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Campagna di Roma olim Latium

A historical landscape archaeology of Tyrrhenian
southern Lazio from late Antiquity
to *incastellamento*

This book is dedicated to Shirley, Marente and Lucas

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Campagna di Roma olim Latium

A historical landscape archaeology of Tyrrhenian
 southern Lazio from late Antiquity
 to *incastellamento*

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ter verkrijging van de graad van doctor aan de
 Rijksuniversiteit Groningen
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 rector magnificus prof. dr. C. Wijmenga
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Appendix 4.1 holds a list of all found historical toponyms.

Appendix 6.1 holds a basic catalogue of sites.

Appendix 6.2 contains all relevant queries from the main site database.

Appendix 6.3 holds a list of infrastructure and hydrography mentioned in the text.

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Reading guide

Structure of the book

I have chosen the way of dividing the book into three parts. Part I includes six chapters addressing the background, context and methodology of the study, part II treats the data analysis, and part III the conclusions. The datasets resulting from this study can be consulted on the University of Groningen/UMCG research database (Pure). One of these datasets is the comprehensive catalogue of all the sites treated in the study, sites that constitute the backbone of the executed spatial analysis.

Short introductions

This thesis looks at the period under scrutiny from a variety of perspectives. It touches upon a broad range of subjects and involves a wide range of disciplines. Not every angle on the subject matter will be self-evident for every reader. That is why I have incorporated short introductions

on a number of subjects. These introductions summarise the status quo of research on the subject and do not involve any new conceptualisation.

Repetition

This research has to deal with an inherently imbalanced dataset, with obvious biases in the available sources; some periods, areas and sites are better documented than others. In order to cope with the imbalanced evidence, I made a number of methodological choices. Among these are the cutting up of the research area into 10 key areas and subdividing the research period into three different periods. In the analysis of the different key areas and study periods repetition is inevitable, as overlapping angles and themes will have to be (shortly) re-introduced if the analysis requires it.

A glossary of periodisation

early Christian

A much debated term. When used here, the term refers to processes/developments and material culture (archaeology, art) dating until late 6th century.

early, middle and late imperial

When used here, these terms are used according to the periodisation set up by the RPC/PRP:

- early imperial: 27 BC to 100 AD
- middle imperial: 100-300 AD
- late imperial: 300-late 5th century AD

late Roman

A term scholars use to describe the final phases of the Roman Empire. When used here, the term refers to the period between the 3/4th century and the late 5th century.

“early middle ages” vs. “late Antiquity”

In traditional scholarship, the term “late Antiquity” was generally and still is often used to describe aspects of continuity with the Roman Empire, while “early middle ages” was and is used to put emphasis on developments characteristic of the earlier medieval period. As such the terms overlap. “Late Antiquity” was used for the era up to 6/7th century, while “early middle ages” used to denote the period from roughly 5/6th century onwards up until the 10th century. In many instances neither the denotations of the terms nor their chronology completely did justice to the attested developments.

Research in past 25 years, the current study included, shows that if one wants to use these terms, the following division works fine for the current state of evidence: Late Antiquity = 4th-7th century, early middle ages = 8th-10th century. The argumentation for this division was recently summarised by Andrea Augenti (2016), and has since almost universally been accepted by Italian scholarship¹.

In view of the strong case made for it by other scholars and by the data themselves, I have chosen to adopt this new periodisation of the first millennium AD. Therefore, when the phrases “late Antiquity” and “early middle ages” are used here, this “new” periodisation should be read.

high middle ages

In most studies the term denotes the period from roughly 1000 AD onwards until around 1250/1300. When used here, this period should be read as well, complying to “i secoli centrali del medioevo” in the periodisation summarised by Augenti.

Dark Ages

A term that the majority of modern scholars avoid due to its negative connotations, finding it inaccurate and misleading. When used here, the term refers to (earlier used characterisations of) the period between 5/6th century and the 9/10th century.

Note:

1. The argumentation can be summarised as follows, Augenti 2016, 5 (earlier Delogu 1999): late Antiquity describes a world that began in the 4th century, with the affirmation of Christianity, and is different from the previous one, but despite the obvious changes taking place, preserves some of its essential features until the end of the 7th century, most importantly the continued trade across the Mediterranean. It is with the early 8th century that the real transformations became visible, as for example is clearly demonstrated in the contexts of Rome: In the early 8th, Rome had ceased to receive imports from across the Mediterranean. The origin of the imported pottery found is restricted to the city’s hinterland and, to a lesser extent, southern Italy, see in the current thesis 2.I.4 and Sagui 1998, 305, Panella & Sagui 2001, 804–15 and Wickham 2006, 735. In the course of the 8th and 9th century, a significant economic and demographic recovery could be seen, not just in Rome. From that period onwards the political and economic landscape changed significantly. See also 2.II.1 Introduction.

Part I

Backgrounds, context and methodology

Chapter 1 Backgrounds, sources and methodology

1.1 Backgrounds to the study

Of all the research themes in Italian archaeology, the transition from the late Roman world to that of the middle ages, embodied in the development of *incastellamento* hilltop settlements, is one of the most discussed but at the same time one of the least archaeologically documented. In earlier research, aspects of this transition were dealt with, but most of these studies have been hindered by a limited use of the available data of other disciplines. As shall be explained below, this PhD thesis will combine archaeology with other disciplines to study this period in the landscapes of Tyrrhenian southern Lazio, central Italy. It shall be made clear how the current research fits in the recent paradigms for the study of late Roman to late medieval landscapes in Italy and how it is complementary to earlier conducted research in the research area.

1.1.1 *The changing fortunes of research on medieval landscapes in central Italy*

Until fairly recently, regional archaeological projects mostly failed to identify the post-antique rural landscape in Italy. The main archaeological explanation for this failure lies in an intrinsic lack of empirical data for the period. Late Antique / early medieval material culture was mostly simply undetectable, due to a combination of negative factors. Amongst these are the poor understanding of the ceramics of the post-antique period, the breakdown of imports and the less durable built environment that impedes recognition of any vestiges there might have been in the rural landscape. These factors have been summarised by Arthur and Patterson specifically on ceramics¹ and by Barker in more general terms².

The most crucial impediment for analysis of the transition³, however, appears to have been methodological. In fact, it has been a lack of interdisciplinary enthusiasm that hindered investigating the long period of transition. In much earlier research aspects of the transition were dealt with, but those studies were mostly either archaeological or historical in nature. This dichotomy has been acknowledged by Moreland⁴ and Francovich and Hodges⁵. Moreland cleverly showed how these contrasting viewpoints of *conventional wisdom* are determined by the kind of evidence one is focussed on, and by the

methodological traditions of the different disciplines⁶: Traditionally, archaeological research was focussed on the well-known datasets and stratigraphies of the Roman period. Archaeological study often ended with the proposed breakdown of Roman structures, while avoiding the period afterwards. The *incastellamento* phase was left to the historians who were perceived to be the only scholars to have a good hold on this phase, through the bulk of written sources which becomes available from the 9/10th century onwards. Constructing their ideas along the lines of their disciplines, analysis of the late Roman to medieval landscape yielded contrasting views: Some historians, like Pierre Toubert (1973, *Les structures du Latium médiévale*) tended to see a continuation of classical settlement patterns until the 10th and 11th century⁷. Toubert's influential vision stood in sharp contrast with the traditional view of some archaeologists, who upheld the idea that the classical settlement pattern already had met its end during the downfall of the Roman Empire (for example Potter 1979, Hodges & Whitehouse 1983). The archaeological field survey projects in central Italy, that had been conducted since the 1940s, after all had shown a sharp decline in the number of sites from the second century onwards⁸. This, as was understood, was the result of an early severe urban and rural demographic breakdown. These results moreover self-enhanced the *idée fixe* of the remaining people taking refuge in hilltop settlements, which was caused, as was fairly generally believed, by the insecurity of the 'Dark Ages'.

Nowadays it is considered imperative to let go of the historical and archaeological divide to effectively study the medieval landscape. Indeed, it is a necessity to exploit all available resources to fill the common information gap found in the 6/7th and 8/9th century, generally referred to as the *Dark Ages*. Two decades ago, the publications of the Biferno Valley⁹ and Liri Valley¹⁰ projects were among the first projects to reconstruct the medieval archaeological landscape using all sources available.

Next to the new interdisciplinary zeal, a second factor is rapidly changing our understanding of the post-Roman Central Italian landscape: progressing coarse ware typologies show that material culture indeed can shed light on the Dark Ages. Since the end of the 1980s,

and increasingly in the last 20 years, additional coarse ware pottery typologies for the 6th to 9th century have become available. This changing fate is brought about by new excavations on key sites and the consequent reworking of earlier pottery research. First of all, the material from the Crypta Balbi excavations need to be mentioned, which has led to our current improved understanding of medieval coarse wares in Lazio. With these pottery assemblages, excavated in the centre of Rome, extensive pottery topologies became available for the entire middle ages¹¹. In recent years other large excavations in the city of Rome have yielded similar ground breaking results¹². The excavation of key sites in the wider Tiber Valley, like San Donato, moreover showed that locally produced medieval pottery can be discerned as well. These results teach us that the limited knowledge of medieval pottery in the past may have left the medieval phases of many sites found in surveys in the past undetected. This becomes specifically clear from the research done in the Tiber Valley Project by Helen Patterson and Paul Roberts on the 6th to 8th century pottery¹³. Patterson and Roberts' re-analysis of survey material of the Rieti and Farfa survey projects, done with knowledge of the new coarse ware typologies, has greatly enhanced the picture of settlement and production. Their study has resulted in the identification of many medieval phases of sites that had been overlooked before¹⁴. In recent years, typological studies of rural contexts of central Italy have confirmed that the empirical basis for analysis of post-antiquity in central Italy is much bigger than thought before.¹⁵

The results of teamed archaeological and historical research projects, combined with new coarse ware typologies are impressive¹⁶. Ricardo Francovich and Richard Hodges have been able to construct a dramatic new generic view for central Italy (Francovich and Hodges 2003, *Villa to Village*). Their reconstruction was based on archaeological research done in the last 30 years on the whole peninsula. Their conclusions have been corroborated and complemented by interdisciplinary work in regional contexts, for example the archaeological and historical analysis of the area surrounding the monastery of Farfa (Sabina). This study, executed in the framework of the Tiber Valley project, clearly shows that the discussion on early (archaeology) versus late (history) change can be a rigid and simplistic divide¹⁷. Through a combined archaeological and historical study a rather constantly changing Sabine landscape and society is uncovered. Considerable transformations seem to have taken place in no less than four timeframes: the 2nd, 6th, 8th and 10th centuries¹⁸. Another fairly recent regional project shows remarkable results too: the work done by Paul Arthur's team in Apulia. This undertaking shows parallels with the generic view in *Villa to Village* as well¹⁹. For both the

Tiber Valley project and the Apulian project an initial large inventory was made of all the available resources, on which the successful survey, excavation and re-analysis research strategies of these projects were built.

Looking at the state of research on the post-Roman period, a clear picture arises: the great disciplinary divide should and can be overcome. It is with this in mind that this book aims at executing a multidisciplinary study of the landscape, in which the dichotomy between archaeology and history is overcome. The debate between the "continuists" (like Toubert) and "discontinuists" (like Potter), and the juxtapositions taken by archaeology and history, can now be re-examined in a new landscape setting: Tyrrhenian southern Lazio.

The current research is therefore from the outset designed to deal with datasets from various disciplines into a comprehensive landscape analysis of the late Roman and medieval landscape. A large advantage is that this new research can profit from the pioneering recent work published on nearby areas, like the Tiber Valley. This study is set in a regional context that as yet has not been explored as a whole for the late Roman period and middle ages.

This thesis is rooted in two research traditions that are multidisciplinary in essence: archaeologically it is embedded in the school of (Anglo-Saxon) Mediterranean landscape archaeology, and historically in the traditional approach of the French Annales school. Both points of view have a lot in common, as I will explain in the next paragraphs.

1.1.2 A landscape archaeological approach

This PhD thesis essentially consists of a landscape archaeological study. Landscape archaeological research, such as the Biferno and Tiber Valley projects, has greatly contributed to our knowledge of medieval Italy²⁰. Landscape archaeology can take many forms²¹, but is best defined as the investigation of the relationship between man and his environment on a regional scale²². Landscape archaeology focuses on spatial relationships within the landscape, such as ecological, economic, political or cultural relations. Although material culture is the principal evidence in the analysis of human activity, landscape archaeology inherently is multidisciplinary. And its intrinsic focal point is the longer-term history of the landscape, as many of the developments within it take place on the long term. The present study covers all the above mentioned aspects: it performs analyses on a regional scale, it does so multidisciplinary, focuses on spatial analysis of human activity and it spans a long period of time.

In this thesis the multidisciplinary approach is abundantly exercised. While traditional landscape archaeological (excavations, survey field work, ecology, remote

sensing and Geographical Information Systems - GIS) and historical evidence play a central role and provide the bulk of data²³, other fields of expertise play their part too, i.e. historical cartography, (historical) topography, ethnography, geography and toponymic studies. The intention is to use all sources possible in order to reconstruct human activity in the landscape of Tyrrhenian southern Lazio in the middle ages, treating data from all disciplines equally.

1.1.3 *An Annaliste approach: the Braudelian scheme*

With its emphasis on the long term interaction between man and his environment, and its multidisciplinary approach, this thesis allows analysis of the past within the temporal framework as devised by the Annales scholar Fernand Braudel. The structural approach of the scholars of the Annales school towards history was developed in the 1930s as a result of the growing discomfort among French historians with narrative political history, which was in their eyes too much focussed on events, too political, and not in contact with other disciplines. Stressing the importance of the wider context in which events take place seen within long term socio-economic and demographic developments, and with its emphasis on ecology, it found a counterpart in the new archaeology, which developed in the 1960s. In contrast to new archaeology however, it stayed away from using explicit models of explanation of the past, and had no clear-cut theoretical framework. As the Annales approach looks at cyclical change and underlying long-term trends (including continuity), the adoption of Annales thinking is useful for the current study which aims at understanding the complex interaction between changes on the short, medium and long term within the long period from late Antiquity to *incastellamento*. Like landscape archaeological studies, Annales study draws much on other disciplines for inspiration, hard data and their models²⁴.

The basic principles of Annales thinking should be articulated here. The most prominent Annales historian in the 1950s and 1960s, Fernand Braudel, defined three levels of time which are temporal as well as functional, and which, according to him, could act as levels of historical analysis: the short-term history of individuals, of events, *l'histoire événementielle*; the slower rhythms of time, the middle long term (cyclical) developments, the so-called *conjonctures*. Examples of such cyclical developments are the economic cycles which can be measured in decades. "Conjonctures can also be recognized in the social and economic trends represented by the survey and excavation data."²⁵; and thirdly the longer term history, the *longue durée*. Long-term forces can include environmental circumstances, dominant and slowly changing technologies,

agricultural technology, or persistent cultural features such as ideologies and world views (*mentalités*)²⁶.

The Braudelian paradigm of the Annales School has been acclaimed by archaeologists as a useful tool in (temporal) structuring the analysis of archaeological landscapes, especially in larger regional projects. It is especially in the long term perspective that landscape archaeology and the Annales approach come together. With Braudel, British landscape archaeologist Graeme Barker maintains that the interaction between humans and the environment should best be studied over an as large as possible time span, in order to really understand the forces at work in the landscape and the human response to these²⁷. Nonetheless, only rarely analysis of the longer term was actively and effectively pursued in archaeological studies of the classical world. For this reason Snodgrass²⁸ uttered scepticism, and rightfully so, on the contribution of Classical archaeology to research on the *longue durée*, as its research time span might be too short. Barker's Biferno Valley Project was only one of the first major research projects on a regional scale to cover a large enough time span to execute archaeological landscape analysis on the longest wavelength of time. The solid results of this research project, which covers the Stone Age until modern times, testify to this²⁹.

All the same, one has to be careful using the Braudelian scheme in its original form, as conceptualised in 1972. It does not provide a flexible enough analytical framework for structuring interdisciplinary datasets on all of the paces of time. There is validity after all, in the criticism of the last three decades or so on the original Braudelian scheme. The time-depth of the long term proved too narrow for archaeology: Unlike the Braudelian time frame, the archaeological time scale of the *longue durée* may stretch over a millennium or more³⁰. The most important critique is the determinism that is inherent to 'Braudel'. Unlike Braudel, Moreland (1992), Attema (1993) and Barker (1995³¹) regard the environment as a dynamic, rather than a fixed determinant factor. As Attema justly argued, the environment and climate are no Braudelian 'stable monolithic entities', unimpressionable by human input and unchangeable in man's perception³². This becomes clear in all multi-period research projects since the 1990ies, for example in the Pontine Region³³, the Biferno Valley³⁴, the Liri Valley³⁵, the Metapontino³⁶, the Pontenza Valley³⁷ and in the region of San Vincenzo al Volturno³⁸. In these areas, environment and climate were demonstrated as having been greatly influenced by human action, and having been constantly perceived differently - all aspects of the Braudelian middle long term. The concept of *conjoncture* is very much applicable to landscape archaeology. As Attema has shown, not only the changing "natural"

landscape but also socio-economic structures and technological conditions of the middle long term change man's perception of the environment, his degree and way of controlling it, and his freedom of movement and action within it. In the Pontine plain this is obviously connected to changing technology and capability of controlling the swamps and the economic exploitation of the plain and hinterland³⁹.

Let us return to the current study. This thesis indeed allows for an Annaliste approach, in size and time span. The subject is what I would like to call the "Tyrrhenian" part of the landscape of southern Lazio⁴⁰, roughly situated between Rome and Fondi, and the time span is the late Roman period to the high middle ages (3rd to 14th century). This creates a research period of roughly 1000 years. As I will explain below, the research period is stretched by incorporating retrospective evidence from the 15th to 21st century. The Braudelian scheme will actually be put to work in the final synthesis (Part III, Chapter 8), scrutinising both the *longue durée* and the faster paces of time, in order to get a firm grasp on the change and continuity within the landscape and to create an understanding of the relationship between people and their environment.

1.1.4 A microregional perspective

The current study intends to incorporate a relatively novel perspective on the relationship between people and their environments in the Mediterranean region as well: the microregional perspective. In their ground-breaking book *The Corrupting Sea*, Horden and Purcell introduced a novel idea of understanding the Mediterranean, as a region branded by an considerable fragmentation because of large ecological diversity on the one hand, and a high level of connectivity on the other. They emphasised the primary production within and redistribution among so-called microregions (or microecologies) as an effective way of understanding the functioning of the Mediterranean landscape.

The concept evolves around the idea that each microregion has one or more distinctive geographic features, and has specific environmental circumstances and natural boundaries imposed by nature. And that each microregion was shaped and re-shaped by various human adaptive responses to the constantly changing environmental circumstances. But the developments within and between microecologies are determined by more than nature alone: Microregions are moulded and remoulded by adaptive responses of its people to the ever changing socio-economic and political circumstances as well. In Horden and Purcell's model, the *connectivity* (i.e. interrelations) within microecologies, among each other and with the distant outside world, is a major force in the shaping and reshaping of their constitution.

In *The Corrupting Sea* and later studies, the microecological approach has proven to be a very useful structure to explore the history of landscapes. Primarily, the concept of ecological microregions is a way to look at the evidence on a landscape's history from the viewpoint of "interaction of opportunities", i.e. the changing human response to the potential offered by a given landscape. Although it is an ecological approach above all, it does "put people before physical geography"⁴¹, and although it puts less emphasis on the (geo)political developments (like changes of government) than other perspectives on Mediterranean history, it still allows for their influence. This renders it a balanced and novel means to look at my data. The concept appreciates both the landscape and its human-induced adaptations as factors, and with a keen eye for small-scale developments within the landscape and the larger ones initiated by the outside world. The core elements of the theory are production and redistribution within the microregions, and the interaction of the microregions with their neighbours. As was outlined, the current study covers a long research period and a diverse database, which enables an attempt to analyse on a micro-regional level, as it provides enough data of patterns of micro-regional interaction, and data regarding changes within and between microecologies.

I shall use the concept of Horden and Purcell, describing geographies of fragmentation (i.e. microregions) and connectivity (i.e. redistribution, communication and mobility), as the second main angle in my final synthesis (Part III, Chapter 8), next to the Braudelian perspective.

1.1.5 A retrospective viewpoint

The current research also builds on local research traditions, specifically on that of the Pontine Region Project (PRP, 1987-). This is a long-running landscape archaeological project in the Pontine region, executed by the University of Groningen under the direction of Peter Attema⁴².

In the first phases of the Pontine Region Project (Attema 1993), excavation and survey research were combined with historical cartography and ethno-historical studies for an insight into the *longue durée* of the study area. With its multidisciplinary approach the PRP returned to the 19th century way of studying the landscape, and specifically for this research area, to the work done by De la Blanchère. This French scholar was the first to combine the available historical and topographical evidence with archaeological and ethnological fieldwork data⁴³.

As Attema⁴⁴ and Moreland have shown, the deployment of ethnohistorical and topographical data can be valuable for environmental studies and especially landscape archaeology. Through data derived from historical maps,

19th century topographical descriptions and toponyms, Attema was able to get insight in what Moreland calls the ‘internal environmental constraints’ of a region⁴⁵, in this case the Pontine region. In this way he made visible how the environment is part of the *mentalité* of man.

As in the PRP and in Moreland’s studies, the present research reverts to a multidisciplinary regional historical-topographical tradition in which retrospective data play an important role in finding long term aspects of the landscape. First of all, historical maps are worked through as a source of information on the *longue durée* of the landscape. These maps are dated between the 12th century and the early 20th century. In addition, toponyms found in post-medieval literature and on maps are studied. Furthermore, several 19th and early 20th century landscape descriptions, and topographical-toponymic and ethnographic research by scholars like De Prony, De La Blanchère and Nibby are studied. In general, as the theory goes, by studying this earlier scholarship, toponyms and historical maps, our understanding of the functioning and the perception of the pre-industrial and pre-*bonifica*⁴⁶ landscape of Tyrrhenian southern Lazio is enlarged.

1.1.6 *Stretching the margins of the longue durée within the Groningen research*

This thesis basically is a chronological extension to the PRP. The PRP initially focused on the first millennium BC (Latial protohistory and the Roman Republican period), with in recent years an increasing emphasis on the Bronze Age⁴⁷ and the imperial period⁴⁸, whereas this thesis deals with roughly the last three quarters of the first and the early part of the second millennium AD.

The initial objective of the PRP was to gain insight into the developments and changes in the organisation of the Pontine Region during the first millennium BC⁴⁹. To attain this goal several environmental and archaeological surveys were conducted. The results of this fieldwork shed light on two major developments in the research period. First of all on urbanisation, a process that started south of the river Tiber in the 8th century BC, culminating in the *floruit* of the large 6th century BC Latin centres. The other key development was the Roman colonisation of Latium Vetus, starting in the early 5th century. The PRP has provided a strong foundation for the interpretation of this period that is generally archaeologically difficult to discern⁵⁰. In later phases of the PRP project also the late Roman period was subject of study, during which the middle ages were touched upon⁵¹.

As is clear from his publications and as is explicitly stated in his oration, the temporal and geographical margins of the classical landscape are central in Attema’s scholarship⁵². With the current research, ultimately incorporated

into earlier PRP research on the first millennium BC, these margins of the classical landscape can be temporally stretched, now towards the middle ages. By extending the temporal margins of the classical landscape and the inclusion of the post-classical transition, research on long term human and environmental dynamics in the studied part of southern Lazio is given a more solid basis. The scepticism of Snodgrass of the virtually absent contribution of Classical archaeology to research on the *longue durée*, as its time span might be too short, can be countered, while the above noted appeals for multi-period approaches can be met.

1.1.7 *Research goals*

The objective of this study is:

Through a multidisciplinary dataset spatially analyse human activity within the landscape of Tyrrhenian southern Lazio between the late Roman and high medieval period.

In principle, the study is based on data from the existing literature that subsequently are analysed in a regional geographical context. The dataset is built on the (re)analysis of data from primary and secondary sources. All archaeological evidence is gathered and complemented by as much data as possible from other disciplines that can shed light on the period.

The results of other regional archaeological and multidisciplinary studies in central Italy will be used as a sounding board. With these results as a background, the landscape of Tyrrhenian southern Lazio can be approached from two angles:

The contemporary perspective. Using contemporary archaeological and historical data (3rd to 14th century), a diachronic mapping is made of human activity in the landscape. This mapping is based on finding contemporary sites of human activity and analysing these sites in a spatial context in GIS. Two types of sites are incorporated into the database, both treated on the same level: archaeologically attested and historically recorded sites.

The retrospective perspective. Using historical cartography, data from the historical topographical literature, ethnographic studies and toponymic research, a retrospective analysis is made of the medieval to sub-recent landscape (12th to 20th century). By extending the chronological perspective, our understanding of the *longue durée* functioning of the pre-industrial landscape is increased. Moreover, this retrospective approach should help find and interpret data on individual sites, adding to the information we have on these sites from contemporary sources.

Within the main objective the study aims at two things:

1. **To diachronically map activity within the landscape**, such as settlement, production, trade, aspects of authority, ownership, animosities, religion and infrastructure and to find the actors at work. The goal of the analysis is not the confirmation or rejection of specific earlier theories or concepts about human activity in the medieval landscape of Tyrrhenian southern Lazio. This thesis intends to create fresh insights on the developments within this landscape. It will be the first study to accumulate known and (yet) unknown historical and archaeological data into a spatial and environmental context. It will enable a landscape archaeological analysis of these activities in a regional setting, allowing insight in the demographic, socio-economic and political transitions between late Antiquity and the high middle ages, and providing building stones for the reconstruction of the social reality behind the processes at work. Change and continuity are monitored, as well as communication and interaction, marginalisation and vitality of parts of the region.

In the final synthesis (Part III, Chapter8) I will relate my database's landscape data to the two above introduced models of historical landscape analysis in the Mediterranean:

The attested developments will be studied along the lines of the Braudelian scheme. At first the structures of the *longue durée* are treated, followed by the conjunctures.

The found evidence is analysed from the perspective of unity by diversity through microecologies and their connectivity.

This thesis attempts the following with regard to the mapped activity throughout the studied period:

- to outline the main developments taking place within the long time span of this research;
- to monitor the kinds of activity and interaction and the actors at work within the landscape;
- to examine possible regional diversity in the nature of activity and interaction;
- to define what activity seems to escape our observation and the reasons for this;
- to define possible clear stages of transformations and specifically
- to comment on the process of disintegration (or continuity) of Roman socio-economic and political structures;
- to comment on the rise and fall of the process of *incastellamento*;
- to identify the part that the physical landscape could have played in the history of human activity ;

- to delineate the effect the nearby presence of Rome had on the developments within the research area throughout the study period;
 - to study the found data along the lines of the Braudelian scheme and to establish the strengths and weaknesses of this perspective;
 - to study the mapped activity from the perspective of Horden and Purcell's microregional model and to establish the strengths and weaknesses of this perspective.
2. The second aim is **to test the used method**. It is tried to establish to what extent a multidisciplinary review study can provide new ideas about the chronology of the processes that took place, on change and continuity and the social reality behind these processes. The following is attempted with regard to the used method:
 - to define the possibilities and pitfalls of combining disciplines;
 - to establish if the retrospective study adds to the knowledge of the research period, and to the understanding of the intrinsic opportunities and difficulties for dwelling in this landscape;
 - to establish the weaknesses and strengths of the used methods of dealing with the available sources and the data contained within them;
 - to determine if the methods used to deal with imbalances and biases are effective.

The thesis concludes with a set of recommendations based on the experiences of this study, in order to facilitate future study.

1.1.8 Time span

Diachronically the current project covers the final phases of the Roman Empire to the conclusion of the formative process of *incastellamento*, the creation of a series of fortified, nucleated villages or *castra* in elevated positions in the high middle ages. Of course, there are no fixed begin or end dates for the formative processes responsible for continuity and discontinuity within the landscape from late Antiquity onwards: transitional processes are not easily captured within set dates. All the same, it is necessary to adopt begin and end dates, as the database might get too extensive otherwise. The choice has been made to incorporate evidence from the 3rd century onwards⁵³. The dating of the end of *incastellamento* has never been set, but Toubert showed how the process declined sharply in the 13th century. In order to get a grip on the entire span of the *incastellamento* phase, the research period is extended unto the 14th century.



Figure 1.1. The research area. Source: ArcGISOnline.

1.1.9 Area of research: “Tyrrhenian” southern Lazio

The research area roughly covers the area from the southern suburbium of ancient Rome to Fondi in the south, covering the area from Ostia to the Alban Hills, the Pontine Region including the Circeo peninsula, the Lepine, Ausoni and western part of the Aurunci mountains (figure 1.1), an area which I shall call “Tyrrhenian” southern Lazio. Throughout this study the adjective “Tyrrhenian” will be used first of all when necessary to distinguish the current study’s coverage (of the coastal part and western-most mountain ranges of Lazio) from (the developments / research in) the interior parts of southern Lazio. Its northern boundary is set by the Roman suburbium (not the City itself), with the modern Gran Raccordo Annulare (GRA, Rome’s ring road) as defining border. To the west the Tiber constitutes the northern border (Ostia is included). From the GRA south-eastwards the research area includes all of the area south of the Via Latina (leaving out everything north and east of the road). From Valmontone southwards, the northern flanks of the Lepine Mountains constitute the border of the research area. The Sacco valley is not incorporated, except for the area around Colferro where intensive field research has been done. This spatial limitation is set by the boundaries of the earlier Pontine Region Project GIS dataset, which was set up to cover parts of the Lepine Mountains and the Alban Hills. The eastern boundary is set roughly along the line Fondi-Campodimele, a line defined by the outlines of the set of precise Austrian maps published in 1851⁵⁴, adding the Ausoni and Fondi plain to the earlier PRP coverage.

The socio-economic, demographic and political developments within the city of Rome are dealt with as well, because of the city’s close relationship with the research area, and the importance of its archaeological assemblages and historical documentation for this study.

1.II Methodology and sources

As briefly explained above, the research period is approached from a contemporary and retrospective angle. To speak in terms of the Braudel scheme: I will make use of the “contemporary” primary sources of the *conjoncture* (archaeology, the historical record) and, whenever applicable, the *histoire événementielle* (the historical record⁵⁵), and combine these with the data obtained from the retrospective angle of the *longue durée* (maps, topographical descriptions). With toponyms working on both time scales, the circle is closed: long-term landscape analysis in this way is effectively set against the fragmentary record of the short to middle long term.

Many different sources are used in this thesis. The central idea is that by studying many disciplines, omission and bias in one discipline are countered or better contextualised by data from other disciplines. And that by doing so human activity in the landscape can be dated and located with as much detail as possible. An example of such omission and bias is the partial coverage of archaeological research (surveys and excavations), and of topographical studies. These kinds of studies are not equally distributed over the landscape. This coverage problem holds

true for the historical sources as well, but in this case not only spatially but also chronologically: historical sources are limited between the late Roman period and the 10th century⁵⁶.

However, it is no sinecure to combine all these disciplines, because each has its own perspective, or “conventional wisdom”, on the period under scrutiny, as has been discussed. In order to use many different disciplines effectively, a keen methodology has to be set up. Evans wrote that methodologically the data we can extract from historical archaeological and ethnohistoric records should be kept separate in studies explaining the past⁵⁷. This is true. Below I will expand how I will address this⁵⁸. But first let us have a look at the different types of data used that I collected in the database that supports this thesis.

1.II.1 Six types of data

Overall, I identified six types of data that could shed light on the period to investigate: archaeological, historical, toponymic, cartographical, sub-recent topographical and ethnographical data, and modern aerial photographs. Retrieving these data entailed the study of primary sources (like treaties, contemporary chronicles, historical maps and archaeological reports) and a reworking of secondary sources, such as (sub)modern topographical-archaeological, toponymic and historical overview studies. Although I did not aim at completeness, the intention was to study as many relevant sources as possible, sources available in the Dutch and Italian, analogue as well as digital libraries.

In summary, these are the six types of data that built the database:

1. Archaeological data (of the 3rd to 14th century).

The starting point of the archaeological dataset⁵⁹ are the reports of earlier Dutch excavation and survey projects in southern Lazio, mainly the PRP. Furthermore, the relative few archaeological publications on early and higher medieval sites are processed, for example those on Villamagna, Norba, Carpineto Romano, Fossanova, Privernum and Laurentum (Castel Porziano). In addition, monographs on specific landscape elements such as villas (Lafon 2001, Lilli 2005, Venditti 2011), monasteries (Caraffa 1981), Roman infrastructure such as the Via Appia (Quilici 1990a-b, Marchi 2019) and the Via Severiana (Brandizzi Vittucci 1998), medieval infrastructure and castles (Marazzi 1990, Coste 1990, Giammaria 1998) and specific regions (like the *Forma Italiae* series⁶⁰), all to some degree dealing with the archaeology of the transition, were worked through. The database incorporates all archaeological sites from the 3rd century AD onwards. In addition, a small-scale study is conducted of the early to high medieval pottery stored in the depot of the museum Sangallo in Nettuno. All the studied material

was found at or in the vicinity of Torre Astura, a harbour site at the mouth of the Astura river. This pottery study is a case-study of the potential of the many small collections available for research in Lazio; its results could be used as the start of a local pottery reference collection.

2. Historical data (of the 3rd to 14th century).

For both the mapping of the late Roman and medieval landscape and the *longue durée*, a good grip on the historical sources is vital. The historical record is given the same consideration as the archaeological: contemporary written sources are worked through and assessed as bearers of information on human activity within the landscape (e.g. settlement and infrastructure, agricultural production, interests of specific parties, struggles), placing these pieces of information in space and time. Where available, every single historical primary source was read in its original form⁶¹, and secondary sources and earlier historical interpretations of historical data are looked at again. I opted for close-reading of primary and secondary sources to find data (e.g. topographical and toponymic clues, family relations or identifications of individuals, dating information) that may have been disregarded in earlier studies. Moreover, reading the original texts enabled me to find possible intentions of the writer, which might influence the document as a source of facts⁶². In short, historical records should be stripped as much as possible of earlier interpretation and the potential layers of political meaning of their creators; the factual data found in them I stored in the database.

3. Toponyms (3rd to 21st^e century).

A toponymic study was executed in cooperation with Sonia Pomicino (Chapter 4), the goal of which was to find origin, meaning and use of place-names originating in the research period. Possible diachronic morphological change in the toponym was monitored, and most importantly, the toponym was located – and tracked if its location changes. This study helped to identify or link (historical) toponyms and/or enhance our understanding of the physical location of the site or area involved.

I started out with an inventory and chronological research of all toponyms occurring in written sources of which the origins can be traced back to the research period of the 3rd to 14th century (like *cartularia*, the *Liber Pontificalis*, medieval *bolle*). In essence, per “historical” toponym an inventory was made of the earliest mention, all later derivatives, and of all toponymic strings that are linked to this location. The toponym was, if possible or applicable, located by its modern counterpart in the IGM database of toponyms⁶³.

Secondly, all toponyms were listed that are depicted on the examined 51 historical maps, as presented in Chapter

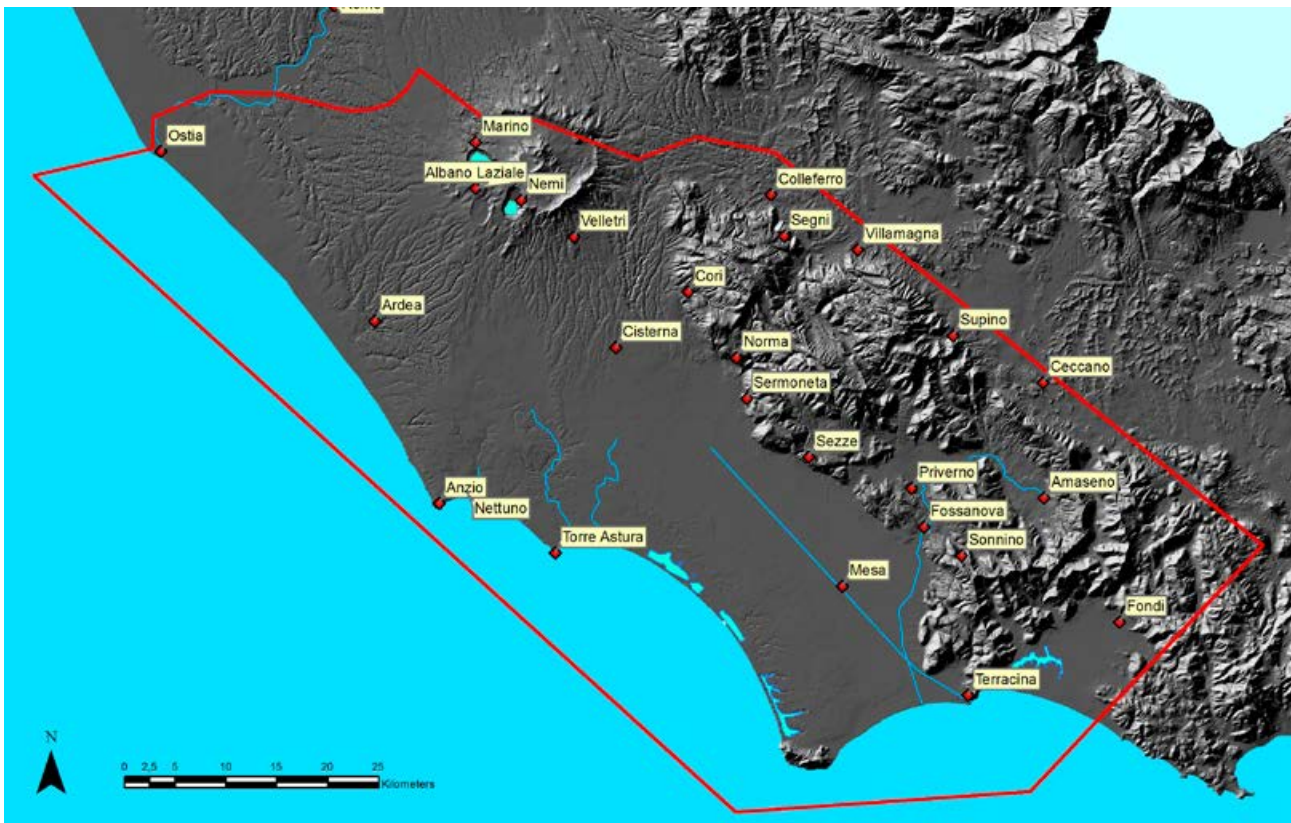


Figure 1.2. The research area and a number of the main settlements and sites.

5. These “cartographical” toponyms date from the 11-12th century to the early 20th century. They were all worked through to see if they possibly match the contemporary toponyms, in that way helping to track the toponyms in later periods.

In order to treat the toponymic evidence in a correct way these two types of toponyms were treated separately.

4. Cartographic data (12th to 20th century). The cartography of Lazio from the Renaissance until the early 20th century was studied (Chapter 5). As earlier studies showed, maps hold important data on the pre-industrial landscape: contemporary land use, built environments, infrastructure, toponymy and ethnography. In synopsis, by analysing historical maps the following can be achieved:

The (perceived) contemporaneous situation in cartographical detail can be reconstructed.

Maps provide a glimpse of what is still left of the ancient landscape at the moment of their compilation, like ancient vestiges still visible before the large scale land reforms of the 20th century removed them.

The landscape can be surveyed as it was before the industrialisation and before the large scale agricultural activities (as deep-ploughing) of the last 70 years, gaining insight into the *longue durée* of landscape and the

intrinsic possibilities and pitfalls of living in this landscape (the ‘internal environmental constraints’).

Through cartographical toponyms a number of sites mentioned in written sources can be located, and some clues on contemporary perception of the landscape and on land use can be found.

This approach is based on the premise that the landscape of the early maps (12-20th century), combined with the study of toponyms and the topographical descriptions of post-Renaissance travellers, gives clues how the early and high medieval landscape looked like and how it functioned as a natural backdrop to human activity. By studying historical maps the insights into Roman to sub-recent settlement dynamics and patterns and related infrastructure can be enhanced. A successful example of this kind of regressive cartographic research for the Pontine region was begun by Attema (1993), as was mentioned earlier. The argument that scholars can get a grip on the longer term landscape and its intrinsic qualities, and on settlement developments through a retrospective analysis of maps, is backed up by similar studies on a micro-regional scale: Both the year-long studies of Cancellieri in the Pontine plain and the work done by De Silva and Pizziolo⁶⁴ in the Grosseto area have shown how useful and accurate historical maps can be in getting clues on the ancient landscape.

A separate element of the cartographical study was the digitalisation of the *Carta Geografica dello Stato Pontificio* maps of Lazio made by the Military Geographical Institute of Vienna. Published in 1851 it was the first truly modern map of Lazio, with a clear legend and an accurate projection. For the current study the *Carta* was digitised. By plotting all landscape elements (roads, towns, land use, swamps) into a GIS, a detailed pre-industrial human landscape of Lazio became available for spatial analysis⁶⁵.

5. 19th century and early 20th century landscape studies, travel accounts and ethnographic and toponymic publications⁶⁶. The accounts of scholars like G. De Prony (1822), M.R. De La Blanchère (1885, 1889), A. Nibby (1837), T. Ashby (1927) and G. Tomassetti (1927/1979) were worked through. These studies are important for the understanding of the functioning and perception of the pre-industrial landscape. These accounts provided detailed descriptions of the environment, topographical-toponymic information and ethnographic data. They provided clues on what was still left of the past landscape (e.g. vestiges, customs). Furthermore, rehashing earlier topographical and toponymic research by Tomassetti and Ashby was crucial for the toponymic research.

6. Present-day aerial photographs. These were used to aid the identification of sites. In a number of cases a historical description and/or the (modern) toponym in combination with an aerial photograph facilitated the pinpointing of the location of a site. Aerial photographs also helped assess the site's potential for future studies⁶⁷.

1.II.2 Incorporating the results of earlier studies

In the current study area, in contrast with other areas in central Italy, and in particular with northern Lazio and the Sabina, little systematic historical and archaeological research has been done on the early and higher middle ages⁶⁸. Given the poor state of affairs in the research area it proved essential for this thesis to gain insight into the status quo of such research in central Italy in general, as a sounding board for the interpretation of the fragmented information on the developments in this part southern Lazio.

An advantage for the current new research is that it could build upon insights gained by the pioneering work on the transitional phases done in the Farfa area and on the coast of Tuscany. By looking at these areas, late and post-Roman settlement developments are better understood, as are the changes in the communication and exchange with the city of Rome. An analogy with the results in the Tiber valley is valuable, as the developments north of Rome, like those in Tyrrhenian southern Lazio, have always been profoundly connected to that of

the Eternal City. Tuscany, and especially its coastal area, has seen a number of local and regional studies on late and post-Roman coastal villas, the harbour towns and their connection to the inland areas⁶⁹. This study also gains from research done in the Biferno valley (Molise)⁷⁰. The results of these earlier studies are summarised in Chapter 2.

1.II.3 How the database is built

The information on human activity found in the sources was studied along the lines of the six identified data types. In doing so this study is based as much as possible upon primary sources and takes a critical attitude towards earlier scholarly interpretations. Each type of data was in agreement with the ideas of Evans, dealt with separately to identify their specific interpretative challenges and to increase their interpretative potential. One source can contain different data types. A fragment of a historical source may, for instance, contain historical information on the dating of a site, the presence of a specific family and its interests, the political and socio-economic background, local topography, but may also convey useful information on local toponyms. Maps too may contain different pieces of valuable data, such as information on local topography and on a local toponyms. The origin of the source was scrutinized: what political motivations did the writer of a specific document have in writing the text? What period and what kind of data was the archaeological project aimed at?

The six data types were brought together on the level of "sites". In this study, a site denotes a node of human activity within the landscape (like living, building, producing, protecting, worshipping) or a place of interest to a specific party. A site can be a settlement, an outhouse, a church or a defensive location, but also a border marker or a battle field. Often activity on sites is recorded simultaneously in different kind of sources at the same time. Plotting sites in GIS allows to detect spatial patterning of activities over time. In the database, the sites are numbered. If mentioned in the text I refer to the number of each site preceded by "OLIMsite" (for example Torre Astura OLIMsite 64).

If one type of data allows to stipulate the existence of a "site" at a given moment in time at a certain location in the landscape, all five other sources were worked through to find as much as possible additional information about that specific site. The idea is that this accumulation of data per site may lead to a more specific location of the site (or confirmation of earlier hypotheses of it), to increased insights in its specific function(s) and / or to a fine-tuning of the sites' chronology. Using all discussed types of data, the sites inserted in the database were all scrutinized on toponymy, location, chronology, site morphology, clues

in historical and present-day cartography, visible remains, present state on recent aerial photographs, (historical) presence, activity or interests of specific parties and (earlier records on or interpretation of) socio-political, military and economic function.

This has resulted in a database existing of point locations of contemporary (3rd to 14th century) human activity in the landscape, in other words: “sites”. The following criteria were established to identify a site as eligible for analysis:

- First, “contemporary” sources should secure the date as within the research period.
- Secondly, the site should have an approximate location within the research area. The location of historically attested sites is often insecure. A probable location within the research area can be deduced from explicit or implicit historical or toponymic information, or may have been convincingly suggested by earlier authors. Regarding historically attested sites, only those with a secure physical (point) location were incorporated into the database. After all, this thesis is a landscape archaeological study, within which the key element is spatial analysis. Very large organisational bodies were not incorporated into the database, such as dioceses or the Papal State itself, as these cannot be used in a spatial analysis; an episcopal seat however, the settlement where the bishop resided, was included as site. Sites in this study, however, do not have to be represented by a physical built presence: a documented border marker can be a site, as it describes a feature in the landscape which points to contemporary human presence or ownership.

Even if the sources already described sites in terms of historical categories, such as *massa*, *fundus*, *castrum* or otherwise, we often have no clear idea as to what this accounts for in terms of physical reality on the ground. Moreover, in the secondary literature there usually is no convention on site categories, on what exactly is a villa, farm, town, village or hamlet. As to the sites’ physical (archaeological) manifestation I have therefore in line with Arthur⁷¹ devised a site classification based on set criteria, treated in Chapter 6. These criteria are based on observations of the primary data and plausible assignment to a specific class done in earlier research. On the basis of these criteria definitions of site types were created consisting of two parts: the archaeological fact and the interpretation of the term.

Where possible the nature of human activity on sites was specified. The protagonists active in the landscape were also mentioned, like the Roman emperor, the pope or elite families, whenever they appear to have had interests on a site. These “interests”, like ownership (bequests,

donations, fiefs), investments (embellishment or reconstruction of a church, building of a castle), taxation, the building or destruction of fortresses or a siege, were studied as well. These interests may reveal political and economic power structures present in the landscape.

Two databases

The study makes use of two databases: a database of sites and a toponymic database. In the cumulative site database all sources come together. Each site (i.e. node of activity), is given a number to which is referred in the texts of this study and on the used maps. The site database includes for each site the basic information such as the site’s name, location and all contemporary data and their interpretations. Included are its layout and types of buildings, the historical description of the site and the kind of activity, interests and presence recorded on them, the chronology and the interpreted function of the site (i.e. site type). Furthermore the database includes related applicable data from retrospective sources, such as the site’s depiction on historical maps (that are presented in Chapter 5) and the associated toponyms. The consulted literature is listed as well. The site database, and the distribution maps derived from it, constitute the basis of the landscape archaeological and historical analysis.

A compact version of the site database is included in Chapter 6 as Appendix 6.1. An extensive version of this site database can be found on the University of Groningen/UMCG research database (Pure), <http://www.rug.nl/research/portal>.

As the toponymic study involves a totally different primary analysis, the decision was made to create a separate database of toponyms. The toponymic research of Chapter 4 focuses on the names only, treating those features within the landscape for which a toponym can be traced back to the research period. Material remains or historical background are of secondary importance. The result of this study of place names is a database of toponymic roots, which is linked to the site database by connecting each toponym to its corresponding site(s). In Appendix 4.1, a list of the found historical toponyms is presented. The complete digital database of historical toponyms from the research period, including literature and cross-references to the site database, and the list of cartographic toponyms can be consulted on the University of Groningen/UMCG research database (Pure), <http://www.rug.nl/research/portal>.

1.II.4 Dealing with imbalance and bias

This research has to deal with an inherently imbalanced dataset: there are obvious biases in the available sources and in the data extracted from them. Some periods, areas and sites are better documented and studied than others.

The foundation of this PhD's analysis consists of the primary sources, i.e. originating in the research period. Three basic levels of interpretative challenges regarding primary sources can be recognised:

1. Bias (or possible analytical distortion) inherent to the primary sources, relating to the origin of the source. The problems in recognising less durable built houses in late Antiquity and the early middle ages is an example. Furthermore most written documents originate at the high end of society, and are usually coloured by the intentions of the writer.
2. Bias or distortion caused by earlier research. Earlier interpretation of contemporary sources or choices made in research can constitute a bias as well: scholars always have to decide what data to incorporate into their studies. Within each selection and interpretation lies a potential bias as scholars focus on specific kinds of data, material or periods. The fact that the available archaeological evidence is not equally distributed over the study area, as was mentioned, is just one of the results of selections made. One should also be aware of the selection criteria used in sampling.
3. Choices in structuring my own database. Thirdly there is the way the current database is set up: how are the sources in this study interpreted and how are the data contained within them structured in the current database. How does this influence the output of the database?

These three levels of interpretative challenges of the available primary data will be dealt in a detailed overview in Chapter 3 (on the primary sources).

Bias and imbalances will be a recurring theme throughout this study, specifically in Chapter 6, when discussing the site classification, and in Part II (Chapter 7), the data analysis, in dealing with specific sites in the final analysis of the database.

In order to cope with the imbalanced evidence and to make the database fit for analysis, three choices were made in the design of this study:

The *spatial imbalanced distribution of data* over the landscape is tackled by assigning 10 key areas to the study area (see below in the next paragraph).

The *diachronic imbalance* is dealt with by dividing the research period into three different periods (see the next paragraph).

Imbalance and bias in the sources, and the interpretative challenges of the data found in them, are monitored and made explicit. It will be stated clearly and in detail what can be concluded from the found data, and what cannot.

1.II.5 Analysis of the developments in the landscape

In Part II (Chapter 7) the final analysis of the developments within the landscape will be executed. This analysis will be based on the cumulative database of sites. The found details of each site are mapped in a GIS, resulting in distribution maps of sites and related activities which are plotted per century. The GIS tool used, ArcGIS, combines spatial visualisation possibilities and geo-relational data modelling functionalities⁷².

By studying site patterns in a GIS, activity can be diachronically mapped in a regional setting. By studying the stakeholders involved (like the pope, monasteries, bishops, elite families, foreign forces and communes), and the kind of activities and interests on these sites, the actors at work in the landscape can be defined, and interaction tracked and regional diversity within it found. Knowledge of the physical landscape, found in retrospective data, in modern geographical studies and in aerial photographs, and current ideas on the transition in this studies' research area and other parts of the Italian peninsula are added to complete the picture.

For the study of infrastructure mostly the reconstructions and interpretations of earlier research are used. The distribution of sites however, in combination with historical information such as travel accounts, can aid the estimation of the use and disuse of infrastructure at a particular moment in time⁷³.

Three research periods

A spatial chronological analysis of the database is the litmus test for the practicality and effective use of a multi-disciplinary effort on such a large scale and timeframe. As stated, the analysis is divided in three logical chronological stages, along the lines of the available historical and archaeological information:

- The first phase addresses the 3rd to 7th century, covering late Antiquity. This phase is chronologically defined by continued imports from across the Mediterranean, specifically of African Red Slip Ware (ARSW).
- The second stage consists of the 7th to the 10th century, covering the "early middle ages" in the new periodisation currently used in Italian archaeology. It covers the period traditionally denominated as Dark Ages, because of the scarcity of data. The Dark Ages used to be set between the 7th and the 9th century. This stage is extended to include the 10th century in order to capture the first signs of *incastellamento*.
- The third stage addresses the 10th to 14th century, covering the process of development of the high medieval landscape, characterized by *incastellamento*.

As already mentioned, the three-period approach serves to deal with the diachronic imbalance of the available evidence, as some periods are better documented and studied than others. It allows the developments to be studied in detail, with an eye for the specific characteristics of each period and prevents drowning analyses in a too long timeframe. In the final synthesis of this thesis (Part III, Chapter 8) the geographical and chronological strands are pulled together to present the long-term perspective of the whole studied period of roughly a 1000 years.

Key areas

The research area is divided in ten key areas to be studied. The main reason to split up the research area into separate study areas is the fact that the research area as a whole constitutes a map at too large a scale to be effectively studied for patterns. A further pragmatic reason, as was discussed earlier, is the imbalance in the dataset caused by the fact that some areas and sites are better documented and studied than others. Dealing separately with these key areas effectively tackles the problem of an imbalanced generic distribution map of the research area, especially considering the late Roman periods. Lastly, the individual key areas allow the study of human activity zoomed to a level on which analysis of Horden and Purcell's microregions becomes possible.

The division in study areas to be examined is based on the following three criteria: First of all on basis of availability of data: For each key area, historical and/or archaeological data are available for at least one of the three research periods. Secondly, the key areas together must cover at least a part of the six main landscape zones of the studied "Tyrrhenian" part of southern Lazio (i.e. the Tiber delta, the Alban Hills, the Agro Pontino, the Volsci range, the Fondi plain and including part of the Sacco Valley⁷⁴). And thirdly the key areas chosen cover as much as possible (parts of) the trajectories of the main roads, the principal harbours and seaways, and the important crossroads.

The ten key areas are:

1. The *Nettuno-Anzio* key area; the boundary of the key area is set by the coverage of the landscape archaeological research conducted by the PRP since the late 1990s. This area earlier has been intensively studied from prehistory until the 7th century AD. The site of Astura settlement also has a well-documented high medieval phase. The area furthermore covers the coastal roads and includes the harbour of Torre Astura.
2. The *Fogliano* key area covers the lagoonal lake area of Fogliano and Monaci, part of the Agro Pontino. The area was intensively studied by the PRP team as well in the late 1990s. Archaeological remains date until the late Roman period. Historically the area is of importance because of an early (10th century) *castrum* situated here.
3. The key area of *Ostia* and the coast southwards covers part of the Tiber delta and the Laurentine coast from Ostia southwards until the important site of Tor Paterno. Its eastern border is set to the presidential domain of Castel Fusano. This is a thoroughly studied area for the entire chosen research period. Of specific interest is the continuing importance of the Tiber river to the city of Rome.
4. The *Velletri - Le Castella* key area covers the landscape between the significant and continuously settled town of Velletri and the site Le Castella. Both sites played a role in early *incastellamento* in this part of southern Lazio. In the context of the PRP, surveys were conducted here, south of Cori (the Cori transect) and during the Cisterna survey⁷⁵. The Via Appia and high medieval road Rome - Marino - Cisterna and the northern pedemontana road run through this area.
5. The boundary of the *Fondi* key area is chosen to incorporate the town of Fondi, the surrounding plain (including the Via Appia) and the adjacent parts of the Ausoni and Aurunci mountains and their foothills (part of the Volsci range). Fondi was a continuously settled important town and see throughout the middle ages, from the 8th century onwards situated on the border of the Papal State. In the middle ages this area had close ties with the nearby town of Gaeta and monastery of Montecassino.
6. The key area covering the southern *Alban Hills* and area to their west, a region with a historically well-documented ongoing close relations with Rome. The settlement of Albano Laziale was continuously occupied throughout the middle ages. This key area covers the main routes from Rome southwards west of the Alban Hills. In the PRP, during the Lanuvio-Albano study, surveys were conducted in the south of this key area.
7. The *Priverno-Fossanova* key area includes the continuously occupied and well-studied site and see of Privernum/Priverno and the site of Fossanova. The area is a permanent crucial axis in the circulation of goods and people between the Pontine plain and the Sacco Valley and an important stop for traffic on the pedemontana road during the middle ages.
8. The key area covering the mountains, the pedemontana zone and a large section of the Pontine plain between *Norma and Sezze*. It includes the two main routes between Rome and the south in the studied area of this thesis: the Appian way and the pedemontana road. The area was important for growing monasticism from the 10th century onwards. The pedemontana zone seems to have been a volatile area during the



Figure 1.3. The research area and the chosen key areas. Source: ArcGISOnline.

high middle ages with a large concentration of settlements and many recorded changes in authority.

9. The key area covering the northern *Lepine Mountains* and the *Sacco Valley* between Artena and Villamagna. In this area the PRP has conducted field surveys (Segni survey); here also the well-studied continuous site of Villamagna⁷⁶ and the town/see of Segni are situated.
10. The key area covering Terracina and its surroundings. Terracina was a continuously occupied, strategically situated harbour town, which saw many changes in authority in the early and high middle ages. The town of Terracina and its hinterland appear to have been an attractive location during the boom of monasteries of the 10th century.

The Nettuno-Anzio and Fogliano key areas should be seen as in-depth case-studies, for the Groningen institute of archaeology holds a long research tradition there; for both areas, the 2nd century is incorporated to extend the chronological scope. The study of the Nettuno key area is complimented by the earlier mentioned small scale study of the early to high medieval pottery of the museum Sangallo.

The site distribution maps are described for each key area including historical context, archaeology, cartography, toponymics, natural environment and the different interpretations of scholars along the following lines:

General site distribution: What distribution of human presence such as settlement, building, worship, ownership etcetera can be observed? Which specific sites can be

discerned in this period? What activities can be made visible and where did they take place? Which locations were inhabited and where was activity concentrated in the landscape? How did this change throughout the study period? What sites/activities continued in the next period?

Infrastructure: What can be said about roads (and their often divergent interpretations by other scholars), and about routes, canals, harbours, road stations?

Economy, production and trade: What is known about local economy, production and trade? This section also deals with the pottery evidence and the use of the natural environment (land use).

Religion and worship: What is the distribution and chronology of activity related to religion and worship? When and where can temples, churches and chapels, monasteries and communities of monks be observed? What can be said about Church ownership and the socio-economic and political activities of Church institutions?

Geo-politics: This section includes the discussion on aspects of secular ownership, power relations, struggle and defensive or control strategies. It concretely treats among others possible lines of defence, the building of fortresses and the development of *castra*. The rise of the free commune is treated here, as well as border markers and the Saracene threat.

In general, the method of cutting the evidence up in pieces (periods, key areas) enables me to focus and refocus,

zoom in and out, and to dive deep into the available data in order to detect meaningful patterning in the evidence.

Analysis per period

Per period an overview is given of the main developments concerning the combined key areas, enabling a holistic analysis of results, assessing all evidence (on site distribution, infrastructure, economy, religion and geo-politics), biases and the degree of imbalance in the key areas' data. At the same time it is indicated to what extent data are missing or sites cannot be located. The developments in other parts of the Italian peninsula are used as a sounding board in this analysis. For each period a number of themes are treated. These themes represent the essence of the period under scrutiny, and specifically for these themes the database should offer evidence that transcends the individual key areas. For instance, during the 3rd to 7th century a central theme was the expansion of the Church. Throughout the 7th to 10th century the Saracene threat was a major factor. And for the 10th to 14th century *incastellamento* was of momentous weight. The analysis per period is concluded with a partial synthesis, in which the main transformations that took place in the landscape and society of this part of southern Lazio are discussed.

1.II.6 Synthesis

In the synthesising chapter (Part III, Chapter 8), the entire study area and focus period are brought together. The conclusions of the period-by-period analyses on the activities within the landscape will be related to two dominant models of historical landscape analysis in the Mediterranean:

The attested developments will be studied along the lines of the Braudelian scheme. The long-term trends, medium-term developments, and the short-term events punctuating them are discussed, while explicating the underlying data. At first the structures of the *longue durée* are treated, followed by the conjunctures. I will cut up the analysis of structures of the medium term in two parts: at first the generic tendencies or most common repeating cycles of human adaptation to the medium-long term will be described, followed by a chronological overview. Events will be treated whenever measurable as elements of the conjuncture or *longue durée*.

The second angle will be *microregional*. As will be shown in the introduction of the Synthesis, the landscape of Lazio is a characteristic Mediterranean landscape on which Horden and Purcell have opened a window in their ground-breaking book *The Corrupting Sea*. They perceive the Mediterranean as a region characterised by enormous

fragmentation through ecological diversity on the one hand, and a high degree of *connectivity* on the other. Their concept of microregions, describing geographies of fragmentation (micro-regions) and connectivity (redistribution, communication and mobility), will be used as a second angle in the synthesis. The perspective of unity by diversity through microecologies and their connectivity provides a novel way of analysing the diachronic distribution of sites, interests and events in my database. The microecological perspective must be seen as complementary to the main Braudelian analysis. Whenever possible I will try to comment on aspects of microregions and connectivity within the main periods / structures defined along the Braudelian tripartite sub-division of the past: events, medium-term and long-term.

1.II.7 Conclusion

The primary benefits of this study will be:

1. Its multidisciplinary character, considering the specific elements of each type of data.
2. The long-term perspective through the input of retrospective sources
3. Its focus on sites to overcome boundaries between disciplines
4. The fine web of sites, and the recorded activity and interests on these sites, enables me to diachronically map activity in a regional setting. It allows to define the actors at work in the landscape, to track interaction and find regional diversity within it.
5. The regional and diachronic scale: for the first time concerning this part of southern Lazio an integrated landscape archaeological study is presented for a particularly important period, that of the long transition between the late Roman period and the high medieval period

There are, however, also limitations to this study. One should at all times be aware that one cannot see all developments taking place in the landscape. This is a review study, which has to come to terms with fragmented and imbalanced evidence. Moreover, in this study the focus will be on the functional aspects of living, building, producing, wielding authority etcetera in the landscape – as these are much more visible in the available data than for example ideology or *mentalité*. Likewise, the focus of analysis will be on the higher levels of society: as will be shown, evidence of life on subsistence level, of the “common man”, is very difficult to find in the available data. As explained, where necessary, the limitations and interpretative challenges of found data are made explicit throughout the study.

1.III Contents of this study

Part I: Backgrounds, context and methodology

Chapter 1 Aims and methods

Chapter 1 outlines the aims and methods of the research and its theoretical underpinning while setting the scene. Moreover it explains this studies' historical and landscape archaeological framework.

Chapter 2 Status quo of research

To effectively embed the current research, a general overview of the status quo of research is called for. The synopsis presented in this chapter deals with the key processes that took place on the Italian peninsula, and specifically in central Italy, from the late Roman period to high middle ages. First it presents the *communis opinio* on the main historical developments. Then recent archaeological and historical landscape research is discussed, summarising the latest insights on the transition.

Chapter 3 Primary sources

An overview is given of the archaeological and historical primary sources available for study of the landscape of Tyrrhenian southern Lazio. The biases within these sources (and their earlier interpretations) and their interpretative challenges for an analysis of the developments in southern Lazio during the research period are summed up. Finally an overview of the physical geography of the studied landscape of southern Lazio is given.

Chapter 4 Toponyms

In this chapter the toponymic research, executed in cooperation with Sonia Pomicino, is dealt with. In this study the diachronic development of individual toponyms originating in the research period is monitored. The time span of this analysis is stretched by incorporating toponyms from the maps (the 12/13th to the early 20th century) beyond the focal point of this study (the 3rd to the 14th century). The goal of the toponymy is to enhance the ways of identifying and locating sites, and to better develop and explain their history. The result of this study is a database of contemporary toponyms and a list of cartographic toponyms. Appendix 4.1 holds a list of all found historical toponyms.

Chapter 5 Retrospective analysis of historical maps

In this chapter the historical cartographical study is explained. The general idea is that the landscape depicted on the historical maps, aided by the topographical descriptions of post-Renaissance travellers give clues on appearance of the pre-industrial landscape, and thus generally of that of the middle ages.

This chapter begins with an introduction to historical cartography as a means of reconstructing ancient landscapes. The larger part of the chapter consists of the presentation and analysis of 51 historical maps of Lazio, dated from 12/13th-early to the early 20th century. Of major importance is the *Carta Geografica dello Stato Pontificio*, published in 1851 as discussed above. It was the first truly modern map of Lazio, with a clear legend and an accurate projection. Details are given on the origin of this map, its execution, technical details and the digitalisation process, and its concrete significance for insight in the pre-*bonifica* landscape. In Appendix 5.1 a selection of the treated historical maps is displayed for a better understanding of the history of mapmaking in Tyrrhenian southern Lazio and the use of historical cartography as a means of reconstructing the region's ancient landscapes.

Chapter 6 Site classification and presentation of the site database

This chapter presents the structure of the site database, which contains the data from the sources treated in the previous chapters. First of all, the classification of all types of records in the database will be discussed. This classification was devised to create useful interpretative categories for the analysis of settlement patterns. The site classification consists of definitions describing the physical (i.e. archaeological) manifestation of historical site categories and their accompanying interpretations. The site classification is presented in alphabetical order.

Next, the site database itself is presented. The data it contains are explained and the choices made in collecting data are accounted for. This chapter concludes with the presentation of a rudimentary version of the site database with basic information presented per site⁷⁷, Appendix 6.1 Catalogue of sites. Moreover, Appendix 6.2 contains all relevant queries from the main site database. And lastly, Appendix 6.3 holds a list of infrastructure and hydrography mentioned in the text.

Part II: Data analysis

Chapter 7 Combining all sources: analysing the landscape through the cumulative database

The final chronological and spatial analysis of the cumulative database is presented in this chapter. This analysis is cut up in three research periods, as explained above: 3rd to 7th century, 7th to 10th century and 10th to 14th century. First of all, per period a description is given of what happened in the key areas. In these descriptions, contemporary and retrospective data, general biases, research history and landscape have been incorporated. Secondly, in synthesis per study period, all data are integrated and the regional picture is painted. However, it is imperative

to evaluate the analyses of the key areas first per period. By doing so, we get a grip on the main interpretative challenges of these data in a regional perspective and thus create the background needed to effectively synthesise the data for this period. For each period a number of themes is presented; each theme epitomizes the period under scrutiny.

Part III: Conclusions

Chapter 8 *Synthesis, evaluation and recommendations*

In the synthesis, Braudel's three-partite chronological framework will be used as heuristic device, as a structure for studying the past. The attested developments in Tyrrhenian southern Lazio between the 3rd and 14th century are cut up and separately treated along the lines of the three Annaliste wavelengths of time: the *longue durée*, the *conjoncture* and the *événement*. Next, the landscape data will be related to a second dominant model for historical Mediterranean landscape analysis and analysed from the perspective of unity by diversity through Horden and Purcell's concept of Mediterranean microecologies and their connectivity. This microecological perspective is complementary to the main analysis.

The second part of this chapter is an evaluation of this study: what are the possibilities and pitfalls of the used methodology? And what does this study add to our understanding of life in the landscape during studied period? The goal of this review is twofold: to understand the current results and to see how the current methods can be used in future studies. The chapter is concluded with a number of recommendations for future study.

Online datasets

The following datasets can be consulted on the University of Groningen/UMCG research database (Pure), <http://www.rug.nl/research/portal>:

- the main (cumulative) site database
- comprehensive site map
- the toponym database
- the list of cartographical toponyms

Endnotes

- 1 Arthur & Patterson 1994, 410
- 2 Barker 1995a, 3; see also Arthur 1991b, 157 and Moreland 1992, 104 for overviews on the involved factors on obscurity; see also 2.II.1 Introduction.
- 3 The word "transition" is deliberately used, as it is a much more neutral term than other words describing change like "decline" or "rebirth". It is a word befitting the anthropologists' concept that all cultures are equal. To me, the word is best fitted to describe what happened after the Roman structures began to wane, as it leaves open the possibility of subtle change,

refraining from negative or positive connotations. Continued living and producing, perhaps under different circumstances, in a transformed but not totally different environment, is in this way incorporated; see Gelichi 2002, 169.

- 4 Moreland 2005, note 3: textual evidence for 'continuity' in Wickham 1979, 86 and Marazzi 1988, 291. Archaeological picture: Potter 1979, 138-149, especially tables 140 and fig. 41, 146, and Hodges & Whitehouse 1983, 33-48. See also Moreland 2001, 19-20.
- 5 Francovich & Hodges 2003, 11 ff.
- 6 Moreland 2005
- 7 See also paragraph 2.I.9.
- 8 The South Etruria survey project, conducted by the British School of Rome since the 1940s, was by far the largest and long-lasting.
- 9 Barker 1995b
- 10 Hayes & Martini 1994
- 11 See Manacorda (ed.) 1985 and the first volume of *Roma. Dall'antichità al medioevo*, Arena, M.S. et al. (ed) 2001.
- 12 See Molinari, Santangeli Valenzani & Spera 2016, specifically 5 ff for an overview of the status quo and Rascaglia & Russo 2016; see also Meneghini & Santangeli Valenzani 2004, Paroli 2004 and Santangeli Valenzani 2007.
- 13 Moreland 2005, 932; see also Patterson & Roberts 1998. The heart of the Tiber Valley project is a re-analysis of the South Etruria survey data, collected between the 1940s and 1970s, incorporating Moreland's Farfa survey of the 1980s as well. Crucial was the discovery of a characteristic late 6th and early 7th century homogenous pottery assemblage at Casale San Donato. See also 2.II.3.3.
- 14 Patterson & Roberts 1998. More generally on the challenges of pottery research in Central and South Italy: Arthur & Patterson 1994. At San Donato a homogenous ceramic assemblage was found dated convincingly from the late 6th to the end of the 7th century; Moreland et al. 1993, 206-209, Patterson & Roberts 1998; This assemblage covers exactly the 150 year typological gap as found in many earlier publications (like Potter 1979). The San Donato pottery made identification possible of 14 survey sites of this period which had earlier been overlooked; see also 2.II.3.3.
- 15 The most recent publication for late Antique and early medieval ceramics in central Italy is Cirelli, Diosono & Patterson 2015, which showed the progress that has been made in recent years in the development of local and regional pottery typologies.
- 16 The results of these studies are summarised in Chapter 2 on the status quo of research on the Italian medieval landscape.
- 17 Moreland 2005
- 18 Moreland 2005, 4. See also 2.II.3.2, conclusions.
- 19 Arthur 2006, 2010 and 2012; After a pilot study, Arthur in 1992 had ultimately chosen several key sites to excavate with the aim of studying the settlement context and the socio-economic relation of the settlement with the surrounding landscape, Arthur 2006.
- 20 For an overview of recent developments in medieval landscape archaeology in Italy see Corsi 2016.
- 21 See the wide variation of contributions in overviews of the state of landscape archaeology in for example Ashmore & Knapp (eds.), 1999 *Archaeologies of Landscape: Contemporary Perspectives* and in Kluiving & Guttmann-Bond (eds.), 2012 *Landscape Archaeology between Art and Science: From a Multi- to an Interdisciplinary Approach*

- 22 Barker 1986
- 23 Although both the landscape archaeological and historical evidence are fragmented in our study area, see 3.I.1 and 3.II.2.
- 24 Knapp 1992, 4; Attema 1993, 18. Knapp 2009, introduction: “Annalists attempted to construct a ‘total’ history, dealing with a wide range of human activity, and combining divergent material, documentary, and theoretical approaches to the past. Annales-oriented research utilizes the techniques and tools of various ancillary fields, and integrates temporal, spatial, material and behavioural analyses. Such an approach is obviously attractive to archaeologists, for even though they deal with material data rather than social facts, they are just as much as historians interested in understanding social, economic and political factors such as power and dominance, conflict, exchange and other human activities.”
- 25 Barker 1991, 51
- 26 Bintliff 1991, 7
- 27 Barker 1995b, 4, 308 ff.
- 28 Snodgrass 1987
- 29 Barker 1995b; among the projects with such a long time span including the middle ages in central Italy are the earlier mentioned Liri Valley Project (Hayes & Martini 1994), the Farfa Survey Project (Moreland 2005), the The Rieti Basin Survey (Coccia & Mattingly 1992 and 1995), the Tuscan research projects directed by Marco Valenti (Valenti 1996, 2004, 2008 and 2012) and the research projects directed by Cristina Corsi in inner southern Lazio (Corsi 2006), and the Potenza Valley Project, executed in the central part of the Umbria-Marches Apennine mountains (Vermeulen *et al.* 2017)
- 30 Knapp 1992, 14
- 31 Barker 1995b, 308
- 32 Attema 1993, 18
- 33 The Pontine plain is situated about 60 km south of Rome. On this Project see Attema 1993, 18 and paragraph *The Pontine Region Project* in 3.I.1. The reality of the changing landscape (whether caused by man or not) and man’s changing perception of the potential environment, belonging to the *conjoncture*, are in Attema’s research exemplified by fact that colluviation in Pontine plain increased, or even began with the first stable settlement of the hill margins in the first half of the first millennium BC, and the fact that these new soils afterwards were intensely exploited by the Romans.
- 34 In the Biferno Valley an analogue correlation has been attested between periods of sedimentation and archaeological and historical prove for settlement and agricultural expansion, for example in the Samnite and Early Roman period, Barker 1995b, 314.
- 35 Hayes 1994
- 36 Carter & Prieto 2011
- 37 Vermeulen *et al.* 2017
- 38 Bowes, Francis & Hodges 2006
- 39 As Attema 1993, 18 put it: “The history of settlement and land use in the Pontine Region shows that the environment formed a powerful factor structuring human action, and that change was dependent on the recursive relationship between landscape and socio-economic, political and technological developments”. Decreasing expenditure in drainage works as one of the causes of increased sedimentation and swamping in the late Empire, as was described by Potter 1981 for Southern Etruria; in the northern Campania, an area closely resembling the Pontine plain with its (less extensive) marshy coastal plain and surrounding terraces and foothills, this factor was pointed out by Arthur 1991b for the environment of the cities of Minturnae and Sinuessa. Undoubtedly these conditions occurred on the Braudelian timescale of the *conjoncture*, as they developed through human social structuring on the middle long term. See also Walsh, Attema & de Haas 2014.
- 40 See below the paragraph *Area of research: “Tyrrhenian” southern Lazio*, for a detailed description of the area of research.
- 41 Horden & Purcell 2000, 80
- 42 Attema 1993; Attema & Van Leusen 2004; Attema, De Haas & Tol 2011
- 43 De la Blanchère 1889; Attema 1993, 55; Attema 2019
- 44 Attema 1993, 19
- 45 Moreland 1992, 117
- 46 The *bonifica integrale* is the large scale reclamation and demographical restructuring of the Pontine plain in the 1930s, see 3.III.
- 47 Alessandri 2009; Feiken 2016
- 48 Tol 2012
- 49 See paragraph *The Pontine Region Project* in 3.I.1 for a detailed overview of the PRP Project.
- 50 Attema 1993, 13; De Haas 2011; Attema, De Haas & Termeer 2014
- 51 Tol 2012
- 52 Attema 2002
- 53 With the exception of two key areas: Nettuno – Anzio and Fogliano. Here the 2nd century is incorporated as well.
- 54 See 5.IV.
- 55 As will be shown, archaeological evidence pointing to specific events, like burned layers or retrieved arrow heads (such as found at Farfa and San Vincenzo al Volturno), are absent in our study area. See also 2.I.7 and 7.II.2.1, *lack of markers of change*.
- 56 Not only by accumulating sources, the problem of spatial coverage of the available sources (and connected biases) is countered; this is also done by cutting up the research area into 10 micro-regions, as is explained below in the paragraph *Analysis of the developments in the landscape*.
- 57 Evans 1974, 17
- 58 See the paragraph *How the database is built*.
- 59 The archaeological reports and data extracted from them are treated in detail in Chapter 3.
- 60 See 3.I.1.
- 61 The contemporary written texts and data extracted from them are treated in detail in Chapter 3.
- 62 As recent studies show, texts should be appreciated as products of their creators, as a way to express the social status and political motives of the people mentioned in them; the same holds true for maps. In 3.II.1. I reflect in more detail on how I read texts. On reading historical maps see 5.I.
- 63 IGM, 2006, Database IGM Toponimi 25000 (tutta italia)
- 64 Cancellieri 1985 and 1987; De Silva & Pizziolo 2004
- 65 See 5.IV.
- 66 These studies are not treated in a separate chapter because of the large variety in post-Renaissance scholarship. However, these sources are described in detail, where needed, in the data analysis of Part II (Chapter 7); the toponymic data they contain are incorporated in the study of Chapter 4.
- 67 The *Ortofoto digitali 2000 di Lazio* was used; this set of clear aerial photographs of Lazio was accessed via the Geoportale

- Nazionale of the Ministero dell'Ambiente e della Tutela del Territorio e del Mare. Available at: <http://www.opengis.net/wms>.
- 68 Cf. Hodges 1993 who summarises the research done on the early to higher medieval hinterland of Rome and shows how much work is done in northern Lazio and the Sabina. Striking is the absence of projects with a medieval focus in Tyrrhenian southern Lazio. Outside the current study area, however, regional studies of the archaeological landscape of medieval southern Lazio have been conducted, such as Pietrobono 2006 (covering the Frosinone area) and Corsi 2006 (covering interior southern Lazio).
- 69 Studies summarised in Francovich & Hodges 2003, 40, 50, 57, 68-70 and 108; the most important are Fentress & Cambi 1989 and Valenti 1996.
- 70 Barker 1995b
- 71 Arthur 1991a, 19
- 72 ArcGis is a geo-relational model, which means that geography and descriptive information can be combined, viewed and visually manipulated, see 5.IV.
- 73 See Chapter 7, Introduction: the reconstruction of roads.
- 74 See 3.III.
- 75 See the paragraph *The Pontine Region Project* in 3.I.1.
- 76 Throughout this study I use the denomination *Villamagna*, the medieval name for the site. The Roman name for the site, *Villa Magna*, is used as well in the literature.
- 77 The full site database can be consulted on the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>.

Chapter 2 The status quo of research

Introduction

To effectively embed the current research in past and recent scholarship, a general overview of the status quo of research is called for. This will be done in two parts. Part 1 (2.I) *Setting the historical stage: main scenes* concentrates on historical scholarship. Part 2 (2.II) *The status quo of research on the post-Roman Italian landscape* discusses landscape historical and archaeological approaches.

Part 1 presents the status quo of research on fourteen historical topics that stand out between late Antiquity and the late medieval period. These topics (sections 2.I.1-2.I.15), will serve as a historical socio-economic, religious and political sounding board for the interpretation of the developments in the landscape of Tyrrhenian southern Lazio in the data analysis of Part II (Chapter 7). Sections 2.I.1 to 2.I.12 are treated in chronological order, while section 2.I.13-15 provide short introductions on a number of subjects, summarising the status quo of research. Adding to the interpretive framework a number of themes is singled out which represent the essence of the period under scrutiny, such as feudalism and *incastellamento*. These themes are dealt with in separate short studies. In part 1, central Italy is the main focus, with a sharp eye on the developments in the city of Rome and the changing relations between the city and its hinterland. Being by far the largest political, economic and religious centre of the region, socio-economic and political developments in this part of southern Lazio always were, and still are profoundly connected to the fate of the Eternal City. Specific attention is paid to recent historical scholarship on the influence of the church in Rome's surroundings, as this is extremely relevant in understanding settlement organization and power relations in the studied part of southern Lazio.¹ The historical overview incorporates some generic archaeological argumentation, for example on the material evidence for a decline in imports in the late Antique and early medieval excavation record within the city of Rome².

Part 2 summarises the latest insights on the transition as seen from the perspective of landscape archaeology and landscape history, with particular attention to the archaeological scrutiny of rural environments in central Italy. In the preface to Part 2, an overview of recent

developments in these fields is given, as well as an outline of the specific theoretical and methodological premises that underlie the study of regional landscapes for the research period. The first part of the main text consists of a generic overview on the developments that took place in rural areas of the Italian peninsula at large³. The latest insights into the main stages of transformation and regional diversity within these are discussed. The second part focusses on two regions in central Italy where integrated regional studies have been undertaken: Northern Lazio and the Biferno Valley. These regional studies provide useful models against which the fragmented evidence from the current research area can be put in perspective.

2.I Setting the historical stage: main scenes

2.I.1 *The Italian homeland under transformation: the "end" of Antiquity*

The later 4th and 5th century on the Italian peninsula was characterized by progressive political division, collapsing Roman state systems, incursions of foreign peoples and population decline. The mounting political complications and internal discord within the Roman Empire however, had already become unmistakable at the end of the 3rd century. In 286 AD Diocletian named a co-emperor, and divided the Empire into a western and eastern part. Each co-emperor named a Caesar as a second-in-command and successor. Although this unworkable tetrarchy collapsed in 312 when Constantine defeated his competitors and became sole ruler, the split up of the Empire had been set in motion. Constantine relocated the imperial capital to Byzantium on the Bosphorus in 330 and renamed it Constantinople. From 395 onwards the Empire was officially divided between a western and eastern part, with Milan and Constantinople as their respective capitals. In 402, the Western Roman Empire moved its capital from Milan to Ravenna.

By the beginning of the 5th century the Roman Empire had lost its territorial integrity. Britain was lost (in 410), as were parts of Spain and France. Northern Africa was captured by the Vandals in 430, blocking the main influx of resources, pottery in particular, from this region. In that period, the Italian homeland became an open arena for incursions of barbaric peoples. In 410, Rome was sacked by the Goths⁴. The Vandals pillaged Rome again in 455

under king Geiseric. These raids forced many towns to (re)build their walls. Parts of the countryside were abandoned, caused not only by a general economic deterioration⁵; insecurity in these times of frequent attacks must have been an important incentive to flee remote rural areas⁶.

Barbarians on the Italian peninsula

Until recently the barbarian incursions were still explained in terms of the ideas of ‘invasions’ versus ‘migrations’. Current research however rather emphasizes more intricate processes of integration and adoption of foreign people, into a Roman society itself under continuous transformation. This indeed is a subtler way of looking at the role of foreigners in Roman society.

In fact, for centuries already, the Roman model of dealing with external populations was to adopt them into *Romanitas*⁷. Ever since Emperor Claudius in 48 AD had opened the Senate for people from outside the motherland, the concept of *Romanitas* had been a strong tool in incorporating foreign populations in Roman society. New *gentes* were accepted into the Empire, in the expectancy that they would bring economic and military benefits. They became a pivotal part of Italian society. Many foreign men served in the Roman military, especially since the 3rd century when internal fracas and increasing outside barbaric threat forced Rome to seek for soldiers of fortune from outside the motherland. As a consequence, the lion's share of officers on the Italian peninsula under Theodosius I (379-395) was already ‘barbarian’. In that period, the recurring conflicts had brought about a steady militarization of the Empire. This caused the civil institutions to lose control over the army, leaving room for new ethnic identities within the armed forces to be accentuated. Loyalty to these fractions along ethnic lines eventually became more important than duties to the Roman Empire⁸. In the later 4th and 5th century warlord-generals like Stilicho (overthrown in 407/408) and Aetius (killed in 454) temporarily drew most power to themselves. Of all the ethnic groups which strove for power within the military forces of the Empire, the Goths were the most successful⁹. It was King Alaric of the Goths who sacked Rome in 410.

Despite their military success, however, none of the invading and conquering armies was able to consolidate power on the Italian motherland until the end of the 5th century. This was most of all due to their inability to master the Roman administrative structures, “the machinery that had been set up by the Romans to govern [the Empire]” (Pohl)¹⁰. The first barbaric leader able to stay in power over a long period of time was Odoacer, who reigned from 476 to 493 AD.

The decline of the Roman land tax system

Central in these processes of decomposition and growing volatility was the fading away of the Roman state systems and administration. The governmental breakdown was epitomised by the gradual weakening of the central (land) tax system. From the 4th century onwards, some of the outer provinces became destabilised, largely as a result of barbarian incursions. As a consequence, these territories were not able to fulfil their tax duties any more¹¹. Tax evasion became epidemic. It is well documented that in the 4th and 5th centuries large landowners misused their high position to dodge tax collection, often by bribing or pressuring the officials responsible for it¹².

Under the Ostrogoth kings in the last quarter of the 5th and first half of the 6th century, only part of the tax system still seemed to function, but with major difficulties¹³. However, the remaining elements of the Roman tax system still enabled the Ostrogoths to execute their rebuilding programs¹⁴. After a low in the middle of the 6th century¹⁵, a central duty system was revived in Byzantine Italy for some time, at least in and around the larger cities¹⁶. Tax collection in Byzantine Italy positively ended in the later part of the 7th century¹⁷.

The diminishing of regular tax income was felt dearly. After all, centralised, recurrently extracted duty constituted the largest base income for the Roman state. It supported the maintenance of the army, the central government as well as the building, restoration and administration of the city of Rome itself. The large enterprises of the state workshops and the public postal service for example, vital to the coherence of the Empire, were largely sustained by it.

Partly due to the fading of the central tax system, in 4th and 5th century central Italy the real power came into the hands of people and institutions that owned lands. The historically attested wealth of the senatorial class of the Western Empire in these centuries is considered legendary. A lot of the internal turbulence in 5th century Italian society seemed to have been caused by the elite connected to the senate, who tried to increase their landed properties and power¹⁸. Later on, the Ostrogoth and Byzantine forces of Italy based their subsistence on landownership too¹⁹.

The decline in pottery imports as an indication for fading state structures

Wickham²⁰ discussed a specific major effect of the crumbling of the structure of the state: the evaporation of long distance distribution systems. It is clear that long-range bulk exchange between the Italian peninsula and other (former) parts of the Roman Empire routes became severed at a given point in time. The picture of decline in distribution networks is best drawn by archaeological

evidence on pottery production and distribution²¹. The typologies of African Red Slip wares (ARSW) and amphorae show an overall decrease in the number of wares produced and transported over the Mediterranean from the 5th century onwards²².

Perspectives on the causes of the dropping numbers of pottery imports of the peninsula vary. Demographic decline should be part of any explanatory reasoning: less demand ultimately leads to less production²³. Some archaeologists, like Hodges and Whitehouse, indeed focused on the demand issue, treating the pottery import as a commercial issue separate from the larger picture of insecurity and collapse²⁴. They suggested that a decrease in urban demand was the central cause of the diminution of imports from northern Africa. Others centralised the Vandal take-over of northern Africa as a major explanation. As a result of the Vandal conquest, shipping routes to Italy would have become less frequented, causing the distribution costs to rise significantly²⁵. It should be noted however, that the focus on the sheer numbers of imported pottery finds could be a too one-sided perspective; a drop in the numbers of imported pots does not always have to signify economic decline. A change in regional distribution patterns²⁶ and the formation of regional productive and micro-regional commercial trade systems²⁷, which are often less well detectable, should be considered as factors as well.

For Wickham, the reasons given above were too monocausal, as they do not appreciate the whole picture of decline and changing geo-politics. Wickham looked at declining pottery production and distribution from another, broader perspective. Although he recognised the commercial and cost-profit factors, he maintained that the breakdown of large scale pottery production and distribution first of all was connected to the collapse of stable state structures. In his view, only a strong and well-oiled state like the Roman Empire would be capable of making large scale Mediterranean trade possible: "The end of large-scale pottery production in the Mediterranean in general must tell us about, not the breakdown in international commerce (that is only a redescription of the phenomenon), but the collapse in structures of the state in the West, or, in Byzantium, their drastic transformation and simplification in the mid-7th century"²⁸. According to Wickham, the axes of exchange "shifted as the boundaries of the Empire shifted"²⁹.

Sure enough, as the West was fragmented in the 4th and 5th century, large scale pottery import from Africa into Italy dropped, although in Rome, Naples and other large markets imports did not decrease until much later³⁰. This decline cannot be explained in terms of manufacturing

failure only: production continued in northern Africa, despite the fact that it was captured by the Vandals³¹. After the Vandal occupation, northern Africa became an Exarchate of the Byzantine Empire, in 533 AD. Pottery production was sustained, with exports focusing on the eastern Mediterranean. It seems that the semi-autonomous Exarchate had become a partner in a still functioning Roman / Byzantine exchange system. To speak with Wickham: the exchange route had shifted with the boundaries of the Empire. In this perspective, it is interesting to see that, in contrast to many areas on the Italian peninsula, Rome's northern and southern hinterland and Liguria, Calabria and Naples, until the 7th century still saw a certain level of imports from (Byzantine) northern Africa³²; these were Byzantine occupied areas. Indeed, economic change and decline were probably slower in Byzantine Italy because of the Mediterranean exchange in and around larger Byzantine centres³³.

The connection between Carthage and the eastern Mediterranean only collapsed when the links between Carthage and Constantinople were severed in middle of the 7th century. At that time, the Byzantine Empire became more loosely organised³⁴. Wickham's argumentation is supported by the fact that the clearest evidence for continued bulk pottery production has been found in regions where the late Roman world persisted longest, i.e. Constantinople and the Umayyad regions of Syria and Egypt³⁵.

Public building and infrastructure

Historical sources show that in the 4th century the built environment of Roman Italy began to change. Part of the once glorified Roman infrastructure fell into disrepair and even disuse, secondary roads in particular³⁶. This made travelling a difficult and dangerous undertaking, certainly as gangs of robbers began to roam the Italian homeland during the 4th and 5th century³⁷. Although continuity and change prove to be delicate subjects of study, it is overall accepted that at the end of the 4th century the physiognomy of many cities began to change³⁸. This is clearly visible in Rome³⁹. Many of Rome's monuments already had fallen into disrepair. The 4th and 5th century law code of the *Codex Theodosianus* show this indirectly, as protection of the Roman buildings evidently needed to be regulated⁴⁰. Because of the insecurity at the time, 5th century cities began bolstering their defences. Albenga (Liguria), Ravenna, Grado, Terracina and Rome⁴¹ are well known examples⁴²; many Italian cities appear to have been fortified before the Gothic war⁴³. All types of settlements underwent transformations in the 5th and 6th century: large cities, towns as well as smaller rural settlements saw changes characterized by a simplification in architecture, construction plan and function⁴⁴.

The change in the appearance of the Italian cities was an inescapable process. Demographic decline led to disuse and an increasingly poor condition of large parts of urban areas. Public building activities from the 3rd century onwards more and more had to rely on the ever-poorer central government. Individual local elite investors abandoned building in public spaces and eventually started to focus on private and communal churches⁴⁵ and private residences. On the other hand, during Ostrogoth rule some deteriorated parts of Ravenna and Rome were rebuilt; still, the Ostrogoth kings had to finance these public building activities themselves⁴⁶. In general, it can be said that from the later 4th century onwards public display of wealth was limited. Even the papal sponsored churches of Rome in the centuries to come were no match compared to the early 4th century basilicas regarding scale and embellishment⁴⁷.

According to Wickham, these building activities were indicative for the poor economic state of late and post-Roman society: building on a smaller scale reflected a wide-ranging decreasing of resources, and, regarding state investment, tax income. However, not everything was negative: the sustained maintenance of the larger basilicas, for which the *Liber Pontificalis* gives ample documentation⁴⁸, pointed to a continued level of craft skills. These skills continued to exist, but were clearly less widely deployed⁴⁹.

2.1.2. *The city of Rome in the 4th to 6th century*

The fate of late Antique Rome and its surroundings has been studied manifold, by archaeologists and historians alike. Clearly, already before the Gothic wars of the early 6th century, the city of Rome underwent major changes. It is safe to say that Rome's economy was changing and shrinking from the late 4th century onwards. In the 5th century, the city was overrun several times.

Many 4th to 6th century historical sources were explicitly pessimistic⁵⁰. These texts portrayed Rome as only a shadow of its former self, and a countryside in decline. The works of Cassiodorus (Var.II.39), the chronicler of Theodoric's reign, are exemplary for this negative perspective⁵¹. Rome experienced major transformations of the organisation of building work, including the decline of brick manufacture, and the use of recycled materials as an alternative. However, as recent work shows, this is not only a question of decline, but "resulted from the emergence of a society rigidly divided between a ruling class that controlled the means of production and an oppressed inferior class, responsible for production activity"⁵². Neglect and abandonment, however, were real as well⁵³.

Extensive depopulation can be read from the many excavations, for example on the Crypta Balbi complex and on the Caelian hill⁵⁴. A discussion of demographic

decline and its causes is a delicate one as Corsi (2013) has shown: "The estimation of the demographic consistency of the population of Rome is a very tricky subject, considering that scholars like Bavant, Durliat, Beloch and Mazarino have proposed hugely diverse totals and trends. What seems by now established is that a demographic crisis occurred at the beginning of the fifth century AD. However, this crisis appears to be due to a conjunctural situation, explained by contemporaneous factors like pestilence, famine and food shortages. On the contrary, between the end of the fifth and the beginning of the sixth century, the population of Rome dropped because of structural factors, such as radical transformations of the economic and social system, this time irreversible."⁵⁵ Although the discussion on the total numbers of inhabitants is a complicated one, in the 7th century only a fraction of the past million-plus population of Rome remained⁵⁶.

The general changing nature of built environments is corroborated by the archaeological findings in the near hinterland of Rome, particularly at Portus and Ostia⁵⁷.

Retained vitality

As Wickham pointed out, however, for the following centuries some vitality remained in "local urban life, politically, socially, and economically"⁵⁸. Not everything was gloomy. Life in the city and urban government continued, even during the dark 6th and 7th century. A certain level of craft production was retained⁵⁹. This becomes clear among others from the pottery assemblages of the Crypta Balbi excavations and the maintenance of churches.

Rome also experienced periods of some temporary demographic recovery, in the later 4th and second quarter of the 5th century⁶⁰, based on figures of and legislation on the supply of free bread and meat in the Codex Theodosianus⁶¹.

There are other positive signs. As touched upon before, economic decline was probably slower in Byzantine ruled areas, Rome and its near hinterland, because of the Mediterranean exchange in and around larger Byzantine centres⁶². What is more, the deterioration of macro-regional trade networks did not seem to have totally destroyed the close bond between Italian cities and their hinterland. This certainly seems to apply to Rome. For some parts of Rome's hinterland there are clear signs of continued rural occupation, producing and exchange relations with the city until the end of the 6th century at least. Earlier studies have shown that there is strong ceramic evidence for this in the coastal area south of Ostia⁶³. Here even an unbroken exchange relation with Rome during the Dark Ages seems probable. Contrary, in the Sabine area the ceramic links with the city lasted until the third quarter of the 6th century⁶⁴.

Rome as administrative and religious centre

Rome itself, unlike many other Italian cities, most certainly continued to act as an administrative and religious centre. As Hodges puts it: "Like many other ancient centres, [Rome] served an administrative purpose first and foremost. Like many other great cities of the ancient world, early medieval Rome represented rather a theoretical state of affairs, essentially an anachronistic condition since it had lost most of its territory, and had been reduced to no more than a provincial centre. Only its unique association with the papacy safeguarded it from further decline"⁶⁵.

Indeed, at the end of the 4th century, the Christian faith finally triumphed in Rome, as in the rest of the Italian peninsula, when the powerful Roman senatorial families accepted it⁶⁶. It should be made clear, that the bishop of Rome was not from the outset the supreme ruler of the Church, as the Christian Church was not yet an integrated and consistent institutional unity⁶⁷. From the 3rd century onwards, however, the bishop of Rome slowly but steadily put himself forward as the successor of Peter, and owner of the apostolic primacy over the whole Church⁶⁸. The position of the papal court was considerably strengthened by the Edict of Milan (313), a declaration that permanently established religious toleration for Christianity within the Roman Empire. In the course of the later 5th century, the supremacy of the Roman bishop over Christendom would finally be accepted, although some eastern Churches often took an independent stance⁶⁹.

Papal estates outside Rome

During this period, starting with the pontificate of Pope Sylvester (314-335), the papacy rapidly extended its landed properties outside of Rome, mostly by donation. This was documented foremost by the *Liber Pontificalis*. The largest donations to the ecclesiastical institutions were done in the early 4th century by Emperor Constantine (306-337). By acquiring these estates, the pope, but also other powerful Church institutions like individual churches and monasteries, built up authority and economic interests in the countryside around Rome⁷⁰. The popes were able to use the still full-fledged bureaucratic apparatus of the Roman Empire to impose strict ruling on their estates. In the 6th century the papacy was said to be the largest landowner in the entire Empire after the Byzantine emperor⁷¹. These papal estates combined were called the *Patrimonium Petri*.

The papal rural estates around Rome, *fondiari*, growing since the 4th century, were ultimately (in the 7/8th century) grouped in a number of administrative entities called *patrimonia*. In this way the Church attempted to strengthen its grasp on its institutions in the *suburbium*, their revenues and their expenditure. The lion's share of

the *fondiari* were located in the *Patrimonium Appiae*, the south-western quarter of the *suburbium* including at least a part of the Pontine plain⁷².

2.1.3 Theodoric and the Ostrogoths

The first barbarian leader to consolidate power on the Italian motherland was Odoacer (ruled 476-493). He was a mercenary, and leader of the Germanic forces incorporated in the Roman army. His descent is still disputed. Key to his success was him being able to build an allegiance without a dominant political loyalty and ethnicity, enabling him to wield large fractions of the fragmented forces in the Roman Empire. He resided in Ravenna. Odoacer disposed of the last western Roman emperor, Romulus Augustulus, in 476. By taking up the throne as king and not as emperor, he effectively eliminated the Western Roman Empire.

In 489 Odoacer clashed with Theodoric, king of the Goths and a general of Odoacer's army. Theodoric had developed a strong authority on the Balkans in the 480s. Byzantine emperor Zeno became concerned of the presence of this formidable force in his backyard. Zeno hereupon cleverly enticed Theodoric to overthrow Odoacer, with the prospect of governing Italy in his name. After a four-year conflict, Theodoric finally managed to seize power in the year of 493.

Theodoric's reign

The years of Theodoric (493-526) are seen as an age of prosperity and relative peace, a period well-documented by contemporary statesman-writer Cassiodorus. Theodoric resided in Ravenna which he made his capital. He gained the support of the Roman senators and was thus able to get the Roman administration working for him, something barbarian conquerors before him had not been able to do. He and his Roman counsellors attempted, relatively successfully, to develop a permanent cultural mix in which Gothic military and Roman civic customs and traditions would blend⁷³.

Some parts of Ravenna and Rome saw extensive rebuilding programs, the so-called Theodoric *renovatio urbium*, solely paid for by the king. Although these restoration works on classical buildings have always triggered historical imagination, these efforts in fact seem to have been executed on a fairly small scale⁷⁴. The most important activities were performed on fortifications in cities and on castles, as appears from the *Anonymus Valesianus*⁷⁵. In rural areas, some large undertakings are contributed to Theodoric's reign: the drainage of large parts of the Pontine plain is a well-known example⁷⁶.

These activities were financially realizable as the Ostrogoths kept parts of the Roman tax system intact, although doing so with major difficulties⁷⁷. Later on, many of them obtained lands to provide for themselves⁷⁸.

In some areas agricultural life flourished again, although production did not reach the level of the Roman period⁷⁹.

The Gothic war

In the wake of Theodoric's death, the metastable power balance in Italy began to shift⁸⁰. The senators who opposed the Gothic rule sought the support of Justinianus, the Byzantine emperor who was already looking for an opportunity to start a campaign to reconquer the western parts of the former Roman Empire. At long last, he found an excuse to go ahead in 533, when the Ostrogoth king Theodahad had removed his co-ruler, Theodoric's daughter Amalasantha.

The Gothic war lasted for almost 20 years, vividly described by contemporary writer Procopius, in *De Bello Gothico*⁸¹. After the Byzantine invasion, southern Italy soon fell. The Goths regrouped in the northern regions of the peninsula, where they were able to withstand the Byzantine forces for two decades, with varying fortunes for both parties⁸².

In the course of the war, parts of the still functioning infrastructure and the available agricultural lands were damaged⁸³. When the Gothic war ended in 552/553 with the death of the last king of the Goths, Teias, Italy was severely weakened, economically as demographically. This was not only due to the war. One has to bear in mind that the relative peace of Gothic rule did not change the long term economic and demographic downward trend that had started long before. Many of the urban repairs, drainage works and temporary economic successes were once again obliterated. Then again, not all the causes of decline were economic or military-political: the Justinianic plague from 542 onwards could have played a major role in this recession⁸⁴.

2.1.4 The Byzantine period

Byzantine Italy consisted of two main centres plus hinterland, around which imperial authority was forged and upheld for roughly 200 years (until the year of 751): Ravenna and Rome. These two centres were connected by a corridor that ran in a straight north-south direction along the Tiber and over the Apennines, protected by a series of fortresses. At first, after the Gothic war (535-554) and before the Lombard arrival (568 AD), Byzantine possessions were much more extensive. Byzantine territory covered all but the whole Adriatic coastline, Calabria, Liguria and most islands. In the course of these 200 years, now and again Byzantine ruled regions fell to the Lombards.

The Byzantines were not able to create a solid rule over the whole Italian peninsula in the years after the Gothic wars. Their weak factual control on Italy as a territorial

unity constituted a break with the past. In the wake of the Gothic war, "the unity established by Rome that had firmly drawn together the different regions of Italy was fading away, and the Byzantine state, with its tax collectors and its barbarian soldiers, was incapable of maintaining it"⁸⁵. The political culture of Italy had decisively been changed: Italian unity was disintegrating. This was the backdrop against which the Lombard invasion and permanent settlement, from the late 560s onwards, must be seen (see below, next section).

Following the loss of large parts of Byzantine area on the Italian peninsula to the Lombards (560-570s), the emperor was able to consolidate firm control over the remaining possessions. For this he established the function of governor, the so-called *Exarch* (584). The Exarch took up his headquarters in Ravenna, and was supported by an extensive hierarchical structure of administrators. Regular tax collection, which had declined but was continued during Gothic rule, was maintained and even expanded⁸⁶. The tax burden imposed by the Byzantines was heavy, but necessary to maintain control and keep up the imperial army on the peninsula. This led to the Byzantine rule being very much disliked. The main positions like Exarch and pope were often held by Greeks. A large number of inscriptions make clear that a significant Greek minority existed in many of the larger towns of central Italy.

Urbanocentric government

By the time the Byzantines had established their reign on the Italian peninsula, towns had gained more political weight⁸⁷, despite the fact that the old urban centres were waning and that large parts of these towns had fallen into ruins. Towns provided shelter in those days of turmoil and became the centres of Byzantine control. Altogether, Byzantine authority and administration on the peninsula were urbanocentric: administration and tax collection were organized from cities⁸⁸. As the sources and the archaeological documentation attest, Byzantine presence outside the cities was concentrated in the defensive structures that were built along the coastline; from without these structures (often called *castra/castella*) they defended their landed possessions and those who worked in them⁸⁹. They also erected defences on strategic inland positions. In the 7th century several *castra* were documented in the Sacco Valley (on the right bank Segni, Patrica and Gradon – unidentified as of yet-, on the left bank Anagni, Alatri, Ferentino and Veroli), likely part of a Byzantine defensive system along the edges of the valley⁹⁰.

The Byzantine court, on the other hand, allowed smaller local communities a large amount of administrative autonomy⁹¹. The urbanocentric nature of Byzantine presence in Italy was documented in the written sources and

is shown by the surviving material culture: in the cities, Byzantine iconographical and architectural influence is well-documented while in the countryside Byzantine archaeological assemblages are rarely found (with the exception of Liguria)⁹².

A new military elite

The Gothic war had weakened both the urban and rural aristocracy (although the distinction between them is difficult to make). Civil secular elites progressively vanished, just as in Lombard ruled Italy and many other parts of Europe⁹³. The senatorial aristocracy lost most of its authority as most senatorial families had fled to Sicily and Constantinople⁹⁴. First functionally and finally factually the senate ceased to exist⁹⁵.

With this disappearance of the old elite, a rising group of military leaders became the new large landowners. This new military elite developed in both Lombard and Byzantine areas⁹⁶. They were the top-end of a strongly militarized society that had evolved forcefully since the Gothic war, but had its roots in the late Empire. Testimony to the progressive militarization of Italian society, specifically in the later 6th and 7th centuries, was the rise of the hilltop settlements on defensive positions, both in Byzantine and Lombard ruled areas. Archaeology has provided an abundance of documentation on these centres in the Tiber valley and in Friuli⁹⁷. In border areas, such sites were most heavily fortified.

Fading Byzantine and growing papal authority in the 8th century

During the 8th century, the Byzantine powers faded in Italy. Several cities began to follow an independent course: Naples, Amalfi, Gaeta, and especially Rome. In Rome, the pope had already begun to take over much of the secular, administrative duties of the disappearing lay aristocracy⁹⁸. The papal court developed into a formidable administrative and political centre⁹⁹. Most of all, however, Rome became the central focus of Christianity, not only for the Italian peninsula but also for the rest of the Christian world. The pope was aware of this unique position¹⁰⁰.

The liquid assets of the papacy grew rapidly by the revenue of the large properties it had gathered since Constantine, as discussed above. Between the 4th and the beginning of the 7th century the papal court had gained extensive properties in Rome and its surrounding areas, mostly by donation¹⁰¹. Because of these large possessions and the increasing civic control of the papal administration, Lazio of the 8th century was dubbed unofficially the *Duchy of Rome*, with the pope (figuratively) acting as its Duke. The growth in power and assets of the Holy Chair took place despite the fact that Rome and its hinterland remained *de iure* subject to the Byzantine emperor¹⁰². The

“Pope-president” (as Llewellyn dubs him)¹⁰³, being the largest property-owner and most prominent person of the peninsula, began to develop into an independent force. Encouraged by the fact that it was able to keep out the Lombards and to secure a lasting alliance with the Franks, the papacy began to strive at a re-established Roman state, secularly ruled by the papal office¹⁰⁴.

In the middle of the 8th century, the end of Byzantine rule in northern and central Italy came swift. Byzantine Emperor Constantine V concentrated his resources on the wars in the East against the Bulgars and the Arabs, thus neglecting the preservation of his power in Italy¹⁰⁵. Byzantine control in Italy had already severely weakened. Tension with the Duchy of Rome was mounting since the iconoclastic conflict started and reached a high after the confiscation of the papal properties of Sicily and Calabria by Leo III, probably in 732¹⁰⁶. In the background lingered the constant threat of the Lombards – for which the papacy initially sought assistance from the emperor. Ostrogorsky: “As long as the Papacy felt that it could count on the support of the Byzantine Empire in its resistance to Lombard pressure, and as long as there did not seem to be any other power to whom it could turn for help, it had seemed politic to ignore religious differences and to maintain complete loyalty to the Emperor”¹⁰⁷.

All this changed when Ravenna was captured by the Lombard king Aistulf in 751, eliminating the Exarchate. With this event, the Byzantine reign in northern and central Italy ended. The pope turned to the strongly developing Frankish power in Italy for support in his struggle with the Lombards. In the light of the iconoclastic conflict this was a dogmatically painless distancing from the heretical Byzantine Empire. King Pepin and Pope Stephen II set up a meeting in Ponthion in 754, a historic event that set the scene towards an age-long bond between Rome and the Frankish Kingdom. This meeting was the prelude to the foundation of the papal state, and, half a century later, the Empire of Charlemagne¹⁰⁸.

Rome during the Byzantine period

The population and urban inhabited area of Rome significantly decreased throughout the Byzantine period, certainly in the late 6th and 7th century. The City, however, remained an important interregional centre. There were trade and production ties with the surrounding countryside and even with estates remotely situated in the south and Sicily¹⁰⁹. The connection with the Byzantine world and the cities of Rome and Ravenna was artistically strong in the 7th century, as is shown by the mosaics in Roman churches and Byzantine influenced production in the Crypta Balbi¹¹⁰.

The city of Rome saw little building activities in the Byzantine time¹¹¹, although some Byzantine writers want

us to believe differently¹¹². It was in many ways an unfathomable era, which led to little era-specific archaeological remains found in Rome and its hinterland. Despite of some positive socio-economic observations in the *Liber Pontificalis*, the period between the later 7th and later 8th century can be seen as the lowest socio-economic ebb of the city of Rome. The archaeological and historical signs are unmistakable¹¹³. Delogu's numismatic research for example showed a city embedded in a closed socio-economic system, relying mostly on local resources¹¹⁴. The pottery evidence shows how Rome was cut off from African and eastern bulk exchange around 700; in the early 8th century local common wares dominated in the city¹¹⁵. It was only in the second half of the 8th century that a clear economic upsurge was detectable.

2.1.5 The Lombards¹¹⁶

The incapability of the Byzantines to create a solid base and strong rule on the peninsula triggered Lombard king Alboin in seeking his fortune in Italy¹¹⁷. The Lombards were already familiar with the situation on the Italian peninsula, as they had been invited to help Justinian against the Goths in 552. In the meantime, the Avars were becoming a threat to the Lombard homeland in Central Europe¹¹⁸. Now that Italy seemed weak after the death of Justinianus, Alboin seized the opportunity. He recruited a formidable multi-ethnic army in Pannonia, which relatively easily conquered large parts of northern Italy in 568, including Etruria. This army quickly dissolved, but in the north of Italy the Lombards were able to establish a sound basis for a long-lasting presence, through the establishment of strong duchies in the larger cities of Brescia, Trento and Turin. In time, two autonomous Lombard duchies, in Spoleto and Benevento, were set up. From Benevento a large part of southern Lazio was occupied already in the late 6th century¹¹⁹. For a long time, the Lombards occupied the greater part of the Italian peninsula, forming a kingdom that stretched from north to south¹²⁰. Some duchies, however, remained relatively autonomous for a long time, for example Spoleto. The current study area of Tyrrhenian Lazio, parts of northern Lazio and Rome (collectively part of "the Duchy of Rome"), the Exarchate of Ravenna, Calabria, Apulia, Liguria and, for a long time, Sicily, stayed under Byzantine rule. Some authors regard this patchwork of states as the blueprint of a divided Italy, as it would remain until the Risorgimento of the 19th century¹²¹.

In the past, the Lombard invasion of the peninsula of 568/569 was seen as the definitive break with the Roman past. As a result of this invasion, it was believed, lasting barbaric rule was established and foreign habits were adopted, a rupture with the past. This period constituted the factual start of the Dark Ages¹²². Nowadays

the developments are represented in a less dramatic way. The socio-political and demographic changes that took place, are understood as part of more subtle and long drawn processes. The Lombard ruled areas, however, saw a break with the past in the way government was set up. The King's power was limited compared to the periods of Roman and Gothic reign. Government was less centralised and the importance of the civic identities and local political relations rose. On the whole, Lombard rule was more simple and possibly more primitive in nature, which made it less susceptible to corruption¹²³. Bishops in Lombard-ruled areas gained civil authority¹²⁴. The Lombard elite were engaged in the establishment of ecclesiastical buildings, such as private churches and monasteries, just as their counterparts in other Italian regions. Above all, the Lombard aristocracy was strongly involved in the foundation and support of large monasteries in the 8th century¹²⁵. Most of these complexes were realized on strategic locations, on the frontiers of their authority. The monasteries of Farfa and San Vincenzo al Volturno are the best-known examples¹²⁶.

The Lombards were able to sustain independent duchies on the Italian peninsula for about 200 years, and in its southern parts even longer¹²⁷. Conflicts with the Byzantine force in Italy now and then resumed, shortly and regionally. After these years of war and internal fights, a more serene period began around 600. With the definitive peace between the Byzantine and the Lombards in 680, long distance trade seems to have picked up. In this new age of serenity, a new class of *possessores* arose, urban as well as rural. These property owners were less occupied with military business¹²⁸.

The Lombards, who originally numbered several tens of thousands, were able to maintain their control over millions of Romans and not only by blunt military oppression. The Dukes initially successfully stood their ground, as they adapted to the political situation by repeatedly changing positions, linking up with either the Franks or Byzantines whenever the situation asked for it¹²⁹. Eventually they were able to consolidate their position as the Italian world underwent an acculturation process in which "local societies [...] became ethnically mixed"¹³⁰. As a result, the Lombard elements in Italian society were finally absorbed into the large cultural mix of later 7th and 8th century Italy¹³¹.

Desiderius was to be the last king of the Lombards. He was Duke of Tuscany and became king of the Lombards after the death of Aistulf in 756. Like the Lombard kings before him, he sought to extend Lombard power in Italy. In doing so, he once again brought the Lombards in conflict with the papacy. Through the new pope, Hadrian I, he hoped to exert influence on the Franks, by trying to

convince him to anoint Carloman's¹³² sons as kings instead of their uncle Charlemagne (who had been King since 771) and thus replacing him. Hadrian refused and several papal territories were seized by the Lombards. Hadrian pled with Charlemagne for help against Desiderius in 772. Subsequently, Charlemagne invaded Italy and after a long siege, took control of Pavia. This constituted the end of the Lombard Kingdom. Charlemagne declared himself king of the Franks and the Lombards. Desiderius was forced to retire to a monastery in Liège¹³³.

The direct influence of the Lombards on the current research area seems limited as the historical borders of Lombard territory lie remote from the research area. The only possible direct material influence nearby is situated in a zone of inhabited hilltop sites, strategically positioned on the roads 40 km north of Rome. These forts could have originated during the Lombard invasions¹³⁴. There is yet little evidence available on the physiognomy and function of these sites. The 6th or 7th century necropolis of Ceriara in the Priverno plain is the only archaeological site tentatively identified as Lombard in the researched area¹³⁵, although at Villamagna structures have been found which may have been influenced by the Lombards¹³⁶. At Privernum the archaeological excavations did not yield any indications of Lombard influence¹³⁷. The Sacco Valley almost certainly remained Byzantines territory throughout the 7th century¹³⁸. In the middle of 8th century the Lombards were able to now and then reach the Lepine Mountains, as becomes clear from the brief occupation of Ceccano in 752¹³⁹.

Only during the rule of Charlemagne, when the Lombard influence had evaporated in the north of the Italian peninsula and the Duchy of Benevento only barely held on in the south, the border of Lombard territory might have run south-east of Terracina - Fondi, in the mountainous areas¹⁴⁰. During this period, however, substantial border conflicts were not usual anymore. Therefore the material impact of the Lombards was at most minimal in these parts. The real struggle took place throughout the early years of the Byzantine – Lombard antagonism, at the end of the 6th and first half of the 7th century. In this period, a rigorous reorganisation of border territories took place in the durably disputed areas, i.e. Apulia, Bruttium, Abruzzo, Tuscany and the Po-plain¹⁴¹.

2.1.6 The emergence of the papal state and Carolingian influence

As discussed previously, the papacy as of the early 8th century started a political emancipation process to withstand the Byzantine authority and as such began to strive for an independent Papal State¹⁴². With the help of the Franks, the papacy was finally able to achieve autonomy from the middle of the 8th century onwards. In short, the

external Lombard threat speeded up the autonomy of the Papal States and helped formalising the process towards independence, that had started earlier with the Duchy of Rome.

Papal and Carolingian collaboration and the establishment of the Papal States

The danger of a Lombard invasion of Rome had become imminent during the reign of the Lombard king Liutprand (713-744). He promoted himself as Christian king (*christianus Langobardorum rex*) and defender of the Church¹⁴³. This promotion was a clear provocation of the pope. Moreover, Liutprand captured a part of the Duchy of Rome in 739¹⁴⁴.

Liutprand was dealt with successfully, however, by the new strong Pope Zachary (741-752)¹⁴⁵. This self-conscious pope went up against both the Byzantines and the Lombards, determined to regain lost ground and restore power¹⁴⁶. The pope took matters into his own hand. The realization of the *domusculata* estates, situated in the Roman *suburbium*, was one of the pro-active measures the pope took¹⁴⁷.

The Lombard danger reached a high with the definitive surrender of Byzantine Ravenna in 751 to Liutprand's successor Aistulf. Pope Stephen II sought external support to oppose the Lombards, as the Byzantine forces had crumbled away. An alliance with the Frankish leader Pepin brought needed relief. At that time, Pepin was involved in a power struggle with Childeric III for the Frankish throne. The subsequent actions, triggered by mutual interest, proved fruitful: the pope declared Pepin the 'Patrician of the Romans' and anointed him as king. As such giving him the authority needed, Pepin in turn intervened. He conquered Italy between 754 and 756. Finally, Pepin promised to donate the territory of the former Exarchate to the pope (the so-called *Donation of Pippin*). After the final elimination of the Lombards in 772, this donation was confirmed by Charlemagne in 781 in a code. The donated assets consisted of large parts of Italy¹⁴⁸. At the end of the day, however, Charlemagne did not totally keep his promise, as only Lazio and the area surrounding Ravenna actually were given to the Papal State(s). Later, Pope Hadrian (772-795) was able to enlarge papal territory on the Italian peninsula¹⁴⁹. Papal-Carolingian collaboration found its apogee in the coronation of Charlemagne in Rome in 800 as 'Augustus Romanorum' (emperor of the Romans)¹⁵⁰.

Charlemagne executed a plan to defend strategic locations (ports and river mouths) all along the coast of Italy by building a system of "stationes et excubias" (stations and sentinels) on "toto etiam Italiae littore usque Romam" ("along the whole Italian coast until Rome"), possibly to counter the Saracene threat which was growing from

the start of the 9th century¹⁵¹. The relative peace of Charlemagne's reign must have created the stable circumstances in which Hadrian could deploy a large range of activities in the hinterland of Rome, as appears from the *Liber Pontificalis*¹⁵², like the establishment of the *domuscultae*.

It is clear that Carolingian control established itself thoroughly and strongly in large parts of Italy. The Duchy of Benevento accepted Carolingian sovereignty, but remained de facto autonomous. The remainder of previous Lombard Italy ended up being the Kingdom of Italy, as part of the Frankish Empire. The Kingdom of Italy was ruled from Pavia. Only the Papal States were officially independent, although here too Carolingian influence was clearly felt¹⁵³. The Carolingian Kings were strongly involved in Church affairs. Charlemagne personally issued a programme for the embellishment and restoration of monasteries and churches¹⁵⁴. The kings upheld a policy of homogenizing all ecclesiastical practices and institutions, in order to realize more organisational unity and increased political control over the Church. As a result of Carolingian pressure on Church affairs and the consequent ecclesiastical centralisation, the papacy was able to strengthen its role as head of the Church¹⁵⁵.

The exact status of the Papal States, their degree of autonomy and (in)dependence of the Frankish Kingdom is difficult to assess. Their position was never explicitly and officially defined¹⁵⁶. What is clear is that within the Papal States the popes never, from their foundation throughout the middle ages, exercised total and effective sovereignty. Several forces were competing for political power within these States. Local (elite) and international forces (Holy Roman emperor) were striving for their share of political power and territory in and around Rome. One should also keep their geography in mind: The Papal States simply were too extensive, and in part too mountainous, for the papacy to control effectively.

New elites in Carolingian Italy

Generally, the Carolingian century saw a decline of free men¹⁵⁷. Landed property ownership was scaled up. Smaller landowners lost their lands to nearby larger players, lay or ecclesiastical. This process might not have been without struggle. The documented antagonism of the papacy with Roman nobles on the landownership of the *domuscultae* estates was possibly related to scaling up as many smaller older estates were absorbed into the newly founded papal *domuscultae*.¹⁵⁸ In general, the levels of land-exploitation were increased. There occurred an upsurge in trade and an increase in investment in both secular and ecclesiastical landed properties and in cities.

From the start of Carolingian involvement in Italy, competing local landed aristocracies existed¹⁵⁹. Aristocratic families from the north of the Alps were settling steadily in Italy during the 9th century. The structure of these and native aristocratic families in the 9th century is still a subject of study. It is clear that these families constituted a new rural elite, which mainly invested in rural settlements. From written sources it is known that the territorial base of these elite families is the *curtis*, a landed property with an agricultural function and often monumental stone building, usually built in pre-existing villages¹⁶⁰. The *curtis* had originated in earlier centuries but was now at its peak¹⁶¹.

The new elite of the Carolingian-Lombard Kingdom lived almost solely in the countryside and avoided the cities, despite the fact that they produced many counts and bishops¹⁶². They mainly identified and associated politically with the Carolingian dynasty. The cities, which increasingly became the focal point of local identity in the later 9th and 10th century, were left to the lesser aristocracy¹⁶³. On the other hand, this was less the case in Italy outside the Lombard-Carolingian kingdom, for example in the Papal States. In Rome, Naples and Benevento for example, the elite continued to be more narrowly linked to the city. In Rome, the 'party of nobles' ruled over the city which had a firm hold over the papal court in the middle of the 9th century¹⁶⁴.

Economic revival and Carolingian investment

Within the city of Rome, a clear economic upsurge is detectable in the second half of the 8th century. This new economic zeal is substantiated by clear archaeological evidence¹⁶⁵: around the middle of the 8th century, Rome began to export ceramics again. During the 9th and 10th centuries, Rome became a production centre of pottery that found its way across the Mediterranean. Furthermore, new building activities took place and new artistic expressions evolved (sculptures, decorations). The use of spolia during this late 8th and 9th century revival seems one of the reasons for the enigmatic material culture of the 7th and 8th century¹⁶⁶. The economic revival also applied to Rome's hinterland. The 9th century census figures of the properties of the Farfa monastery are telling, and provide a picture of a sharp increase in rural population¹⁶⁷. This economic revival seems connected to the rise of the earlier in this section described new agrarian structures, functioning within a local economy, the *curtes*, and their efficient and economical production methods.

This restoration of Rome was paralleled by other towns on the Italian peninsula. This upsurge undoubtedly to a large extent was incited by Carolingian influence and investments. As Hodges writes on the revival in the second half of the 8th century¹⁶⁸: "The sudden surge in Rome's

fortunes has the hallmark of a rational investment in the city. Rome was restored. It was designated as a symbol for the renaissance of Europe, the seat of Latin Christendom and the capital of the West. The indigenous culture of the [Papal] Republic cannot be denied, but the flow of wealth and skills manifestly did not exist in the city before Charlemagne arrived in 774. A parallel with the lands captured by the Carolingians to the east of the Rhine is not farfetched". Indeed, large sums of money found their way south to Rome and new building activities were sponsored. Monasteries grew extremely wealthy, partly because of Carolingian investment (e.g. Farfa). Furthermore, an unambiguous rise in landed power of military and ecclesiastical elites took place. Commoditization of goods and landed properties took place¹⁶⁹.

To what extent all this could be attributed to the influence and financial backing of the Franks is difficult to assess, but the local resources could not have sufficed. Hodges agreed with Krautheimer's claim, that in Rome the Carolingians found access to Antiquity, a key to their identity and to the "undeveloped landscapes" of the Campagna and the Sabina¹⁷⁰.

Expansion of Church properties

In the Carolingian period the Church again started to gain worldly goods on a large scale¹⁷¹. These new assets were bequeathed or given in life by private owners to church institutions, the papacy being the largest beneficiary. Huge marginal territories were donated by the kings to individual churches and monasteries as well. These marginal lands usually were inhabited by a very independent populace. After acquisition, landlordly property ties with these independents were tightened, through the imposition of a stricter regime of subjection. On many ecclesiastical properties, from the 8th century onwards the collection of tithe was introduced. This measure considerably increased the wealth of church institutions. The Farfa monastery is the best example in central Italy of the growth in ecclesiastical landed property: in the first half and third quarter of the 8th century, the monastery acquired large domains in the Sabina and in the Marche region¹⁷².

In Tyrrhenian southern Lazio, the number and extent of papal estates greatly expanded in the course of the 8th century¹⁷³, especially from the pontificate of Zachary onwards. One of the main reasons of the rapid new papal acquisition politics in southern Lazio might be the loss of papal possessions in Calabria, Campania and Sicily, confiscated by emperor Leo around 730. The growth of the papal *patrimonium* seems to have involved both active acquisitions and donations. Before, the papacy had already owned large properties in the Laurentine coastal area until Antium¹⁷⁴. A well-documented acquisition

took place in the year 742. Pope Zachary got two centres in the Pontine region, Ninfa and Norma and their large territories in return for his efforts for Byzantine emperor Constantine V, as can be read in the *Liber Pontificalis*¹⁷⁵.

The papacy moreover directed the development of an estate type that was typical for Lazio: the *domusculta*. These estates were first and foremost production centres for the papal court and the city of Rome in general¹⁷⁶. This was a time of a need to revitalise and rationalise rural economic production around Rome, necessary after the loss of papal possessions in the south; *domuscultae* became the centres of efficient production, storage and distribution¹⁷⁷. The foundation of the *domuscultae* in the Roman *suburbium* involved a reorganization of earlier papal possessions and new acquisitions¹⁷⁸. From the *Liber Pontificalis* it is clear that at first the imperial possessions of Anthius and Formiae were transformed into *domuscultae* during the papacy of Zachary. Another *domusculta* was founded on the coast, the *domusculta Laurentum*, probably situated in the Roman *Ager Laurens*, the area between Ostia and Ardea¹⁷⁹. Later in the 8th century, three other *domuscultae* were founded south of Rome, further increasing the direct papal control: Calvisianum, Sulphisianum and S. Edistus. A number of other *domuscultae* evolved north of Rome as well. The *domuscultae* became under direct control of the papacy¹⁸⁰. *Domuscultae* indeed had a direct distribution link with Rome, as the pottery evidence on *domusculta* sites north of Rome indicated¹⁸¹. In one case north of Rome a *militia* (to be translated as "workforce") belonging to a *domusculta* is recorded performing civil works outside of the estate, i.e. by aiding in the building of the Leonine walls of Rome¹⁸².

Beside their agricultural function, *domuscultae* seem to have had a political purpose, ensuring papal authority in the countryside around the city of Rome, "thereby countering the growing landed power and wealth of the lay aristocracy"¹⁸³. Contemporary defensive walls were documented or have been suggested on the three well-studied *domusculta* centres north of Rome: Santa Cornelia, Monte Gelato and Santa Rufina¹⁸⁴. It may be suggested that *domuscultae* were positioned according to a defensive strategy.

2.1.7 The Saracene menace

From the early 9th century onwards, Saracens originating from the coast of North Africa¹⁸⁵ regularly staged raids aimed at the coast of Italy. "Saracen" (Greek: Σαρακηνοί) was a biblical name, originally given to Muslim soldiers of various origins, commanded by Arabs and based in northern Africa. After the rise of Islam, the name "Saracenes" was indiscriminately used for all Muslims, but specifically for those in southern Italy and Sicily.

On the background of the mostly unhindered attacks of the Saracens on the Italian coasts, views differ. What is clear is that these were a sign of the disintegrated central authority on the Italian peninsula, and of the increasing significance (and fragility) of local powers¹⁸⁶. Regular raids of Italy started in the early 9th century and increased after 830¹⁸⁷. The *Liber Pontificalis* documented these events¹⁸⁸. On several archaeological sites, newly erected fortifications bear testimony to the insecurity of the time¹⁸⁹. Initially, the raiders focussed on the wealthy areas of Sicily and Calabria. Later the whole of southern and central Italy was targeted, especially the large monasteries¹⁹⁰. In 846 Rome was repeatedly sacked¹⁹¹, as was its hinterland, in the years between 850 and 870¹⁹². The prosperous large monasteries were under attack in the late 9th century: S. Vincenzo al Volturno was raided in 881¹⁹³, as was Montecassino in 883¹⁹⁴ and Farfa in 898¹⁹⁵.

Quick gain seemed the objective of most of the recorded Saracene raids. Arthur proposed that large population centres in Apulia were specifically targeted for their slave potential¹⁹⁶. Conversely, on several occasions a Saracene bridgehead was created on the Italian coast. Bari was captured from the Byzantines in the middle of the 9th century as was the archipelago of Ponza¹⁹⁷. At Bari, an emirate was established for several decades. Byzantine Sicily was conquered between 827 and 902 and would remain Muslim occupied territory until the Norman conquest of 1072¹⁹⁸. In the 10th century the Saracene raids stopped in central Italy, but continued in southern Italy until the 11th century.

2.1.8 *The later 9th and early 10th century: political chaos and crisis in the papacy*

The later 9th and early 10th century was a period of political and territorial unrest¹⁹⁹. The Frankish Empire crumbled when Charlemagne's grandchildren each inherited a piece of its large territory. As a consequence, Carolingian leadership in Italy gradually dwindled. The Italian part of the Frankish Empire became the Kingdom of Italy in the late 9th century, consisting of a constantly changing constellation of kingdoms and duchies (such as Spoleto, Trento, Tuscia and Friuli) which proved difficult to control. The Italian peninsula saw an array of contending forces, both indigenous and foreign, which were unable to establish lasting political dominance²⁰⁰. "Italy was a complicated mosaic of competing powers" (Pohl)²⁰¹. The impact this discord had on the population of the peninsula, however, generally proved to be minimal. External forces did profit from the instable political situation. The Magyars raided the (northern) Adriatic coast in the first half of the 10th century. The papal homeland in Lazio was usually spared by the Magyars. Saracen attacks, however, continued until the 10th century.

With the termination of Carolingian influence in Italy, the position of the papacy weakened. The centralisation process of the Church had ended²⁰², or, to put it better, was suspended (it would be picked up again in 11th century)²⁰³. For the papal court it was difficult to control the extensive Papal States beyond the former Duchy of Rome. The papal position and prestige was further weakened by internal moral and political conflicts. Within the walls of Rome, the papal court was held captive by the Roman aristocracy from the end of the 9th century until the middle of the 11th century. The elite could decisively influence the papal election and directly dictated Roman politics. The extent of papal possessions in Italy decreased²⁰⁴.

In the political chaos of the later 9th century, the larger of the new elite families that arose during the Carolingian period had accumulated such power that they were able to aim for control over parts of Italy. These families engaged in a number of local conflicts during the later 9th and early 10th century²⁰⁵. The major aristocratic dynasties which had thrived in the Carolingian age disappeared as of the middle of the 10th century²⁰⁶. The political weight of the cities gradually grew in the 10th and 11th century, and as a result the importance of the urban elite grew. This period shows the first signs of the impending 'communal age'²⁰⁷, which would bloom at the end of the 11th century.

Not yet until the middle of the 10th century, a new major power was able to create more stability on the Italian peninsula: the German king²⁰⁸. King Otto I defeated the Magyars in 955 in Bavaria. A few years later, he unified the Italian and German kingdom (962)²⁰⁹. Otto was crowned Holy Roman Emperor²¹⁰ by Pope John XII in 962. This was the start of a long series of expeditions of German kings to Rome, to be crowned as emperor, lasting until the 13th century. Although Otto conquered large parts of northern Italy, he did not seize the Papal States. These, however, became his political dependencies. Otto sanctioned the so-called *Diploma Ottonianum*, a treaty which assured the sovereignty of the Papal States.

2.1.9 *The later 10th and 11th century: German interference, growing clerical power and incastellamento*

The Magyar attacks would prove to be the last invasions of the northern and central parts of the peninsula. From King Otto I's intervention until the end of the Hohenstaufen dynasty in the middle 1200s, the action and politics of the German emperors stabilised the Italian peninsula. Their influence in Rome, however, was modest and would evaporate each time the emperor had left the city. The emperor interfered in the political affairs of the Papal States only when needed²¹¹. Only concerning affairs of the papal court, especially papal elections, the emperor

would now and then exercise supervision. The apogee of German imperial influence was the election of several German popes in the middle of the 11th century (Clement II, Damasus II, Leo IX and Victor II)²¹². The German emperors were keen to restore papal authority, and they succeeded in doing so. Papal authority was strengthened and the College of Cardinals, responsible for the papal elections, was put in place as well. The renewed papal office of the 11th century became the centre of the Church reforms that were started to create a Church independent of secular politics and aristocracy.

As stated, the elite in the Carolingian age was mainly focussed on the countryside – with the exception of the hinterland of the large cities of Rome, Naples and Benevento. The lesser aristocracy was connected to the city and its surroundings, the *civitas*²¹³. In the Italic Kingdom of the middle 10th century²¹⁴ the foremost aristocratic dynasties of the Carolingian period would fade away. They were substituted by new powerful families that had been getting involved in politics since the end of the 9th century. The ethnic (Italic, Frankish or Burgundian) background and structure of these families is difficult to assess. What is clear is that the seigneurial powers of the new elite families grew rapidly²¹⁵.

Two correlated parallel developments can be detected: the authority of the new seigneurial families clashed with the existing political and administrative structures of the Italic Kingdom²¹⁶. Simultaneously, the process of building castles was surfacing, generally called *incastellamento* (see below²¹⁷). To what extent this process was correlated with the emergence of the new families and connected vassalages²¹⁸, is still under scrutiny. It is clear, however, that from the 10th century onwards the power of the reigning families would become invested in their *castelli*. Their castles became the focal point of seigneurial lordship. It is generally agreed that this new climate of investment was one, if not the, reason for the Italian rural economy to take off during the 10th century.

While the highest and middle aristocracy were leaving towns for their rural castles, cities became *de facto* the power base of the bishops. The later 10th and 11th century saw the rise of an aristocracy connected to the bishop²¹⁹. The significance of the urban clergy was further enhanced by royal permits to build walls and maintain public administration.

The above drawn picture applies to the (former) Kingdom of Italy, i.e. everything north of the Papal States²²⁰. However, to a large extent the created image also applies to the developments in Lazio, especially regarding the growing power of bishops in smaller cities outside Rome and the involvement of the larger families in the

incastellamento process. Here as well, one sees the rise of elite families that would extend and maintain their power for centuries afterwards. These families would be at each other's throats between the 11th and 14th centuries. In and around Rome, the first large family dispute was the struggle between the Crescentii and Tusculans around the year 1000. In this conflict, the German emperor Henry II and the pope were actively involved²²¹. This struggle was a blueprint for many regional family disputes in the next centuries, in and around the city of Rome²²².

In the 10th and 11th century, the political weight of the town progressively grew. While the influence of many large monasteries started to decline from the 10th century onwards, the towns began to flourish, both the existing ones and those who proved to be successful foundations during and after *incastellamento*. Communal self-consciousness grew. In all, the later 11th and 12th century would eventually see the blooming of the 'communal age'²²³.

The same can be observed in Rome. There, from the middle of the 12th century, the commune would become a formidable political player. In the city of Rome, the nobility converted many buildings into fortresses around the middle of the 11th century. The Colosseum and the theatres of Marcellus and Pompeius are well known examples. At the same time, many of the characteristic family towers were erected²²⁴. The most powerful figure in the 11th to 13th century was the city's prefect, who ruled in name of both the emperor and the pope.

2.1.9.1 *Incstellamento*: a study

In a nutshell, *incastellamento* was the process of the foundation of fortified nucleated (mostly hilltop) settlements, called *castra* or *castelli*²²⁵, during the high middle ages. Some scholars use the term *incastellamento* purely in terms of the building of castra, without paying attention to the stimuli for these foundations²²⁶. In my view, this is too narrow a perspective as the broader socio-economic and social background of the process, the profound economic, hierarchical and demographic changes taking place, should be incorporated into any study of the phenomenon. Only then the advent of castles can be fully understood.

The area north and east of Rome has been thoroughly studied in regard of the *incastellamento* period, and thus provides the right background to examine the process²²⁷. In this region, consisting of northern and (the southern part) of eastern Lazio and the Sabina, until recently two models dominated research on *incastellamento*.

The first model emphasises the external stimulus. Pivotal to this model is the factor of insecurity in the establishment of *castra*. In this model, the process of *incastellamento*

was considered to be triggered by a power vacuum that developed in the later 9th century, when the papal authority had dwindled and Carolingian influence was drying up as well²²⁸. Simultaneously external threat increased the urge to settle on defended hill tops: the Saracens (9th century), Magyars (10th century) and the Normans (from the late 10th century onwards) caused problems in large parts of the Italian peninsula. This interpretation of the process was more and more abandoned as the second model gained ground.

The second model, put forward by the French historian Toubert (1973) and widely accepted²²⁹ with some annotations, emphasises internal stimulus by seigneurial elites. Toubert described *incastellamento* as a social process in which the rural population was resettled in, or was attracted to, newly founded fortified settlements²³⁰. These settlements were mostly founded on new sites (i.e. not settled in Roman times), although some of the castles were already occupied before²³¹. Toubert's research was based upon the high medieval documents of the Farfa monastery, the main sources being the *Regestum farfense* and the *Liber largitorius* of the Farfa monastery²³².

Toubert saw *incastellamento* as part of the commercial and power revolution of the 10th and 11th centuries, initiated by both ecclesiastical and secular seigneurial authority. The *castra* developed into the new centres for social control, production and distribution, and became foci in a new religious topography. The *incastellamento* process in his view was not a consequence of insecurity issues, but sort of a colonising movement, by which the *domini* increased their grasp on the population and tried to expand production. Local markets were started in these castles²³³.

From Toubert's study it is clear that the nature of seigneurial authority on *incastellamento* settlements was diverse. The foundation charts show that ecclesiastical lords (monasteries, the pope, bishops) as well as secular noblemen were involved as *lords entrepreneurs*²³⁴. For the Sabina, the start of *incastellamento* has been set by Toubert in the early 10th century²³⁵. It lasted well until the 12th century. Toubert's idea that the *castra* became the new economic and religious centres of the countryside is generally accepted, at least for the wide area around the great monasteries in the Sabina and southern part of eastern Lazio: Farfa and Subiaco.

What the 10 charts studied in Toubert's research show is the active nature of the *incastellamento* process, which eventually constituted the core of Toubert's hypothesis, and the fact that church institutions, such as dioceses and more importantly monasteries, were actively involved in the *incastellamento* process. Furthermore, there might possibly have been two phases in the process. At first the *seigneurs* could have had stitch-up between themselves,

and later on the populace concerned was more actively involved in the settlement of new locations. But Toubert's proposed chronology remains a hypothesis.

Because of its wide acceptance and the proximity of his research area to the current, I will take Toubert's model as point of reference to study the castle building phase in Tyrrhenian southern Lazio.

While *castra* seemed to press forward simultaneously all over the Italian peninsula, regional deviation did exist. In Apulia for example, Norman castles in this period primarily served a defensive purpose²³⁶. In the area around San Vincenzo in the Molise on the other hand, the foundation of castles should be seen as a means of increasing the economic potential of the area; neither control by an overlord, nor security seems the central issue in this process²³⁷.

To summarise: Toubert's conceptualisation of the *incastellamento* is generally accepted. In most cases the *castra* of Italy seemed to have been built with the intention to reorganise the local rural economy. With the *castra*, and with castle feudalism²³⁸, more rigid control of the peasant activity was effectuated²³⁹. Although initially peasants often seem to have had an active role in the process of *incastellamento*, it is clear that gradually the lords gained control over the incastellated communities. Gathered in castle towns, the peasantry was burdened with an ever increasing range of measures of control²⁴⁰. In the first half of the 11th century, this social construction was enforced by the general introduction of the exclusive castle churches as attested in many towns. At the same time, the gradual adaptation of communal law in favour of the lord was completed²⁴¹. From that period onwards, the *incastellamento* was in full flight.

Indeed, the new investments in incastellated settlements seemed to pay off: the fully implemented *incastellamento* is paralleled by a blooming of the Italian rural economy from the later 10th century onwards. Although additional factors contributed to the economic growth as well, like the increase in international contacts and in long-distance trade²⁴².

The central word in the *incastellamento* process was control: control over economic means, the peasantry, strategic locations and infrastructure²⁴³. From Toubert's work it is clear that *incastellamento* was not a process that had always been successful. The relative prompt abandonment of many of the new *castra* between the 10th and the beginning of the 12th century was one of the let-downs of the *incastellamento* process²⁴⁴. This impression is reinforced by the fact that areas with a less clear manifestation of *incastellamento* also showed fewer cases of deserted castles in the next centuries. What is more, some areas were never incastellated, like parts of the area around the

monastery of Farfa. Moreland stressed this point to elucidate that the process was regionally divergent and that the dominance of *castelli* was not all-encompassing²⁴⁵.

Recent research seems to show that the small temporary *castelli* and the large *castelli* / *castra* developed simultaneously in two waves, between the 10th and 13th century: at first *castelli* were primitive defensive measures in existing villages or temporary small and basic defensive structures created in the rural landscape²⁴⁶. During the second wave of the late 11th and 12th century, both the smaller uninhabited locations and the fortified villages were built more strongly, and served as residence or temporary private hide-outs for a lord and his entourage²⁴⁷. With their high walls and strong towers, these “*castelli* of the late 12th and 13th centuries often represent legal and political claims by rural lords”²⁴⁸. An interesting observation by Osheim is that in some areas *castelli* of the second wave are absent in the neighbourhood of large towns (Pisa, Lucca). It appears that from the beginning of the 12th century, towns and their communes gained authority over the *contado*²⁴⁹. In this new political constellation, castles apparently had become superfluous. For Tyrrhenian southern Lazio, it will be interesting to see if *castelli* also show a development in waves, and if the presence of a large town influences the development of *incastellamento*.

Toubert’s sources

For his research area of northern and eastern Lazio and the Sabina, Toubert found 10 acts that directly describe the (active) population or repopulation of *castelli*²⁵⁰. Although low in number, these legal passages are telling. As touched upon before, seigneurial power wielded over the new foundations seemed to have come in different shapes. Monasteries, local nobility and even the pope were involved in the initiation of (re)settlement. Direct monastic involvement in *incastellamento* was apparent after reading sources on the Farfa monastery. This monastery owned several castles in the Marche region and in northern Lazio in the 11th and 12th centuries²⁵¹.

Although there are examples of groups of settlers directly involved in their own resettlement, in most cases the lords seem to have been pro-active in their relocation. Toubert’s acts can be divided into two categories: contracts for *incastellamento* which link up a church magistrate (abbot, bishop²⁵²), who offered the lands to be build on and to be exploited, with an “entrepreneur de colonisation”. The latter was a secular lord with the responsibility to realise the project²⁵³. And secondly, contracts that directly link up the founding initiator (secular or religious) with a collective of colonists or a group of initiators.

The lords actively tried to attract colonists to populate the new sites; from the contracts it becomes clear that these

settlers consisted of groups linked through family ties and their wider consorts; only seldom individuals would participate in *incastellamento* projects²⁵⁴. Although the future inhabitants seemed to have been directly involved in the enterprise, the strictness of the contracts ensured the profit for the founding lords in initiating the gathering of people (*amasare homines, congregare populum*)²⁵⁵.

The first type of contract is attested between 945 and 988, the second after 992. The number of acts, however, for Toubert was too low to draw any definitive conclusions on a possible changing nature of colonisation²⁵⁶; still, this possibility cannot be excluded. In conclusion, from the 10 charts available for Toubert’s research area, it becomes clear that *incastellamento* was an active process, initiated by people of power. As stated, this can be seen as the core of Toubert’s hypothesis.

A proto-*incastellamento* phase?

While there is a general agreement on the blooming of *incastellamento* in the 10th and 11th century, the discussion about the earliest phases of the process is still open. Richard Hodges suggested that some of the 8th and 9th century rural (*curtes*) sites with clear elite presence, often rooted in the 6th or 7th century, could be seen as an early stage of *incastellamento*²⁵⁷. Miranduolo, Montarrenti and Poggibonsi all are possible examples. Indeed, seigneurial power had already been in place on these hilltop locations, at least since the Carolingian period. Moreland suggested something similar for the 9th century sites Cavallaria and Bezanum around Farfa, and Vacchereccia near San Vincenzo al Volturno²⁵⁸; these could have acted as the blueprint for later *incastellamento* foundations in the area²⁵⁹. Paul Arthur’s work in Apulia, though in a different setting (in which Byzantine influence was long-lasting in contrast to Lazio), did also raise questions about the origins of hilltop settlements. A number of villages that had previously been shown to originate in the 11-13th centuries on the basis of written sources, and from which archaeological contexts were radiocarbon dated, can actually be dated back to the 8th century²⁶⁰. In the current study of Lazio, however, a possible proto-*incastellamento* phase will not be elaborated upon with the same detail; in comparison to other parts of the peninsula, no (deserted) castle site has been excavated. This model of a proto-*incastellamento* phase cannot be tested therefore. The new findings in Apulia were all acquired by open-area excavations; these are outside the reach of this study. It should be stressed that the image created by Toubert still stands firm: although there might have been earlier local initiatives of settling on hilltops with elite involvement, it is generally agreed that the 10th century saw a widespread development of *incastellated* hilltop *castra*. Those became the centres of social control, production and distribution, and religion.

***Incastellamento* and feudalism**

Moreland stated that *incastellamento* is a perfect demonstration of how changes in settlement patterns and social structuring are not the direct consequence of a collective passive response to environmental factors and other external stimuli, such as external threat of pillage or conquest, but a product of the dialectics between conscious human action and structure in the past²⁶¹. In these dialectics, texts are considered the vital mediating tools. *Incastellamento* shows the complex interaction between structure and human agency, which was absent in the original Braudelian idiom, as explained in the first chapter: people tend to live their lives in and through social structuring, but can also play an active or even ‘anti-structural’ subversive role. The reality of the latter observation to the *incastellamento* phase is proven by the fact that some *castra* were founded by peasants themselves, as is the case in Tuscia Romana²⁶².

As Moreland explained, *incastellamento* society at first, perhaps for a very short period, was an ideal example of a well-balanced feudal system²⁶³. The allocation of the populace in controlled incastellised hilltop settlements might for a short period of time have embodied the “perfect” feudal society, in which all three orders of Duby’s “three order construct”²⁶⁴ were in balance: The *oratores* (those who pray), the *bellatores* (those who fight) and the *laboratores* (those who work) lived and worked together, concentrated in the new hilltop towns of the 10th and 11th century.

Nevertheless, the equilibrium, if it ever existed, was distorted soon, as times were changing rapidly. Before long, Italian society became much more complex. Large-scale trade was reassumed in the course of the 11th century²⁶⁵. As a result of the Cluniac reforms, monasteries reached out for international contacts with pan-European ecclesiastical movements²⁶⁶. Simultaneously, small agricultural vassalage fragmented more and more. The status of local nobles (*boni homines*) was growing rapidly, partly because they financially successfully reallocated and assembled lands which during the disintegration of small agricultural vassalage had become fragmented²⁶⁷. The same local nobles would sow the seed for new strong communes, which would constitute a major power in 12th and 13th century Italy. These communes entered into negotiation with the original seigneurial authority, and ultimately were able to establish the municipal statutes of the town or *castrum* in the 13th century. As a result of these developments direct vassalage in and around most towns would dissolve²⁶⁸.

2.I.9.2 Feudalism: a study

The term “feudalism” needs some further clarification, as it is one of the central aspects of European society

in the middle ages. Feudalism is a term applied to several periods in European history. The medieval societies to which the term has been applied, differ as chalk and cheese. “Feudalism” was used, for example, for the Carolingian age, during which the secular and ecclesiastical elite power grew²⁶⁹. The term, however, mostly has been applied to the social constellations of the 11th and 12th century. This was an age of consolidated lord-peasant vassalage in which the implications of feudal relationships on socio-economy and demography were exceptionally strong.

Many recent modern historians (Braudel²⁷⁰, and more radically so Reynolds²⁷¹) have reminded us that “feudalism” and associated terminology should be dealt with very cautiously. One of the reason being the variety of meanings applied to the word. Another one is that the term itself is a post-Renaissance historical construct: medieval man never saw himself as a lord or vassal within a pre-set and clearly defined feudal system. If one decides to ignore this and accepts the term, it is clear that for the term feudalism two general discourses have developed: a generic traditional legal-military practice and a more specific sociological practice.

The traditional and best known definition of feudalism is focussed on the legal-military relationships of noblemen. It was probably best voiced by Ganshof²⁷²: a lord bestowed a vassal with a fief in return for military service from that vassal. In this view, feudalism was a system that only had bearing on nobility, leaving out the peasant as a partner in the social construct.

The sociological perspective is represented by the influential French historian Bloch²⁷³, who didn’t describe feudalism primarily as a relationship among nobility, but as a movement within a specific type of society, in which peasants were included as partners in the feudal relationships. Hence not only the vassals and nobles are part of the system; the peasant had a similar relationship with the lord. The vassal carried out military service for the lord, and, in return, was granted use of the fief. The physical labour was performed by the peasantry, who received protection in return from the lord.

Time does not permit me to go deep into the subject of feudalism. A general definition of what is meant by “feudalism” in this study, however, should be given, before applying the term to the developments in the current study area. Toubert is one of the scholars who use “feudalism” in the sociological context for the study of the *incastellamento* landscape of Italy. As this research owes much to his research, this study will follow his lead. Bearing in mind that the term should be used with the utmost care, I will use the following working definition: in feudalism, lords and vassals (free men, like peasants and townsmen)

were hooked up with each other in an initially more or less voluntary social construct, a vassalage, in which protection and support was given by the lords through the administrative and military systems, in return for physical labour and military service.

2.I.10 The second half of the 11th and 12th century: Church reforms, papal authority consolidated and the rise of the autonomous town

In the 11th century the papal office became the centre of Church reforms that affected all layers of ecclesiastical organisation and that were intended to create a Church independent of worldly politics and aristocracy²⁷⁴. At the peak of this self-modification process a number of reforms occurred in the period of 1050 to 1080, later jointly called the Gregorian reform, after Pope Gregory VII (1073-1085)²⁷⁵. An important step in the Gregorian reform was the announcement of the supremacy of the pope over the whole episcopate, as stated in Pope Gregory VII's *dictatus papae* of 1075. In sum, the Gregorian reform regulated the independence of all the clergy and more specifically that of the papacy. Most of all, it freed the pope from direct imperial control. The already simmering conflict between the papacy and the Holy Roman Empire²⁷⁶ as to who had the right to elect German bishops, exploded into what became known as the *Investiture Conflict*²⁷⁷. During this conflict, the emperors often nominated their own papal candidates, which resulted in the installation of a number of anti-popes. The final outcome of the Investiture Conflict was a victory for the Church, formalised in the Concordat of Worms (1122). At the end of the day, the struggle had considerably increased the authority of the papacy. However, the struggle between the papacy and the German imperial powers would continue until the 13th century.

Growing papal authority

Between the later 11th and 13th century, the pontificate started building a strong papal state, simultaneously enlarging its political influence and accumulating landed property²⁷⁸. The papal state was able to exert ever more control over local aristocracies²⁷⁹. From Nicolas II (1059-1061) onwards, the papacy upheld an active policy of regaining authority over a series of *castra*, located in areas that had become most threatened by local aristocratic ambition. In the early 12th century there were papal successes to be celebrated in Tyrrhenian southern Lazio against the local baronage: In 1108-1109 Pope Paschal II captured lands and castles near Velletri and Subiaco, assisted by Norman armed forces²⁸⁰. Ninfa was seized in the year of 1110²⁸¹. In the 12th century further successes could be claimed against local elites by Pope Calixes II (1119-1124) and Honorius II (1124-1130)²⁸². Moreover, with the help of the Frangipane the papacy won back

control over several *castra* in Tyrrhenian southern Lazio in the first half of the 12th century: Maenza, Roccasecca, Giuliano and Acquapuzza. The papacy progressively gained control over the monastery of Farfa, earlier a fierce local competitor. By then, this abbey had lost much of its economic and religious authority²⁸³. In the meantime, Rome had settled its ongoing dogmatic dispute with the patriarch of Constantinople. In the year of 1054 both the patriarch and the pope in Rome declared mutual excommunication (the Great Schism).

In the course of the Investiture Conflict, Christian piety in Europe grew as both sides tried to wield as much as possible influence over the Christian population. Partly as a result of this development, the Crusades were set in motion. In this the papacy played an important role. Pope Urban II instigated the First Crusade in 1095. This showed the growing influence of the papal institute, not just in Italy, but in the whole of Europe as well.

The later 11th and 12th century, however, still was not always a secure period for the papal state, as political alliances and fortunes would change with every new pope²⁸⁴. Rome, for example, was invaded (although not sacked) by Duke Werner of Spoleto in November 1105. The pope was taken hostage during Emperor Henry V's expedition to Rome in 1110-1111²⁸⁵.

Independent communes

While the papacy consolidated its power, the Italian economy and especially (international) trade piecemeal resumed. All over Italy, towns developed into autonomous communes from the middle of the 11th century onwards²⁸⁶, unattached to the (Papal) State, the Church, large (feudal) land ownerships or any other power structure. Sea trading towns started growing from the 11th century onwards: Amalfi, Pisa, Genoa and Venice became important forces in the Mediterranean. Many Italian cities situated within the Holy Roman Empire succeeded in claiming autonomy from the Empire in the 12th century, especially in northern Italy; here quasi-independent or independent city-states evolved, some of which would last until the 19th century.

Roman politics: the rise of powerful families and the commune

Rome itself would suffer one of its last devastating sacks, by the Normans in 1084²⁸⁷. From around the year of 1100, the struggles between powerful families would be one of the determining factors in Roman politics. At that time, the Frangipane and the Pierleoni families had become the dominant families, repeatedly changing political sides during the many struggles between papal and imperial parties.

From the middle of the 12th century too, the self-awareness of the commune of Rome was clearly growing, a movement that elsewhere in Italy had already led to independent communes²⁸⁸. In the year of 1143, the Roman populace stormed the capitol. In the wake of this episode, the councillors of the commune dubbed themselves senator and declared the *renovatio senatus*. The leaders of the commune, however, predominantly middle class men, had to cope with formidable influential players in the whole of Europe: the baronial families, the pope and, more indirectly, the emperor. Total independence for the commune would prove an near to impossible struggle over the next centuries²⁸⁹. Under Pope Eugenius II (1145-1153) a compromise was reached in which the commune recognised the pope as the highest authority of the city, in return for affirmation of the Roman magistrates and additional financial support.

From the second half of the 12th century onwards, the commune of Rome, like other communes, sought for expansion in the surroundings, striving for a *contado* or *districtus* in Lazio. In the year of 1191, the power of the commune and its aggressive nature was confirmed as the Romans destroyed Tusculum²⁹⁰, their rival in urban and regional politics. For this they had the explicit authorization of emperor Henry VI and the pope²⁹¹.

Around the year of 1200 the Romans laid claim on a large area roughly from Tarquinia to Terracina, in which especially the grain-lands of Tarquinia were important²⁹².

The commune engaged in a number of conflicts in the 13th and early 14th century. Conflicts between the pope and the commune would now and then flare up, as the papacy was not happy with the expansion efforts of the Roman commune²⁹³. Armed conflicts with other communes in the region (Viterbo, Tivoli, Tarquinia and Velletri) would unfold in the 13th and 14th centuries²⁹⁴.

2.1.11 *The 13th century: expansion of papal authority*

From the beginning of the 13th century onwards, the popes began a stormy advance in the political arena of central Italy, building on the already growing papal authority of the late 11th and 12th century. The Church, as universal institution, had a growing political influence²⁹⁵. The ongoing Crusades were typical of this. The papacy set out to (re)conquer authority and property, not only in central Italy but over the whole of the peninsula (Sicily, Tuscany)²⁹⁶. Since the aggressive politics of Innocentius III (1198-1216) in particular, papal policies were so successful, that Lazio (once again) became one of several Papal States instead of being the only one²⁹⁷. Many towns in the Duchy of Spoleto, to the east of Lazio, and somewhat later the Marche region yielded to Innocentius. In 1261 Farfa was finally and irreversibly placed under direct

papal control by a decree²⁹⁸. In Tyrrhenian southern Lazio, the papacy ended feudatory arrangements with a number of settlements (like Cori, Terracina, Acquapuzza, Ninfa and Giulianello) and drew all authority and rights of these sites to itself, as can be explicitly read in the written sources²⁹⁹.

The only threat to the newly acquired properties were the continuous struggles with Frederick II Hohenstaufen (in power between 1215 and 1250). Only at the very end of the Hohenstaufen dynasty in 1268, when Conradin of Swabia was killed after being betrayed by the Frangipane lords of Torre Astura³⁰⁰, the conflicts with the Holy Roman Empire ceased. The intervention of the French kings of Anjou brought new stability. With their help the papacy acquired the Romagna (1278). The military and financial power of the papacy was at new heights.

Although the Papal States had grown northwards, Lazio remained the main provider of popes and other officials in the Roman curia³⁰¹. As one learns from Toubert on the other hand, in this period southern and eastern Lazio lagged behind in terms of urban growth compared to Tuscany (Viterbo, Orvieto)³⁰². Urban growth in Tuscany was largely caused by the influx of people from the overpopulated countryside into the booming towns that could expand into the surrounding plains. The opposite seemed to have been the reality for the growing population of the *castra* in the Sabina and Lazio: the small enclosed areas on the hilltops did not allow much room for growth, and eventually became stacked to the point that even open spaces and gardens were sacrificed for living space. Buildings grew in height. Internal tensions and conflicts (attested by the local archives) grew³⁰³.

In southern and eastern Lazio, profits of the lords seemed to have grown in correlation with the population until the start of the 13th century. From that period onwards, the returns seem to have decreased and small agricultural vassalage became more and more fragmented. This asymmetric development of the levels of production and the available workforce was caused by several negative factors of which Toubert mentioned the stagnation of agricultural techniques, the fragmentation of agricultural activities, and less successful cultivation of new land³⁰⁴. Furthermore, the status of local nobles (*boni homines*) was growing strongly, partly because of their successful financial reallocation and assembling of lands which, during the disintegration of small agricultural vassalage, had become fragmented³⁰⁵. The same local nobles had in the 13th century been able to negotiate and fix municipal statutes with seigneurial authorities. Regarding the countryside, the general tendency of the large landowners was to invest in extensive stock breeding. Agricultural activities had no priority. As a result, Toubert concluded, the

countryside and agriculture were left untouched until at least the start of the 14th century³⁰⁶.

The city of Rome

From around the year of 1200, politics within Rome were defined by the tensions between pro- and antipapal parties within the nobility³⁰⁷. These frictions most of all stemmed from the policy, imposed by several popes, to strengthen the power of their own noble family. This was done by appointing relatives for powerful positions within the church, as well by giving them ecclesiastical fiefs in Lazio. Building up family power was a strategy to control over the Roman commune, and to deal with the imperial sway within the elite. The downside was that during pontifical elections, families often got mixed up into (internal) conflicts. These conflicts would affect many papal elections in the next centuries³⁰⁸.

In the 13th century, the Roman commune was drawn into several struggles involving the pope and the emperor, and in a number of occasions was squashed between them. At the end of another complicated series of conflicts, Pope Gregory IX and emperor Frederick II Hohenstaufen teamed up against the Roman commune in 1235. As a result, the commune and senate were forced to yield to papal authority³⁰⁹. From the year of 1238 onwards, the Roman senate consisted of one imperial and one papal senator, acting as straw men for the pope and emperor.

In this period, the financial situation of Rome improved. The city of Rome in the later 12th and 13th century arose as an important service focal point and financial centre. Rome became an international financial hub, primarily for investment banking, because of the many funds flowing towards the ecclesiastical institutions. The Holy Year of 1300 was very profitable to Rome and the papacy, and Holy Years would be repeated many times afterwards, at given intervals.

Three classes within Rome's society

The middle of the 13th century was also the time in which the city council of *consilarii* gained much authority. The *consilarii* consisted of men from the three classes which could be discerned in Roman society between the 12th and 14th century³¹⁰. First of all, the baronial families. They provided the most senators and had representatives in the College of Cardinals. They possessed many castles in Lazio³¹¹. Secondly the Roman upper class, consisting of the urban aristocracy whose members formed the largest part of the city council and had important positions within the clergy. This upper class consisted of families of divergent milieus, some originally from nobility (like the Frangipane³¹²), administrators, and what may be called "nouveau riche". And thirdly the middle class, who often were barristers, proprietors and merchants.

The middle of the 13th century saw the first conflict between the Orsini and Colonna families, the most powerful among the baronial families³¹³. In the meantime, a conflict was brewing inside the baronial elites of the Italian peninsula, more specific between parties loyal to the pope (the Guelfs) and those loyal to the emperor (the Ghibellines)³¹⁴. The real issue of this chasm was the distribution of power; ideology of the status of the pope or the emperor was only of secondary importance. Most families took sides, although in some (the Orsini) internal division prevailed. In the last quarter of the 13th century, the Colonna and the Orsini once again became the poles around which the conflict evolved in Rome, a conflict that lasted far into the 14th century³¹⁵.

2.1.12 The 14th century: the Avignon papacy and return, chaos and recession in Rome

Because of the strong French influence in the papal court and as a consequence of the continuing power struggles and resulting insecurity in Rome, the papacy temporarily moved to Avignon during Clement V (of southern French origin). The papal office would be seated at Avignon between 1309 and 1376. In this period, the authority of the pope over the Italian Papal States severely diminished. The return of the papacy to Rome was repetitively postponed as the complex political situation and security in the city did not allow it³¹⁶. At the return of the papal court to Rome, the city was still in turmoil and it took the papacy a few decades to restore its full authority within the city. During these years of instability after the papal return, an ongoing power struggle between the papacy and the commune emerged. The papacy also had to deal with the great Western Schism, a rupture within the Church which lasted from 1378 to 1417.

During much of the 14th century, the city of Rome was in a recession³¹⁷. Parts of Rome were neglected. The population of Rome is estimated to have been around 25.000 inhabitants, a historical low³¹⁸. During the Avignon sojourn the Lateran palace and basilica were damaged. After the return of the papal court to Rome the Vatican became the new seat of the papal court³¹⁹.

2.1.13 A short introduction: The Christian organisation of the late Antique to high medieval Italian landscape³²⁰

The late Roman cities, and especially Rome, were the breeding place of christianisation³²¹. Rome, from the start, had had a strong attraction to pilgrims who visited the tombs of Peter and Paul. Milan was the second largest Christian bastion, and had become particularly important since the Edict of Milan in 313 and the days of bishop Ambrosius of Milan (374-397), who had had a large influence on the Church³²². In these early years, however, the

Christian faith lacked a clear religious focal point. The bishop of Rome had not yet become the supreme ruler of the Church. Rome was just one of the larger bishoprics in an ill-integrated Church³²³. Although the bishop of Rome began asserting himself forward as the God-given successor of Peter from the 3rd century onwards, the reality of Rome as the centre of Christian unity took a long time to evolve³²⁴. Enduring resistance from the higher ranks of episcopacy, certainly by the bishoprics of the east, played an important part in this³²⁵.

The growth of Church institutions had started gradually, picking up pace after Constantine declared Christianity the state religion in the year of 313, in the edict of Milan. The process was accelerated after Theodosius' Edict of 380, which made Christianity the only accepted state religion³²⁶. The clerical organisation in the 4th century manifested itself strongest in central and southern Italy. In the countryside of Lazio, the first clear (epigraphic) signs of an ecclesiastical organisation are found in the 4th century³²⁷. At the end of that century, there were about 100 dioceses in central and southern Italy and Sicily, while Christian faith in northern Italy was centred in Milan, Ravenna and Aquileia³²⁸.

It was, however, only in the 6th century that fundamental ecclesiastical institutions, like dioceses, became definitively established. In that century, 41 dioceses were listed in Lazio³²⁹, 8 of which with Tyrrhenian southern Lazio³³⁰. One has to be careful, therefore, to impose later ecclesiastical institutional hierarchy on the early phases of christianisation. The doctrinal and institutional coherence of the Church in the 5th and 6th centuries were still weak. Some scholars talk of "Christianities" when they describe this period³³¹. By then, the clergy was becoming a group detached from the Christian community, acting in their clerical role as the moral and religious leaders and as the administrators of ecclesiastical possessions.

The whole first millennium was to be an era of continued change and incoherence in the ecclesiastical hierarchy³³². Only with the declared supremacy of the papacy at the start of the second millennium, an unambiguous and definitive management structure from top to bottom would evolve.

The Suburbicarian Dioceses

Lazio was one of the regions on the peninsula where the Christian faith spread early and capillary³³³. The bishoprics closest to Rome had an especially close relationship with the bishop of Rome. They were often consulted and (certainly early on) often had special rights. A specifically privileged role was played by the bishop of Ostia who is known to have consecrated the new pope in the 4th century³³⁴. In the course of the early middle ages these special

duties and privileges were officially established by creating the Cardinal-bishops, i.e. the bishops of Albano, Anagni, Gabbiani, Ostia, Nepi, Porto, Praeneste, Silva Candida, Tivoli, Velletri. In the high middle ages the bishop of Segni was created a Cardinal-bishop as well³³⁵. The first time the Cardinal-bishops were mentioned was in the *Liber Pontificalis*, Life of Stephen 768-772³³⁶. This record shows that the regular attendance of these bishops was already an old established tradition by the 8th century. Until the 11th century their power remained constant: by then they were sanctioned to participate in the papal election³³⁷. In the course of the high middle ages the constitution and number of the Suburbicarian Dioceses would change. Although their influence in the high middle ages was less than in the early middle ages, their special relationship with Rome would continue, even until today.

The emperor and the pope

From the 3rd century onwards, the bishop of Rome began playing his card as successor of Peter and inherent bearer of the apostolic primacy of the Church. Eventually he was able to establish the papacy as the spiritual centre of the Church, in the later 5th century³³⁸. Until that time, the bishop of Rome had to cope with the multifarious actors involved in the affairs of the Christian faith. The bishoprics in the east and the Emperor were his largest competitors.

The relationship between the papacy and the Roman (later: Byzantine) emperor was a complicated one. In the early years of the general acceptance of Christian faith, an interdependent collaboration was upheld among the imperial authority and the barely organised ecclesiastical institutions. The emperor interfered strongly in Church affairs. Early on the Church itself was not yet strong enough to organise and execute power. In the 4th and 5th century it was actually the emperor who played a mediating role in the realm of Christian faith as an initiator and the chairman of ecumenical councils (for example at Nicaea in the year of 325), and as the person who effectuated the decisions made at these meetings. Finally, with the growing organisational level and hierarchy of the Church, led by the bishop of Rome, relations would be straightened out in the end of the 5th century. Pope Gelasius I formulated a balanced partnership to rule the Christian world, regal power (*regalis potestas*) and the holy power of priests (*auctoritas sacrata pontificum*) should rule simultaneously and as equals³³⁹. These two powers had to be divided among two unconnected persons, i.e. the pope and the emperor, which were obliged to collaborate. This *modus operandi* would prove to be very successful; it would be the fundament for relationships between the papacy and earthly rulers in the future.

The diocese as the fundament of Church organisation

As the Roman administration disintegrated and central authority was on the wane, the power of the bishoprics increased, both secularly and spiritually. The diocese would evolve into the fundament of the Church organisation. Nevertheless, it took a long time before dioceses became uniform entities. It has been suggested that only in the 6th century a diocese would become to indicate both the Christian communities ruled by a bishop and the diocesan region around the see, although the subject is still intensely debated³⁴⁰. Bishops assumed many of the organisational structures and took over the tasks of the former Roman civil services that had eroded in the territories of their dioceses. Urban administration and security became largely dependent on the bishop³⁴¹. The territory of the dioceses was often defined by the borders of the past Roman municipalities (*municipia or civitates*)³⁴², just as the territory of a medieval church community was often defined by the Roman *pagus* (see below)³⁴³. The fact that many of the higher clerics were descended from aristocratic families, helped them in conducting their tasks, in particular concerning their political duties. With this competence they were able to protect their communities during the years of turmoil of the 6th and 7th centuries. At the same time, there are indications that the middle of the 6th century saw a collapse of many diocesan networks. The Lombard invasions and the Gothic war caused bishops to flee. As a consequence, a reshuffle of episcopal structures took place. Many sees were abandoned or their task relocated³⁴⁴. The demographic decline in most parts of Italy played an important role in this process as well.

The christianisation of the countryside

Christianity in the late 4th and early 5th century had become firmly rooted into city life. While the gradual ecclesiastical structuring within the cities is relatively well-documented, the situation in the countryside between the 4th and 8th century is more difficult to assess³⁴⁵. However, it is clear that already before Constantine, the Christian faith had spread extensively within the landscape of Lazio³⁴⁶. The Christian cemeteries found throughout Lazio are proof of the existence of numerous Christian communities in the 4th and 5th century. It is not possible to answer the question until when and in what way, and what subtle forms of local piety paganism held on; certainly in the context of the arrival of foreign elements in society throughout late Antiquity, as with their arrival more than once new forms of paganism were brought in³⁴⁷.

Local churches evolved. The first evidence for the existence of buildings belonging to local parishes is found in the countryside Lazio³⁴⁸. In the course of the 5th century, the number of rural churches in Lazio grew³⁴⁹. Research on the relation between former Roman

settlements and medieval parish churches is full of twists and turns, because of the insecure historical information³⁵⁰. Continuity between the Roman *pagus*, the smallest administrative district in the late Roman Empire, and the medieval church (community) has been widely suggested but is not easy to conceptualise³⁵¹. A confusing factor is the widely accepted notion that many early churches were built in centres along the main Roman roads, mostly disregarding the territorial authority of a *pagus*³⁵².

As discussed above, between the 6th and late 8th century, the amount of rural churches in the Italian countryside grew steadily³⁵³. 6th and 7th century churches suggest strong indications for continued living in the rural landscape, where building using perishable materials and undiagnostic pottery make actual occupation difficult to prove using the existing archaeological record. Francovich and Hodges saw churches firstly as hubs for the ecclesiastical organisation of the rural area³⁵⁴. Brogiolo suggested that they served as centres of regrouping the scattered inhabitants of the countryside, actively allocated by an urban aristocracy³⁵⁵. How this exactly would have worked is not totally clear yet. In some attested cases these churches were constructed in deserted villas³⁵⁶ and became the focal points for new habitation (e.g. Villamagna in the current study area, and Marcellino in the Chianti region), or in former Roman cult places. The majority of rural churches built in the 7th and 8th century was constructed by richer families in local communities³⁵⁷. Their incentive seems to have been a concoction of personal devotion and the display of status.

By the 8th century, the structure of Church hierarchy had begun to be more thoroughly organized from the top down, although some sources suggest continued hierarchical jurisdictional inconsistencies and liturgical conflicts³⁵⁸. The influence of the Byzantine world, which had its own deviating clerical institutions, must have complicated matters in Byzantine occupied areas³⁵⁹. It is hard, however, to assess how much this clouded the situation in the Duchy of Rome.

From the early 9th century onwards, the number of newly founded rural churches dropped on the whole Italian peninsula. This becomes clear from the relatively trustworthy Tuscan sources³⁶⁰. The drop in new rural church foundation might have been caused by the lesser profitability for elite families in setting up and maintaining ecclesiastical edifices in the countryside.

8th and 9th century:

the growing authority of the papacy, and the ecclesiastical institutions as important political factors
As pointed out before, the papacy of the early 8th century began to strive at a re-established Roman state, ruled

by the pope with worldly authority³⁶¹. With the aid of Carolingian power, the papacy was finally able to achieve an independent state from the middle of the century onwards. During the Carolingian period the papacy was able to strengthen its role as leader of the Church³⁶². This was the outcome of the Carolingian policy of homogenizing all ecclesiastical practices and institutions, in order to realize more organisational unity and to get political control over the Church. Besides that, the earlier challengers of Rome for supremacy over the Church, the patriarchate of Alexandria, Antioch and Jerusalem had significantly lost influence as a result of the growth of the Islamic world. The missionary work in the lands that were gradually absorbed into the Frankish Empire (such as Alamannia, Frisia and Thuringia) was done under patronage of the pope. Charlemagne promoted the Benedictine rule for monasteries all over the Empire, and slowly but surely it substituted the others. From the middle of the 10th century, the papacy strongly engaged in the evangelization of the Slavs. Herein it perceived strong competition from the Greek Church³⁶³.

From the 8th century onwards ecclesiastical institutions, and especially the monasteries, became important political players³⁶⁴. In 8th century Lombard and Carolingian ruled areas, the political role of the monasteries and other ecclesiastical institutions grew as they constituted important centres around which the Franks built and maintained their power in Italy³⁶⁵. The Lombards founded many new large monasteries and the Carolingians invested in new and enriched old monasteries. With the political support of the elite and kings, these monasteries gained authority over the surrounding areas. In the power vacuum that developed in the later 9th century the Carolingian influence dwindled³⁶⁶, but the monasteries and other clerical bodies that had gained privileges and juridical and tax immunities during the previous centuries, even enlarged their power. Occasionally even vassalage systems were set up³⁶⁷.

The Italian Church between the later 9th and 11th century

When the Carolingian influence in Italy ended, the position of the papacy was destabilized. The centralisation of the Church had stopped³⁶⁸. It proved difficult to control the large Papal States outside the former Duchy³⁶⁹. The papal position and its prestige declined further through internal moral and political conflicts, particularly during the so-called *papocracy* (first half of the 10th century)³⁷⁰. Inside Rome, the papal court and papal elections were controlled by the Roman aristocracy from the end of the 9th century until the middle of the 11th century.

Strong German imperial influence can be seen in the election of several German popes around the middle of the 11th century (Clement II, Damasus II, Leo IX and Victor II). Their election was a result of Emperor Henry III's mediation in the struggle between the Roman aristocracies over the control over the papal office³⁷¹. The German popes succeeded in restoring papal authority, which had been lost in the earlier internal political conflicts. The papacy became the centre of the Church reforms that had started to create a Church independent of secular politics and the aristocracy.

In the 10th century, civic administrative regions disintegrated all over the Italian peninsula. The high-end clergy (bishops and abbots) strengthened its political power accumulated in earlier centuries over the people living on Church lands³⁷². When the German influence expanded and the Saxons ruled over large parts of Italy, the civic authority of the bishops grew. Dioceses were once more awarded many economic and legal privileges in the cities and ecclesiastical landed properties. The bishop's administrative responsibilities in the cities got bigger, but at the same time he was often still fairly powerless concerning the controlling of many aspects of the ecclesiastical business of his bishopric. The number of private family churches grew in the 9-10th century³⁷³. Many of these private places of worship followed their own course, as their priests were unable to get by without the support of the secular nobles who owned the places of worship. Quite often these local private churches assumed the role of the parish churches whenever they were situated near to an incastellised population centre³⁷⁴.

Church reforms of the 10th to 12th century

The oft-conflicting interests of Church institutions and lay aristocracy that had started in the Carolingian period became a burden to the Church in the 10th century. Higher clergymen had become secular rulers; in many aspects, they could not be told apart from lay lords. This is illustrated by the fact that in the 10th century during synods in Rome worldly matters were dealt with as well³⁷⁵. To cope with this burden, reforms of the Church were initiated. The most important transformations were initiated by monasteries³⁷⁶. During that period, the abbey of Cluny in Burgundy, with its stricter Benedictine monastic life, was very influential in Italy. Large new orders were started in the 10th and 11th centuries, that played a vital part in the reforms: the Calmaldolese, Vallombrosan, Cistercian and Carthusian orders. In this age of reorganisation, the papacy began to assume the role of coordinator and designer of all the different channels within the Church structures³⁷⁷. The Church was actively developed into an uniform instrument under a strict hierarchy and

as detached from worldly business as before. As Azzara stated: “In short, together with the more general evolution of institutions and society of western Christendom, this period saw the gradual completion of the centuries-long process by which the office of the bishop of Rome was transformed from an initial honorary primacy to a real jurisdictional supremacy over an increasingly hierarchical church”³⁷⁸. It was in the 11th century that it came to a definitive break with the Greek Churches. In 1054 the pope in Rome and the patriarch of Constantinople excommunicated each other, the so-called Great Schism³⁷⁹.

The apogee of the restructuring measures in the Roman Church would be a series of reforms in the period 1050-1080, later collectively called the Gregorian reform, after Pope Gregory VII (1073-1085)³⁸⁰. These reforms regulated the autonomy and the moral integrity of the clergy in general and more specifically the papacy. An important step was to determine that the election of the pope was reserved to the cardinals. This was decided during the Lateran council of 1059. In the *dictatus papae*, issued in 1075, Pope Gregory VII announced the supremacy of the pope over the whole episcopate. Not all measures of this restructuring were intended purely dogmatic. Economic benefits most certainly played a part in the process of reorganisation. As a result of the more independent course that was taken by the Church, monasteries for example were able to recover grounds and possessions on a large-scale that were previously lost³⁸¹.

While the Gregorian reform regulated the independence of the clergy in general, it also led to the prohibition of lay investiture, i.e. the election and installation of clergymen by a secular lord. This again led to the intensification of the dispute the papacy had with the Holy Roman Empire on the right to elect German bishops. This struggle was called the Investiture Conflict³⁸². In short, these struggles between the popes and the emperors continued well into the 12th century. The outcome should be considered a triumph of the Church, codified in the Concordat of Worms (1122). It increased the authority of the papacy considerably and weakened the Holy Roman Empire. None the less, the struggles with the German (Swabian) imperial powers would continue until the 13th century.

In the course of the Investiture Conflict, both sides tried to wield as much influence as possible on the Christian population. Partly as a result of this development, the Crusades were set in motion, in which the papacy played an important initiating role. Pope Urban II proclaimed the First Crusade in 1095. This demonstrates the influence the pope had gained, not just in Italy, but in the whole of Europe. Again the papal court was actively involved in the initiation of later Crusades, especially the Third (1187-1197) and Fourth (1202-1204).

The Church as an universal institution gained political influence in the later 12th and 13th century³⁸³. As stated earlier³⁸⁴, the papacy set out to (re)conquer authority and properties, not only in central Italy but over the whole of the peninsula (Sicily, Tuscany)³⁸⁵. The aggressive politics of Innocentius III (1198-1206) were particularly successful³⁸⁶. He was able to secure a lot of towns in the Duchy of Spoleto; somewhat later the Marche yielded to him.

2.1.14 A short introduction: Monasticism in Italy

From the deserts of Egypt, Christian monasticism proliferated to the west in the 4th century³⁸⁷. Rome and its hinterland were the first centres of embryonic monasticism in Italy. As can be read in the *Liber Pontificalis*, the bishops of Rome Siricius (384-399) and Xystus (432-440) each built a monastery at a catacomb complex near Rome³⁸⁸. The first monastery outside Rome in central Italy was Montecassino³⁸⁹. It was founded by Benedict of Norcia, who wrote a rule for monastic life between 530 and 550. In this *Regula magistri* the monastic leadership of the abbot was defined, as well as the daily tasks of monks. This Benedictine rule would have large influence as of that period onwards and it dwarfed all other monastic life guidelines, certainly since it officially became the sole directive in Carolingian ruled areas in the 9th century³⁹⁰.

The success of monasticism in Italy was a story of elite family involvement too³⁹¹. In addition to their contribution to local churches, aristocrats invested in monasteries, both financially and in human resources; many members of these upper-class families began to hold high positions in abbeys. From the 7th century onwards, Lombard kings and aristocrats were very actively involved in the foundation of monasteries. These were built both inside and outside of cities, and in the 8th century on strategic locations on the borders of the Lombard areas. Examples are Nonantola (near Modena on the border of the exarchate), Farfa (founded by the Duke of Spoleto, near Rome) and S. Vincenzo al Volturno³⁹². Archaeology has considerably contributed to the knowledge of Lombard monasteries and their leading role within intricate local economies. The selection criteria for the building site of a monastery depended mostly on the particular natural circumstances. The existence of ancient vestiges in the vicinity, such as a villa, seems frequently to have been an important incentive; these might have meant a ready material supply or even foundation for the new buildings³⁹³.

The motives for the Lombard aristocrats and rulers to get involved were the same as for the elite in other areas: by building local churches and monasteries they demonstrated their devotion. Furthermore, ecclesiastical investment was seen as a way to expand their wealth and the authority of their family. Monasteries proved to be effective in centralising the territorial organisations; they

became a focal point for production. Moreover, monasteries became a magnet for donations, which were encouraged by worldly rulers from the start of the 8th century onwards³⁹⁴. At a local level, monasteries were involved in the organisation and building of the *curtis* centres of the 8th and 9th century³⁹⁵.

In the Byzantine ruled areas of Italy, and certainly in Rome, the influence of Greek monastic life was felt³⁹⁶. Greek monasteries in Rome developed into asylums for orthodox Greek monks throughout the dogmatic disputes of the 7th to 9th century. This was especially the case during the fierce first iconoclastic period (730-787)³⁹⁷. Quite a few popes of the 6th to 8th century were Greek, and certainly at the beginning of the 7th century, born in Byzantine ruled areas and educated in Greek monastic life. Zachary I (741-752) was the last of these Greek popes. In southern Italy Greek monasticism would last until the 13th century³⁹⁸.

As the Carolingians gained influence, monasteries began to play an important part in Italian political life. As Azzara explained: "With the establishment of Carolingian power throughout most of Italy, new ties were established between the great monasteries, political power, and aristocratic interest"³⁹⁹. Abbeys developed into principal political allies for the Carolingian leadership and many Franks occupied high positions in their administration. Many new monasteries were founded and investments were made on existing ones. The amount of monastic properties grew and Carolingian monarchs formalized their protective role by often exempting monasteries from taxes and granting them legal immunity. As a result of their growing affluence, the monasteries became extremely vulnerable to the marauders present on the Italian peninsula between the 9th and early 11th century. The Magyar raids, and more particularly the Saracen attacks were severe to such an extent that these assaults more than once caused the temporary abandonment of the monasteries (e.g. Farfa)⁴⁰⁰.

In the political turmoil of the later 9th and first half of the 10th century following the decline of Carolingian influence, central power wavered⁴⁰¹. The monasteries and other ecclesiastical institutions, such as the dioceses, began to build up authority comparable to that of the lords themselves, including their own vassalage systems. The attested examples of monasteries involved in the *incastellamento* process of the 10th century can be seen as evidence for this authority building process⁴⁰². The upcoming new elite families of the 9th to 11th centuries, which often originated from north of the Alps, made use of new monasteries as centres around which to bolster their economic position and to build up their authority⁴⁰³. The German emperors from the middle of the 10th century onwards

followed the Carolingian example and used monasteries as one of the bases to uphold their control in Italy. In the course of the 11th century, smaller and private monasteries in central Italy⁴⁰⁴ became less interesting to rich benefactors than the larger "international" monasteries such as Farfa, Monte Cassino, Subiaco and San Vincenzo al Volturno. Howe proposed that small communities were not able to compete with the larger ones because these 'had become conspicuously superior in their amenities, culture, and spirituality'⁴⁰⁵. More significantly, a donation to a larger monastery more and more came to be a way of gaining access to power.

From the start of the 13th century, mendicant orders developed, dependent on charity and totally dedicated to the faith. Of these orders, the Franciscan order had the most impact in Italy.

Centuries after the great high medieval ecclesiastical upsurge, in the 16th and 17th century, many monastic settlements and small rural churches would disappear. This was the time in which monastic presence would be concentrated in or around inhabited centres⁴⁰⁶.

2.1.15 A short introduction:

The history of the Farfa monastery

Monasteries were important focal points in the socio-economic and ecclesiastical-political developments of the early and high middle ages. In the following pages the history of the Farfa abbey will be discussed, to show in detail how the position of the large central Italian monastic communities of this period came about.

Although according to legend an earlier church would have been founded on the site, the actual establishment of the Farfa monastery was historically dated between 680 and 700. It was in all probability founded by Thomas of Maurienne, a monk from Gaul⁴⁰⁷. The Dukes of Spoleto were benefactors of the monastery from the start⁴⁰⁸, and were joined later on by the Lombard kings. They stayed involved until the Lombard rule in central and northern Italy faded in the middle of the 8th century. Pope John VII conceded a papal privilege for the monastery in the year of 705. In the first half and third quarter of the 8th century, the monastery obtained large domains in the Sabina and in the Marche region⁴⁰⁹. It is one of the best documented examples in central Italy of the growth in ecclesiastical landed property in this period.

The 9th century census figures of the properties of the Farfa monastery draw a picture of an even steeper demographic growth in rural population⁴¹⁰. Farfa had become an institution with a strong direct link to the Carolingian leadership since the Franks captured the Lombard kingdom in 774. This must have been an important factor

in the flourishing of the abbey in the later 8th century. Certainly as it offered the monastery shelter against the papal zeal to limit Farfa's liberties and as it provided concrete armed protection as well⁴¹¹. Farfa developed into the largest property-owner in its region. Large building programs were conducted on the abbey in the first half of the 9th century. In the 8th and 9th century Farfa was probably actively involved in the many newly organised and (re)built *curtis* centres of the time. Archaeological scrutiny has provided evidence for settlement on small hills near the abbey at San Donato, Cavallaria and Bezanum⁴¹². The territory of Farfa and the role of the monastery in the territorial management of its surroundings from the 8th onwards has been studied manifold⁴¹³.

The Saracens sacked Farfa in 897 or 898⁴¹⁴, the same fate that many other great monasteries suffered in the late 9th century. The site was temporarily abandoned after which the complex was burned to the ground by (Christian) plunderers. Only in the second quarter of the 10th century, monks resettled the monastery⁴¹⁵. Following the intervention of emperor Otto I in Italy in the middle of the 10th century, the monastery once more received imperial protection and benefaction⁴¹⁶. Archaeological and historical research showed that *incastellamento* evolved in parts of the Farfa region in the 10th and 11th centuries⁴¹⁷. According to Stroll, Farfa reached the peak of its prosperity and authority during the second half of the 11th century. Abbot Berard I (1048-1089) succeeded in harvesting the crops of both the imperial and the papal patronage. His successor started the compilation of the *Regestum Farfense*.

Farfa as a pawn of 11th and 12th century politics

Authority over the monasteries, and specifically the appointment of abbots, was an important issue in the investiture conflict. Consequently, the monastery of Farfa became one of the focal points of this struggle. Stroll's book on the Farfa monastery⁴¹⁸ deals with many of the local (Roman) and international political issues of the 11th and early 12th century. Stroll's book showed Farfa as a vivid example of the ever changing alliances of the political snake pit of that time. From the later 11th century onwards the monastery usually sought support of the emperor in its struggles with the pope and the local nobility. The latter party had grown in power in the *incastellamento* process and sought to obtain as much as possible lands and castles owned by the Farfa monastery⁴¹⁹.

Weakened by the constant pressures from outside, the authority of Farfa had diminished during the 12th century. Whilst in the meantime the papacy had grown in influence⁴²⁰. The direct link between the emperor and the monastery was disconnected after the Concordat of Worms (1122). Farfa lost its long-established imperial

protection and was placed under the control of the papal office⁴²¹. This, however, brought some stability to the Farfa area. After Pope Eugenius III (1145-1153) was consecrated at Farfa he defended the monastery against the political and the territorial threat of the local nobility⁴²². Imperial ties were renewed temporarily in the third quarter of the 12th century when Frederic Barbarossa tried to revitalize imperial aspirations in Italy. The Concordat of Worms, however, would stand ground. In the 13th century, control of the pope over Farfa was reinstated, this time even stricter. In 1261 Farfa was, finally and irreversibly, in formal terms placed under direct papal control⁴²³.

2.II The status quo of research on the post-Roman Italian landscape

2.II.1 Introduction: the "undetected" medieval phases versus the changing fortunes of work in progress

Until fairly recently, regional archaeological projects had difficulties identifying the post-antique rural landscape in Italy. Hardly ever project publications attempted to reconstruct the early to high/late medieval archaeological landscape. The South Etruria project was one of the first which did (Potter 1979). As discussed in the introductory chapter, the discomfort with analysing the period of transition(s) from the late Roman period to the high middle ages was mainly caused by the lack of interdisciplinary enthusiasm⁴²⁴.

The main archaeological reason however was the intrinsic lack of secure data for the period. Much late Antique and early medieval material culture was, and often still is, simply not detectable, due to a combination of negative factors. These were summarised by Arthur and Patterson on the ceramics⁴²⁵ and by Barker in more general terms⁴²⁶: the poor understanding of the ceramics of the post-antique period

- the absence of kiln sites;
- the breakdown of imports;
- the less durable built environment that impedes archaeological recognition;
- the fact that many sites are on spots that are still inhabited today.

Furthermore, Moreland emphasised the need for a better understanding of the changes in production and distribution systems, in order to better interpret the (lack of) late Antique and early medieval pottery. He proposed a change from a world system to a network of regional and local supply. He also suggested that the problems in detecting 6th to 8th century layers were exacerbated by changes in the way rubbish was disposed of⁴²⁷.

Arthur⁴²⁸ reconstructed a number of other factors that caused the poor visibility and the decrease in the number of late Roman and post-Roman (villa) sites in northern Campania⁴²⁹:

- the decreasing number of rural sites from the first century onwards seems to be caused by the fact that many small scale private properties were incorporated in larger centralised imperial manors. This process is attested in the written sources as well.
- The rise of large *latifundia* (the most important Roman agricultural production centres) might consequently have led to a substantial increase in under-cultivated lands (the *agri deserti* of the late and post-Roman period)⁴³⁰.
- An increase in the use of wooden vessels might also have influenced the recovery rate of archaeological sites in the field surveys; indications for this exist in Italy from the 3rd century onwards⁴³¹.
- There might also have been a demographic factor for the decline in the number of inhabited rural sites, as exemplified by Suessa Aurunca: this former colonial town was inhabited until at least the high middle ages and as such must have had a certain continuous demand for supplies. This demand might have been provided for by farmers cultivating the lands from the towns itself, due to the insecure agricultural circumstances of the late Antique and early medieval period. This situation might have been comparable to the initial colonial phase in the 4th century BC when farming was likewise carried out from inside the town⁴³².

As has been articulated before, meanwhile the fortunes of researchers of medieval landscapes have changed: an intensification of excavations and surveys, scholarly awareness of the importance and fragility of post-Roman layers and multidisciplinary approaches have provided new insights. More than two decades ago, the publications of the Biferno Valley⁴³³ and Liri Valley⁴³⁴ projects already provided valuable insights in the medieval archaeological landscape in a long-term context. The middle ages are not as dark as thought before.

As discussed, the crux for a better understanding of the post-Roman landscape lies in the improved (coarse ware) pottery typologies. This is brought about by new excavations on key sites and the consequent reworking of earlier pottery research. As becomes clear, the limited knowledge of local pottery might have obscured late Antique and early medieval phases of many survey sites in the past⁴³⁵. It is expected that more similar re-evaluations will eventually cause a dramatic shift from the traditional view of the 'abandoned' countryside (cf. Potter 1979⁴³⁶) of late Antiquity and the early middle ages⁴³⁷. In the context

of new pottery typologies, two excavations stand out: the Crypta Balbi site in Rome, the most important key-site in our understanding of 6th to 12th century pottery in central Italy, and the site of Villamagna, a recently well-studied site in the countryside of the research area⁴³⁸.

In the following, the status quo is given of archaeological landscape research on the transitions taking place from the late Roman period to the high middle ages. Two important projects are described, both aiming at a dialectic with the historical discipline, and incorporating the latest results of pottery (re)studies. Ricardo Francovich and Richard Hodges have been able to construct a new generic view of central Italy based on archaeological and historical research done in the last 30 years throughout Italy⁴³⁹. Their conclusions are corroborated and complemented by other work in regional contexts of the past 25 years or so. Within the context of the Tiber Valley project, John Moreland has built on the rehashing of earlier typologies. His study of the Farfa region (Moreland 1992, 2005) showed significant consistency with the established general view of *Villa to Village*⁴⁴⁰.

Additionally, the Biferno Valley project is described; this long running multidisciplinary study is exemplary to the current research, not only because of its comparable regional setting but also because in its synthesis the Braudelian scheme is explicitly put to work.

Although different in setup and geographical setting, the overall results of these three comprehensive studies, and of other more recent studies not dealt with in detail here⁴⁴¹, complement each other: most landscapes of Italy are shown not to have had one period of transition but to have been created and recreated more than once throughout late Antiquity and the early middle ages. The question of continuity or discontinuity in the transition from the Roman world to the middle ages (see Chapter 1⁴⁴²) seems to be too rigid a perspective. However, as was recently summarised by Augenti⁴⁴³, if there is one period in which, after a regionally divergent array of larger and smaller changes since late Roman period, the real transformations became visible, it would be early 8th century. Until the late 7th century the peninsula, despite the obvious changes taking place, preserved some of its essential features, most importantly the continued trade across the Mediterranean. This trade finally ceased in the late 7th century, and the peninsula experienced a deep economic crisis. And then, after the end of the late Antique system of production and trade, a significant recovery could be seen from the early to middle 8th century. From that period onwards, new protagonists arrived on the economic and political scene, new channels of exchange and new markets were started. The 8th, and certainly the 9th century was a time of considerable demographic growth.

In view of this status quo of research I have adopted the “Italian” periodization for the first millennium AD: i.e. Late Antiquity = 4th-7th century, early middle ages = 8th-10th century⁴⁴⁴.

The outline of the status quo of research is complemented by a detailed account of three key-sites in the area north of Rome: Santa Cornelia, Mola di Monte Gelato and San Donato. An in-depth description of these sites provides valuable background information to the current research of Tyrrhenian southern Lazio, as this analogy will provide a scaffold for interpreting the fragmented data of the research area. A detailed scrutiny of these key-sites is particularly imperative for the understanding of the morphology and functioning of the *domuscultae* of the 8th century: Santa Cornelia and Mola di Monte Gelato have been identified as estate centres, functioning within such a papal rural organization.

2.II.2 A generic perspective for the Italian peninsula

The fundamental work done by Francovich and Hodges demonstrated that archaeology in combination with history can indeed create a balanced new view on rural early to high medieval history in central Italy. Their work showed that many historians have been too much fixed on the period around 1000 AD, when the bulk of written sources becomes available. With the newly acquired insights into the final phases of the villa system, the authors at the time expressed good hopes to ultimately solving the puzzle of the end of the classical settlement system. According to Francovich and Hodges the post-built structures of the final phases of villas “are in fact harbingers of a settlement form soon to be imprinted upon hilltops”⁴⁴⁵. They maintained that it will be crucial to further examine this phase: large scale excavations will be needed to uncover the initial phases of settlements that continued to exist in the higher and later middle ages. An earlier successful example of such a large scale excavation was the Montarrenti project (Tuscany)⁴⁴⁶.

Francovich and Hodges distinguished four stages of transformation during the transition from the Roman period to *incastellamento*.

The first stage of transition, the 3rd to 5th century: decline and continuation

The general picture of the 3rd and 4th century is one of Roman landscapes in decline; the number of rural sites dropped resolutely and the organisational level deteriorated⁴⁴⁷. This process picked up pace even faster in regions where the villa system was the exclusive core of organisation. In regions where the villa existed side by side with

pre-Roman socio-economic systems based on the *vicus* (village) or small dispersed settlements, the regression is thought to have been more modest.

The Constantine age came as a period of revitalization for some sites. In the 4th century many villages and villas are remodelled. In some cases, this has produced outstanding architecture (San Giovanni di Ruoti⁴⁴⁸), but in general this phase was characterised by rudimentary rearranging interiors of rural structures. In the Roman Campagna, the Mola di Monte Gelato is one example of this process.

Another characteristic of the 3rd and 4th century Italian landscape was the emergence of the village as the new ‘focus of aggregation’. Some villages were new foundations, but also re-organised villas and *mansiones* at times could develop into a village. Examples of these transformations are Trino in Lombardy⁴⁴⁹ and the Torrita di Siena (see below)⁴⁵⁰. These remodelled sites of the 4th century one way or another seem to have kept most ancient landscapes intact until the Gothic war of the middle of the 6th century. The (elite) economic and social milieu increasingly evolved in a regional context.

This very general picture of course shows regional variation. In some coastal areas villas proved to have a longer life-span, like in Tuscany. On the other hand, in some other regions, decline started already as early as the 3rd century, especially in northern Italy (Trentino Valley, Garda lake, Emilia); other areas one way or another found new vigour in reorganised and reaggregated settlement systems⁴⁵¹.

Long distance distribution systems collapse. The picture of decline in distribution networks is best drawn by archaeological evidence on pottery production and distribution⁴⁵². An overall decrease in the number of wares produced and transported over the Mediterranean into Italy can be seen from the early 5th century onwards. Distribution of amphorae and African Red Slip wares (ARSW) from northern Africa into Italy peaked around 400 AD⁴⁵³. After that period, a regionally diverse picture of pottery production and supply emerges. On inland sites local imitations of ARSW from 450 onwards replaced African imports. According to Hayes, ARSW imports almost totally died out after 550, with some rare examples of local replacements⁴⁵⁴. Francovich and Hodges saw this as evidence that regional marketing systems also had collapsed at this time⁴⁵⁵. In Byzantine ruled areas on the Italian peninsula, trade connections seem to have persevered longer because of the Mediterranean exchange in and around larger Byzantine centres. The supply of wares from overseas seems to have definitely dried up in the 7th century.

Deterioration also occurred in the environment. The changing expenditure in drainage works has been one of the factors put forward in the increased sedimentation and swamping in the late Roman period⁴⁵⁶. This environmental deterioration resulted in instable economic and demographic circumstances. The formerly adopted, but now somewhat nuanced idea of climatic change from the first century onwards⁴⁵⁷ might have strengthened this effect⁴⁵⁸.

The second stage, the 6th and 7th century: the end of the villa system and the development of the first hilltop settlements

In many areas the villa as a settlement type came to an end in the 6th century⁴⁵⁹. According to Francovich and Hodges, the origin of villa decline lay first of all in the progressive ‘provincialisation’ of Italy. It is linked to the process of deteriorating connections between city and countryside⁴⁶⁰.

From the 6th century onwards, subsistence farming is spreading quickly. The Italian peninsula went through a change from lowland mixed farming systems to the exploitation of niche economies from within defensive locations⁴⁶¹; on these sites the craft of building in stone was forgotten. Trade connections with other regions were limited or absent. Archaeologically this phase in rural settlements is very difficult to detect.

Francovich and Hodges see the 6th and 7th century as an era of a return to *niche* economies, in which more effective ecological areas were sought out. According to Wickham, “this must have been a golden age of a largely independent peasantry”⁴⁶². Some collectives of farms became (hilltop) villages, usually *vici*, situated on new locations. These are mostly attested in inland areas and seem to have been mainly involved in subsistence farming (Gorfigliano and Poggibonsi in Tuscany, San Donato in Lazio)⁴⁶³.

Again, one should allow for regional variation. As shall be shown below, in northern Lazio the classical *fundus* system remained in use until the 8th century; the same could be said for parts of inner southern Lazio, based on the excavation at Castro dei Volsci - villa in località casale di Madonna del Piano⁴⁶⁴. Furthermore, there were inland areas where settlements did not produce for internal consumption only: in Byzantine Abruzzo for example, the large coastal towns were provided for by a web of inland settlements⁴⁶⁵. Over the whole peninsula, the coastal areas often kept their special position, especially the villas. Here several large centres remained in use and still showed signs of incorporated elite dwellings⁴⁶⁶.

During the political crises of the 6th and earlier 7th century and certainly during the Gothic war, the definitive

break with the classical rural landscape took place. “Public power was overthrown”⁴⁶⁷. A gradual wane of central authority took place. In the 5th to 7th century there was a “progressive simplification of social structure, of production processes and of buildings”⁴⁶⁸.

On the other hand, it seems that a social hierarchy with an elite at the top did not totally disappear. The Gothic war advanced the rise of a new military elite and the downfall of the existing rural aristocracy. The rise of the hilltop settlements (as attested in the Tiber valley and in Friuli) must first of all be seen as part of the progressive militarization of society at large and the rural landscape, specifically in the later 6th and 7th century. These hilltop sites were not always physically fortified, but relied on their defensive positions. However, in border areas they usually were fortified⁴⁶⁹.

The processes of change and decline were economically probably slower in Byzantine Italy because of the Mediterranean exchange that occurred in larger centres such as Rome and Naples⁴⁷⁰. And military-political processes of decline to some extent were slowed down at a local level because of the presence of the Byzantine forces. From the pottery evidence it is clear that Lazio, together with the Exarchate of Ravenna, Abruzzo, Naples, Calabria and Liguria was one of the few regions dynamically engaged in Mediterranean exchange systems⁴⁷¹. Indeed, these are all areas where the Byzantines were active⁴⁷².

The new settlement patterns that evolved were intersected by a (partly overlapping) web of an ever growing number of rural churches from the 6th century onwards⁴⁷³. Churches can provide strong indications for a continuous lived landscape, where building in wood and undiagnostic pottery do not make them stand out in the archaeological records. Francovich and Hodges saw them firstly as hubs for the ecclesiastical organisation of the rural areas⁴⁷⁴. Secondly, as suggested by Brogiolo, churches served as regrouping centres of the scattered inhabitants of the countryside, actively being allocated by an urban aristocracy⁴⁷⁵. How this process exactly occurred is still blurred. In some attested cases the researched churches were built in deserted villas and grew to be the focal points for habitation (e.g. Villamagna in Tyrrhenian southern Lazio, Marcellino in the Chianti region). Monte Gelato in the Roman Campagna saw activities reduced to habitation in a mausoleum connected to a small chapel⁴⁷⁶.

Locally new hilltop settlements arose. In a number of regions, there was a return to regional or even local distribution systems or subsistence farming. The concept of living on hilltops developed slowly but steadily all over the Italian peninsula in the 6th and 7th century, be it with a large diversity in size and materialisation.

The third stage, the 8th and 9th century: *curtis*, elite and ecclesiastical investment

The later 8th and 9th century is seen as the second phase of the development of an Italian landscape characterised by hilltop settlements. A new rural elite arose, often originating from north of the Alps⁴⁷⁷, and investing mainly in settlements, where seigneurial dwellings were built. New forms of farming management were introduced. With the start of Carolingian involvement in Italy, specifically from the 770s onwards, competing local landed aristocracies were established. Within these developments “new agrarian and ideological institutional structures”⁴⁷⁸ were created, generally called *curtes* (singular *curtis*)⁴⁷⁹. Francovich and Hodges defined *curtes* as estate centres “in many different forms, invariably being a manorial initiative within pre-existing villages”. These estates centres became the focus of accumulation (storage), administration and religion for a long period.

Toubert⁴⁸⁰ believed that only *incastellamento* brought a final end to the classical landscape. He saw the *curtes* as isolated manor-settlements scattered around the countryside, often including the surrounding lands. From this viewpoint, the *curtis* meant continued dispersed living, as had been the case in the 6th and 7th century, then centred on the *casale* households. His design of the post-antique landscape has nowadays been totally overhauled. Moreland’s study of the Farfa region confirms this in a regional context (see below)⁴⁸¹. Indeed, as explained above, it is now clear that starting already from the 6th century onwards, there was a tendency to settle on hilltop locations. Many of these newly founded settlements of the 6th and 7th centuries would become *curtes* in the 8th century⁴⁸²: Scarlino in western Tuscany, Poggibonsi and Montarrenti. Pre-existing villages in this period often saw new defensive measures taken (Montarrenti).

The *curtes* often seem to have been set up as centres of storage and distribution, as is illustrated by the building of a granary at the site of Montarrenti⁴⁸³. These storehouses point to the presence of seigneurial power. Within the *curtis* system, social hierarchy must have grown. The *curtes* mainly functioned within a local economy, although the larger centres seem to have transcended being only local-level points of exchange and served larger areas.

Curtes developed into centres for newly evolved productive specialisation. In the view of Francovich and Hodges, this specialisation led to the necessity of organising (in writing) rights and obligations. Within this social revolution peasant rights were steadily diminished⁴⁸⁴. The economic revival of the 9th century of the countryside north of Rome⁴⁸⁵ seems to have been related to the rise of the *curtes*, at least in the Farfa area. How exactly the *curtes* contributed to this economic revival has not yet been fully studied, but it seems that the new forms of specialization,

storage and administration on these estates enabled more efficient production⁴⁸⁶.

Of interest is the active involvement of monasteries in many of these newly organized and (re)built *curtis* centres of the 8th and 9th century⁴⁸⁷. Quite a few monasteries were involved: Farfa (in the Sabina: possible *curtes* at San Donato, Cavallaria and Bezanum⁴⁸⁸), Matura (Tuscany: Poggibonsi), San Salvatore (Tuscany: several so-called *cellae*, small associated monasteries) and San Vincenzo al Volturno (Molise: Colle Castellano and Vacchereccia)⁴⁸⁹. The development of the papal *domuscultae* might also be interpreted within this tendency of church institutions to get involved in the development of local (in many senses) contributory settlements⁴⁹⁰. These estates however were of a totally different nature and (more intricate) composition.

The fourth stage: the 10th century, *incastellamento*

In the later 9th and 10th century, with the fading of Carolingian influence⁴⁹¹, “local power became fully invested in aristocrats who defined the legal rights of their territories”⁴⁹². State-power weakened even further and the authority of rural aristocracy grew stronger. This “regionalisation of power” is shown by the large output of foundation-charters and the building of fortifications within towns. “Villages needed, and began to gain, more government”⁴⁹³. Religious organisation increasingly became more focussed on the local structure of the parish. From the mid and later 10th century onwards these transformations cumulated into what is generally called *incastellamento*. As pointed out before, Toubert (1973) formulated the accepted definition of this process. During *incastellamento*, the *castra* developed into the new centres for social control, production and distribution. They also developed into foci of a new religious topography with the establishment of new parish churches inside the town⁴⁹⁴.

The new fortified villages, *castelli* or *castra*, were often founded on new locations. In some cases the transfer of a population from a settlement to a nearby castrum was documented, like the Castrum Castellaccio replacement of the nearby settlement of Monte Gelato in northern Lazio. In other cases old settlements were reorganised, as was shown at the site of San Donato⁴⁹⁵. The surrounding lands, often abandoned in the 3rd and 4th century, were cleared and their colonisation organised by landlords. Rural markets were established, anticipating the blooming of a Mediterranean market in the next century⁴⁹⁶. According to Francovich and Hodges, material peer-pressure kept the system buzzing. In the 11th century, stone built peasant houses had become widespread.

As stated before, the discussion of the early phases of *incastellamento* is still open. Richard Hodges put forward that some of the 8th and 9th century rural (*curtes*) sites

with clear elite presence could be seen as an early stage of *incastellamento*⁴⁹⁷; the origin of these sites might even go back to the 6th or 7th century. Moreland made a similar suggestion on earlier 9th century sites acting as blueprints for *incastellamento* in the Farfa and San Vincenzo al Volturno areas (see below in Study: 8th and 9th century satellites around monasteries)⁴⁹⁸. Likewise, Paul Arthurs work in Apulia raised questions about the origins of hill-top settlements⁴⁹⁹. A possible proto-*incastellamento* phase in the current study area could not be the subject of this study; excavations are outside its scope.

Conclusions

Francovich and Hodges' work successfully depicted general processes of change for the Italian peninsula, but it also made clear that there was no such thing as an uniform development. The perspective of *Villa to village* is different from the current study that rather acts on sub-regional levels. Because of their broad scope, Francovich and Hodges overall had to refrain from extensively fluffing the pillow of regional contexts, with Tuscany as the sole exception.

In their work one never sees a single clear transition towards *incastellamento*. Only seldom a clear breakpoint from classical structures can be pinpointed. *Villa to village* demonstrated that one has to keep an open mind and should not focus on only one single point of transition. It also showed the reality of constantly changing landscapes and of local deviations during the transition from the late Antiquity to the high medieval period.

2.II.2.1 A short introduction: Byzantine archaeology in Italy

As the Byzantine period was a crucial stage in the transition from the Roman to the medieval world, it is imperative to draw a picture of the archaeological study of this period. The first overview of Byzantine archaeology in Italy was written 30 years ago by Neil Christie. The recent works by Enrico Zanini offer the status quo of research⁵⁰⁰. The picture originally drawn by Christie, showing meagre archaeological evidence of Byzantine activity in Italy, still holds, despite the developments in pottery studies.

The Byzantine reconquest of Italy did not lead to a regeneration of pan-Mediterranean bulk trade with Italy, as can be read from the pottery evidence of northern Africa (see above⁵⁰¹). Even when northern Africa became Byzantine territory (between 533 and 698), large scale exchange was not resumed⁵⁰². It is assumed that the market had already collapsed⁵⁰³. Local imitations often replaced the imports from northern Africa. Some African Red Slip wares still reached the peninsula until the 7th century, but primarily the coastline. As touched upon above, change and

economic decline were probably slower in Byzantine Italy because of the Mediterranean exchange in and around larger Byzantine centres⁵⁰⁴. Indeed, Rome's hinterland until the 7th century⁵⁰⁵ still saw relatively large quantities of imports from (Byzantine) northern Africa⁵⁰⁶, just like Byzantine occupied Liguria⁵⁰⁷, Calabria and Naples. It is reasonable to assume that a Byzantine trade connection was responsible for this.

The physical impact of the Byzantines in the rural parts of central Italy was not large, or, in any case, was, and still is, often difficult to discern from local material culture. Only on Ligurian sites large quantities of 6/7th century Byzantine artefacts were found, showing clear evidence of continued trade⁵⁰⁸. In general, Byzantine ceramic evidence is scarce⁵⁰⁹. A typology of Byzantine pottery (locally produced, or imported) is still difficult to make, as it has no clear set of characteristics⁵¹⁰. The use of rectangular impressions or incisions, however, is an often-observed feature⁵¹¹.

Byzantine authority and administration on the Italian peninsula was urbanocentric. In contrast to the countryside, the cities clearly show Byzantine influence. Here churches are the main guides for the centuries of Byzantine influence⁵¹². Abundant Greek epigraphy in Rome and Ravenna bears testimony to the Byzantine Greek minority present⁵¹³. The artistic connection with the Byzantine world in the city of Rome and Ravenna was strong, especially during the 7th century. This can be read from the mosaics in Roman churches and Byzantine influenced production in the Crypta Balbi⁵¹⁴. As it appears now, however, the city of Rome saw little building activities in the Byzantine period, although some Byzantine writers stated differently⁵¹⁵. Despite the evidence from larger cities like Rome, Byzantine settlements or Byzantine phases in larger cities are difficult to study. The main reason is that most locations that were inhabited by Byzantines are still inhabited today⁵¹⁶. Byzantine presence outside the cities was focused on defensive structures built along the coastline, used to defend landed possessions; for such presence a fair amount of archaeological and written evidence is available⁵¹⁷.

Until the middle of the 20th century, scholars tried to extrapolate the well-documented Byzantine defensive systems in northern Africa to the material culture found in Italy. Some fortifications in Tyrrhenian southern Lazio, such as the structures at Ardea and Terracina were interpreted as Byzantine, while in fact they date earlier or later: Ardea's fortifications turned out to be 12-14th century, the ones in Terracina early 5th century⁵¹⁸.

In conclusion: Byzantine presence stands out most in the larger towns of the peninsula, certainly in church

architecture and decoration. It could be presumed that this is correlated to the fact that Byzantine presence (armed forces or administration) was concentrated in (larger) towns with Ravenna being the main Byzantine military and administrative hub. Rome first of all experienced influence of Greek monastic communities. Written sources, indeed, mostly provide information on Byzantine presence in urban contexts. What is more, most Greek epigraphy of the time is attested in the larger cities. Specific Byzantine settlement forms, specifically in rural areas, are difficult to study; this is due to the fact that most possible locations, just like the urban settings, are probably still inhabited today. Byzantine (influenced) pottery outside larger towns is mostly found in small quantities. In sum, it seems that the physical impact of the Byzantines in rural northern and central Italy was not substantial, or at least often difficult to discern from local material culture. In the south of Italy, where the Byzantines stayed much longer, their material impact in the countryside was stronger⁵¹⁹.

2.II.2.2 A short introduction: Tuscany between the 3rd and 7th century

In comparison to Tyrrhenian southern Lazio, Tuscany, and especially its coastal area, has been the subject of a wide range of local archaeological studies⁵²⁰. For the current research it is of interest to get a grasp on the well-studied Tuscan coastal villas, the harbour towns and their connection to the inland areas.

Along the Tuscan coast, villas engaged in fish farming were functioning unchanged until well into the 5th century. Later that century these sites too underwent internal reorganisation and contraction⁵²¹ as has been attested for inland areas from the 4th century onwards. The coastal Ager Cosanus has been studied particularly well⁵²². Here only a few well-organized farms seem to have survived into the 5th century. Unlike many other parts of the Italian peninsula, cultivation in the Ager Cosanus probably did not shift to zones that earlier were marginal. It seems to have continued, contracted on the lands of these farms.

As stated before, the materialization of a limited number of new villages as the new 'focus of aggregation' was a general tendency in the Italian landscape of the 3rd and 4th century⁵²³. In inland Tuscany a number of former roads stations (possibly *mansiones*), sentry posts and *thermae* along the roads transformed into villages⁵²⁴. This occurred somewhat later than in the rest of the peninsula, during the 4th and 5th century. An example of this kind of transformation of sites is Torrita di Siena, where the old villa / *mansio* on the Via Cassia was abandoned in the 2nd century and a reoccupation of parts of the site in the

5th century led to the emergence of a small village. Torrita could be seen as a prototype of the 6th and 7th century settlement form. Stone may no longer have been used in building; trade connections with other regions were limited or absent⁵²⁵.

In the late 5th and early 6th century, a selection process led to a scattered inland settlement pattern of rural communities, polarised on a small number of locations⁵²⁶. Along the coast villas were converted into maritime settlements. An example is the Cosa area where the remaining vestiges were re-used to provide for a safe haven⁵²⁷. In all, habitation and rural cultivation were concentrated on new centres in and around old (maritime) villas and on locations along the functioning roads⁵²⁸. Inland, on the border with Byzantine Lazio, a series of fortifications were laid out.

Exemplary for the above described 6th to late 7th century shift from scattered lowland settlements to hilltops in Tuscany are the sites of Montarrenti (founded mid-7th century, south of Siena), Poggio Imperiale (6/7th century, central Tuscany) and Scarlino (7/8th century, western coastal Tuscany)⁵²⁹.

Consequently, an interesting question which arises for the current research to answer is if there were parallel developments along the coast of Lazio. Could there be seen continuity on villa sites of traditional functions (fish farming / fish culture) until well into the 5th century? Interesting too is to monitor if the village in the current research area developed into a new 'focus of aggregation' in the 3rd and 4th century. And related, if road stations, sentry posts and *thermae* along the roads were transformed into villages in the 3rd and 4th century.

2.II.3 Northern Lazio

Northern Lazio has had a long tradition of archaeological and historical research on the early and high middle ages⁵³⁰. A short review of the earlier research and a representation of the current state of research in northern Lazio is useful as a background for the current study of Tyrrhenian southern Lazio, for which no such long tradition of historical and archaeological landscape research exists.

In northern Lazio, the *communis opinio* accepts a classical habitation pattern and agricultural system that lasted until at least the 6th century (Potter 1979, Moreland 1992, Patterson & Roberts 1998). This fits the picture drawn by Francovich and Hodges. On the developments from the 6th century onwards, however, two views have been battling until fairly recently: one of continuity and one of discontinuity. These views are currently under revision.

2.II.3.1 Two scenarios under revision

The two scenarios of continuity and discontinuity in the post-antique landscape were developed in two different parts of northern Lazio, featuring the Ager Faliscus and the Ager Veientanus/western Sabina:

The Ager Faliscus. In the Ager Faliscus, an area situated roughly 40–50 km north of Rome, west of the Tiber river, a quick and clear break from Roman organisation was upheld, adopting Potters interpretations (Potter 1979)⁵³¹. In this scenario, the proposed early, late 6th century, breakdown of classical structures was epitomised by a movement towards nearby hill-top settlements from the late 6th century on, and a successive fall into disuse of the plains. The Faliscan view of a 6th century abandonment of classical settlement patterns would support the generic view as proposed by Francovich and Hodges, at least in regard of the movement into upland settlements. Many small later medieval forts found in the Faliscus during the South Etruria project were presented as evidence for this “flight into the hills” for reasons of insecurity. The Lombards and later Saracens were deemed responsible⁵³². A direct transfer from the villa to the village was considered a real possibility⁵³³. Only after the foundation of the papal *domuscultae* estates, during the relative stability of Carolingian rule, activity in the rural landscape would have begun to increase again. Since migration to nucleated hilltop settlements started in earlier centuries, *incastellamento* in the Ager Faliscus may have constituted a less abrupt changeover than in other areas.

The Ager Veientanus and the western Sabina. The Ager Veientanus, situated immediately to the north of Rome, and the western part of the Sabina provide a different perspective. The prevailing model of the post-Roman developments in this part of northern Lazio involved a late break from Roman structures. In these regions, the classical farm (*fundus* / *villa*) system is hypothesised to have continued to be at the heart of agricultural organisation until the end of the 8th century⁵³⁴. The sites of S. Rufina (Ager Veientanus), and especially of the early medieval *fundus* of Casale San Donato (the Sabina) provide strong evidence for such a claim. In recent years, this scenario has gained more and more ground primarily because of the above discussed new pottery typologies⁵³⁵. The survival of the classical *fundus* in itself however, does not instantly mean continuity in distribution networks: As Patterson and Roberts have shown, there had been an increasing economic regionalisation within the Sabina from the 6th century onwards (Patterson & Roberts 1998). Later, during the Lombard occupation of the Sabina, constant changes in the distribution networks seem to have taken place. From the 8th century onwards, the agricultural system, still being based on Roman structures, was managed

from the *domuscultae*⁵³⁶. Finally, from the early 10th century onwards, *incastellamento* was being set in motion.

In the debate on the Ager Faliscus, the search for security has often been mentioned to explain movement to hill-tops, or, for that matter, stability as a reason for continuity on lower areas. This “fear factor” still governs the ideas on the Faliscan developments leading up to the end of Roman structures. Generally however, this factor is now given less supremacy than before. After all, the new coarse ware typologies in the adjacent regions to the south and east (Ager Veientanus and Sabina) profoundly set aside the ideas of an early clear-cut abandonment and shift to nearby higher locations. As a consequence, it should be greatly doubted if the Faliscan hypothesis of a “flight into the hills” can uphold, certainly regarding the idea of a rapid abandonment of the plains. Insecurity of course, might have been a factor. One could argue that the Ager Faliscus is situated further away from Rome than the Veientanus and that Rome as provider of protection and workforce could have been a factor of significance. A counter argument to this statement is that the western Sabina is situated just as far north of Rome.

The ongoing re-evaluation of the Ager Faliscus survey material in the Tiber Valley project will have to prove whether this Faliscan scenario can be maintained. Awaiting the all-encompassing publication however for the Tiber Valley⁵³⁷, which will include syntheses on both the Ager Faliscus and Veientanus, it is for now not clear yet whether the continuity or discontinuity has (micro) regional variation in northern Lazio. The website of the Tiber Valley Project writes that as regards the “the completion of the restudy, preliminary results already suggest significant modification of the original synthesis of Tim Potter”⁵³⁸.

Moreland’s preliminary publication (2005) of the Farfa project, the results of which will be incorporated into the Tiber Valley synthesis, already forecast the landslide the future results of the Tiber Valley project could create:

2.II.3.2 The Farfa project: reworking pottery and history

The Farfa project was a combined field survey and text study of the area surrounding the monastery of Farfa⁵³⁹. The project was multi-period but was specifically focussed on late Antiquity and the early middle ages. The text-rich Farfa region gave British scholars the opportunity to deal with the dialectic between historiography and archaeology which usually exists in regional research of the post-Roman landscape. It was an attempt to construct detailed ‘histories of transformations in patterns of power, social relationships, and settlement’⁵⁴⁰, linking not only the regional, but also national and Mediterranean

dimensions. For this purpose, extensive surveys were carried out and a substantial review of written sources of the Farfa registry was made.

The study showed a peak of habitation and economic activity in the first century AD⁵⁴¹. As from the middle to the late 2nd century some dislocation in the countryside took place during which the number of sites rapidly dropped. Moreland held the Antonine plague of this period largely responsible for this wane⁵⁴².

During the following centuries, the number of sites did not recover, although the decline was by no means as steep as in the 2nd century. A key question is why this number did not recuperate. Moreland suggested that this had to do with the resource relation of Rome with its hinterland. He rightfully wrote: "As the largest city in the ancient world, Rome's relationship with its hinterland was unusually intense". He proposed that this relation had been changed by some kind of geographical redirection in resource management. In this changed relation, the city of Rome might have extracted its resources from elsewhere from the 2nd century onwards, cold shouldering its hinterland⁵⁴³.

Moreland argued that the Antonine plague and the subsequent decline of resource pressure from Rome merely brought back settlement and production systems in Rome's hinterland to "normal"⁵⁴⁴.

The restudy of the San Donato pottery wares made clear that Potters great plunge into Dark Age oblivion is outdated. Moreland explicitly challenged the catastrophists with their teleological framework of reference, stating that the 2nd century drop was not the end, and moreover not even the beginning of the end of the Roman countryside⁵⁴⁵. The survey surface material and the intensive restudy of the pottery have revealed that there had been continuation of habitation from the Roman period until the 6th and 7th century, at least in sections of former sites. An example of this continuation is site 7040, where part of the Roman villa remained in use. In some cases, new settlements were established, for instance at San Donato. Sites seem to have been spread more or less consistently over the Sabine landscape between the first century and 5th century AD. In the late 6th to late 7th century however, settlement became concentrated on the hills nearby the (later) monastery. Moreland saw this movement of settlement as the second transformation of the Sabine landscape, and furthermore as part of a re-orientation away from the Tiber (and Rome)⁵⁴⁶.

Moreland reconstructed yet another possible recreation of the Sabine landscape: in the 8th century, the original wood-built structures at Casale San Donato were replaced by stone buildings. These stone structures could be seen as an intended robust materialisation of power.

The monastery "(literally) cemented its position in the landscape"⁵⁴⁷. Although only San Donato was thoroughly investigated, it is expected that other sites might have undergone the same transformations. Among these sites are Cavallaria and Bezanum (see below⁵⁴⁸). This hypothesis can be confirmed only by means of new excavations.

From archaeological and historical research it becomes clear that *incastellamento* evolved around Farfa during the 10th and 11th century. Casale San Donato continued to exist well into these centuries, as were other post-antique sites of the region. It is likely that these sites were incorporated into the *incastellamento* process as *castelli*⁵⁴⁹. The continuation at San Donato proved Toubert wrong in this case: *incastellamento* did not bring with it the definite end of classical settlement patterns⁵⁵⁰.

In conclusion it could be stated that the Farfa project showed that the early-versus-late-change discussion is a rigid and simplistic version of reality and in this case by far not worth the qualification "dichotomy". Four transitional phases were identified, in the 2nd, 6th, 8th and 10th centuries. The research thus uncovered a constantly changing Sabine landscape and society. The Farfa region was not subjected to dramatic collapse in post-antiquity as suggested elsewhere, but "rather a landscape in which the past was present throughout even the most radical changes"⁵⁵¹.

In the setting of the Farfa micro-region, Toubert's model proves to be too rigid. First of all, a clear break with the classical landscape did not occur until *incastellamento*. The movement into *castelli* was clearly not the first recreation of the landscape. Besides that, it is clear that some elements of the classical landscape remained in use far into the *incastellamento* phase. The settlement of San Donato is a case in point (see below). Therefore, Toubert's idea of a generic definitive break with classical settlement patterns by the 11th century does not hold. *incastellamento* should be seen as one of several transitions, be it the most fundamental restructuring of the landscape since the 6th century.

One aspect of Moreland's overview particularly catches the eye: several 6th and 7th century sites were possibly founded on locations deserted during the late 2nd - early 3rd century dislocations⁵⁵². Moreland called this a 'sense of place' that would have persisted within the late Antique communities. This concept, which certainly also seems applicable to some of Francovich and Hodges conclusions, seems to epitomise the end of the discontinuists' stance. The Sabine landscape was changing, being created and recreated all the time, and was not simply subject to an all-encompassing post-Roman collapse.

2.II.3.3 Three key sites north of Rome

Three sites can be considered evident examples of the continued occupation of the rural landscape during the Dark Ages: San Donato, Monte Gelato and Santa Cornelia. These are key sites among the growing number of excavated rural settlements of the Dark Ages.

San Donato

Casale San Donato is situated 3 km north-east of the Farfa monastery. The site is important for the new ware typologies it provided. At the site a homogeneous ceramic assemblage was recorded dated convincingly to the late 6th or the end of the 7th century⁵⁵³. The study of the San Donato pottery resulted in the identification of 14 survey sites of this period which had earlier been overlooked. The quantity and quality of the 6th and 7th century San Donato pottery showed the continued production of ceramics at a higher than subsistence level. The pottery assembly has been identified as part of a new tradition of ceramics in the Sabina Tiberina and the Sabina Reatina of the mid-6th and 7th century. This ceramic innovation coincided with the Lombard occupation of the Farfa region. It has been suggested that the San Donato pottery should be seen as part of Lombard material culture; some links with the Roman typology however seem to have remained⁵⁵⁴.

From written sources belonging to the Farfa registry it is clear that San Donato was part of an estate called Cicilianus, given to the monastery of Farfa in the middle of the 8th century. Later, in the 11th century, a castrum was founded on the same location, as part of the *incastellamento* process. At San Donato continuous stratigraphic contexts from the 6th to 11th century are available and a continuous historical record from the 8th century onwards. As Moreland claimed: “This suggests that at San Donato we might have the key to understanding the formation of the medieval landscape”⁵⁵⁵.

Exploring *domusculta* centres north of Rome

During the South Etruria survey and in the course of the Tiber Valley project, one *domusculta* was identified and thoroughly investigated: the *domusculta* of Capracorum⁵⁵⁶. The sites of Santa Cornelia and Monte Gelato were postulated as part of this *domusculta*. Closer to Rome the site of Santa Rufina was identified as part of the *domusculta* Galeria. In fact, these three sites are as yet the only securely identified parts of any *domusculta*⁵⁵⁷. The work on these three sites confirms the picture drawn earlier based on the meagre historical sources available (mostly: the *Liber Pontificalis*) that *domuscultae* must have consisted of several habitation and production centres⁵⁵⁸. The plan and open setting of these sites reminds of the Roman villas in the area⁵⁵⁹. Christie⁵⁶⁰ proposed that Santa Cornelia was the administrative and logistical

centre of the *domusculta*, which must have stretched over a large area: The other site connected to the same *domusculta* (Monte Gelato) was situated roughly 15 km to the north of (Monte Gelato). Santa Cornelia shows that the historical record can be complemented with the archaeological, as the site had initially been identified and located by the description in the *Liber Pontificalis*.

The work done on the Capracorum and Galeria *domuscultae* has greatly enhanced the understanding of the morphology, functioning and distribution links of *domuscultae*⁵⁶¹. As earlier discussed, these estates should be considered agricultural production annexes for the papal court and the city of Rome in general⁵⁶². A direct (re)distribution link with Rome has been established: the ceramic wares (specifically *Forum Ware*) on these 3 sites north of Rome on the west bank of the Tiber are the same as found in Rome⁵⁶³. A fossil guide is *Forum Ware* or *ceramica a vetrina pesante*, dated from the late 8th century onwards, which has been found on all three sites⁵⁶⁴. The *Forum Ware* found on these sites was produced in Rome, with the exception of Santa Rufina, which is the only site outside Rome with evidence for *Forum Ware* production⁵⁶⁵. Conspicuously, in contrast to the Capracorum area, the Sabina in this period seemingly was directed towards the monastery of Farfa and not Rome⁵⁶⁶.

Santa Cornelia

This site was discovered 15 Roman miles (24 km) north of Rome, just as described in the *Liber Pontificalis*⁵⁶⁷. Santa Cornelia is the testimony to the fact that in the 8th century not only defensible locations were sought out for settlement⁵⁶⁸. It was openly situated in the Sabine landscape, in an area where before small farms and villas had been situated⁵⁶⁹. The site itself has no Roman past, although the reference in the *Liber Pontificalis* seems to suggest this to be untrue⁵⁷⁰. Its foundation was dated to the 780s. It consisted of a church, storage rooms and a possible residential area. In the first half of the 9th century a boundary wall was added affording a measure of protection⁵⁷¹; it may be suggested that this was done in reaction to the insecurity caused by Saracen attacks. Christie suggested that Santa Cornelia composed the administrative centre and distribution focal point of the *domusculta*⁵⁷².

Mola di Monte Gelato

The Mola di Monte Gelato is situated 34 km north of Rome, in the Treia valley⁵⁷³. It was convincingly identified as one of the centers of the *domusculta* Capracorum⁵⁷⁴. Here, a Roman villa was resettled after the 4th century. The site saw gradually less activity during the 5th and 6th centuries. At first it was believed that the site had been abandoned for two centuries but it now seems sure that the site was never fully abandoned but only reduced in

size⁵⁷⁵. There are signs of reuse or refurbishing of some of the rooms in the 6th and 7th century; there are however no other occupation remains found of that period⁵⁷⁶. The possibility exists that the late-Roman church was continuously in use, as could be indicated by some 6th and 7th century vessel burials. In the late 8th century the church was rebuilt and decorated in a more elaborate way. The cemetery continued to be used.

The nearby site of Castrum Castellaccio is likely to have been the castrum Capracorum, which was named in a bull of 1054 AD⁵⁷⁷. After the rebuilding of the local church and baptistery in the late 10th and early 11th century, the site was soon abandoned and all buildings were dismantled. No ceramics post-dating 1100 were found. Based on the fact that the last phases of this site coincide with the earliest phase (based on the pottery evidence) of the castle site of Castellaccio, it was proposed that the population (was) resettled here⁵⁷⁸. Monte Gelato-Castellaccio could well be a perfect example of population transfer within the process of *incastellamento*.

2.II.3.4 A study: 8th and 9th century satellites around monasteries

The 8th century hilltop settlements surrounding the large monasteries of Farfa and San Vincenzo al Volturno (in the Molise) were thoroughly studied⁵⁷⁹. The existence of these sites seems to have fit in the contemporaneous tendency of involvement of monasteries in the *curtis*, as described by Francovich and Hodges⁵⁸⁰. For the current overview of the status quo of archaeological studies, it can be interesting to go into some detail on the nature of these sites and their relation with the nearby monastery. Possibly one might see comparable constellations in the current analysis of the developments in southern Lazio.

Both the Farfa and the San Vincenzo projects provided clear evidence for 8th century settlement on the small hills near the large monasteries. Close to the Farfa monastery, the sites of Cavallaria and Bezanum⁵⁸¹ were studied, as was the site of Vacchereccia near San Vincenzo al Volturno⁵⁸². The rich material remains of the newly founded settlements suggest an important position in the rural settlement hierarchy⁵⁸³. Furthermore, these settlements were present in the registries of both the monasteries from the middle of the 8th century onwards.

From the archaeological and historical evidence, Moreland reconstructed the rationale behind these foundations. He basically proposed that these small hilltop settlements were a means of intensifying control over peasants and production. First of all, through their mere presence, these centres acted as focal points of control of agricultural labour (for monasteries). Through their administrative role⁵⁸⁴ too, these settlements helped to increase the agricultural production. Moreland stressed

that texts could often be seen as a means to control relationships, by formalising donation and setting production or tax targets. Their location and function reminds of the power/knowledge concept which Foucault has called *surveillance*⁵⁸⁵: the collection and registration of information in order to control one's surroundings. In addition, local transhumance⁵⁸⁶ and trade routes seem to have been controlled by this network.

Stepping up economic production was needed in this time of growth. Indeed, economic growth was clearly documented in the Farfa area, as it was around San Vincenzo al Volturno in or shortly after this period⁵⁸⁷. Moreland proposed that because interregional trade was still difficult, local production had to be stepped up. By founding these satellite centres, it was possible to enlarge control and step up production without changing settlement organization⁵⁸⁸. Moving the population to other (fortified) sites was not yet necessary.

After their destruction by the Saracens and its consecutive abandonment, both Farfa and San Vincenzo were repopulated in the first decennia of the 10th century. In these years, the same control measures as before seemed to have been taken, to increase production and rebuild the abbey and countryside. A large bulk of administrative sources stems from this period⁵⁸⁹. From here onwards, the final steps towards *incastellamento* were taken. Moreland postulated that 9th century sites such as Bezanum and Cavallaria could have served as a model for *incastellamento*, maybe in terms of controlling production and population, but at least regarding the choice of location on higher positions of the 10th century *incastellamento* population⁵⁹⁰.

2.II.4 The Biferno valley

The large scale, multidisciplinary long-running Biferno Valley Project (Barker 1995b) was one of the first major research projects on a regional scale to cover large enough diachronic and multidisciplinary ground to execute archaeological landscape analysis with a truly considering of the Braudelian *longue durée*. The project covered the Stone Age until modern times, incorporating archaeological, historical, geomorphological and ethno-historical studies. The project showed compellingly how an Annaliste analysis could yield valuable insights in the complex cycles of the middle term, for example the correlation between settlement patterns and demographic and economic expansion and contraction. The study showed how cycles of the conjuncture interacted with the *longue durée* of the valley "with its distinct internal variations in climate, topography, agricultural resources and natural communications, offering different constraints and opportunities for settlement and land use." Barker also touched on important subjects as the long-term factor of

agricultural technology and the power of the Church as *mentalité*⁵⁹¹.

The project showed how the environment acted as a dynamic, rather than a fixed determinant factor: the human impact on the environment was made visible in the chronological comparison between geomorphological, archaeological and historical data, as a correlation was found between periods of sedimentation and settlement and agricultural expansion, for example in the Early Roman period. The process of *incastellamento* was studied thoroughly; the project yielded evidence of the development of satellite settlements to the castra⁵⁹². The project also showed how transhumance had remained an intrinsic economic factor since Roman times⁵⁹³.

Conclusion

The general overview of historical research on the very long time span of this study provided in this chapter (2.I), could only be fragmentary and with variety in diachronic resolution. It is clear that the 15 historical topics dealt with do not cover all of the socio-economic, religious and political aspects of the studied period. However, to me the treated topics and themes are the dominating elements in historiography for late Antiquity and the early to high middle ages in central Italy. I believe that with the current set-up the historical essence of the period under scrutiny is represented. The level of detail chosen enables the study of intricate processes, such as the formation of the Papal States, feudalism and *incastellamento*. The benefits of the historiographic overview as historical background for the analysis of settlement and landscape in southern Tyrrhenian Lazio will become apparent in the data analysis of Part II (Chapter 7).

The outline of landscape archaeological research (2.II) shows that there is no such thing as uniform development; landscapes constantly change and (micro-)regional deviation is the rule as it comes to the transition from late Antiquity to the high medieval period. Clear transitions, for example a clear breakpoint from classical structures, are hard to substantiate. The presented overview of the status quo of (integrated) archaeological and historical landscape research underscores the absence of Tyrrhenian southern Lazio in such studies, certainly in comparison to northern Lazio. As the current study area is clearly underrepresented in earlier landscape studies, it will be interesting to observe in the analysis of Part II (Chapter 7) if the developments attested in the current review study of Tyrrhenian southern Lazio match those in other intensively and integrated studied areas, and if there are discrepancies within or aspects of the developments that remain out of sight. Fortunately, the recently published results of the Villamagna Project provide a benchmark in multidisciplinary research of the study period

in Tyrrhenian southern Lazio. In the analysis of Part II, the results of this project will provide valuable context for the interpretation of the fragmented data available for the research area.

Endnotes

- 1 For the review of the development of the Church and specifically the papacy, I owe much to Claudio Azzara's work: Azzara 2002, 85 ff.
- 2 In contrast to most post-Roman archaeological landscapes (as treated in 2.II), for Rome an archaeological record is available for the whole middle ages. The Crypta Balbi excavations are of particular importance in this. These have provided a precisely dated ceramic sequence, based on numismatic evidence, from the 4th to the 10th century. In recent years other excavations in Rome have yielded similar results, see among others Molinari, Santangeli Valenzani & Spera 2016. See also 1.I, *The changing fortunes*.
- 3 The study *Villa to Village* by Francovich & Hodges (2003), although more recent research has nuanced some of their findings still being a formidable benchmark overview, constitutes the basis of this overview.
- 4 On the sack of Rome: A. Di Berardino, G. Pilara and L. Spera, 2012: *Roma e il sacco del 410 : realtà, interpretazione, mito: atti della Giornata di studio (Roma, 6 dicembre 2010)*. Roma: Institutum Patristicum Augustinianum.
- 5 For a good survey of the socio-economic situation see Marazzi 1998c, especially 124 ff.
- 6 Potter 1979; Arthur 1991a, 90. The *Codex Theodosianus* explicitly counts the amounts of lands in disuse in the Campania (*CTh.* XI.28.2). As becomes clear in recent archaeological studies however, the fate of the late Antique and early medieval countryside requires in-depth study at a local level, as developments differ greatly from region to region; see also 2.II.2.
- 7 Pohl 2002, 11 ff.
- 8 Pohl 2002, 13
- 9 Pohl 2002, 19 ff. The descent of the Gothic peoples is disputed. Between the 3rd and 6th century many groups were called Goths and it seems clear that their history is complicated. In 376 Valens had permitted the Visigoths to settle within the Empire. After the period under king Alaric (395-410), during which the Goths briefly were very influential in Roman politics, the Visigoths ultimately migrated to Spain (414) and Aquitaine (418), where they established lasting kingdoms.
- 10 Pohl 2002, 15.
- 11 The *Codex Theodosianus* shows that in some cases the burdens of the time had begun to weigh too much on the peasantry: in the year of 412, 4/5 of the landed tax was acquitted by the emperor for the period of 5 years for large parts of central and southern Italy, *CTh.* XI.28.7.
- 12 Marazzi 1998c, 126; this happened after the tax system had changed from collection per city to centralised collection *ad personam* by the pretorian *praefecture*. The idea was that in this way the tax money would find its way more quickly to the centre of the empire. This process was delegated to *curiales* (councils), who were given quota. These, however, were often susceptible to bribe or political pressure of private parties.
- 13 Contemporary writer Procopius very explicitly wrote of the difficulties in tax collection in the 540s. Procopius, *Secret History*, XI, XII and XVIII.

- 14 See 2.I.3.
- 15 Wickham 1994, 101 ff.
- 16 Wickham 1994, 102. Tax collection under Byzantine rule primarily functioned in Naples, Rome, Ravenna and their hinterland, and in parts of rural southern Italy.
- 17 See 2.I.4.
- 18 Pohl 2002, 13. As Wickham pointed out, the senatorial families of the Petronii and Symmachi owned landed properties in every corner of the western empire, Wickham 1994, 101. The private and public power of the senate ended with the Gothic war (535–552), see 2.I.4. As a result of the conflict, large parts of the senatorial class fled to Sicily or moved to Constantinople, Christie 1989, 254.
- 19 See 2.I.4.
- 20 Wickham 1994, 104 ff.
- 21 As Horden & Purcell 2000 pointed out, small scale exchange across the Mediterranean continued, be it much less visible in the archaeological evidence. For more on their microregional perspective on the Mediterranean see 8.I.1.3.
- 22 See Chapter 2.II.2 *A generic perspective for the Italian peninsula* for more details on the decline in pottery finds. In synopsis, originally after Wickham 1994, 104 ff and by and large confirmed (on a local level) by more recent studies like Tol 2012, 34 ff: after a peak around 400, amphorae and ARSW showed a regionally diverse picture of production and supply. On inland sites, local imitations of ARSW from 450 onwards replaced African imports; ARSW imports almost totally died out after 550. In Byzantine ruled areas, imports seemed to have lasted longer and in larger quantities. The supply of wares from overseas seems to have definitely dried out in the 7th century.
- 23 Central in Hodges & Whitehouse 1983.
- 24 Hodges & Whitehouse 1983. For a good synopsis of the explanations on the decline of long distance exchange systems see Wickham 1994, 105.
- 25 Wickham 1994, 106. Cost-profit motives might be responsible for the decline in distribution on the peninsula itself: difficult inland markets simply were too expensive to exploit; ARSW of the later 5th and 6th century is primarily found on the coast of the Peninsula.
- 26 Panella and Tchernia 2002 on the amphorae evidence on coastal villa sites.
- 27 Tol 2012, 320 on the pottery evidence of Astura settlement; Toniolo 2012, 595 for Naples; At Villamagna new wares and fabrics (bowls, casseroles, jars, jugs and lids) were introduced in the 6th and 7th century, as a result of new methods of food preparation and/or a decline in imported ceramics. The new forms of pottery are an indication of regional connections within Lazio and, especially, with Rome. Fentress, Goodson & Maiuro 2016, 242 ff., Attema 2018, 764
- 28 Wickham 1994, 107; see also Wickham 2006, 124
- 29 Wickham 1994, 106
- 30 In Rome, African pottery is found in relatively large numbers until the late 7th century, Sagui 1998. 310 ff.; Wickham 2006, 712
- 31 Wickham 1994, 106; the Vandals made new types of pottery for export. They seemed to have kept up a steady stream of exports to all parts of the Mediterranean, be it in a smaller volume. Production volumes only slowly dropped.
- 32 In western Liguria (Ventimiglia and Albenga) African import was still abundant between 550 and 625, Christie 1989, 259, Zanini 2014, 432 and fig. 3. Liguria stayed Byzantine territory until 643. In comparison to Liguria, Rome saw fewer imports. For imports in Rome see Arena 2001 and Vendittelli & Paroli 2004.
- 33 Moreland 1993, 97; Francovich & Hodges 2003, 51; Zanini 2014, 432 ff.
- 34 Wickham 1994, 107
- 35 Wickham 1994, 107
- 36 Christie 1996, 261. Maintenance seemed to have been focussed on the main roads from the 4th century onwards at latest. After 370 there are no references to maintenance of roads anywhere. This can without a doubt be seen as a sign of a reduction or discontinuation of maintenance.
- 37 The *Codex Theodosianus* makes several references to highwayman roaming the countryside of Italy, *CTh* VII.13.4; VII.18.10–15; VII.20.12
- 38 Marazzi 1998b, 121 and Gelichi 2002, 186. This appears from the written records, such as the lament of Saint Ambrose (late 4th century), *Ambrose Opera, Pars X, Epistolae*, XXXIX, 3 ed. O. Faller, CSEL 87/1, 67–68. Ambrose wrote about the cities of Regio VIII (Aemilia) as *semirutarum urbium cadavera* (“remains of half-ruined cities”). Rutilis Namatianus (early 5th century) portrayed the Tyrrhenian coastal cities as *mortalia corpora* (“mortal bodies”) that perish. Rutilius, *De reditu suo*, I.413–414. See B. Ward-Perkins, 1984 for a detailed overview study of the archaeological evidence on the changing physiognomy of towns and the changes in the tradition of public building.
- 39 On the archaeological evidence of change within the city of Rome, see 2.I.2. *The city of Rome in the 4th to 6th century*.
- 40 For example *CTh* XVI.10.3, *CTh* XV.1.1, 14, 19, 37 and 43
- 41 The Aurelian fortification of Rome, built in 270, was enhanced by Honorius in 403, Coates-Stephens 1998, 166.
- 42 According to Christie 1989, 273 secure dating of the walls in many cities is difficult. For more examples of contemporary fortifications see Johnson 1983, 119–121, Christie and Rushworth 1988, 83–88, Arthur 1991a, 90, and Nuzzo 2013, 593 ff
- 43 Christie 1989, 274; Christie 1996, 258; This is also clear from Procopius’ *De Bello Gothico* which described the defensive structures that had been erected in many cities.
- 44 Marazzi 1998b, 122; Delogu & Gasparri 2010, 3. *Le città: economia e società urbana*, 215 ff.; See Citter 2012 for the towns in Tuscany.
- 45 On the growth in the 4th and 5th century of private churches in peripheral zones of rural estates or just outside their boundaries see Fiocchi Nicolai 2017.
- 46 The Ostrogoth kings were the only secular sponsors of large scale public building activities until the 8th century.
- 47 Wickham 1994, 103
- 48 Hadrian I for example repaired among others St Peter’s, *Liber Pontificalis* Life 97.45–48, 57, 64, 72. Especially the roof must have been a technically challenging; Life 97, 57 and 64 described the restoration of the roof; see Davis 2007, 143 ff.
- 49 Wickham 1994, 104
- 50 Brogiolo 1999, 100 ff. summarised contemporary comments on the state of affairs on the peninsula; from the second half of the 7th century, these observations seem to become more nuanced, stressing what is still left of the Roman heritage.
- 51 Cassidorus, *Variae*, II.39
- 52 Santangeli Valenzani 2007, 4
- 53 As can be indirectly read from the laws in the 4th and 5th century *Codex Theodosianus*, see 2.I.1. See Ward-Perkins, 1984;

- more recent publications on the archaeological evidence on the developments in Rome are Pavolini 1993, Meneghini & Santangeli Valenzani 2004, Paroli 2004, Santangeli Valenzani 2007 and Meneghini 2008.
- 54 Crypta Balbi: Arena *et al.* 2001 and Manacorda 2005. Celian hill: Pavolini 1993, 56; for an overview of recent excavations in Rome see Corsi & Carboni 2013, 156 ff.
- 55 Corsi & Carboni 2013, 156
- 56 Cf. Hodges 1993; The number of inhabitants of Rome seems to have been in decline until the late 8th century.
- 57 Cf. Pavolini 2016
- 58 Wickham 1994, 108
- 59 Wickham 1994, 113
- 60 For a summary of research on the demography of the city of Rome between the 1st and 10th century, see Hodges & Whitehouse 1983, 48-52, and more recently Meneghini and Santangeli Valenzani 2004, 21-24. From the accumulated figures in earlier research, most scholars estimated that the total number of inhabitants of Rome was a million or more in the 1st century AD and 400.000 ± 25% in the middle of the 5th century. After this period, the total number of inhabitants should have dropped considerably, amounting to several tens of thousands in the 6th to 9th century. Hodges & Whitehouse referred to Russell 1958, 73 and 93, who estimated that Rome in the 10th century had a population of around 30.000 people. Most recent figures, as summarised in Meneghini & Santangeli Valenzani 2004, 23 seem to show that after a steep demographic drop until the end of the 5th and start of the 6th century, the total number of inhabitant of Rome may have stabilized around 50-60.000. It is not known what happened after the 7th century. The next reliable figures date to the 14th century, when Rome was estimated to have had a population of 25.000 inhabitants, Beloch 1994, 2. These mentioned figures, however are far from absolute and were the result of several presumptions on the composition (number of free men, slaves) of the population. Still these numbers do provide a broader picture of a shrinking Rome in the first millennium AD.
- 61 Hodges & Whitehouse 1983, 42 and 48-52; Hodges and Whitehouse suggested that this might be connected to an influx into Rome of people from the countryside of the Campagna. This idea was largely based on pottery evidence on the countryside, showing remarkable decline of sites (up to 80% between the 1st and 5th century) and on the *Codex Theodosianus* which showed that large parts of the Campagna were no longer taxable from the end of the 4th century onwards, see 2.I.1. The pottery evidence, however, was still based on the old typologies (from Potter 1979). As will be shown in Chapter 2.II, the latest (coarse) ware research in central Italy yielded remarkable new insights on the developments on the late-Roman countryside. These showed that a critical attitude should be adopted towards the claim of a massively abandoned countryside. Although Hodges and Whitehouse's idea of migration from the countryside to Rome is an interesting one, Rome's demographic attraction remains very difficult to verify or quantify archaeologically and historically.
- 62 See 2.I.1.
- 63 Hodges 1990; Paroli 1993, 154 ff.
- 64 Patterson & Roberts 1998, see also 2.II.3.1.
- 65 Hodges 1993, 258
- 66 Kleinhenz 2004, 974
- 67 See 2.I.13 A short introduction: The Christian organisation of the late Antique to high medieval Italian landscape.
- 68 Azzara 2002, 103
- 69 See below in history of the church; Azzara 2002, 102 ff.
- 70 Marazzi 1998a, 1 ff.
- 71 Costambeys 2000, 368
- 72 Marazzi 1990, 119. The term *Patrimonium Appiae* was used since Pope Gregory the Great, 590-604. In this *Patrimonium Appiae*, 75 toponyms of *fondiar* were described, from the time of Constantine the Great (306-337) to the 9th century, 16 toponyms of *massae* and 59 of *fundi*. For a list of these estates see Marazzi 1990, 123. For an expose on the other *patrimonia* see Marazzi 1998a, 112-137.
- 73 Pohl 2002, 19
- 74 La Rocca 1994, 451 ff; Gelichi 2002, 187
- 75 Brogiolo 1999, 105 ff. The *Anonymous Valesianus* probably is a contemporary writer, see König 1997.
- 76 See also 7.I.1.8.
- 77 Wickham 1994, 101
- 78 Pohl 2002, 19
- 79 Cf. Hodges & Whitehouse 1983, 42-44; Christie 1989, 279
- 80 Pohl 2002, 20
- 81 Procopius, *History of the wars*, ed. H. B. Dewing, 5 vols. (Cambridge, Mass., 1914-28)
- 82 Christie 1996, 270; Visigoth rebels led by Totila sacked Roma in 546; imperial troops reconquered the city in 551.
- 83 Procopius explicitly described the rural decay in Picenum and Aemilia: Procopius, *Wars*, VI.20.21. However, recent research seems to show that damages or a durable effect of the war can be detected only in a handful of cases, as was addressed in a number of contributions to the proceedings of *The sack of Rome in 410 AD: the event, its context and its impact*, a conference held in the German Archaeological Institute at Rome in November 2010: Lipps, Machado & von Rummel (eds,) 2013
- 84 Moreland 2005, 3: Recent research however showed that demographical catastrophe can sometimes also provide economic advantages for the survivors. Moreland refers to Scheidel, who studied the 14th century plague (Scheidel 2002, 100, 112).
- 85 Pohl 2002, 20
- 86 Wickham 1994, 102; tax collection in and around the larger Byzantine centres would last until at least the end of the 7th century.
- 87 Pohl 2002, 21
- 88 Wickham 1994, 109
- 89 Nuzzo 2013, 604 ff
- 90 Zanini 1998, 270, referring to the writer George of Cyprus; Fentress, Goodson & Maiuro 2016, 257
- 91 Marazzi 1998b, 143
- 92 Christie 1989, 254 ff. See also 2.II.2.1.
- 93 Pohl 2002, 22; see also Francovich & Hodges 2003, 107
- 94 Christie 1989, 254
- 95 To date, there is no consistent picture of the end of the senate. Most scholars uphold the idea that the Roman Senate was effectively removed in the late 6th or early 7th century under Byzantine rule. Kleinhenz 2004, 975: its last meeting took place in the end of the 6th century; Talbert, 1984, 27 ff: late 6th or early 7th century; According to the *Liber Pontificalis* it was done away with during the pontificate of Honorius I (625-638).
- 96 Francovich & Hodges 2003, 107
- 97 Cf. Francovich & Hodges 2003, 53. On Byzantine archaeology in Italy see 2.II.2.1.

- 98 Pohl 2002, 26
- 99 Azzara 2002, 107
- 100 This can be read from a later word of warning of Pope Gregory II to the Byzantine emperor Leo III (729): “The whole West has its eyes on us and on Saint Peter...whom all the kingdoms of the West honour. We are going to the most distant parts of the West to seek those who desire baptism...[but] their princes wish to receive from ourselves alone”, cited by Hodges 1993, see also Azzara 2002, 107.
- 101 These possessions were described as *patrimonium petri*, see also 2.1.2. This was an expression which after the middle of the 8th century would also refer to the independent Papal State, see also 2.1.6.
- 102 Christie 1989, 254
- 103 Llewellyn 1986, 45-46
- 104 Pohl 2002, 27
- 105 Ostrogorsky 1989, 169
- 106 The Hellenised south Italian provinces of Sicily and Calabria, until then belonging to the diocese of Rome, were confiscated and placed under the patriarchate of Constantinople; some compensation might have been given by the gift of the Eastern emperor of Ninfia and Norma to the papacy in 742, see Ostrogorsky 1989, 170, note 1.
- 107 Ostrogorsky 1989, 170
- 108 Ostrogorsky 1989, 170. Pepin was the first Frankish ruler of which a (indirectly handed down) record exists in which lands are promised to the pope as part of an autonomous Papal State.
- 109 Hodges 1993, Marazzi 1991
- 110 Paroli 1993, 164 on 7th century Crypta Balbi; Churches: S. Stefano Rotondo and S. Agnese fuori le mura.
- 111 Christie 1989, 266: The popes, on the other hand, were involved in building programs in Rome, be it at a smaller scale than before. This can be clearly read from the *Liber Pontificalis* and recent archaeological work reaffirms this, cf. also Azzara 2002, 107 and Santangeli Valenzani, 435 ff.
- 112 Cf. Procopius’ *Buildings* on Justinian’s building activity; in *Buildings*, Justinian’s efforts to (re)built are probably exaggerated, Christie 1989, 254.
- 113 This discussion is summarised in Hodges 1993.
- 114 Delogu 1989, 97
- 115 Sagui 1998, 305; Panella & Sagui 2001, 804–15; Wickham 2006, 735
- 116 Lombard occupation is dealt with even though the research area was never under their control, with the exception of Fabrateria Vetus – Ceccano (OLIMsite 253) which shortly was occupied by the Lombards, as can be read in the *Liber Pontificalis* Life 44. The Lombards crucially, however, did occupy large parts of the peninsula during the crucial 6th to 8th centuries and were involved in the foundation of many important monastic centres in Italy, such as Farfa and Vincenzo al Volturno.
- 117 Cf. Pohl 2002, 21 ff.
- 118 Hodges & Whitehouse 1983, 23
- 119 Corsi 2017, 295
- 120 See Augenti 2016, 10 for a map of the progression of the Lombard conquest.
- 121 Hodges & Whitehouse 1983, 23
- 122 La Rocca 2002, 3
- 123 La Rocca 2002, 6
- 124 Pohl 2002, 22
- 125 Azzara 2002, 96
- 126 For an overview of Farfa’s history, see Stroll 1997. For the status quo of research in Farfa’s hinterland cf. Carloni 2015; For the research on San Vincenzo, see Hodges & Mitchell 1985, Hayes 1985, Bowes, Francis & Hodges 2006, Lucanio 2008, 14, Hodges, Leppard & Mitchell 2011, and Marazzi 2012
- 127 Christie 1994, 97
- 128 Brogiolo 1999, 120
- 129 Pohl 2002, 21
- 130 Pohl 2002, 22
- 131 Pohl 2002, 24 described how Lombards gradually became part of Italian society. During this process, Lombard identity was spread broadly and transferred to other ethnic fractions within the population. Finally, it became assimilated. During this process, the Germanic Lombard language slowly died away.
- 132 In 768 Pepin died. His sons Charlemagne and Carloman shared ruling the kingdom until the death of Carloman in 771.
- 133 Davis 2007, 107
- 134 Whitehouse & Potter 1981, 206-210; Hodges & Whitehouse 1983, 45; see also Francovich & Hodges 2003, 57 on the defensive posts along the borders of Byzantine and Lombard ruled areas
- 135 Mazzuccato 1987; in the current study the site of Ceriara is OLIMsite 65.
- 136 OLIMsite 52; Fentress, Goodson & Maiuro 2016, 260.
- 137 Leotta & Rinnaudo 2015, 566
- 138 Fentress, Goodson & Maiuro 2016, 259
- 139 *Liber Pontificalis* Life 44.17 (Stephanus II), Davis 2007, 59
- 140 Priester 2004, 63 and 159 ff. In the 8th century, the wider area of Montecassino was part of the Lombard realm.
- 141 Brogiolo 1999, 119
- 142 Hodges 1997, 59; Pohl 2002, 27
- 143 Azzara 2002, 110
- 144 As described in the *Liber Pontificalis* Life 93.2, see Davis 2007, 34. Paul the Deacon described the king’s cause for action, as his opponent Transamund, Duke of Spoleto, had taken refuge in Rome, Paul, *HL*, VI.55. Spoleto was captured by Liutprand and thus Transamund had to flee to Rome. According to the *Liber Pontificalis* Life 93.2 four cities of the Roman Duchy were seized by Liutprand: Amélia, Orte, Bomarzo and Blera.
- 145 A notable example of the growing papal influence and the abating Byzantine power in Italy was the appeal in 742 of the city of Ravenna, under siege by Lombard troops, to Pope Zachary to negotiate with Liutprand, *Liber Pontificalis* Life 93,12; Davis 2007, 38.
- 146 As becomes clear from the *Liber Pontificalis*, the apparent weakness of the Byzantine forces was a thorn in the flesh of the Pope Zachary. As described in the *Liber Pontificalis* Life 93.4-6, Zachary was the first pope to undertake a diplomatic mission. The pope visited Liutprand to restore contacts. Following this event, Liutprand promised to restore the four lost cities to Rome. This pro-activity shows the new vigour with which Zachary tried to protect Rome. As the influence of the Byzantine exarchate had weakened, he acted as a leader of the Roman people.
- 147 Some of the estates incorporated into the new *domuscultae* may have been confiscated from the Byzantine emperor, see below in this Section, *Expansion of Church properties*. The *domuscultae* were founded by the Popes Zachary (741-752) and Hadrian I (772-795), according to the *Liber Pontificalis* Life 93.25-26 and

- Life 97.54-55, 63, 69, 76 and 77. For more on the *domuscultae* see 6.I.2.
- 148 In the code of 781, the following regions were promised: The Duchy of Rome (for the first time explicitly mentioned in this text), the city of Ravenna and surroundings, the Pentapolis (large areas south of Ravenna, including among others the cities of Rimini and Ancona), Lombardy, Tuscany, parts of the Duchy of Benevento, Corsica, and a few individual Italian cities.
- 149 Hadrian was dissatisfied, as can be read from many documents, with the slow progress in getting concessions by Charles, who had promised him an extended papal authority over much of central Italy in 774, even over territories Charles had not even conquered yet. He only got back the lands Desiderius had seized, although the direct control over the cities in Emilia was at first shared with the strong archbishop of Ravenna, Leo. Probably Charles realised that the pope would not be able to control many parts, especially those over the Apennines. Later Charles would have had more confidence in the military power and authority of the pope and changed his mind as the years passed, Davis 2007, 118. Hadrian for his part weakened his claims gradually, as experience learned that it was not easy to get them effectuated and large far off situated new territories proved difficult to control, Davis 2007, 118. Hadrian had at first dropped his claims on Benevento and Spoleto in 776, Davis 2007, 112. With every visit of the king, however, Hadrian would be granted lands. In 781 Charles granted parts of the duchy of Tuscina and the whole of Campania to Hadrian southwards until the Liri valley, Davis 2007, 115. In 787 he granted him part of the duchy of Benevento, all the way to (and including) Capua, Indelli 2010, 25-30.
- 150 Shahan and Macpherson 1908 [Catholic Encyclopedia online, accessed October 12 2016]
- 151 Monumenta Germaniae Historica, SS, II, 452, Einhard, VK, c.17 and Brandizzi Vittucci 2000, 146, note 707; there is discussion if “*usque romam*” means to include the papal possessions. Brandizzi Vittucci has suggested that the later towers at S.Anastasia, Anzio, Nettuno and Astura were at first posts built as part of Charlemagne’s plan.
- 152 *Liber Pontificalis* Life 97, Davis 2007, 120. See also Krautheimer 1980, 109-111.
- 153 Pohl 2002, 2 ff.
- 154 Mitchell 1999, 95
- 155 Azzara 2002, 113; Moreover, the earlier competing patriarchates, Alexandria, Antioch and Jerusalem had considerably lost authority considerably as a result of the Islamic expansion.
- 156 Pohl 2002, 2 ff.
- 157 Wickham 1981, 107 ff.
- 158 In the year of 816 the Roman landowners planned and executed the burning of *domusculta* farms, Astronomer, *Vita Hludovici*, 363, c.25.
- 159 Francovich & Hodges 2001, 111
- 160 A famous example of these sources is the will of Carolingian aristocrat Eberhard, dating to 867.
- 161 Gasparri 2002, 76; also Francovich & Hodges 2001, 111; for more on the archaeology of the *curtis* see 2.II.2 and 6.I.2.
- 162 Gasparri 2002, 77
- 163 Pohl 2002, 33
- 164 Gasparri 2002, 77 ff.
- 165 Delogu 1988c, 32 ff; Hodges 1993, 357; Paganelli 1994, 23; Vendittelli & Paroli (ed.) 2004; the Crypta Balbi excavations again provided ample evidence, see Arena *et al.* (ed.) 2001 and Manacorda 2005, 84; for the evidence on the progressive standardisation of the pottery produced in Rome see Campagna 2018, 343.
- 166 Hodges 1993, 359
- 167 Toubert 1973, Hodges 1993; Farfa however was a known factor with strong ties to both Rome and Western Europe; it is difficult therefore to assess this demographic rise in the context of central Italy in general and Tyrrhenian southern Lazio in particular.
- 168 Hodges 1993, 360
- 169 Hodges 1993, 361
- 170 Hodges 1993, 361
- 171 Wickham 1994, 115 ff.
- 172 Stroll 1997, 30
- 173 Marazzi 1998a and 1998b
- 174 “*massa urbana in territorio Antiano, preast.sol. CCXL*” was donated by Constantine to Pope Sylvester (314-335), *Liber Pontificalis* Life 34.12; Davis 2000, 17.
- 175 Haderman 1986, 28. Zachary is said to have played a role as negotiator between the Lombards and the Byzantines, and was in that capacity able to increase the territory of the Church.
- 176 The *domuscultae* were founded by the Popes Zachary (741-752) and Hadrian I (772-795), according to the *Liber Pontificalis* Life 93.25-26 and Life 97.54-55, 63, 69, 76 and 77. See also Marazzi 1990; Arthur & Patterson 1994; Bauer 1999, 519; Davis 2007.
- 177 See also Christie 1991, 6.
- 178 Some of these lands earlier were in the Byzantine imperial fisc, which led Prigent 2004, 587 to believe that their seizure by the pope was a matter of *quid pro quo*, after the loss of papal estates in Sicily and Calabria as a result of the iconoclast controversy.
- 179 Marazzi 1998b, 34 referred to Duchesne *Liber Pontificalis*, I, 432 and 435; see also Marazzi 1990 and 1993, Claridge 1993
- 180 Marazzi 1998b, 34
- 181 Arthur & Patterson 1994, 414 and Potter & King 1997.
- 182 At Capracorum, Christie 1991, 7-8, Potter & King 1997, 79
- 183 Quote: Christie 1991, 8; see also Christie 1991, 357; Potter & King 1997, 4 ff.
- 184 See 2.II.3.3.
- 185 The origins of Muslim presence in northern Africa lay in the 630s and 640s when they conquered Egypt. Attacks westwards on Exarchate of Carthage started in the 660s. The Exarchate successfully resisted the pressure until the end of the 7th century. In 698 Carthage was captured. Refugees fled to Sardinia, Sicily and Spain, Christie 1989, 252.
- 186 Toubert 1973, 312-313; Moreland 1992, 124
- 187 Hodges & Whitehouse 1983, 168; Tucciarone 1991, 39 ff.
- 188 In the *Liber Pontificalis* the Saracens were also named *Agareni*. They were mentioned in the *Liber Pontificalis* from Gregory II (Life 91, 715-731) onwards, describing events in Spain and Constantinople. The first raids on the Italian coast described in the *Liber Pontificalis* occurred during the pontificate of Gregory IV (Life 103, 828-844), see Davis 1996, 67. The bulk of references to the Saracens can be read in Life 104 (Sergius II, 844-847) to 108 (Hadrian II, 867-872).
- 189 The fortified settlement of Gregoriopolis near Ostia was built by Pope Gregory IV (827-844) because of the danger of Saracene attacks, Paroli 1993. At the site of Santa Cornelia, north of Rome, in the first half of the 9th century a fortification was added, possible in response to the imminent insecurity caused by Saracene attacks on Rome and the *suburbium*; see Christie 1991, Francovich & Hodges 2003, 89.

- 190 Hodges & Whitehouse 1983, 74
- 191 Azzara 2002, 98; Kleinhenz 2004, 976
- 192 Potter 1979, 139: Among others, Sutri was attacked; in 827 Bovillae and Ariccia were reported to have suffered an attack, although solid contemporary historical evidence is lacking: Severini 2001, 52. More concerning the chronology of Saracene attacks in the researched area see 7.II.2.2, Theme: The Saracene threat.
- 193 The *Chronicon Vulturnese* reported the destructions of 881. Saracene arrow heads have been found during excavations on the complex, Moreland 1985, 37 ff.
- 194 Bloch 1986, 5, 9
- 195 Stroll 1997, 24-25: Farfa was looted by Saracen raiders in the late 9th century. In 897 the monks split into three groups and abandoned the site. Subsequently (possibly in 905) the monastic complex went up in flames by the hands of (Christian) plunderers. See also Azzara 2002, 98
- 196 Arthur 2006, 105; Arthur 2010, 556
- 197 Davis 1995, 94
- 198 Ostrogorsky 1989, 237 ff.
- 199 Gasparri 2002, 79 ff.
- 200 Pohl 2002, 31 ff. For example, during the 9th century, the new Principate of Benevento (the successor to the Duchy of Benevento) disintegrated as a result of internal conflict. The Byzantines thereupon were able to restore some of their lost territories in the former Principate of Benevento and around Naples.
- 201 Pohl 2002, 32
- 202 Azzara 2002, 115
- 203 See 2.I.10.
- 204 Marazzi 1998a, ix
- 205 Pohl 2002, 30
- 206 Gasparri 2002, 79 ff. See also 2.I.9.
- 207 Pohl 2002, 33. See also 2.I.10.
- 208 Pohl 2002, 33 ff.
- 209 Gasparri 2002, 79
- 210 The term Holy Roman is an anachronism; it has only been applied to this period since the 13th century.
- 211 Pohl 2002, 33; Kleinhenz 2004, 977
- 212 Azzara 2002, 115: This was the result of Emperor Henry III's mediation in the struggle within Roman aristocracy over the control over the papacy.
- 213 Gasparri 2002, 77
- 214 Gasparri 2002, 79 ff.
- 215 Gasparri 2002, 80. They owed their success in essence to a strong build-up of landed properties and a flexible vassalage with kings, monasteries and churches. The families would entitle themselves as "Counts" and "Marquis".
- 216 Gasparri 2002, 81. The Italic Kingdom would lose importance and would finally dissolve into the Holy Roman empire in 962.
- 217 See 2.I.9.1. Incastellamento: a study.
- 218 In this study, the term *vassalage* denotes the state of being a vassal. A vassal, or liege, was a person who took part in a relation of reciprocal commitment with a lord. Often the mutual obligations involved a piece of land, a fief, conceded by the lord to the vassal.
- 219 Gasparri 2002, 83. The episcopal administration employed members of high rank families who often also had properties in the surroundings of the town.
- 220 For the Italic Kingdom, more historical sources and studies are available describing the elite families and their seigneurial role in the *incastellamento* phase.
- 221 Kleinhenz 2004, 978
- 222 Struggles between families, abbeys, popes and anti-popes, ecclesiastical and secular leaders, and monastic/religious orders, are among the most influential factors in settlement dynamics of the central centuries of the middle ages. The study of the histories of these struggles and of the spatial distribution of recorded interest of these parties within the landscape constitutes a vital part of the data analysis in Part II (Chapter 7), see 7.III.2.2.1 Theme: a dynamic geo-political landscape.
- 223 Pohl 2002, 33
- 224 Kleinhenz 2004, 976
- 225 Osheim 2004 & Bartolini 1987, the latter discussing the 12th century only. The term *castello* has a much wider meaning which often causes confusion. A distinction should be made between a *castello* as an (often small) defensive structure and checkpoint in the rural landscape without habitation, and a *castello* as a fortified settlement, synonym for *castrum*. The latter *castelli* were much bigger and were the focal points of the *incastellamento* process, see also 6.I.2.
- 226 Coste 1990
- 227 Toubert 1973; Moreland 1992
- 228 Cf. Christie 1996, 278; Potter 1979, 155-67
- 229 Cf. Francovich & Hodges 2004; Moreland 1992, 2005
- 230 Toubert 1973, 330 ff. Toubert maintained the idea of continuity in 'open' (or dispersed) agricultural and settlement systems until the 10th century *incastellamento* phase. In his view, settlement patterns had remained more or less unchanged since Roman times. This hypothesis is being questioned by more recent research, as it might be too rigid to use for the whole region north and east of Rome. See 1.I.1 and below 2.II.2.
- 231 See below in this section, the paragraph A proto-*incastellamento* phase?
- 232 The list of castra in Toubert 1973, 374 ff. contains those castles in Lazio that can be found in the Farfa documents according to Toubert's methodology, see also Toubert 1973, 319 ff. Although being focussed on Lazio as a whole, Toubert's list primarily features castles of the Sabina and north-eastern Lazio, regions with a strong connection to the Farfa monastery. The Farfa registers reveal only fragmentary information on the current study area - which is clearly situated outside the service range of the *Regestum farfense* and the *Liber largitorius*.
- 233 Osheim 2004, 162
- 234 Toubert 1973, 322, nr. 1
- 235 Toubert 1973; Moreland 1992, 121
- 236 Arthur 2006, 99
- 237 Osheim 2004, 162.
- 238 Toubert followed the sociological meaning of feudalism of among others Bloch, see 2.I.9.2.
- 239 Toubert 1973, 1356
- 240 Toubert 1973, 1357
- 241 Toubert 1973, 1357
- 242 In the context of the Mediterranean Wickham 2005, 718, 736, 794; On the resumption of long-distance trade in the high middle ages in the Biferno Valley see Hodges & Wickham 1995, 282.
- 243 Osheim 2004, 166; Strategic incentives seemed more and more important in the 13th and 14th century. In Tuscany, the peak in establishment of *castra* that were explicitly strategically situated,

- on borders or along roads, was reached in the second half of the 13th century. However, these were not part of the *incastellamento* process anymore, but only a tool in the battle between strong communes.
- 244 Toubert 1973, 352
- 245 Moreland 1992, 125
- 246 Osheim 2004, 164. In northern Italy, *castelli* primarily served a defensive purpose in the 10th century and first half of the 11th century. In Tuscany, small *castelli* sometimes acted as temporary shelter in times of emergence or for storage.
- 247 Osheim 2004, 164
- 248 Osheim 2004, 164
- 249 Osheim 2004, 164; Of interest is also Citter and Vaccaro 2005 on the Grosseto area. The authors saw hilltop sites (not only *castra*) developing between the 11th and 13th century with clear markers of seigneurial power: manorial houses, towers, “defence curtains”, churches, expensive pottery and rich building techniques. From the 13th century onwards these markers disappear from the hilltops as large towns (Siena, Pisa) became, as they described it, the focal points of new social hierarchies.
- 250 Toubert 1973, 322 ff. One has to take into account that he primarily studied monastic pieces and therefore that the bulk of acts available to him were about ecclesiastical contracts for the population. As will be dealt with in detail in the analysis of Part II (Chapter 7), Toubert’s study of the registers of Farfa yielded two acts that deal with *castra* in the current researched area: *Castrum Vetus* near Velletri (2 charts, OLIMsite 133) and *castellum Monte Julianu* (OLIMsite 298).
- 251 Stroll 1997, 30 ff.
- 252 Toubert 1973, 322, nr. 1 found two cases in which castles were founded after an initiative by a bishop, one of which was located in the researched area: the Concession of bishop Leon of Velletri to Demetrius de Melioso on 9th of January, 945-946 of a “mons ad castellum faciendum”, see 3.II.2. The other one by the bishop of Tivoli (922).
- 253 Toubert 1973, 322, nr. 1: *actes* numbered 1 to 5.
- 254 Toubert 1973, 325
- 255 Toubert 1973, 325
- 256 Toubert 1973, 322-324; see also 324, nr 1
- 257 Hodges 2006
- 258 Moreland 1992, 124
- 259 On early phases of *incastellamento* sites see Francovich and Hodges 1990, Hubert 1990, Hodges 1994, and Francovich 1998, among others. See also 2.II.3.4, A study: 8th and 9th century satellites around monasteries.
- 260 Arthur 2006, 203; most recently Arthur, Imperiale & Muci 2018, 147
- 261 Moreland 1992, 125
- 262 Wickham 1985, 72-73
- 263 Moreland 1992, 125
- 264 Duby, 1983
- 265 See also 7.II.2.2.4, Theme: The economy and systems of redistribution.
- 266 McClendon 1986, 100
- 267 Toubert 1973, 1360
- 268 Terracina’s transformation is in point of the changing times. At first a vassal, it became an independent community at the start of the 13th century. Terracina was given in concession to Duke Daiferius by Pope Sylvester II around the year 1000 (Toubert 1973, 1102). It was later conceded by Celestino II to the Frangipane in 1143, becoming the only town known in the 12th century that was a collective vassal to a feudal lord, Toubert 1973, 1188, nr. 2; Kehr, *Italia Pontificia*, II, 120, n.9. In 1207 it became a free community which itself conceded a fief (Capeselce) to an elite family (the Frangipane).
- 269 Lexikon für Theologie und Kirche, 1993-2001
- 270 Braudel, F. 1984. *The Perspective of the World*.
- 271 Reynolds, S. 1991. *Fiefs and Vassals: The Medieval Evidence Reinterpreted*; Reynolds called for a removal of the term as an anachronistic construct which gave a false sense of uniformity of medieval society.
- 272 Ganshof, F.-L. 1964. *Feudalism*. New York
- 273 Bloch, M. 1961. *Feudal Society*. Chicago
- 274 Azzara 2002, 116
- 275 See also 2.I.13 A short introduction: The Christian organisation of the late Antique to high medieval Italian landscape.
- 276 Although a controversial, anachronistic, term, it is used here to denote the political coagulation of states constituting an empire in medieval Central Europe with a constant important German aspect. This empire evolved from the eastern part of the Frankish empire, separated from the western part at Verdun in 843. In many different shapes and compositions, the empire would endure until the 19th century. The term Holy Roman empire however was not yet commonly used before the 13th century. The Holy Roman empire should be seen as a confederation of sovereign states, not as a state in itself, at least for the largest part of its life span. A strong intrinsic bond with the church was felt: the German king had to be crowned by the pope in order to be accepted as emperor of the empire, that is, until 1508. The rulers of the empire felt a strong obligation towards the Christian faith and the Church. They defended and supported the Church and mingled in its affairs. This way they often came in conflict with the papacy.
- 277 Investiture denoted the ceremony of the transferring of an ecclesiastical office to a person by an overlord, Columbia encyclopedia, lemma investiture. Generically it could also mean the transfer of a fief to a vassal.
- 278 Toubert 1973, 1357
- 279 See Toubert 1973, 1039-1081, conclusions 1080 ff.
- 280 Ring 2006
- 281 Toubert 1973, 1074
- 282 Toubert 1973, 1074
- 283 Toubert 1973, 1074
- 284 This can be read in Strolls book on the Farfa monastery (1997), which showed the ever-changing alliances in central Italy. See 2.I.15.
- 285 Stroll 1997, 143
- 286 The development of communes in Italy was summarised in Coleman 2004, 35 ff. Communes throughout Italy showed remarkable resemblances: gatherings were organized, at first ad hoc, to talk about urgent matters. These assemblies elected consuls to take care of law and order, and to represent the commune to external parties. All communes sought to control the surrounding area of the city, the *contado*. A legal archive was started.
- 287 Kleinhenz 2004, 978: This incident followed a papal call for their help, as the bishop of Rome was under siege in the castle S. Angelo by imperial troops of Henry IV.
- 288 Kleinhenz 2004, 979

- 289 Kleinhenz 2004, 979 ff. In the middle of the 13th century the pope had appropriated the instrument of the senate and would gain the right to elect senators. From the year of 1238 onwards the senate would become an instrument of the pope and emperor, consisting of one papal and one imperial senator.
- 290 Diarte-Blasco et. al 2018, 261 ff. present an analysis of Tusculum's urban planning in their 10th-12th century, based on aerial photographs, topographical analysis, geophysical surveys and excavations. The stratigraphies confirm the historical date of abandonment of the site, in the late 12th century.
- 291 Kleinhenz 2004, 979
- 292 Kleinhenz 2004, 980
- 293 The commune of Rome sought for expansion in the surroundings of the City and strove for a *contado* or *districtus* in Lazio, similar to other communes in northern and central Italy. This proved difficult as Rome in the early and middle 12th century was economically weak compared to other cities (Kleinhenz 2004, 979).
- 294 Kleinhenz 2004, 980: These wars showed the strong identification of the Romans with their commune. Likewise, these wars were economically and strategically indispensable as they affected the control over infrastructure and the grain producing lands north of Rome.
- 295 Toubert 1973, 1357
- 296 Toubert 1973, 1358
- 297 Pope Innocentius III re-established areas that temporarily had gone lost to the Holy Roman king Henry VI and even expanded the territories of the Papal States. The base for his success was the consolidation of his power in Rome by forcing a pledge of loyalty of the Roman senate and imperial prefect, Schnürer 1912.
- 298 Stroll 1997, 272
- 299 Ployer Mione 1995, 83; primary source not made explicit. See also Coste 1990, 134 and Belochini 2006, 101, and note 316.
- 300 Lombardi 1847, 128
- 301 Toubert 1973, 1358
- 302 Toubert 1973, 1359
- 303 Toubert 1973, 1359
- 304 Toubert 1973, 1359
- 305 Toubert 1973, 1360
- 306 Toubert 1973, 1360
- 307 Kleinhenz 2004, 980
- 308 Kleinhenz 2004, 980
- 309 Kleinhenz 2004, 980
- 310 Kleinhenz 2004, 981; Families regularly switched between classes.
- 311 Kleinhenz 2004, 981; From the 12th century onwards, the Annibaldi, the Bonaventura-Romani, the Capocci, the Colonna, the Conti, the Malabranca, the Normanni, the Orsini, the Savelli, the de Sant'Eustachio, and the Stefaneschi-Raynerii were counted among the baronial elite; at the end of the 13th century, the d'Anguillara, the Boccamazza and the Caetani had reached this class too. Some of these families had already been powerful long before the 12th century.
- 312 Kleinhenz 2004, 981; the Frangipane still owned a number of castles around Rome but were no longer considered a baronial family. See also 7.II.2.2.3 Theme: The expansion of secular (elite) activities.
- 313 Kleinhenz 2004, 980
- 314 Kleinhenz 2004, 982
- 315 Kleinhenz 2004, 982
- 316 Vigeur 2001, 132 ff.
- 317 Hubert 2001, 174 ff.
- 318 Beloch 1994, 2 ff.
- 319 <http://www.treccani.it/enciclopedia/laterano>
- 320 This is an introductory text based on a limited number of articles, an overview that suffices in the context of this study and does not address specific case studies and sites. For an overview of the vast bibliography on the processes of christianisation and Christian organisation of the countryside of Lazio see V. Fiocchi Nicolai 1999. *Alle origini della parrocchia rurale nel Lazio (IV-VI sec.)*, in: *Alle origini della parrocchia rurale (IV-VIII sec.)*. *Atti della giornata tematica dei Seminari di Archeologia Cristiana* (École Française de Rome, 19 marzo 1998), Città del Vaticano, 445-485 and Cantino Wataghin, G., V. Fiocchi Nicolai and G. Volpe 2007. *Aspetti della cristianizzazione degli agglomerati secondari*, in: di R.M. Bonacasa Carra and E. Vitale (ed), *La cristianizzazione in Italia fra tardoantico e altomedioevo*. *Atti del IX Congresso Nazionale di Archeologia Cristiana* (Agrigento, 20-25 novembre 2004), Palermo, 2007, 85-130. On the great variety in types of buildings involved in early Christian worship in the countryside see V. Fiocchi Nicolai and S. Gelichi 2001. *Battisteri e chiese rurali (IV-VII secolo)*, in: *L'edificio battesimale in Italia. Aspetti e problemi*. *Atti dell'VIII Congresso Nazionale di Archeologia Cristiana* (Genova, Sarzana, Albenga, Finale Ligure, Ventimiglia, 21-26 settembre 1998), Bordighera, 303-384. On the relationship between rural churches and local communities between late Antiquity and the high middle ages see A. Chavarria Arnau 2008, *Chiese, territorio e dinamiche del popolamento nelle campagne tra tardoantico e alto medioevo*, *Hortus Artium Medievalium* 14, 7-28. On the formation of ecclesiastical territories in central and northern Italy with a focus on the written sources see C. Violante 1986. *Ricerche sulle istituzioni ecclesiastiche dell'Italia centro-settentrionale ne medioevo*. Palermo.
- 321 Fiocchi Nicolai 1998, 445
- 322 Religion in Geschichte und Gegenwart, lemma: *Italien*
- 323 Azzara 2002, 103
- 324 Azzara 2002, 103
- 325 Even when in the late 5th century the distinctive position of Rome (the *principatus*) was accepted by the whole Church, these eastern churches often took an independent course, Ostrogorsky 1989, 58.
- 326 All other cults were ultimately banned in 391 by Theodosius.
- 327 Fiocchi Nicolai 1998, 448
- 328 Lexikon für Theologie und Kirche, 1993-2001; for the list of early bishoprics in Lazio compiled by see Duchesne 1892.
- 329 Fiocchi Nicolai 1998, 445
- 330 Duchesne 1892
- 331 See Azzara 2002, 86
- 332 Azzara 2002, 85
- 333 Fiocchi Nicolai 1998, 445
- 334 B. Galland 2002. *Suburbicarian bishopric* in: *Encyclopedia of the Middle Ages* [accessed November 23 2018]; Bakker 2005 website Ostia: introduction
- 335 Sägmüller 1908 [Catholic encyclopedia online, accessed April 1 2010]
- 336 *Liber Pontificalis* Life 96.27; Davis 2007, 101
- 337 B. Galland 2002. *Suburbicarian bishopric* in: *Encyclopedia of the Middle Ages* [accessed November 23 2018]

- 338 Azzara 2002, 107
- 339 Kelly, J., & Walsh, M. 2015. St. Gelasius I, In: A Dictionary of Popes: Oxford University Press
- 340 Azzara 2002, 85 ff: In the larger centres the bishop (*episcopus*) was the leader and teacher of the local Christian community from the early centuries onwards. Under him served a priest (*presbyter*) who was in charge of the ecclesiastical routine of administering the sacraments. Both were supported by a deacon. When the christianisation of Europe reached its completion, the rural Christian communities multiplied so fast that the clergy of the episcopal town could not facilitate the whole hinterland anymore. Therefore, before long the larger rural centres were provided with their own churches and permanent clergy. These churches each were led by an archpriest (*archipresbyter*). He was responsible for the proper execution of the ecclesiastical duties, J. Avril, 2002. *Archpriest, Rural dean* in: Encyclopedia of the Middle Ages [Online, accessed April 14 2019]. He again was subject to the archdeacon; several such rural communities, or parishes (in Italy: *pieve / parrocchia*, see also 6.I.2) constituted an archidiaconate. A number of archidiaconates again constituted a see or bishopric.
- 341 Azzara 2002, 87
- 342 Azzara 2002, 86; V. Tabbagh, 2002. *Diocese* in: Encyclopedia of the Middle Ages [Online, accessed March 13 2018]
- 343 The *pagus* was the smallest administrative district in a late Roman province.
- 344 Azzara 2002, 88
- 345 Azzara 2002, 89 ff.
- 346 Fiocchi Nicolai 1998, 448
- 347 P. Riché 2002. *Paganism* in: Encyclopedia of the Middle Ages [Accessed November 23 2019]
- 348 Fiocchi Nicolai 1998, 451
- 349 Fiocchi Nicolai 1998, 454
- 350 Azzara 2002, 89 and 91
- 351 Azzara 2002, 91; Juridical continuity has been widely accepted, but cannot have occurred universally, at least it didn't spatially. Some more remotely situated *pagi* should initially have had to do without a church. What is more, it is often difficult to tell if a settlement actually (physically) survived. A church might have been the reason for the revival of an already declining Roman centre.
- 352 Toubert 1973, 794; Azzara 2002, 91
- 353 Azzara 2002, 89 ff; see also Francovich & Hodges 2003, 57.
- 354 Francovich & Hodges 2003, 57
- 355 Brogiolo 2001, 199 ff
- 356 See also Bowes 2002.
- 357 Azzara 2002, 90
- 358 Azzara 2002, 93
- 359 Azzara 2002, 93
- 360 Azzara 2002, 90; Carolingian law texts also indicate that rural chapels and churches were deserted from the later 8th century onwards.
- 361 Pohl 2002, 27
- 362 P. Montaubin 2002. *Pope, Papacy* in: Encyclopedia of the Middle Ages [Accessed November 23 2019]
- 363 Ostrogorsky 1989, 228 ff.
- 364 Azzara 2002, 97
- 365 Azzara 2002, 95 ff.
- 366 Gasparri 2002, 79 ff.
- 367 Azzara 2002, 98
- 368 Azzara 2002, 115
- 369 See 2.I.8.
- 370 *Pornocracy* denotes the period during which the papacy was heavily influenced by Roman aristocratic families. An alleged moral decline was (in later sources) said to have befallen the papal court in this period.
- 371 Azzara 2002, 115
- 372 Azzara 2002, 99
- 373 B. Delmaire 2002. *Private Church* in: Encyclopedia of the Middle Ages [accessed 20 March 2012]; Lexikon für Theologie und Kirche, 1993-2001
- 374 Azzara 2002, 99
- 375 Lexikon für Theologie und Kirche, 1993-2001
- 376 Azzara 2002, 100
- 377 P. Montaubin 2002. *Pope, Papacy* in: Encyclopedia of the Middle Ages [accessed 13 March 2012]
- 378 Azzara 2002, 116
- 379 See also 2.I.10.
- 380 M. Parisse, 2002. *Gregorian reform* in: Encyclopedia of the Middle Ages [accessed 12 March 2012]
- 381 Day 2006
- 382 P. Montaubin 2002. *Pope, Papacy* in: Encyclopedia of the Middle Ages [accessed 12 March 2012]
- 383 Toubert 1973, 1357
- 384 See 2.I.11.
- 385 Toubert 1973, 1358
- 386 On Innocentius III's politics see above 2.I.12 The 13th century: expansion of papal authority.
- 387 T. Head, 2010. 'Monasticism'. In: The Oxford Dictionary of the Middle Ages [Accessed March 12 2019]
- 388 *Liber Pontificalis* Life 46.7; Davis 2000, 38
- 389 Bloch 1986 on the history of the monastery and its archives; Fabiani 1968-1980 on the secular territory, or seignory, of the monastery in the direct hinterland of the Monte Cassino from the 8th century onwards.
- 390 Azzara 2002, 94 and 113
- 391 Azzara 2002, 95
- 392 For an overview of archaeological and historical research on the monasteries and surroundings of Farfa and S.Vincenzo al Volturno see Moreland 1991, 480 and 1992, 122-123.
- 393 At Villamagna and Fossanova, a villa preceded the monastery on the location, cf. respect. Fentress, Goodson & Maiuro 2016 and Coccia & Fabiani 1997; At Farfa and this was also the case, Christie 1996, 275.
- 394 Azzara 2000, 96
- 395 Balzaretto 1994
- 396 See e.g. Zagari 2018
- 397 Berschin 2006
- 398 Azzara 2002, 99
- 399 Azzara 2002, 97
- 400 See 2.I.6 and 2.I.15.
- 401 See 2.I.8.
- 402 See 2.I.9.1.
- 403 Azzara 2002, 98

- 404 As described for Abruzzo and south-eastern Lazio in the book by John Howe (2007) on the life of Dominic of Sora, Chapter 5 to 7.
- 405 Howe 1997, 145
- 406 Del Lungo 2001, 56
- 407 Stroll 1997, 17
- 408 Azzara 2002, 96
- 409 Stroll 1997, 30; Ring 2006
- 410 Toubert 1973; Hodges 1993, 356
- 411 Moreland 1992, 120 ff.; Stroll 1997, 24; it is no coincidence that after the Carolingian power collapsed in the late 9th century, Farfa was destroyed by Saracens. After the monastery was rebuilt, the papacy filled the power vacuum left by the Carolingians.
- 412 On these sites see Moreland 1991, 480 and 1992, 122-123; The 8th century stone built phase of San Donato certainly was also part of this *curtis* system, see 2.II.3.3.
- 413 E.g. Carloni 2015 and Stasolla 2015. The latter paper treated the intricate hierarchical systems which Benedictine monasteries in central Italy used to exploit the natural resources of their vast estates.
- 414 See section 2.I.6 on the Saracene raids and Azzara 2002, 98
- 415 Stroll 1997, 24-25
- 416 Stroll 1997, 26
- 417 Moreland *et al.* 1993, 197; Moreland 2005, 932
- 418 Stroll 1997 *The medieval Abbey of Farfa, Target of papal and imperial ambitions*. The main focus of the book is the tussle between the papacy and the Holy Roman empire, as seen from the perspective of the monastery of Farfa. The 11th and 12th century Church reforms and Investiture Controversy are elaborated upon. See also Ring 2006.
- 419 Stroll 1997, 27 and 75 ff. Exemplary is the episode concerning the Crescenzi/Ottaviani family which in the early 11th century relocated from Rome to the Sabina, and quarrelled for more than a century with Farfa about the control over castles and the jurisdiction of parts of the Sabina.
- 420 Toubert 1973, 1074
- 421 Stroll 1997, 240 ff.
- 422 Stroll 1997, 256-257
- 423 Stroll 1997, 272
- 424 See I.I.1.
- 425 Arthur & Patterson 1994, 410
- 426 Barker 1995a, 3, see also I.I.1.
- 427 Moreland 1992, 104
- 428 Arthur 1991b, 157
- 429 The landscape in this area in many ways resembles that of Tyrrhenian southern Lazio: it shows a lagoonal area, intersected by the Via Appia and surrounded with accessible foothill and mountainous regions. Large population centres are situated nearby.
- 430 Arthur 1991b, 157
- 431 Arthur 1991b, 158
- 432 Arthur 1991b, 158
- 433 Barker 1995b
- 434 Hayes & Martini 1994 The Liri Valley project had from the start been designed as a multidisciplinary research project for medievalists, archaeologists and geologists in reconstructing settlement history study. Unfortunately, much of the intended research was not executed because of the death of the project's coordinator Edith Wightman in 1983. It is not dealt with in detail here for reasons of available time and space.
- 435 See the earlier published results of the research done on the Tiber Valley Project by Helen Patterson and Paul Roberts, Patterson & Roberts 1998. More generally on the challenges of pottery research in central and southern Italy: Arthur & Patterson 1994. See also 2.II.3.2..
- 436 See also below 2.II.3.1. Two scenarios under revision.
- 437 As similar re-studies in Apulia and Basilicata incontestable prove. In the area around the thoroughly excavated site of San Giovanni di Ruoti the new ware analysis of the Roman Painted common ware show that there were many more sites in late Antiquity than thought before, cf. Small 1991 and 1994.
- 438 Fentress, Goodson & Maiuro 2016
- 439 Francovich & Hodges 2003; this overview study incorporated the works up till then of important Italian archaeologist such as Brogiolo, Citter, Paroli and Valenti.
- 440 Another recent regional medieval multidisciplinary study that showed parallels with *Villa to Village* is the work done in the Salento under the direction of Paul Arthur, Arthur 2006, 2010 and 2012; in this region, the end of the 6th to end of 7th century seemed to have been an age without strong state control or local authority. It is precisely this period Francovich & Hodges 2003, 110 and Wickham 1989, 146 describe as a golden age of a principally independent peasantry. In Apulia, a new cohesive settlement pattern might already have developed from the 8th century onwards, possibly comparable to the development of a system of *curtes*. Still much research needs to be done to see what exactly was the function of these 8th century sites, Arthur 2006, 105 and 2012, 445 ff. Cf. Francovich & Hodges 2003, Chapter 4.
- 441 Such as Valenti 2004, Arthur 2010, Brogiolo 2009 and 2011, De Marchi 2013, and Augenti 2016.
- 442 See I.I.1.
- 443 Augenti 2016, 5 ff, 82 ff, 111-112
- 444 See also *A short glossary of periodization* in the introduction to the current thesis.
- 445 Francovich & Hodges 2003, 114
- 446 Their co-direction of the site of Montarrenti was the foremost incentive for Francovich and Hodges to re-evaluate the state of research on the countryside during the transition from the Roman world to the middle ages. See also the monograph on the site of Montarrenti: Cantini 2003.
- 447 Francovich & Hodges 2003, 37 ff
- 448 Gualtieri, Salvatore & Small 1983
- 449 Francovich & Hodges 2003, 39
- 450 See 2.II.2.2.
- 451 Francovich & Hodges 2003, 38. Some of these villas and farms in Lombardy and the Trentino valley recovered to some extent and remained in use until the 6th century. This improved vigour was possibly caused by a renewed link with the thriving imperial city of Milan. A similar development is visible in the Volturno valley (Molise). Here, after the abandonment of most villas and small sites during the 3rd century crisis, a new centre (village?) was established at San Vincenzo al Volturno at the start of the 5th century. This centre (or at least this phase) lasted until the 6th century, Hodges 1997.
- 452 Francovich and Hodges focussed on bulk trade. Small scale exchange across the Mediterranean continued, as Horden & Purcell 2000 have argued, see introduction to the Synthesis, Chapter 8.

- 453 See 2.I.1.
- 454 Hayes 1998, 13
- 455 Francovich & Hodges 2003, 58
- 456 Arthur 1991b, 157; see also Potter 1981 and Linoli 2005, 32. See also 1.I.3. In the data analysis (Part II, Chapter 7) and the synthesis (Part III, Chapter 8) environmental deterioration and human agency in late Antiquity and the early middle ages are scrutinized in detail.
- 457 Vita-Finzi 1969 and Potter 1981
- 458 Arthur 1991b, 158
- 459 Francovich & Hodges 2003, 37
- 460 Francovich & Hodges 2003, 51
- 461 Francovich & Hodges 2003, 60
- 462 Wickham 1989, 146; Wickham 1999, 19; Francovich & Hodges 2003, 110; see also Wickham 1994, 113
- 463 Hodges 1990, 357; Francovich & Hodges 2004, 60 and 110
- 464 Moreland 2005; on Castro dei Volsci: Laurenti 1990, 261 ff.
- 465 Francovich & Hodges, 58-60
- 466 Francovich & Hodges 2003, 60
- 467 Francovich & Hodges 2004, 109
- 468 Francovich & Hodges 2003, 52
- 469 Francovich & Hodges 2003, 53. In border areas of regions with a strong central power many (small) strongholds were built in the 6th century. This was the case in Lombardy and the Byzantine Exarchate, and the earlier Gothic ruled areas. This fortifying of border posts is especially clear on the border between Byzantine Lazio and Tuscany (Francovich & Hodges 2003, 57; see also below). For many of these posts pre-Roman structures were used. These all soon dissolved, except those who had adopted a socio-economic role for the surrounding countryside and in consequence became successful centres, for example Castelprio in the Varese and Monselice near Padua.
- 470 Francovich & Hodges 2003, 107
- 471 Francovich & Hodges 2003, 51
- 472 See 2.I.5.
- 473 Cf. Azzara 2002, 89 ff. The number of rural churches in Italy seems to have grown until the 9th century. Most of the rural churches built in the 7th and 8th century were constructed by richer families in local communities. Their incentive seems to have been personal devotion, but also the display of status. See also 2.I.12.
- 474 Francovich & Hodges 2003, 57
- 475 Brogiolo 2001, 200
- 476 Potter & King 1997, 42-45, 206 and 425-426
- 477 Pohl 2002, 30; Gasparri 2002, 73 ff.
- 478 Francovich & Hodges 2003, 111
- 479 Gasparri 2002, 77; See also above in 2.I.5 *The emergence of the papal state and Carolingian influence*.
- 480 Toubert 1973 and 1987
- 481 See 2.II.3.2.
- 482 Francovich & Hodges 2003, 68 ff.
- 483 Francovich & Hodges 2003, 77
- 484 Francovich & Hodges 2003, 111
- 485 See 2.I.6.
- 486 Cf. Moreland 1992, 122; See also 2.I.6 and 2.II.3.4.
- 487 Balzaretto 1994 discussed the *curtis* as the focus of power relationships and analysed the part of monasteries in these relationships.
- 488 see below in Study: 8th and 9th century satellites around monasteries
- 489 For a more detailed study of these satellite centres see 2.II.3.4.
- 490 Francovich & Hodges 2003, 84 ff.
- 491 See 2.I.8.
- 492 Francovich & Hodges 2003, 99
- 493 Francovich & Hodges 2003, 112
- 494 Toubert 1973
- 495 For more details on Monte Gelato and San Donato see paragraph 2.II.3.3.
- 496 Francovich & Hodges 2003, 112
- 497 Hodges 2006
- 498 Moreland 1992, 124.
- 499 See 2.I.9.1.
- 500 Christie 1989; Zanini 1998 and 2014
- 501 See 2.I.1.
- 502 For a study of the political-military backgrounds of the collapse of pan-Mediterranean exchange systems see also 2.I.1 The Italian homeland under transformation: the “end” of antiquity.
- 503 Christie 1989, 263
- 504 Christie 1989, 259; Moreland 1993, 97; Francovich & Hodges 2003, 51. See also 2.I.2.
- 505 In the 8th most Crypta Balbi pots originate from Rome and its hinterland and from southern Italy, Sagui 1998, 305 ff., Panella & Sagui 2001, 804–15.
- 506 As it appears now, Rome and its hinterland, and Naples and other large markets as well, saw fewer North African imports than for example Liguria until the 7th century, but significantly more than most other regions of Italy. For Rome see Sagui 1998. 310 ff, and Wickham 2006, 712; see also Moreland 1993, 97 on the Farfa area and southern Etruria.
- 507 See 2.I.1. Liguria was Byzantine ruled until 643, and it is no coincidence that African imports (and eastern *amphorae*) cease to be found along the coast of Liguria after the second quarter of the 7th century AD, Zanini 2014, 234 and fig. 3.
- 508 Christie 1989, 254 and 260
- 509 At Privernum, for example, only a small number eastern 6th and 7th century sherds from the eastern Mediterranean have been identified, Leotta & Rinnaudo 2015, 565.
- 510 Christie 1989, 264
- 511 Among others observed in the Privernum excavation contexts, in the Amaseno Valley, part of the research area of Tyrrhenian southern Lazio, Cristina Leotta pers. comm.
- 512 Christie 1989, 283
- 513 Pohl 2002, 26
- 514 Paroli 1993, 164 on 7th century Crypta Balbi. Churches in Rome: S. Stefano Rotondo and S. Agnese fuori le mura. In Ravenna: S. Apollinare in Classe.
- 515 Christie 1989, 254; see also 2.I.4.
- 516 Christie 1989
- 517 Nuzzo 2013, 604 ff; Galeazzi 2008, 76
- 518 Christie 1989, 274
- 519 Christie 1989, 254
- 520 Because of this, and Francovich's personal involvement in Tuscan medieval archaeology, *Villa to village* provides a useful basis for an overview of the developments in late Antiquity and the early middle ages in this region; although recent research

- has yielded many new insights, the framework of the book still stands.
- 521 Francovich & Hodges 2003, 40; Valenti 1996 and Valenti 2004, 158 ff.
- 522 Fentress and Cambi 1989; Francovich & Hodges 2003, 39 ff.
- 523 2.II.2, *The first stage of transition, the 3rd to 5th century*.
- 524 Francovich & Hodges 2003, 40. However, all the identifications of sites as *mansiones* remain hypothetical and were not confirmed by recent research, Cristina Corsi pers.comm.
- 525 Francovich & Hodges 2003, 50 and 108; Valenti 2004, 31
- 526 Valenti 2004, 66
- 527 Francovich & Hodges 2003, 57 referring to Fentress & Perkins 1989 and Carandini & Cambi 2002, 239-241.
- 528 Francovich & Hodges 2003, 57
- 529 Francovich & Hodges 2003, 68-70
- 530 When referring to northern Lazio, the regions of southern Etruria, the western Sabina and the northern Roman Campagna are meant. These regions have been the subject of British research projects during the last 60 years. For a summary of these exploits see Potter & Stoddart 2001.
- 531 Potter 1979, 155
- 532 Christie 1987, 456-467; Christie 1989, 281 referred to the genuine danger the Lombards posed in 720 under Liutprand. He proposed a temporary occupation of promontory sites took place, possibly already occurring since the Gothic wars, although he stressed that this hypothesis still needs archaeological substantiation (contra Whitehouse & Potter 1981)
- 533 Potter 1979, 155-67; Christie 1989, 281
- 534 For the Sabina see Moreland 1992 and Patterson & Roberts 1998.
- 535 See 2.II.1.
- 536 I.e. in the Ager Veientanus at least, situated close to Rome. For more on the *domuscultae* see 2.I.6 and 6.I.2.
- 537 Patterson, H., H. Di Giuseppe & R. Witcher, forthcoming, *Changing Landscapes of the Middle Tiber Valley* (Archaeological Monographs of the British School at Rome). London. British School at Rome.
- 538 <http://www.bsr.ac.uk/research/archaeology/completed-projects/tiber-valley-project/south-etruria-survey> [Accessed March 2019]. For preliminary results on the Veii survey material see Patterson 2004.
- 539 See Moreland 1986, 1987, 1992, 1993 and 2005.
- 540 Moreland 2005, 930
- 541 Moreland 2005, 932. According to Moreland this could be a result of specific features of the archaeological facts. Scholars are more familiar with the types of wares that are more detectable and more diagnostic.
- 542 The plague of these years seems to have impacted the whole Mediterranean, see Duncan-Jones 1996 and Scheidel 2002.
- 543 Moreland 2003, 932. In the 2nd and 3rd century Rome was at its imperialistic peak, and the *pax romana* was still unbroken. Indeed, in this period economic (exchange) relations of Rome with its more distant provinces must have been well-oiled. See also Linoli 2005, 32 who explained the growing problems in the Pontine plain by a loss in investment in local drainage schemes. This decline in investment was the result of a shift in the attraction of resources, away from the Pontine plain to the wider provinces. See also 2.II.2.
- 544 Moreland 2005, 932. The suggested collapse in the 6th century of a pan-Mediterranean economic system could also be seen as a return to normality, as Wickham also stated: Wickham 1994, 107 and 134.
- 545 Moreland 2005, 932
- 546 Moreland 2005, 932; see also Patterson & Roberts 1998
- 547 Moreland 2005, 932
- 548 See also 2.II.3.4.
- 549 Moreland *et al.* 1993, 197; Moreland 2005, 932
- 550 This continuity had been historically described earlier for northern and north-eastern Lazio and the Sabina by Toubert (1973). He created a model in which the settlement dynamics in the high middle ages in the Sabina continued in 'open' (or dispersed) agricultural and settlement systems until the 10th century, Toubert 1973, 330 ff.
- 551 Moreland 2005, 934
- 552 Moreland 2005, 932
- 553 Moreland *et al.* 1993, 206-209; Patterson & Roberts 1998
- 554 Moreland, 2000b
- 555 Moreland 2002b: An undisclosed document of 1046 refers to the castrum of San Donato.
- 556 *Liber Pontificalis* Life 97.54 and 69; Davis 2007, 147
- 557 The Capracorum *domusculta* was the first securely identified of these papal estates, cf. Christie 1991
- 558 From the description in the *Liber Pontificalis* it becomes clear that *domuscultae* consisted of lands or groupings of lands and farms (*massae*), farms (*fundi*) and/or farm buildings (*casali*). Cf. Duchesne 1886, 501 and Francovich & Hodges 2003, 88.
- 559 Potter 1979, 154; Arthur & Patterson 1994, 414;
- 560 Christie 1991, 6 ff.
- 561 More on the generic picture of *domuscultae* see 6.I.2.
- 562 See 2.I.6.
- 563 Arthur & Patterson 1994, 414; Patterson 2003
- 564 Christie 1991, 130 ff.; Patterson 1994; Potter & King 1997
- 565 Patterson 2003
- 566 See 2.II.3.3.
- 567 Potter 1979
- 568 Christie 1991
- 569 Christie 1991, 355-358
- 570 Christie 1996, 277
- 571 Potter & King 1997, 98; the enclosing wall at Santa Cornelia was dated to 815-850.
- 572 Christie 1991; Francovich & Hodges 2003, 89
- 573 For a full account of the excavation and their interpretation see T.W. Potter, A.C. King and others 1997. Excavations at the Mola di Monte Gelato: A Roman and Medieval Settlement in South Etruria.
- 574 Potter 1993, 150; Potter & King 1997
- 575 Potter 1993, 141
- 576 Christie 1996, 275
- 577 Potter 1993, 149
- 578 Potter 1993, 150
- 579 For an overview of research in both areas see Moreland 1991, 480 and 1992, 122-123
- 580 See 2.II.2.
- 581 On these sites Moreland 1991, 480 and 1992, 122-123; the 8th century stone built phase of San Donato certainly was part of this *curtis* system.
- 582 Moreland 1992, 121-123

- 583 Moreland 1992, 123
- 584 The number of written sources grows rapidly in the 9th century.
- 585 Foucault 1979
- 586 Moreland 1992, 123 especially Bezanum, which overlooked the pastoral routes into the mountains; see Wickham 1985b on transhumance routes between the Tiber lowlands and the Sabine highlands.
- 587 See 2.I.15. Both monasteries were small in the 8th century and showed rapid growth in the late 8th and early 9th century. They had become imperial institutions under the Carolingians, a possible strong factor in their bloom. Both were the largest landowners in their region. Extensive building activities took place on their abbeys in the first half of the 9th century.
- 588 Moreland 1992, 122; the available sources speak of a continuation of a *curtis* system.
- 589 Moreland 1992, 124
- 590 Moreland 1992, 124. This seems a logical way of thinking, as higher position and registration for control and production regulation was put forward as central to the process of *incastellamento*. Circular reasoning lies in wait here: The critical question remains if Moreland has not moulded his interpretation of the 8th century sites after the very definition of *incastellamento* itself.
- 591 Barker 1995b, 310
- 592 Hodges & Wickham 1995, 283
- 593 Hodges & Wickham 1995, 272

Chapter 3 Primary sources

Introduction

This chapter will discuss the main issues relating to the primary sources, i.e. the archaeological and historical sources dating to the research period itself, which constitute the core of this study of the post-antique landscape of Tyrrhenian southern Lazio. In this chapter, an overview will be given of the main primary sources available for analysis. At the same time the main interpretative challenges in using these sources will be discussed. Therefore this chapter can be considered the starting point in correctly reading the primary evidence. Many aspects of dealing with the primary sources, however, will return in the discussions and evaluations further on in this study whenever appropriate.

As was touched upon shortly in Chapter 1, three basic levels of interpretative challenges regarding primary sources can be recognised:

1. Bias (or possible analytical distortion) inherent to the primary sources. This consists of the biases, or possible analytical distortions which present-day observers cannot control. These biases relate to the origin of the sources. An opinionated medieval writer who produced a prejudiced text could be an example of such bias. Such biases can also be identified in the way physical sources come to us present-day scholars, as these are the product of a strong selection based on their material qualities to survive the centuries. The low survival rate of the less durable built late Antique and early medieval vestiges for example, causes a lack of archaeological sources for this particular period². The overrepresentation of the 8th century in the database because of the abundantly available epigraphic evidence (as shown below) is another case of strong inherent bias in the available sources³.
2. Bias or distortion caused by earlier research. The way the primary sources are collected during research, and how they were structured, interpreted and published in earlier studies, influences the way the primary data are presented to us scholars. Much of the available archaeological evidence is influenced by choices made by scholars: what to excavate; where to conduct a survey; and what material to collect. The uneven dispersal of archaeological studies over the landscape is just one of the results of selections made⁴. For example,

this study will show that archaeological research of the wider Colleferro area, Privernum, the PRP survey areas and the southern coastal zone near Ostia has been much more intensive than in other parts of the research area.

This biased selection likewise applies to collections of written sources, i.e. the secondary sources: an editor dictates which texts are assembled and how, and in what way these are to be interpreted.

3. Bias in the way the current database was structured. The data contained in primary sources have been (re) interpreted, categorised, reworked and compressed in order to provide structure in the database and mapping of this thesis. The choices made in its structure influenced the output of the database. Among others, the following questions were dealt with in structuring the database: what to do with uneven dispersal of archaeological studies over the landscape? How to handle broad archaeological dating (such as *opera saracinesca*, dated 9-13th century)? What to do with sites that can be located only roughly? Generally, how to plot the chronology of sites and insecurity of their location on the distribution maps?

The third point shall not be dealt with in detail in this chapter. This was already done in general terms in Chapter 1 (“dealing with imbalances and biases”). However, a discussion of this issue will reappear in Chapter 6 (site classification) and again, ad hoc, in the final analysis of the database in Part II (Chapter 7).

The distinctive division of these three levels of interpretative challenges is not sought after in this study, for in many cases they overlap: Is the availability of the data on a commemorative stone caused by the stone’s physical survival, or by the decision made by the scholars to study it and publish the results? Instead, the focus will be on the most important interpretative challenges, those that most influence or challenge the analysis of the database and the regional settlement maps derived from it. This provides a necessary context for interpretation and analysis, in order to understand what can be stated and cannot be stated about the period under scrutiny. I have organized this chapter along the lines of archaeological and written sources.

The chapter will be concluded with an overview of recent insights into the physical geography of the landscape of Tyrrhenian southern Lazio. Similar to texts and archaeology, the landscape should be treated as a primary source, providing information about the situation on the ground in the research period. In fact, environmental information, written sources and the archaeological record in this thesis form an integral data set, constituting the basis of analysis of human activity during the researched period. Together they form the backbone of this study. As in written and archaeological sources, contemporary environmental information reaches us fragmentary, as the landscape has changed much since the middle ages, certainly in the last century, and not all changes have been researched in detail. Some details on the functioning of the medieval landscape can be inferred (often with distortions) from retrospective sources. These details will be discussed later in this study⁵. The current overview, however, examines the *longue durée* of the landscape, not only of the study period. It is based on empirical data obtained from recent (paleo)geographical studies done in the research area. It discusses the regional climate, and the landscape zones that are discerned.

3.I Archaeology

3.I.1 Archaeological sources

So far, comprehensive archaeological (or, for that matter, multidisciplinary) study on the late Antique to high medieval landscape of Tyrrhenian southern Lazio has been limited, the exception being the Villamagna Project. As was discussed in Chapter 1, the available archaeological data on the late Roman and medieval landscape are fragmented in distribution, subject, methodology and chronological focus. First of all, this is a result of the fact that these periods were not the focal point of most archaeological projects. This contrasts with adjacent regions like southern Etruria (with key site Monte Gelato⁶), the Sabina (Farfa, San Donato⁷) and the northern Sacco valley (Abbey of San Sebastiano⁸). In their influential book *Villa to village*, which provided a well-documented overview of the status quo of research on the transition from late Roman period to the high middle ages⁹, Francovich and Hodges were manifestly silent on the landscape of Tyrrhenian southern Lazio¹⁰.

Large-scale survey research in the research area of Tyrrhenian southern Lazio is still limited, with a few exceptions such as the PRP study (see below), the Minor Centres Project, the eastern Pontine reconnaissance (under the direction of Margherita Cancellieri)¹¹ and the study of the area around Colleferro (by the Gruppo Archeologico Toleriente)¹²; these projects however did not specifically target the middle ages and used very different methodologies. Therefore, in this study the

potential of spatial analysis of archaeological patterns based on survey, a type of analysis that is usual in landscape archaeology of other periods, is limited. This lack of surveys is unfortunately rather the rule than the exception in regional medieval landscape studies in Italy. The main sources of information in such landscape studies are (the combination of) excavation, texts and material studies, not large scale archaeological field surveys¹³.

Overall, it is clear that medieval archaeology in Tyrrhenian southern Lazio has to step up. However, some positive developments can be detected. The middle ages are becoming more and more incorporated into archaeological (landscape) projects, as already visible in the long-running studies of Privernum and Ostia/Pianabella, most recently at Villamagna¹⁴, in the Astura area¹⁵ and in the areas covered by Minor Centres Project (PRP)¹⁶. Below I will present the available evidence.

The clearest archaeological data on the research period derive from excavations of larger sites with a specific focus on the (early) middle ages, such as Astura settlement¹⁷, Carpineto Romano¹⁸, Castro dei Volsci - villa in località casale di Madonna del Piano¹⁹, Fossanova²⁰, Norba²¹, Ostia²², Pianabella²³, Privernum²⁴, the Laurentine coast (Tor Paterno, Vicus Augustanus)²⁵ and Villamagna²⁶. Especially the Privernum project, the study of Astura settlement and the work done on the Laurentine coast have yielded important insights into the early and high middle ages, using the latest pottery typologies and synthesising the results in a regional context.

The excavations and material studies on a number of smaller sites with late Roman or medieval phases, often as part of a project with a prime focus on earlier periods, are further data sources used to build the database of this thesis. Examples of such sites are Tres Tabernae²⁷, the villa at Satricum²⁸, the villa of Pliny²⁹, Piombinara³⁰, Ceriara³¹, the villa in località Maria at the lake of Nemi³² and villa S.Cesareo³³. Also of relevance are publications focused on material studies, like wall facing techniques and pottery; these offer relevant typologies and dates³⁴.

Unfortunately, the results of excavations on several key sites (Antium³⁵, Terracina³⁶, and Tor Paterno³⁷) and of relevant archaeological-topographical fieldwork (Pontine plain³⁸) have not yet been published.

This thesis uses the so-called Liboni collection, one of the many small local collections that make up the fragmented archaeology of the research area. This collection, consisting of the material collected by Arnaldo Liboni³⁹ in the hinterland of Nettuno and Torre Astura, constitutes the basis of a small-scale study of the early to high medieval pottery of the site of Astura and its surroundings⁴⁰. The choice of this site for a diachronic ware study is based on

the GIA's long-running research tradition in the area, and on the assumption that the harbour might have stayed in service throughout the middle ages. This small-scale pottery study is a case-study of the potential of the many local collections in creating regional typologies of medieval pottery; its results could be used as a base for a future pottery reference collection for the Astura peninsula⁴¹.

Although I read as much as possible original excavation reports, much of the data in this study stem from interpretative overviews. These overviews often focussed on specific landscape elements or specific site types. Lafon for example offered an overview of local studies of Roman *villae maritimae*⁴². De Rossi focused on medieval coastal towers⁴³. In the reconstruction of late Roman roads, the Via Severiana⁴⁴, the Via Appia⁴⁵ and La Selciatella⁴⁶ archaeological data were treated as part of a multidisciplinary overview. This also applies to the study of medieval infrastructure⁴⁷. Several local studies dealt with late Roman and medieval sites in a multidisciplinary (historical, topographical, archaeological and/or historical architectural) overview paper, refraining from intensive excavations. Illustrative are the studies of Ad Turres Albas⁴⁸, Villa Caetani⁴⁹ and Monte Giuliano⁵⁰.

The toponymic overviews by Del Lungo are rich in references of archaeological studies and topographical-archaeological data⁵¹. The *Forma Italiae* series, topographical surveys conducted and published between 1927 and 1982⁵², covered large parts of the research area. The series provides a lot of data, to some extent on the current study period, although the late Roman and medieval period were not its foremost focal point⁵³. These data however cause a number of interpretative challenges, which are common to most overview studies (see below, 3.II.2. *Interpretative challenges*).

Of all the landscapes in Tyrrhenian southern Lazio, the Agro Pontino has seen the most large-scale archaeological (survey) projects. The reconnaissance work by Cancellieri has already been mentioned. The first systematic survey research there was conducted during the Agro Pontino Survey project by the university of Amsterdam⁵⁴, intended to study settlement patterns and the connected socio-economic developments. In order to be able to explore different geographical landscape types, pre-selected parts of the region were surveyed in transects. The Pontine region was also featured in the Regional Pathways to Complexity (RPC) project, a multi-regional project conducted by the Groningen Institute of Archaeology (GIA) and the Archaeological Centre of the Free University of Amsterdam (ACVU)⁵⁵. In this project, the Pontine region was one of the three studied areas. Two PhD theses conducted within the boundaries of this project are of interest to the current study: Van Joolen's study *Archaeological*

land evaluation. A reconstruction of the suitability of ancient landscapes for various land uses in Italy focused on the first millennium BC (2003)⁵⁶ targeted past potential land use, by carrying out a land evaluation analysis, using among others pollen cores collected in the Agro Pontino. Veenman's study *Reconstructing the Pasture. A reconstruction of pastoral land use in Italy in the first millennium BC* (2002)⁵⁷ focused on the reconstruction of actual (as opposed to potential) land use, reconstructing different types of pastoral land use. She used off-site find patterns, archaeozoological analysis and ethnographic parallels.

The Pontine Region Project

By far the largest archaeological contribution to my database is provided by the Pontine Region Project⁵⁸, initiated in 1987 by the Groningen Institute of Archaeology under the direction of Peter Attema. The PRP started as a side project to the Dutch excavations at Satricum. The project has shifted its geographical and chronological focus over the years⁵⁹. At first intensive site surveys and extensive field surveys were conducted along the Lepine Mountains and in the Pontine plain⁶⁰. Its fieldwork's goal was to study the processes of centralisation in the late Iron Age and Archaic period and the impact of urbanisation and Roman colonisation during the Republican period. As was discussed in chapter 1, in the first phases of the PRP, excavation and survey research were combined with historical cartography and ethno-historical studies to obtain insight into the *longue durée* of the study area.

At a later stage, field surveys were conducted in parts of the Alban Hills and the Sacco valley to the north, as a part of a comparative study on early Roman colonisation⁶¹. This study dealt with the impact of Roman colonisation on the hinterlands of Setia, Lanuvium and Signia in an intensive all-period artefact survey. At the same time surveys took place near ancient Norba and Satricum⁶².

From the late 1990s onwards the project began to focus on the northern part of the coastal landscape of the Pontine plain, in the area between Anzio and Fogliano⁶³. Surveys here were followed by the excavation of protohistoric and Roman coastal sites south of Nettuno. In the municipality of Nettuno and in the adjacent Astura valley intensive field surveys were conducted between 2003 and 2005⁶⁴. During this phase, the project extended its chronological focus to the late Roman period, while the middle ages also received attention⁶⁵. Essential for the current study is the restudy by De Haas⁶⁶ in 2005 of all still accessible material from the PRP surveys of the period 1987-1999. This restudy incorporated the latest insights in the ARSW and late Roman amphorae⁶⁷. From 2005 to 2009 the GIA also executed an additional project in the area, the Hidden Landscapes project, which yielded further information on

(among others late Roman) sites along the foothills and in the central parts of the Lepine Mountains⁶⁸.

In recent years, several PhD projects were completed. Tol's study *A fragmented history. A methodological and artefactual approach to the study of ancient settlement in the territories of Satricum and Antium* (2012) is of special importance for my research as it included the (material) study of late Antique settlement in the area between Antium and Satricum. This study included the excavation work done at the site of Astura settlement and the study of the pottery found there, in sections along the coast which had been exposed by marine erosion. Between 2011 and 2016 the Minor Centers project was executed, which studied the role of minor central places in the economy of Roman central Italy. For this project field surveying, geophysical prospection and targeted excavations were conducted, which in the central Pontine plain yielded evidence for early and high medieval pottery⁶⁹.

3.1.2 Interpretative challenges

Inherent bias, the first point listed in the introduction of this chapter, played a large role in the interpretative challenges in dealing with the archaeological evidence for the current study. For example, many of the medieval villages are built-over and therefore not accessible for excavations. As the below overview shows, however, the second point, the choices made by scholars, without a doubt has had most impact of all challenges on the interpretation of the available data. Scholarly paradigms, local research traditions and personal preferences dictated what to excavate or what standing walls to study, which data to compile and how these data are to be interpreted. Choice dictated what was published too: as was mentioned, several possibly crucial fieldwork projects remain unpublished. These kinds of interventions distort my view on the primary material.

A generic picture: the distribution and chronology of archaeological data

This overview of biases should begin by zooming out as far as possible in order to make visible the generic biases in the archaeological evidence already discussed before:

For some areas clearly more archaeological sources are available than elsewhere, like the areas mapped by the *Forma Italiae* volumes and by the PRP. As I have explained, this bias is one of the reasons to cut up the study area into several key areas⁷⁰. Of these, the Nettuno – Anzio and Fogliano key areas can be studied in most detail. Here the PRP teams conducted fieldwork, in which attention was paid to late and post-Roman periods⁷¹.

Moreover, chronologically some periods were better studied than others. The general focus of archaeological research has been on the imperial Roman period whilst leaving the middle ages relatively underexposed. This was not only due to the fact that much medieval material culture was difficult to detect. It also had to do with the fact that, in my opinion, the middle ages are in low esteem in archaeological studies of the current research area, when compared to adjacent regions.

Common biases and related interpretative challenges in archaeological studies

There are a number of common biases and related interpretative challenges to be accounted for when dealing with (topographical-) archaeological studies.

The most frequent are:

- **A focus on imperial Roman phases.** The volumes of the *Forma Italiae* series compiled for my study area are a case in point, as they especially provided data on the republican and early imperial period, whilst the late imperial and medieval phases received less attention. This fits the generic picture drawn above: the largest part of available archaeological data in this part of southern Lazio relates to the Roman Empire. As a consequence the long-term chronological resolution of the sites often is too meagre to establish rise, continuity and decline (see also the point below on the generic dating of sites)⁷².
- **Limited description of artefacts and building (wall masonry) techniques.** In several overviews⁷³ only a limited number of artefacts and of building techniques was described. In the *Forma Italiae* volumes available for my study area, the treated find categories were usually restricted to bricks, tiles, cups, amphorae, marble fragments, black gloss ware and *terra sigillata*. Moreover, in most overview studies the descriptions of these finds are minimal. This makes a possible functional (re)interpretation of the described (pottery) finds and walls on my part very difficult (see also below the paragraph on *opus vittatum*).
- Related to the above is the **unspecified dating of sites in the available literature.** Details of the argumentation and evidence for the dating of sites were not always provided. This often hinders an effective evaluation of the proposed chronology of sites. Whenever a date or interpretation of a site is not specified in literature, or based on unsound grounds (with today's knowledge), it will be stated explicitly so in the data analysis of Part II (Chapter 7).
- **Late Roman and medieval walls are mostly unrecorded.** Most (older) archaeological studies, like the *Forma Italiae*, focussed on the republican to early imperial phases, dated by then well-known building

techniques. Less resilient built phases on sites (for example the Archaic and medieval phases) were usually not recorded. Some relevant wall facing typologies were not yet available at the time, like that of *opus vittatum* and other early and high medieval wall facing techniques⁷⁴.

- **Almost no systematic sampling of pottery** has been performed for the *Forma Italiae*, and only **very generic dates were assigned to the collected material**. The insights in pottery typologies of the time were more limited; Hayes' inventory on ARSW, for example, was not yet available⁷⁵. Indeed, most projects with a late Roman or medieval focus refrained from extensive systematic collection of finds (see above, the introduction to this section on Archaeology).
- Related to this lack of systematic sampling and dating tools for pottery, are the **very generic dates assigned to sites**, reflecting the state of knowledge at the time. This is common to (older) archaeological reports on the late Roman period and middle ages, for example the *Forma Italiae* series and the Agro Pontino survey. It influenced the archaeological chronological resolution of sites – which contrasts with the often higher historical chronological resolution.
- **Monumentality as bias**. In (topographical-)archaeological overviews monumentality seems a factor for incorporation. In these studies, often only the most conspicuous examples of bridges, monumental graves, Roman fortifications, cisterns and villas seem to have been included. Exemplary for this bias is the wider area of Priverno, where roughly 70 smaller medieval towers are known⁷⁶. Yet, only the largest three of these are treated in the available literature⁷⁷.
- **No structural treatment of functional aspects of sites**. In some overviews, some rudimentary information was provided on facilities on sites, like kilns, mills, olive presses, water works (pipes); in other overviews this was not the case. Overall, little attention was given to the dating of such facilities. In sum, the functional aspects of sites cannot be compared or studied in a diachronic regional perspective.

Pottery

African Red Slip Ware (ARSW)

While ARSW offers a crucial and relatively fine chronological fine-tuning tool for the 4th to 7th century contexts⁷⁸, it is less reliable as a dating tool for the 2nd and 3rd century, at least for the Nettuno – Anzio key area. For these centuries, scholars are very much dependent on ARSW for identification and dating of the PRP survey sites; on many sites no other dating tools were available. Unfortunately, ARSW of the 2nd and 3rd century Nettuno area mostly manifested itself in Hayes 196 and 197, shapes which both have a broad chronology: from Hayes 196

dates from the middle of the 2nd to the mid-3rd century AD and from 197 from the late 2nd to the mid-3rd century. As many sites in the Nettuno area seem to end in these centuries, the closing stages of a large number of survey sites could not be dated accurately.

Another bias in the database is related to ARSW: because of the large positive effect of a sound ARSW study on the identification and dating of late Roman sites, the distribution maps of this study's key areas are incomparable. Not all regions have seen thorough ARSW research. Only in three key areas large-scale surveys with a clear focus on ARSW studies have been conducted, the Nettuno and Fogliano key area (both by the GIA-PRP team) and the area south of Ostia (by several British and Italian teams). The small-scale surveys conducted by the Hidden Landscapes survey campaigns in the central Lepine Mountains and their margins also were executed with an awareness of the presence of ARSW⁷⁹. Added to the list of ARSW-focus surveys should be the other PRP survey areas (near Lanuvio, Cori, Segni and Norma). Earlier pottery finds in these areas were later restudied by De Haas with, among others, the specific focus on finding and dating ARSW shapes⁸⁰.

Medieval coarse wares

The Crypta Balbi typologies (and more recent excavations within Rome)⁸¹ boosted scholarly insight of earlier non-diagnostic 5th to 10th century coarse wares. During the Tiber valley project, excavations and restudy of survey material led to the recognition of (locally produced) coarse pottery; for the late Roman period these wares often constituted evidence for occupational phases for which no other *fossil types* existed⁸². Both the Crypta Balbi and Tiber Valley projects make us realise that in a lot of research in Tyrrhenian southern Lazio, also the PRP surveys, medieval coarse wares could have been misdated or even overlooked. This constitutes a clear bias in dealing with the archaeological evidence, which also affects the current study. On a positive note, the potential for future coarse ware studies in the studied area is clear: Tol's excavation of Astura settlement yielded a number of fragments of such coarse wares, providing evidence for local production⁸³.

High and late medieval glazed and decorative wares

The high and late medieval glazed and decorative pottery was underrepresented in most archaeological reports and in the archaeological-topographical overviews. To some extent this applied to the PRP survey dataset as well, at least before Tol began his study and the current study was started. This research lacuna was caused by an earlier lack of research focus on the high and late middle ages and, until fairly recently, limited knowledge of the

characteristics of these wares. It is conceivable that glazed pottery sometimes was mistaken for (sub) recent material. Concerning past studies it is not possible to quantify the amount of such material that might have been overlooked or disregarded. It is obvious that it is fairly impossible to create regional distribution maps of these pottery types. Pottery types that might have been overlooked are the *vetrina sparsa* or with sparse glazing, dated 9th to 11-13th century and the *vetrina dipinta a bande*, decorated with red or brown stripes, dated from the 10th century onwards. Forum Ware, *ceramica a vetrina pesante*, probably the earliest medieval glazed pottery of Italy⁸⁴, might have been disregarded as well. However, its importance should have been known to many scholars, as it has been the subject of several studies since the 1960s and had early on already been recognised as one of the few fossil guides for the Dark Ages⁸⁵.

The work done by Tol and in the current research should be considered small contributions to the re-appreciating of the high and late medieval pottery of Tyrrhenian southern Lazio. In this study's restudy of the high medieval material from Torre Astura, several fragments of medieval glazed and decorative pottery were diagnosed, described and dated.

Wall facing studies

Opus vittatum (mixtum)

Good indicators for activity in the late Roman Empire and onwards can be found by the study of *opus vittatum* wall

facings (or: *opera listata*, in the *Forma Italiae* volumes). This building technique is characterised by blocks of tuff intersected by one or more brick bands (hence the often used adjective *mixtum*). In Latin *vittatum* means “banded” or “striped”, pointing to the intersection of several types of building blocks. This masonry was thoroughly studied at Ostia⁸⁶ and at Rome. Almost all *opus vittatum* at Ostia was used for repair and renovations from the end of the 3rd century onwards. *Opus vittatum* often consisted partly of *spolia* (re-used reticulate blocks). In Ostia, Heres (1982) distinguished two subgroups of *opus vittatum*: *type A*, mainly appearing throughout the late 3rd and 4th century and *type B*, predominantly appearing in the later 4th to 6th century, and possibly continuing until the 8th century⁸⁷.

Unfortunately, most archaeological-topographical studies did not provide clear descriptions, drawings or photographs of the *vittatum* walls (a point earlier stated in the discussion of frequent interpretative challenges in overview studies), which might have enabled a typological distinction between type A and/or B. Only for three sites enough details were provided to discern a type (all B, see table 1). As for the other sites, a generic date to the *vittatum* could be assigned, being between the 3rd and 8th century. What is more, other indicators, like the type of construction the technique was used for (for *ad hoc* restorations or for the main construction of a building) and the use of space (size, wall / room arrangement) were usually absent in the relevant literature. These contextual details

Table 3.1. A list of all sites on which *opus vittatum* has been attested.

OLIMsite	name	vittatum general	vittatum A	vittatum B
13	rpc site 15210, villa of nero at antium	Y		Y
30	tres tabernae	Y		
31	terracina	Y		
32	roman settlement of antium	Y		
52	villamagna	Y		
64	torre astura	Y		
85	site 53 forma italiae tellenae, villa	Y		
99	site 88 forma italiae tellenae, villa	Y		
139	vicus augustanus laurentium	Y		
161	site 150 forma italiae tellenae, villa	Y		
187	site 170 forma italiae tellenae, large cistern	Y		Y
239	site 79 forma italiae tellenae, villa	Y		
376	torre delle grotte	Y		
392	ostia antica	Y		Y
467	rpc site 11207, piccarreta 7	Y		

can be necessary to really utilise *opus vittatum* as a dating tool, as both A and B type have a wide date range.

In the current study *opus vittatum* has been attested on the sites shown in Table 3.1.

Opera saracinesca

The dating of 5 towers and fortresses was based on the wall facing technique of reused blocks generically called *opera saracinesca*, which has a wide date range, i.e. 9th to 13th century⁸⁸. This causes an interpretative challenge: the insecure building date implies that these sites should not be straightforwardly incorporated in the chronological analysis of site distribution and of defensive strategies. At the same time, however, we acknowledge activity on these sites within the suggested time span. The sites involved are the villa of Nero (OLIMsite 13), Torre Capo d'Anzio (OLIMsite 35), Torre S.Anastasio (OLIMsite 75), Castel Savelli (OLIMsite 156) and Monte S. Angelo (Terracina, OLIMsite 216).

3.II Written sources

3.II.1 Reading the written sources⁸⁹

As Wickham observed in his study of the early middle ages, secondary sources often overwhelm the scarce primary data that they comment on⁹⁰. Fortunately, the original texts of many of the most important and data-rich primary sources for the current research area (like the *Liber Pontificalis*, the *Regesta Pontificum Romanorum*, the *Monumenta Germaniae Historica* and the *Regesto Sublacense*) are readily available and at the same time have been critically annotated by great historians like Marazzi and Davis (both with a focus on developments within the Church), Coste (on medieval roads) and Toubert (on *incastellamento*)⁹¹.

The critical (re)reading of both original and annotated texts for this thesis resulted in the observation of some new, earlier missed details on sites and ownership⁹². The assessment of the possible biased nature of statements in written sources and the implicit socio-political information they may contain is part of the reading process. Fortunately, the biased aspects of historical sources have been the subject of historical study in recent years⁹³.

As Wickham⁹⁴ does, I consider legal documents or charters, like documents on the selling or leasing of lands, to be the most reliable sources of facts; these often described a local situation in detail and clearly provided names and dates. Normative texts, like codes of law, are valuable sources of facts as well, but should not always be taken literally, as theory and practise tend to differ. Most of all, normative texts can relate to past legislators and their authoritative or political agenda. Narrative texts,

like hagiographies or travel accounts, should be seen as (inherently biased) opinions and should only be accepted as carriers of facts if a background check can be made concerning their origins – here I rely much on earlier interpretations.

For this present research, the in-depth epistemological treatment of the background of historical sources is not of the essence. Unlike studies focussed on social and cultural history, exaggeration or a biased tone in sources, related to the circumstances under which the text was written, do not cause major issues for the current study. In the current research the focus is on particles of information that reliably qualify as signs of human activity in the landscape, and as such as sites in the database, even if coloured by the specific context in which they appeared. To illustrate this: It is known that the intended inalienability to the Church of the papal *castra specialia*, stated in a papal bull of 1234 AD⁹⁵, did not hold, but it is a certainty that the *castra* mentioned in the text did function at that moment in time, and that the papacy exerted interests on these sites. Even though exaggerations and even blunt lies, for example on the produce of an estate, might have been unduly incorporated into the current database, the overall picture was not affected. The more so, since the bulk of historical data stems from epigraphic lists, (papal) legal documents and normative texts. These texts provide reliable data on human activity and interests, as is evident from earlier historical scholarship.

3.II.2 Interpretative challenges

In primary sources, bias is first of all caused by the circumstances (author, historical background, commissioner) in which the text was conceived. Their potential implicit socio-political information has been discussed⁹⁶. Another cause of bias in primary texts is coincidence. To a certain extent chance determines which texts will have survived the ages. In the current study area, a fairly small number of sources rich in detail provided for a relatively large number of historical indicators for the existence of sites. As a fairly plausible result of such coincidence, some centuries are overrepresented in the database, causing a diachronic bias (see below⁹⁷). Another result is the overrepresentation of some areas on the distribution maps (see also below⁹⁸).

In secondary sources, e.g. later reviews, compilations and interpretations of primary sources, the academic agenda (paradigm) and personal opinions (or prejudices) of an editor may cause a bias. Editors usually dictate what data are compiled and how the information is to be interpreted. For example, Toubert (1973) focused on the larger *castra* and not the smaller settlements (*casalia, curtes*).

A generic picture: Ecclesiastical documents from Rome dominated until the 11th century

Zooming out as far as possible regarding the written sources of the studied period, the following picture emerges:

The main bulk of historical sources of Tyrrhenian southern Lazio had not become only available until the late 10th and 11th century and onwards; as will be discussed in the data analysis of Part II (Chapter 7), this is echoed by the number of sites and by the distribution maps⁹⁹. Previous to those centuries, more precisely between the 5th and 11th century, ecclesiastical documents and inscriptions from Rome were the predominant written sources. Nevertheless, other non-ecclesiastical sources did exist after the 5th century. These, however, provide much less specific information¹⁰⁰.

The late Antique and early medieval ecclesiastical texts from Rome documented, among other things, the activities and assets of the popes and the large Roman churches in the rural areas. The quality and quantity of the ecclesiastical writings varies through time. The most important of these sources is the *Liber Pontificalis* (see below here). Other written output includes inscriptions in Roman churches¹⁰¹, a letter by Pope Gregory the Great¹⁰², several papal registers and letters edited in the *Regesta pontificum Romanorum*¹⁰³, and episcopal canons¹⁰⁴. From the 10th century onwards another type of ecclesiastical source from Rome arose: monastic *bolla*. These bulls report on the possessions south of the city of monasteries based in Rome, and on the exploits of the newly arising aristocracy¹⁰⁵.

The first *bolla* originating outside Rome dates to the middle of 10th century: a concession of bishop Leon of Velletri to Demetrius de Melioso, dated to 945-946 AD¹⁰⁶. Another type of written ecclesiastical output in central Italy is provided by rural monastic registries. These would only surface in Tyrrhenian southern Lazio from the late 10th century onwards, after the foundation (in 1004 AD) of the large Basilian monastery of Grottaferrata and the rise of the smaller monastery of Villamagna (documentation since 976)¹⁰⁷. This process contrasts with northern Lazio, where rural monasteries had begun to create registers from the 8th century onwards, starting with Farfa¹⁰⁸. In the 9th century, the monastery of Subiaco, located to the east of the research area, started a register as well¹⁰⁹. From the 10th century onwards, the Registers of Montecassino were established¹¹⁰.

Starting in the late 10th century, and in larger quantities from the 11th onwards, secular (non-ecclesiastical/

non-monastic) sources became available for Tyrrhenian southern Lazio¹¹¹.

To conclude: the vast majority of written sources between the early and high middle ages were ecclesiastical, and stemmed from Rome. This first of all constitutes an interpretative challenge regarding their content: these written sources should be seen in the light of Church policies and interests prevailing at that time. The *Liber Pontificalis*, for example, should be read as a 'Leistungsnachweis' in the first place, as will be treated in detail in the next paragraph¹¹²: papal achievements may have been exaggerated in the texts. And secondly, the ecclesiastical dominance in written output may have implications for the interpretation of the regional settlement distribution maps. Until the 11th century the sources primarily stemmed from Rome and (in the 10th and 11th century) from distant (Farfa and Subiaco) and nearby (Grottaferrata) rural monasteries. This fact may constitute a spatial bias in the distribution of sites and interests: On the distribution maps, the well-documented areas closest to Rome, or the monastic centres, may experience a relatively larger site density than other areas, while this will not have been the actual situation on the ground at the time.

The reliability of data in the *Liber Pontificalis*

The *Liber Pontificalis* is the generic title of a collection of biographies of the popes from St. Peter onwards. Its title was a later, 12th century, invention. The *Liber Pontificalis* is a vital source for the study of the 4th to 9th century specifically¹¹³, but also subsequently during the high middle ages, even when more sources become available, containing information of the geo-political and economic situation and describing many sites, new foundations and transitions of ownership. The accuracy and reliability of the data in the *Liber Pontificalis* varies through time and should be discussed, in order this primary source to be correctly interpreted.

The authors of the *Liber Pontificalis* were probably Roman clerics, some of them connected to the papal court. Only in a few cases the author could be identified, mostly in the parts dealing with the 8th and 9th century. The accounts should not be seen as attempts to describe historical events or foundations. In the first place the texts were a 'Leistungsnachweis' of the lives of the deceased popes: most likely papal accomplishments were often inflated in the texts¹¹⁴.

The *Liber Pontificalis* was compiled in several phases: the first compilation took place in the early 6th century, the second probably at the end of the 9th century. It was later supplemented until the 15th century¹¹⁵.

The first compilation seems to have been a retrospective enterprise, stretching from the 4th to the 6th century. Herein the 6th century authors afterwards described the lives of popes, using the information available at the time. The general perception is that much of the listing of properties and churches was based on historical facts (archives), and that most of the information is accurate¹¹⁶. Some of the sites mentioned in these accounts can be confirmed by archaeological research and from other (later) sparse historical sources¹¹⁷. Davis stressed the improbability of the 6th century collector(s) having falsified these data.

Summing up the consequences for the interpretation of the data contained in the first compilation: Most of the information contained in the *Liber Pontificalis* is considered most likely accurate. Nevertheless, as regards the historical facts, some clear chronological mistakes can be observed. The information most certainly is incomplete, as the absence in the texts of some well-known churches built in this period proves¹¹⁸.

In the second compilation, covering the middle of the 6th to the 9th century, the descriptions of papal lifetimes at first were meagre and did not contain much information on properties and foundations. As from the pontificate of Honorius (625-638) onwards, the accounts seem to portray much more detail and historical-political accuracy¹¹⁹. This is certainly valid for the 9th century, during which several biographies already seem to have been started during the pope's lifetime¹²⁰. In sum, throughout the 7th to the 9th century the accuracy of the information is greater than before, at least regarding the ecclesiastical-political events of the papal reign. These actual episodes are relatively easy to verify. In some cases, the authors even seem to have had direct access to papal records or must have been close to the actual events in the papal court¹²¹. All through these years, however, the *Liber Pontificalis* quantitatively provided less information on properties and new foundations. These were no longer listed, but mentioned in passing in the description of events¹²². The entries of Zacharias (741-752) and Hadrian (772-797) are of special interest because these popes played a crucial role in the development of the Papal State. Furthermore, these were the popes whose Lives described the foundation of the *domuscultae*. Their Lives seem to have been compiled by someone with detailed knowledge of the events of that time; the information contained in them could be considered genuine with some consideration for possible copying errors.

Summing up the consequences for the interpretation of the data contained in the second compilation: although the number of specific sites described is smaller, the

verifiable accuracy of the events shows that most information is to be considered precise. The sites named in the *Liber Pontificalis* from the first quarter of the 7th to the late 9th century very likely have to be seen as historical reality¹²³.

Even when other ecclesiastical and civic sources become available from the 10th century onwards, the *Liber Pontificalis* remains an important source for the geo-political and economic situation of Rome and Lazio.

The elite dominated the written sources

Another generic point that should be made: The origin of written documents was usually to be found in the elite. The clergy and, from the 10th century onwards, the civic elite, both closely entangled groups at the high end of society, had had almost exclusive access to written sources, until the advent of communal archives in the 11-12th century¹²⁴. As a consequence, there is not a lot of direct information available concerning the common man, who largely remained outside the realm of text¹²⁵. This obviously constitutes a bias in the database and consequently in the academic perspective of the period. In the high middle ages the dominance of the elite in written documents is less pronounced. In high medieval treaties, concessions and complaints, aspects of life at the level of townsmen, peasants, shepherds and fishermen were documented. Moreover, through travel accounts merchants and pilgrims are better visible than in the early middle ages.

Overrepresentation of the 4th and 8th century in the written sources

The diachronic distribution of written sources poses a clear interpretative challenge: the 4th and the 8th century are overrepresented in the written (ecclesiastical) sources available to the current study. First of all, I rely heavily on the *Liber Pontificalis* for written evidence between the 4th to the late 7th / 8th century. There are several 4th century Lives in the *Liber Pontificalis* which provide a lot of data on ecclesiastical and papal ownership and building activities, and therefore give the 4th century much weight in the historical record¹²⁶. An example is the Life of Sylvester (315-335), which included a large number of donations by emperor Constantine, many of which are entered as a site in the database.

From the 5th and certainly from the middle of the 6th century onwards, the *Liber Pontificalis* provided less and less information on properties and foundations¹²⁷. Because of the dependence on the *Liber Pontificalis*, the overall number of available historical data drops. For the late 7th and 8th century more historical sources of church ownership are available, including a number of data rich inscriptions. The 8th century provides so much epigraphy

that, as a result, the 9th century is overshadowed in the database¹²⁸.

Another effect of this 4th and 8th century surplus of information is the overrepresentation of certain site types in these centuries. An example is the *massa*, a grouping of lands or farms, or an estate. This site type peaks in the database for the 4th and the 8th century. The *fundus* too, peaks in the 8th century. During the diachronic functional analysis of site types this overrepresentation should be taken into account¹²⁹.

Spatial overrepresentation of historical data

As was stated, coincidence constitutes a factor in the amount of available historical data, on account of the weight of a small number of data-rich sources. This not only causes the diachronic overrepresentation of the 4th and 8th century in the database, as seen above, it also causes a (synchronous) bias in the distribution maps. Gregory II's commemorative stone¹³⁰ may serve to illustrate this. The sites listed on Gregory II's stone should all be located in the wider area of Velletri¹³¹. As a result, the area around Velletri has a larger site density when studying the 8th century than other parts of the research area. The same is true for a concession dated to 946, which listed a relatively large number of sites that are all to be located in the wider area of *castrum Vetus*¹³².

Exemplary too is the donation in 1072 by Duchess Littefrida of Fondi of a number of villages to the monastery of Montecassino¹³³. The vast possession of this monastery in the Fondi hinterland, clearly visible on the site distribution map and in the maps of regional monastic interests¹³⁴, did not withstand in the next century. The event of 1072 therefore creates a one-off large patrimony of this monastery in this studies' research area. In the analysis it should be made clear that this event did not represent a permanent geo-political power shift in these parts – although it does imply a lot about the regional influence of the monastery of Montecassino in these centuries.

As has been explained, the use of key areas is one of the measures taken in this study in order to overcome spatial biases in source availability¹³⁵.

Unclear and changing meanings of historical terms

As Wickham pointed out¹³⁶, scholars have to be very careful in interpreting and classifying terms found in medieval texts when setting up site typologies or reconstructing settlement patterns. "Historians find villages identified by a vast number of terms — vicus, locus, fundus, villa, castrum, casale and so on; these are highly misleading as guides to settlement-patterns. Quite apart from the fact that in the charters at disposal from before 950, at least, these words were often interchangeable, and usually lost

their original meaning, even in Antiquity they denoted at best units defined by function, and not visible entities on the ground"¹³⁷. An interpretative challenge is therefore caused by the ambiguous or changing denominations of a number of historical terms throughout the studied period. In the current study area, these are for example *civitas*, *locus*, *massa*, *fundus*, *turrem* and *castrum / castellum*. The last two terms are important to the study of the process of *incastellamento*. In the 10th to 13th century the term *castrum* almost always pointed to an example of incastellisation. From the 14th century onwards, however, the term became more generally used, denoting any kind of fortress, with or without settlement. To complicate matters, in the 10th to 14th century, the word *castellum* was also used to describe an *incastellamento* project, but could also describe a fortified settlement of fortress, or ruins¹³⁸. It should be pointed out that I am often dependant on the interpretation of the (changing) denominations by other scholars. In Chapter 6, the issue of interpreting historical terms will be addressed in detail.

3.III The landscape of Tyrrhenian southern Lazio

This paragraph provides an overview of the status quo of research on the physical geography of the landscape under scrutiny.

With its large variation in geology, soil and relief, climate and drainage, and closeness to the sea, the landscape of Tyrrhenian southern Lazio is considered typically Mediterranean. The region has a variable environment with distinct contrasts between the coast, the plains and the mountains. Fertility and soil potential vary. This diversity is enhanced by its rivers, which have varying annual water and sediment loads. Periodical fluctuations of dry and wet conditions of the land occur throughout the landscape.

Climate

This part of southern Lazio is comprised of three climate zones, in which variations in rainfall and temperature basically are determined by proximity to the sea and the large differences in relief¹³⁹: the coastal plain with moderate temperatures, sparse precipitation and dry summers; the foothills with temperatures correlated to the orientation of the relief (seaward or inland), quite abundant precipitation and a less distinct dry period; and the mountain areas with very strong precipitation, moderate summer temperatures and low winter temperatures. Onshore winds prevail in southern Lazio, often shifting to correspond to the orientation of the valleys¹⁴⁰. There are often violent south-western winds, especially in the periods of

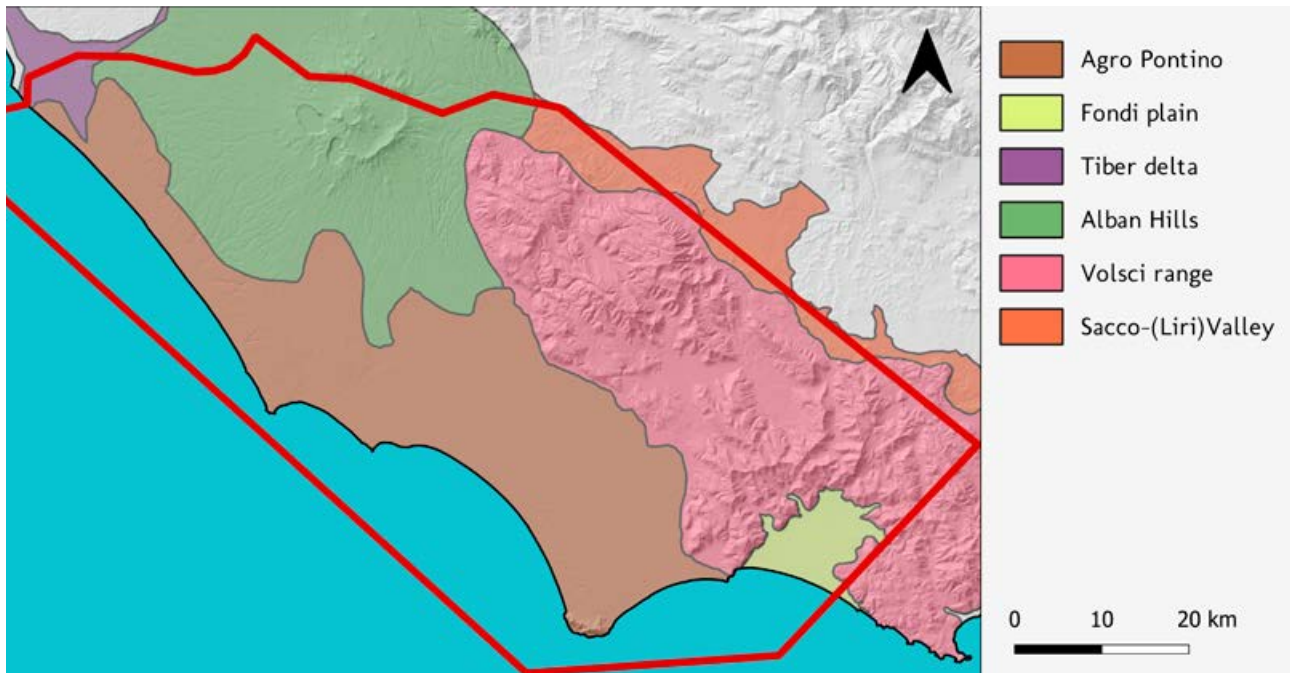


Figure 3.1. The six main landscape zones of Tyrrhenian southern Lazio. Based on Feiken 2016, fig. 2.2 and Sevink 1984.

the equinox, which render it dangerous to sail along the coast and round the promontory of Monte Circeo¹⁴¹.

Landscape zones

The research area can be roughly subdivided into six main landscape zones (see figure 3.1)¹⁴²: the coastal Agro Pontino, Fondi plain and river delta of the Tiber, and the inland Alban Hills, Volsci range (Lepine, Ausoni and Aurunci mountains) and Sacco valley.

Agro Pontino

The Agro Pontino consists of a coastal strip, further inland marine terraces, a lower central plain, the Astura Valley and the Monte Circeo. In the past, the wetland of this region was difficult to control. Because of the strip of coastal dunes and the low position of the central plain, the many watercourses stemming from the mountains and running through the plain did not easily drain into the sea. In the marshland that evolved, malaria posed a constant threat. The Romans set up a large-scale *centuriation* drainage scheme to control and agriculturally exploit the marshes. This included a central drainage/transportation canal (the *decennovium*) and a road (the *Via Appia*) through the heart of the plain. During the late Roman period and certainly after the decline of the Roman state structures, drainage problems increased¹⁴³. A number of temporary successful and failed reclamation projects were conducted in the Agro Pontino from the late Roman period onwards¹⁴⁴. In the 1930s large parts of the Pontine plain were finally drained during a number of extensive land reclamation projects, the so-called *bonifica integrale*. The main goals of these reclamation works were to expand

the total area of agricultural land, to create new employment and to reduce the threat of malaria¹⁴⁵.

The limestone and dolomite Monte Circeo is the most prominent feature of the westernmost Apennine ridge; this ridge also surfaces in Nettuno-Anzio plateau in the north-west of the Agro Pontino¹⁴⁶. Situated between this western ridge and the Volsci-range is the tectonic depression of the Pontine plain. Across this depression lies a northwest / southeast oriented fault line, of which the south-western part was lifted up forming a *horst*, while the north-eastern part was displaced downward, causing a *graben*. On the horst a complex of marine terraces has formed. The graben, situated between the Lepine Mountains and the marine terraces, hosts the lowland zone of the central Pontine plain. This central Pontine plain measures roughly 280km² and is filled up with Holocene sediments. Nowadays the plain is intensively exploited for vegetable cultivation and by industry.

The coastal strip north and east of Monte Circeo consists of a coastal strip with sandy beaches and a series of dunes and a number of lagoonal lakes. During the *bonifica* of the 1930s, the lagoonal marshland was largely drained; the lakes were made brackish in order to repel malaria mosquitoes by connecting them to the sea via sluices. Located more inland, there are three marine terraces, consisting of sandy elevated beach ridges and clayey lagoons¹⁴⁷. Here and there these marine sediments are covered by sandy Aeolian deposits. A large part of the coastal area and marine terraces is drained by the Rio Martino, a high medieval reconstruction of a presumably earlier Roman

canal. To the north, the Astura river and its tributaries drain part of the Alban Hills; its valley cuts through the marine terraces before reaching the sea at Torre Astura.

Fondi plain

Similar to the central Pontine plain, the Fondi plain is a lowland zone that evolved because of a *graben*¹⁴⁸. The area was filled with fluvial deposits from the Ausoni and Aurunci mountains. A large marsh and several lagoonal lakes developed here. With the reclamation works of the late 19th century, the marsh was drained by digging canals leading to the largest lake, which itself connects to the sea by canals at either end of the lake. Comparable to the Pontine plain, the Fondi plain is intensively exploited for agricultural production. The coastal area consists of a strip of sandy beaches and a series of dunes.

Tiber delta

The research area covers a part of the Tiber river delta. Traffic using this river to get to and from Rome used to be intense in Roman times and likely continued throughout the middle ages. Similar to many other great rivers, its delta has had a complex palaeo-environmental evolution¹⁴⁹. This has especially affected the wider area of the ancient town of Ostia, the harbour city of ancient Rome. Due to sediment deposition, the river mouth here has advanced roughly 3 kilometres to the west since Roman times. The depositions causing dune ridge development of the prograding coast can be found on the Laurentine coast until at least 20 km south of Ostia¹⁵⁰. Nowadays the coastal area around the Tiber mouth is intensively used, mostly for recreational purposes.

Alban Hills

The landscape zone of the Alban Hills can be subdivided into two subunits: The huge caldera at the centre of the Alban hill and the tuff stone area of the slopes radiating from the caldera. The Nemi Lake, the Alban Lake and the Valle Ariccia are the largest of a number of small craters that were later formed inside the old caldera. The soils on the central hills and its slopes mainly consist of a thick layer of tuffs and minor lavas, which are usually very fertile. The *peperino* tuff of the slopes offers a mineral-rich substrate that is considered particularly suitable for growing grape vines; olive culture is widespread there as well¹⁵¹. As is typical for volcanoes, the drainage radiates outwards from the central high point¹⁵². Rivers and rivulets drain to the east into the Teppia and Fossa del Foscarello, to the south-west into the Fosso Grande and Fosso Torto, to the north west in the Fosso di Malafede and the Tiber, and to the south into the Astura. The streams flowing from the Alban Hills carved out deep and narrow gorges into the tuff soils, which hinders movement through these parts;

this is especially the case at the tuff stone slopes to the west and south of the Alban Hills.

The Volsci range

The Lepine, Ausoni and Aurunci mountains together form the Volsci range¹⁵³, which itself is one of a number of parallel, north-west south-east orientated mountain ranges of the Apennines in central Italy. All three are limestone massifs, with altitudes up to 1000m (Lepine Mountains), 1150m (Ausoni) and 1500m (Aurunci). In these mountains, present-day settlement is concentrated on elevated positions in the valleys and along the foothills of the plains. These valleys and the foothills constitute the main agricultural areas. The central parts of the mountain ranges are largely unexploited and are forested over large areas. In the north-eastern part of the Lepine Mountains a large limestone plateau can be found. The Lepine and Ausoni Mountains are separated by the Priverno and Amaseno basins, which are filled with Quaternary sediments. Alluvial fan deposits originating in the Lepine Mountains are found along the footslopes of the Pontine plain (for example at Fossanova, Sermoneta and Sezze) and the Sacco Valley (at Patrica). Many rivers run through the Lepine and Ausoni mountain ranges; in the Aurunci mountains running rivers are almost absent¹⁵⁴.

Sacco Valley

The research area also covers a part of the Sacco valley, which borders on the steep limestone massif of the Lepine Mountains. The north-eastern parts of the Lepine maintains drain into the river Sacco, which flows through a broad floodplain. It meanders, continually eroding older deposits (tuffs, shales and sandstones)¹⁵⁵. To the south-east of the current research area, near Ceprano, the Sacco flows into the Liri river. From that point the floodplain is called the Liri Valley.

Endnotes

- 1 Note that for the retrospective study the “research period” is stretched towards the 20th century. Historical maps, like the Austrian maps of 1851, and first hand topographical observations by 18-20th century scholars can be primary sources as well. Sub-recent topographical sources and their interpretative challenges are dealt with, where needed, in the data analysis of Part II (Chapter 7). Cartography as a primary source will be treated in detail in Chapter 5.
- 2 See 1.I.1.
- 3 See 3.II.2.
- 4 See also 1.II.2.
- 5 Such as historical maps, treated in Chapter 5, and 18th to 20th century travel accounts and topographical inventories, treated where applicable in the data analysis (Part II, Chapter 7).
- 6 See 2.II.3.3.
- 7 See 2.II.3.2. and 2.II.3.3.
- 8 Fentress, Goodson & Laird 2005

- 9 See 2.II.2.
- 10 See also the map depicting all excavated late Antique and early medieval rural sites in Italy in La Rocca 2002, 262: the number of excavated early medieval sites in the currently studied part southern Lazio contrast strongly with the rest of Italy and especially northern Lazio and Tuscany.
- 11 Cancellieri 1985, 1987
- 12 Carpino, Giuliani & Luttazzi 1999; Luttazzi 2001
- 13 Corsi 2016, 334; Among the exceptions on this picture are the Salento (Arthur 2010), Biferno Valley (Barker 1995b), Tuscany (Valenti 1996, 2012), Tiber Valley (Potter 1979, Moreland 2005), the Volturno Valley (Hodges & Mitchell 1985).
- 14 Fentress, Goodson & Maiuro 2016
- 15 Attema, de Haas & Tol 2006; Tol 2012
- 16 See 7.I.1.3.
- 17 Tol 2012
- 18 Campagna, I. and R. 1978
- 19 Laurenti 1990, 261 ff.; Venditti 2011, 142
- 20 Coccia & Fabiani 1997; G.M. De Rossi 2001
- 21 Savignoni & Mengarelli 1901 and 1903
- 22 Gismondi 1955; Meiggs 1973; Paroli 1993; Ostia Antica website, 2006; Pensabene 2007; Pavolini 2016
- 23 Ciarrochi 1995, Torres 1998
- 24 Among others Bosi & De Minicis 1991 and Cancellieri & Ceci 2003; Pottery: Mazzucato 1993; Pannuzzi 1998; Leotta & Rinnaudo 2015
- 25 Lauro 1988; Claridge 1993; The Castelporziano series, among others Lauro and Claridge, 1998; Lauro 1988 and Lauro 1998 on Tor Paterno.
- 26 Fentress, Goodson & Mairuo 2016; see earlier Fentress *et al.* 2006-2010 yearly excavations reports, FOLD&R: 68, 96, 126, 169, 207.
- 27 Cassieri 1995, 2002; Fiocchi Nicolai 2015, 219-130
- 28 Becker 1998; Raaijmakers 2007
- 29 Ramieri 1995
- 30 Serangeli *et al.* 2009
- 31 Mazzucato 1987; Del Lungo 2001, 34-35; Pannuzzi 2009, 34
- 32 Bilde 2003
- 33 G. Lugli 1930
- 34 Wall facing techniques: Marta 1989 and Mauri 2007 (on Lanuvio and Ardea). Pottery: the series De Minicis (ed.), *Ceramiche di Roma e del Lazio*, with among others Pannuzzi 1994 and 2009 and the series L.Sagui (ed.), *Ceramica in Italia, VI-VII secolo*, especially Tortella 1998.
- 35 See also 7.I.1.1.
- 36 Some archaeological data on late Roman and medieval Terracina were published, however, among others in Comune di Terracina, 1983.
- 37 Much of what is on display in the museum of Castel Porziano has not yet been published, notably the archaeological contexts of the Forum Ware pottery found in the area.
- 38 The topographical study of the Pontine plain for the *Forma Italiae* (see below in the section) was divided into three geographical regions: Terracina (published in 1926 as *Anxur-Tarracina*), S.Felice Circeo (in 1928 published as *Circei*), and Sezze. The results of research in the latter area remain unpublished, which is unfortunate as the study comprised also “la parte principale delle palude Pontine, attraversata della via Appia, tra le fosse migliare 39 e 57, con le antiche stazioni di *Forum Appii e ad Medias*”, as described in the *Anxur-Tarracina* volume. The central Pontine plain after all, has undergone tremendous changes in the late 1920s and 1930s during the *bonifica* projects. In recent years, De Haas and Tol were the first to execute intensive field surveys in these parts, in the framework of the Minor Centres Project, see 7.I.1.8 and 7.III.1.8, following on the study by De Haas 2011. A second missed opportunity is the unpublished book by De la Blanchère, *La Via Appia e les terres Pontines*, on his extensive topographical research of the Pontine area carried out in the last quarter of 19th century, of which only one chapter was published. As Cancellieri pointed out, publications of both *Forma Italiae*'s Sezze volume and De la Blanchère's *La Via Appia* would not only have changed the research history of the area, and filled in blanks, but might also have changed or nuanced the negative –and by the fascists propagated- view of the Pontine plain as an almost void, swamped and unhealthy area, Cancellieri 1987, 41-42.
- 39 The former director of the Antiquarium Comunale di Nettuno
- 40 Some of this pottery was studied before, be it focused on late medieval material (Bosi & Romoli 1995).
- 41 The results of this study will eventually be published in the *Palaeohistoria*; on the results of recent studies on the late Antique and high medieval Astura settlement see Tol *et al.* 2018.
- 42 Lafon 2001
- 43 De Rossi 1971
- 44 De Paolis & Tetro 1986; Brandizzi Vitucci 2001; Cassatella 2003 and 2004.
- 45 Quilici 1990a-b
- 46 De Rossi 1981
- 47 Coste 1990 studies the complicated 11th to 17th century infrastructure in the Pontine area and surrounding regions, with a main focus on the Via Appia. He built his analysis mostly on historical sources, but also uses topographical-archaeological information.
- 48 Cecere 1989
- 49 Egidi 1980
- 50 Molteni 2003
- 51 Del Lungo 1996, 2001
- 52 For my research area the following volumes are of interest: Lugli, J. 1926. *Ager pomptinus 1: Anxur-Tarracina*; Lugli, J. 1928. *Ager pomptinus 2: Circei*; Brandizzi Vittucci, P. 1968. *Cora*; Piccarreta, F. 1977. *Astura*; Tortorici, E. 1975. *Castra Albana*; De Rossi, G.M. 1979. *Bovillae*; Morselli, C. & E. Tortorici, 1982, *Ardea*.
- 53 Below I will discuss in more detail the biases inherent to the way archaeological data in the *Forma Italiae* series were collected (3.I.2).
- 54 Voorrips *et al.* 1991
- 55 Attema, Burgers & Van Leusen 2010, 1 ff.
- 56 See also 7.I.1.1 and 7.I.1.2.
- 57 See also 7.I.1.1, 7.I.1.2. and 7.I.2.2. Theme: the economy and systems of redistribution.
- 58 Attema 1993; Attema & Van Leusen 1999; Attema & Van Leusen 2004; De Haas 2006 and 2011; Attema, De Haas & Tol 2011; Tol 2012; Attema, De Haas & Tol 2014; Tol *et al.* 2018. Attema, De Haas & La Rosa 2005 on Fogliano.
- 59 For an overview of the PRP project see the Minor Centres website [Accessed March 2019].
- 60 Attema 1993

- 61 Attema & Van Leusen 2004
- 62 Van Leusen 1998
- 63 Attema, Van Joolen & Van Leusen 2002; Attema, De Haas & La Rosa 2005
- 64 Tol 2005; Attema, de Haas & Tol 2006: this study incorporated much of the Liboni collection.
- 65 Attema, Derks & Tol 2010; De Haas 2011; Tol 2012
- 66 De Haas 2005 unpublished database
- 67 Generally, this means that after De Haas' re-study, all later material, specifically amphora ware and ARSW, has been recognised if collected. His conclusion is that for later periods (late Roman to medieval) some material might have been overlooked or wrongly interpreted (ARSW, Forum Ware?), Tymon de Haas, pers. comm. The work done by the GIA in Nettuno between 2003 and 2005 is incorporated into the current database, as far as the sites dating from the 2nd century onwards is concerned
- 68 Van Leusen *et al.* 2003/2004; Van Leusen, Tol & Anastasia 2010; Feiken 2011
- 69 Tol *et al.* 2014 on the project; on the medieval pottery: De Haas *et al.* 2017.
- 70 See 1.II.5.
- 71 These two areas are by far the best documented, having been the scene of long running field and pottery research by the PRP, allowing for an in-depth archaeological quantitative evaluation. For this reason I included the 2nd century record in the study of Nettuno-Anzio and Fogliano key areas in Chapter 7; in the other key areas, the used records start in the 3rd century. By including the 2nd century, more chronological depth could be applied to the study of the changes taking place from the late Roman period onwards.
- 72 See Attema & De Haas 2005, page 2 ff.
- 73 Among other publications the *Forma Italiae* volumes, Lafon 2001, Carpino, Giuliani & Luttazi 1999 (the report by the Gruppo Archeologico Toleriense), archaeological detail in Del Lungo 1996 and 2001.
- 74 Marta 1989; Esposito 1997; Mauri 2007
- 75 In the 2000s GIA has revisited the *Forma Italiae* sites that were still accessible, Attema & De Haas 2005
- 76 Zaccheo 1985
- 77 In this study OLIMsites 207, 284 and 286.
- 78 Additional dating on late Roman sites is mainly provided by amphorae, although their dating is often rather imprecise: Gallica 4/Pelichet 47: mid-1st-3rd c AD; Dressel 20: 1st-late 3rd c AD; Dressel 30: late 2nd - into 4th c AD; Ostia type XXII: late 1st - mid 3rd c AD; Africana I/II: late 2nd - late 4th c AD; LR North African: 4th c AD, Tripolitana I: 1st - 4th c AD.
- 79 Van Leusen, Tol & Anastasia 2010
- 80 De Haas 2005, 2006-1 and 2006-2
- 81 See among others Arena 2001 and Manacorda 2005 for Crypta Balbi, see also 1.I.1.
- 82 See 2.II.1 and 2.II.3.2.
- 83 Tol 2012
- 84 Christie 1991, 131
- 85 Early publications on *Forum Ware*: Whitehouse 1965; Hodges, Barker & Wade, 1980; Christie 1987; Patterson 1992.
- 86 Heres 1982; Bakker & Heres, 2006 website Ostia glossary. Also Torres 1998, 19.
- 87 Heres 1982
- 88 Marta 1989, 45 and Esposito 1997, 50 ff; earlier Nibby 1841, 281; this term was coined by 19th century scholars to describe all types of wall facing technique involving irregular and/or reused (tuff) blocks.
- 89 As explained in the introduction of Chapter 1, this study intends to critically assess as much as possible the original texts. Although it has been attempted to read all relevant written sources available, undoubtedly a few, maybe important ones, have been missed out on. This is not done purposely as part of an intentional or unintentional selection on my behalf. When a relevant primary source was not available in the original text, earlier historical interpretations in one of the overview studies were relied on.
- 90 Wickham 2005, 7
- 91 Several historical overview studies are particularly rich in annotated historical data, especially Toubert 1973, Coste 1990, Davis 1995, 2000, and 2007, Ployer Mione 1995, Del Lungo 1996, 2001, Brandizzi Vittucci 1998, Marazzi 1998a. Many of the primary sources treated in these studies appeared earlier in several elaborate (topographical and/or historical) overviews like Nibby 1838 (1868), Duchesne 1884 (1955), Alodi & Levi 1885, and Tomassetti 1927/1979. The *Forma Italiae* series too incorporated a lot of primary historical sources.
- 92 For example in the Astura text of 987 AD, see 7.II.1.1.
- 93 Moreland 1992, 116 ff.; La Rocca 2002, 7 ff; Wickham 2005, 7 ff. Since the 1970s, medieval written sources have been studied from a new perspective, in which they are more and more appreciated as products of their creators. Texts are seen as a way to express the social status of the people (often buyers) mentioned in them and as active elements in the social and control mechanisms of the medieval landscape. By formalising donation, for example, claims of others, or other generations, on property could be prevented. Moreover, mentioning people in sources bound them to the writer. As such, texts provided formalisation to newly evolved socio-political relations. Especially in the *incastellamento* phase, texts should be evaluated as carriers of such implicit socio-political information, see Moreland 1992. Due to the extensive scope of the current research it has not been possible to do a close reading of texts in the fashion of Moreland in his *Annales* approach of *incastellamento* of the Sabine area (Moreland 1992). See Moreland 1992, 116 on the degree material culture and text were instrumental in maintaining or changing social relationships.
- 94 2005, 7 and 383 ff.
- 95 See 7.III.2.2.1 Theme: a dynamic geo-political landscape.
- 96 Cf. note 93. An example of the importance of understanding the background of texts can be found in the 4th to 6th century sources, which often stress the deplorable state of countryside in the period. For example, the 5th century *Codex Theodosianus* explicitly counted the amounts of lands in disuse in the Campania, *CTh*, XI.28.2. The poet Rutilius Namatianus (beginning of the 5th century) portrayed the Tyrrhenian coastal cities as *mortalia corpora*. Rutilius, *De reditu suo*, I.413-414. As multidisciplinary research elsewhere showed, however, these developments often seem less dramatic than the sources insinuated. Christie 1996, 255 wrote that in some cases it might have been for political reasons that a troubling event in the countryside was exaggerated.
- 97 See in this section the paragraph *Overrepresentation of the 4th and 8th century in the written sources*.
- 98 See in this section the paragraph *Spatial overrepresentation of historical data*.

- 99 See Chapter 7.II.2.1, *An evaluation of results, sources and method used* (10-14th century), for a short heuristic discussion of the question if growth in recorded activity within the landscape is not partly caused by the availability of sources.
- 100 Up to the 5th century, in a few cases also later, the *Corpus Inscriptionum Latinarum* provided epigraphic evidence for activities within the landscape. Other examples of relevant non-ecclesiastical sources are the above mentioned Rutilis Namatianus (although the interpretation of these elegiac verses should be done with the upmost caution) and the 6th century accounts of Cassiodorus, who wrote among others about the draining of the Pontine plain during Theodoric, Cassiodorus, *Variae*, II.21, II.32.
- 101 For example an epitaph in the Santa Susanna, dated 687-701, in: De Rossi 1870, 89-112, see also Marazzi 1990, 120 ff; Several epigraphs of the St.Peter's and St.Paul's churches, dated 715-731; in: Marini & Mai 1831, 209-210.
- 102 Gregory, *Epp.*, XIV.14
- 103 For example Jaffe2206: register of Gregory II, 715-731; Jaffe 2581: a letter by Pope John VIII, 877 AD; Jaffe 3669 and Jaffe 3692, two charters of the monastery of S.Silvestre in Rome, 955 and 962 AD.
- 104 For example episcopal canon 149, *ColCan* III.149, dated 715-731.
- 105 For example, a *bolla* of the monastery of Sant'Alessio all'Aventino of 987 AD in: *Regesto di S.Alesio all'Aventino*, Monaci (ed.) 1904, 368. Other examples are provided by two charters of the monastery of S.Silvestre in Rome, 955 and 962 AD, Jaffe 3669 and Jaffe3692.
- 106 ASRSP.12, 73-80; Toubert 1973, 322, nr 1. This primary source, dated 9th of January 945-946 AD, holds the first reference to a *castrum* in the currently studied part of southern Lazio, "mons ad castellum faciendum", i.e. of the *castrum* *Vetus* (OLIMsite 133); see also 7.III.2.2., Theme: *incastellamento* in the analysis of Part II (Chapter 7).
- 107 On the foundation of Grottaferrata see Ambrogi 2013, 16 ff and Zagari 2014, On Villamagna see Fentress, Goodson & Maiuro 2016, 284 ff. and earlier Toubert 1973, 354. For the register of the latter monastery, see *Le pergamene del monastero di S. Pietro di Villamagna (976-1237)*. This monastery probably had no large-scale possessions or authority outside its territory. The monasteries in towns, like the Benedictine community recorded within the town of Fondi from the 10th century onwards, do not provide much written sources, at least not so early. The first reference to this monastery in Fondi dates to 979, *Lib Cens.* I, p.257-258, n. XXIV.
- 108 *Regesto di Farfa*, ed. Giorgi, I. & U. Balzani, 5 volumes. Rome, 1879-1892.
- 109 From the 9th century, the *Regesto Sublacense* holds valuable information on the study area, among others on the fate of several antique roads in the 9th and 10th century, which seem to have lost their ancient names in that period – see also 7.II.1.9.
- 110 Bloch 1986, 1336 ff. Partly published by the *Tabularium Casinensis* series.
- 111 Among others the *Codex diplomaticus Caietanus*, published as part of the *Tabularium Casinense* series; in this *Codex* there are references to the current study area from the 10th century onwards. The *Codex* originates in the 8th century. Other examples of secular sources are the 11th century *Documenti Terracinesi*, the 12th century *Chronicon Beneventanum*, the 12th and 13th century *Annales Ceccanenses* and the 12th to 14th century *Pergamene di Sezze* concerning the activities of the local judiciary of Sezze and the arrangements made in the interest of its commune.
- 112 Bauer 1999, 525
- 113 After that period, more sources become available and from the late 9th to halfway the 11th century the description of the lives of popes in the *Liber Pontificalis* is limited to a listing of the name and the duration of the pontificate. Between the middle of the 11th century and 1431 the *Liber Pontificalis* is continued in a more elaborate fashion.
- 114 Bauer 1999, 525
- 115 Davis 2000, xiii ff.
- 116 Davis 2000, xxvii and xxix; Davis convincingly showed that there are certainly errors in the lists, but that the main part of the information seems authentic. It should be realised that these actual donations may have inspired the 8th century forged imperial decree known as the Donation of Constantine. In this fake decree emperor Constantine allegedly transferred authority over Rome and the western Roman Empire to the pope.
- 117 For example, the foundation dates of the larger churches in Rome described in the *Liber Pontificalis* have been archaeologically verified.
- 118 Exemplary of such absence is the building of St. Pauls basilica in Rome, which was constructed during the pontificate of Pope Siricius (384-399).
- 119 Davis 2000, xiii
- 120 Davis 2000, xiii
- 121 Davis 2007, 107 ff.
- 122 Davis 2000, xlv
- 123 See Chapter 2.II.3.2: the domusculca Capracorum for example has been identified based on the texts in the *Liber Pontificalis*.
- 124 Civic elite documents became available from the 10th century onwards, see above in this section. A clear example of communal texts were the 12-14th century *Pergamene di Sezze*.
- 125 For a wider discussion of the issue of the more visible elite versus the "common man" see 7.III.2.1 the Evaluation of the 10-14th century in Chapter 7, and in the Synthesis, 8.II.1.1.
- 126 See also above in this section the paragraph on the reliability of data in the *Liber Pontificalis*.
- 127 Davis 2000, xiii
- 128 Epigraphic evidence includes an inscription in the S.Susanna (687-701, 4 database entries), De Rossi 1870. The most conspicuous of these sources is the commemorative stone of Gregory II, (715-731, 38 entries), Marini & Mai, 1831, 209. In total 11 of the 38 estates mentioned on the inscription have been (tentatively) located by me in the current study area, 8 of which in the Velletri – Le Castella key area.
- 129 The results of the study of site types will be treated in the definitions of Chapter 6 and in the data analysis (Part II, Chapter 7).
- 130 Marini and Mai, 1831
- 131 Cf. also Tomassetti 1979 I, 354 who assumed that all the estates on the inscription could be located in the wider Velletri area. On the overrepresentation of the Velletri – Le Castella key area in the database see 7.II.1.4.
- 132 A concession of bishop Leon, dated 945-946, ASRSP.12, 73-80. On this document, 32 fundi and 18 places are listed, 10 of which can be located.
- 133 *Tab.Cas.* II, 114, n. CCXLVII
- 134 See 7.III.2.2.1 Theme: a dynamic geo-political landscape.
- 135 See 1.II.4 and 1.II.5.

- 136 Wickham 1978a, 495 ff.
- 137 Wickham 1978a, 496
- 138 For more on the terminology associated with *incastellamento* see 2.I.9.1.
- 139 Feiken 2014, 4 referring to Blasi 1994
- 140 Feiken 2014, 93
- 141 Bianchini 1972, 7; Alessandri 2009, 474
- 142 The below overview on the geology, geomorphology and soils is based on Sevink 1984, De Haas 2012, and Feiken 2014, 13ff.
- 143 The historical sources show that in the 1st century BC the problems with the Pontine marshes (“*Pomptinae paludes*”) already had started, as by then these began to draw the attention of writers; for an overview of these Roman sources see Linoli 2005, 30. An exact date for the starting of drainage problems, however, cannot be given. De Haas 2003a, 9 described how the deteriorating drainage and enlargement of the swamps caused the abandonment of parts of the central Pontine region during the Roman empire, with the exception of the coastal zone and the area around Setia. On the increased environmental problems in the Pontine plain from the late Roman period onwards, see also Van Joolen 2003, 81 ff. The Fogliano lake area, like other low-lying coastal areas on the Peninsula, maybe already from the 2nd century onwards have suffered from an increase in alluvial depositions, causing the swamping of the area to accelerate; this may have been caused by deforestation of the mountains, Veenman 2002, 122.
- 144 For an overview of these efforts see Linoli 2005. The most famous reclamation project in the middle ages was executed during the reign of Theodoric, in the years 507-511. This involved a restoration of older waterworks, Sallares 2003, 190.
- 145 Attema 1993, 28; Linoli 2005, 39
- 146 Feiken 2000; Feiken 2014, 15
- 147 Feiken 2104, 15
- 148 Sevink *et al.* 1984
- 149 See Bellotti 2011
- 150 Bicket *et al.* 2009
- 151 For present day land use in the wider Alban hills see the Corine Land Cover 1990 raster data; For historical land use see Attema 1993, 52
- 152 A so-called radial drainage pattern, Feiken 2014, 14.
- 153 Parotto & Praturlon 1975, 263-266; Feiken 2014, 14
- 154 Due to karstic phenomena, Romano 2007, 18
- 155 Feiken 2014, 15

Chapter 4 Study of toponyms

This chapter will present the toponymic research that was carried out in cooperation with Sonia Pomicino¹. It defines the methodology that was adopted for this study and for the organization of the resulting data. This study resulted in a database of toponyms known from historical sources dated within the research period, and a list of cartographic toponyms dated between the 14th and 20th century. Appendix 4.1 will contain a list of all studied toponyms dated within the research period. In this basic version of the toponymic database the examples of toponyms mentioned in the text can be found².

Introduction

Toponymy, the study of place names, “can uncover important historical information about a place, such as the period of time the original language of the inhabitants lasted, settlement history, and population dispersal. Place-name study can also provide insight to religious changes in an area, such as the conversion to Christianity. Information about the folklore, institutional conditions, and social conditions of a place can be understood as well.” (Encyclopaedia Britannica)³.

The Italian *Topografia Antica* has a very long tradition of using place names for landscape research⁴. Although its merits are unmistakable, toponymic research is not easily executed. In the fields of contemporary geography and cartography, efforts are made to facilitate toponymic research through standardisation⁵. Historical toponymy, on the other hand, studying toponyms through time, has no standard method. In diachronic linguistic disciplines, for example, the evolution of place names is studied in many different ways; the common denominator of these studies being a high degree of etymological specialisation, involving philological study and semantics⁶. In our field of research, i.e. historical-topographical and archaeological studies, toponyms are often successfully used as a means to study settlement history, site function, environment and perceptions of the landscape. Within these very diverse studies, the evolution of local place names is combined with historical, archaeological and geographical information⁷; a detailed linguistic-etymological study of individual words is often refrained from.

The current study of toponyms is first of all directed at identifying place names within the research period, as

such pinpointing them in space and time - and preferably spotting them on a later (modern) map; the primary goal of identification, by linking toponyms to known features, and of location is to facilitate the study of sites and their history. By focussing on identification and location, and not on ancient origin and original connotation (meaning) of a place name, the degree of linguistic specialisation needed is reduced⁸. With this focus Pomicino and I follow the topographical-archaeological tradition of the *Forma Italiae* series and Del Lungo.

However, still some rudimentary etymology will be needed. In this study, it is tried to systematically find diachronic similarities of place names. For this purpose, a basic appreciation is needed of the standard linguistic processes that take place, by which place names can change. This involves knowledge of the phonological and morphological alterations that took place in languages, especially from Latin to vulgar Latin and to medieval Italian⁹, and the influence these changes may have had on the morphology/spelling (and meaning) of words in general, and thus of toponyms¹⁰. It is generally known that most changes evolved according to a fixed set of linguistic laws. Phonological change (*Surrisco* > *Sorresca*, *Sabellum* > *Savello*) for example is a well-studied process in Indo-European linguistics, especially in Germanic languages. The same applies to folk etymology, a process in which unfamiliarity with its original meaning can eventually cause a change of the spelling of a word. It needs to be taken into account as well that variations in toponyms may have occurred through the influence of other languages (most of all: Greek¹¹) and dialects¹². The frequent occurrence of misspellings, for instance by non-native speaking map makers, is another factor involved.

4.I Basic principles of the executed toponymic study

In order to gain as much as possible from the potential of toponymy, Pomicino and I set up a study based on a number of basic principles outlined in this paragraph. The essence of the study was the consistent examination of place names found both in written sources and on maps, as part of the retrospective approach. Both were scrutinised in the same way, as part of the same physical space of the landscape. This was done in a regional context and over a long period (from the 3rd to the 21st century¹³).

The locations of toponyms in written sources are often unknown; the idea was that linking these “historical” toponyms to toponyms on maps could be of help in providing spatial correlates. Cartographical place names are often more accurately pinpointed, although this also depends on the scale of the map. Furthermore, the study of cartographical toponyms could extend the time scope of the related features, often shedding light on the fate of sites after this study’s prime study period (3rd to 14th century), which could enhance the understanding of their function, and provide details on the natural environment surrounding them.

In order to examine the toponymic evidence in a correct way, toponyms were studied along the lines of their sources: We separately analysed the toponyms occurring in written sources, from here on referred to as historical toponyms and toponyms on historical maps, from here on referred to as cartographical toponyms¹⁴.

The core of this research consists of a broad linguistic study of similarities of all place names documented in the researched period (3rd to 14th century). The idea was that the systematic nature of this study would lead to more links between toponyms by morphological resemblance. Indeed, it resulted in a number of chronological strings of toponymic variations/derivatives which showed the possible stages of diachronic morphological development of a place name. An example of such a string of morphological transformations¹⁵ of a toponym is OLIMtoponym 206: *Sancta Maria in Surriscu* (591 AD) - *in Surriscu in qua est aeclesia Sancte Marie* (967 AD) - *cella Sancte Marie. In Suresco* (1050 AD) - *ecclesiam S.Mariae in Surriscu* (1050) - *In surrisco ecclesia sancte marie* (12th century) - *Ecclesia S. Mariae de Surreca* (12/13th century) - *loco qui vocatur Sancta Maria de Surreca* (1301) - *S.Maria della Sorresca a Gaeta* (1617-1635).

Moreover, per toponym all available background information present in the consulted written source or on the maps that record the toponym, was taken into account: source facts, site function, ownership, location, topography, nature of activity, meaning of or connotation to the term/place name, and other toponyms connected to the same location.

Another premise of the study was that the systematic monitoring of morphological similarities among toponyms and of the related information through time, first of all could help identifying/locating (historical) place names documented in the research period, and relating them to specific features in the landscape. It furthermore could benefit the study of the history of sites. The toponym combined with the related bordering text could

reveal much about function as well, for example on the functional change of a site from *castrum* to *casale*: the *cellam* [monastery] *quoque S.Maria de Veprosa cum castro* [...] *Nave* (996) later became *Casale Nave alias Verposae* (1392). The related information of ownership and local topography could also help validate the linguistic link that we might assume, for example in the case of *basilicam sanctiae Mariae* (492-496 AD, OLIMtoponym 199) and *ecclesiam sanctae dei genetricis semperque virginis Mariae* (795-816 AD, OLIMtoponym 245). Both churches to Maria were owned by the same owner (the Church) and roughly had the same location (20 miles from Rome), as could be read in related texts.

The semantic discussion of a certain place name was not the first aim of this toponymic examination, as this would involve too specialised a study. However, a simple scrutiny of the meaning of the word/place name, often aided by the input of earlier scholars, could be valuable in identifying and/or locating the toponym. For example, the toponym *piscaria grecesco* (1368 AD, OLIMtoponym 3) might be linked to the Monaci lake, where the Greek monastery of Grottaferrata had interests in the high middle ages. In cases where both the location of the toponym and meaning were known, the toponym greatly enhanced the understanding of the (perception of) landscape.

The traditional toponymic division of place names into categories of places of habitation (toponyms), water features (hydronyms), relief features (oronyms), street names (hodonoms) or inhabited places (microtoponyms) was not made in this study¹⁶. All place names were studied in the same way, as the focus of the study of texts was on finding toponyms relating to human activity in the landscape (sites). The idea behind the incorporation of names of all these earlier identified toponymic categories was that, in theory, the whole landscape might have been the arena of human activity at one point in time. Moreover, toponyms could hold valuable information on land use (potential) and environmental circumstances, and on the history of roads.

The study of contemporary toponyms relies heavily on the data produced in earlier work done in this part of southern Lazio, most prominently by Coste (1990), Davis (1992, 1995, 2000), Del Lungo (1996, 2001), De Rossi (1969) and Tomassetti (1927/1979). These data were reorganised, and the new toponymic analysis of this thesis, based on finding resemblances and looking for additional information, was built on them.

All toponyms on the 51 historical maps that were used, as presented in Chapter 5, were listed and studied. These cartographical toponyms generally date from the 14th century

(the oldest detailed maps containing readable toponyms) to the early 20th century, with the exception of the Tabula Peutingeriana (that originated in Antiquity)¹⁷. The inventory of cartographical toponyms included an analysis of cartographical details (the symbols used, environment, the size of sites etc) and, when possible, the interpretation/identification of the studied place name.

In sum, the primary benefits of performing this toponymic study were:

- the consistent study of toponyms in both written sources and on maps. A database of combined historical and topographical toponyms was built. Next to being a valuable foundation for the retrospective approach, this database has such wide scope that it has the potential to generate new connections between toponyms.
- the prolonged study period (3rd to 21st century), valuable in view of the long-term perspective of this study.
- the opportunity to find toponymic clues that may have been disregarded in earlier studies, by reading the original texts and studying the maps.
- the size of the database of (more than 4500) cartographical toponyms.
- the use of the detailed 1:5000 reconnaissance maps of the Agro Pontino¹⁸, realized between 1925 and 1932, which have never before been used as a historical toponymic source.
- the consequent analysis of additional and background data (details of the source, the location, the meaning of or connotation to the term, the nature of activity, ownership, site type/function and topography, and other toponyms connected to the same location) in written sources and on maps.

In using this structural approach, the tool of toponymy was utilised to the full to reconstruct activity within the studied landscape.

4.II A detailed set-up

In chronological order these were the steps taken in this study:

Catalogue. A catalogue was built of all toponyms in the research area dating back to the research period (3rd to 14th century). These were almost all found in written sources, as maps only became available in the 12th century¹⁹. Toponyms could point to human activity on a specific location (a site), but also to natural features. The *root* or *stem* of each toponym was established²⁰. This is the part of a word that is common to all its variants, but can be subject to morphological change through time. The stem was often indicated between brackets for reasons of clarity,

for example [*Roma*]. Per toponym an inventory was made of the date(s) of its record and all available background information as described above.

Assembly into toponymic strings. All (possibly) connected morphological variations/derivatives of a toponymic root were assembled. Together these formed a sequence of morphological transformations showing the possible stages of diachronic development of the particular place name. Such a sequence is called a *toponymic string*. An example is the stem [*Squezanell*]um, from which the toponyms *squizanello* and *schizzanello* evolve²¹. Together they form the toponymic string [*Squezanell*]um - *squizanello* - *schizzanello* (see OLIMtoponym 364). The entry of a toponym in a toponymic cluster indicates that this toponym is most certainly from the same stem/root²². In this study we speak of a *connection* between toponyms if they (possibly) share the same root. The cluster connection first of all becomes clear by the morphological similarity of the toponyms. There can be, however, secondary indications for linking toponyms to one single root, which were derived from geographical or functional clues in the original historical source in which the toponym was found. An example are the written sources describing the root [*sabel*]lo (OLIMtoponym 58), in which the phrase “vineam in fundo Sabello in territorio Albanese” (dated in 1017) clearly indicates that toponym *Sabello* is located near Albano, and therefore very likely can be connected to the sub-recent and modern toponym *Savello*.

As it would be excessive to the central theme of the current study to deal with all the etymological-linguistic aspects, the proposed morphological links between toponyms were seen as *tentative*, unless earlier research and other indicators, such as additional information on topography or ownership in the source, made a connection more certain. If there was a measure of uncertainty as to the morphological connection between separate toponymic roots, they were treated separately and cross-referred underneath each related toponymic string. The chance that this connection was true was assessed. Such connection were indicated by “(certain/probable/possible/tentative connection²³, see toponym...)”. The following example serves to illustrate this²⁴:

- 205 massa Juliana - Fundus Julianus (tentative connection, see toponym 302) – Giuliano (tentative 262) - castellum quod est in monte julianu (tentative connection, see toponym 348) - castrum iuliani (tentative connection, see toponym 266)
- 262 Giuliano - Fundus Julianus / Iulianus (possible connection, see toponym 302) - castellum quod est in monte julianu (tentative connection, see toponym 348) - massa Juliana (tentative connection, see topo-

- nym 205). Modern derivate toponym: Giulianello. Current toponym area / site: Giulianello
- 266 castrum iuliani - castellum quod est in monte julianu (tentative connection, see toponym 348) - Fundus Julianus / Iulianus (tentative connection, see toponym 302) - massa Juliana (tentative connection, see toponym 205). Modern derivate toponym: giuliano di roma. Current toponym area / site: Giuliano di Roma
- 302 Fundus Julianus / Iulianus - castellum quod est in monte julianu (tentative connection, see toponym 348) - massa Juliana (tentative connection, see toponym 205) - Giuliano (possible connection, see toponym 262) - castrum iuliani (tentative connection, see toponym 266). Modern derivate toponym: Giuliano? Current toponym area / site: Giuliano?
- 348 castellum quod est in monte julianu - Fundus Julianus / Iulianus (tentative connection, see toponym 302) - massa Juliana (tentative connection, see toponym 205) - Giuliano (tentative connection, see toponym 262) - castrum iuliani (tentative connection, see toponym 266)

Connecting roots to the same location (site).

More than one toponymic stem/root can be related to a singular location. This can be known through (earlier) historical study. An example is Roman *Lanuvium*, which in the high middle ages became known as *Civita Lavinia* and *Civitatis Novine* (OLIMtoponym 357). The different roots, in this case [*Lanuv*] and [*Civit*], should be split into separate toponymic strings. In case of different historical toponyms sharing the same location, these were cross-referred **underneath** each related toponymic string. Again, the level of certainty of this connection was assessed. A concrete example:

- 276 castrum qui dicitur monte gabum - Castrum [Roc] ce de [Papa] (possibly same location, see toponym 399). Current toponym area/site: Rocca di Papa?
- 399 Castrum [Roc]ce de [Papa] - castrum rocce pape - castrum qui dicitur monte gabum (possibly same location, see toponym 276). Modern derivative toponym: rocca di papa. Current toponym area/site: Rocca di Papa.

A spatial match of toponyms may also be read in the texts themselves, in cases where two different toponyms are mentioned in the same context. An example would be the reference to the church of “s.nicolao de’ neptuni” in Nettuno (1210 AD), which provided toponymic information about the roots [*s.nicol*] and [*neptun*]/[*nettun*]. If toponyms were related to the same location/site this was consistently noted in the toponymic string by making cross-references²⁵. For example:

- 22 [s.nicol]ao de’[neptun]i (see toponym 23). Current toponym area / site: Nettuno
- 23 Castrum [Neptun]i - castrum neptuni - Lettun - s.nicolao (see toponym 22) de’neptuni - Noctuno - noctuni - neptuni. Modern derivate toponym: Nettuno. Current toponym area / site: Nettuno

Relating the cartographical toponyms to the toponyms documented in the research period.

The list of historical toponymic strings was morphologically compared to the catalogue of cartographical toponyms. Whenever a historical toponym had a cartographical counterpart, the cartographical details of the toponym, like the used symbology, were explored, in order to identify and elucidate the location (for example its exact topographical position, the size of the site or the road type). This was done per historical toponym. This often provided a more profound understanding of the proposed linked location of the toponymic root in case. Thereby, some toponyms were given more historical depth (i.e. past the 14th century), and some could be located or relocated.

We should point out that a toponym may change location, usually nearby an earlier found location, as can be inferred from indications in the written sources or maps: the occurrence of such a transfer was noted. A useful example was transfer of the early medieval toponym *S. Donato* near the coast to the more inland *abbazia di S. Donato*, as documented in the 19th century (see OLIMtoponym 28).

IGM. Finally, every toponymic string was compared to the IGM database of modern toponyms²⁶ to specify its possible current position.

4.III Results

The first result of this toponymic study is a database of toponymic roots dating within the research period (3rd to 14th century). In total 431 roots/stems were studied. This amount could easily have been larger, as we are under no illusion to have found all existing toponyms written down during the studied period. Furthermore, this study’s choice to use separate strings is often necessarily arbitrary²⁷. The final database contains all contemporary toponyms, their diachronic morphological development and all additional data (dates of the variations/derivations, semantics of the name – if at all known, location, ownership, kind of activity, site type and details of the source). The database also includes all later variations/derivations of the toponymic strings found on maps. Every contemporary toponym related to human activity (= a site) is cross-linked to one or more specific site number(s) in the site database. Sites can be related to several toponyms, and

vice versa. A second result of the toponymic study is a list of cartographic toponyms, which includes cartographic details (like the symbols used for the –vicinity of the- particular place name and local environment) and interpretation/identification of very single place name.

The focal point of this study was to identify and locate, i.e. first of all linking toponyms to each other and secondly linking these to a known feature in the landscape. This twofold focus yielded valuable results. The consistent study of toponyms recorded in the study period has yielded a number of new (possible) connections, as such helping to identify or locate toponyms on related sites or to confirm earlier hypotheses on the identification or location of toponyms. Exemplary is the connection between *Fundus Casaromaniana / Casa Romaniana* (OLIMtoponym 318, OLIMsite 6) and *casale quod dicitur romanio* (tentative connection, see OLIMtoponym 85, OLIMsite 2: Castel Romano vecchio)²⁸. The toponymic study of the stem *formias* (OLIMtoponym 293) led to the hypothesis that the site of Satricum should be identified as a centre of the domusculata Formias²⁹.

The combining of contemporary historical and retrospective cartographical toponyms (12th to 21st century) delivered most results: toponyms on maps proved instrumental in locating sites mentioned in written sources. Regularly this identification was aided by topographical detail on 19th and 20th century maps. For example, the combined historical and cartographical toponyms and additional related information make a well-argued case for a connection of the former *castrum sancti petri in formis* (OLIMsite 3, mentioned in sources in 1224 and 1304) and the church / monastery *s.petri de forma, s.pietro in formis* (OLIMsite 278, documented 12-14th) to the toponym *s.pietro* depicted on maps in the area of Campo Morto (see OLIMtoponym 190 and 293)³⁰. The large set of IGM toponyms also proved very valuable to the (possible) location of older toponyms. For example, *Fundus Priscianus* (OLIMtoponym 312, OLIMsite 507) is tentatively connected to several IGM toponyms “presciano”, located 7,5 km south-west of Velletri³¹.

In Appendix 4.1, the list of found historical toponyms is presented. The complete digital database of historical toponyms from the research period, including literature and cross-references to the site database, and the list of cartographic toponyms can be consulted on the University of Groningen / UMCG research database (Pure), <http://www.rug.nl/research/portal>. Many of the factual results of this study will be found in the analysis in Part II (Chapter 7). An evaluation of the toponymic effort within the context of the retrospective approach shall be given in Part III Conclusions (Chapter 8)³².

Endnotes

- 1 Sonia Pomicino is an archaeologist who specialises in medieval text interpretation, epigraphy and topography, see for example Solin, H. and S. Pomicino, 2014 ‘Unomologa di CIL IX 990. Un caso di ripetizione?’, in: *Epigraphica* 76, 445-448.
- 2 In the text I refer to the number of each toponym preceded by “OLIMtoponym” (for example OLIMtoponym 206). The complete digital database of historical toponyms from the research period and the list of cartographic toponyms can be consulted on the University of Groningen/UMCG research database (Pure), <http://www.rug.nl/research/portal>.
- 3 Encyclopaedia Britannica, <https://www.britannica.com/science/toponymy> [Accessed January 20, 2017]
- 4 See e.g. G. Uggeri 1991, ‘Questioni di metodo. La toponomastica nella ricerca topografica. Il contributo alla ricostruzione della viabilità’, *JAT* 1, 21-36; G. Uggeri 2000. *Le fonti per la topografia antica: Il contributo della toponomastica alla ricerca topografica*, in: P.L. Dall’Aglia (ed.), *La topografia antica*, 119-132. For research in the tradition of the *Topografia Antica* in Tyrrhenian southern Lazio: Del Lungo 1996 and 2001.
- 5 See for example the website of the *Belgische Nationaal Geografisch Instituut* [<http://www.ngi.be/>, Accessed January 21, 2017]. See also the contributions to the regular *United Nations Conference on the standardization of geographical names*, for example F. Ormeling and A. Versloot 1992. ‘Toponymic Guidelines for map and other editors: the Netherlands,’ in: *Sixth United Nations Conference on the standardization of geographical names, 25 August-3 September 1992, vol.II, Technical Papers*, New York, 274-279. The UN has issued a Manual for the national standardization of geographical names (2006), online http://unstats.un.org/unsd/publication/seriesm/seriesm_88e.pdf [Accessed January 24, 2017]; see also N. Kadmon 2007. *Teaching Toponymy at University Level. Geographical Names, Maps and GIS*, *Onoma* 39, 275-287.
- 6 For example Cacciafoco, F.P. 2014. Beyond etymology: historical reconstruction and diachronic toponomastics through the lens of a new convergence theory, *Acta Linguistica* 8-3, 79-98; T. Laansalu and M. Alas 2013. Intercultural influences in contemporary Estonian settlement names, in: O. Felecan (ed.), *Proceedings of ICONN 2*, 339-356; see also the variety in contributions to the regularly held *Trends in Toponymy* conferences.
- 7 E.g. Tomassetti 1979, Moscatelli 1991, Coste 1996 and Del Lungo 1996 and 2001.
- 8 The study of ancient origin, meaning (semantics) or motive behind the naming of a place, and the etymological reason why individual toponyms change, all elements of traditional toponymy with a linguistic focus, is not the core of this study; such a full-blown etymological-semantically analysis would involve a level of specialisation for which this study’s time is too limited. See for example Perono Cacciafoco 2014, who uses historical phonetics, historical semantics, historical geography and landscape archaeology in tracking the ancient origins of European (mostly Italian) names.
- 9 A. Elliott, 1997. A brief introduction to medieval Latin grammar, in: K. Harrington, J. Pucci and A. Elliott (eds.), *Medieval Latin* (2nd ed.), Chicago, 1 ff; J. Herman and R. Wright 2000. *Vulgar Latin*, University Park: Pennsylvania State University Press, especially 27 ff. and 47 ff.
- 10 For a generic overview of these linguistic processes see P. Lehman 1993. *Historical Linguistics: An Introduction*, 3rd Edition, London and New York, 2 ff.

- 11 Greek was widely used in Lazio in the Byzantine period, see 2.I.4, 2.I.14 and 2.II.2.1..
- 12 During periods of intensive contact with other languages, place names can be subjected to phonetic transfer (the phonetic rendering by someone of a toponym from another in his own language) or to folk etymology, see <https://www.britannica.com/science/toponymy> [Accessed December 12, 2017] and Laansalu 2013 op.cit., 341.
- 13 The 21st century's toponymic information relates to the toponyms on modern IGM maps, see below 4.II. This study's catalogue of historical maps covers the 12th and 20th century, see Chapter 5.
- 14 For the results of the study of cartographical toponyms, see the University of Groningen/UMCG research database (Pure), <http://www.rug.nl/research/portal>.
- 15 As to the study of morphology in toponyms see for example E. Eggert 2010. Morphological variation in the construction of French names for inhabitants, in: F. Rainer et al. (eds.), *Variation and Change in Morphology: Selected papers from the 13th International Morphology Meeting, Vienna, February 2008*, Amsterdam, 75-88.
- 16 <https://www.britannica.com/topic/name> [Accessed December 13, 2017]
- 17 See 5.VI.
- 18 See 5.VI.
- 19 With the exception of the Tabula Peutingeriana, which has an earlier origin. See 5.VI on the status quo of research on the Tabula, which, as the latest studies show, maybe should not be interpreted as a map.
- 20 It goes too far to dwell upon the difference between root and stem. Suffices to say that a stem can be a root, like [Roma], but can also be more morphologically complex, such as in the word [romantic].
- 21 De Rossi 1969, 56
- 22 In some cases, however, certainly connected toponyms are treated separately, see also below in this paragraph.
- 23 Possible/probable/tentative connection: a connection is *tentative* if toponyms (roughly) have the same morphology, but there were no other clues available to confirm a toponymic match. *Possible*: in case toponyms got the same morphology and there were some indications that a connection is possible, for example in chronology or in approximate location in the same part of the landscape. An example is *fundus Cornelianus* - *fundus Corellianus* (OLIMtoponyms 328 and 408, both dated 715-731). *Probably*: in case toponyms got the same morphology and several clues combined made their connection certain; such clues may include: roughly the same date of appearance, same entity, same owner, topographical description of its location, same kind of source etc.
- 24 This example shows how intricate a possible connections can be: toponym 262 *Giuliano* and 266 *castrum iuliani* are the only with a certain location, respectively the modern villages of Giulianello and Giuliano di Roma. The other toponymic strings of OLIMtoponym 205, 302 and 348 may be related to one of these, or none. Only for toponymic strings 302, *Fundus Julianus* there was enough additional historical evidence to presume its location was the village of Giulianello (hence the possible connection), see Ployer Mione 1995, 62.
- 25 A location link was only created with toponyms that date to the study's prime study period (3rd to 14th century). For example, OLIMtoponym 211 S.[Angel]i was called *Mons Neptunius* in the 17th century; in this case, *Mons Neptunius* was not treated separately as toponymic string.
- 26 IGM, 2006, Database IGM Toponimi 25000 (tutta italia)
- 27 For example, not all affirmed connected toponyms are treated as one string but separately, whenever these toponyms refer to different site types – which could denote another site structure or size or (nearby) location. E.g. *massa steiana* and *fundus steianus*: the *fundus steianus* (OLIMsite 590, OLIMtoponym 325) was probably part of the *massa steiana* (OLIMsite 591, OLIMtoponym 334). See also 6.I.2 on the definitions of *fundus* and *massa*.
- 28 See 7.II.1.3.
- 29 See 7.II.1.1.
- 30 See 7.II.1.1.
- 31 See 7.II.1.4.
- 32 See 8.II.1.2.

Appendix 4.1

List of historical toponyms

In this Appendix the list of found historical toponyms is presented. The complete digital database of historical toponyms from the research period, including literature and cross-references to the site database, and the list of cartographic toponyms can be consulted on the University of Groningen/UMCG research database (Pure), <http://www.rug.nl/research/portal>.

Some remarks:

- Not all stems/roots are given brackets, this was only done for clarification if needed.
- Every case of clear root/stem change is indicated, for example from Roman *lanuvium* to 14th century *civita lavinia* (see OLIMtoponym 357).
- Transfers of a place name to another location are pointed out.
- If a root/stem relates to a road this is mentioned.
- Different manuscript versions of the same historical source are separated by a slash (/): *massa Fontiiana / Fontianam / Fortem ianum / Pontiianam* (see OLIMtoponym 247).
- Different site types found in the same historical source are also separated alike above: e.g., *massa / domusculta*.
- If a modern derivation/variation of the toponym is known, this is noted.
- If the current toponym of the location is known, this is noted.
- Uppercase and lowercase are used as found in the (original or edited) texts or on the maps.

All toponymic strings

- 1 ecclesia sancti eleutherii - lu prato de santo loterj - prugine salvatico della strata de santo loterj - tenuta de sancto lotieri. Modern derivate toponym: s. eleuterio (rudere). Current toponym area / site: s. eleuterio (rudere)
- 2 signia - signia - signium. Modern derivate toponym: segni. Current toponym area / site: segni
- 3 piscaria grecesco - lu gricisca - possessio Grecorum (tentative connection, see toponym 347). Current toponym area / site: lago dei monaci?
- 4 Sublanubio - Suelanubus
- 5 capella sancti romani - contrada furce sancti romani
- 6 cripta rubea
- 7 Moreni - massa [maren]i (possibly connected, see toponym 33) - massa murinas (tentatively connected, see toponym 373) - possessio Marinas (tentatively connected, see toponym 236) - castrum Morini (probably connected, see toponym 263). Modern derivative toponym: marino? Current toponym area/site: marino?
- 8 fundum Genzani - castrum Genzani. Modern derivative toponym: Genzano. Current toponym area/site: Genzano di Roma
- 9 mercatum vetulum supra silicem. Current toponym area/site: tor tre ponti?
- 10 Campo Normarum o castrum normarum (same location see toponym 130) in loco qui dicitur [Civita] - Civita della Penna d'oro - Rovine di Norba ora dette Civita de Penna - Norba ora Civita da Penna. Modern derivate toponym: civita. Current toponym area / site: civita
- 11 tribus tabernis - Tres tabernae
- 12 Forum appii- Appii foron- appii forum- foro appii - rocchetta- casarillo oggi detto di s.maria - forappio - frappio
- 13 [laurent]um - laurento - ager Laurens - in quo loco. sub civitate laurentum possessio patras (see toponym 369) - laurento - laurentum - vicus Laurentum Augustanorum - domusculta Lauretum (probably connected, see toponym 383)
- 14 [lavini]um - lanuvio - lavinium - lanuvium- possessio [Patra]s (same location, see toponym 369). Current toponym area / site: patrica di mare
- 15 Antium - antianum - antium - massa / domusculta Ant(h)ius (probably connected toponym 385) - fundus Antinianus (tentative connection, see toponym 400). Current toponym area/site: anzio. Modern derivative toponym: anzio.
- 16 s.crucis de pruno de pruno (see toponym 84). Current toponym area/site: prunio (ruderi).
- 17 [clostr]a romana - clostris - plostris- colostris - acufoliani cum ecclesia [san]cti [donat] (possibly same location, see toponym 28)
- 18 Ad Turres albas - turris - albas
- 19 Ad turres - turres - turris. Current toponym area / site: torre olevola?
- 20 turris camellaria - turris sancti sabae (same location, see toponym 356) - fundus camellianus (possibly connected, see toponym 358)

- 21 ecclesia Sanctae Marie Seu Salvatoris - isola di s.maria (possibly connected)
- 22 [s.nicol]ao de'neptuni (see toponym 23). Current toponym area / site: Nettuno
- 23 Castrum Neptuni – castrum neptuni – Lettun - s.nicolao (see toponym 22) de'neptuni – Noctuno – noctuni – neptuni. Modern derivate toponym: Nettuno. Current toponym area / site: Nettuno
- 24 San Cesario - s.maria ad martyres (same location, see toponym 97) - Fundus Caesarianus / Caesarianus (tentative connection, see toponym 316) - massa Caesariana (tentative connection, see toponym 391) - S.Cesario (tentative connection see toponym 332). Current toponym area/site: s.cesario (alle prebende). Modern derivative toponym: s.cesario (alle prebende)
- 25 de ecclesia [S.Martin]i de Annrificio / de Amirificio (see toponym 125\6). Current toponym area/site: Monte ambrifi
- 26 lacu [folian]i cum eclesia sancti donati (see toponym 28). - lacis & locus qui appellatur fuliano / fulianum - Lacis duobus unum qui vocatur foliano - Folliano - lacu folianensi - fundus Folianus (possibly connected, see toponym 413). Modern derivate toponym: Lago di fogliano. Current toponym area / site: Lago di fogliano.
- 27 campo qui vocantur sceri - Sancta Maria in [Surrisc]u (possible connection, see toponym 31). Modern derivate toponym: s.maria delle sorresca? Current toponym area / site: s.maria delle sorresca?
- 28 lacu foliani (see toponym 26) cum eclesia [san]cti [donat]i - seu caput lacis eclesia sancti donati - Flumicellum S. Donati - san donato - castrum diruti sancti donati - mura di san donato - S. Donato - abbazia di s. donato (transfer to another location?) - porcareccia di s.donato - [clostr]a romana (possible same location, see toponym 17) - lacu [folian]i (same location, see toponym 26). Modern derivate toponym: borgo s.donato / scopeto di s.donato?
- 29 loco qui dicitur [Zennit]um - Zenneti et dictis tenimentis ac Turri de Zenneti - Zennetum, parvulum casale tenimenti Nimphe - casali, turri et tenimento Zenneti
- 30 Ecclesiam [Salvator]is positam in Decimo (see toponym 73). Current toponym area/site: Decima
- 31 Sancta Maria in [Surrisc]u - cellam in Surrisco in qua est aeclesia Sancte Marie – surisce - cella Sancte Marie. In Suresco - ecclesiam S.Mariae in Surrisco - In surrisco eclesia sancte marie - insula Sorresca - loco qui vocatur Sancta Maria de Surreca - lacus Sorressi - campo qui vocantur sceri (possibly same location, see toponym 27). Modern derivative toponym: s.maria della sorresca. Current toponym area / site: s.maria delle sorresca, lago di paola
- 32 in sabellum – in sabellum - vineam in fundo sabello in territorio albanense (possibly connected, see toponym 58) - basilica sancti theodori (same location, see toponym 201) - domusculta sulphicianum / sulficianum (nearby location, see toponym 382). Modern derivative toponym: castel savelli? Current toponym area/site: castel savelli?
- 33 massa [maren]i - Moreni (possibly connected, see toponym 7) - massa murinas (tentatively connected, toponym 373) - possessio Marinas (tentatively connected, see toponym 236) - castrum Morini (possibly connected, see toponym 263) - fundus Maranus (tentatively connected, see toponym 416) - Fundus Maranus cum prato et turri (tentatively connected, see toponym 415). Modern derivative toponym: marino? Current toponym area/site: marino?
- 34 Nemorensis Lacus - castrum Nemus - massa nemus (probably connected see toponym 235)
- 35 Burgo de [Tuscolan]o - Castrum Burgi Montis Frenelli (same location, see toponym 59). Current toponym area/site: Castel Savelli (Borghetto)
- 36 castrum vetus - castrum vetus - castrum vecclum - castrum vetum iam diu dirutum - castrum quod dicitur vetus - Castrum Vetus..Castro Novo. Current toponym area / site: le castella?
- 37 Aricia - ciuitas aricia – Ariccia - castrum aricie- Castello Ariciense - Castrum Ariciensis - osteriaccia. Modern derivative toponym: ariccia, osteriaccia. Current toponym area/site: ariccia, osteriaccia
- 38 fundus surano - fundus soranianus
- 39 marmosole - marmosolio (transfer of toponym?) - malvitiolo – malvisciolo – valvisciolo - malvisciolo/ valvisciolo (other location, probably connected) - valvisciola (other location, probably connected). Modern derivatives toponym: valvisciolo. Current toponym area/site: Muro pecoraro (Ruderi) (marmosolio)? Valvisciolo
- 40 [Sarminet]um. Modern derivative toponym: Sermoneta. Current toponym area/site: Sermoneta
- 41 [s.mari]e di viano. Current toponym area/site: La Badia?
- 42 s.marie di [vian]o. Current toponym area/site: La Badia?
- 43 Gallienus. Current toponym area/site: sepolcro di gallieno
- 44 Cerqueti casalibus. Current toponym area/site: casale cerqueto. Modern derivative toponym: casale cerqueto
- 45 Castrum antiquum – castellione (same location, see toponym 54). Current toponym area / site: Castel di Leva
- 46 Flexu ad Portellas - castello di monticelli (same location or nearby, see toponym 48)

- 47 castrum novum - Castro Novo. Current toponym area / site: le castella
- 48 castello di monticelli- Flexu ad Portellas (same location or nearby, see toponym 46). Current toponym area / site: monte s.biagio
- 49 roccam - roccaburga. Modern derivative toponym: Roccagorga. Current toponym area/site: Roccagorga
- 50 Fabrateria – Febraterie - ciccianense castellum (same location, see toponym 69). Current toponym area / site: ceccano
- 51 via quae venit de Moreni iuxta silva et veniente in silva transversa. Modern derivative toponym: Le Selve Vecchie, Selve Nuove. Current toponym area/site: Le Selve Vecchie.
- 52 Lariani cum turre et arce. current toponym area/site: Castel d'Ariano. Modern derivative toponym: Castello d'Ariano, Lariano
- 53 Mons qui voc(atur) Paulell(i) - Castro quod dic(itur) Pauli - in loco qui dic(itur) Pauli -(in ecclesia) Castrum quod Pauli dicitur - prope Castellum..de Paolo - tenimentum castrum Pauli - loci seu castrum diruti Pauli nuncup(ati) - prata (meadows) que appellantur pauli (nearby location, see toponym 274) - massa Pauli (possible connection, see toponym 395) - Casalis Turri domini Pauli (probably connected, see toponym 88). Modern derivative toponym: Castel De' Paolis. Current toponym area/site: Castel De' Paolis
- 54 casale quod vocatur Castellione - castrum Leoniscastel leone - castrum leanis - Castel di Leva - Castrum antiquum. modern derivative toponym: Castel di Leva. Current toponym area/site: Castel di Leva
- 55 Molaria deserta iacet – modern derivative toponym: Castel di molare. Current toponym area/site: castel di molare
- 56 Massam Fusanum- s.mariae de Fusano- castrum fusani - castrum sive Casalis Fusane - Fusano - tenuta di castel diruto fusano&tenuta det ta di castel Fusano, con casino... modern derivative toponym: Castel Fusano. Current toponym area/site: Castel Fusano.
- 57 castrum pircigliani - Sebastianus Castrum Porcigliano - castrum Porcigliani - Fundus Procilianus (possibly connected, see toponym 149). modern derivative toponym: Castel Porziano. Current toponym area/site: Castel Porziano
- 58 vineam in fundo Sabello in territorio albanense - in fundo et loco... Sabello (vineam posita in territorio albanense) - Castel Savelli - In sabellum (possibly connected, see toponym 32). modern derivative toponym: castel savello / savelli. Current toponym area/site: castel savello / savelli
- 59 Castrum [Burg]i Montis Frenelli - Borghetto - [Burg]o de Tuscolano (same location, see toponym 35). modern derivative toponym: Castel Savelli (Borghetto). Current toponym area/site: Castel Savelli (Borghetto)
- 60 Oppidum Sancti Silvestri in Maritimis. Modern: Colle medico?
- 61 castrum algidum - Massa Algisia (tentatively connected, see toponym 134). Current toponym area/site: Monte Castellaccio?
- 62 in monte qui vocatur Crescentuli (see toponym 67) ecclesiam unam in integro que est [S.angel]i. Current toponym area/site: Monte Crescenzo
- 63 ROAD Via que venit de Moreni iuxta silva - via antiqua silicata - via delli cavoni - via marittima e doganale. Modern derivative toponym: Via Cavona
- 64 SS.trinità - San bartolomeo dei Valloni (same location, see toponym 150). Current toponym area/site: Acqua della chiesa
- 65 fundus qui vocatur civitella. Modern derivative toponym: Civitella? Current toponym area/site: Civitella?
- 66 Monte due torri – francavilla (same location, see toponym 107). Modern derivative toponym: monte due torri. Current toponym area/site: monte due torri
- 67 in [mont]e qui vocatur [Crescen]tuli ecclesiam unam in integro que est S.angeli (see toponym 62). Modern derivative toponym: Monte Crescenzo. Current toponym area/site: Monte Crescenzo
- 68 Valle Marciana/o - Balle marciana - ecclesiam disertam que vocatur S.Petri (same location or nearby, see toponym 151). Modern derivative toponym: valle marciana. Current toponym area/site: valle marciana
- 69 ciccianense castellum – Fabrateria (same location, see toponym 50). Modern derivative toponym: ceccano. Current toponym area/site: ceccano
- 70 basilicam sancti teodori martyris in coranis (see toponym 241)
- 71 Fundum soleluna- Solluna. Modern derivative toponym: Sole Luna. Current toponym area/site: Sole Luna
- 72 mutatio ad nono
- 73 castrum pontis decimi- castellum decimi- Ecclesiam Salvatoris (see toponym 30) positam in Decimo. Modern derivative toponym: Decima. Current toponym area/site: Decima
- 74 Ponte di nona
- 75 S.Maria in palatiolis - monasterio s.marie de palatiola albanensis. Modern: Palazzolo
- 76 Casale Palumbario - tor colombaro - ecclesia deserta in hon(ore) S.Maria dei genitricis (same location or nearby, see toponym 77). Modern derivative toponym: Casale il Palombaro. Current toponym area/site: Casale il Palombaro.

- 77 Ecclesia deserta S. Mariae dei genetricis - Casale Palumbario (same location or nearby, see toponym 76). Current toponym area / site: barette de prete? casale il palombaro?
- 78 possessio in sassone. Modern: Sassone
- 79 castrum maleaffectum- malaffitti dirutum et inhabitatum. Modern derivative toponym: Sorgente Maleaffitto. Current toponym area/site: Muraccio
- 80 fiorano – fiorano- fiorano – fiorano - campo alexandri (located nearby, see toponym 345) - Fundus Sanctorum Andreae et Gregorii (located nearby, see toponym 346). Modern derivative toponym: Casale di Fiorano. Current toponym area/site: Casale di Fiorano
- 81 turris..in Falconiano - Falcognana. Modern derivative toponym: Falcognana (di sotto e di sopra)
- 82 in morenico narrano - corte de moreni - curte qui vocatur morrei - casale mureni - terra que vocatur Marani (tentatively connected, see toponym 218). Current toponym area/site: casale morena. Modern derivative toponym: casale morena
- 83 S. Maria delle Canne - Fundus Canianus / Canianus (tentatively connected, see toponym 309). Current toponym area/site: le monache?
- 84 castrum pruni – s. crucis (see toponym 16) de pruno. Current toponym area/site: prunio (ruderi). Modern derivative toponym: prunio (ruderi)
- 85 casale quod dicitur romanio - Castel romano - Castel Romano (nuova) (transfer to a location nearby) - Fundus Casaromaniana / Casa Romaniana (possible connection, see toponym 318). Modern derivative toponym: castel romano. Current toponym area/site: castel romano
- 86 montelungum. Current toponym area/site: mura di montelungo. Modern derivative toponym: mura di montelungo
- 87 paterni. Current toponym area/site: Tor paterno. Modern derivative toponym: Tor paterno
- 88 Casalis Turri domini Pauli - Mons qui vocatur Paulell(i) (probably connected, see toponym 53) - massa Pauli (possibly connection, see toponym 395) - prata que appellantur pauli (possibly connected, see toponym 274) - casale d(omi)ni Pauli Bartholome(i) (probably connected, see toponym 430). Modern derivative toponym: Tor Messer / Ser Paolo. Current toponym area/site: Tor Messer / Ser Paolo
- 89 fossam que dicitur vaianicum - Torre de Valanico - massa [Fonteian]a (same location or nearby, see toponym 386)
- 90 [stora]s – astura - Satura, inter antium et cerceos, eadem Stura – Astura - isturas- loco qui dicitur Astura - campo qui vocatur astura - insulam de Astura - insula Asturie - Astura cum turri ac porto Asturae - fundus Saturnianus (tentatively connected, see toponym 355). Modern derivative toponym: torre astura, fiume astura. Current toponym area / site: torre astura, fiume astura. Modern derivative toponym: torre astura, fiume astura.
- 91 Casale quod dicitur Acqua sottterra - Casale della torre detta di acqua Sotterra - Fundus Maranus cum prato et turri (same location, see toponym 415). Current toponym area/site: Torre dell'Acqua Sotterra, il torraccio. Modern derivative toponym: Torre dell'Acqua Sotterra
- 92 morulum. Current toponym area/site: morolo. Modern derivative toponym: morolo
- 93 Torre boacciana - Turris civitatis Ostiensis que tiberino flumini imminet. Current toponym area/site: Torre boacciana. Modern derivative toponym: Torre boacciana
- 94 Castrum castellucciae - castrum lutiae - Castellutia.. iuxta territorium Castri Candulphorum - castrum castellutiae. Current toponym area/site: Castelluzza. Modern derivative toponym: Castelluzza, Torre Castelluzza
- 95 Fossanova – fossanova – fossanove. Current toponym area/site: fossanova. Modern derivative toponym: fossanova
- 96 Ecclesia S. Angeli - Macchia di torre. Current toponym area/site: Macchia di torre
- 97 s.maria at martyres – s.cesario (same location, see toponym 24). Current toponym area/site: s.cesario (alle prebende)
- 98 isilvam de vetera. Current toponym area/site: selva di vetera. Modern derivative toponym: selva di vetera
- 99 castrum sancti [felic]i. Current toponym area/site: s.felice circeo . Modern derivative toponym: s.felice circeo
- 100 tor di nona- casale di s. maria dell'ospitale - casa della torretta. Current toponym area/site: casa della torretta
- 101 turricellae. Current toponym area/site: Torretta. Modern derivative toponym: Torretta
- 102 monasterii S. Mariae in Gryptaferata. Modern derivative toponym: grottaferata. Current toponym area/site: abbazia di grottaferata
- 103 Petra aquara
- 104 Capo de aqua
- 105 Balle de aqua buia
- 106 loco ubi dicitur ad Acquam Vivam - chiesa diruta di acquaviva (same location?). Modern derivative toponym: (quarto dell')acquaviva

- 107 francavilla - Monte due torri (same location, see toponym 66). Current toponym area/site: monte due torri
- 108 [Acqua]m [viva]m – castellum quod nominatur acqaviva - acquaviba castello - castrum aquevive - aque vive. Current toponym area/site: Acquaviva. Modern derivative toponym: Acquaviva
- 109 [Aqua] [put]rida- aquis putzis- aquapuzza- aque putide- fortellicio aquapucze- arx putide - fossella putida (probable same location or nearby, see toponym 110) - Flumine Mortuo (probable same location or nearby, see toponym 164). Current toponym area/site: (monte) acquapuzza. Modern derivative toponym: acquapuzza
- 110 fossella putida - flumine mortuo (same location or nearby, see toponym 164) - orgiale (same location or nearby, see toponym 168) - Aqua putida (same location or nearby, see toponym 109)
- 111 Altire antiqua
- 112 Cavata antiqua
- 113 Flumen antiquum
- 114 Casale sito in Antico
- 115 vetere - Castello qui dicitur vetera – in vetera. Current toponym area/site: monte calvo di monte. Modern derivative toponym: Sorgente di Vetere, Vetrine
- 116 portelle- ad portellam - passus portellae - passo di portella. Current toponym area/site: la portella. Modern derivative toponym: (sorgente) la portella
- 117 cellam quoque S.Maria de Veprusa [...] cum castrum quod modo noviter aedificatur cui vocabulum est Nave (see toponym 423) - castrum quod dicitur Veperosa - castrum verbose - Casale Nave (see toponym 423) alias Verposae - castellaccio. Current toponym area/site: Casale and tenuta di Buonriposo. Modern derivative toponym: Casale and tenuta di Buonriposo
- 118 castellionem - campiliano - castrum leonis. Current toponym area/site: Casale Campoleone. Modern derivative toponym: Casale Campoleone
- 119 Casale quod vocatur Castellum [Unolct]i - Castrum Bolocti (possibly connected, see toponym 157). Current toponym area/site: monticchio??
- 120 castellum valentinum- ruderi di castel valentino - rov del castel valentino. Current toponym area/site: castello valentino. Modern derivative toponym: castello valentino
- 121 Tiberia- turri dirruta tiberie- thiberis- Castrum diruti Tyberie- castel tiberio- Tenuta e/o Muracci di Castellone. Current toponym area / site: (il) Castellone
- 122 loco qui dicitur Apranu –[...] qui cognominatur Asprana (possibly connected, see toponym 124)
- 123 castrum fusugnanum- Castrum Fusingianj dirutum – castellaccio - quarto del castellaccio. Current toponym area/site: Ruderi del castellaccio
- 124 [...] qui cognominatur Asprana – in castrum de Asprana..in locum ante Sancta Maria (see toponym 349) – Aspranum - S. Maria (see toponym 349) de Sperana - loco qui dicitur Apranu (possibly connected, see toponym 122). Current toponym area/site: Asprano. Modern derivative toponym: Asprano
- 125 Treve - Castrum Trebarum - Trebis. Current toponym area/site: Monte Trevi. Modern derivative toponym: Monte Trevi
- 126 castello de [ambris]e - castello ambrise - castrum ambrisie - de ambrisis - ecclesia S.Martini (see toponym 25) de Annrifio / de Amirifio - castrum ambrifii - ambrisi. Current toponym area/site: Monte ambrifi. Modern derivative toponym: Monte ambrifi
- 127 pesclum montanum- pischi montani - Fortellitius Pescoli Montani - Arce parvam nuncupatam Pesculum Montanum - torre di peschio mentano - casa mastrilli. Current toponym area/site: pisco montano. Modern derivative toponym: pisco montano
- 128 vallis ad centum guttas - balneum novum (same location or nearby, see toponym 129). Current toponym area/site: Cento colonne?
- 129 balneum novum - Vallis ad Centum Guttas (same location or nearby, see toponym 128). Current toponym area/site: Cento colonne?
- 130 [Nor]b[a]- massa Normas – Norma – Norma - campo Normarum o castrum normarum in loco qui dicitur Civita (same location, see toponym 6) - civita della penna d'oro- Rovine di Norba ora dette Civita de Penna- Norba ora Civita da Penna - piano di norba. Current toponym area/site: Civita, Norma. Modern derivative toponym: Norma
- 131 monte dofati- monte del fato - monte delle fate. Current toponym area/site: monte delle fate. Modern derivative toponym:monte delle fate
- 132 circei - circaeii – circeios - circeo - cerellos - carcellis - quaitanat al-arab - rocca circegi. Current toponym area/site: Monte circeo. Modern derivative toponym: Monte Circeo
- 133 mons [ferron]eus - Torre Ferronum - Feruniam cum aquimolis suis – Torre del Farrone - Fortezza delle Mole (same location, see toponym 231) – [feronia] (probably connected, see toponym 156). Current toponym area/site: Torre delle Mole, Monte Leano
- 134 Massa Algisia - castrum Algidum (tentatively connected, see toponym 61). Current toponym area/site: monte castellaccio?
- 135 fluvius [Nympha]eus - Ninfa - massa Nympha(e) / Nimphas / Nrifas / Nenisphas – Nimphas - territorio Nimfe - monasterii Sancti Angeli (see toponym 213) supra Nimpham - comune Nimphe - Turricella (see toponym 243) de Nimpha - tenimenti Nimphe - territorio Nimphe. Current toponym area/site: Ninfa. Modern derivative toponym: Ninfa

- 136 Ad fontem de fico
- 137 Plagarium de Fico
- 138 Molella
- 139 turris annibaldis - torre d'annibaldi - tor tipalda.
Current toponym area/site: Torre Ubaldo. Modern derivative toponym: Torre Ubaldo
- 140 Quercum pausatorium. Current toponym area/site: Passo della quercia del monaco. Modern derivative toponym: Passo della quercia del monaco
- 141 Cerqua revolosa - Cerqua rebalosa
- 142 Arborem Pirum
- 143 castra albana – ciuitas albana - castel Savello Albano. Modern derivative toponym: albano laziale. Current toponym area/site: albano laziale
- 144 Cantaro
- 145 Aqua de Bersa. Current toponym area/site: sorgente di vetere?
- 146 Piscaria.. cum criptis..
- 147 Castellum Ardeae. Modern derivative toponym: ardea. Current toponym area/site: ardea
- 148 locus Marcantrevola. Modern derivative toponym: Marcandrea. Current toponym area/site: Marcandrea
- 149 Fundus Procilianus – Castrum Pircilgiani (possibly connected, see toponym 57). modern derivative toponym: castel porziano? Current toponym area/site: castel porziano?
- 150 San bartolomeo dei Valloni - SS.trinitá (same location, see toponym 64). Current toponym area/site: Acqua della chiesa
- 151 ecclesiam disertam que vocatur [S.Petr]i - Valle Marciano (same location or nearby, see toponym 68). Current toponym area/site: valle marciana?
- 152 Campo lombardo. Modern: Campo lombardo
- 153 Massa Virginis
- 154 Massa Statiliana – possessio Statiliana
- 155 [set]ia - castrum quoddam, setium nomine - S. Luciae (see toponym 278) extra muros Setini - Castel Setino. Modern derivate toponym: sezze. Current toponym area / site: sezze
- 156 [feronia] – feronia - mons [ferron]eus (probably connected, see toponym 133)
- 157 Castrum [Boloct]i - Casale quod vocatur Castellum Unolocti (possibly connected, see toponym 119)
- 158 supinum - castrum supini cum eius fortellicio. Current toponym area/site: supino. Modern derivative toponym:supino
- 159 me(n)tellanicum. Modern derivative toponym: montelanico. Current toponym area / site: montelanico
- 160 gabinianum. Modern derivative toponym: gavignanao. Current toponym: gavignanao
- 161 locus piscopio
- 162 Mons de Episcopo - Monte Episcopi
- 163 Altura Abbatis. Current toponym area/site: monticello
- 164 flumine mortuo - fossella putida (same location or nearby, see toponym 110) - orgiale (same location or nearby, see toponym 168) - locus aquaticum lo Morto (probably connected, see toponym 169)
- 165 fonte..papalis
- 166 Campum de Acqua Papae - Strata antiqua Acqua Papae - Saltus Acquae de Papa
- 167 Mola Monticuli- Moticchio- montichio - Torre del Montecchio - mola. Current toponym area/site: Monticchio. Modern derivative toponym: Monticchio
- 168 Orgiale – Fossella Putida (same location or nearby, see toponym 110) - Flumine Mortuo (same location or nearby, see toponym 164)
- 169 locus aquaticum lo Morto - flumine mortuo (probably connected, see toponym 164) - Fossella Putida (probably connected, see toponym 110)
- 170 collemedium. Current toponym area/site: castello di collemezzo (ruder). Modern derivative toponym: castello di collemezzo (ruder)
- 171 fundum Sancti Petri - Ecclesia S. Petri in formis (possibly connected, see toponym 190)
- 172 Murum Anticum- Murum Anticum. Current toponym area/site: Muro Antico? Modern derivative toponym: Muro Antico?
- 173 paludis [san]cti [leonard]i - molendinum hospitalis [san]cti [Leonard]I (tentative connection, see toponym 204)
- 174 sanctu archangelu. Current toponym area/site: (monte) s.angelo. Modern derivative toponym: (monte) s.angelo
- 175 Fundum duo amanti
- 176 Quarantula
- 177 Flumen de Septe Aque
- 178 petium terre ubi dicitur Duo Rigora.. - fossatum quod vocatur Duo Rigora - Dorriga scilicet - ad duo riga - Cicianum (same location or nearby, see toponym 180) - [molam] ubi iunguntur duo riva, Dorriga scilicet et Cicianum (same location or nearby, see toponym 196)
- 179 Duas Fauces
- 180 Cicianum - fossatum quod vocatur Duo Rigora (same location or nearby, see toponym 178) - [molam] ubi iunguntur duo riva, Dorriga scilicet et Cicianum (same location or nearby, see toponym 196)
- 181 Tripontium - S. Maria (see toponym 183) treponti – Treponti - rem de tre ponti - rem de tre ponti. Current toponym area/site: tor tre ponti. Modern derivative toponym: tor tre ponti
- 182 Raviniano
- 183 S. Maria treponti (see toponym 181). Current toponym area/site: tor tre ponti. Modern derivative toponym: tor tre ponti

- 184 Agripparia
- 185 fundum casale Cesarrau - massa Cesariana (tentative connection see toponym 391) - Fundus Caesarianus / Caesarianus (tentative connection see toponym 316) - S.Cesario (tentative connection see toponym 332)
- 186 Rigum Martinum - Rio del re Martino - Fossa di Augusto. Current toponym area/site: rio martino. Modern derivative toponym: rio martino
- 187 S. [Andrea] in Arenata (see toponym 197) - basilica beati Andraeae apostoli - S.Andreas in Silice - S.Andrea in Silice et Arenati - S.Andreas in Silice - Castrum Vecclum and Castra Sancti Andree - ultra sancti Thoma apostolo (same location as or nearby, see toponym 188). Current toponym area / site: le castella.
- 188 sancti Thoma apostolo - Fundus Sancti Thome apostoli - S.Tommaso - s.tomaso - basilica beati Andraeae apostoli (same location as or nearby, see toponym 187). Modern derivative toponym: santo tomaso? Current toponym area/site: santo tomaso?
- 189 Lago di Paola - ecclesia S. Pauli - Chiesa del casino di Paola. Modern derivate toponym: paola, lago di paola. Current toponym area / site: paola
- 190 [S. Pietro] de [Forma] (toponym 293) - ecclesia s.petri in formis - San Pietro in Formis - s.pietro in formis - tenimentum castris sancti Petri in Formis - Sanctum Petrum in Forma o in Formis - s.pietr.. - S.Petri Formis - fundum Sancti Petri (possibly connected, see 171)
- 191 San Salvatore de Meleto. Current toponym area/site: san salvatore?. Modern derivative toponym: san salvatore?
- 192 ecclesia..sancti clementis. Current toponym area/site: tenuta s.clemente?
- 193 Montis de Sancto Agapito. Current toponym area/site: Cima del Monte?
- 194 Pantanum Sancti Antonini
- 195 Haeccliam sanctorum.Filippi et Iacobi et Sancti Pastoris et Sancti Antonini
- 196 [molam] ubi iunguntur duo riva, Dorriga scilicet et Ciciarum - fossatum quod vocatur Duo Rigora (same location or nearby, see toponym 178) - Ciciarum (same location or nearby, see toponym 180)
- 197 S. Andrea in [Arenat]a - S.Andrea in Silice (see toponym 187) et Arenati. Current toponym area/site: le castella
- 198 regeta / regata
- 199 basilicam [sanct]iae Mariae .. in fundo crispinis (see toponym 221) - ecclesiam sanctae dei genetricis semperque virginis Mariae dominae nostrae (probably connected, see toponym 245) sita in Fonteiana (probably same location or nearby see toponym 246)
- 200 S. Juvenalis
- 201 basilica sancti theodori - in sancto theodoro - sabelum (same location, see toponym 32) - domusculta sulpicianum / sulficianum (nearby location, see toponym 382)
- 202 ecclesia sancti potiti iuxta lacum- ecclesie de sancti potiti - lacum sancti potiti. Modern derivative toponym: Lago di San Puoto. Current toponym area / site: Lago di San Puoto
- 203 monasterio sancti andree - massa Juliana (same location, see toponym 205)
- 204 molendinum hospitalis [san]cti [Leonard]i - paludis [san]cti [leonard]i (tentative connection, see toponym 173)
- 205 massa Juliana - monasterio sancti andree (same location, see toponym 203) - Fundus Julianus (tentative connection, see toponym 302) - Giuliano (tentative 262) - castellum quod est in monte julianu (tentative connection, see toponym 348) - castrum iuliani (tentative connection, see toponym 266)
- 206 Sancta [Maria] in Surrisco - in Surrisco in qua est aeccliam Sancte Marie - cella Sancte Marie. In Surrisco - ecclesiam S.Mariae in Surrisco - In surrisco ecclesia sancte marie - Ecclesia S. Mariae de Surrisca - loco qui vocatur Sancta Maria de Surrisca - lago di s.maria. S.Maria della Sorresca a Gaeta. Modern derivative toponym: s.maria della sorresca. Current toponym area / site: s.maria della sorresca, lago di paola.
- 207 ecclesia sancti Petri in Piperno (see toponym 417). Modern derivative toponym: Colle San Pietro. Current toponym area / site: Colle San Pietro
- 208 Sancti Viti - Ville sancti Viti - villa di S.Magno - Villa di Sancito. Modern derivative toponym: Villa San Vito. Current toponym area / site: (Fontana) Villa San Vito
- 209 Locum, ubi sancta Anastasia vocatur - sancta Anastasia - piscara qui esse videtur ad sancta Anastasia - ecclesiam sancte Anastasie - turris et flumen S.Anastasiae - castrum turris sancte Anastasie - turrim sancti Nastasii - Chiesa di S.Anastasio (tentative connection, see toponym 343). Modern derivative toponym: Torre S.Anastasia. Current toponym area / site: Torre S.Anastasia
- 210 Sancti Heliae - Sancti Helie de Annrificio - ecclesie Sancte Elye
- 211 S.Angeli - Montem Sancti Angeli - arx S.Angeli - rocca di S.Angelo - castel S.Angelo - S.Angeletto - Mons Neptunius - Monte della guardia. Modern derivative toponym: Monte S.Angelo. Current toponym area / site: Monte S.Angelo
- 212 Ecclesiam Sancti Angeli de Campo Mellis - Rovine di S.Angelo - S.Angelo diruto. Modern derivative toponym: Monte S.Angelo. Current toponym area / site: Monte S.Angelo

- 213 ROAD stratam sancti Angeli - monasterii Sancti Angeli supra Nimpham (see toponym 135) - la badia ninfana di s.angelo o del monte mirteto nei volsci - S.Angelo - Abbadia di S.Angelo - S.Maria di monte mirteto (same location, see toponym 230). Modern derivative toponym: S.Angelo (ruder). Current toponym area / site: S.Angelo (ruder)
- 214 ROAD Stratella Antiqua
- 215 ROAD Sylex - Silice antiqua - Silice / Silice antiqua - Silex - Via Silicis Portae Inferioris/ Via Silicis Portae Superioris - silice seu strata Appia - Appia Longarum..regina viarum (same road, see toponym 216) - ad Stradam (same road, see toponym 219). Current toponym area / site: via appia
- 216 ROAD Appia Longarum..regina viarum - silice seu strata Appia - Silice antiqua (same road, see toponym 215) - ad Stradam (same road, see toponym 219). Modern derivative toponym: via appia. Current toponym area / site: via appia
- 217 s. martina
- 218 terra que vocatur Marani - in Morenico Narrano (possibly connected, see toponym 82) - Fundus Maranus (tentatively connected, see toponym 416) - Fundus Maranus cum prato et turri (tentatively connected, see toponym 415)
- 219 ROAD ad Stradam – Sylex (same road, see toponym 215) - Appia Longarum..regina viarum (same road, see toponym 216). Current toponym area / site: via appia
- 220 ROAD Via Carraria
- 221 basilicam sanctiae Mariae (see toponym 199) in fundo [crispin]is
- 222 Ad Lautolas- Casale de Flexu (same location, see toponym 223). Current toponym area/site: Piazza Palatina
- 223 Casale de Flexu - loco qui vocatur Flexu- Piazza dei Palladini - Ad Lautolas (same location, see toponym 222). Current toponym area/site: Piazza Palatina
- 224 mutatio ad medias - loco qui vocatur mese - pantano de Mese. Modern derivative toponym: mesa - torre mesa. Current toponym area/site: mesa
- 225 [Caput] [Silic]em - ecclesia S.Mariae (see toponym 226) de Capite Silicis - contrata Capitis Silicis- s.m.in campo selte/selce - Capo di Selce - S.Maria a Caposelce - Capo Salcio - Due Ponti di Traiano. Modern derivative toponym: (Ponte) Caposelce. Current toponym area/site: (Ponte) Caposelce
- 226 Ecclesia S.[Maria]e de capite silicis (see toponym 225) - s.m.in campo selte/selce - S.Maria a Caposelce. Current toponym area/site: (Ponte) Caposelce
- 227 ponte de [Turr]i et a rivo de [Mussan]o. Modern derivative toponym: Torre Sessano / di Sassano? Current toponym area/site: casale e torre di sessano?
- 228 Rivo de Mussano
- 229 possessio Mefontis. Current toponym area / site: albano laziale
- 230 S.Maria di monte mirteto - monasterii Sancti Angeli supra Nimpham (same location, see toponym 213). Current toponym area / site: S.Angelo (ruder)
- 231 Fortezza delle Mole- Turres vero molendinorum - Turrium Molarum - Turris..prope molendina - Torre Ferronum (same location, see toponym 133). Modern derivative toponym: Torre delle Mole
- 232 s.nicola
- 233 possessio Fundanensis
- 234 possessio Amartianas. Modern derivative toponym: camartino? Current toponym area/site: camartino?
- 235 massa Nemus – Nemorensis Lacus (probably connected see toponym 34). Modern derivative toponym: (lago di) nemi? Current toponym area/site: (lago di) nemi?
- 236 possessio Marinas - massa murinas (possibly connected, toponym 373) - massa [maren]i (tentatively connected, see toponym 33) - Moreni (tentatively connected, see toponym 7) - castrum Morini (tentatively connected, see toponym 263) - fundus Maranus (tentatively connected, see toponym 416)
- 237 possessio Lacum Albanensis
- 238 campus lazzari. Modern derivative toponym: Torre di Lazzaria? Current toponym area/site: torre di lazzaria?
- 239 possessio lacum Turni. Current toponym area/site: laghetto
- 240 civitas patrica (see toponym 369) cum ecclesia S.Laurentii. Current toponym area / site: patrica di mare
- 241 cora rustica - basilicam sancti teodori martyris (see toponym 70) in coranis - Turricella (see toponym 242) de Cora. Modern derivative toponym: cori, torretta corana. Current toponym area/site: Cori
- 242 Turricella de Cora (see toponym 241). Modern derivative toponym: torretta (corana). Current toponym area/site: torretta (corana)
- 243 Turricella de Nimpha (see toponym 135)
- 244 fundum Picturas
- 245 ecclesiam sanctae dei genetricis semperque virginis Mariae dominae nostrae sita in Fonteiana (see toponym 246) - basilicam sanctiae Mariae (probably connected see toponym 199) [...] in fundo crispinis (probably same location or near, see toponym 221)
- 246 ecclesiam sanctae dei genetricis semperque virginis Mariae dominae nostrae (see toponym 245) sita in Fonteiana - massa Fontiiana / Fontianam / Fortemianum / Pontiiianam (probably connected, see toponym 247) - massa Fonteiana (probably connected, see toponym 386)

- 247 et massam Fontiiana / Fontianam / Fortem ianum / Pontiianam, qui cognominatur Paunaria (see toponym 387) - domusculta Lauretum (same location or nearby, see toponym 383) - massa Fonteiana (probably connected, see toponym 386) - ecclesiam sanctae dei genetricis semperque virginis Mariae dominae noastra sita in Fonteiana (probably connected, see toponym 246). Current toponym area/site: font.le renato?
- 248 curia de calvisavis - calvisciano (possibly connected) - domusculta calvisiana (possibly connected, see toponym 367)
- 249 S. Stefano in Colle - S. Stephani inside Colle Secciae - S. Lucia (same location, see toponym 278). Current toponym area / site: Sezze Romano
- 250 gurga. Modern derivative toponym: gorga. Current toponym area / site: gorga
- 251 colomnella - monte qui dicitur le rotecheta (same location, see toponym 260). Current toponym area/site: Monte Erdigheta
- 252 conca rutonda - Amphiteatrum Fundane civitatis (same location, see toponym 253). Current toponym area / site: fondi
- 253 Fundis - ciuitas fundis -- Fundis (peut) - Amphiteatrum Fundane civitatis - conca rutonda (same location, see toponym 252). Modern derivative toponym: fondi. Current toponym area / site: fondi
- 254 Rocca Turri Cassaro - Turrichia (probably same location, see toponym 256). Current toponym area/site: Torrecchia Vecchia?
- 255 Turrim de Pretaro- Turrim Pretate- Torre di Sezze- Torre Leonarda- Torre Pietra- Turrim Petrara- Torre di San Lidano. Modern derivative toponym: Torre Petrara; current toponym area / site: La Torre
- 256 Turrichia- Turracula - Turricola- Torreccla- tenimentum castru Torrecchie- Castrum..Torrecchia- Castello guasto de Torrecchia - Rocca Turri Cassaro (probably same location, see toponym 254). Modern derivative toponym: Torrecchia Vecchia. Current toponym area/site: Torrecchia Vecchia
- 257 velliter - territorio Velletrans(is). Current toponym area/site: velletri. Modern derivative toponym: velletri
- 258 Ribo de Scatii - Fundus Scazzi (possibly connected, see toponym 338)
- 259 Colle de Toco
- 260 monte qui dicitur le rotecheta - colomnella (same location, see toponym 251). Modern derivative toponym: Monte Erdigheta. Current toponym area/site: Monte Erdigheta
- 261 patrica - Castrum patrice Modern: patrica. (geen connectie met 369)
- 262 Giuliano - Fundus Julianus / Iulianus (possible connection, see toponym 302) - castellum quod est in monte julianu (tentative connection, see toponym 348) - massa Juliana (tentative connection, see toponym 205). Modern derivate toponym: Giulianello. Current toponym area / site: Giulianello
- 263 castrum Morini - castrimoenium (same location, see toponym 264) - massa [maren]i (possibly connected, see toponym 33) - Moreni (probably connected, see toponym 7) - massa murinas (tentatively connected, see toponym 373) - possessio Marinas (tentatively connected, see toponym 236) - fundus Maranus (tentatively connected, see toponym 416). Modern derivative toponym: Marino. Current toponym area site: Marino
- 264 castrimoenium - castrum Morini (same location, see toponym 263). Modern derivative toponym: Marino. Current toponym area site: Marino
- 265 Fossatum de Lectere - Littari
- 266 castrum iuliani - castellum quod est in monte julianu (tentative connection, see toponym 348) - Fundus Julianus / Iulianus (tentative connection, see toponym 302) - massa Juliana (tentative connection, see toponym 205). Modern derivate toponym: giuliano di roma. Current toponym area / site: giuliano di roma
- 267 castello de pastina – pastina. Modern derivate toponym: pastena. Current toponym area / site: pastena
- 268 castello qui dicitur ynola. Modern derivate toponym: lenola. Current toponym area / site: lenola
- 269 Fossatum Orlandi
- 270 Grotta[lazar]i - Campulazaro- tenimentum Campilazari. Modern derivative toponym: Campolazzero. Current toponym area site: Campolazzero?
- 271 de Hospitali
- 272 Ponte Lignicum
- 273 castello de campu de melle. Modern derivative toponym: campodimele. Current toponym area site: campodimele
- 274 prata que appellantur pauli - Mons qui voc(atu)r Paulell(i) (nearby location, see toponym 53) - Casalis Turri domini Pauli (probably connected, see toponym 88) - massa Pauli (possibly connection, see toponym 395)
- 275 Cripta Vascellum. Current toponym area site: Grotta vascello. Modern derivative toponym: Grotta vascello
- 276 castrum qui dicitur monte gabum - Castrum [Roc]ce de [Papa] (possibly same location, see toponym 399). Current toponym area/site: Rocca di papa?
- 277 S. Cecilia di Piombinara- S. Ceciliae de Plumbinaria

- 278 S. Lucia - S. Luciae extra muros Setini (see toponym 155)- S. Stefano in Colle (same location, see toponym 249) - Chiesa di S.Lucia (possibly connected, see toponym 342). Current toponym area/site: Sezze Romano
- 279 s.maria in selci - S. Maria in Selice. Current toponym area/site: valle s.maria?
- 280 retaria [terz]o / terno - pistercium- pistertium- castrum postertii / castrum pistertii- pistorio - pistorium. Modern derivative toponym: pisterzo. Current toponym area/site: pisterzo
- 281 sumnium sompnino - castrum somnini - sompninum. Modern derivative toponym: sonnino . Current toponym area/site: sonnino
- 282 civita [lavini]a - castrum [civitat]is novinae (certainly same location, see toponym 350) - [lanuvi]um (certainly on the same location, see toponym 357). Modern derivative toponym: lanuvio (retro denomination). Current toponym area/site: lanuvio.
- 283 magentia. Modern derivative toponym: maenza. Current toponym area site: maenza
- 284 castrum s.laurentii - laurentii castrum. Current toponym area/site: amaseno
- 285 berseus – preseï - castrum prosedi. Current toponym area/site: prossedi. Modern derivative toponym: prossedi
- 286 s.stephani castrum. Current toponym area/site: villa s.stefano. Modern derivative toponym: villa s.stefano
- 287 castrum castrî. Modern: castro (dei volsci)
- 288 sculcula – sculcula. Modern derivative toponym: sgurgola. Current toponym area/site: sgurgola
- 289 abbatte de rosallis - monasterium et abbas de rosillis- abbas de rescillis. Modern derivative toponym: I rossili. Current toponym area/site: I rossili.
- 290 ecclesia s.marie de turri²⁹¹ montefortinum. Modern derivative toponym: artena. Current toponym area site: artena
- 292 castello de vallecorsa - vallis cursa. Modern derivative toponym: vallecorsa. Current toponym area/site: vallecorsa
- 293 [S.Pietr]o (toponym 190) de [Form]a - ecclesia s.petri in formis - Sancti Petri in Formis - s.pietro in formis - tenimentum castrî sancti Petri in Formis - Sanctum Petrum in Forma o in Formis - S.Petri Formis - massa / domusculta Formia(s) (possibly connected, see 384)
- 294 Fundus Mucianus
- 295 Fundus Cosconis - Fundus Cosconi (probable connection, see toponym 336)
- 296 Fundus Praetoriolus
- 297 Fundus Casacatelli - fundus Casaculi (possibly connected, see toponym 405)
- 298 Fundus Rumellianus
- 299 Fundus Octavianus / Octabianus
- 300 Fundus Burreianus
- 301 Fundus Oppianus. Modern derivate toponym: colle l'oppi? Current toponym area / site: colle l'oppi?
- 302 Fundus Julianus / Iulianus - castellum quod est in monte julianu (tentative connection, see toponym 348) - massa Juliana (tentative connection, see toponym 205) – Giuliano (possible connection, see toponym 262) - castrum iuliani (tentative connection, see toponym 266). Modern derivate toponym: Giuliano? Current toponym area / site: Giuliano?
- 303 Fundus Vivianus. Modern derivative toponym: acqua vivola? Current toponym area/site: acqua vivola?
- 304 Fundus Cassis / Cassianus - Fundus Cassianus (probably connected, see toponym 326)
- 305 Fundus Solificianus - domusculta sulpicianum / sulficianum (tentative connection, see toponym 382) - fundus Sulpiciana (tentative connection, see toponym 381) - castrum sulpherate (tentative connection, see toponym 366)
- 306 Fundus Palmis. Modern derivative toponym: quarto palmetane? Current toponym area/site: quarto palmetane?
- 307 Fundus Sagari / Sagaris
- 308 possessio Balneolum
- 309 Fundus Canianus / Caninanus - S. Maria delle Canne (tentatively connected, see toponym 83). Modern derivative toponym: Monte canino? Current toponym area/site: Monte canino?
- 310 Fundus Carbonaria - fundus Corbianus (possibly connected, see toponym 378). Modern derivative toponym: Monte Carbolino? Current toponym area/site: Monte Corvino / Carbolino?
- 311 Fundus Floranus - Fundus Casaflorana / Casa Florana (possibly connected, see toponym 320)
- 312 Fundus Priscianus. Modern derivative toponym: presciano? Current toponym area/site: presciano?
- 313 Fundus Grassianus / Grassanus
- 314 Fundus Pascuranus
- 315 Fundus Varinianus
- 316 Fundus Caesarianus / Caesarianus - massa Caesariana / Caesariana (certainly connected, see toponym 391) - San Cesario (tentative connection, toponym 24) - fundum casale Cesarrau (tentative connection, see toponym 185) - S.Cesario (tentative connection see toponym 332)
- 317 Fundus Pontianus I - Fundus Pontianus II - Massa Pontiana (certainly connected, see toponym 333)
- 318 Fundus Casaromaniana / Casa Romaniana - casale quod dicitur romanio (possible connection, see toponym 85). Modern derivative toponym: castel romano? Current toponym area/site: castel romano?
- 319 Fundus Tatianus / Tattianus - fundus Tatianus
- 320 Fundus Casaflorana / Casa Florana - Fundus Florianus (possibly connected, see toponym 311)

- 321 Fundus Barranus
- 322 Fundus Cacclanus
- 323 possessio Quiriti / Quirini
- 324 Fundus Aquilianus
- 325 Fundus Steianus - Massa Steiana (certainly connected, see toponym 334)
- 326 Fundus Cassianus - Fundus Cassis / Cassianus (probably connected, see toponym 304)
- 327 Fundus Arcipianus
- 328 Fundus Cornelianus - fundus Corellianus (possibly connected, see toponym 408)
- 329 Fundus Ursanus
- 330 Massa Victoriolo / Victoriolas
- 331 Massa Trabatiana
- 332 S.Cesario - Fundus Caesarianus / Caesarianus (tentative connection see toponym 316) - massa Cesariana / Caesariana (tentative connection, see toponym 391) - fundum casale Cesarrau (tentative connection, see toponym 185)
- 333 Massa Pontiana - Fundus Pontianus (certainly connected, see toponym 317)
- 334 Massa Steiana - Fundus Steianus (certainly connected, see toponym 325)
- 335 Massa Neviana
- 336 Fundus Cosconi - Fundus Cosconis (probable connection, see toponym 295)
- 337 Fundus Paganicum. Modern derivative toponym: paganica, fontana paganica? Current toponym area/site: paganica, fontana paganica?
- 338 Fundus Scazzi - Ribo de Scatii (possibly connected, see toponym 258)
- 339 Fundus Paritorum
- 340 Fundus Papazano. Modern derivative toponym: quarto papazzano? Current toponym area/site: quarto papazzano?
- 341 ROAD Via Caiano
- 342 Chiesa di S.Lucia - S.Anastasio (located nearby, see toponym 343) - S. Lucia (possible connection, see toponym 278)
- 343 S.Anastasio - Chiesa di S.Lucia (located nearby, see toponym 342) - Locum, ubi sancta Anastasia vocatur (tentative connection, see toponym 209)
- 344 Aqua Capra / Crabra - Marrana dell'acqua Mariana
- 345 Campo Alexandri - Fundus Sanctorum Andreae et Gregorii (located nearby, see toponym 346) - Fiorano (nearby location, see toponym 80)
- 346 Fundus Sanctorum Andreae et Gregorii - campo alexandri (located nearby, see toponym 345) - Fiorano (probable nearby location, see toponym 80)
- 347 possessio Grecorum - piscaria grecesco (tentative connection, see toponym 3)
- 348 castellum quod est in monte julianu - Fundus Julianus / Iulianus (tentative connection, see toponym 302) - massa Juliana (tentative connection, see toponym 205) - Giuliano (tentative, see 262) - Giuliano (tentative connection, see toponym 262) - castrum iuliani (tentative connection, see toponym 266) - monte Giuliano (possible connection)
- 349 in castro de Asprana (see toponym 124)..in locum ante [Sancta Maria] - S. Maria de Sperana (see toponym 124). Current toponym area/site: asprano
- 350 castrum [civitat]is novinae - civita [lavini]a (certainly same location, see toponym 282) - [lanuvi]um (certainly on the same location, see toponym 357). Modern derivative toponym: lanuvio (retro denomination). Current toponym area/site: lanuvio.
- 351 fundus Viricaria
- 352 fundus Villa Pertusa
- 353 fundus Tessellata
- 354 fundus Silonis
- 355 fundus Saturnianus - Satura, inter antium et cerceos, eadem Stura (tentatively connected, see toponym 90)
- 356 turris sancti sabae - turris camellaria (same location, see toponym 20)
- 357 [lanuvi]um - castrum [civitat]is novinae (same location, see toponym 350) - civita [lavini]a stem change (same location, see toponym 282). Modern derivative toponym: lanuvio (retro denomination). Current toponym area/site: lanuvio.
- 358 fundus camellianus - turris camellaria (possibly connected, see toponym 20)
- 359 ecclesiam [sanct]ae [eufimia]e - turrem quae vocatur de Sanctae Eufemiae - ecclesiam sanctae eufemia cum turre - S.Fomia. Modern derivative toponym: torretta di s.eufemia. Current toponym area/site: torretta di s.eufemia (a.o.)
- 360 ecclesia / domusculta beati Edisti - massa Aratiana (same location, see toponym 361) - massa acutiana (same location or nearby, see toponym 362)
- 361 massa Aratiana - massa acutiana (same location or nearby, see toponym 361) - ecclesia / domusculta beati Edisti (same location, see toponym 360)
- 362 massa Acutiana - massa aratiana (same location or nearby, see toponym 361) - ecclesia / domusculta beati Edisti (same location, see toponym 360)
- 363 casale Mandra. Modern derivative toponym: torre, tenuta della mandriola. Current toponym area/site: torre, tenuta della mandriola
- 364 casale quod dicitur Squezanellum - casale quod dicitur Squezanellum. Modern derivative toponym: torretta di schizzanello, tenuta dello schizzanello. Current toponym area/site: tenuta dello schizzanello, torretta di schizzanello, quarto della torre.

- 365 castrum Montis Milioris - casale di monte migliore grande - c.di monte migliore. Modern derivative toponym: casale di monte migliore. Current toponym area/site: casale di monte migliore.
- 366 castrum [sulpherat]e - castrum sulforatae - castrum sulfuratella - zolferata castrum dirutum - casale turris zufuranae - fundus Solificianus (tentative connection, see toponym 305) - domusculta sulpicianum (tentative connection, see toponym 382) - fundus sulpicianus (tentative connection, see toponym 381) - domusculta calvisiana (possibile same location, see toponym 367). Modern derivative toponym: casale zolferata(lla), zolforata. Current toponym area/site: casale zolferata(lla), zolforata
- 367 domusculta calvisiana - curia de calvisavis (possibly connected, see toponym 248) - calvisiano (possibly connected) - castrum sulpherate (possibly same location, see toponym 366). Current toponym area/site: zolforata (area)?
- 368 ecclesiam sancte Petronelle - castrum petronille - casale di petronella. Modern derivative toponym: casale della petronella. Current toponym area/site: casale della petronella.
- 369 in quo loco..sub civitate laurentum (see toponym 14) possessio [Patra]s - civitas Patrica - civitas patrica cum ecclesia S.Laurentii (see toponym 240) - castro nostro quod vocetur Patrica - castri olim nunc reducti ad casale quod vocatur patrica - castri q.(ui) v.(ocatur) Patricha - Pratica - Pratica di Mare - [Lavinium] (same location, see toponym 14). Modern derivative toponym: patrica di mare. Current toponym area / site: patrica di mare
- 370 s.cyriaco - ante turrem S.Cyriaci - s.ciriaco
- 371 curtis quae cognominatur Draconis - turrem Ioannis de Petro que antiquo nomine appellatur Draconi - in loco q.d. Dragoncelli - Modern derivative toponym: casale di dragonella. Current toponym area/site: casale di dragonella
- 372 massa Auriana
- 373 massa Murinas - possessio Marinas - (possibly connected, toponym 236) - massa [maren]i (tentatively connected, see toponym 33) - Moreni (tentatively connected, see toponym 7) - castrum Morini (tentatively connected, see toponym 263) - fundus Maranus (tentatively connected, see toponym 416). Modern derivative toponym: marino?
- 374 massa Sentiliana
- 375 massa Urbana. Current toponym area / site: Anzio?
- 376 fundus Bacchanas / Vaccanas
- 377 fundus Beruclas
- 378 fundus Corbianus - Fundus Carbonaria (possibly connected, see toponym 310). Modern derivative toponym: Monte Corvino? Current toponym area/site: Monte Corvino / Carbolino?
- 379 fundus Orrea - fundus Horrea (probable connected, see toponym 414)
- 380 fundus Priminianus
- 381 fundus sulpicianus - domusculta sulpicianum / sulficianum (tentative connection, see toponym 382) - fundus Solificianus (tentative connection, see toponym 305) - castrum sulpherate (tentative connection, see toponym 366)
- 382 domusculta sulpicianum / sulficianum - fundus sulpicianus (tentative connection, see toponym 381) - castrum sulpherate (tentative connection, see toponym 366) - fundus Solificianus (tentative connection, see toponym 305) - sabellum (nearby located, see toponym 32) - basilicam sancti Theodori (nearby located, see toponym 201)
- 383 domusculta Lauretum - Laurentum (probably connected, see toponym 13) - et massam Fontiiana / Fontianam / Fortem ianum / Pontiiianam (same location or nearby, see toponym 247), qui cognominatur [Paunari]a (same location or nearby, see toponym 387). Current toponym area/site: tor paterno?
- 384 domusculta Formia(s) - massa Formia(s) - S.Pietro de [Forma] (possibly connected see toponym 293). Current toponym area/site: borgo le ferriere (Saticum)?
- 385 domusculta Ant(h)ius - massa Antius / Anthius - [antium] (probable connection, see toponym 15) - fundus Antinianus (tentative connection, see toponym 400). Current toponym area/site: Anzio?
- 386 massa [Fonteian]a - massa Fontiiana / Fontianam / Fortem ianum / Pontiiianam (probably connected, see toponym 247) - ecclesiam sanctae dei genetricis semperque virginis Mariae dominae noastra sita in Fonteiana (probably connected, see toponym 246) - Fossam que dicitur Vaianicum (same location or nearby, see toponym 89). Current toponym area/site: font.le renato?
- 387 et massam Fontiiana / Fontianam / Fortem ianum / Pontiiianam (see toponym 247), qui cognominatur [Paunari]a - domusculta Lauretum (same location as or nearby, see toponym 383)
- 388 massa Aquas Salvias
- 389 massa [Cammusti]s.. - Campum Barbaricum (located nearby, see toponym 390)
- 390 Campo Barbarico - Campum Barbaricum - fundus Curtianus (nearby location, see toponym 409) - massa Cammustis (located nearby, see toponym 389)
- 391 massa Cesariana / Caesariana - fundus Caesianus (certainly connected, see toponym 316) - fundum casale Cesarrau (tentative connection, see toponym 185) - San Cesario (tentative connection, toponym 24) - S.Cesario (possible connection see toponym 332)
- 392 massa Ciliana

- 393 massa Marulis - massa Marulis - massa Marulis - fundus Capitonis (nearby location, see toponym 404)
- 394 massa Ocrana - massa Ocris
- 395 massa Pauli - Mons qui voc(atur) Paulell(i) (possible connection, see toponym 53) - Casalis Turri domini Pauli (possible connection, see toponym 88) - prata que appellantur pauli (possible connection, see toponym 274)
- 396 massa Sestiana
- 397 massa Tertiana
- 398 fundus Ostilianus
- 399 Castrum [Roc]ce de [Papa] - castrum rocce pape - castrum qui dicitur monte gabum (possibly same location, see toponym 276). Modern derivative toponym: rocca di papa. Current toponym area/site: rocca di papa
- 400 fundus Antinianus - [antium] (tentative connection, see toponym 15) - massa / domusculta Ant(h)ius (toponym, tentative connection) - fundus Antonianus (possible connection, see toponym 401)
- 401 fundus Antonianus - fundus Antinianus (possible connection, see toponym 400)
- 402 fundus Beranus
- 403 fundus Bifurcus
- 404 fundus Capitonis - fundus Capitonianus - massa marulis (nearby location, see toponym 393)
- 405 fundus Casaculi - Fundus Casacatelli (possibly connected, see toponym 297)
- 406 fundus Casulam
- 407 fundus Cattia
- 408 fundus Corellianus - Fundus Cornelianus (possibly connected, see toponym 328)
- 409 fundus Curtianus - Campus Barbaricus (location nearby, see toponym 390) - massa Cammustis (nearby location, see toponym 389)
- 410 fundus Dometiorum
- 411 fundus Dostianus
- 412 fundus Flabis
- 413 fundus Folianus - lacu [folian]i (possibly connected see toponym 26)
- 414 fundus Horrea - fundus Orrea (probably connected, see toponym 379)
- 415 Fundus [Maran]us cum prato et turri - Torre della marrana - Casale quod dicitur Acqua sopterra (same location, see toponym 91) - fundus Maranus (possibly connected, see toponym 416) - terra que vocatur Marani (tentatively connected, see toponym 218) - massa mareni (tentatively connected, see toponym 33)
- 416 fundus [Maran]us - Fundus Maranus cum prato et turri (possibly connected, see toponym 415) - terra que vocatur Marani (tentatively connected, see toponym 218) - massa mareni (tentatively connected, see toponym 33) - possessio Marinas (tentatively connected, see toponym 236) - massa mareni (tentatively connected, see toponym 33) - castrum Morini (tentatively connected, see toponym 263). Current toponym area/site: Il torraccio, Torre dell'Acqua Sotterra?
- 417 [privern]um - privernum - ecclesia sancti Petri (see toponym 207) in Piperno - vestigia veteris priverni. Modern derivative toponym: priverno. Current toponym area/site: priverno, localita Mezzagosto
- 418 terracina. Current toponym area/site: terracina. Modern derivative toponym: terracina.
- 419 mutatio ad sponsas. Current toponym area/site: località Sole Luna?
- 420 castrum sanctae crucis - Rocca Siccum. Current toponym area/site: roccasecca. Modern derivative toponym: roccasecca
- 421 [cisterna] neronis. Current toponym area/site: cisterna (di latina). Modern derivative toponym: cisterna (di latina)
- 422 bobellas. Modern derivative toponym: boville
- 423 cellam quoque S.Maria de Veprosa (see toponym 117) [...] cum castro quod modo noviter aedificatur cui vocabulum est Nave - Casale Nave alias Verposae (see toponym 117). Current toponym area/site: Casale and tenuta di Buonriposo. Modern derivative toponym: Casale and tenuta di Buonriposo
- 424 castrum sancti ianuarii. Current toponym area/site: castellaccio
- 425 castrum quod dicitur turris de Candulphi. Current toponym area/site: castel gandolfo. Modern derivative toponym: castel gandolfo
- 426 cacumen - castrum cacuminis (?). Current toponym area/site: monte caccume. Modern derivative toponym: monte caccume
- 427 carpinetum - capinitum. Current toponym area/site: carpineto romano. Modern derivative toponym: carpineto romano
- 428 castrum conke - castro Conke. Current toponym area/site: borgo montello
- 429 castrum colisferi. Current toponym area/site: colleferro. Modern derivative toponym: colleferro
- 430 casale d(omi)ni Pauli Bartholome(i) - Casalis Turri domini Pauli (probably connected, see toponym 88). Current toponym area/site: tor (mes)ser paulo/pauli? Modern derivative toponym: tor (mes)ser paulo/pauli?
- 431 Ad Decimum

Chapter 5 A Retrospective analysis of historical maps

Introduction

In this chapter I shall present the historical cartographical sources of relevance to the studied area and what might be gleaned from these. My in-depth study of this particularly important source material is, in tandem with the previous chapter on toponymy, part of the retrospective approach of my thesis on the analysis of the landscape between 3rd century and the 14th century AD. The general idea is that certain aspects of the studied landscape documented in the historical maps of the period 12th-early 20th century can shed light on those same aspects regarding the ancient Roman and medieval landscape either in terms of continuity or transformation. Historical cartography may tell the contemporary spectator how the ancient landscape functioned and evolved, and wherever and however people lived and travelled within it. It might show how the landscape was adapted through time to new demands or if it fell back to a former state. The analysis of historical cartography thus might reveal environmental aspects, economic uses and socio-economic differentiation inherent to the landscape, while giving detailed insight in urban and rural realities and regional infrastructure.

The chapter will start with an introduction of historical cartography as a means of reconstructing ancient landscapes. I will explain how I have studied the corpus of historical maps available to me. The second paragraph shortly explores the historical thematic maps of the 16th to 19th century, and how these were utilised in the efforts to find aspects of the (ancient) literary landscape in the then-modern landscape. The subsequent paragraph investigates the concept of old maps as providers of “insider” information of the landscape, i.e. information that tells us modern spectators how it may have worked, elucidating the landscape’s ‘internal environmental constraints’. Of major importance for this study is the *Carta Geografica dello Stato Pontificio* by the Istituto Geografico Militare (Map 49, 1851, from here on: the 1851 IGM map). The fourth paragraph therefore delves into the significance and use of this first truly modern map of Lazio. This map was digitised and put in a GIS specifically for the current study. This way, settlement, land use, infrastructure, waterways, drainage etcetera in the 1850-ties can be explored in detail. Details are given on the origin of this map, its technical execution and legend, and the

digitalisation process. The fifth paragraph discusses the main results of this cartographic study, and the lessons learned from it. The final part of this chapter consists of the presentation and the analysis of 51 historical maps of Lazio. In Appendix 5.1 a selection of the treated historical maps is displayed for a better understanding of the history of mapmaking in Tyrrhenian southern Lazio and the use of historical cartography as a means of reconstructing the region’s ancient landscapes.

5.1 Reading ancient maps of the study area

Basic principles

As referred to in the introductory chapter, Attema has explored ancient maps as containers of information on how the landscape in this part of southern Lazio worked in the long term, on its ‘internal environmental constraints’, which determined the possibilities and difficulties of living there. In various papers he showed how a map may provide “insider” information of the landscape, as at times it will draw the observer straight into the landscape of past inhabitants¹.

The argument that we can get a grip on the long term natural and “lived” landscape through a retrospective analysis of maps was confirmed in historical-cartographical studies such as executed by Michele De Silva and Giovanna Pizziolo². They explored the area around Florence through a reverse cartographic approach, comparing 18th and 19th century cadastral maps with aerial photographs pre-dating the large scale exploitation of the plain in the 20th century, and with the current industrialised/urbanised situation. From the study of elements of the ancient landscape that are still visible on the photographs, it appeared that the historical maps indeed are often accurate in depicting ancient landscape features. They concluded that most significant changes of the landscape only seemed to have taken place since the industrialisation of the landscape, or in the last 70 years at the latest, and that especially the maps of the 18th and 19th century could provide detailed information on earlier hydrography, ancient infrastructure and antique field allotment³.

The same seems to hold true for the Pontine plain. Margherita Cancellieri has compared aerial photographs

to ancient maps of the area. Her study clearly showed that elements of the ancient landscape, specifically on the Roman centuriation, can very well be found on maps that pre-date the *bonifica integrale* of the 1920 and 30-ties⁴.

In short, by analysing historical maps one could, in theory,

- reconstruct the (perceived) contemporaneous situation in cartographical detail get an idea of then-contemporary perception of the landscape
- have a glimpse of what is still left of the ancient landscape at that moment in time, like ancient vestiges that were still (or already) visible at the time.
- see the landscape as it had been before the industrialisation and before large scale agricultural activities (as deep-ploughing) of the last 70 years, developing insight into the *longue durée* of the landscape and the intrinsic qualities and pitfalls of living in this landscape (i.e. the “internal environmental constraints”).
- locate sites mentioned in historical sources through cartographical toponyms (see Chapter 4).

Biases and errors

Historical maps usually are no objective or scientific accurate containers of historical facts. Like all primary sources, historical maps contain inherent biases⁵ or possible analytical distortions in understanding the contemporary landscape, which relate to the origin of the source. I discern three main (and overlapping) causes of distortion in maps: 1. the socio-political structures in which maps evolved; 2. the technical cartographic limitations of their age; 3. mistakes and technical errors made in measurements or execution.

1. Harley described in detail how one should view maps as essentially social products⁶. In other words as “socially constructed forms of knowledge”⁷ biased by political and ideological contexts and the specific aim with which they were constructed. Political, religious or social power usually affected the map’s execution. Maps often explicitly expressed the intentions or political agenda of the mapmaker or the person who commissioned it. Maps for example were used to explicitly confirm imperialistic power, for example colonial occupation⁸, or as a means to show what had been achieved⁹. According to Harley, all maps contain some kind of social or authoritative influence. As he put it: “whether a map is produced under the banner of cartographic science – as most official maps have been – or whether it is an overt propaganda exercise, it cannot escape involvement in the process by which power is deployed”¹⁰. In sum, Harley believed there is no such thing as absolute objectivity in maps, even in modern cartography¹¹. The content and design of maps will always be manipulated or distorted in some way, be it consciously¹² (i.e. deliberately) or unconsciously¹³.

2. Not only units of authority influence the map creators’ objectivity or accuracy. Mapmakers also had to deal with the cartographic limitations of their age. For the accurate analysis of maps it is imperative to understand these contemporary technical-topographic restrictions. In early cartography, mapmakers did not yet have access to precise measurement techniques and projections (providing vertical views and a fixed scale), nor did they normally have field teams at their disposal to conduct field surveys over large areas. They often had to rely on limited first-hand knowledge of the actual topographical situation. Mapmakers often copied older maps or cartographic archetypes¹⁴ which distorted the map’s accuracy in depicting the actual topographic situation. Errors were easily copied as well.
3. Mapmakers were not flawless. Even in modern cartography (i.e. from the late 18th century onwards), with its precise geodetic measurements and observations in the field, errors are constantly made by the chain of people involved in the mapmaking process and throughout their internal communications: field crews, interpreters of cartographic measurements, editors of toponyms and third party sources, etchers and printers are all fully capable of messing pieces of information up and thereby influence the final outcome of a map.

Therefore, points of attention in reading the research-related maps are:

- What could be the possible intentions of the map’s maker or of the person or entity who commissioned the map’s making?
- Are there conscious or unconscious distortions or codes to be found that could be seen in the map’s execution, which might show political, religious or social power?
- Are there clear consistent errors to be found on the maps related to contemporary technical-topographic restrictions, for example to limited knowledge of the actual situation on the ground or to the copying of older maps or archetypes?
- Are there clear consistent technical errors to be identified in the map’s content and design?
- What do the answers to these questions tell about the map’s validity to be used as a primary source in reconstructing the ancient and contemporary landscape?

Throughout this chapter I will address these questions in the framework of this study’s analysis of maps; a summary of the results is made in paragraph 5.V.

Analysing the maps

The study of maps is usually an intensive and painstaking endeavour. Maps may and should be analysed with different perspectives in mind: as containers of raw information

of past landscapes (e.g. toponyms, topography, vestiges and roads), as pointers to the workings of the pre-industrial landscape and environmental conditions (i.e. the ‘internal environmental constraints’) and as depictions of contemporary and historic perceptions of a particular portion of the landscape studied. A map may also be perceived as a cultural product, often implicitly or explicitly expressing the intentions or political agenda of the map-maker or the person who commissioned it. Moreover, a map is the outcome of a series of cartographic techniques, involving geodetic, astronomic and topographic measurements and possible observations in the field. The copying of earlier maps and the use of older cadastral information may also have been part of the mapmaking process. All these perspectives can be of relevance to my analysis. The basis of my cartographical effort was a holistic study per individual map of these possible perspectives, as far as these can be identified. The focal point, however, was on the pieces of raw information that helped my research of the late Roman and medieval landscape, especially of sites and their direct surroundings. In sum, regarding the analysis of maps I have tried to squeeze out as much relevant historical, topographical, archaeological and toponymic information concerning the past landscape from each single map, while simultaneously trying to understand the map’s intrinsic distortions.

This map-by-map analysis however is not to be seen as the end point of analysis. The study of cartographic evidence was never really finished. The maps were reviewed again and again during the phases of analysis of this book, in search for “insider” information about the part of the landscape that was being analysed at that moment. Especially the *1851 IGM map* and *ONC maps* repeatedly provided much valuable detail needed at that point of the analysis. For example, when the study of combined historical and cartographical toponyms resulted in a possible identification/localisation, the presumed site was re-studied on all available maps in search for clues on site type/function, local topography, land use, the contemporary state of ancient vestiges and roads etcetera. This was done, for example, for S. Eleuterio (Conclusion: it was located on a small elevation until the 1920-s). When I found a 10th century document describing the produce of *castrum Vetus* and its contributory centres, I restudied the digitised land use data of the *1850 IGM map* (conclusion: the then-contemporary land use and 1850-s land use do match). During the study of a specific road I went back to the maps to see if these held additional information. For instance, about the Via Mactorina (conclusion: its tract and intersection with the Via Appia are still visible on 17th century maps), or the possible route of the Via Severiana along the Pontine coast (conclusion: a coastal road is feasible given the local topography portrayed on the *1851 IGM map*)¹⁵.

Unlike De Silva and Pizziolo I did not perform a wide scale comparison of maps with aerial photographs. And unlike Harley, this study’s focus has not been the deconstruction of maps in order to analyse biases. Comparable to the study of the written sources (Chapter 3), the search for implicit meaning and bias in maps has not been the goal of this study. First of all, this map-by-map analysis has been a study of (the potential of) a map being the source of ‘raw’ data to study the ancient settled landscape of Lazio.

5.II Inside or outside the Pontine landscape?

This paragraph explores the idea of a historical map as provider of “insider” information of the landscape. Insider information is provided by sources that take us, distant observers, straight into the past landscape, and tell more or less concretely how it worked, explaining its ‘internal environmental constraints’.

The term “insider information” has been coined by Attema¹⁶. He constructed a model in which the current and past perceptions of his study area, i.e. the Pontine region, could be treated. He discerned between “outsider” and “insider” information or perception, regarding how the region functioned and how its people actually used to live there. Attema tried to show how in his study area, fragments of insider information could be obtained from outsider documents, like historical maps. He maintained that as landscape archaeologists from the 21st century, one inherently remains an “outsider”, with an intrinsic broad scope of wanting to restore “meaning to the totality of the present-day, through modern agriculture, urbanism and tourism highly fragmented Mediterranean landscape”. The message is that subtle interpretative skills are needed to assess the information on ancient maps for their true value. I agree with Attema, and one map in this study’s catalogue of maps is well suited to discuss the delicateness of the issue: Leonardo da Vinci’s *Carta delle Paludi Pontine* (1513/1516, map 12, see also Appendix 5.1 Display of a selection of the studied historical maps).

Leonardo’s *Carta delle Paludi Pontine* and the insider / outsider look

This map might, at first sight, be seen as an “insider” angle, as it seems to guide the spectator straight into the landscape of past inhabitants. Some scholars have taken this stand. According to Attema however, the depictions on the map are not based on interior perceptions, but are rather purposeful interpretations by the *outsider* Da Vinci – acting for the Vatican – of a desolate, unsanitary and infertile area. An outsider’s view therefore, most probably biased towards the Pope’s political agenda: the desolate state and inertia shown on the map should, according to

Attema, be seen as part of the Vatican's political or purposeful ideological perception of a landscape that was difficult to exploit and to control¹⁷.

Indeed, if one takes a close look the map clearly was not a representation of the topographical reality of that time. It overstates the emptiness of the Pontine plain and puts its drainage system in the limelight. The major rivers and canals and, especially, the Rio Martino occupy centre stage. As De Paolis and Tetro stated, the map seems to be intended as a schematic design of a new waterway system, with two major streams at its centre¹⁸: The Rio Martino, draining the rivers Teppia (Tivera), Ninfa (Nympha), Fiumicello (Cavatella) and the Fosso di Sermoneta, and the Portatore, draining the Ufente, the Amaseno, the Via Appia-canal (later the Linea Pia). According to Attema, this drainage scheme must have been politically delicate because the drainage of the *Palude* could only have been in opposition to the ambitions of the local *domini*, whose thriving economies were largely based on the marshy resources¹⁹.

Given its execution and the known historical background, it is indeed feasible that this map sketched the general outlines of a future drainage project of the Agro Pontino designed or aided by Leonardo for his patron Giuliano de' Medici (who was the brother of Pope Leo X). It is a historical fact that such large scale drainage project was commissioned by the pope in the year of 1514. Leonardo's involvement in this project can also be inferred from his stay in Rome in these years²⁰ and his close ties to the Medici family²¹.

The hypothesis of the map being part of the Vatican's political or ideological agenda, and the degree to which the political intentions of the Vatican were purposely incorporated by Da Vinci, cannot be verified absolutely. Da Vinci's direct connection with and his commissioning by the Vatican however, seem historically valid. There are no documents that state that Da Vinci himself ever visited the Pontine area²². The detailed way in which the *ad visu* views of the Ausoni Mountains, Monte Circeo and Terracina were drawn makes clear that Da Vinci had personally seen the area, be it only from the sea or keeping to the pedemontana road. This further enhances the picture that this map must be interpreted as a schematic, political map rather than the result of scientific cartography. By contrast, another map of the Arno basin by Da Vinci, can serve as prove that the artist also had other (and arguably less biased) perceptions of the Italian landscape, in this case also of an area with a turbulent natural environment (a landscape 'under pressure' as Attema calls it)²³.

To conclude: Although one might want to try translating the map's information and use this for the reconstruction of the *longue durée*, one should be prudent: this map might have been a politically charged statement, rather than a factual representation of the situation on the ground²⁴. This map shows not only that one has to be careful in interpreting the information on ancient maps, but also how (re-)assessment of the "insider" and "outsider" position of the creator of a historical map is needed, in order to really unravel the cartographical source's meaning and potential. The necessity to explore the background of the mapmakers in general and their intentions is clear.

5.III Historical thematic maps and perceptions of the ancient landscape

This paragraph shortly explores the historical thematic maps of the 16th to the 19th century, and how these were utilised in the efforts to match the then-contemporary landscape with the landscape described in (ancient) historical sources. I will finally discuss shortly how historical thematic maps can be of help for this study.

(Post-)Renaissance historical thematic maps

Historical cartographers of the Renaissance were the first trying to create a workable linkage between the then current landscape and the topographical information in the ancient sources, by means of the introduction of fairly accurate topographical maps. Their efforts however, although being rather learned and elegant, often had to resort to conjectures, at times resulting in unsubstantiated speculation on the locations of specific sites. The earliest example in this chapter's catalogue of such a reconstruction of ancient topography is Map 14, *Il Lazio in una grande carta d'Italia*, dated to the second quarter or middle of the 16th century. The epitome of these first historical thematic maps were the works of Abraham Ortelius (*floruit* in the beginning of 17th century, see Map 21 and Appendix 5.1), and the publications of the scholar seen as the founder of historical geography and topography, the German Philipp Clüver (Cluverius). In *Italia Antiqua* (published posthumously in 1659, Map 24, see Appendix 5.1) the latter produced cartographical descriptions of several Italian regions in Antiquity. Cluverius' travelling companion in Italy, Lucas Holstenius, revised Cluverius' *Italia Antiqua* in 1666²⁵. Through his *fresco* painted maps in the *Galleria delle Carte Geografiche* in the Vatican (see Map 25, Appendix 5.1), Holstenius exemplified how intertwined cartography and artistic achievement were throughout this period. This tradition of historical thematic maps was continued, but was considered less popular in the 18th century.

The *carta storica* of the 19th century

In the 19th century, cartographical history of matching the contemporary landscape with the literary was revived. The De Bonstetten map (Map 44, see Appendix 5.1) is known as one of the first *carte storiche* of the 19th century, a series of historical thematic maps plotted onto modern projected maps. The *carta storica*, a term applicable to the post-Renaissance maps as well but more commonly used in the 19th century came into vogue again as a part of the boost in classical topographical-geographical research generated by the then occurring upsurge of interest in classical remains. In their studies, the 19th century's scholars tried to link ancient names of people and places to contemporary locations. However, they struggled heavily to get a grip on the contrast between the "empty" contemporary landscape and the same landscape being presented as populated in certain historical literary sources²⁶. Regarding the Pontine Region and the Campagna this proved to be an especially discouraging undertaking, as the existing landscape gave the impression of being depopulated and being barely exploited economically, certainly in the waterlogged areas. These swampy, unfriendly environments differed as chalk and cheese from the image of a prosperous and populated area as it had been presented in classical sources. The challenge of meeting this contradiction however, should be predated much further. In early imperial times, Pliny had already been confronted with a contemporary inconsistency with past images of the same landscape²⁷.

The *carta storica* of the 19th century marked the beginning of the common usage of modern research technology and methodology in historical mapmaking. Topographical studies in the field, new geodetic measurement procedures, and modern projections (providing vertical views and a fixed scale) became available to the venture of reconciling the contemporary landscape with the information found in ancient sources, and plotting ancient topography. The first to apply these mapping techniques to create historical reconstructions was Frédéric-Charles-Louis Sickler, a German archaeologist and topo-cartographer. On his *Plan topographique de la Campagna de Rome, cosiderée sous le rapport de la géologie et des antiquités* (1811, Map 46, see also Appendix 5.1), Sickler tried to outline the territories of the ancient colonies based on his first-hand knowledge of the landscape of Lazio. Sickler did not bother indicating projection and scale. The purpose of this map was plainly not to portray the then-current topography, but to create a background against which the region's ancient topography could be shown. The *Carta Corographica ed Archeologica dell'Italia* (1881, Map 50) by Heinrich Kiepert marks the end of the 19th century *carta storica*²⁸.

Incorporating historical thematic maps into the current study

Generally the 19th century topographical efforts to reconstruct classical topography give the impression of having more scientific validity than those of the Renaissance, by employing modern mapping techniques. In this respect, the 19th century topographical works were of greater help to this study's research than the more historically conjectural reconstructive designs of the 16th to 18th century. The 19th century topographical effort provides an idea, often in great detail, of the landscape before industrialisation, offering keys to its internal environmental constraints and contemporary perceptions, and sometimes present elaborated sketches of ancient structures still present in the landscape at that time (as in the case of Map 48, 1845, by Canina; see also Appendix 5.1).

5.IV The study of the 1851 IGM map

The *Carta Geografica dello Stato Pontificio e del Granducato della Toscana costruita sopra misure astronomico trigonometriche ed incise sopra pietra a Vienna nell'Istituto Geografico Militare* made by the Austrian Military Geographical Institute in Vienna (1851), is the first truly modern map of Lazio²⁹. It should be considered modern in the sense that it has a clear and accurate projection and strict geodesy, uses trigonometric measurements and a clear and extensive legend for the whole range of natural and human topographical phenomena in the landscape. The Vatican Library hosts a complete printed set of this constellation of maps, which consists of 52 sheets (*fogli* or *Karte*), engraved on stone³⁰. The maps are set in Italian and German and numbered by using a character followed by a number, from C1 to I17, as becomes clear from the frame of map sheets of the *Foglio d'Insieme* (figure 5.1). The G16, G17, H16, H17 sheets cover this study's research area (see also Appendix 5.1).

This *Foglio d'Insieme*, sheet F14, is but one example of the several additional sheets that complement the maps. Among other things, these extra sheets recount the history of the creation of the maps and provide the technical details, like the datum and projection pane of the coordinate system and the precise locations of trigonometric measurements. The *Foglio d'Insieme e Carta sanitaria*, also depicts the hygienic state of specific areas; it gives clues to the serious state of affairs by showing the extent of the malaria infection in Italy in the first half of the 19th century: the darker the areas depicted on the sheet, the more they were infected by "deadly fevers". Sheet H14, the *Cenno storico statistico sul bonificamento delle Paludi Pontine*, is a description of the drainage history of the Pontine Plain, needed to clear Rome from "evil miasmas". Sheet I17, the

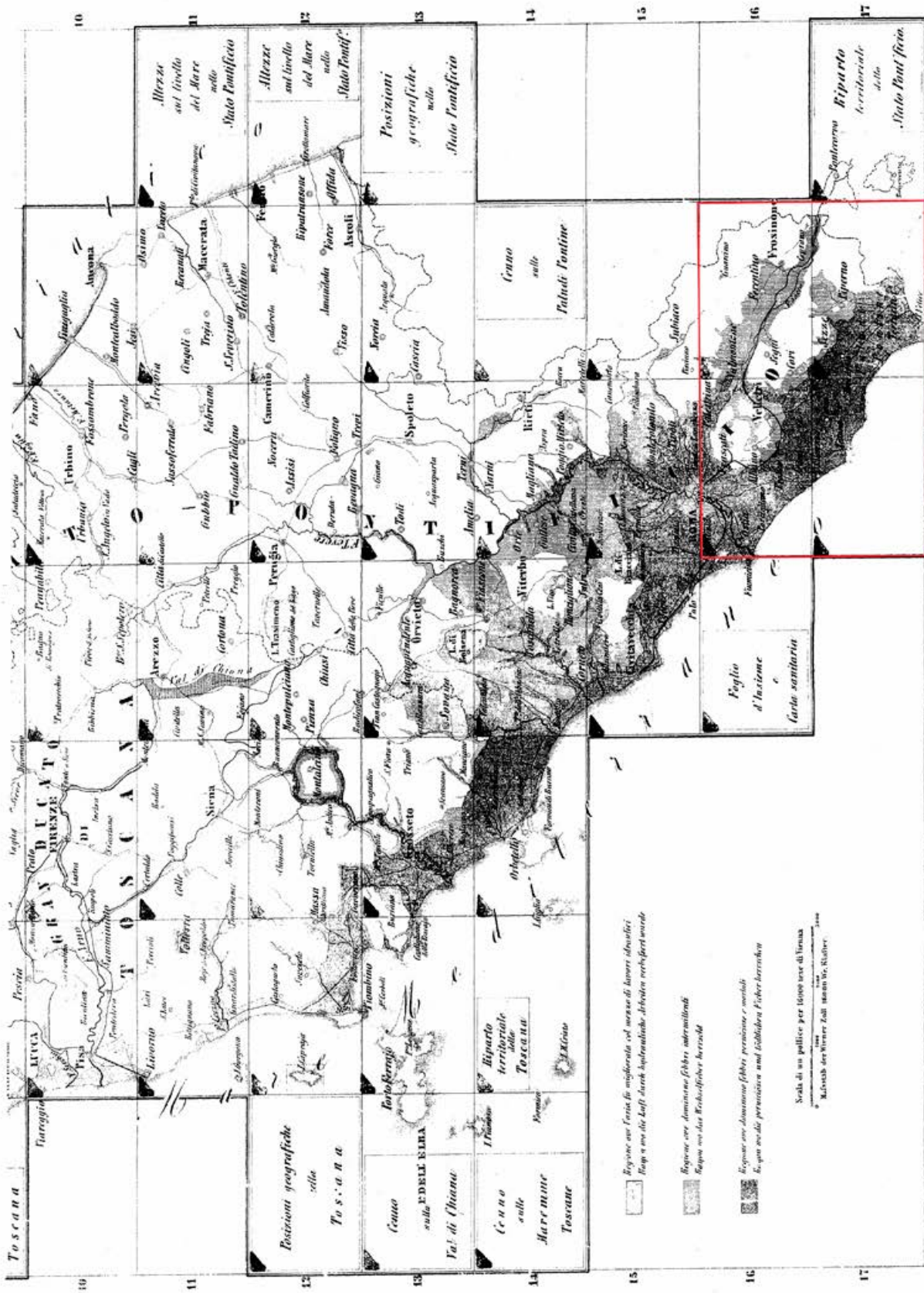


Figure 5.1. The Foglio d'Insieme. The research area is covered by sheet G16, G17, H16, H17 (demarcated in red). Source: IGM Florence.

Riparto territoriale dello Stato Pontificio, states the number of inhabitants of towns and villages.

The map's origin

From the accompanying *Cenno sulla carta topografica dell'Italia media, comprendente lo Stato della Chiesa, il Granducato della Toscana e il Ducato di Lucca*³¹ it is apparent that the maps were officially commissioned in 1840 by Ferdinand I, the Emperor of Austria from 1835 to 1848. The map originally was intended as part of a larger general map of Italy on the scale of an inch per 4000 tese (fathoms³²) di Vienna, i.e. 1: 288000. Because of the efforts by the Naples-born General Campana, director of the Istituto Geografico Militare Austriaco³³, and by a technical impulse by Giovanni Marieni, head of the trigonometric service of the Institute, the plans for the map were effectuated.

After its commissioning the Istituto who was in charge of the whole operation, turned to the several states requesting relevant extant cadastral and geographical data. It must have been decided in the early stages of the project, and for reasons not made explicit on the *Cenno*, to limit the mapping to the Papal State, Tuscany and Lucca. The Papal government committed itself to set out to complete the cadastral map of the Papal State by filling in existing voids. To this end, Marieni was entrusted with the comprehensive triangulation of the Papal State in the years 1841 to 1843. He incorporated Tuscany in this work as well. Marieni was technically assisted by a group of Austrian "officers", presumably engineers, during the fieldwork campaigns, in correcting the cadastral maps put at disposal by the two states³⁴.

The most secure and fastest way to meet the objectives was to integrate, coordinate and adjust the already existing cartographic work. These data had to be set within a trigonometric network, and revised on the spot by doing field surveys and re-measurements. Because in the originally intended small scale of 1: 288000 a good mapping of all details and particularities proved impossible, it was decided to use the scale of "una linea per 100 tese or un police per 1200 tese di Vienna or der Wiener Zoll 1200 Klafter", i.e. 1:86400³⁵. Experience with the scale of 1:86400 had earlier on been gained by the Istituto Geografico Militare di Milano with the maps on the Regno Lombardo-Veneto, the Ducato di Parma and Modena, and as such the new maps were to be a cartographic spatial continuation southwards of the extant maps (i.e. in projection, design and dimensions). The new map was based on strict and secure geodetic, astronomic and topographic measurements and observations in the field. Fundamental to the whole project was the strict cohesion of the former separately done trigonometrical and astronomical measurements. To relate the old and new measurements, the new trigonometry was linked to

the work done by Brioschi in Lombardy in 1817. This new trigonometrical network was laid out by Marieni along the coast of Tuscany from Lombardy, in this way creating a framework linking the earlier and new work.

After the base network of geodetic chains was laid out along the coast by Marieni, the original but corrected cadastral work and new measurements were linked to it. Although for most areas a lot of cadastral measurements already had been performed, it must have been a major fieldwork operation. This applied especially to Lazio where a lot of new work was done by Marieni and his team³⁶, though exact figures of the number of people involved are not given. On the *Cenno* it is mentioned that the labourers were aided by locals, but this might have been a political statement.

Technical details

The maps are oriented towards the north and graduated, and are set in the Cassini-projection, a transverse cylindrical projection³⁷. Crucial to the understanding of the map's cartography is the position of its prime meridian: it runs over Ferro, one of the Canary Islands, at 17°39'46" west of Greenwich³⁸. On Sheet I.13 some remarks are made regarding the positioning of specific sites on the map, comments which prove to be important for the interpretation of the maps' cartographic composition, and ultimately for the transformation of the digitised version to a modern map projection. It is stated that the position of the measured trigonometric points within the Stato Pontificio diverts slightly from their position on the map³⁹. According to the sheet, the reason for this small deviation was the fact that these were the first points to be measured by the astronomers from the observatory of Rome (L'Osservatorio del Collegio Romano) starting from Rome, while the map was made according to the projection of Cassini with its centre of coordinates running over the cathedral of Milan. What the text probably is referring to, is the slight shape and distance distortion away from the central meridian (also known as the tangent line) of projection, a peculiarity normal to a transverse cylindrical projection like Cassini's⁴⁰. As was discussed earlier, the scale is 1:86400; one degree represents 14.67 postal miles (österreichische postmeile) or 7,6 kilometres, as evident from the legend, *Spegazione dei Segni* (Sheet E6, figure 5.2).

The map's legend, execution and the consequences of blurred printing

The legend of the map is designed extensively and encompasses a range of natural and human topographical features in the landscape. The map is executed in exceptional detail and the used symbols are lucid. The hydrography and infrastructure appear to have been plotted very

precisely, and land use is elaborated upon for even the smallest section of land. The detailed orography is shaded. This shading however, often turns mountainous areas into black masses on the printed version; it proves very difficult to discern other topographical symbols within these dark sections⁴¹. Furthermore, details sometimes got blurred in the printed version because of the map's detailed execution and all-embracing and thus minute symbology. For instance, in order to depict meadows or grasslands (i.e. the *prati* or *Wiesen*), originally a shallow engraving of small dots was used. On the printed version this practice resulted in a soft grey tone which in some cases is very difficult to distinguish⁴². In the digitised version, the interpretation of land use might be slightly biased by this inherent vagueness.

Reliability and consistency of the map

One obviously cannot be sure if the surveyors actually inspected all corners of the mapped region. The fact that existing cadastral maps were used in putting together the map's topography⁴³ provides a certain degree of accuracy regarding the location and toponyms of inhabited areas. Moreover, the meticulous mapping of the *lestre* (i.e. seasonally settled, deforested areas, mainly used for transhumant pasture) and ruins also gives the impression of great accuracy in the field, as most of these scattered and constantly changing dwellings had not been accurately plotted on (cadastral) maps before⁴⁴.

As visible from a few omissions of the sheets and little inaccuracies, the different teams did not share all data, or, at least, the etchers did not copy the field maps without flaws: the olive tree areas on the border of map G16 do not continue on map H16, as is the case in the borders of H16 and H17. Furthermore, there is a discontinuity in the depiction of the sandy soils from the border of map G16 to G17. In the digitized coverage of land use that I made, these errors are obvious from the straight and unnatural lines that are parallel to or overlay the borders of the original four maps. However, these are exceptions. On the whole, the maps give the impression of being very accurate and reliable. They were certainly manufactured accurately enough to serve this study's purpose: the reconstruction of the pre-industrial and pre-*bonifica* landscape of Tyrrhenian southern Lazio.

Digitising the map and the creation of the ArcInfo geo-database

The G16, G17, H16 and H17 sheets cover this study's research area. For this study these map sheets were digitised and put in a GIS in order to have the pre-industrial landscape (settlement, land use, infrastructure, drainage and ruins) of the complete research area available for analysis in relation to the primary data of the research period⁴⁵.

In total I have created 8 different geo-database layers (or *coverages*):

Roads. This is a line coverage, in which nine types of roads (or in the GIS context, 9 types *attributes*) are distinguished: eight road types following the map legend and one attribute for *unknown*, in cases of uncertainty caused by inconsequent or unclear symbology or by blurred printing. These road types are specified in the GIS by linking one of the nine specific attribute-values in the line attribute table (LAT) to each of the digitised line features. These are the attributes labelled in the GIS, with their description on the maps legend and their attribute-value in the LAT:

- unknown (o)
- Road for carts (comunicazione per piccoli carri / Karren Weg, 200)
- Road for pack animals (comunicazione per bestie da soma / Saun Weg, 300)
- Footpath (comunicazione per pedoni / Fuss Weg, 400)
- Sunken road (strada incassata / Huhlweg, 500)
- Secondary road, and in the *suburbium* a suburban main road (strada provinciale / Landstrasse, 600)
- Main road of the first or secondary class (chaussée di 1ma classe / Chaussée 1ter Classe or chaussée di 2da classe / Chaussée 2ter Classe 700)
- Road kept in repair in general (strada di comunicazione / erhaltener Landweg, 800)

As is visible from the digitised maps, the road network on the H171-4 maps in the mountainous areas was not digitised as meticulously as in the other quarters: this is due to the darkness of copies available from the IGM Florence, where the copies were originally made; the plain is digitised in more detail. The same applies to the coverage for the waterways.

Bridges and crossings. This is a point coverage⁴⁶. The five types of bridges, crossings and ferry-boats on the map legend are not labelled in the GIS, as the distinction between these types is not considered important for this study.⁴⁷

Dams. This is a line coverage. One should read the digitised lines as follows: a line in this coverage depicts a dam or a dam with a road on it, as the distinction between these features often is unclear due to the indistinct character of the symbol used for the depiction of dams. Furthermore, the shading used on the map caused a grey blurring on the copied map, hampering the distinction between dam and the road on it⁴⁸. There are no different types of dams on the maps' legend.

Aqueducts. This is a line coverage (in the legend: *acquedotto*). There are three types of aqueducts which are not labelled in the GIS coverage, as the distinction between these types is not considered significant for this study.

Water ways, rivers and canals. A line coverage. Three types of waterways are distinguished and have been given a specific attribute value in the LAT. In total this amounts to the following three types of attributes:

- river (natural waterway, 100)
- navigable canal or manmade waterway (canale navigabile / Schiffbarer Canal, 200)
- unnavigable canal (canale non navigabile / nicht schiffbarer Canal, 300)

The waterways on the H171-4 maps in the mountainous areas are not digitised as intricately as the other quarters. This is due to the darkness of copies available from the IGM Florence, where the copies were originally made; the plain is digitised in more detail. The same applies to the roads (see above).

Lakes and broad waterways. This is a polygon coverage for all large water surfaces and broad rivers. There are no types specified.

Land use. This is a polygon coverage and by far the largest and most complicated (see for example figure 5.3). There are 11 types of land use: nine following the map legend (figure 5.2), one for unknown (in cases of uncertainty caused by inconsequent or unclear symbology or printing blurring) and one added for the seasonal pastoral and transhumant land use of the *lestre*. The following attributes are labelled in the GIS, with their description on the maps' legend and their attribute value in the LAT:

Mixed or unclear land use (attribute 0). In a complex land use situation with a lot of farms or standing structures present, it is often difficult to tell the difference between symbols used for vineyards and olive yards and those for houses and/or the symbols for hills: this is especially the case for the Alban Hills and around Rome, see also 450.

Unmarked, not specified or built environment of small towns (50); lakes were digitised separately.

- *lestre* (i.e. seasonal pastoral or transhumant land use) (attribute 100).
- forest (*boschi* / Wälder) (200).
- rice fields (*risaje* / Reisfelder) (300): does not occur in the study area of Lazio.
- vineyards (*vigne* / Weinreben) or olive yards (olive / Oliven), or extensive arboriculture in general (400)⁴⁹; this category is difficult to discern from forested areas, especially in the hills and mountains portrayed on a dark background. Combining the copies in Frutaz' and

the copy made in Florence enabled me to make the right choice in most instances.

- Probable vineyards (*vigne* / Weinreben) or olive yards (olive / Oliven), or extensive arboriculture in general (450); this “probable” category is introduced because the symbol for “hill” when badly printed nearly resembles the symbol for “vineyard” or “olive yard”, making a clear identification difficult; moreover, in the legend of the map, the symbols for “vineyards” and “olive yards” are depicted as lying in a row, but it seems that on the map itself these symbols are also used in other constellations than rows.
- meadows and grasslands (*prati* / Wiesen) and mixed symbology of meadows and trees used on the map (600).
- swampy areas or marshes (*barene* or *paludi* / Moräste or Sümpfe) (700): two categories on the map treated as one. From the terminology used, *barene* or *Moräste* seem to be plain or semi-dry swamps, while *paludi* or *Sümpfe* seem to refer to waterlogged marshes. However, the factual geomorphologic or pedologic distinction remains unclear, as a definition for both features is absent. For this reason both types of swamps are treated as one.
- mixed swamps and meadows (750): some areas were impossible to tell apart due to bad copying or simply exist of a mix of meadows and swamps.
- sandy soil (*sabbie* / Sand) (800).
- sea (1000).

Of the land use elements listed on the legend on the map, no salt productions areas (*saline* / Salinen), nor reed-land (*canneti* / Rohrwuchs) were featured on the 4 map sheets covering the research area.

As a rule, only clearly recognisable land use is categorised. Many polygons will remain unspecified (attribute 50) or unclear (attribute 0) especially concerning the hilly areas. Here the symbols denoting hills are easily mixed up with those for olives and vineyards and/or forested areas.

The topography of artificial elements in the landscape.

This is a point coverage. There are ten types of manmade topographical elements in the landscape following the legend of the map. Harbours, astronomical points and post and railway stations were left out of the GIS as they should evidently be considered contemporary elements in the landscape without any reference to earlier phases. I created a joint feature for *unknown* and *single houses*, as the symbology often is unclear: houses are depicted as a filled-in square, and blurring by printing often gives other symbols the impression of being such a filled-in square. Furthermore, single houses are digitised rather arbitrary and are used only to place nearby toponyms on specific

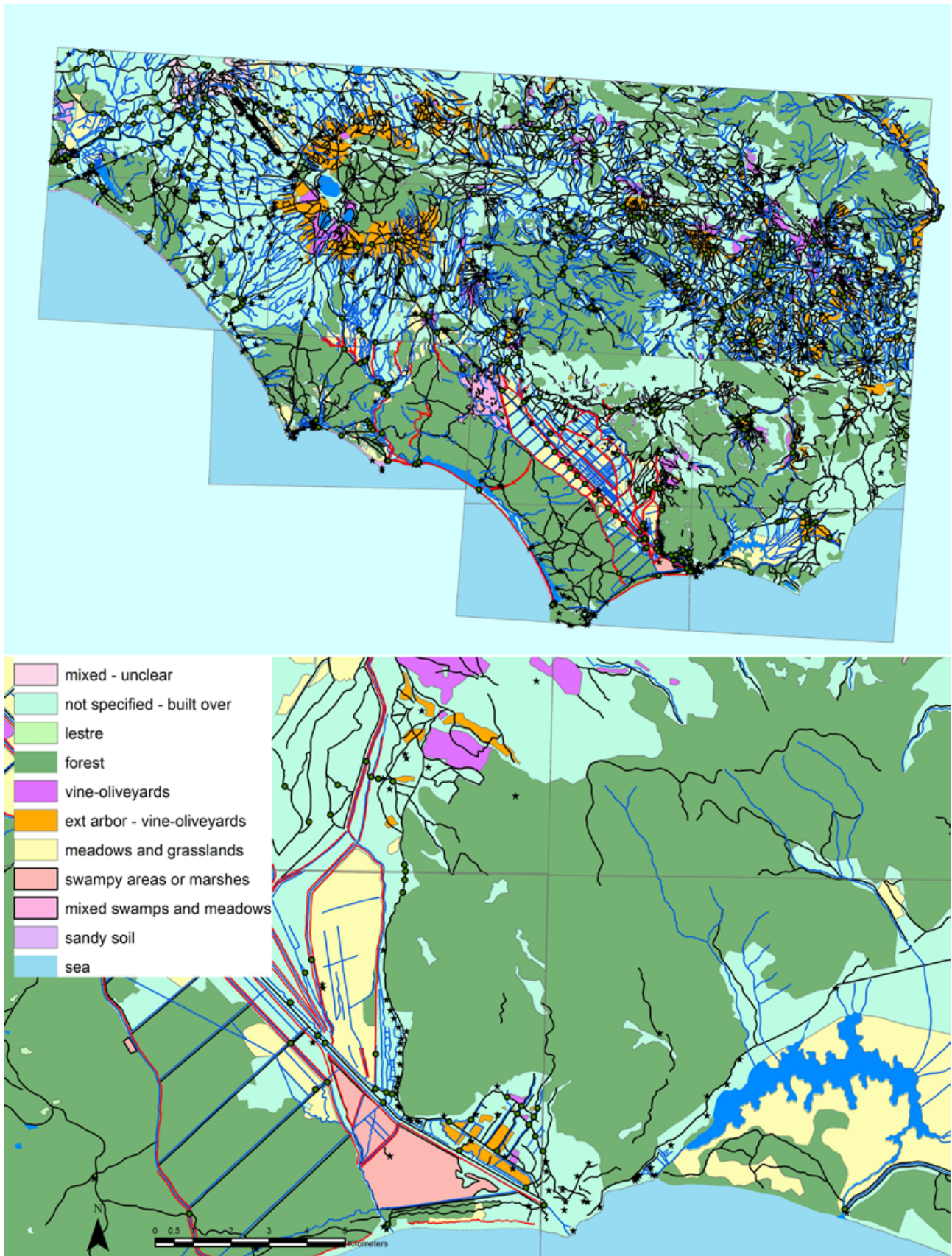


Figure 5.3. Plotting all coverages digitised from the 1851 map, illustrating the level of detail obtained by the map's digitalisation. Below a zoom of the Terracina area.

locations: some toponyms are clearly used for specific houses or clusters of houses. The ten types of topographical elements in the landscape were not labelled in the GIS, as the distinction between them usually could not be made.⁵⁰This coverage contains the following features:

- unknown or single houses (case isolate / einzelne Häuser)
- parochial churches (chiese parrocchiali / Pfarr Kirchen)
- other churches (chiese sussidiarie / sonstige Kirchen)
- chapels (capelle / Kapellen)
- sculptures (immagini / Bildsäulen)
- crosses (croci / Kreuze)
- cemeteries (cimiteri / Kirchöfe)
- mills (molini / Mühlen)
- towers (torre / Türme)
- ruins (ruine / Ruinen)

The following features were not digitised:

- The feature “minerals baths” on the map’s legend, as these hold no bearing on this study’s research area.
- The topography of natural elements in the landscape, as these yielded only a few points for the research area. Furthermore, the symbols used for natural elements are complicated and often very hard or impossible to interpret on the copies. What is more, the map’s legend gives a large array of possible features: 19 types. In order to avoid a lot of work on a complicated coverage resulting in only a few, and mostly unidentifiable, points, no coverage for natural elements was made.

The result of these digitalisation may be seen on the following overview map, in which all coverages combined are plotted.

Conclusion

The digitalisation of the *Carta Geografica dello Stato Pontificio* was a lot of work, but it paid off because of the detailed information it provides on the pre-industrial landscape, specifically, on sub-recent land-use over large parts of the researched area, and on the location of waterlogged areas in the plains. The map too provides a vast amount of toponyms, many of which proved valuable in pinpointing historical toponyms. Moreover, infrastructure of the pre-industrial landscape is made visible. The map showcases small mule-tracts within the landscape, for example on the coastal zone along the Pontine lakes⁵¹. These mule-tracts are examples of a subtle form of mobility that provides a window on the reality of Horden and Purcell’s small scale Mediterranean connectivity (see Chapter 8)⁵². Moreover, in this study several concrete indications (and no clear contra-indications) were found that the landscape depicted on the 1851 IGM map complies to the fragmented contemporary information we have on the ancient “natural” landscape. This way the 1851

map provides us with (fragments of) so-called “insider” information (see also Chapter 8)⁵³. The digitized 1851 map holds a lot more information than I was able to process in the context of the current study. In future research, like in De Silva and Pizziolo’s reverse cartographic approach, a wide scale comparison of the 1851 map with aerial photographs could be executed; such study would enable to obtain detailed information on earlier hydrography, ancient infrastructure and antique field allotment.

5.V The results of analysis

Below I shall discuss, in general terms, the results of my retrospective analysis of historical maps. Concrete results of the cartographic study (such as the then-current state of ancient sites and information on the then-contemporary and ancient landscape) are addressed in this chapter, in the paragraph dealing with the catalogue of maps below; in the data analysis of Part II (Chapter 7); and in the site database⁵⁴. The concrete results of the study of cartographic toponyms are dealt with in Chapter 4.

Cartographical toponyms

An important result of the study of the corpus of relevant maps was the creation of an inventory of a large number of cartographical toponyms which could be dated back to between the 14th and 20th century. The retrospective study of these toponyms proved effective in identifying toponyms and locating sites mentioned in the written sources dating to the research period, as is discussed in Chapter 4. The detailed topographical information on 19th and 20th century maps added valuable information for this identification process. Especially the cartographic topographical detail of the 1851 IGM map (Map 49) and the *ONC maps* (Map 51, 1925-1936) were of help in locating sites, like Petra Aquara (OLIMsite 116), Torre Sessano (OLIMsite 118) and the mill of Monticule (OLIMsite 225).

The then-contemporary state of ancient vestiges and morphology of sites

The cartographic study also provided valuable information about the contemporary state and perception of ancient vestiges, such as the condition of the site of Forum Appii (OLIMsite 16)⁵⁵ and the archaeological remains on the Via Appia near Sole Luna (OLIMsite 172)⁵⁶. Traces of ancient roads are sometimes still visible on yesterday’s maps, like those of the *Via Mactorina*⁵⁷ (OLIMinfra 36) and the *Nettuno alternative of the Anziate – Nettunense* (OLIMinfra 112)⁵⁸. Some geodetic accurate maps of the 19th and 20th century permit a detailed study of the original morphology of sites and the topography of the surrounding countryside, showing details that have gone lost, mainly due to post WWII levelling and deep-ploughing and subsequent erosion.

An example of found original morphology concerns the site of S. Eleuterio (OLIMsite 280). Sheet B4 of the *Levate al 5000* (Map 51) shows the detailed morphology of the site before the *bonifica* of the 1920-ties and 30-ties and the position of the ruins (“*rovine*”) on a much more pronounced hill than nowadays is visible. It can be concluded that the site probably was levelled during the reclamation works⁵⁹. Another example of found original morphology concerns the site of Torre Sessano (OLIMsite 118), which is depicted a 1000 meters south east of Borgo Podgora on ONC Sheet F4. As appears from this map, the tower had originally been positioned on a small round hill before the levelling activities; this hill is now completely vanished. And finally, my hypothesis on the identification of Clostra Romana with a large site to the south of the Fogliano lake is partly based on the morphological clues found on the ONC maps; the most prominent and strategic high position in the wider area of the southern Fogliano lake area is the best candidate for the site Clostra Romana⁶⁰. Another example of remnants of original morphology on maps concerns the site concerns the site Le Grottace (OLIMsite 551) which was depicted on *La campagna Romana esposta nello stato antico e moderno* by Luigi Canina (1845, Map 48). The map shows the section of the villa that was exposed by the sea at that moment in time.

The environmental constraints and possibilities of the landscape

Also intrinsic environmental constraints and possibilities of the landscape are visible on the studied maps. Map 40, *Pinata delle Paludi Pontine formata per ordine di Nro Sigre Pio papa VI* (1785) by Gaetano Astolfi, the *Levate al 5000* (Map 51) and especially the *1851 IGM map* (Map 49) for example clearly demarcate the extent of the waterlogged parts of the Pontine and Amaseno plains. The latter map shows detailed land use patterns, e.g. the natural richness of the soils in the Alban Hills and Lepine foothills which renders these areas traditionally suitable for viticulture and olive production. Besides these very general patterns, the 1851 IGM map allows for a detailed analysis of historical land use on a local scale as well, as will demonstrated in the study of land use around the castrum Vetus (OLIMsite 133) in the analysis of Part II (Chapter 7)⁶¹.

Assessing maps as a source of information

Overall, how should one assess maps as a source of information? The examples of clear and consistent errors and distortions of the actual contemporary topography in my cartographic set show the importance of scrutinising the map's origins and the mapmaking process, in order to be able to assess the potential of each map as a bearer of information on the ancient and contemporary landscape of Lazio.

Many maps were created after an earlier example or archetype, a process in which the actual situation on the ground is not the base of the map's content. This practice occurred especially during the making of the early maps of the 12-17th century. For example, Ptolemy's Geography was to have a large influence on the execution of maps until the 15th century⁶². Eufrosino della Volpaia's map (Map 15, 1547) dominated the cartographical practice in the century to follow. Another example of a map created after an earlier archetype is Map 6 by M. Zuane Regazzin (1449, edition 1642), which is a copy of an older map model brought up to date.

Early maps often reveal the mapmaker's limited knowledge of the actual topographical situation and toponymy. Often cartographical precision of the map is lacking, especially concerning maps dating before the 17th century, as for example is the case with *Campagna di Roma olim Latium* by Giovanni Antonio Magini (1604, Map 22), the map whose title I reused in the title of the current thesis. Sometimes the map's creator only seems to have had access to detailed information on a part of the map's extent: specific parts of the landscape would be given more topographic attention than others. This for example is the case with *Italiae provinciae modernus situs* (dated to the end of the 14th century-beginning of the 15th century, Map 5), on which the northern part of the Italian peninsula is shown in great toponymic and topographical detail, in comparison to central Italy. On *Carta nuova d'Italia* (1480/1492, Map 9), the area closest to Rome was constructed in much more toponymic detail, and on the *Carta d'Italia* (late 15th century, Map 11), the coastal basins were depicted oversized, possibly as a result of being influenced by nautical maps of that time. On many maps, unambiguous mistakes on the toponymy were made, for example on *La Campagne de Romme* by Gilles Boileau de Bouillon (dated 1555/1556, Map 17), on which Fondi is depicted twice.

According to Harley all maps are one way or another manipulated or distorted by the social forces that structure cartography, consciously or unconsciously⁶³, as touched upon above in paragraph 5.I. The influence of such forces is not very apparent in most maps. As has been discussed in paragraph 5.II, one likely example of the influence of a political agenda on the maps' execution, exemplifying the pitfalls that exist in interpreting landscape information from historical maps, is Da Vinci's *Carta delle Paludi Pontine* (1513/1516, Map 12). This map is treated in detail in paragraph 5.II. Another perhaps is *Patrimonium Sancti Petri, Latium et Sabina* by Lucas Holstenius (1636, Map 25 – see the discussion in the catalogue below).

In my view, two maps (rather: map collections) were least affected by such distortions of social structures: the *1851*

IGM map (Map 49) and the *ONC maps* (1925-1936, Map 51). Both map collections were the result of recent field work in which scientific observations were key. They were executed under strict geodetic consistency and with great topographical precision, even in the most remote parts of the depicted landscape. They display a consistent and extensive map legend with room for many particularities on the ground. The symbols used are effective and simple. No overt ideology can be identified in the sheets explaining the map's origins, nor in its execution or in the used symbology. Even the smallest and seemingly non-monumental landscape features (like *lestre*, small swamps and mule tracts) were consistently depicted. Villages were not depicted oversized. On the *ONC maps*, parts that were not accessible are demarcated as "non percorribile". Both map collections do however, display inaccuracies. It is clear that the different teams did not share all topographic and toponymic data, or that the etchers did not copy the field maps flawless. Whether or not both map collections are truly scientific or objective in nature (or even in intention), their mere existence provides a very valuable tool for the analyses of the pre-industrial landscape of Lazio in detail, not in the least because both map collections have been georeferenced in ArcGIS. Moreover, the 1851 *IGM map* (Map 49) was digitised for the current study, as was treated in detail in paragraph 5.IV⁶⁴.

Having stipulated the difficulties in interpreting maps and the information they contain, a positive note should be made: This study plainly shows how much detailed information sub-recent maps may hold on the ancient Roman and medieval landscape. A fine example of this is the land-use depicted on the 1851 *IGM map* (Map 49), which confirms the existence of crops of the *Castrum Vetus* listed in a 10th century document⁶⁵. Another example of the usefulness of maps as providers of glimpses into past landscapes is the fact that Strabo's topographical description⁶⁶ of the Pontine swamps matches the extent of the waterlogged areas that is visible on some of the historical maps studied in this thesis, again most prominently on the 1851 *IGM map*.

Conclusion

The study of maps was an intensive and meticulous work. Despite its constraints and the interpretation difficulties inherent to ancient maps, it yielded good results. The large inventory of cartographical toponyms proved valuable in identifying and locating toponyms (and sites) – as is treated in detail in Chapter 4. It resulted in the retrieval of valuable information on the contemporary state of ancient vestiges and roads still present in the landscape. It also helped outlining the environmental constraints and possibilities of the landscape of this study's research area, such as the difficult marshy environment of the Pontine

plain and Amaseno valley. Moreover, the topographical detail of the 19th and 20th century maps provides valuable information for this study, especially in locating sites. In some cases this study shows concretely how much detailed information maps may hold on the ancient Roman and medieval landscape.

5.VI Catalogue of historical maps

In the following section an introduction shall be given to each map treated in this study's retrospective cartographical and cartographic-toponymic approach to the analysis of human activity in the landscape. The main cartographical body for this study was provided by Roberto Almagià's *Documenti cartografici dello Stato Pontificio editi dalla Biblioteca Apostolica Vaticana* (1960) and Amato Pietro Frutaz' *Le carte del Lazio* (1972). These two authoritative monographs are essential for the understanding of the evolution of mapmaking in Lazio⁶⁷. I decided to incorporate two sets of maps: maps that provide data on the contemporary topography and/or environmental conditions, show extensive or unique toponymy, or are explicit on land use, remaining ancient vestiges, infrastructure or hydrography; and maps that are representative for their age or constitute a known archetype (i.e. base map) with a strong influence on contemporary or later cartography. The first provide the essential raw data for the retrospective analysis of the pre-industrial landscape of Tyrrhenian southern Lazio. The latter are included to explain the evolutionary steps taken in Italian cartography, a scene that has to be set in order to elucidate and interpret the topographical and toponymic clues found on the maps. Generally, for each map to be included it required a sufficient level of readability of the copies and had to be decipherable to the smallest detail.

If applicable and whenever information is available, the mapmaker's background and the nature of his patronage will be described in order to interpret the map even better, and to weigh its potential as a relevant source for landscape reconstruction⁶⁸.

The number of maps dealt with in the following catalogue will be 51 in total. Of the 484 maps incorporated in Frutaz and the 80 in Almagià, all together 50 were selected. To this selection the reconnaissance maps of the Agro Pontino made for the *Opera Nazionale per i Combattenti* (ONC) between the years 1925 and 1932 were added. In order to make the catalogue even more accessible, added abbreviations will indicate what information can be derived from the specific map under scrutiny, i.e. political and organisational boundaries (POL), toponyms (TOP), contemporary land use (LU), hydrography (HYD), infrastructure (INFR) or remaining ancient vestiges (ANC).

Some reticence has to be upheld regarding the use in the analysis of some of the toponyms on the thematic maps that represent a reconstruction of the classical landscape, that came into vogue from the late 16th century onwards (like Ortelius 1595, Map 21 and Mattei 1666, Map 33). The makers of these maps mostly did not endeavour to portray the contemporary backdrop and often seemed to indulge in wild guesses on the localisation of ancient places known only from literary sources. Therefore, such historical topographical maps are only incorporated in this research if they make a clear distinction (i.e. in symbology, typeface or by using explicit formulations) between the contemporary and the reconstructed classical topography⁶⁹. In this manner, the validity of a map as being a relevant source on the then-contemporary landscape could be assessed, as well as the degree of speculation versus factual observation. In the catalogue these historical thematic maps will be clearly indicated by HIST THEMATIC MAP.

To be complete: in this study the modern *Carta Tecnica Regionale* (CTR) 1:10000 maps and database of modern toponyms by the IGM have been used as well.⁷⁰ Being modern maps the CTR are not included in the catalogue. These maps however, are useful as a background to study the changes in the landscape compared to the landscape portrayed on the historical maps. The IGM toponyms are instrumental in the study of toponyms: every toponymic string is compared to the modern IGM maps in order to help locating it and/or to monitor morphological change of its root/stem.

Map 1. The *Tabula Peutingeriana*⁷¹

- A 12 or 13th century copy of a Roman original with late Antique and possible early medieval updates
- Anonymous mapmaker
- Painted on parchment
- 11 parchment leaves of 31 cm by 670 cm in total⁷²
- No (fixed) scale or indication of orientation
- No projection
- TOP, INFR
- See Appendix 5.1 Display of a relevant selection of the maps

The *Tabula Peutingeriana* is a high medieval copy of an originally Roman chart of the then-known world. There are a multitude of difficulties regarding its interpretation and background. This is particularly expressed in a strong and ongoing polemic between two factions that could be identified as the “cartographers” versus the “historians” debate in the *Tabula* research. Scholars like Kai Brodersen in “*Terra Cognita*” (1995) see the *Tabula* more as a historical document than as a cartographical document, i.e. a 2D version of the itineraries consisting of lists of names,

of which several were known from Antiquity (for example the *Itinerarium Hierosolimitanum* and *Itinerarium Antonini*). The “cartographers” such as Richard Talbert⁷³ however, contest this view, and regard the *Tabula* as an exponent of a long tradition of map making.

What is particularly important for the current research is the period in which the chart was most recently updated; this used to be fixed on the mid to late 4th century AD⁷⁴. However, recent research seems to indicate that updates were made to an archetype of first half of 1st century AD during the reign of Trajan and Hadrian, in the 4th century and throughout the early middle ages, and that most elements were added without erasing the outdated ones⁷⁵. So in that hypothesis, for which more and more evidence is being found, the *Tabula* should be considered as a taphonomic document rather than a “picture” of the 4th century. It may be a palimpsest of historical landscapes⁷⁶. According to Talbert⁷⁷ the original sequence in mapmaking of the *Tabula* was the following: the first phase consisted of fixing the scope and dimensions of the map. The geographical design had been devised to put Rome exactly at its centre⁷⁸. Secondly the rivers, shorelines and mountain ranges were laid out. During the third phase the larger centres and the main junctions for the network would have been plotted. The smaller ones likely were squeezed in afterwards, as seemed clear from the fact that the length of a tract is usually inconsistent to the mileage given for it. The far ends of routes between settlements were marked out by a meander. Not only the important centres were marked by large symbols, the “main junctions” were as well⁷⁹. Possibly only those locations that were specifically meant to be located have a symbol: when given a symbol, the settlement or station was dubbed as being important or as a crucial junction⁸⁰. As one cannot be certain to what entities the names on the map refer to, it is most appropriate to refer to them as “toponyms”. In total more than 2700 toponyms were added on the *Peutinger* map.

In Tyrrhenian southern Lazio, on the Via Severiana, the following toponyms were mentioned: *Hostis* (Ostia), *Laurento* (Laurentum), *Lavinium*, *Antium*, *Astura*, *Clostris* (Clostra Romana?), *Ad Turres Albas*, *Circeios*, *Ad Turres* and *Terracina*. On the Via Appia: *Bobellas* (Bovillae), *Ariccia*, *Sublanuvio*, *Tres Tabernae* and *Fundis*. On the Via Latina: *Febraterie* (Ceccano?). The distances from settlement to settlement shown on the map make the *Tabula* an imperative source in the positioning of long-time vanished sites like Clostra Romana (OLIMsite 18), Ad Turres Albas (OLIMsite 46) and Ad Turres (OLIMsite 48). Ostia, Tres Tabernae, Sublanuvio, Bovillae, Antium, Terracina and Fondi were allocated symbols for larger settlements (or “main junctions”). Remarkable is the absence of Forum Appii (i.e. missing in name) and Ad Medias on the *Peutinger* map: maybe this part of the Pontine plain

had already been all but (seasonally?) impassable at the time the map was updated in late Antiquity or the early middle ages in which these names were erased⁸¹. Although unnamed, Forum Appii was probably represented by a symbol of a spa (i.e. an *ad aquas*, commonly consisting of two towers and a large building with atrium), depicted south of Tres Tabernae and north of Terracina⁸². The discussion of the interpretation of the symbol of two towers (e.g. at Antium, Terracina and Fondi) has not yet been settled⁸³. They might be symbols for administrative centres, possibly the ones responsible for the collection of the *Annona*, within a hierarchical system.

However, so far, scholars, do not yet have a clear idea to what extent copying faults or possible later additions obscure their vision on the original mapping work. However, one has to be careful to not overzealously accept all the information provided by the *Tabula*. On many occasions symbols lack a name, as the example Forum Appii shows; in fact this is also the case for Alexandria (Egypt); odd when considering it being one of the largest cities of the known world in the late Roman period. What is more, distances were not always correctly represented (e.g. the tract Astura-Antium was depicted as being 7 miles, instead of the actual 9). The factual faults might have been caused by copying errors, but very probably also because of the maps scale, incorporating the whole then-known world. Interesting is the suggestion that errors in distances given on the Peutinger map might be explained by assuming that signs and distances depicted actually relate to *diverticula* (i.e. junctions) towards the stations, not to the distance between the stations themselves⁸⁴. In that scenario, the names on the map are the names of the places the road is going to, from that junction, or the name of the *civitas* area that will be crossed.

As Frutaz explained in his introduction, the Italian maps of the 11th to the 15th century can be subdivided into three types: the Ptolemean maps, the nautical-portolan maps, and the modern maps⁸⁵. A representative for the Ptolemean maps, based upon the Byzantine texts, is:

Map 2. *Il Lazio nella carta tolemaica Greca d'Italia*⁸⁶

- 11 or 12th century
- Anonymous mapmaker
- Painted on parchment
- Two sheets of 57x43 cm
- No scale or indication of orientation
- No projection
- TOP
- See Appendix 5.1 Display of a relevant selection of the maps

The exact dating of this map is still disputed; Frutaz dated it to the 11th or 12th century. According to Frutaz this is

the oldest map compiled in Greek based on the so called manuscripts of the “class A” or “Byzantine tradition” of Ptolemy’s *Geography* (class B is the type of manuscripts based on the Asian tradition)⁸⁷. The early date makes this map unique; It was not until the 14th or 15th century that Ptolemy’s *Geography* was rediscovered by scholarship⁸⁸. Speculation about a date of a possible late Antique archetype of this map is considered futile, but it is generally agreed that all manuscripts of the *Geography* come from one ancestor that post-dates Ptolemy⁸⁹. How much of Ptolemy’s own work has survived in the rediscovered *Geography* is uncertain.

The following toponyms can be discerned in the research area:

- * αντι (Anzio, depicted as a tower or a wall), αναγνια (Anagni, tower/wall),
- * τυσκυλον (Tusculum, tower/wall), αρδεα (Ardea, tower/wall),
- * λανυβιον (Lanuvium, tower/wall),
- * κιλκαιον Ακρον (peninsula of Circeo, no symbol),
- * ταρρακινας (Terracina, several towers/walled structures),
- * σιτια (Sezze, tower/wall), πριερον (Priverno, no symbol),
- * φερεντινον (Ferentino, tower/wall), σωρα (Sora, tower/wall),
- * β/γεμψον (Ninfa?, tower/wall),
- * κλαστα/κλασο (Clostra, tower/wall),
- * φονδοι (Fondi, tower/wall). The symbol for a tower or walls (i.e. a red-coloured square or round figure with a string of vertical stripes on top, probably suggesting battlements) appears to imply a town in general⁹⁰. The exact location of the settlement was specified by a single dot. The larger cities, i.e. in the southern part of Lazio Terracina and Rome, were specified by one or two large towers.

Map 3. *Le diocesi del Lazio, 1250-1350*⁹¹

- 1274 to 1370
- Modern reconstruction by Giulio Battelli, drawn by Giovanni De Agostini
- 73 by 75,7 cm
- 1:250.000
- POL, TOP (modern reconstruction)

This map is a modern reconstruction, fabricated by Giulio Battelli, based on historical sources roughly originating from the period 1274 to 1370, and at the same time it is a revised compilation of the *Rationes Decimarum Italiae*, the accounts of tax collection of a number of specific areas by the Papal court. *The Rationes* and connected sources were published in 1946 under supervision of Battelli as *Rationes Decimarum Italiae nei secoli XIII e XIV, Latium*. Battelli’s research goals were to identify toponyms and to locate the

borders of the dioceses. A small bias concerns its focus on the diocese's immediate surroundings: "Sono stati ricercati e aggiunti specialmente nomi di località, torri e castelli nella prossimità dei confine delle diocesi per rendere più precisa la loro delimitazione". In the appendix to the volume, a large number of small places was listed per diocese, which can be very useful for the toponymic research of written sources⁹².

Map 4. *Il Lazio nella carta nautica del mediterraneo occidentale*⁹³

- 1318-1321
- Pietro Visconte
- Painted on parchment
- 29,8 by 23,5 cm
- No scale or indication of orientation
- No projection
- TOP

Il Lazio nella carta nautica del mediterraneo occidentale was commissioned by Pope Giovanni XXII. This does not seem to have influenced the maps execution. The chart constitutes one of the oldest nautical maps for Italy⁹⁴, and can be deemed a fine example of the portolan-nautical map tradition. It was drawn by Pietro Visconte all through the years of 1318 up to 1321. This portolan-nautical map was created as being a part of a preparation plan for a crusade set up by the Venetian traveller Marin Sanudo il Vecchio (1270-1343). Only a few places in the currently studied part southern Lazio were mentioned, i.e. Terracina, Anzio (*capo danza*), Astura and Circeo (*capo d cerecii*).

Map 5. *Italiae provinciae modernus situs*⁹⁵

- Created at the end of the 14th century-beginning of the 15th century
- Anonymous
- Painted on parchment
- 64x237 cm
- No scale or indication of orientation
- No projection
- TOP

The *Italiae provinciae modernus situs* can be dated to the end of the 14th century or the beginning of the 15th on the basis of the palaeographical and linguistic clues. The northern part of the Italian peninsula was depicted in great toponymic and topographical detail, whilst leaving Central Italy looking a bit pale. The apparent morphological inaccuracy of the Italian coastline clashes with the 15th century tradition of the nautical-portolan chart. Especially the way settlements were depicted seems to stem from an older tradition, comparable to the Ptolemean maps (as is the case on Map 2). It is therefore

conceivable that the map was created after a 12th century (or earlier) archetype. The way the Po's river basin was abstracted and denominated can be considered as a clue for this hypothesis⁹⁶. No orography was depicted. The topographical descriptions were placed in the margin. Inhabited locations were symbolised by towers of different sizes. The larger cities like Roma, Tivoli, Fondi and Ostia were featured as having a city wall. Toponyms were written in Vulgar Latin, such as *Nefa* (Ninfa) and *Segna* (Segni).

Map 6. *Questa carta la compl[ea]ta M°Zuane Regazzin l'anno 1642 che fo 193 che le fatta*⁹⁷

- Created around 1449, an edition of 1642 was used
- M. Zuane Regazzin
- Painted on parchment
- 117x66 cm
- No scale or indication of orientation
- No projection
- LU

This is a newer edition of a map originally created around 1449. Mountainous areas are depicted in a relative dark colouring, the plains and valleys are shown in the parchment's colour. There is no subtle transitional scale of colours. Settlements are shown as clusters of houses or towers, seemingly being scaled visually: the larger a settlement was supposed to be, the more structures were shown. Like the *Italiae provinciae modernus situs* (that is dated to the end of the 14th century or beginning of the 15th, Map 5) the representation of settlements is reminiscent of an older tradition. According to Almagià this might be a copy of an older map model dated to the middle of the 15th century; he believed a date of 1449 is most plausible⁹⁸. The toponyms written on this copy are not very well legible.

Map 7. *Descriptio sextae tabulae Europae*⁹⁹

- 1471
- Ugo Commineau da Mézières and Pietro del Massaio
- Painted on parchment
- 46,5 by 38,3 cm
- No scale or indication of orientation
- No projection
- TOP

This map is primarily worthy of note because it adds to the discussion of the 11/12th century Ptolemean map (see Map 2) and its place in the history of mapmaking of Lazio. The *Descriptio sextae tabulae Europae* should be seen as representative of the 15th century upsurge in Ptolemean maps, but seems to fit better in the older tradition, rigidly following the Ptolemean list.

Map 8. *Descriptio Italiae Nova*¹⁰⁰

- 1471
- Ugo Commineau da Mézières e Pietro del Massaio
- Painted on parchment
- 43,6 by 73,5 cm
- No scale or indication of orientation
- No projection
- TOP

The *Descriptio Italiae Nova* is treated here as it should be considered exemplary for the new approaches towards cartography that developed out of the tradition of the Ptolemean mapmaking from this age onwards. The authors of the map were fully aware of the new paths they were trotting, no longer honouring the rigid Ptolemean tradition. This is demonstrated by the title, and the fact that Commineau and Massaio produced a similar map in both the old and the new fashion.

Map 9. *Carta nuova d'Italia*¹⁰¹

- 1480/1492 (Frutaz), 1470-1500 (Almagià)
- Enrico Martello
- Painted on parchment
- 55,2 by 105,8
- No scale or indication of orientation
- No projection
- TOP, LU, HYD

This piece by the German cartographer Enrico Martello (Henricus Martellus Germanus) is considered one of the highlights of 15th century map making, in view of its richness, its size and its detail. Prominent features are the depiction of hydrography and a very rich orography with relief in several gradations of yellow-gold laid in strips. Settlements were, like on every map of this Ptolemean type, depicted uniformly as boxes and little towers. Important cities were featured somewhat larger and capitalized¹⁰². According to Almagià this map is a very elaborate example of a Ptolemean prototype drafted in Latin, with additions made to its topography and its toponymy. One has to take into account that the toponyms written in Italian might originate from the 14th century. In the Sacco valley and the Alban Hills and the Lepine Mountains many settlements were shown with their nomenclature. Quite possibly the creator of the map had had first-hand knowledge of the area. Most other coastal topography seems to have been derived from several nautical maps¹⁰³. The map describes a few toponyms in Tyrrhenian southern Lazio: *Nympha* (Ninfa), *Fumone* fl. (Sacco river), *Astura*, *Terracina*, *Netuna* (?). In the Pontine plain a lake was made visible between Ninfa and S. Felicità (S. Felice Circeo).

Map 10. *Novella Italia*¹⁰⁴

- 1482
- Anonymous
- Printed on paper
- 51,5 by 38 cm
- No scale or indication of orientation
- Ptolemean projection
- TOP

This corrected Ptolemean map was incorporated in the *Geographia in Terra Rima* by Francesco Berlinghieri, published in 1482. In Berlinghieri's Atlas one finds the only maps in the Ptolemean projection of all the Renaissance editions of Ptolemy's maps that depict equidistant meridians and parallels. According to Almagià, Berlinghieri had not been a cartographer himself, so it is ambiguous to whom the unmistakable corrections to the earlier Ptolemean maps should be accredited¹⁰⁵. The scarce toponyms portrayed on the map in the research area are: *Ans.i.atio* (probably from *actium* = cape) c. (Anzio), *Nottona*, *Fondi*, *Alba*, *Velletri*, *Terracina*. A lake was drawn north of Astura, as on many maps of this timeframe. Like Map 9, this piece was an enhanced and updated version of the Ptolemean maps.

Map 11. *Carta d'Italia*¹⁰⁶

- Late 15th century or first decennia 16th century (Frutaz), or second quarter of the 16th century (Almagià)
- Anonymous
- Engraved on wood
- Sheet with central Italy 34,5 by 28 cm
- No scale or indication of orientation
- No projection
- TOP, HYD

An anonymous mapmaker designed this map of the whole of Italy in a semi-bird's-eye view, be it rather crooked, of which only the depictions of the northern and central parts have been preserved. This piece fits into other 15th century map types, although the print size was unprecedented in this century¹⁰⁷. The coastal basins are portrayed oversized. In this respect it can be considered conspicuous that the lakes of Albano and Nemi are absent. This imbalance might unveil the creator's perspective or emphasis on the coast; Frutaz observed a strong influence of nautical maps on the mapmaking proces. Striking in the depiction of the topography of Tyrrhenian southern Lazio is the "*Laco di S. Pier/t...*" (illegible from there), situated somewhere in the Pontine plain; the toponym may be completed as "*Lago di S. Pietro*" (OLIMtoponym 190 and 293)¹⁰⁸. This *Lago* might represent one of the stagnant waters of the Pontine region. Possibly this is a small lake near Campomorto, the Laghetto del Monsignore, an area in which the toponym S.Pietro (in Formis) was

recorded in written sources and on maps, such as among others Ameti 1693 (Map 36). It may also show the lake including the wider waterlogged area here, which in the 1930-ties measured 650 by 300 meters¹⁰⁹.

The following other toponyms are readable on the map: *Ansa* (Anzio), *Notono* (Nettuno), *Albano*, *Marino*, *Coro* (Cori), *Rochaborga* (Roccagorga), *Velle* (Velletri), *ortiglano* (Porcigliano), and probably San Andrea on the Lago di Fogliano (*Adria* or *Ndria*). Astura seems to be located on the position of Terracina. The name of a dotted location near Anzio and Nettuno is indecipherable.

Map 12. *Carta delle Paludi Pontine*¹¹⁰

- 1513/1516
- Leonardo da Vinci
- Drawing
- 27,7 by 40 cm
- No scale or indication of orientation
- No projection
- TOP, HYD, LU (?)
- See 5.II and Appendix 5.1 Display of a relevant selection of the maps

This map by Leonardo da Vinci offers a bird's-eye view of the Pontine plain, showing a deserted plain, a couple of axially placed major streams and a population concentrated in the hilltop settlements of the Lepine Mountains. The *Carta delle Paludi Pontine* was commissioned by Giuliano de' Medici or Pope Leo X (see the intermezzo below). Orography and hydrography are prominently featured. A few toponyms are visible on the maps: *Feronia*, *Sezza*, *Nympha*, *Montechio*, *Sermoneta*, *Terracina*, *Ansur*, *Piperno* and *Monte Circeo*. Concerning the regional depiction of hydrography: *Nympha*, *Puza*, *Portatore*, *Rio Martino*, *Amaseno* (strikingly situated in the plains), *Tinera* (Teppia?) and *Livoli*. Striking is the detail in which Da Vinci gives the outlines of Terracina's ancient harbours¹¹¹. The Via Appia is clearly visible. See paragraph 5.II on the map's interpretation.

Map 13. *Map of Italy*¹¹²

- 1524
- Pietro Coppo
- Engraved on wood
- 36 by 26,5 cm
- TOP

Not many specifics are given on the maps genesis and execution. Toponyms that are mentioned on the map and located in the current research area: *Frasca*, *Veletri*, *Segna* (Segni), *Alba?* (Albano?), *Sermoneta* (?), *Falmoda* (Valmontone?), *Pipno* (Priverno, conspicuously portrayed on the wrong location), *Secegno* (Sezze), *Terracina*, *Fondi*, *Cercoli*, *Astura*, *Toscolo* and *C. Danzo*.

Map 14. *Il Lazio in una grande carta d'Italia*¹¹³

- Second quarter-middle of the 16th century
- Anonymous mapmaker
- Water colour painting
- This sheet measures 37 by 54,5 cm, and is part of a large map of the whole of Italy of 275 by 140 cm (by approximation)
- No scale is given. Orientation (yet not indicated) is to the north-east, like many maps of the 15th century and beginning of the 16th century¹¹⁴.
- No projection
- HIST THEMATIC MAP
- TOP, possibly ANC, HYD

Il Lazio in una grande carta d'Italia is a section of the largest map until that time, if Almagià's and Frutaz' dating of around the year 1550 is correct. The discussion on its origin and dating was summarised in Frutaz¹¹⁵. The map was probably a Venetian achievement, as can be concluded from the toponymic dialect used¹¹⁶. The raster of squares evident on the map does not represent a system of geographic coordinates, but denotes the boundaries of smaller maps that the creator used to compile a map of Italy¹¹⁷. The depiction of the coastline in Lazio is more complex and elaborately executed than on other parts of the map; hydrography was meticulously worked out and the coastal lakes were accurately presented for the first time. It might well be possible that the creator had a thorough knowledge of the coastal area of Lazio.

This is the earliest example of a historic thematic map in which the creator attempted to make a historical reconstruction of the ancient topography, annotating the modern names with the presumed classical toponym (for instance *Arina olim Civitas*). His attempt at reconstructing the classical geo-political situation needs to be examined with a good deal of scepticism. He, for example, identified Clostra (OLIMsite 18) with Astura, situated about 40-80 kilometres from its actual position as accepted by most scholars¹¹⁸.

Map 15. *Il paese di roma e tutti i luoghi particolari dintorno Roma per XX miglia*¹¹⁹

- 1547
- Eufrosino della Volpaia
- Copper engraving
- A Single sheet of 55,6 by 41,3 cm, the entire map measures 111,2 by 123 cm
- No scale was added, but an indication of scale is given by indicating the distance of a mile on a measurement bar; Frutaz estimated the scale to be about 1:41000. No indication of orientation was given.
- TOP, HYD, LU, INFR, ANC
- See Appendix 5.1 Display of a relevant selection of the maps

This bird's-eye view of the surroundings of Rome by the Florentine Eufrosino della Volpaia, drawn in 1547, was to have a large influence on contemporary map making and on the cartographical practice of the century to follow. Because of its detail and care, the map is deemed an important source for scholars of the history of the surroundings of Rome of that period, not only as regards the topography, but also regarding the exploitation and cultivation of the region. Tavola 27 and 30 are of interest to researchers, featuring the Alban Hills and the area south of it, and the eastern border of the river Tiber. The map most likely was drawn with first-hand knowledge of the area: The infrastructure, the hydrography and the orography are scrutinised in detail (although not always executed cartographically consistent). *Osterie*, hamlets, forests, and cultivated farmland, even actual views of towns, are depicted with a sharp eye for detail as well. Although the map was explicitly authorised by the Pope, the Lords of Venice and the Duke of Florence, no specific historical information is available on the maps commission¹²⁰.

Map 16. part of the map *Carta d'Europa in 15 maps*¹²¹

- 1554
- Gerard Mercator
- The maps measurements are 147x120 cm
- Stab-Werner projection (with a coordinate system laid out along the cornice)

This map, although it proves not to be very useful for the study of past landscapes because of its small scale, is treated here as it constituted a very important step in cartography. This piece was created by the most influential cartographer of the 16th century, Gerard Mercator and is part of the famous *Carta d'Europa* in 15 sheets, published in 1554. Significant steps forward were made: for the first time in history a map projection was used, i.e. a Stab-Werner¹²² equal-area projection. The shape of Italy is depicted perfectly different from earlier maps, due to the astronomical recalculations done by Mercator for the whole of Europe. Identifiable toponyms for Tyrrhenian southern Lazio on this map are: *Aque Fatide* or *Satide* ('superfluous'), *Piperno*, *Anza* (Anzio), *Fundi*, *Ardia*.

Map 17. *La Campagne de Romme*¹²³

- 1555/1556
- Gilles Boileau de Bouillon (Aegidius Boleavus Bolioius)
- Copper engraving
- 31,6 by 48,2 cm
- No scale or indication of orientation
- No projection
- HYD, INFR, ANC

La Campagne de Romme describes the geo-political and topographical situation during the "Guerra di Napoli", a conflict between Pope Paolo IV and Spain that lasted from 1555 to 1557. The map does not seem to take a stand concerning the ongoing war. This work by Gilles Boileau de Bouillon proves to be a curiosity because of its elaborate descriptions of the topography that congest the map as if it was a rococo *horror vacui* decoration. The pedemontana road is described as "Le chemin par on le precaccio qui est le conducteur des postes va de Romme en Naples, tout le chemin d'este pave de grosses plattes pierres comme l'on voit". On the location of the traditional Pontine swamps an annotation is made, reading: "le chemin tourne ainsi pourreque est endroli [endroit= place?] est marecu-gueux, or: "the road is detoured because at that spot is flooded"(?). For this research the map is considered useful as it gives a direct description of the (perceived) situation on the ground. Many unambiguous mistakes on the toponymy (in French and Italian) were made: Fondi for example, is mentioned twice and the toponym *Vorsea* is unidentifiable.

Map 18. *Paese di Roma*¹²⁴

- 1556
- Anonymous mapmaker (after Volpaia)
- Copper engraving
- 32 by 44,5 cm
- No scale is specified, but an indication of scale is given by indicating the distance of a mile on a measurement bar; there is no indication of orientation.
- No projection
- TOP, LU, HYD

The *Paese di Roma* is a schematic and modest version of the Della Volpaia archetype (Map 15). When comparing both maps a larger area is covered by the *Paese* and essentially the toponyms, infrastructure, hydrography and coastline were copied from Volpaia, be it with many omissions and some additions. Although the map was explicitly authorised by the Pope, there is no specific historical information available on the maps commission.

Map 19. *Latium Nunc Campagna di Roma*¹²⁵

- 1589 (re-edited in 1613)
- Gerard Mercator (after Volpaia)
- Copper engraving
- 36,7 by 47,6 cm
- Oriented to the north. No scale is specified, but an indication of scale is given by indicating the distance of a mile on a measurement bar.
- Mercator projection (coordinate system laid out along the cornice)
- TOP, LU, HYD, ANC

The *Latium Nunc Campagna di Roma* map once again is a schematic and modest revision of the Della Volpaia map (Map 15). It is the first map of Lazio drawn based on the projection that Mercator had developed for the mapping of the whole Italian peninsula. The orientation is to the north and the coordinates were pencilled in on the cornice of the map. Its derivation from Della Volpaia becomes especially clear in the way the coastline and hydrography are depicted, although Mercator left some waterways unnamed. Toponyms are richly distributed near the river Tiber, but elsewhere they are scarce. The smallest villages and towers remain unnamed, in contrast to the Della Volpaia original. The *Palus Potina* is shown as a lake. A striking toponym for the current research is *Appio Foro rovinato* (ruins of Forum Appii).

Map 20. *Il paese di roma e tutti i luoghi particolari dintorno Roma per XX miglia (after Volpaia)*¹²⁶

- 1590/1610
- Anonymous mapmaker (close revision of the 1547 Della Volpaia map)
- Copper engraving
- 4 sheets of 59 by 57 cm in total
- The scale is not specified, but an indication of scale is given by indicating the distance of a mile on a measurement bar; No indication of orientation
- No projection
- TOP, HYD, LU, INFR, ANC

This is an example of the many revised copies made of the Della Volpaia archetype (Map 15). This copy nears the original, except for a manifold of added toponymic indications, and some further information on the shape of the landscape through sketches of land use and indications of wells (i.e. *fonti*). Like on the original Volpaia map, only the area close to Rome is covered.

Map 21. *Latium Storico*¹²⁷

- 1595 (this copy 1624)
- Abramo Ortelius¹²⁸
- Copper engraving
- The map is oriented northward. The scale was not specified.
- Mercator Projection (the coordinate system was laid out along the cornice)
- HIST THEMATIC MAP
- TOP, HYD, ANC
- See Appendix 5.1 Display of a relevant selection of the maps

This historical thematic map is incorporated, not so much for its use in the retrospective and toponymic research, as for its influence on contemporary cartographer-topographers. The general geography of the *Latium Storico* was

inspired on the map by Mercator (Map 19, 1589). This is most clearly evident from the identical coordinate system visible on the cornice. In an inset the peninsula of Monte Circeo is shown from a bird's-eye view (a drawing by Angelo Breventano). The denominations for the Pontine swamp (*Pomtina, Pontina palus, Pomptinus ager, Pontinus, Pontini Campi, Pometini*) stemmed from classical authors, who most likely were the suppliers of Ortelius' historical toponyms as well¹²⁹. The whole coastal area from Antium until Minturnae is seen as part of the *palude*, thereby ignoring the existence of the Ausoni mountain range. The toponyms generally are not very useful for toponymic study as the distinction between modern denomination and historical reconstruction was not made, and cannot be inferred from typeface or the descriptions used. The toponyms' location is often dubious, e.g. the position of Forum Appii north of Priverno. The map thus appears as a hotchpot of several historical sources and maps. Ortelius almost certainly took the Ptolemean maps as a point of reference, as a settlement with the non-historical name of *Vempsum* (Ninfa) is located north of Sezze, just like on the "Ptolemean" Map 2.

Map 22. *Campagna di Roma olim Latium*¹³⁰

- 1604 (this copy 1620)
- Giovanni Antonio Magini
- Copper engraving
- 46,5 by 36,5 cm
- Oriented to the north. The scale is not specified, but an indication of scale is given by indicating the distance of a mile on a measurement bar displayed on the map.
- A coordinate system was laid out along the cornice, but the projection is unknown.
- POL, TOP, HYD, LU, ANC
- See Appendix 5.1 Display of a relevant selection of the maps

For the first time in the history of cartography of Lazio, a specific symbology for present-day territorial administrative boundaries was employed¹³¹: the borders of the Papal state were indicated by a striped line. Toponyms appear to be confined to specific areas, particularly to the *suburbium*, and seem to have been influenced by Della Volpaia (Map 15, 1547) and Mercator (Map 19, 1589). The depiction of hydrography is rich. For the portrayal of the *Palude Pontine* Magini seems to have had free access to field observations made by engineers working on the recently completed drainage works, ordered by pope Sixtus V (1585-1590)¹³². A reference is made to the settlement of S. Pietro in the *campo morto* exactly located where on the late 15th century's *Carta d'Italia* (Map 11) a lake with the same denomination is depicted. The cartographical precision of the map is meagre. For example, the Tor Acquapuzza is located on the wrong site of the mountain

ridge here. Some ancient vestiges are depicted, such as *antio rovinato*, *Delitia di Lucullo* and *sepolchri antichi*. This map greatly influenced other cartographers, like Willem Janssoon Blaeu, c.f. his map *Campagna di Roma, olim Latium: Patrimonio Di S. Pietro; et Sabina*, dated 1640 (which was not included in this catalogue)¹³³. It has also greatly influenced Map 27, *Patrimonio di San Pietro, Sabina et campagna di Roma* of 1638, by Johannes Jansson (Joannes Janssonius) and Hendrik de Hondt (Henricus Hondius). I reused this map's title *Campagna di Roma olim Latium* in the title of the current thesis, as it captures this thesis' essence, i.e. the reconstruction of past landscapes of Tyrrhenian southern Lazio.

Map 23. Spiaggia di Roma¹³⁴

- 1624
- Anonymous mapmaker
- Pen and ink drawing
- 43,2 by 222 cm
- No scale (estimated to 1:100.000) or indication of orientation is given
- No projection was added
- POL, TOP, LU

The *Spiaggia di Roma* is in essence a rather basic sketch, with a rather simplified reflection of the coastal area of Tyrrhenian southern Lazio. In contrast, the detailed hydrography is quite striking. The coastal lake area is depicted in all the intricacy of its waterways, but the forested areas along the coast were roughed in. Almost no orography is shown. The borders of the *Stato Pontificio* are designated with a dotted line. A lot of attention was paid to the depiction of the towers along the coast. Some toponyms are presented, among which is the Lago di S. Maria. Striking is the forest shown south of Nettuno until the Monaci lake, being the only forested area on the Tyrrhenian coast with the exception of the area south of Ostia.

Map 24. Latii utriusque, antiqui scilicet et novi... descriptio¹³⁵

- 1624
- Philipp Clüver (Cluverius)
- Copper engraving
- 28 by 36 cm
- No orientation is specified. The scale is not specified, but an indication of scale is given by indicating the distance of a mile on a measurement bar.
- A coordinate system is laid out along the cornice, but the projection remains unknown (Mercator?).
- HIST THEMATIC MAP
- TOP
- See Appendix 5.1 Display of a relevant selection of the maps

Like Ortelius' *Latium Storico* (Map 21), this historical thematic map is incorporated in this chapter's catalogue most of all because of its influence on contemporary cartographers and topographers. The *Latii utriusque* map was published in *Italia Antiqua*, a two volume history and geography of Italy and part of Clüver's *magnum opus*: an effort to make a description and historical overview of all countries known in Antiquity¹³⁶. The works by Clüver were directly influenced by Holstenius, who accompanied him on his second trip to Italy (1618) and later used the *Latii utriusque* in his own reconnaissance field work. The *Latii utriusque* was published posthumously in the year of 1624 after various revisions made by Holstenius. In 1666 Holstenius edited a reissue of some of Clüver's (and Ortelius') cartographical works¹³⁷. The toponyms are not helpful for the current toponymic research, as the distinction between modern names and historical topography is not made, nor can be inferred from the applied typeface or descriptions.

Map 25. Patrimonium Sancti Petri, Latium et Sabina¹³⁸

- 1636
- Lucas Holstenius
- Fresco
- 3,14 by 4,20 m
- No added scale or orientation
- No projection was added
- HIST THEMATIC MAP
- TOP, LU, HYD, INFR, ANC
- See Appendix 5.1 Display of a relevant selection of the maps

These two frescoes cover a section of the walls of the *Galleria delle Carte Geografiche* of the Vatican palaces. Holstenius simultaneously created two geographically complementary maps in this *Galleria*, i.e. "Patrimonium Sancti Petri"¹³⁹ and "Latium et Sabina"¹⁴⁰. Already in 1628 Holstenius intended to create a map of the *Territorio Romano* which would have combined modern and antique elements, but this work was lost, or possibly even never executed. Scholars know that he conducted field observations and subsequently used the results of the performed research in the creation of a number of small scale maps of the whole Italian peninsula in fresco in the same *Galleria* (*Il Lazio nell'Italia Nova e Antiquità*, 1632, not treated here), and finally on the two fresco's discussed in this paragraph¹⁴¹. He was directly influenced by the works of Philip Clüver, whose maps Holstenius used in his reconnaissance field work¹⁴². For the orography on the *Patrimonium Sancti Petri* however, he borrowed from the maps of Oddi¹⁴³ and for the coastline from the anonymous map *La spiaggia Laziale* dated in the first quarter of the 17th century¹⁴⁴. For the *Latium et Sabina* he relied among others on Magini (1604, Map 22), and *La Sabina*

by Mauro Giubileo (1592, not treated here). Furthermore he incorporated the preliminary results of the measurements and observations done on the *vie consolari* of the district, notably the Via Appia and the Via Prenestina. These measurements and observations were ultimately published (at Holstenius' instigation) in 1637 by geometri-
cian Domenico Parasacchi¹⁴⁵.

To return to the map *Patrimonium Sancti Petri, Latium et Sabina*: the coastline, the hydrography, the lakes and settlements were portrayed with a keen eye for detail and were consistently denominated. Many allusions were made to the classical topography, ruined settlements and medieval castles of the region. Historical sites were put in capital letters, in order to distinguish these reconstructions from contemporary topography. Names were written in Italian or Latin but the toponyms are not always decipherable due to the discoloration of the frescoes¹⁴⁶. The orography is visible in some detail and is for the most part shown *ad visu*. In contrast to many other maps manufactured in the 15th and 16th century, the Pontine swamps are not depicted as a lake. This possibly is the result of the recent reclamation works ordered by Sixtus V (1585-1590). This way of portraying the *Palude*, however, might have been idealised, biased by the commissioning of the frescoes by the papal court in order to suggest that the drainage works funded by the Pope had yielded result.

Map 26. *Designo della Via Appia, pars 2da and 3a*¹⁴⁷

- 1637
- Domenico Parasacchi
- Pen and ink drawing
- 41 by 236,8 cm (pars 2) and 41 by 266 cm (pars 3)
- No orientation was specified. The scale is not specified, but an indication of scale is given by indicating the distance of a mile on a measurement bar.
- No projection was added
- TOP, LU, HYD, INFR, ANC

The *Designo della Via Appia* is part of the cartographical tradition of the second and third quarter of the 17th century, during which a large collection of detailed maps of the main roads of Lazio and their immediate environment was made¹⁴⁸. For the blueprints, new field measurements and observations were executed¹⁴⁹. The long-drawn-out designs of these *reti stradale del Lazio* in large scale not only depict the main routes but also secondary infrastructure. Parasacchi worked as a *disegnatore* for Holstenius in 1633 in the *Galleria delle Carte geografiche* and in all likelihood shared information with him (see Map 25). Topographical information is abundantly present, and the hydrography is depicted in detail. What's more, the maps provide information on ancient vestiges and offer an *ad visu* views of towns and villages. *Pars 2a* tracks the Appia

from *Frattochie* to *Tre Ponti* and *pars 3a* from *Tre Ponti* via *Ad Medias* to the *confine del regno di Napoli*.

This map, especially *pars 2a* and *3a*, is crucial to the successful location of several high medieval (church) sites along the Via Appia, such as the churches of S. Leonardo de Silice, S. Giacomo and S. Maria in Caposelce (the latter being portrayed as what looks to be a slender church tower).

Map 27. *Patrimonio di San Pietro, Sabina et campagna di Roma*¹⁵⁰

- 1638
- edited by Johannes Jansson (Joannes Janssonius) and Hendrik de Hondt (Henricus Hondius)
- Copper engraving
- 40 by 51,5 cm
- No orientation was specified. In addition, no scale was specified, but an indication of scale is given by indicating the distance of a mile on a measurement bar.
- A coordinate system is laid out along the cornice, but the projection is not specified (but probably Mercator).
- POL, TOP, HYD

This map was replicated in the two most influential Atlases of the time, Mercator's *Atlas Novus* in the year of 1638 and Blaeu's *Theatrum Orbis terrarum sive Atlas novus* in 1640. The reproduction in Frutaz was incorporated in the third volume of the *Atlas Novus* by Gerard Mercator for which Jansson and De Hondt edited several maps¹⁵¹. The *Patrimonio di San Pietro, Sabina et campagna di Roma* is a small scale map, and therefore not suited for a detailed investigation of the topography of Lazio. The depiction of toponyms in the Pontine Region is scarce, but more extensive around the Alban Hills. Land use is hardly dealt with. The orography is nothing more than basic. Overall the map seems to have been very much influenced by the in the year of 1604 published Magini map concerning toponyms and symbology, as can be clearly seen in the Pontine plain. The boundaries of the Papal State are shown.

Map 28. *Designo del Lazio meridionale*¹⁵²

- second half of the 17th century
- Anonymous mapmaker
- An arrow indicating the north specifies the orientation to the north-east. The scale is not specified, but an indication of scale is given by indicating the distance of a mile on a measurement bar.
- TOP, HYD, INFR

The *Designo del Lazio meridionale* was influenced by Holstenius (Map 25), especially as regards the portrayal of the hydrography. Almagià assumed that both Holstenius and the creator of this map used the same sources¹⁵³.

Holstenius himself performed field reconnaissance himself as well⁵⁴, so possibly the map could have been inspired by Holstenius in a one-way direction. According to Almagià the *Disegno del Lazio meridionale* constitutes one of the best topographical works of the period before the geodetic cartography. The toponyms are very difficult to read on the copy available.

Map 29. *Catasto Alessandrino: Strada fuori di Porta S.Giovanni verso Marino...sino alle Case Nove*¹⁵⁵

- 1659
- Francesco Contini
- Water colour on paper
- 46,5 by 219 cm
- No orientation was specified. The scale is not specified, but an indication of scale is given by indicating the distance of a mile on a measurement bar.
- TOP, LU
- See Appendix 5.1 Display of a relevant selection of the maps

The *Catasto Alessandrino* (also known as the *Catasto Chigi*) was part of the upsurge in cartographical projects during the second and third quarter of the 17th century. In these years numerous detailed maps of the major roads of Lazio and their immediate environment were compiled (see also Map 26). The *Catasto* was ordered by Pope Alessandro VII (1655-1667), which to some extent might have influenced its execution and contents. This does not seem to be the case however: the controversial extent of the marshy area near Case Nove for example was not ignored or exaggerated. All areas seem to have been dealt with consistently.

The road maps constituted the framework for the land registry: the planimetric cadastral drawings were grouped per road, starting from the main gates of Rome. Of key interest for this study are the toponyms, which are abundantly depicted and are numbered for the smaller locations; lists of names are appended to the map in an inset. The map *Catasto Alessandrino: Strada fuori di Porta S.Giovanni verso Marino...sino alle Case Nove* starts from the S.Giovanni Gate and ends at Casale Nove in the *Palude Pontine*.

Map 30. *Catasto Alessandrino: Strada fuori di Porta S.Giovanni verso Grotta ferrata che conduce a Valmontone...sino a Fierentino di Campagna*¹⁵⁶

- 1661
- Francesco Contini
- Water colour on paper
- 39 by 221,5 cm
- An arrow indicating the north specifies the orientation to the north-east. The scale is not specified, but an

indication of scale is given by indicating the distance of a mile on a measurement bar.

- TOP, LU

Concerning its origins see Map 29. Of this route, the north of the Alban Hills (Marino) and the north ranges of the Lepine Mountains (at the altitude of Segni) are of interest.

Map 31. *Catasto Alessandrino: Strada di parte S.Sebastiano et Latina sino al Mare a Nettuno*¹⁵⁷

- 1661
- Antonio del Grande
- Water colour on paper
- 50,5 by 178 cm
- An arrow indicating the north specifies the orientation to the east. The scale is not specified, but an indication of scale is given by indicating the distance of a mile on a measurement bar.
- TOP, LU

As Map 29. The map follows the Via Appia until Bovillae, then rounds the outer foothills of the Alban Hills passing to the south of the Savello hill, and then from Fontana di Papa turns to the sea: this route still exists as the Via Nettunense Nuova, or (to the south of Aprilia) as the N 207.

Map 32. *Catasto Alessandrino: Strada da Porta S. Paolo a Ostia e a S. Procula*¹⁵⁸

- 1662
- Giulio Martinelli
- Water colour on paper
- 42,3 by 70,3 cm
- No indication of orientation. The scale is not specified, but an indication of scale is given by indicating the distance of a mile on a measurement bar.
- TOP, LU

As Map 29. Of interest to this study as regards the eastern border of the Tiber river and the surroundings of Castel Porziano.

Map 33. *Tavola Esata dell'Antico Latium e Nova Campagna di Roma*¹⁵⁹

- 1666
- Innocenzo Mattei
- Copper engraving
- 38 by 51,7 cm
- The scale is not specified, but an indication of scale is given by measuring a mile; no indication of orientation is added.
- HIST THEMATIC MAP
- TOP, LU, INFR, ANC

The *Tavola Esata dell'Antico Latio e Nova Campagna di Roma* constitutes a late derivation of the Della Volpaia map (Map 15). It was possibly commissioned by prior Sigismondo Gighi (the same person involved in the *Catasto Gighi*), considering the dedication on the escutcheon in the upper right corner of the chart. In this reconstruction of the classical geo-political setting, a clear distinction was made between ancient vestiges and modern topography. This lucidity renders useful both the study of existing toponyms and of the remaining ancient structures. The basic lay-out is reminiscent of Della Volpaia in the amount of attention paid to toponymy. The infill of the classical landscape seems primarily based on the cartographical and historical works by Lucas Holstenius (on *Latium Vetus*, see Map 25) and Antonio Bosio (on the paleo-Christian tombs)¹⁶⁰.

Map 34. Nuova e esatta tavola topografica del territorio o distretto di Roma¹⁶¹

- 1674
- Innocenzo Mattei
- Copper engraving
- On two plates which measure 55,9 by 40,4 cm and 55,7 by 39,8 cm
- No scale was given, but Almagià calculates that 10 mile = 70 mm, equalling a scale of approximately 1: 235.000.
- The projection does not follow the north-north-east orientation of the map, as is visible from the angled lines along the cornice indicating coordinates¹⁶².
- Unknown projection
- HIST THEMATIC MAP
- POL, TOP, LU, HYD, INFR, ANC
- See Appendix 5.1 Display of a relevant selection of the maps

The *Nuova e esatta tavola topografica del territorio o distretto di Roma* chart was influenced by Magini (1604, Map 22), Cluverius (1624, Map 24) and Holstenius (1636, Map 25), and, specifically concerning the Roman *suburbium*, by the Della Volpaia archetype (1547, Map 15). In view of the tributary relationship with these important cartographers and the excellent execution in both technical and artistical respect, the map should be seen as the accumulation and culmination of more than a century of reconstructive classical cartography. This map gives a very detailed account of the classical elements (of which some were in actual fact still present) within the contemporary landscape. Medieval or antique ruins and their toponyms are annotated with a “d” from “diruto”, meaning “ruined”. However, in some cases historical reconstructions are not discernible from modern toponyms, at least not by the symbols used. The toponymy is detailed, with consistent denominations of sanctuaries, spas (i.e. *luogo di bagni*), *osterie* along roads, towers along the coastline and so on. Unique

are the mines and caves indicated, be it so only north of the Tiber and in Tuscia Romana. Many toponyms have the marginal note “R.C.” added, denoting areas belonging to the *reverenda Camera Apostolica* (Papal court); some are annotated with the family names of large landowners. This work most probably was commissioned by the Vatican, as Mattei was appointed “geografo pontificio” during the papacies of Clemente X and Innocenzo XI¹⁶³; possibly this has influenced the map’s execution. In this view, the “R.C.” annotations could be explained, as well as the depiction of administrative boundaries that follow the demarcation sanctioned by Pius V¹⁶⁴. The orography does not accurately follow the natural relief of the landscape. The hydrography is richly elaborated and should be attributed to the works of Holstenius, as it is depicted nearly identical to the frescoes in the *Galleria delle Carte geografiche* in the Vatican (Map 25). All lakes are represented. Similar to the maps of Holstenius the Pontine swamps are not depicted as a lake, in contrast to the bulk of maps of the 15th and 16th century. On the 22 cm broad cornice of the map a description was made of all classical ruins that have fallen to the Christians. For the positioning of classical locations Holstenius’ maps and *Latium* by Kirchner seem to have been consulted¹⁶⁵; these contributory maps were not without fault: on all three maps the toponym “Le castella olim Tres Tabernae” clearly puts the latter site on the wrong location. The *Nuova e esatta* map was, without major changes, in use until 1750.

Map 35. Topografia geometrica dell'Agro Romano¹⁶⁶

1692

- Giovanni Batista Cingolani, under the direction of P. Francesco Eschinardi
- Copper engraving
- It consists of six parts, 65 by 56 cm each
- The scale is 500 pari per 135 mm or approximately 1: 44000
- An arrow indicating the north specifies the orientation to the north-north-east
- The projection is unknown, a coordinate system is shown in minutes on the cornice
- HIST THEMATIC MAP
- TOP, LU, HYD, INFR, ANC

The work initiated by Pope Alessandro VII, to make a cadastral inventory and mapping of all settlements in the Agro Romano, was continued after the Pope’s death (in the year of 1667) by Giovanni Batista Cingolani. His inventory of place names, consisting of the *Catasto Alessandrino* combined with new data recorded on-site, resulted in the *Topografia geometrica dell'Agro Romano*. Published in 1692, it constitutes a solid work in which all areas and locations along the roads are dealt with consistently. The research and mapping was supervised by the

mathematician and physicist Francesco Eschinardi, who originally worked on the Catasto Alessandrino. While this purely topographical map is in essence a large scale accurate contemporary landscape description with a keen eye for detail, it also attempts assigning several ancient toponyms to the then present-day topography. Hydrography is depicted excellently, as are the road networks, settlements and ruins (shown *ad visu*). A striking example of the detail used in hydrography is a small lake north-west of Ferriere di Conca, probably being the remains of a larger lake in the Campomorto area that was depicted on older maps¹⁶⁷. The toponymy is presented in detail: in Frutaz¹⁶⁸ the printed list of 1704 by Domenico De Rossi was reproduced; this list of 411 *tenute* clarifies the individual numbers depicted on the map. Regarding the toponyms, the numbers 143-304 are of interest to this research. Similar to the cadastral registry of Alessandro VII (Map 29-32), the names are grouped along the lines of the ancient roads, starting at the major gates of Rome¹⁶⁹. On this inventory by De Rossi, the names of settlements, their owners and the size of their territories were indicated. The list reproduced in Frutaz was not part of the original map publication, but of a later version, dating from 1704. In later years more versions of the inventory would emerge (in 1770¹⁷⁰ –with a reprinted version of the map- and in 1803¹⁷¹), of course being updated with the names of the new owners¹⁷².

Map 36. *Il Lazio con le sue più cospicue strade antiche, e moderne e' principale Casali, e Tenute di esso*¹⁷³

1693

- Giacomo Filippo Ameti
- Copper engraving
- It comprises of 4 sheets measuring 81 by 113,7 cm in total
- The scale used: 10 standard mile equals 150 mm (approximately 1:106667)
- No orientation is indicated, but it appears to be approximately north-north-east
- The projection is unknown, a coordinate system is shown in minutes on the map's cornice
- HIST THEMATIC MAP
- TOP, LU, HYD, INFR, ANC

According to Almagià and Frutaz this work is inspired on, but also shows in many respects improvements of Mattei's map (1674, Map 34), as regarding toponymic detail, and the depiction of the coastal area, the *Palude Pontina* and the Sacco Valley. Ameti did not use the Eschinardi-Cingolani map because the preliminary work for *Il Lazio* was well on its way when the Eschinardi-Cingolani map was printed. The *Il Lazio* map is dedicated to cardinal Pietro Ottoboni and adorned with his *stemma*. This might imply an active participation of the church (possibly being commissioned), although this cannot be stated

with certainty as dedications on escutcheons were fairly common, as explained above¹⁷⁴. Ancient toponyms and contemporary topography are clearly distinguishable by their typeface and descriptions¹⁷⁵. An example of the topographical detail of the map is, amongst others, shown by the references to the *capanne* (huts) of fishermen in the Fogliano lake area, the vineyards in the wider Velletri area and the olive yards between Sermoneta and Sezze. This map proves to be very important for the study of toponyms: it depicts 290 cartographical toponyms in total in the research area. Property owners are mentioned; lands without a stated proprietor belong to the Pope¹⁷⁶. The annotation "diruto" refers to ancient ruins. The pedemontana route is annotated as "strada romana per Napoli" and is drawn along the base of the mountains of Cori, Norma, Sermoneta and Sezze, from there turning to the valley of Priverno and the Amaseno, along the Fossanova monastery and the Monte Romano and Seano. It joins the ancient route of the Via Appia near Terracina. The topography is not always portrayed correctly: for example, on this map the Appia seems to run behind Anxur and a range of small hills along the coast.

Map 37. *Bonifica delle Paludi Pontine*¹⁷⁷

- 1701

- Anonymous mapmaker
- It consists of 3 sheets measuring 54 by 104,5 cm in total
- The scale is not specified
- No indication of orientation is added
- No projection is specified
- POL, TOP, LU, HYD, INFR

Although its commission and the designer of the *Bonifica delle Paludi Pontine* are unknown, it seems to be part of the project scheme designed for the drainage work done in the Pontine plain around the turn of the 18th century: this map is "data per parte de'bonificatori l'anno 1701", as was written on the back of *Foglio 3*. According to an annotation on the left lower corner, everything portrayed in cornflower blue was part of the *Palude*. The orography is shown basically, but the hydrography and interconnection of the lagoon lakes is depicted very transparently. The "confino tra il Duca di Sermoneta and Terracina" is drawn straight through the Pontine plain.

Map 38. *Nuova carta geografica dello Stato Pontificio*¹⁷⁸

- 1755

- Cristoforo Maire and Ruggero Guiseppe Boscovich
- Copper engraving
- 64 by 116,5 cm
- The scale is not specified, but an indication of scale is given by measuring a mile on the map
- The orientation is not indicated but it is probably due north

- An unnamed trapezoidal projection, coordinate system is laid out along the map's cornice
- TOP, HYD, INFR, ANC

The *Nuova carta geografica dello Stato Pontificio* is incorporated in this study, as it was the first cartographical work in which topography was set within a precise measurement network¹⁷⁹. It was made based upon a large geodetic-topographical operation, the first to be conducted in the Papal state. The geodetic approach and the final execution of *Nuova carta* must have been inspiring for the creators of the *Carta Geografica dello Stato Pontificio* (Map 49, 1851), which for example was to have the same type of preparatory trigonometric works and the same prime meridian, the Ferro meridian. For the trigonometric network laid over the Italian peninsula, the chosen geodetic starting points were located close to the city of Rimini and the Cecilia Metella tomb¹⁸⁰.

Altogether, 84 settlements were geodetically measured. The creators of the map were not focused on the particularities of the terrain but more on the positioning of settlements and individual topographical point elements. Therefore, detail on orography and land use is lacking, also because of the small scale. The toponyms however, are valuable for this study because of the exact positioning of the settlements, notably the postal stations along the main routes. The hydrography is shown in great detail. Around the year of 1770 a influential revision of this map was undertaken by an anonymous cartographer: *Carta dello stato della Chiesa e del Granducato di Toscana*¹⁸¹, a copper engraving of 58x 78,5 cm depicting not just the Papal state but the whole of Central Italy.

Map 39. *Campagna di Roma di nuova proiezione*¹⁸²

- 1783
- Giuseppe Zaliani
- Copper engraving
- 31,2 by 40,8 cm
- The (large) scale is not specified, but an indication of scale is given by measuring of a mile
- An orientation is not indicated but it was probably due north
- The projection is unknown, a coordinate system is laid out along the cornice
- TOP, LU, HYD

The *Campagna di Roma di nuova proiezione* was incorporated in the *Atlante Novissimo*, that was edited by Antonio Zatta. The orography is set in an *ad visu* view. The toponymy is portrayed in detail and almost in the same way as on the Maire and Boscovich map for the Pontine plain and the Lepine Mountains (Map 38); near Rome the toponyms are depicted more dense and more detail is given on the hydrography.

Map 40. *Pianta delle Paludi Pontine formata per ordine di Nro Sig.re Pio papa VI*¹⁸³

- 1785
- Gaetano Astolfi
- Copper engraving
- It measures 96,3 by 137,3 cm
- The scale is not specified, but an indication of scale is given by indicating the distance of a mile on a measurement bar
- An arrow indicating the north specifies the orientation to the north-east
- The projection is unknown
- TOP, LU, HYD, INFR

Because this map of the area between Velletri and Fondi was dedicated explicitly to Pius VI (1775-1799) and his zealous efforts to at long last drain the swamps of the Pontine plain, one could expect a biased topography, with possibly an emphasis on toponyms or infrastructure associated with the drainage works and/or church institutions. The map is based on a map by Salvati, that was executed in 1777¹⁸⁴. The Pronti map (1788, Map 41) and Salvati map (1795, Map 42) seem to have used the same base map. The *Pianta* is part of a set of five sheets containing 24 *ad visu* views of amongst other things towns and palaces in the Pontine area (that were not reproduced in Frutaz). A conspicuous topographical feature incorporated on this map is the *stagno* near Priverno that might be a long term landscape indication for the swampy conditions in the Priverno plain. The toponymy is treated in detail but frequently is difficult to decipher when printed in small letters. Especially interesting are the mountain routes which are made visible as part of the map's orography, shown in a bird's-eye view.

Map 41. *Pianta topografica del Circondario Pontino con la delineazione de'nuovi lavori e fabbriche fatte erigere dalla S. di N.S. Papa Pio sesto*¹⁸⁵

- 1788
- Domenico Pronti
- Copper engraving
- It measures 28,5 by 35,5 cm
- The scale is not specified, but an indication of scale is given by indicating the distance of a mile on a measurement bar
- An arrow indicating the north specifies the orientation being to the east-north-east
- The projection is unknown
- TOP, LU, HYD, INFR

The map is worthy of note as it holds 13 small sketches on its cornice, showing *ad visu* views of key structures (i.e. *poste*, *palazzo*, *magazine*, mills and bridges) associated with the *bonifica* of the Pontine region. Among these are

sketches of the sites of Foro Appio, Torre tre Ponti and Mesa.

Map 42. *Carta esprimente lo stato dell'Agro Pontino già bonificato dalla Santità di Nostro Signore Papa Pio VI*⁸⁶

- 1795
- Serafino Salvati
- Copper engraving
- It measures 49 by 68,3 cm
- The scale is not specified, but an indication of scale is given by indicating the distance of a mile on a measurement bar
- An arrow indicating the north specifies the orientation being to the east-north-east.
- The projection is unknown
- TOP, LU, HYD, INFR

The *Carta esprimente* closely resembles the map designed by Salvati in 1777⁸⁷, and its derivatives, Maps no. 40 and 41. As in the case of Map 40, the map was dedicated explicitly to Pius VI (1775-1799) and his efforts to finally get a grip on the swamps of the Pontine plain; this focus on the plain and its hydrology might have influenced the toponymy and topography.

Map 43. *Nuova pianta topografica dell'Agro Romano*⁸⁸

- 1803
- Andrea Alippi (cartography) and Nicola Maria Nicolaj (toponyms)
- Copper engraving
- It measures 53,7 by 94 cm
- The scale is not specified, but an indication of scale is given by indicating the distance of a mile on a measurement bar
- An arrow indicating the north specifies the orientation being to the north-east.
- The projection is unknown
- POL, TOP, LU, HYD, INFR

The *Nuova pianta topografica dell'Agro Romano* is an appendix to the second volume of a pair of books written by Nicola Maria Nicolaj, that recounted the legislative, topographical and historical setting of the *Agro Romano*. The inventory of settlements accompanying this map is an updated adaptation of the Cingolani map/list of the year of 1692 (Map 35). Altogether 362 toponyms are numbered; in contrast to the Cingolani map, the toponyms are not ordered following the major routes, but are placed at random. Nicolaj used an up-to-date survey (performed in 1783) of the existing topography as his primary source for this list⁸⁹. This topographical inventory seems to be a very valuable and, in essence, a straightforward ordnance survey map, especially proving useful for toponymic research. The toponyms are numbered

in alphabetical order. Furthermore, the map features the municipal boundaries.

Map 44. *Carta storica della Campagna Romana*⁹⁰

- 1804-1805
- Charles-Victor de Bonstetten
- Copper engraving
- It measures 17,7 by 27,7 cm
- The scale is not specified
- Orientation is not indicated but probably is roughly north-east
- The projection is unknown
- HIST THEMATIC MAP
- TOP, LU, INFR, ANC
- See 5.III and Appendix 5.1 Display of a relevant selection of the maps

This map is one of the first examples of a *carta storica*, or a historical thematic map, featuring the research area in the 19th century. Although a kind of projection was used, the map to some extent seems to tend to the 17th century tradition of reconstructive cartography of ancient landscapes, i.e. the topographical distribution is not fixed with great accuracy by then state-of-the-art geodetic techniques, and the overall picture still comes across as rather schematic. Most of the toponyms (written in Italian and French) are contemporary, and some are historical reconstructions.

Map 45. *Carte de Marais-Pontins*⁹¹

- 1811
- Barone De Prony
- Copper engraving
- It measures 72,2 by 78,5 cm
- The scale is not specified, but an indication of scale is given by indicating the distance of a mile on a measurement bar
- Orientation not specified but probably due north
- The projection is unknown. The prime meridian runs over Paris
- HIST THEMATIC MAP
- HYD, ANC

This map is incorporated in this research not so much for its geographical or topographical qualities, as for its being complementary to the creator's influential writings on landscape description and ancient topography⁹². The hydrography is depicted extensively. Toponyms are restricted to the main settlements and infrastructure and are very difficult to decipher. The ones put in larger characters (and smaller ones who are readable) seem to be the same as on the Salvati (Map 42) and Astolfi (Map 40) maps and therefore are not incorporated into the toponymic database.

Map 46. *Plan topographique de la Campagna de Rome, considérée sous le rapport de la géologie et des antiquités*¹⁹³

- 1811
- Frédéric-Charles-Louis Sickler
- Copper engraving
- It measures 56 by 87,5 cm
- The scale is not specified
- An arrow indicating the north specifies the orientation to the north-east.
- The projection is unknown
- HIST THEMATIC MAP
- TOP, INFR, ANC
- See 5.III and Appendix 5.1 Display of a relevant selection of the maps

As is elaborated upon in paragraph 5.III, historical cartographers since the Renaissance had been trying to match the contemporary with the classical literary landscape. Sickler was to be the first cartographer within the new upsurge in interest in classical remains of the 19th century, to try to link ancient names of people and places with the contemporary then-present-day landscape and settlement by means of new mapping techniques, like a vertical view. He focused on the relation between the present landscape and (post-)classical topography. In his *Plan topographique de la Campagna de Rome, considérée sous le rapport de la géologie et des antiquités* Sickler outlined the territories of the ancient colonies based upon his knowledge of the landscape. Despite his use of modern techniques in the creation of the map, these are not prominently present on the map. Sickler did not indicate projection and scale; the objectives of this map were clearly not to portray the current topography in the first place, but to create a background on which ancient topography could be shown. The toponymy is depicted meagrely. The typeface used does not clearly create a discrepancy between the contemporary inhabited and the reconstructed classical topography: italics and upright characters are used to indicate both. The only way to tell the contemporary and reconstructed reality apart is the language used: only the toponyms in Italian seem to point to contemporary topography. In contrast to the names written in Latin, which seemed to refer to the ancient topography. For this reason only Italian toponyms of this map are incorporated in the cartographical toponymic database.

Map 47. *Latium Vetus et regions conterminae*¹⁹⁴

- 1827, 1834, 1837/48
- design by William Gell and topography mainly by Antonio Nibby
- Copper engraving
- It measures 1827: 73,4 by 81,5 cm, 1834: 70,7 by 95,4 cm, 1837/48: 71,9 by 79,6 cm

- The scale is not specified, but an indication of scale is given by indicating the distance of a mile on a measurement bar
- The north-north-east orientation is specified by showing parts of the projection pane
- The projection is unknown
- HIST THEMATIC MAP
- TOP, HYD, INFR, ANC

These are three versions of the same map, updated with every new edition. Trigonometric field surveys (directed by Gell) and personal reconnaissance (Nibby) had yielded information that was processed in the maps¹⁹⁵. The main topographical input was contributed by Nibby. The 1834 edition officially was exclusively published by archaeologist-cartographer Gell, but the influence of the earlier collaboration with archaeologist-topographer Nibby in its execution was strong. It is expedient to treat these three versions in one go as each gradually gives new topographical-toponymic and spatial information and the versions build upon each other.

Thomas Ashby was able to acquire the notebooks written by Gell during the latter's travels in the area¹⁹⁶. From these it is clear that Gell had procured first-hand knowledge of the archaeology, topography and geographical conditions of the area south of Rome, until roughly the line Cisterna-Anzio. In addition Nibby is known to have travelled whilst making first-hand notes. Consequently these maps should be seen as valuable sources in reconstructing the 19th century contemporary (perspective of the) landscape, and in locating the ancient vestiges still present in it. However, some historical reconstructions seem to be way off. For example, the location of Tres Tabernae was depicted in a wrong spot.

Just as in case of Sickler, modern mapping techniques seemed to have been of minor importance to the creators of the map as regards its execution: projection and scale were not indicated. However, the *Latium Vetus et regiones conterminae* was the first map created after a complete triangulation of Lazio¹⁹⁷. The areas that were not surveyed or studied were left blank on the map. The hydrography and infrastructure network of Lazio are shown in detail. The toponymy is detailed but mainly focussed on the ancient settlements and the classical geography (especially forests), the larger characters denoting the region's reconstructed ancient topography; the legend is most clearly readable on *tavola* 240.

Map 48. *La campagna Romana esposta nello stato antico e moderno*¹⁹⁸

- 1845
- Luigi Canina
- Copper engraving
- It measures 150 by 140 cm

- Scale 1 : 60.000
- The map's orientation is not indicated but probably is due north (or with a slight deviation)
- The projection is unknown
- HIST THEMATIC MAP (ancient topography is not the predominant feature)
- TOP, LU, INFR, ANC
- See Appendix 5.1 Display of a relevant selection of the maps

Despite the fact that this work was compiled during the innovative period of trigonometric precision measurement and refined projection of the first half of the 19th century, the map is not graduated and has no stated projection, nor orientation. Without question, Canina's principal aim was to visualise the topography and particularities of the terrain. As on other *carte storiche* however, whilst creating this map he must have made use of a projected and precisely processed base map produced with geodetic and trigonometric precision: the positioning of sites and roads and morphology of the landscape seem to be fairly consistent with the actual contemporary situation.

The map's detailed description of topography, toponymy and land use can be used to assess and add to the, as will be shown, important *Carta Geografica dello Stato Pontificio* (Map 49), which was created around the same period. The La campagna map's toponymy is extensive and ancient vestiges are indicated with the sketched outlines of their site. Although the region's ancient topography is represented, it is not the predominant element on the map, and is almost subliminally embedded in the modern landscape. Canina must have derived the data for this ancient topography from his own six volume *Storia e topografia di Roma antica e sua campagna* (1839). Although it remains unclear what basic sources Canina used for *Storia e topografia*, it is very likely that he and his team performed some reconnaissance work on the ground, judged by the detailed drawings of the ancient vestiges. An example of such detailed portrayal is the depiction of the site of Le Grottae (OLIMsite 551), where the part of the villa exposed by the sea at that time was precisely drawn on the map. Tomassetti, considered the greatest authority on topographical and toponymic research in the beginning of the 20th century, dubbed this the most valuable historical-topographical map of the 19th century. The toponymy in the Pontine plain is scarcely provided.

Map 49. *Carta Geografica dello Stato Pontificio e del Granducato della Toscana costruita sopra misure astronomico trigonometriche ed incise sopra pietra a Vienna nell'Istituto Geografico Militare*¹⁹⁹ Istituto Geografico Militare (Vienna)

- 1851
- Engraved on stone
- Scale 1: 86400
- The orientation is to the north
- The Cassini projection is used; the prime meridian is Ferro
- POL, TOP, LU, HYD, INFR, ANC
- See 5.IV and Appendix 5.1 Display of a relevant selection of the maps

The *Carta Geografica dello Stato Pontificio e del Granducato della Toscana costruita sopra misure astronomico trigonometriche ed incise sopra pietra a Vienna nell'Istituto Geografico Militare* made by the Austrian Military Geographical Institute in Vienna (1851), is the first truly modern map of Lazio. Its origin, technical execution, digitalisation and significance for the current study is treated in detail in paragraph 5.IV.

Map 50. *Carta Corographica ed Archeologica dell'Italia*²⁰⁰

- 1881
- Heinrich Kiepert
- Chromolithography
- It measures 96,9 by 121,4 cm
- Scale 1: 250.000
- The map is orientated to the north
- The projection is unknown. The map's prime meridian runs over Paris
- TOP, HYD, ANC

The production of the *Carta Corographica ed Archeologica dell'Italia* marked the end of the tradition of the *Carta Storica*²⁰¹. As had been done during the production process of earlier *carte storiche*, the German geographer and cartographer Heinrich Kiepert used modern topographical maps to add in ancient geography. The names of classical regions were rearranged to the latest insights. The map was influenced, among other things, by the work done on the *Carta Geografica dello Stato Pontificio* (Map 49, 1851)²⁰². The depiction of hydrography and toponymy is rich but do not provide new information as they seem to have been adopted from the 1851 map (nr. 49).

Map 51. *Levate al 5000 per i consorzi della bonifica di piscinara e bonificazione Pontina 1925-1936 Istituto Geografico Militare (Vienna)*

- 149 sheets measuring 52 by 46,5 cm
- The scale is 1: 5.000
- The map is orientated to the north

- Projection: Monte Mario; georeferenced in ED50 / UTM zone 33N
- POL, TOP, LU, HYD, INFR, ANC
- See Appendix 5.1 Display of a relevant selection of the maps

These very detailed topographic maps, scaled 1:5000, were made by the Istituto Geografico Militare throughout the years 1925 to 1932. They were compiled for the Opera Nazionale Combattenti (ONC) to be used during the large reclamation project of the plain, which started in 1928²⁰³. The area surveyed by the team of the Istituto Geografico Militare stretched from the Astura basin eastwards and southwards across the Pontine plain until the foothills of the Lepine and Ausoni Mountains and Monte Circeo. The maps were executed with great topographical precision, even when dealing with the most remote parts of the landscape. The map's legend is extensive. The maps were almost all (i.e. 132 of the total of 149) georeferenced in the early 2000s and projected in ED50 / UTM zone 33N²⁰⁴. In total 132 sheets have thus been studied. See Appendix 5.1 for a map of the coverage of the ONC-maps.

From the reports available concerning the creation of these maps²⁰⁵ it is known that 75000 acre of difficult terrain was surveyed. This is illustrated by the map's level of detail. The maps use 10 cm elevation contour intervals, which are supplemented by thousands of elevation points. Even the smallest landscape features like *lestre*, gullies, pools and mule tracts seem to have been consistently depicted. If an area proved to be impossible to cross this was annotated on the map as “non percorribile” (sheet O11) or “zona impraticabile” (sheet R12). The toponymic detail differs per map; this can partly be explained by the voids of some parts of the plain, but in some cases the toponymic scarcity seems rather arbitrary. The consistency of toponymy used is not always checked between different sheets. This inconsistency can for example be demonstrated by the spelling of names of roads. On sheet H9 a road is spelled *Via Setina*, on G8 the same road is named *Via Settina*.

Endnotes

- 1 Attema 1993 and 1996; see 1.I.5. For more on the insider vs. outsider view see below 5.II, *Leonardo's Carta delle Paludi Pontine and the insider / outsider look* and 8.I.1.1.
- 2 De Silva & Pizziolo 2004
- 3 Through their retrospective cartographic method, which they call the *Reverse Research Method*, De Silva and Pizziolo were able to gain some new insights into the long term history of their research area near Florence. They noted that their reconstructed Roman centuriation grid, which must have had strongly impacted the landscape and most likely was used over a long period of time, closely resembles the early 19th century cadastral field allotment. One has to be careful to jump

to conclusions too easily, as the authors merely put up a reconstructive model. De Silva and Pizziolo however, by using the *Reverse Research Method*, convincingly verified their hypothesis that there must have been continuation in field grids, and in water and road networks (in orientation and size), from the Roman times until at least the beginning of the 19th century.

In addition, their research showed remarkable results when comparing the 1820 and 1954 maps to modern maps (of 1997) and aerial photographs. They demonstrated that there was a general continuity in the landscape from the 1820-ties until the second half of the 20th century, Silva & Pizziolo 2004, 295. The 19th century field boundaries and the road and water networks of Sesto Fiorentino for example, proved to be largely identical to the 1954 cadastral maps. Only when the region was drawn into the expansion of Florence from the 1950-ties onwards, things seem to have changed drastically. De Silva and Pizziolo did the same research on the hydrology and road network of the Grosseto plain in southern Tuscany, an area reminiscent of the Pontine region. They found comparable results: a predominantly continuous landscape until at least the 1950-ties and a disappearing image of the ancient landscape on the latest maps. They reached the overall conclusion that the Tuscan landscape (at least the parts they studied) was more or less stable from the Roman period until large scale activities took place, mostly throughout the second half of the 20th century. And that especially the maps of the 18th and 19th century provide details on earlier hydrography and infrastructure.

- 4 Margherita Cancellieri personal communication; De Haas 2011, 2017
- 5 See the introduction to Chapter 3.
- 6 Harley 1988 and 1989
- 7 Harley 1988, 277
- 8 Harley 1988, 282
- 9 Harley 1988, 295
- 10 Harley 1988, 279; Harley called for a new perspective on the study of ancient maps, which should be aimed at their “deconstructing”, in order to find, to the greatest possible extent, the nuances of the political, religious or social forces at work during the creation of maps, Harley 1989, 2ff, 7 ff.
- 11 Harley 1989, 1 ff.
- 12 Harley 1988, 287ff; Some examples of deliberate manipulation of map content are the choice of a specific projection, the manipulation of scale, the movement and size of icons and the use of emotive colours.
- 13 Harley 1988, 289ff; Unconscious distortions of map context were caused by the influence of values and preferences of the map makers, like the choice in geometry (location on the earth on combination with the projection) which could enlarge the political impact of the map, even if this was not the mapmaker's intention; exemplary are the navigation maps which portrayed Europe at their centre. The unconscious choices what not to include and technical rules may also have had an impact on the maps objectivity, such as the omission of small (and deemed cartographically unimportant) houses during cartographic surveys. Another example of unconscious distortions was the application of hierarchy: on maps important towns or castles were often portrayed in ways that far exceed their actual size.
- 14 Almagià 1960, 3 ff; Frutaz, 1972, 3 ff, 14-15.
- 15 For more on the results of the study of maps, see 5.V The results of analysis.
- 16 Attema 1996, 176 ff.
- 17 Attema 1996, 177

- 18 De Paolis & Tetro 1985, 19
- 19 Attema 1996, 179
- 20 Another map exists that was probably drawn by or created under the supervision of Leonardo da Vinci of the coast of Lazio, Frutaz 1972, X, tavola 21, discussion on pages 15-16. According to Almagià 1960, 10 this sketch can be dated around the year of 1513/1516 and depicts the route of the itinerary from Acquapendente to Rome that Leonardo had taken in the years before. Unfortunately Tyrrhenian southern Lazio was not treated in detail.
- 21 Baratta 1928, 3-21
- 22 The above discussed map by Da Vinci of Lazio, dated to 1513/1516, shows that at least around that time his topographical knowledge of the Pontine region was poor, certainly in comparison to the area west and north of Rome, which was portrayed in much more detail. Although this 1513/1516's map was intended to portray the route of his journey to Rome, during which he obviously passed through the northern part of Lazio, the contrast between Tyrrhenian southern Lazio and the rest of Lazio is striking: All of Lazio, except for the Pontine region, was shown with a lot of topographical and toponymic particularities.
- 23 Attema 1996
- 24 Attema 1996, 179
- 25 Frutaz 1972, 46
- 26 For an elaboration on this issue of this apparent incompatibility see Attema 1999, 23 ff.
- 27 Pliny NH 3.69, referred to 53 peoples to have settled in Latium Vetus who seemed to have vanished. His contemporary landscape of the first century AD did not match with the densely populated pre-Roman landscape in literature.
- 28 Attema 1999, 26
- 29 Other than the title suggests, the map also covers the small Ducato di Lucca, as can be read from the *Cenno sulla Formazione Della Carta*, sheet E6.
- 30 Vatican Library STAMPATI collection: R.G.geogr.S.124.Litografia. This first edition was published in Vienna (by Artaria et Comp. Wien) and Milan (by F. Artaria e figlio Editori), as can be read on stamps put on a number of sheets of the Vatican copy.
- 31 Frutaz 1972, LXIII.2
- 32 The Viennese fathom measures 1 *Wiener Klafter zu 6 Schuh zu je 12 Zoll or tesa di Vienna*, or 1,9 m = 2 yards.
- 33 The Austrian Military Geographic Institute had in 1839 been transferred from Milan to Vienna; Lombardy was part of the Austrian Empire at the time, until 1859. Frutaz 1972, 136.
- 34 Frutaz 1972, 136
- 35 As can be read on the *Cenno*, Frutaz LXIII.2, and the *Foglio d'Insieme*, Frutaz 1972, LXIII, 1.
- 36 From the *Cenno* it becomes clear that in Lazio a great deal of new fieldwork still had to be done. "Quest'Istituto possadeva bensì dello stato della Chiesa una rete trigonometrica, e la copia di quasi tutti i piani del censo del territorio posto a settentrione dell'Appennino, ma mancava di ogni elemento per la rimanente parte meridionale, poichè le operazioni trigonometriche eseguite verso il 1752 dai P.Boscovich e Maire, avendo avuto per iscopo particolare la misura dell'arco di meridiano compreso fra Roma e Rimini, non amministravano che pochi punti trigonometrici, e questi anche troppo lontani fra loro per poter servire di base nell'unione di paini parziali ed isolati". New triangulations had to be measured out on the spot. Sheet I.13 attests to this extensive fieldwork, which was undertaken in the years 1841-1843.
- 37 The Cassini(-Soldner) projection is a system of rectangular coordinates redeveloped by J. G. Soldner in the beginning of the 19th century out of the system created earlier by Cesar Francois Cassini de Thury (1714-1784); with this new mathematical analysis and recalculation the projection became widely used; it proved especially practical for topographical mapping (<http://www.3dsoftware.com/ Cartography/USGS/MapProjections/Cylindrical/Cassini/>). The Cassini projection preserves scale down the central meridian and every line parallel to it. This feature renders it therefore best suited for large-scale mapping of areas extending north-south, such as Italy. Some slight distortion of shape and distance can be perceived away from the central meridian of projection (from: Arc Info Desktop help). It proved popular because of the projection's simplicity. In the beginning of the 20th century in many countries this system replaced by a Gauss-Kruger (Transverse Mercator) based system. In ArcInfo the properties of the Cassini projection are specified as follows: *Shape*: No distortion along the central meridian. Distortion increases with distance from the central meridian. *Area*: No distortion along the central meridian. Distortion increases with distance from the central meridian. *Direction*: Generally distorted. *Distance*: Scale distortion increases with distance from the central meridian; however, scale is accurate along the central meridian and all lines perpendicular to the central meridian.
- 38 The position of the prime meridian is not stated on the maps but becomes clear from the geographical locations in Italy on the map between 29 en 31° longitude. What's more, Ferro is the prime meridian for all (land) maps of the Austrian Military Geographical Institute of the 19th century (for sea maps Greenwich was adopted in the 1870s), see <http://wwp.greenwichmeantime.com/info/prime-meridian.htm> [accessed 2004]. The Ferro meridian had already been used by Ptolemy as his map's prime meridian, as he regarded this Canary Island as the western verge of the inhabited world, Ptolemy *Geography* 1.11-12, 7.5, 14. Ferro was adopted after the *Geography* was rediscovered and used for example by the cartographers in the age of Columbus, Harper's Encyclopedia of United States History (ed. Benson Lossing) on The Perseus Website: <http://www.perseus.tufts.edu> [accessed 2004].
- 39 Sheet I.13, *Posizioni geografiche nello Stato Pontificio*. Sheet I13, *Posizioni geografiche nello Stato Pontificio*, was not reproduced in Frutaz, but has been copied for the current study in the Vatican Library STAMPATI collection.
- 40 The dome of the *Duomo* in Milan is the chosen zero-point for the coordinates ("centro delle coordinate"), or central meridian, according to the text on Sheet I.13. Milan is the centre of the projection pane, i.e. it lies exactly on the line on which the distortion should be zero. This central meridian runs pole to pole (as it is a transversed map projection), and the further away a given point is from this central line, the larger is the deviation on the map from its measured position.
- 41 Frutaz 1972, 136. Frutaz acknowledged this; in his book the prints are portrayed slightly more clear than on the print available for this research.
- 42 The grey tones fortunately are more clearly detectable on the Frutaz copies, Frutaz 1972, LXIII.4a ff.
- 43 As stated on the *Cenno*, Frutaz LXIII.2.
- 44 Early exact cadastral mapping of the *lestre* seems improbable in view of the ever changing locations, size and number of

inhabitants of these pieces of land. Government control was weak in these areas. Even until the beginning of the 20th century no taxes were paid in the area south of the Fogliano lake, where most of the *lestre* were located. See Veenman 2002, 120.

- 45 This digitalisation was executed in 2002 and therefore was not performed on screen but on a digitising board, as the on-screen technique was not yet available. In order to establish as many workable so-called tic-points as possible, I needed to fix the digitised map (in digitiser units) on the projected map (in real world coordinates), and to divide the four digitised sheets each sliced into four quarters. In total 13 quarters were thus created. A thematic map layer or so-called *coverage* (for example hydrography, land use, topography) was digitised per quarter, later to be mapjoined into one single geo-database coverage for the whole research area. In this way four tics were created per quarter, and when joined, the total number of tic points amounted to 31 per layer or coverage. The tic-points were established on the intersection point of a marked integer of degree of longitude and of latitude nearest to the corner of the quarter. The numbering was done according to the coordinates on the map: a tic situated on the intersection point of the latitude of 31°41' and longitude of 42°31' was number 31414231. Per original map-sheet the quarters were numbered as follows:

1	2
3	4

The name of the coverage was established per quarter by the name of the map (H17), the quarter (1) and the feature (e.g. canal). It thus follows that the coverage in which canals and other waterways are digitised in the upper left quarter of map H17, was called H171kan.

During the digitising process, in discontinuous digitising sessions the RMS error of the tic points had to be checked at the start of each new session. This RMS error, short for root mean square error, is a measure computed when registering a map to a digitizer. It is also known as "tic registration error" and specifies the inconsistency between established point positions and their digitised locations. So for example if the map has shrunk between sessions by reasons of spilling your coffee, or when the map is removed and again is put on the digitizer and not fixed correctly on it, the RMS error might be too large. This would mean that digitised locations do not have the correct spatial position in relation to locations digitised in earlier sessions. For the RMS error the standard maximum value of 0.005 has been adopted, suitable for highly precise geographic data (according to Arc Info standards).

- 46 In point coverages the points are registered as labels, following Arc Info standards.
- 47 The 5 types: stone and wooden bridges, boat bridges, ferries and ferriages.
- 48 For the correct final visualisation of the infrastructure, this coverage *dam* should be put next to the road coverage, as one can be almost certain that a road was running over the dam if a road connected to the dam.
- 49 Attema 1993 interpreted the viticulture and olive culture on the 1851 maps as part of the general practice of extensive arboriculture.
- 50 The 5 types are: stone and wooden bridges, boat bridges, ferries and ferriages.
- 51 See 7.I.1.2.
- 52 See 8.II.1.2.
- 53 See 8.I.1.1.
- 54 Appendix 6.1

- 55 Forum Appii (OLIMsite 16) is named "rocchetta" (?) on an Anonymous map (after Volpaia) dated to 1556, Map 18, cf Del Lungo 2001, 17, n. 10. The first secure depiction on a map of Forum Appii is on the map by Mercator 1589, Map 19: "Appio Foro rovinato". Conspicuous are the number of wrong identifications and locations of known historical sites. Examples are Bovillae (OLIMsite 86) which on several maps is wrongly reconstructed north of the Via Appia, at Torre di Riparo, for example by Ameti 1666, Map 33 as "cast.boville" and Ameti, 1693, Map 36 as "bovile nunc torre di repaole"; Ad Sponsas (OLIMsite 43) was incorrectly reconstructed near Tre Ponti by Mattei 1674, Map 34 as "mercata olim del sponsas" and by Ameti 1693 as "torre mercata ol ad sponsas". In 17th century Tres Tabernae (OLIMsite 30) was incorrectly reconstructed at Le Castella, for example by Mattei 1674, Map 34 as "le castella olim tres tabernae" and by Ameti 1693, Map 36 as "le castelle olim tres tabernae di s. gio laterano".
- 56 The ruins are visible on the map by Ameti (1693, Map 36), annotated as *civitina diruta*, on the crossing of the "Via Mactorina" with the Via Appia. See also 7.I.1.4.
- 57 On Map 36, *Il Lazio con le sue più cospicue strade antiche, e moderne e principale Casali, e Tenute di esso* by Giacomo Filippo Ameti (1693) parts of the tract are visible. See also 7.II.1.1.
- 58 Its route is also visible on the topographical precise 1851 maps, depicted as a cart-road aligned by trees and on Ameti (1693, Map 36I) as the "Strada Romana di Nettuno". Its tract is also still visible on Castelnuovo 1884, Frutaz 1972, LXXV.7 (not included in this study's Catalogue of maps). See also 7.II.1.1.
- 59 As could be concluded from a comparison of the *Carta Tecnica Regionale* of 1990 with modern aerial photographs, the *Ortofoto digitali di Lazio*, via the Geoportale Nazionale - Ministero dell'Ambiente e della Tutela del Territorio e del Mare. Available at: <http://www.opengis.net/wms> [Accessed 31 March 2015]
- 60 ONC map (Map 51), Sheet M6, see also 7.I.1.2.
- 61 See 7.I.1.4.
- 62 See for example *Il Lazio nella carta tolemaica Greca d'Italia* (11th/12th century, Map 2).
- 63 Harley 1989, 2
- 64 The ONC maps have been digitised by the Groningen Institute of Archaeology in the past years, aimed at creating a 3D model of the 1920-s landscape. The scale of these digitise maps is too fine to be of concrete added use to the current study.
- 65 See 7.II.1.4.
- 66 Strabo *Geography* 3.5.231
- 67 Arguably, Italy's greatest connoisseurs of historical maps of the 20th century were Roberto Almagià (1884-1962) and Amato Pietro Frutaz (1907-1980). Almagià was the first to compile an extensive monograph on the vast and essential collection of maps owned by the Vatican: *Documenti cartografici dello Stato Pontificio editi dalla Biblioteca Apostolica Vaticana* (Biblioteca Apostolica Vaticana, 1960). For more recent research on the cartography of Lazio researchers rely on Amato Pietro Frutaz, whose publications built on Almagià, but were more emphatic on the early cartography of the portolan-nautical and Ptolemean traditions. On a more practical level Frutaz' study is the preferred source of information as it provides a clearer index and a more consistent treatment of the relevant material. Its bibliographical body is impressive. The maps in Frutaz' book are generally clearer and provide more detail than the reproductions of the *Documenti cartografici*.

- 68 Only solid proof for a map's patronage will be treated in detail here. One has to be careful to interpret the escutcheons of popes (like the one of Paolo III on Map 15, sheet 6, and of pope Paolo IV on Map 18) as a symbol of papal patronage. These signs do not straightforwardly point to the pope as the patron, but in most cases must merely be seen as a hallmark of authorisation; putting a papal escutcheon on new publications had been a long-established tradition that lasted until the 20th century. This is illustrated by *Il paese di roma e tutti i luoghi particolari dintorno Roma per XX miglia* by Eufrosino della Volpaia (1547, Map 15). There the displayed text "ex motuproprio della Sra m.N. PP, Paolo III" (i.e. papal dispensation) and, in the same *stemma*, the text "con privilegio" by the Lords of Venice and the Duke of Florence, clearly downgrade the escutcheon as merely a sign of official approval.
- 69 In the list of cartographical toponyms (see Chapter 4), an additional parameter is created especially for these historical reconstructions: every toponym is indicated as "contemporary" or "(possible) historical reconstruction".
- 70 IGM, 2006, Database IGM Toponimi 25000 (tutta italia) and CTR 2007 maps for the Regione Lazio produced by the *Carta Tecnica Regionale*. Although generally useful, unfortunately the CTR of Lazio is not the best of the 50 CTR series in Italy. Regions were obliged to set up CTRs but they were free in their choice of cartographical service provider.
- 71 Frutaz 1972, Ia-c, tavola 1-3, discussion on pages 1-3. Currently, there is much discussion as to whether the Peutinger map is actually a map, providing a picture of the 4th century, or if it should be considered a taphonomic document. I have incorporated this document here, not to take a stand in the discourse, but rather because of the fact that it can be visually examined and the elements of which it is composed can be described – just as is the case for "regular" maps.
- 72 The westernmost parts of the map almost certainly are missing; Talbert 2003 suggested an original length of about 850 cm.
- 73 Talbert 2003, 2004b, 131
- 74 Frutaz 1972: 1, tav. 1 proposed a date in the 3rd century with additions in the 5th; more recently, Talbert 2003, 2004a and 2004b placed it in the 4th century AD, and dated this copy to around 1200. There were multiple possible additions later on which complicate argumentations. An example is the addition of the St. Peter's of Rome (built in the first half of the 4th century) and Constantinople (i.e. the name used for Byzantium from about 330 onwards). Talbert 2004, 129 ff. saw the map's bright colouring as fitting the 4th century decorative and artistic fashion.
- 75 Matthews 2006, 70-77; Corsi C., forthcoming 2020
- 76 Cristina Corsi pers. comm.
- 77 Talbert 2004b, 124 ff.
- 78 Talbert 2004b, 122
- 79 Talbert 2004b, 124
- 80 Talbert 2004b, 125
- 81 See also Brandizzi Vittucci on the theory that the omissions on the map of names in the plain were connected to the bad condition of the road in the central Pontine plain. She stated this question is still open, Brandizzi Vittucci 1998, 970.
- 82 This symbol has also been interpreted as a *praetorium* (i.e. an army position or a camp) by Brandizzi Vittucci 1998, 978 ff. This is not very likely as on the *Tabula* the description of a *praetorium* was only seldom given to this symbol (5 of 52 symbols); in most cases it was named *ad aquas*.
- 83 Brandizzi Vittucci 1998, 976 note 196 for details on the discussion and references, 977 and 984.
- 84 Brandizzi Vittucci 1998, 944, after Weber 1976. See also 7.1.1.1.
- 85 Frutaz 1972, XXVII
- 86 Frutaz 1972, II, tavola 5, discussion on pages 3-4
- 87 Lacroix 1993, 3; Berggren & Jones 2000, 42
- 88 The first printed edition of the *Geography* was published in 1475. Ptolemy (87-150 AD) was the first to describe the principle of depicting the spherical earth on a flat surface. From the end of the 14th and beginning of the 15th century, his cartographical works were rediscovered and used as the basis for new initiatives in mapmaking. The *Geography* later in that century knew great distribution through printed multiplication. No actual map of Ptolemy survived, only the texts of his geographical works. Whitfield considered it an ironical twist of fate that, after centuries of neglect, the Ptolemean cartographical principles were rediscovered precisely at the moment that contemporary events (such as the discovery of America) would expose its limitations, Whitfield 1994, 10.
- 89 Cuntz 1923, 15; Berggren & Jones 2000, 42
- 90 Frutaz 1972, 4
- 91 Battelli 1946; Frutaz 1972, III, tavola 6 and 7, discussion on pages 5-6
- 92 Battelli 1946, 453-539. In my toponymic database of written (and none being cartographical) sources, the names shall be firstly mentioned by their modern toponym (as Battelli already interpreted them on his maps), and secondly by their denominations as found in the *Rationes*. Places that were mentioned on the map but not in the index will be excluded from my toponymic database, as they are modern interpretations by Battelli and do not stem from the research period of the toponymic study of this thesis, see page xxx.
- 93 Frutaz 1972, IVa-b, tavola 8-9, discussion on pages 6-7
- 94 The first nautical maps are dated to the 13th century and were all Genovese-made, Frutaz 1972, 7. For the proper use of these maps *portolani* were necessary, i.e. nautical notebooks with a description of the Mediterranean coast, distances between ports, directions of winds, and navigational challenges en route. Portolan charts were in the 13th to 15th century, the practical and common sense mappings of accumulated knowledge of seafaring men. In contrast to the *mappae mundi* of that time, which were the manifestation of landmen's images of the world; see also Campbell 1987.
- 95 Almagià 1960, 3-4, Tav. I; Frutaz 1972, VI, tavola 12, discussion on pages 9-10
- 96 Almagià 1960, 3
- 97 Almagià 1960, 4-5, Tav. II
- 98 Almagià 1960, 5
- 99 Frutaz 1972, VII.1, tavola 13, discussion on pages 10-13
- 100 Frutaz 1972, VII.2, tavola 14, discussion on pages 10-13
- 101 Almagià 1960, 5-6, Tav. III; Frutaz 1972, VIII, tavola 19, discussion on pages 13-14
- 102 Almagià 1960, 5
- 103 Almagià 1960, 6
- 104 Almagià 1960, 5, Tavola V
- 105 Almagià 1960, 5
- 106 Almagià 1960, 7, Tavola VI; Frutaz 1972, IX, tavola 20, discussion on pages 14-15. More details on this map in Almagià 1934, 125-136.
- 107 Almagià 1960, 7

- 108 See Appendix 4.1.
- 109 Frutaz 1972, tav. LXXXII.3; on the lake and its drainage see Van Loon 2009, 19 ff.
- 110 Frutaz 1972, XI, tavola 22, discussion on page 17
- 111 Andrea di Rosa pers.comm.
- 112 Almagià 1960, 5, IV
- 113 Almagià 1960, 8, VII; Frutaz 1972, XIV, tavola 36, discussion on pages 22-23
- 114 For example the Pietro Coppo map of 1524, Map 13; see Almagià 1960, 8.
- 115 Frutaz, 1972, 23
- 116 Almagià 1960, 7
- 117 Almagià 1960, 8
- 118 See 7.1.1.2.
- 119 Frutaz 1972, XIII, tavola 25-30, discussion on pages 20-22
- 120 This map was authorized by pope Paolo III (“*ex motuproprio della Sra m.N. PP, Paolo III*”), and the Lords of Venice and the Duke of Florence (*con privilegio*), as can be understood from the text on the escutcheon on sheet 6. As explained in the introduction to this catalogue, this by no means is to be considered prove of its commissioning by one of these parties.
- 121 Almagià 1960, 7-8, Tav. VIII.
- 122 This projection was developed by Johannes Stabius (Stab) around the year of 1500 and described and promoted by Johannes Werner (in 1514). It is also known as a “Werner projection” (available at www.mathworks.com [accessed November 2004]).
- 123 Almagià 1960, 12, Tav.XII; Frutaz 1972: XVI, tavola 38, discussion on pages 25-26
- 124 Frutaz 1972, XVII.2a, tavola 40, discussion on pages 26-34
- 125 Almagià 1960, 15, Tav. XXII; Frutaz 1972, XVII.4, tavola 45, discussion on pages 26-34
- 126 Frutaz 1972, XIII, tavola 31-34, discussion on pages 20-22
- 127 Frutaz 1972, XXI, tavola 52, discussion on page 40
- 128 Ortelius also created a map of contemporary Lazio after Della Volpaia. This piece from 1570 (Frutaz 1972: XVII, 3, tavola 44) is not included in the catalogue as it is almost identical to other revisions of Della Volpaia’s influential cartographical work.
- 129 Frutaz 1972, 40
- 130 Almagià 1960, 25, Tav. XLIV; Frutaz 1972 XXII.2, tav. 54, discussion on pages 41-42
- 131 The borders depicted on Map 21 (Ortelius, 1595) are historical geo-political reconstructions, defining the borders of Latium Vetus.
- 132 Frutaz 1972, 42
- 133 Frutaz 1972, 42
- 134 Frutaz 1972, XXIII.3b, tavola 58-59, discussion on pages 44-45
- 135 Frutaz 1972, XXIV.2, tavola 61, discussion on pages 45-46
- 136 Philipp Clüver (1580-1622) is seen as the founding father of historical geography and topography. Unlike Ortelius, who only used ancient sources, Clüver gathered the information for his books and maps also by visiting the countries of interest in person. He visited Italy in the year of 1615 and 1618. As a result of his earlier research, the *Germania antiqua* and *Sicilia antiqua* were published, in the year of 1616 and 1619 respectively.
- 137 Frutaz 1972, 45. Title: *Lucae Holstenii, Annotationes in Geographiam sacram Caroli a S.Paulo; Italiam antiquam Cluverii; et Thesaurum geographicum Ortelii; quibus accedit Dissertatio duplex de Sacramento Confirmationis apud Graecos, typis Iacobi Dragondelli, 1666.*
- 138 Almagià 1960, 19-20, Tav. XXXIV; see also Attema 1999, 24; Frutaz 1972, XXVI, tavola 65-67, discussion on pages 49-51
- 139 Frutaz 1972, tavola 64-65
- 140 Frutaz 1972, tavola 66-67
- 141 Almagià 1960, 20
- 142 Frutaz 1972, 45
- 143 Frutaz 1972, XXVII, these map will not be treated here.
- 144 Frutaz 1972, 43; this map will not be treated here in detail.
- 145 Frutaz 1972, 51
- 146 Frutaz 1972, 50, Almagià 1960, 19
- 147 Frutaz 1972, XXIX.4a-d and 5 a-d, tavola 82-85, discussion on pages 56-57
- 148 Another example is the Catasto Alessandrino, see Map 29-32.
- 149 Frutaz 1972, 51
- 150 Frutaz 1972, XXVIII, tavola 77, discussion on pages 54-55
- 151 Frutaz 1972, 54
- 152 Almagià 1960, 40, Tav. LXIX.
- 153 Almagià 1960, 40
- 154 Almagià 1960, 40
- 155 Frutaz 1972, XXIX.12a-f, tavola 103-108, discussion on pages 58-63; the map was also reproduced in Severini 2001, Tav V. The map is available online via <http://www.cflr.beniculturali.it/Alessandrino/> [accessed 5-2-2017].
- 156 Frutaz 1972, XXIX.13a-f, tavola 109-114, discussion on pages 58-63
- 157 Frutaz 1972, XXIX.21a-d, tavola 139-142, discussion on pages 58-63
- 158 Frutaz 1972, XXIX.17 a-b, tavola 127-128, discussion on pages 58-63
- 159 Frutaz 1972, XVII.6, tavola 47, discussion on pages 64-65
- 160 Frutaz, 1972, 32.
- 161 Almagià 1960, 40, LXVI; Frutaz 1972, XXX.2b, tav. 154-156, discussion on page 64-67
- 162 This type of orientation was also utilised by Cingolani (Map 35), Ameti (Map 36) and Gell-Nibby (Map 48).
- 163 Frutaz 1972, 66.
- 164 Frutaz 1972, 67
- 165 Almagià 1960, 40
- 166 Almagià 1960, 40-41, Tav. LXX-LXXI-LXXII; Frutaz 1972, XXXII.1a-f, tav. 160-165, discussion on pages 71-75
- 167 See map XI.
- 168 Frutaz 1972, XXXII 2a
- 169 Numbering is not always distributed consistently from the gates outward: some numbers are used several times and are geographically way off from the route. The reason for this might be that the names are squeezed in afterwards; some identical toponyms are given the same numbers.
- 170 As partly reproduced in Frutaz 1972: XXXII. 3a.
- 171 Map XLIII; as reproduced in Frutaz 1972: XLIX, tavola 224-225, discussion on pages 107-108
- 172 Frutaz 1972, 72
- 173 Frutaz 1972, XXXIII.1a-d, tav. 176-177, discussion on pages 75-77; Almagià 1960, 41-42, Tav. LXXIV
- 174 See the introduction to the current Catalogue of maps, 5.VI.
- 175 For example “Fanum Anne perenne nunc Petronella di Nari”.

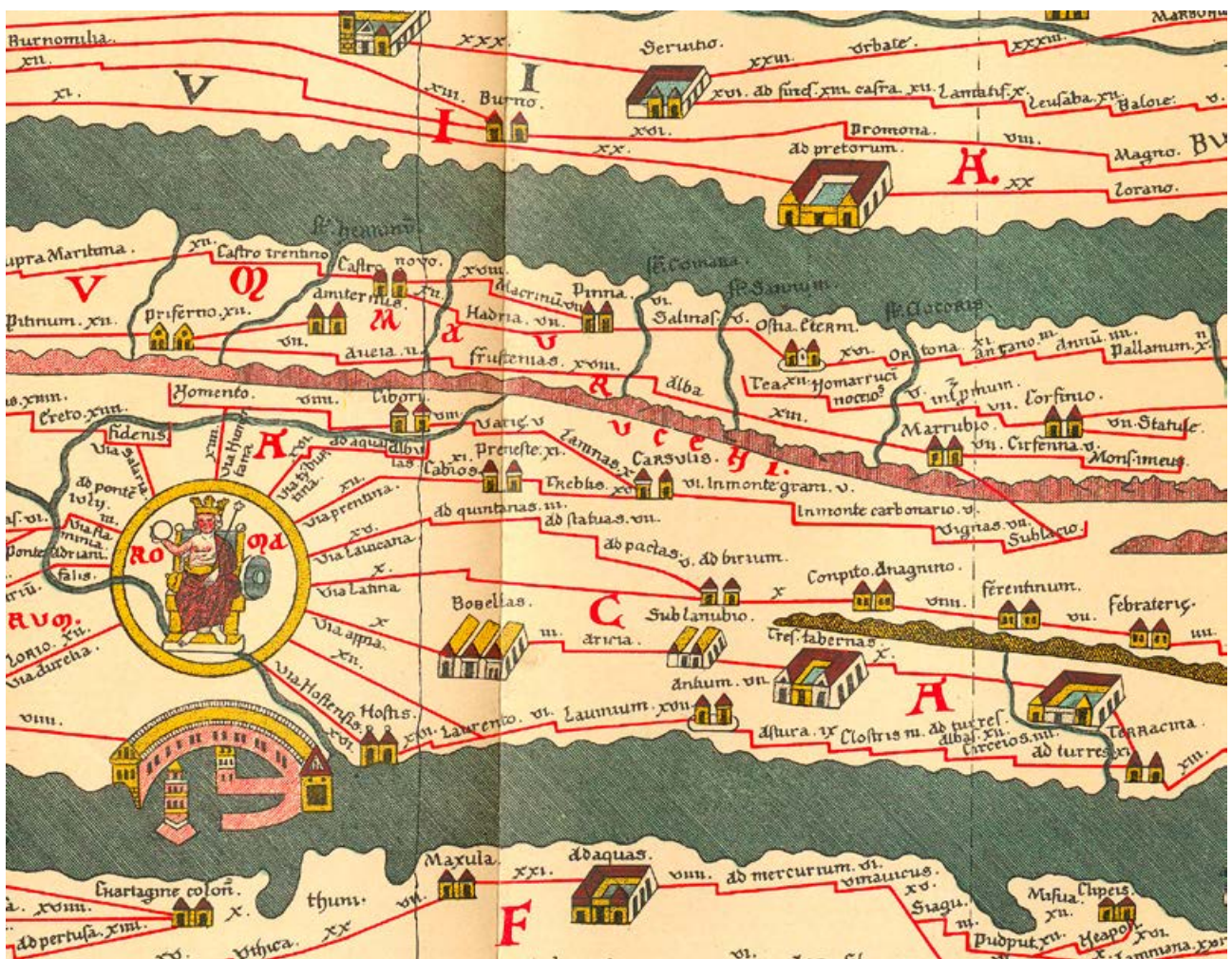
- 176 Frutaz 1972, 75
- 177 Frutaz 1972, XXXV, tavola 184, discussion on page 80.
- 178 Frutaz 1972, XLc, tavola 197-199, discussion on pages 90-92; Almagià 1960, 45, Tav. LXXIX
- 179 Although the creators of the map, Cristoforo Maire and Ruggero Guiseppo Boscovich, joined the brotherhood of the Compagnia di Gesù, the map does not appear to have been biased towards the interests of the Church: it seems intended as a purely scientific effort, incorporating the latest precision measurement techniques.
- 180 The latter was to be the base for the national geodetic network in the second half of the 19th century.
- 181 Almagià 1960, 45, Tav. LXXX.
- 182 Frutaz 1972, XLIII.2, tavola 209, discussion on pages 97-98
- 183 Frutaz 1972, XLII.2b-c, tavola 203-204, discussion on pages 94-95
- 184 Frutaz 1972, XLII.1, tavola 201. The 1777 Salvati map is not included in this catalogue because of the poor quality of the copy.
- 185 Frutaz 1972, XLII.3, tavola 205, discussion on page 95
- 186 Frutaz 1972, XLII.4, tavola 206, discussion on pages 95-96
- 187 Frutaz 1972: XLII.1.
- 188 Frutaz 1972, XLIXb, tavola 224-225, discussion on pages 107-108
- 189 The *Catasto ammonario delle tenute dell'Agro Romano fatto pel regolamento delle semente in esecuzione del Motu Proprio della S.M. di Pio Sesto l'anno 1783*, compiled by several land surveyors, Frutaz 1972, 107.
- 190 Frutaz 1972, L, tavola 226, discussion on page 109
- 191 Frutaz 1972, XLII.5, tavola 207, discussion on page 96
- 192 De Prony, G. 1822. *Description hydrographique et historique des Marais Pontins*, Paris
- 193 Frutaz 1972, LII, tavola 230, discussion on pages 111-112; Attema 1999, 26
- 194 Frutaz, 1972, LV, tavola 239-241, discussion on pages 117-121
- 195 As annotated to the 1834 and 1837 map, Frutaz 1972, 118.
- 196 See Ashby 1927, 6.
- 197 Frutaz 1972, 19
- 198 Frutaz, 1972, LX, tavola 261-273, discussion on pages 129-131
- 199 Frutaz 1972, LXIII, tavola 10b,11a,2,13a.
- 200 Frutaz 1972: LXXVI, tavola 388-393, discussion on pages 158-161; Attema 1999, 26
- 201 Attema 1999, 26, see also 5.III.
- 202 Frutaz 1972, 159-160
- 203 Linoli 2005, 38 ff, Feiken 2012, 173 ff. and Attema 1993, 28 on the history of the *bonifica integrale*, the official name of the reclamation schemes of the late 1920-ties and early 1930-ties.
- 204 By Tecnostudi Ambiente S.r.l., Rome
- 205 See Feiken 2000, 31 for references.

Appendix 5.1 Display of a selection of the studied historical maps

In this Appendix a selection of the treated historical maps is displayed for a better understanding of the history of mapmaking in Tyrrhenian southern Lazio and the use of historical cartography as a means of reconstructing the region's ancient landscapes.

Map 1. The Tabula Peutingeriana

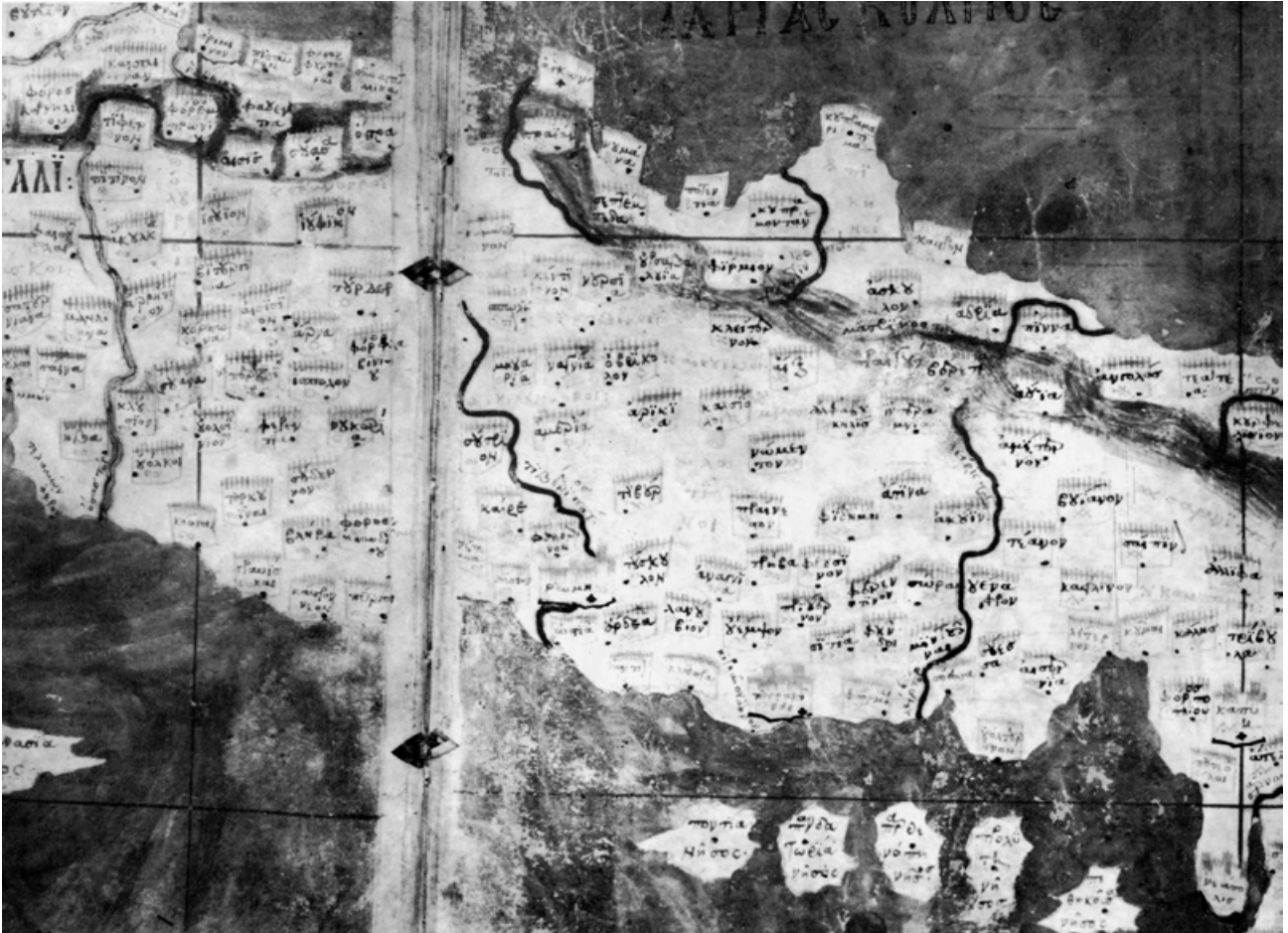
- A 12 or 13th century copy of a Roman original with late Antique and possible early medieval updates
- Anonymous mapmaker
- Painted on parchment
- 11 parchment leaves of 31 cm by 670 (850?) cm in total
- No (fixed) scale or indication of orientation
- No projection
- TOP, INFR



Map 1. Fragment of the Tabula with Rome to the left and in the central part of the research area. Source: https://archive.org/details/Tabula_Peutingeriana_complete

Map 2. Il Lazio nella carta tolemaica Greca d'Italia

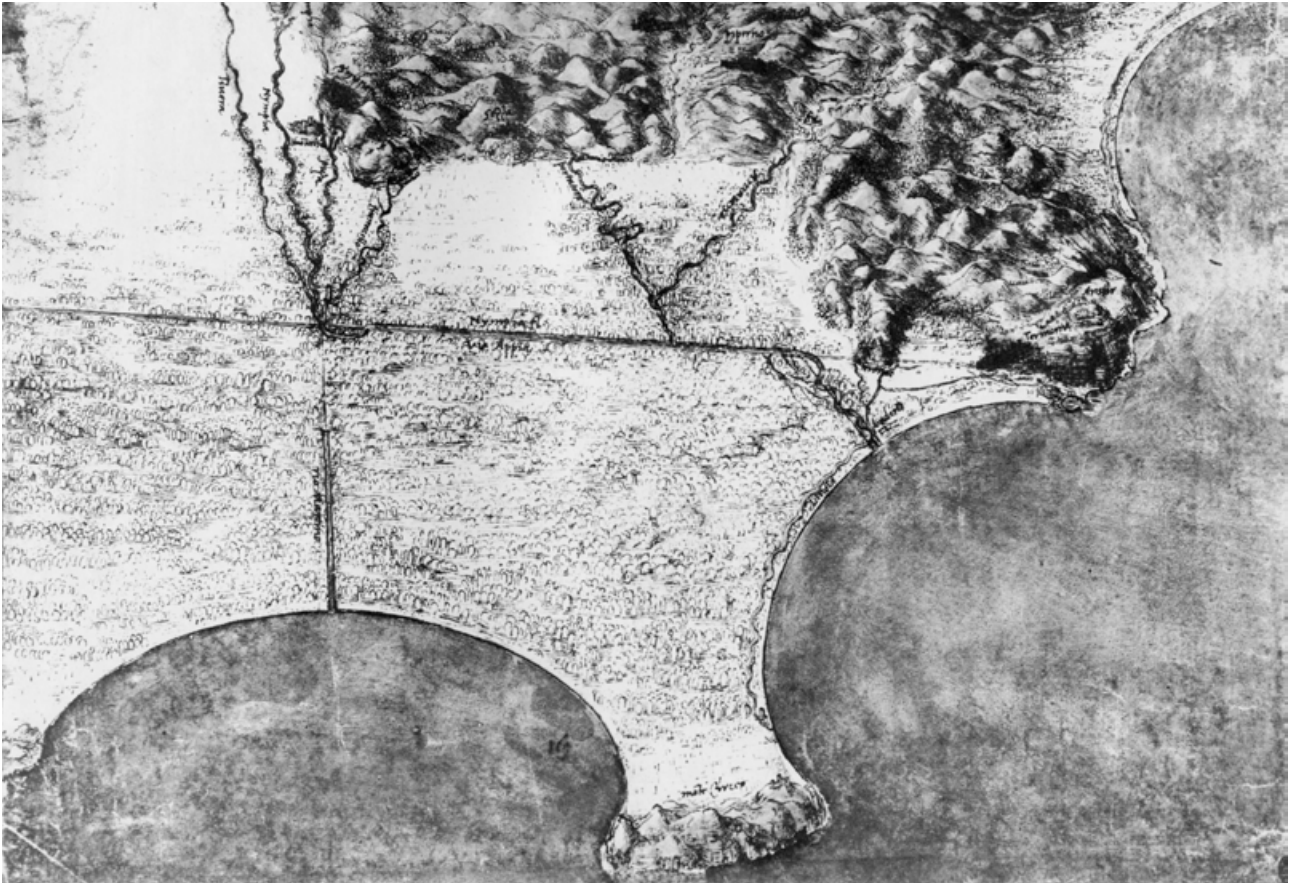
- 11 or 12th century
- Anonymous mapmaker
- Painted on parchment
- Two sheets of 57x43 cm
- No scale or indication of orientation
- No projection
- TOP



Map 2. Source: Frutaz 1972, II, tavola 5.

Map 12. Carta delle Paludi Pontine

- 1513/1516
- Leonardo da Vinci
- Drawing
- 27,7 by 40 cm
- No scale or indication of orientation
- No projection
- TOP, HYD, LU (?)



Map 12. Source: Frutaz 1972, XI, tavola 22.

Map 15. Il paese di roma e tutti i luoghi particolari dintorno Roma per XX miglia

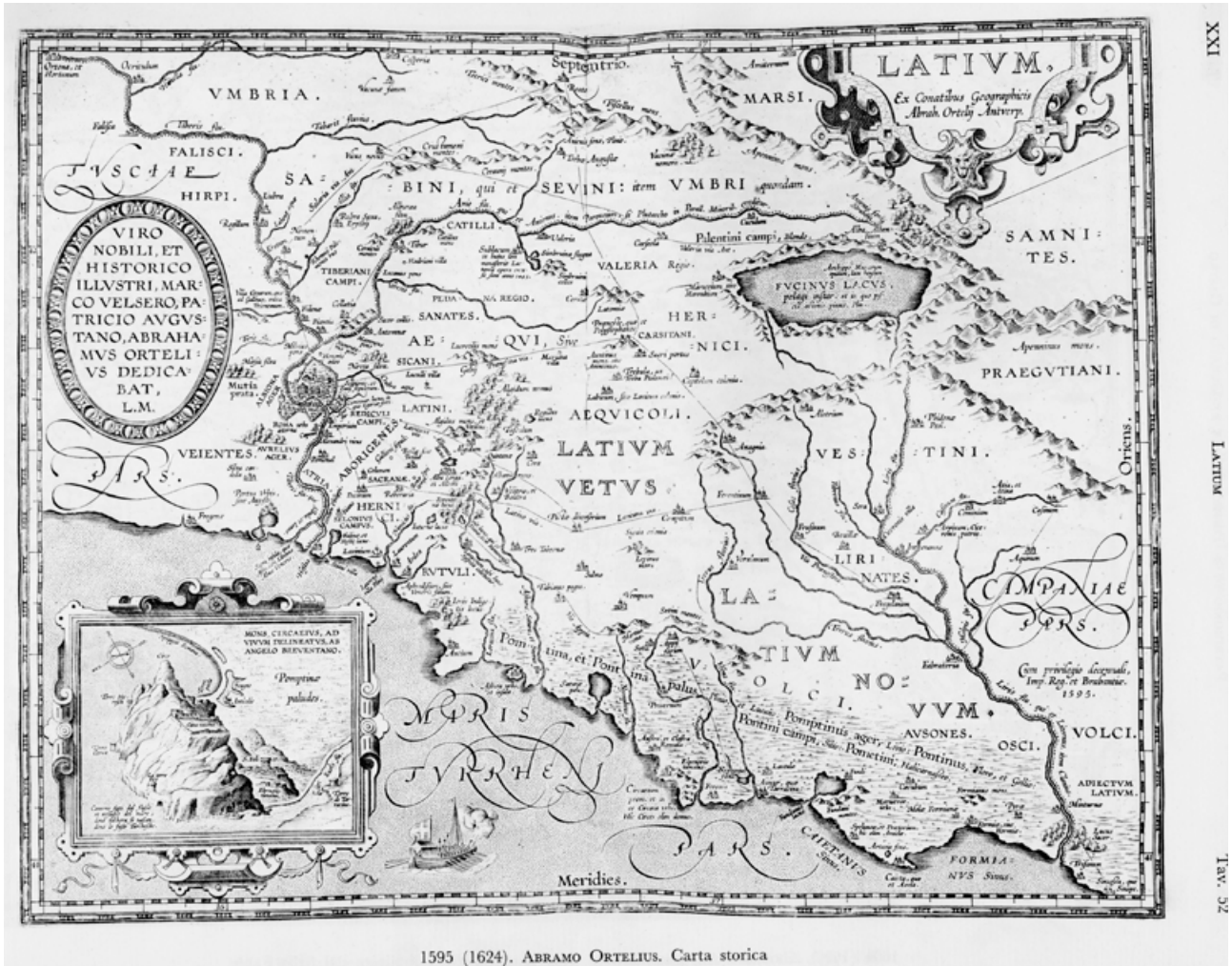
- 1547
- Eufrosino della Volpaia
- Copper engraving
- A Single sheet of 55,6 by 41,3 cm, the entire map measures 111,2 by 123 cm
- No scale was added.
- TOP, HYD, LU, INFR, ANC



Map 15. Source: Frutaz 1972, XIII, tavola 25-30.

Map 21. *Latium Storico*

- 1595 (this copy 1624)
- Abramo Ortelius
- Copper engraving
- The map is oriented northward. The scale was not specified.
- Mercator Projection (the coordinate system was laid out along the cornice)
- HIST THEMATIC MAP
- TOP, HYD, ANC



Map 21. Source: Frutaz 1972, XXI, tavola 52.

Map 22. Campagna di Roma olim Latium

- 1604 (this copy 1620)
- Giovanni Antonio Magini
- Copper engraving
- 46,5 by 36,5 cm
- Oriented to the north. The scale is not specified, but an indication of scale is given by indicating the distance of a mile on a measurement bar displayed on the map.
- A coordinate system was laid out along the cornice, but the projection is unknown.
- POL, TOP, HYD, LU, ANC



1604 (1620). GIOVANNI ANTONIO MAGINI. Tav. 42 dell'Italia, pubblicata dal figlio Fabio

Map 22. Source: *Almagià* 1960, 25, Tav. XLIV.

Map 24. *Latii utriusque, antiqui scilicet et novi...descriptio*

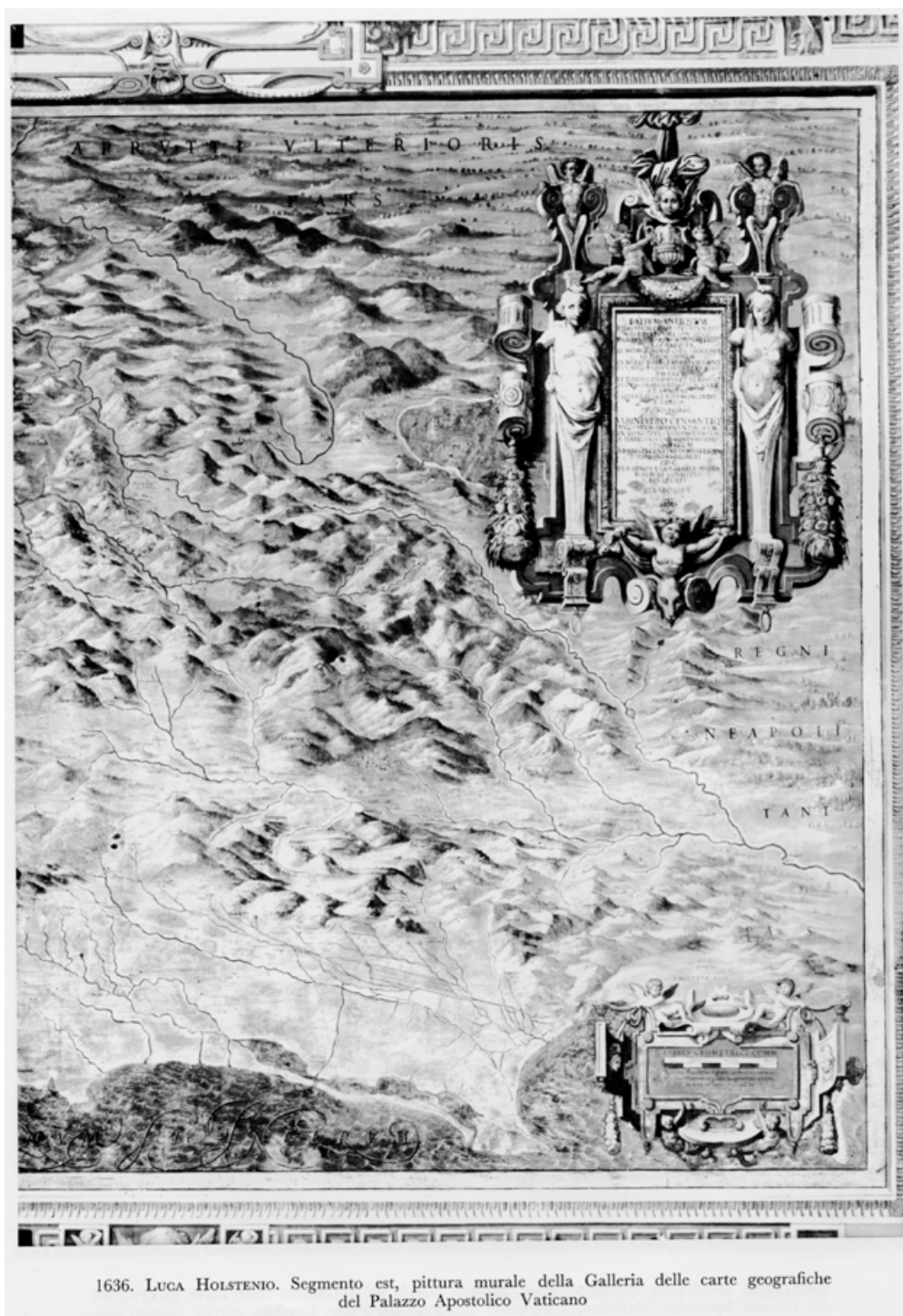
- 1624
- Philipp Clüver (Cluverius)
- Copper engraving
- 28 by 36 cm
- No orientation is specified. The scale is not specified, but an indication of scale is given by indicating the distance of a mile on a measurement bar.
- A coordinate system is laid out along the cornice, but the projection remains unknown (Mercator?).
- HIST THEMATIC MAP
- TOP



Map 24. Source: Frutaz 1972, XXIV.2, tavola 61.

Map 25. *Patrimonium Sancti Petri, Latium et Sabina*

- 1636
- Lucas Holstenius
- Fresco
- 3,14 by 4,20 m
- No added scale or orientation
- No projection was added
- HIST THEMATIC MAP
- TOP, LU, HYD, INFR, ANC



Map 25. Source: *Almagià 1960, 19-20, Tav. XXXIV.*

Map 29. Catasto Alessandrino: Strada fuori di Porta S. Giovanni verso Marino..sino alle Case Nove

- 1659
- Francesco Contini
- Water colour on paper
- 46,5 by 219 cm
- No orientation was specified. The scale is not specified, but an indication of scale is given by indicating the distance of a mile on a measurement bar.
- TOP, LU



Map 29. Source: Archivio di Stato di Roma.

Map 34. Nuova e esatta tavola topografica del territorio o distretto di Roma

- 1674
- Innocenzo Mattei
- Copper engraving
- On two plates which measure 55,9 by 40,4 cm and 55,7 by 39,8 cm
- No scale was given, but Almagià calculates that 10 mile = 70 mm, equalling a scale of approximately 1: 235.000.
- The projection does not follow the north-north-east orientation of the map, as is visible from the angled lines along the cornice indicating coordinates.
- Unknown projection
- HIST THEMATIC MAP
- POL, TOP, LU, HYD, INFR, ANC

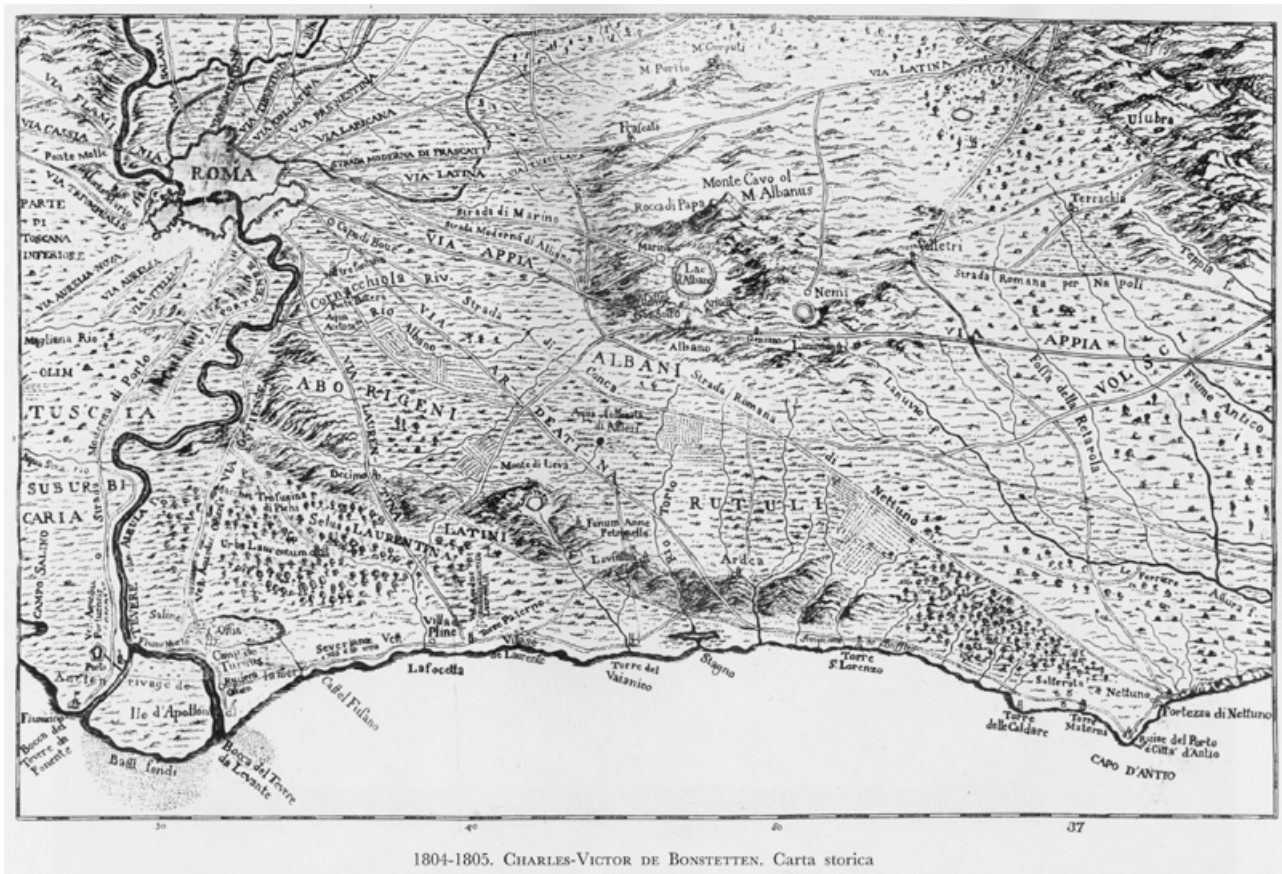


1674. INNOCENZO MATTEI. Lato est della prima tiratura fatta sul rame originale dopo la

Map 34. Source: Almagià 1960, 40, LXVI.

Map 44. Carta storica della Campagna Romana

- 1804-1805
- Charles-Victor de Bonstetten
- Copper engraving
- It measures 17,7 by 27,7 cm
- The scale is not specified
- Orientation is not indicated but probably is roughly north-east
- The projection is unknown
- HIST THEMATIC MAP
- TOP, LU, INFR, ANC



Map 44. Source: Frutaz 1972, L, tavola 226.

Map 46. *Plan topographique de la Campagna de Rome, considérée sous le rapport de la géologie et des antiquités*

- 1811
- Frédéric-Charles-Louis Sickler
- Copper engraving
- It measures 56 by 87,5 cm
- The scale is not specified
- An arrow indicating the north specifies the orientation to the north-east.
- The projection is unknown
- HIST THEMATIC MAP
- TOP, INFR, ANC

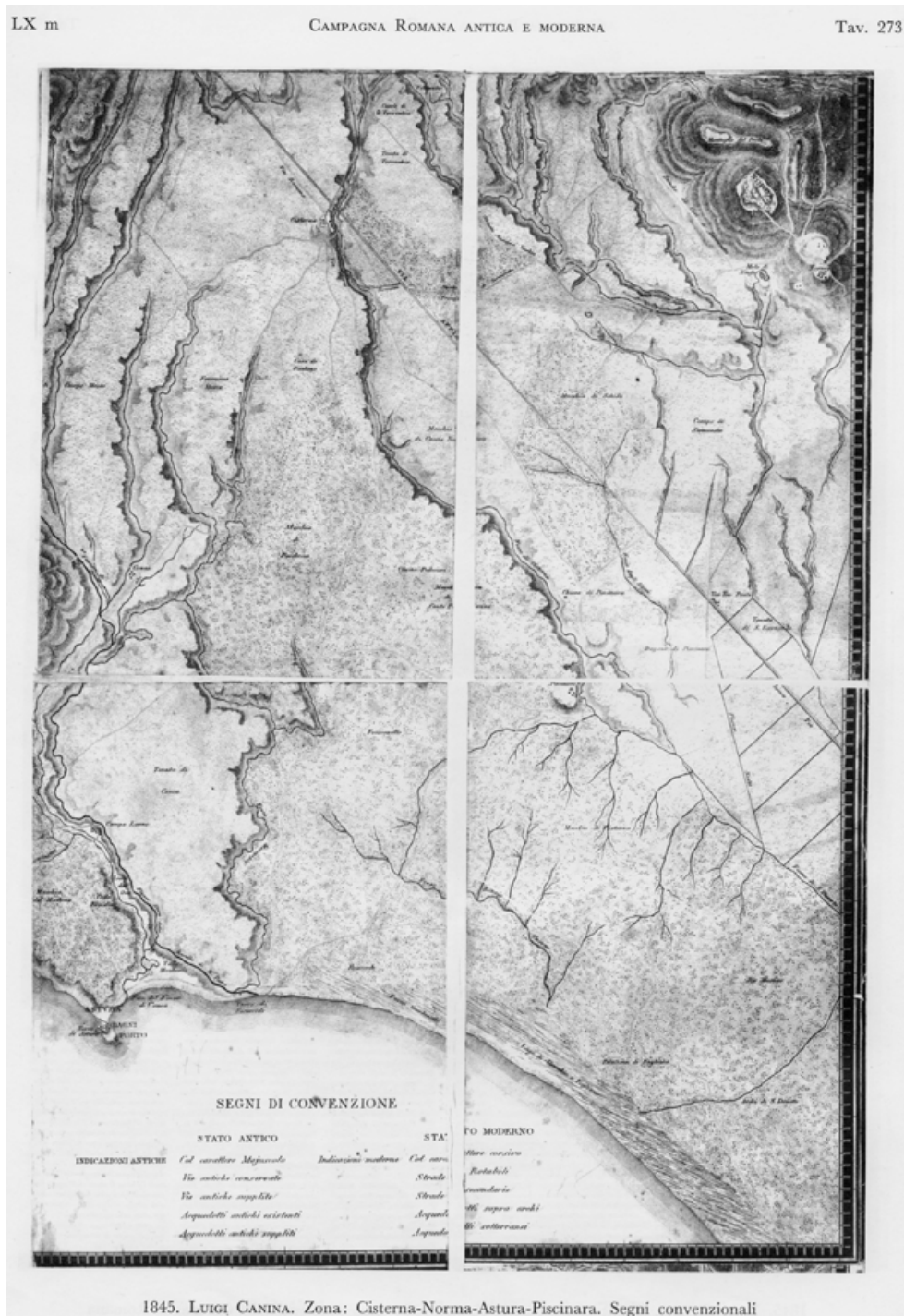


1811. Frédéric-Charles-Louis SICKLER. Carta storica

Map 46. Source: Frutaz 1972, LII, tavola 230.

Map 48. La campagna Romana esposta nello stato antico e moderno

- 1845
- Luigi Canina
- Copper engraving
- It measures 150 by 140 cm
- Scale 1 : 60.000
- The map's orientation is not indicated but probably is due north (or with a slight deviation)
- The projection is unknown
- HIST THEMATIC MAP. TOP, LU, INFR, ANC

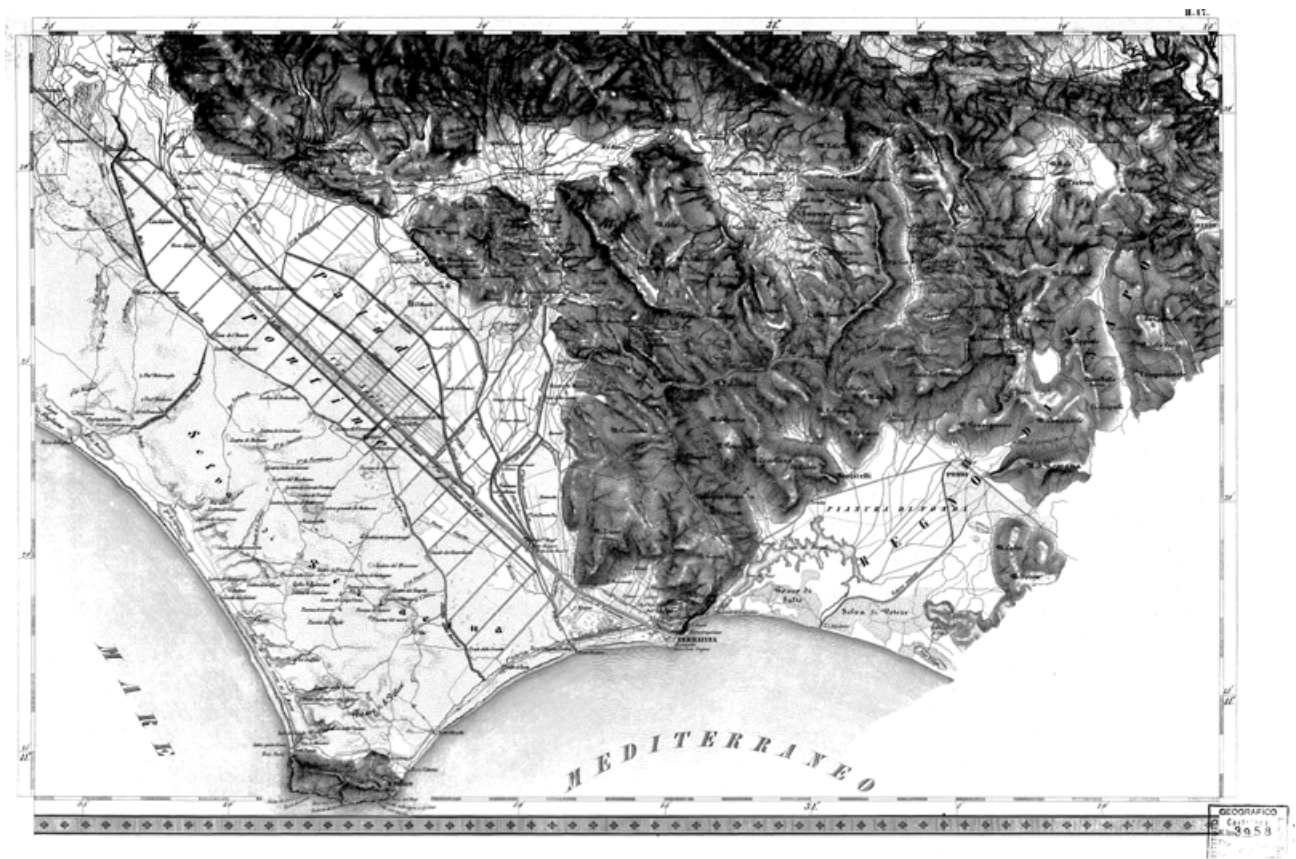


Map 48. Source: Frutaz, 1972, LX, tavola 261-273

Map 49. Carta Geografica dello Stato Pontificio e del Granducato della Toscana costruita sopra misure astronomico trigonometriche ed incise sopra pietra a Vienna nell'Istituto Geografico Militare

Istituto Geografico Militare (Vienna)

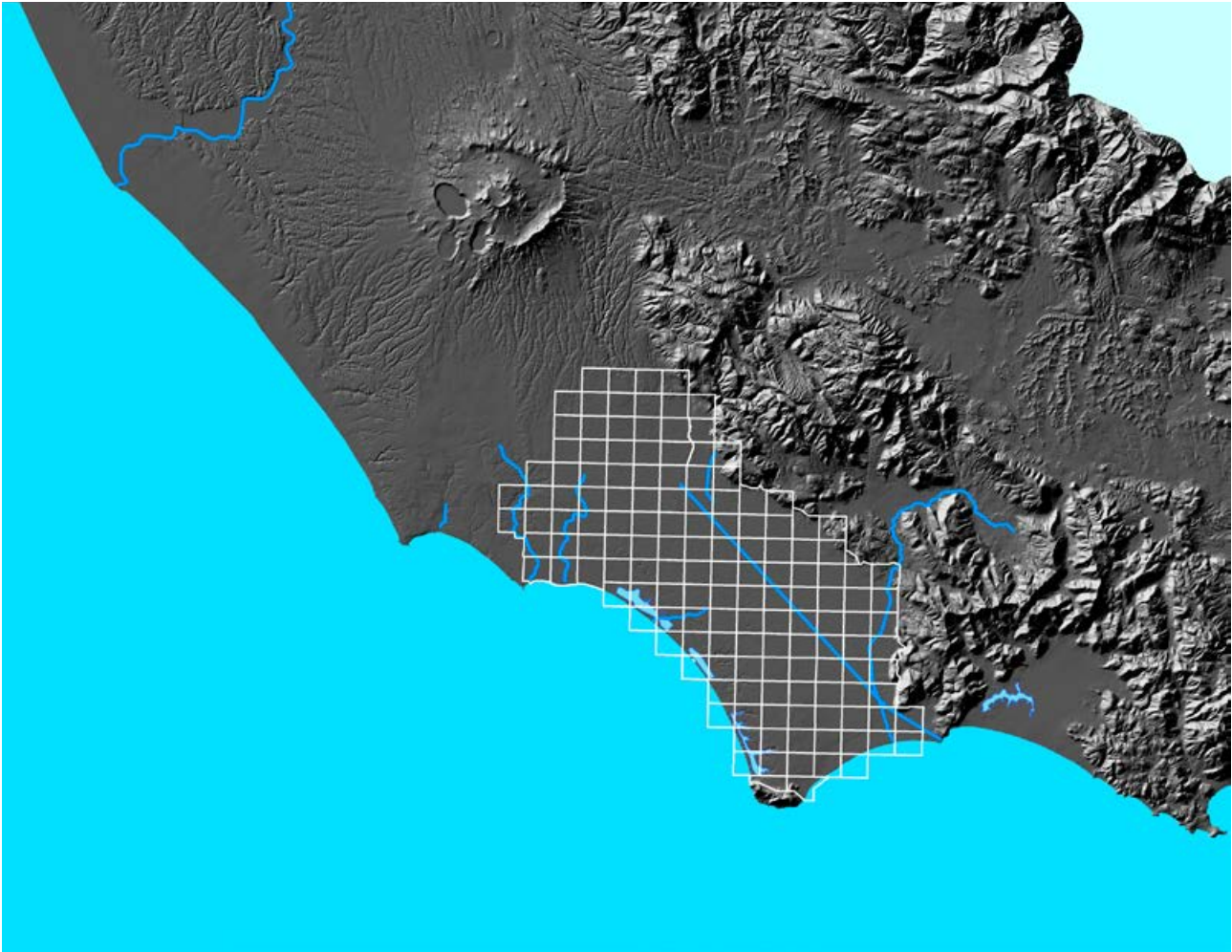
- 1851
- Engraved on stone
- Scale 1: 86400
- The orientation is to the north
- The Cassini projection is used; the prime meridian is Ferro
- POL, TOP, LU, HYD, INFR, ANC
- See also 5.IV and 8.I.1.1.



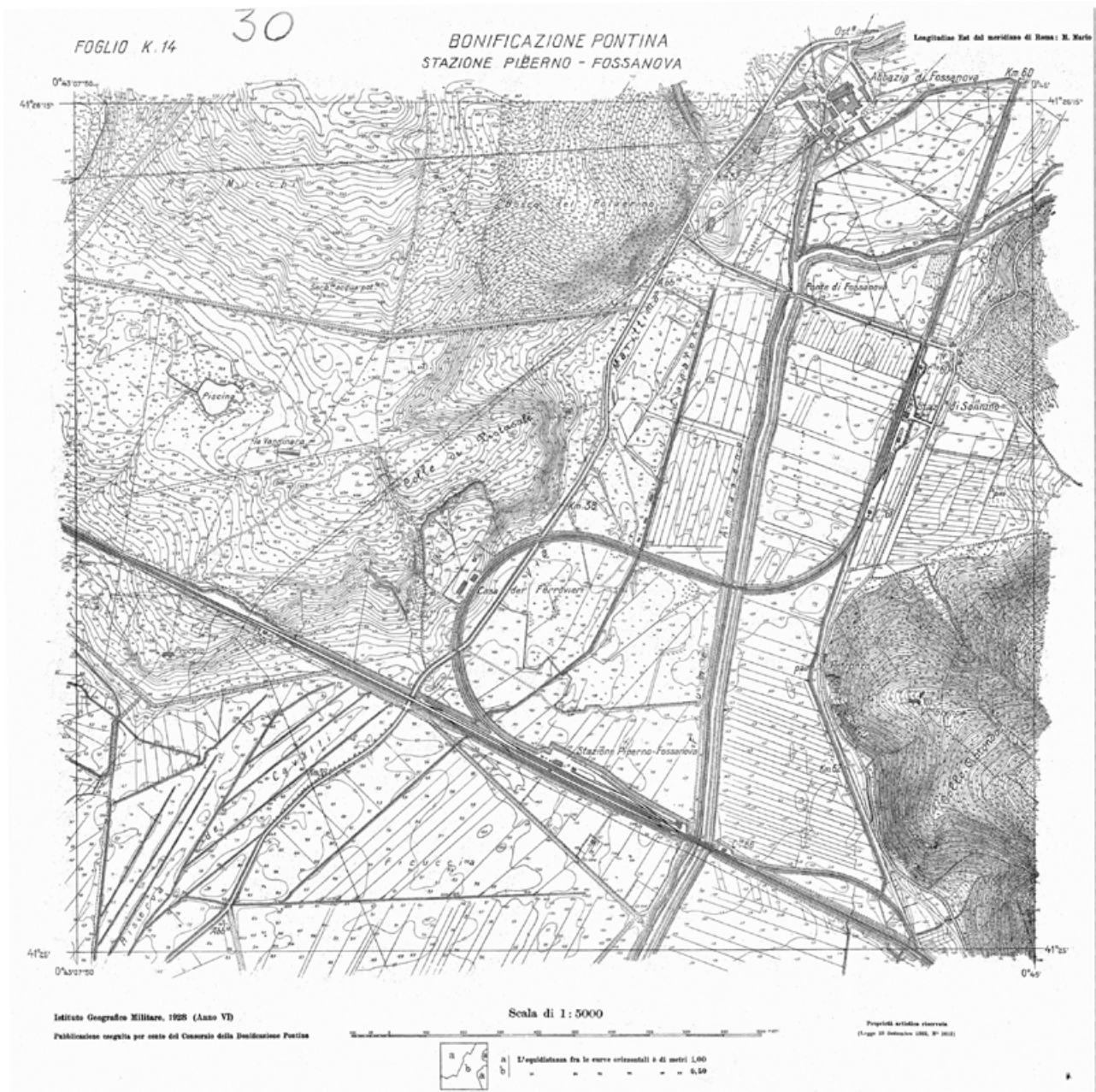
Map 49. Sheet H17, covering roughly a quarter of the research area. Source: IGM Florence.

Map 51. Levate al 5000 per i consorzi della bonifica di piscinara e bonificazione Pontina

- 1925-1936
- Istituto Geografico Militare (Vienna)
- 149 sheets measuring 52 by 46,5 cm
- The scale is 1: 5.000
- The map is orientated to the north
- Projection: Monte Mario; georeferenced in ED50 / UTM zone 33N
- POL, TOP, LU, HYD, INFR, ANC



Map 51. coverage of the map sheets.



Map 51. An example, sheet H17. Source: Consorzio di Bonifica dell'Agro Pontino.

Chapter 6 Site classification and presentation of the site database

This chapter will first present the classification of all types of records in the database. This classification was devised to create useful interpretative categories for the analysis of (changing) settlement patterns based on the sources treated in the foregoing chapters. The site classification consists of definitions describing the physical (i.e. archaeological) manifestation of historical site categories and their accompanying interpretations. The site classification is presented in alphabetical order.

Next, the site database is presented. The data it contains will be discussed and the choices made whilst gathering these data. This chapter concludes with a full site catalogue representing a rudimentary version of the site database, with basic information presented per site. The full site database can be found online, on the University of Groningen/UMCG research database (Pure), <http://www.rug.nl/research/portal>.

6.I Site classification

6.I.1 Introduction

Even though in the primary sources sites are often already described in terms of historical categories, such as *massa*, *fundus*, *castrum* or otherwise, one often has no clear idea as to what this meant in terms of their physical reality. In addition, many of these historical terms have had changing meanings all through the research period, such as *casale*, *locus* and *civitas*. At the same time, in relevant secondary literature usually no convention is found as to what exact material remains constitute a villa, farm, town, village or hamlet. To give an example: while some scholars might consider a villa to be any feature of a certain size discovered with roof tiles, others might want to distinguish more socio-functional characteristics such as a combined agricultural and residential use for such an interpretation. Whereas others distinguish a villa from a farm solely based on the size of the surface scatter¹. Normally also luxurious materials (e.g. marble, tesserae) are used as indicators for a villa².

The difficulties in truly understanding the terms used in primary sources and the inconsistent use of historical site categories in secondary sources make it a hard task to rank and classify sites. I therefore, in line with Arthur³, devised

a site classification based on set criteria. These criteria are based on my observations of the available primary data and the plausible assignment to a specific class done in earlier research. Based on these criteria, definitions of site types were created, describing what I consider to have been the physical (i.e. archaeological) manifestation of the term and its accompanying interpretation. These definitions should be seen as working tools / definitions to provide structure to the many data and contexts available for post-Roman southern Lazio. Whenever necessary, I shortly elaborate on these definitions concerning the choices I had to make in (re)interpreting and categorising the data contained in the primary and secondary sources in order to structure my database. An example of such a choice was the necessity to merge *cemetery* and *necropolis* into one category, as the distinction between these terms usually was not clear in the studied archaeological literature. Another example of a necessary choice was the way the interpretation of the words “castrum” and “castellum” is represented in the database⁴.

Constructing definitions was no sinecure for most of the site-types, as this study has a strong focus on historically attested socio-economic and/or administrative entities, like the *curtis*, *domusculta*, *massa* and *fundus* while archaeological evidence for these entities is scarce. For the identification of these types of sites I mostly relied on written evidence only; their archaeological manifestation is regularly unclear or multifaceted. Some of these historical sites had a complicated organisational structure and will have consisted of several archaeological sites. For instance, a *domusculta* might have had one or several centres and likely included several estates. Furthermore, many of these terms have been topic of a strong polemic as to the interpretation, organisation, physical appearance and classification; as is the case with the terms *castrum*, *domusculta* and *villa*. Therefore, because of their unclear nature and complexity, the interpretation of several historical site types could only be given in more general terms.

The list of definitions is limited to those site types relevant to the current study. For each category of sites I made an arrangement for related terms. The site category *church*, for example, was related to the terms *basilica* and

titulus, which were types of churches serving specific types of communities. *Pieve/parrocchia*, for instance, are also sub-terms for *church*, in general denoting a civil and religious territorial district which extended from a main church with baptistery; its territory could include other churches⁵.

Given the comparative diachronic approach of this thesis, it is of importance that the chronology of each category of sites is made explicit. It was discussed earlier how the meaning of some historical terms may have changed all through the research period⁶. Moreover, the chronology of site should be treated with caution, as type and date are correlated. The example of the *domusculta* shows what I mean: *domuscultae* were recorded as “domuscultae” for the period 750-850, but most of the *domusculta* settlements themselves must have continued to exist afterwards. Concerning the period after 850 these settlements should not be included in the category *domuscultae*, but rather in the category *settlement* or *village*. For these reasons all complications regarding the chronology of the site-types are made explicit in the definitions, and, whenever necessary, are discussed per individual site in the site database as well.

6.1.2 Used definitions

Below I present the site classification in alphabetical order. The criteria on which I devised this site classification were principally based on observations of the primary data and the plausible assignment to a specific class done in earlier research. In case of divergent past definitions, I will shortly mention these. And, whenever necessary, chose the most sensible one, and explain why. Possible new insights in the interpretation of historical terms which arise from the current study are added to the definition⁷. In the task of creating definitions I owe much to Del Lungo 1996 and 2001, Francovich & Hodges 2003, Toubert 1973, Arthur 1991a and Davis 2000. The site classifications grew organically as the building of the database progressed. In a number of cases the available evidence offered new knowledge into the regional meaning of a historical term, as in the case of *civitas*.

Baptisterium (Lat.)

Archaeological context: a built structure with no fixed plan surrounding the baptismal font. One should make a distinction between the baptistery, often separated from the main building of the church, and the church itself. In early Christian basilicas the *baptisteria* can be located at some distance from the church (e.g. San Giovanni in Laterano).

Interpretation and chronology: From the first century AD onwards a place where (Christian) baptism was performed, often a church. These churches, the *ecclesia*

baptismalis or *titulus major* usually were high up in the local church hierarchy (see below, **Church**). In the countryside they often presided over the *christianitas* or *plebs*⁸, consisting of the inhabitants of neighbouring settlements and of widely scattered manors around them.

Capanna (It.)

Archaeological context: a hut.

Interpretation and chronology: In Italian archaeology the term *capanna* is sometimes specifically used for proto-historic dwellings made of wood or wattle-and-daub and with a reed covered roof. For the middle ages until recent times it is a generic term used for huts often made of reed.

Casale (Lat. *casalis*, pl. *casalia*)

I Archaeological context: an isolated rural structure with evidence of domestic occupation and areas of agricultural activity.

Interpretation and chronology: From the 6th century onwards until recent times⁹ *casale* or *casa* can be translated as an isolated farm building, translated by Davis¹⁰ as a “homestead”.

II Archaeological context: a rural centre or settlement, consisting of large buildings for production or storage.

Interpretation and chronology: In 14th and 15th century sources a *casale* can denote an agricultural centre consisting of several large buildings¹¹. Large rural landowners are called *casali* in the 14th century¹². The 10th to 13th *casalia* at Villamagna should be seen as villages / open settlements, probably populated exclusively by the tenants of the monastery¹³. Many *incastellamento castra* (see below, **Castrum**) became later known as *casale*, for example Fusano, which in 1391 was called “castris sive Casalis Fusane” and Pratica di Mare. In the 19th century a *casale* represents a grouping of on average two to five houses in a rural area¹⁴.

In the database: I and II each constitute a separate category.

III Archaeological context: In the high middle ages and later on, the term *casale* can also be an indicator for ancient vestiges that were still in place, connected to the word “casa”.

Interpretation and chronology: *Casa* and derivations of the term often denote a building in ruins in medieval documents¹⁵; mostly remains of villas or cisterns that were documented as a part of pieces of land that were rented, sold etc. E.g.: La Casarina (OLIMsite 129), built on the remains of a Roman villa. In 1637 Forum Appii (OLIMsite 16) was named “casarillo oggi detto di s.maria”¹⁶.

Castrum (castro) / castellum (castello) [Lat. (It.)]

I Archaeological context for castrum: In late Antiquity it denotes any sort of fortified settlement, from an isolated stronghold to a walled town, cf. the Byzantine *castra* in the Sacco Valley¹⁷. From the 10th to the 13th century a *castrum* was a fortified centre of permanently grouped habitation, a village (Toubert)¹⁸; from the 14th century onwards a *castrum* can denote any kind of fortress, inhabited or not.

II Archaeological context for castellum: There were 5 functional site types from the 10th century onwards¹⁹, all named *castelli*²⁰:

- Fortified villages (It. *borghi fortificati*²¹ or *borghi novi*²²) both to be equated with *castra* (see above);
- Military castles (It. *rocche militari*²³) locations enclosed by walls, acting as control points and armed defensive locations. They lacked village life and accompanying structures;
- Small defensive locations, many of them were very temporary, and often served as a shelter in times of emergence or for storage²⁴;
- Private locations for lordly owners in the 12th and 13th century²⁵;
- Ruins²⁶.

Interpretation and chronology: The terms *castrum* and *castellum*, the Roman words for fortified locations, reappeared in 10th century documents in Tyrrhenian southern Lazio.

1. *Castrum / castro:* In the 10-13th century contexts a *castrum* would mean a village, which was in all known cases fortified²⁷. Toubert (1973) showed that the use of the term *castrum* in the 10th to 13th century almost invariably denotes incastellation, as a part of the process of *incastellamento*²⁸. From the 14th century onwards, however, the term *castrum* became more generally used, denoting any kind of fortress, with or without settlement. A *castrum* in the 14th century therefore should be seen as a possible *incastellamento* site.
2. *Castellum / castello:* From the 10th century onwards the word *castellum* was used as a term to describe an *incastellamento* project. Examples in the studied area are “castellum Monte Julianu” (OLIMsite 298) and “castellum Decimi” (OLIMsite 387)²⁹. However, *castellum* can also have other meanings in the high middle ages: any kind of fortified settlement or fortress on an elevated position, or any ruins. A *castellum* should therefore also be seen as a possible *incastellamento* site.

Castrum and *castellum* are sometimes used interchangeably by authors, which in a strict sense is not correct, at least not between the 10th and 13th century: in that period

of time a *castellum* can be a *castrum*, but only if it is inhabited and part of an *incastellamento* project.

* see town/village

In the database I was able to create three main categories of fortified sites: Incastellated centres (*castrum*), fortified settlement general (military castles and *castra*) and stand alone towers.

A *castrum* dated to the 13th century or earlier was put in the database as Y (certain) for being a fortified *incastellamento* village. Later on, the term became more generically used. Therefore, if a *castrum* is dated to the 14th century or later, then it is listed as a P (i.e. the possibility) for possibly being a fortified *incastellamento* village or a possible fortress in general. The reference to a *castrum dirutum*, a common phrase in the 14th century and later on, is always listed in the database as a P (possible) for possibly being a former fortified *incastellamento* village. A *Castellum* (or any derivation thereof) is without any other clues on function and local activities considered a P in all related database entries: it might have been a fortress or a *castrum*.

castello [It.]: a term in the Italian secondary literature used for a fortified location or a fortified population centre.

Cemetery / grave

Archaeological context: “a distinct cluster of specific artefact types (tiles, pottery, etc), to be associated with tomb constructions or grave-goods, within a well-definable area, where often two or more fragments of various individual objects are clearly recognisable.” (Arthur 1991a)³⁰.

Interpretation and chronology:

- **Mausoleum:** a grave of monumental proportions
- **Necropolis:** a large cemetery, mostly a term used in prehistorical studies and (late) Antiquity (including the early Christian period)³¹.
- **Catacombs:** a system of underground tombs
- **Columbarium:** a place of storage of cinerary urns
- **Tomb:** a (single) grave in general

In the database: The distinction between a *cemetery* and a *necropolis* is difficult to make. Earlier studies used both terms to describe a cluster of graves. The terms therefore are merged as one category in the database³².

Church

Archaeological context: a structure without a standard architectural plan or built-up.

Interpretation and chronology: a building used for Christian worship from the beginning of the 4th AD century onwards. Prior to that time illegal gatherings took place, but these were not held within the confinement of buildings specifically built for this purpose.

- *Basilica*, originally an assembly hall functioning as a marketplace and used by the emperor (“Basileus”) to give audiences and to pass judgement in juridical cases. The standardized architectural features of the Roman assembly hall with an axial plan consisting of a nave and two aisles proved suitable for Christian worship, and thus became the early Christian’s congregational home. In the early Christian sources the term was used for a church building in general, serving more than a local community.
- *Baptismal church, ecclesia baptismalis* (see **Baptisterium**).
- *Chapel*. A place used for Christian worship, other than and often smaller than a (parish) church. Also a space with a separate altar within a church.
- *Pieve*. The general term for a rural church with a baptistery, upon which other churches without baptisteries depended. In the early to high middle ages the *pieve*, called *ecclesia plebana*, was at the centre of a civil and religious territorial district (also called *parrochia*)³³.
- *Titulus*. In the early Christian period, a *titulus* at first generally indicated the place where the assembly was held, usually in a part of a private *domus*³⁴. The topographical identification of many of these early *tituli* of Rome is still debated. The term later specifically denotes a parish church, serving a local community only (within Rome); the term was used in historical sources to discern this church type from a *basilica*, which served more than a local community alone. 25 *tituli* can be discerned in Rome in 499³⁵. In the high middle ages, the *titulus* churches of Rome were connected to the members of the College of Cardinals.

Cisterna (Lat.) / Cistern

Archaeological context: A structure functioning as storage unit for water, usually situated underground.

Interpretation and chronology: Most cisterns originally date to the Roman period, attached to a villa. In the higher middle ages (firstly in 954 AD) a *cisterna* generally referred to a place where water from the mountains was gathered. Often used as a drinking place for cattle, protected by a wall or being at least artificially contained. A second high medieval denomination for *cisterna* is a “water basin” in general or the canals used for the cultivation of lands, often on or near a Roman cistern³⁶. Although most cisterns originally are of Roman date, the chronology of a cistern and continuation or discontinuation from Roman times to the middle ages is often difficult to establish. This is especially true if a context, like a Roman villa, is lacking.

Civitas (Lat. pl. civitates)

Archaeological context:

I town

II structures in a ruinous state

Interpretation and chronology: The term *civitas* was given four overlapping meanings in the literature; all four were attested during this study.

1. A Roman to higher medieval term denoting a town (or Roman town community), for example Castra Albana and Ariccia.
2. *Civitas* became the unofficial expression for “episcopal town” during the middle ages, for example Sezze (OLIMsite 17), Fondi (OLIMsite 50), Velletri (OLIMsite 147) and Gregoriopolis (OLIMsite 393)³⁷.
3. For high medieval contexts the term may also denote a fortified town/village on a former Roman site, for example at Lanuvio (OLIMsite 84)³⁸.
4. In high medieval and sub-recent contexts the term may refer to a complex of Roman or pre-Roman ruins³⁹, for example the *civitas* documented on the site of Norba (OLIMsite 23).

The general definition of *civitas* as a high medieval fortified town built on a Roman site (3.) still stands for this study area: all high medieval towns called a *civitas* were fortified (except perhaps Velletri) and located on former Roman sites (i.e. towns). Gregoriopolis is the exception. It was built in the 8th century, i.e. it was not Roman in origin. Gregoriopolis was called a *civitas* from the 9th century onwards. This denomination however, was likely connected to the see which was probably transferred there from Ostia. From the current dataset it does not become clear at what point *civitas* was generically used to refer to an “episcopal town”.

* see town/village

* see see

Curtis (Lat. pl. curtes)

Archaeological context: a grouping(s) of agricultural structures and dwellings in different forms.

Interpretation and chronology: Francovich and Hodges defined a *curtis* as estate centres “in many different forms, invariably being a manorial initiative within pre-existing villages”⁴⁰. The rise of the *curtes* was connected to the establishment of competing local landed elites throughout the wave of Carolingian influence in the late 8th and 9th century⁴¹. The existence of seigniorial power was attested on many locations described as *curtis* by building in stone (usually absent in the preceding period), by the presence of signs of defensive measures and/or by the evidence of large storage facilities for grain⁴². The current research area only yields two historical records of a *curtis*, i.e.: Dragoncella (OLIMsite 391), documented as *curtis*

in 827, and Morena (OLIMsite 304), listed as such in 962 and 992.

* see Village

Domusculta (Lat. pl. domuscultae)

Archaeological context: combined features. The *domuscultae* consisted of lands (*massae*), farms (*fundi*) and farm buildings (*casali*)⁴³. On the earlier studied *domusculta* centres north of Rome, 9th century modest defensive measures were found or have been suggested. The exact size of the *domuscultae* is not known, but all evidence suggests that they were extensive⁴⁴.

Interpretation and chronology: a *domusculta* was a type of estate, founded by the popes Zacharias (741-752) and Hadrian I (772-795)⁴⁵ to the north and south of Rome. In the research area six *domuscultae* were founded: the *domuscultae* of Anthius, Formias and Laure(n)tum (all founded by Pope Zacharias), and Calvisiana, Sulpiciana and S. Edistus (all founded by Hadrian I).

Most of the *domuscultae* were founded on earlier papal estates, which were reorganized; new acquisitions were made as well⁴⁶, as appears from the descriptions of the *domuscultae* Sulfciana, Edisti, Anthius and Formias in the *Liber Pontificalis*. Some of the estate centres were positioned within earlier settlements, as the site of Mola di Monte Gelato attests⁴⁷. *Domuscultae* are relatively short-lived. The last written account of these papal estates dates to the middle of the 9th century⁴⁸. Nevertheless, individual *domusculta* centres may have continued to function, as was documented to the north of Rome⁴⁹. Whether this was the case in southern Lazio as well, cannot be established because of a lack of archaeological and historical evidence.

Through the foundation of these *domusculta* estates, the areas concerned came under direct control of the papacy, and were not being leased to or from other parties⁵⁰. They are mostly considered agricultural production centres first of all for the papal court and secondly for the city of Rome in general, growing grain and vines, and raising pigs. These products were distributed through the papal household and associated charitable centres within Rome⁵¹. The *domusculta* centres north of Rome had a direct distribution link with the City, as the ceramic wares found on the Santa Cornelia and Monte Gelato sites proved⁵². Some have suggested that *domuscultae* also had a political purpose, ensuring papal authority in the countryside around the city of Rome⁵³.

In the database: *Domuscultae* in southern Lazio were recorded in the 8th century only. Their existence is listed as possible (P) in the 9th century, as most scholars argue that *domuscultae* were continued into that century or even into the 10th century⁵⁴.

Fundus (Lat. pl. fundi)

Archaeological context:

- I A farm, an isolated rural structure which bears testament of domestic occupation and areas of agricultural activity.
- II a large agricultural domain of variable dimensions or composition.

Interpretation and chronology: A term used in the Roman period, and early and high middle ages. To interpret the medieval term *fundus* is difficult as it has had a volatile meaning throughout the middle ages.

Fundus from the Roman period until the high middle ages mostly meant "farm". As such it can be found in the *Liber Pontificalis*, in which it was described that several *fundi* often constituted a *massa* (a grouping of lands or farms, or an estate, see below *Massa*)⁵⁵. As appears from the *Liber Pontificalis* too however, there were 8th century *fundi* with substantial revenues up to 1120 *solidi*, a much larger amount than the average of 456 *solidi* usual for a *massa* at that time; The dimensions of a *fundus* therefore should not be seen as merely extending to a single block of land⁵⁶. Indeed, other 8th and 9th century sources show that by then a *fundus* denoted a large agricultural domain without (maximum) fixed dimensions or set composition. A *fundus*, indicating a domain, could reach enormous dimensions, as can be seen observing the *fundus* Sorarianus (OLIMsite 15), a 10th and 11th century possession of Subiaco, located southwest of the Alban lake. From the 8th century onwards a *fundus* could also represent a rural terrain in general and, somewhat later, the rural surroundings of a village/town⁵⁷.

Hamlet

Archaeological context: A small group of dwellings without indications of a centre and of any particular activities or market facilities.

Interpretation and chronology: Only in the Nettuno-Anzio key area and the Norba survey area⁵⁸, a site classification has been set up by the PRP that is specific enough to include a hamlet category for the (late) Roman period, next to a village and a singular dwelling / farmstead.

* **colonia.** The early to high medieval term *colonia* can denote a hamlet⁵⁹.

Hospitalis

Archaeological context: a structure without a standard architectural plan or built-up.

Interpretation and chronology: *Hospitalis* is every institution devoted to assist those in need (pilgrims, travellers, elderly, orphans, the poor, etcetera) and can be found along roads, in villages and in towns⁶⁰. For the high middle ages and onwards it has often specifically been used to denote a place to stay for travellers, and in particular for pilgrims⁶¹.

Locus

Archaeological context: not readily recognisable.

Interpretation and chronology: In the Roman period *locus* denoted “place”; in the middle ages it could also mean “settlement” or “small village”⁶².

Massa (Lat. pl. *massae*)

Archaeological context: not readily recognisable.

Interpretation and chronology: A term used in landholding during the Roman period, and in the early and high middle ages⁶³.

1. The original Roman meaning: lands.
2. In late Roman times the term denoted “an estate with a dwelling house”⁶⁴.
3. In the early and high middle ages a *massa* (plus name) was a generic term for a grouping of several lands or farms (often → *fundi* as meant in meaning I), that constituted a single entity because of their proximity, without being specifically organised as one entity⁶⁵. Basically, the term denoted a geographical zone or a group of possessions within a larger institutionalised (royal, comunal or monastic) unit⁶⁶. As was observed in other parts of Italy as well⁶⁷, a large number of *massae* were registered as ecclesiastical possessions, from Constantine onwards. The fact that they were recorded in the *Liber Pontificalis* stresses their importance to the Church. Although their average revenue (456 *solidi* in the *Liber Pontificalis*) is known, no concrete clues on their size, or how they functioned and interacted, or where the working population was settled can be found.
4. In the 10th century Sabina, a *massa* could also denote “grande unités seigneuriales” (Toubert) which incorporated small un-organised sites established through agricultural colonisation (*coloniae*) and/or dispersed agricultural sites (*casae, casalia*)⁶⁸.
5. From the 11th century onwards a *massa* locally became to denote the *tenimentum*, the (juridical) district of a castrum⁶⁹ and (later on) likewise of a casale⁷⁰.

Monastery (Lat. *monasterium*; It. (ab)badia, monastero, convento)

Archaeological context: a structure without a standardized architectural plan or built-up.

Interpretation and chronology: The residence of a community of monks, ranging from small (monobitic) communities to large convents. Monasteries were founded in and around Rome from the 4th century onwards, as can be read in the *Liber Pontificalis*⁷¹. The first large rural monastery in Central Italy was Montecassino, founded in the year of 529 by San Benedetto of Norcia.

Outbuilding

Archaeological context: a structure of unknown or contributory function and generally part of a larger nearby situated complex⁷².

* **outhouse:** an outbuilding with a contributory function to a nearby situated villa⁷³.

Piscina / piscaria (Lat. (It.))

Archaeological context: artificial or natural fish pond, or generally a shallow body of water or swamp.

Interpretation and chronology: In Roman times a *piscina* was a (hypaethral) fish pond used for pisciculture. From the high middle ages until sub-recent times the variants *piscaria* / *pescara* / *peschiera* are known. Usually these terms denoted a swamp, but they can also refer to coastal pools or lakes functioning as fish ponds, and sometimes also to remnants of Roman water basins⁷⁴.

In the database: There are no historical references to Roman *piscinae* in my database. Because it is not possible to securely interpret high medieval references to *piscinae*, given the variety of meanings, I only list the reference itself, without a possible interpretation.

Road station

Archaeological context: a structure or grouping of structures located beside a main road. Evidence may exist for travel and lodging facilities, stables and a facility for the change of horses; however, some historical road stations do not yield any archaeological evidence for such facilities.

Interpretation and chronology: In the primary and secondary literature the term is traditionally associated with places of the road (roads station / resting places / changes). In Roman times and late Antiquity often *mansio, statio* or *mutatio*, are used interchangeably and prove difficult to categorise and chronologize; moreover, archaeologically no consistent differentiation can be made between these three denominations⁷⁵.

* **osteria** was a term used in medieval to sub-recent times for a road station.

In the database: The terms mentioned in the primary Roman and late Antique sources related to road stations, like *mansio, statio* and *mutatio*, but also *taberna* are clustered in the category Roman or late Antique road station. The same holds true for archaeological remains that may be, or have been interpreted as possible travel facilities. If no additional historical/archaeological evidence on their appearance and operation is available, the toponyms mentioned on the Peutinger map are listed as “possible” Roman and late Antique road stations (they may also refer to a junction in a road network, or may be an early medieval addition⁷⁶).

Sanctuary

Archaeological context: a concentration of votive material and/or a structure related to a cult or the veneration of a deity.

Interpretation and chronology: a (pre)Roman site of religious congregation.

* **temple:** an edifice constructed for the worship of a deity in the context of Greco-Roman polytheism. Many temples were converted into churches in late Antiquity and the early middle ages⁷⁷.

See

Archaeological context: a settlement or village/town that functions as the place where the bishop resides.

Interpretation and chronology:

1. The administrative and religious centre of a diocese, i.e. the episcopal seat. The first sees and related dioceses are listed in the 4th century, as from 313 AD⁷⁸. A functioning see is usually evidenced by historical references to its name and function, or by describing the attendance of a bishop from that particular settlement at a synod⁷⁹.

* see **civitas**

2. An episcopal see is also used for the area of a bishop's ecclesiastical jurisdiction, being synonymous to "diocese". This connotation is not used in this study. In this study I only use the term "diocese/bishopric" for the area of a bishop's ecclesiastical jurisdiction.

Settlement

Archaeological context: a (large) group of houses or dwellings thus forming a cluster of permanent grouped habitation.

Interpretation and chronology: a distinction between different types of settlements is often hard to make because of the lack of intensive archaeological studies (i.e. excavations) and a lack of detailed historical data, and because settlements changed through time. Horden and Purcell⁸⁰ strongly argued against attempts to make a clear distinction between settlement types, due to the mobility among populations in the Mediterranean, which makes many forms of habitation "fluid".

* see **town / village / vicus**

* see **hamlet**

Town / village

Archaeological context: A town / village is a "concentration of archaeological material, indicating diverse and clear areas of activity; the archaeological area is large enough to have held several family nuclei" (Arthur 1991a)⁸¹. In a village more evidence for agrarian activities than for manufacturing can be found. In contrast, in a town other activities dominate, focussing on exchange, manufacture and ritual. "A town is elevated above the rank of village by

the presence of distinct public buildings, excluding those of a purely religious nature, thus indicating a centralised administration"⁸².

Interpretation and chronology: Size is not the defining parameter to distinguish between a village and a town, although a town will frequently be larger than a village. A village usually has a less intricate composition and less variety in activities. A village has at least basic market facilities (in contrast to a hamlet). A town has "a diverse economic base with productive (not solely agricultural) marketing and mercantile facilities; presence of a sedentary population composed of various family nuclei; developed street system"⁸³.

In the database: in most cases it is very difficult to distinguish between a village and a town on the basis of archaeological evidence. Moreover, settlements change throughout time. Both terms are used interchangeably by most authors. For these reasons often no distinction is made between village and town in the database. Generally, in this thesis I used the terms found in the consulted sources.

* see also **civitas**

* see also **curtis**

* see also **locus**

* see also **castrum / castellum**

Villa (Eng. and Lat. pl. villae)

Archaeological context: a "stone and / or tile built rural structure with clear and differentiated functional areas, including both those devoted to agricultural activities and those devoted to resident labour. The residential areas are themselves differentiated, by size and quality, indicating an internal social hierarchy between proprietor / manager and labourers. Thus, one should expect evidence for a certain degree of comfort, in the form of bath structures and interior decoration (mosaics, painted wall plaster, etc)"⁸⁴; in the case of a *villa maritima* there should be evidence of luxury and the villa should be located close to the sea.

Interpretation and chronology: an agricultural, productive and residential estate. The origin of the villa as a (single) agricultural estate with a residential function can be traced back to the 5th century BC, but, as is accepted generally, only became the basic unit of an agricultural economic system in the 3rd and 2nd century BC⁸⁵. The end of the villa (system) is much debated, but recent studies tend to date the demise of the villa in central Italy in the 5th and 6th century⁸⁶.

One can discern between the term *villa* used as a physical manifestation of an agricultural and residential structure (1.), and the term *villa* used as the basic unit of an agricultural economic system, functioning on the same level as the older, often pre-Roman systems based on for example the village or based on small scale settlements

(2.)⁸⁷. The villa as residence and production unit (1.) consisted of several structures (residential, agricultural, infra-structural), all with a different but closely interrelated function. Often a tenant family of slaves provided for the necessary human workforce.

It should be noted that definition and classification of the villa type has proven difficult, and archaeological research has yielded many divergent classifications⁸⁸. During the high tide of the Roman Empire, several functional types of large *villae* evolved (though intermediate types and smaller *villae* formed the bulk). Most conspicuous are two types of villas. Firstly the *villa maritima*⁸⁹, a seaside vacational residence and with a secondary function as production centre. And secondly the *villa rustica*, a substantial agricultural production unit combined with a residential function.

* **platform villa:** Platform villas were farms built on large earth-filled terraces, contained by polygonal walls. In Tyrrhenian southern Lazio, platform villas are typically found in the Lepine and Ausoni foothills. Here these villas present themselves as domestic rural structures, as becomes clear from the presence of fine ware. In the late phases of their existence platform villas often provide indications of interior embellishment by the presence in the surface record of *tesserae* and painted wall plaster⁹⁰. The high site density of such structures throughout the foothill areas generally suggests the platform villa estates to have been of modest size. In some publications the term *basis villa* was used for a platform villa. For this reasons no distinction is made between *basis villa* and *platform villa* in the database. In a strict sense, the *basis villa* is a *cryptoportico* or basement on which a villa is situated; a *platform villa* is located on a platform up against a hill.

6.II The presentation of the site database

At this point of my thesis, the results of assembling and analysing all available relevant archaeological and historical primary data combined with related retrospective information will be presented. The final result of these efforts is the site database, which constitutes the basis for the analysis presented in Part II (Chapter 7).

As touched upon in the introductory chapter, I established two criteria for a site to become eligible for analysis and thus for the incorporation in the site database: the date of the site should securely lie within the research period (i.e. 3rd to 14th century⁹¹) and the site should be located within the research area. The use of these criteria during the scrutiny of all available relevant archaeological and historical primary data has resulted in a database existing of 662 point locations representing sites of human activity in

the landscape (see Appendix 6.1 *The catalogue of sites*). 419 sites of these sites provide archaeological evidence dated to the research period, or can be (possibly) identified with documented contemporary material remains in situ. The archaeological evidence ranges from a few late Roman shards (as on many PRP sites) to still existing medieval fortified towns (like Terracina and Lanuvio). 412 sites of the 662 sites were (possibly) documented in contemporary historical sources, ranging from a solitary mentioning of its name in a single historical text or inscription to a detailed description of the site by a contemporary author (like castrum Vetus in 946)⁹². 206 sites were identified by both (possible) contemporary historical and archaeological evidence.

The database shows the chronology of activity at a site per century: Y stands for certain activity within that century, P represents possible activity. An O is used in case of a broad date range of the evidence, for example pottery that can be dated anywhere within two centuries or more. A void in the chronology table denotes that there is no evidence found pointing to activity in that century.

The location of historically attested sites is often insecure. In the database the site's location may be unknown (but securely situated within the research area), tentative (i.e. hypothetical or situated anywhere within a wide area), probable or certain (securely affirmed), depending on the accuracy of the available evidence and the way interpretative challenges in the data could be dealt with⁹³. 102 sites have an unknown location within the research area; 82 sites have a tentative location, or a wide area assigned to their location; 44 sites have a probable location; and 417 sites have a certain location. As discussed, only those historically attested sites that have a definite physical (point) location were incorporated into the database. Very large historical organisational bodies were not incorporated as site into the database, such as the duchies (e.g. of Fondi and Terracina), the dioceses and the Papal State(s). These considerable historical entities do not constitute point locations (which are the focus of the study) within the landscape, but rather cover large parts of it⁹⁴. The threshold for inclusion of larger entities as a site in the database was, rather arbitrarily, set by large rural estates, i.e. the *massae*, the *fundi* and the *domuscultae*. These were generally much less extensive than duchies and dioceses and usually comprised no more than one other site in the database.

For each site this database presents the basic information such as site name, location and all contemporary data and their interpretation(s): its physical appearance such as its layout and types of buildings, the historical description of the site and the kind of activity, interests and presence recorded on them, the chronology and the interpreted

function of the site (i.e. site type). Furthermore the database includes related applicable data from retrospective sources, such as the site's depiction on historical maps (elaborated on in Chapter 5) and the associated toponyms. The related literature is listed as well.

The following basic data are recorded for each site:

- Site number
- Site name
- Location; its qualification can be “certain”, “probable”, “tentative (wider area)” or “unknown”
- Chronology (date of recorded activity)⁹⁵
- Remarks on the history and interpretation and of the site
- Relevant literature

The following basic data are added in if known and deemed applicable:

- Details on the location
- The current toponym
- Related toponyms (as for their numbers, see the toponym database⁹⁶)

The backbone for the spatial analysis of activity in Tyrrhenian southern Lazio during the research period is constituted by the data that indicate the sites' function (type), their physical appearance (among others their layout and the types of buildings present) and the kind of activity, interests or presence recorded on them.

The following of these vital data can be found in the database, filled in whenever applicable for each individual site (these data can be consulted as separate tables in Appendix 6.2)⁹⁷:

- Diocese / bishopric, historical evidence Y/P/N⁹⁸ per century
- Border marker, historical evidence Y/P
- Casale, historical evidence Y/P/N per century
- Castrum, historical evidence Y/P/N per century. The lord executor (manager of the *incastellamento* process) and location of his home base, owner of the site (pope / bishop / monastery / other), date range of castrum
- Cemetery / necropolis general archaeological evidence Y/P
- Christian cemetery/necropolis/catacomb, archaeological evidence Y/P, chronology (if known)
- Church or chapel, archaeological and historical evidence Y/P/O/N per century, archaeological and

historical construction date, archaeological and historical end date

- Cistern, archaeological evidence Y/P
- Civitas, historical evidence Y/P, date in text
- Autonomous commune, historical evidence Y/P, date in text
- Curtis, historical evidence Y, date in text
- Domusculata, historical evidence Y, date in text
- Ecclesiastical interests⁹⁹, historical evidence Y/P/N per century. Party involved and home base of this party.
- Feudal arrangements, historical evidence Y/P/N per century¹⁰⁰. Listed are the lord owner, the lord executor and home base of the lord executor.
- Fortified all types, historical and archaeological evidence Y/P/O/N per century
- Fortified settlement general, historical and archaeological evidence Y/P/O/N per century
- Fundus, historical evidence Y/N per century, date in text
- Hospitalis, historical evidence Y/P, date in text
- Locus, historical evidence Y/P/N per century, date in text
- Massa, historical evidence Y/N per century, date in text
- Monastery, archaeological and historical evidence Y/P/O/N per century, order, archaeological / historical foundation date, historical end date monastery, situated distinct (rural) or within a larger settlement
- Roman or late Antique road station, archaeological and historical evidence Y/P
- Roman sanctuary, archaeological and historical evidence Y/P
- Saracene attack¹⁰¹, date of attack, attack in contemporary primary source Y/N
- Secular interests¹⁰², historical evidence Y/P/N per century. Party involved and home base of this party
- Standalone tower, historical and archaeological evidence Y/P/O/N per century, archaeological and historical built date, archaeological and historical end date
- Temple, historical and archaeological evidence Y/P, archaeological / historical evidence.
- Tomb / grave, archaeological evidence Y/P
- Villa, historical and archaeological evidence Y/P/O/N per century¹⁰³, archaeological and historical built date, archaeological end date, type of villa¹⁰⁴.

Endnotes

- 1 Arthur 1991a, 19
- 2 Vermeulen 2012
- 3 Arthur 1991a, 19
- 4 See 6.I.2.
- 5 This creates some kind of hierarchy but should not be seen as a strict typology in which one term is a direct subset of the other. Not all sub-terms (as I will call them here) are on the same level.
- 6 See 3.II.2, the paragraph *Unclear and changing meanings of historical terms*.
- 7 In case of divergent definitions, I will shortly mention these and chose the most sensible, and explain why. Possible new insights in the interpretation of historical terms which arise from the current study are added to the definition.
- 8 Catholic encyclopaedia online [accessed 2004]
- 9 Toubert 1973, 309
- 10 Davis 2007, 32
- 11 Toubert 1973, 309
- 12 Kleinhenz 2004, 983
- 13 Villa Magna Excavation report 2007, 8; Fentress, Goodson & Maiuro 2016, 405. In Apulia of the 12th century and later, *casali* were rural settlements without defensive structures. Authority over these *casali* was wielded by local churches or the sovereign, Osheim 2004, 163
- 14 Enciclopedia generale de Agostini online, available on: www.sapere.it [Accessed March 2006]
- 15 Del Lungo 2001, 13
- 16 Map 26 by Parasacchi: *Disegno della Via Appia, pars 2da and 3°, 1637*.
- 17 See 7.I.1.9
- 18 Toubert 1973: 314, 1. This is the unambiguous common meaning for *castrum* in all contemporary texts.
- 19 After Toubert 1973, Bartolini 1987, Del Lungo 2001, 17 and Osheim 2004, 161 ff, and. Bartolini, in her publication on the site of Asprano (site nr 203), examined the defensive system of the Ceccano family, developing from the 12th century onwards in the northern and eastern Lepine Mountains. She discerned two types of (fortified) sites: Fortified villages (It. *borghi fortificati*, to be equalised with castra) and military castles (It. *rocche militare*), of which Asprano itself originally was one. Crova 2018, 70 identified three main categories of fortifications: 1. castles, fortified closed circuits, with prevailing functions of centralization of populations and, limitedly, military (castra); 2. the towers, punctual elements, having the function of a lookout but also of representation of political power; 3. the fortresses, usually placed in an isolated position, sometimes located inside incastellised settlements.
- 20 The number of historically attested *castelli* dating to the middle ages in Tuscany is about 2400. Aerial reconnaissance might even indicate a number of 3600 locations that somewhere in the middle ages might have been *castelli*, Osheim 2004, 163
- 21 Bartolini 1987
- 22 Osheim 2004, 165
- 23 Bartolini 1987
- 24 Osheim 2004, 162 ff
- 25 Osheim 2004, 164
- 26 Ruins of villas or remains of polygonal walls, for example Castellum Valentinum (OLIMsite 210). See Del Lungo 2001, 17, n. 10.
- 27 Toubert 1973; 314, 1
- 28 The first reference to a *castrum* in Tyrrhenian southern Lazio is found in the concession of bishop Leon of Velletri to Demetrius de Melioso, dated to 945-946 AD, ASRSP.12, 73-80. See also Toubert 1973: 322 and Tomassetti 1979, I, 355.
- 29 See also 7.III.2.2.2 Theme: incastellamento.
- 30 Arthur 1991a, 21
- 31 In the current study this generic definition is used, like in most of the consulted literature. In scholarship of early Cristian contexts, the term is often specifically used when dealing with a large number of tombs arranged according to spatial organisation that resembles an urban plan.
- 32 See 6.II. The only catacombs in the research area, located in Albano Laziale (OLIMsite 155), the church of S.Maria dell'Orto (OLIMsite 182) and Ad Decimum (OLIMsite 535), and the only columbarium, on site 72 forma italiae apiolae (OLIMsite 12), are not listed separately in the database but are incorporated as a cemetery/necropolis.
- 33 *Rationes Decimarum Italiae. Latium*, Battelli (ed.) 1946
- 34 Di Berardino 2014, Encyclopedia of Ancient Christianity, 3:800
- 35 Davis 2000, 139
- 36 Del Lungo 2001, 22-23
- 37 Toubert 1973, 795 and Del Lungo 2001, 26
- 38 Mauri 2007, 15; Mauri's interpretation of a high medieval town on a Roman site seems connected to *civitas* as a (Roman) ruin.
- 39 Del Lungo 1996, I, 167 listed several 18th century examples.
- 40 Francovich & Hodges 2003, 111; it has to be stressed that I use theirs as a working definition; other interpretations do exist.
- 41 Francovich & Hodges 2003, 111; Wickham 1997, 198
- 42 Hodges & Whitehouse 2003, 77
- 43 As appears from the descriptions in the *Liber Pontificalis*, see also Duchesne 1886, 501 and Francovich & Hodges 2003, 88
- 44 See the well-documented domusculta Capracorum, 2.II.3.3, Potter & King 1977, 6 ff; King 2015. The description of the domusculta S.Edistus in the present research area also suggests a large size, see Davis 2007, 155, note 124.
- 45 *Liber Pontificalis* life 93: chapter 25 and 26 and life 97: chapter 54-5, 63, 69, 76 and 77;
- 46 See 2.I.6.
- 47 Francovich & Hodges 2003, 89
- 48 Marazzi 1990, 122; Potter & King 1997, 6 and 79
- 49 Potter & King 1997, 6 ff; King 2015. The sites of Santa Cornelia and Monte Gelato continued, Santa Cornelia even until the second quarter of the 11th century, when it was converted into a monastery. However, this continuity as a functioning site does not necessarily mean that the estate structure of the *domusculta* continued.
- 50 As often was the case in other parts of Lazio in that period, Marazzi 1998a, 34
- 51 Christie 1995b, 652; Bauer 1999, 519; Arthur & Patterson 1994, 414; Fentress, Goodson & Maiuro 2016, 411
- 52 Arthur & Patterson 1994, 414; Potter & King 1997; see also 7.II.2.2.1 Theme: The expansion of the papal patrimonium and the creation of the Papal States, *Domuscultae*.
- 53 Christie 1991, 357; Potter & King 1997, 4 ff
- 54 Potter & King 1997, 6, 187
- 55 In the *Liber Pontificalis* 25 *fundi* were listed with revenues, see Davis 200, 125.
- 56 Davis 2000, 125

- 57 According to Sicardi, many 8th and 9th century rural territories on the Peninsula were administratively subdivided into demographical *vici* (villages) and cadastral *fundi* (terrains). In the 9th and 10th century this subdivision disappeared: from that period onwards, *Locus et fundus* (or *villa*) was the set phrase used to specify a settlement or village/town with its surroundings, Sicardi 1980, 363 ff. However, none of these two set phrases are found in the current study area.
- 58 See paragraph *The Pontine Region Project* in 3.I.1 Archaeological sources.
- 59 Del Lungo 1996 II, 208. The Massa Pauli (OLIMsite 584), in *ColCan* III.149, dated 715-731 is described as a *colonia*.
- 60 Corsi 2000a, 41
- 61 Moroni 1855, vol. 49, 264-266
- 62 As was stated above (see **Fundus**) *locus et fundus* became a set phrase used to specify a settlement or town with its surroundings from the 9/10th century onwards, Sicardi 1980, 363 ff.
- 63 Toubert 1973, 455, nr 1: around 1000 this originally Roman term began to lose out, as the terminology of the castra began to prevail.
- 64 Souter: *Glossary of Later Latin*, 1949, 244; from Symm. Rel. 28.2.7 Symmachus 364-402 AD floruit); Amm. 14.11.27 on (Ammiami Marcellini rerum gestarum libri, ca. 390 AD)
- 65 To complicate matters, the original Roman meaning of *massa* as “farm” continued to be used: The 8th century Fundus Priscianus (OLIMsite 507) contained 3 *massae*, as can be read on the commemorative stone of Gregory II, (715-731), Marini and Mai, 1831, 209; see also Marazzi 1990, 126.
- 66 This generic definition was wrought by Toubert 1973: 455, 2 (after Pivano) and based on the texts in the *Liber Pontificalis*, see Davis 2000, 124; see also Arthur 1991a, 93
- 67 Arthur 1991a, 94 on Northern Campania
- 68 Toubert 1973: 328
- 69 Toubert 1973: 455, 1; an example in the researched area is “tenimentum castris Sancti Petri in Formis” (OLIMsite 3, OLIMtoponym 190, 293), located near the casale Campo Morto, mentioned in historical references dated to 1224 and 1304, Reg. Chart, vol Ip. 235, n.1379 and Del Lungo 2001, 89, n. 19.
- 70 Casale: casali, turri et tenimento Zenneti, 1473 AD, Del Lungo 2001, 18.
- 71 See Life of Siricius (384-399) and Xystus (432-440). The latter built the monastery of San Sebastiano at the catacombs, *Liber Pontificalis* Life 46, 7; Davis 2000, 38.
- 72 From the RPC/PRP site classification.
- 73 From the RPC/PRP site classification.
- 74 Del Lungo 2001, 23
- 75 Corsi 2000a, 16, 40 ff and Corsi 2000b; Corsi forthcoming
- 76 See 5.VI.
- 77 See 7.I.2.2, Theme: expanding Christian activity throughout the landscape.
- 78 For an overview of the histories of the dioceses in Lazio see Duchesne 1892
- 79 Like the attendance of John of Norma at a synod held in Rome in the early 960s, which constituted the only reference to a possible diocese of Norma Page, see 7.II.1.8.
- 80 Horden & Purcell 2000, 95
- 81 Arthur 1991a, 19
- 82 Arthur 1991a, 19
- 83 Arthur 1991a, 20
- 84 Arthur 1991a, 19; I use Arthur’s definition, stressing both functional and social criteria.
- 85 Terrenato 2001
- 86 Francovich & Hodges 2000, 51
- 87 Francovich & Hodges 2003, 36
- 88 De Haas 2003a, 12. In this study I will not create my own villa site classification system, but use the terminology coined by earlier studies.
- 89 The monograph dealing with the seaside villas is Lafon 2001.
- 90 Attema & De Haas 2005, 7
- 91 In the Nettuno-Anzio and Fogliano key areas the 2nd century was incorporated to broaden the chronological scope.
- 92 See 6.I.2. and 7.II.1.4.
- 93 This distinction in dependability or accuracy of location is visible on the distribution maps as follows: A name followed by a question mark, for example Fundus Sole Luna?, denotes a probable location and/or identification, or location nearby. A name followed by a double question mark, for example Mutatio Ad Nono??, denotes tentative location and/or interpretation. Sites for which interpretation and location are confirmed have no question marks; these are listed as “exact location known” in the site database. See Chapter 7, Introduction.
- 94 Large historical bodies had huge territories with ever changing boundaries, and are therefore very hard to incorporate in the spatial analysis. Moreover, these usually comprised of a number of point-location sites found in the database, which would complicate spatial study even more. The episcopal seats, however, the towns/villages where the bishop resided, and the towns which functioned as the centres of the duchies were included in the site database.
- 95 As explained, per century there are four possible entries: Y/P/O or a void. Y denotes certain activity, P represents possible activity, O represents a broad date range of the evidence found. A void in the chronology table denotes that there is no evidence found pointing to activity in that century.
- 96 See Appendix 4.1 (list of historical toponyms); the comprehensive digital database of historical toponyms dated to the research period and the list of cartographic toponyms can be consulted on the University of Groningen/UMCG research database (Pure), <http://www.rug.nl/research/portal>.
- 97 In all records within these tables the site’s ID is the key field, i.e. the field in a record that uniquely identifies that record and distinguishes it from all the other (site)records in the database, see <http://www.pcmag.com/encyclopedia/term/45766/key-field> [accessed 1-3-17]. Through these site ID’s, the tables are joined to the sites’ point feature, also comprised in the geodatabase. This sites’ point feature was used to spatially plot the sites and all data (tables) related to them, resulting in the distribution maps of the data analysis (Part II, Chapter 7).
- 98 N stand for “not/no entry”
- 99 Interests can involve ownership, investments, taxation, the building or destruction of a site, a siege etc. See 1.II.3.
- 100 Feudal arrangements involve an owner (lord) conceding or transferring a village or an estate to a feudal party (vassal).
- 101 Y is used if there is a contemporary text confirming actual Saracene presence on this site. P (possible) is used if there is only a local traditional story but no concrete historical record for an actual attack of Saracene troops on this site.
- 102 The Roman emperor is included as a secular party, although this is not strictly correct as he played an important role in Roman religious affairs in being Pontifex Maximus.

103 Per century I have assessed both the (un)certainty of the dating evidence (1.) and the (un)certainty of the interpretation of the site's function as villa (2.):

P (1.) & P (2.) = P (possibly a villa functioned on that site in that century)

P (1.) & Y (2.) = P (possibly a villa functioned in that century)

O (1.) & P (2.) = O (O = wide date range, overall denoting that possibly a villa functioned on that site in that century)

O (1.) & Y (2.) = O (O = wide date range, overall denoting that possibly a villa functioned on that site in that century)

Y (1.) & Y (2.) = Y (it is certain/definite that a villa functioned on that site in that century)

Y (1.) & P (2.) = P (possibly a villa functioned on that site in that century).

This results in relatively many yellow icons on the distribution maps (P & O = possible, represented by yellow icon; Y = certain, represented by a red icon)

104 I have made a distinction between twee generic types of villa: an agricultural villa / villa rustica and coastal villa / villa maritima. In these two categories I have combined the traditional classification (Lafon 2001 e.a.) of villa rustica vs villa maritima and the classification used by Tol (2005) in the PRP Project, i.e. agricultural villa vs coastal villa. I also marked if the construction involved a platform or basement (platform villa / basis villa).

Appendix 6.1 The catalogue of sites

Below a basic version of the site database is presented in the form of a catalogue of sites. It contains the basic information per site:

- site number and name
- site type and function
- issues of location
- the reconstructed chronology of activity on the site

Like on the distribution maps, site name+? denotes a probable location and/or probable interpretation, or a location nearby. Site name+?? denotes a tentative location and/or tentative interpretation, or if its location can be assumed in a wider area. Sites of which the names are followed by an asterisk (*) have an unknown location. Sites with a definite interpretation and location aren't marked by a question mark or an asterix.

This catalogue illustrates the way the overall database deals with chronology and location. It can be used to look up the examples of sites mentioned in the text of this book and to find examples of site types treated in the site classification of the current chapter. The full site database, and a comprehensive site map, can be consulted on the University of Groningen/UMCG research database (Pure), <http://www.rug.nl/research/portal>.

OLIMsite	site name	middle ages	Roman	3rd	4rd	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th	site type, function
1	feronia		Y	Y	Y											sanctuary
2	cast.romano		Y								Y	Y	Y	Y	Y	castel / casale
3	castr.s.petri formis??													Y	Y	castrum
4	ninfa		P									Y	Y	Y	Y	Roman cult place. Medieval settlement
5	norma											Y	Y	Y	Y	village/town
6	casaromaniana??								Y							fundus
7	fund.folianus??								Y							fundus
8	s.angelo										Y	Y	P	P	P	church
9	fossanova		Y	P	P	P	Y	Y	O	O	O	Y	Y	Y	Y	villa, high medieval monastery
10	22 apiolae		Y	Y												villa and burials
11	62 apiolae	Y	Y	Y	P											villa, with nymphaeum, circular mausoleum
12	73 apiolae		Y	O												columbarium
13	nero villa		Y	Y	Y	O	O			O	O	O	O	O		villa
14	domitian villa		Y	Y												villa, imperial complex
15	soranianus??										Y	Y				very large fundus
16	forum appii		Y	Y	Y	Y	Y			O	O	O			O	Roman settlement, road station, sanctuary, centre of craft production, trade hub
17	sezze		Y							P	Y	Y	Y	Y	Y	Roman colony. Medieval village/town
18	clostris??		Y	Y	Y											road station?
19	tre ponti?		Y										Y	Y	Y	Roman and medieval settlement (statio?). Medieval monastery
20	mon.valvisciolo												Y	Y	Y	monastery
21	s.andrea??													P	P	church or chapell
22	camp.lombardo												Y	Y	Y	area, plain

OLIMsite	site name	middle ages														site type, function
		Roman	3rd	4rd	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th		
23	norba/civita	Y				Y	Y	P	O	Y	P				Roman colony. Late antique - medieval settlement (church, graves)	
24	123 apiolae	Y	Y	P	P										large villa	
25	privernum	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Roman, late antique and medieval village / town, see	
26	circeii??	Y	Y	Y											road station and/or settlement	
27	cori	Y	Y	Y	Y	Y			P			Y	Y	Y	Roman town. High medieval castrum	
28	ad medias/mesa	Y	Y	Y					O	P	O	Y	Y	Y	Roman settlement, road station, sanctuary. High medieval church	
29	rpc 15064 - lib 62	Y	P	P	P		P								(part of) villa site with primarily agricultural function	
30	tres tabernae	Y	Y	Y	Y	Y	O	P	P						large settlement. Late antiquity - early middle ages continuation	
31	terraccina	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Roman and medieval town, see	
32	antium	Y	Y	Y	Y	Y									Roman town, villa imperiale near / in town; a see in 465	
33	astura settlement	Y	Y	Y	Y	Y	Y			P	P	O	Y	Y	Roman village. High medieval village	
34	satricum villa	Y	Y	Y	Y				Y	Y					villa, medieval habitation phase	
35	tor.capo d'anizio	Y							O	O	O	O	Y	Y	high medieval tower, lighthouse	
36	rpc 11286	Y	O												villa rustica	
37	124 apiolae	Y	Y	P	P										necropolis	
38	rpc 15010	Y													unknown site type / function	
39	rpc 11277	Y	O												unknown site type / function	
40	rpc 15132	Y	O												outbuilding belonging to a villa	
41	picco circe	Y	O			P					Y	Y			sanctuary and temple site to Circe, later Venus	
42	rpc 15072	P	Y												unknown site type / function	
43	ad sponsas??	Y	Y	Y											road station / mutatio	
44	locus piscopio*										Y	Y			locus	
45	castellionem												Y	Y	fortified location	
46	ad turres albas??	Y		Y											road station?	
47	pratica di mare	Y	Y	Y	Y	P	P	Y	Y	P	Y	Y	Y	Y	Roman and medieval settlement	
48	ad turres??	Y		Y											road station? tower	
49	civ.laurentum??	Y	Y	Y											imperial domain / road station / civitas	
50	fondi	Y	Y	Y	Y	Y	Y	P	Y	Y	Y	Y	Y	Y	Roman and medieval town, see	
51	nettuno	Y										Y	Y	Y	castrum	
52	villamagna	Y	Y	Y	Y	Y	P	P	Y	Y	Y	Y	Y	Y	villa and early medieval church. High medieval monastery and casale	
53	s.andrea silice					Y	P	Y	Y	Y	Y	Y	Y	Y	medieval monastery, church. High medieval hospitalis	
54	roccagorga											Y	Y	Y	town	
55	roccasecca d.v.										P	Y	Y	Y	castrum, later castle / town	
56	maenza										P	Y	Y	Y	village/town	
57	cisterna									P	Y	Y	Y	Y	town, castle, castrum	
58	priverno							P	P	Y	Y	Y	Y	Y	town	
59	sermoneta									Y	Y	Y	Y	Y	town, castrum?	
60	ambrifi										Y	Y	Y	Y	castrum	
61	sonnino	Y								Y	Y	Y	Y	Y	settlement, castrum	
62	bassiano											Y	Y	Y	village/ town. Monastery.	
63	monte mirteto										Y	Y	Y	Y	monastic complex	

OLIMsite	site name	middle ages	Roman	3rd	4rd	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th	site type, function
101	cast.acquapuzza											P	Y	Y	Y	castle (castrum?)
102	t.acquapuzza											P	P	Y	Y	tower, castle
103	alt.abbatis												Y			area, mountain
104	font.papalis??												Y			well, bridge?
105	domusc.lauretum??								Y	P						domusculata
106	144 tellenae		Y	Y												tomb
107	domusc.anthius??								Y	P						domusculata
108	t.cenci														Y	tower
109	villa pliny		Y	Y	Y	P										villa. Early christian church.
110	col.vescovo												Y	Y	P	church, monastery, small village?
111	cr.rubea??													Y		area
112	s.silviano										Y	Y	Y	Y	Y	church, high medieval monastery
113	s.donato?						P		P	P	Y					church, probably part of a (high) medieval settlement
114	capo de aqua*										Y	Y				spring, well; border marker.
115	t.brunori		Y											O	Y	tower
116	petra aq.??													Y	Y	spring; border marker?
117	ac.vivam?													Y	Y	locus
118	t.sessano	Y												P	P	tower
119	massa normas?								Y							massa
120	massa verginis*				Y											massa
121	massa statiliana*				Y											massa
122	amarthiana??				Y											possession
123	sulpicianus*				Y											church possession
124	corbianus??				Y											church possession
125	beruclas*				Y											church possession
126	procoio?													P	P	casale
127	castr. fogliano?						P		P	P	Y	P				locus, castrum
128	sorresca		Y				Y	P	P	P	Y	Y	Y	Y	Y	villa, medieval church & monastery
129	la casarina		Y	O									P	Y	Y	Roman bathhouse, part of a villa complex. High medieval church and monastery
130	area orgiale*												Y			area or domain
131	sublanuvium??		Y	P	Y											road station?
132	s.gennaro		Y											Y	Y	castle, castrum
133	castr.vetus?										Y	Y	Y	P	P	castrum
134	ponte lignicium*										Y					bridge
135	cast.gandolfo											Y	Y	Y	Y	settlement and fortress
136	genzano		Y										Y	Y	Y	medieval town on Roman remains, later castrum
137	castr.novum?												P	Y	P	Castrum
138	castr.s.andrea?													Y	Y	Castrum
139	vicus aug.laurentium		Y	Y	Y	Y							Y	P		Late Roman settlement. High medieval watchpost / fortified settlement
140	osteriaccia	Y	Y	Y	Y											Roman road station, (re)used in middle ages
141	rpc 15085 macotta		Y	Y	Y	Y		P								villa
142	muraccioli		Y	Y	Y											villa
143	s.pauli?		P											Y	P	church, possibly built using part of a Roman village
144	marino		Y	Y	Y	P						P	P	Y	Y	Roman small settlement,medieval town, later castrum
145	malaffitto		Y										O	Y	Y	Roman villa, high medieval castle, later castrum

OLIMsite	site name	middle ages	Roman	3rd	4rd	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th	site type, function
146	fajola??												Y	P	P	castle
147	velletri		Y	Y	Y	Y	Y	P	Y	Y	Y	Y	Y	Y	Y	Roman and medieval town, see
148	pisc.d.fauces??													Y		piscaria
149	massa murinas*				Y											massa
150	mons episcopo*										Y	Y	Y			area, border marker
151	posses.marinas*				Y											area, piece of land (with farms?)
152	villa w of vicus		Y	Y												villa
153	marcantrevola		Y	Y	Y										Y	Roman architectural remains; high medieval locus
154	m.mareni??								Y							massa
155	albano laziale		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Roman castrum, later civitas. (Early) medieval fortress town, see
156	cast.savelli		Y							P	P	Y	Y	Y	Y	Roman residence, high medieval fundus& locus, later castle
157	cast.di molare		P		P								Y	Y	Y	castle
158	cavallacci	Y	Y	Y	Y	Y										Roman villa, medieval building phase. Necropolis nearby
159	ariccia		Y	Y	Y	Y				P	Y	Y	Y	Y	Y	Roman civitas, medieval castrum
160	turricellae		Y									Y	Y	Y	Y	tower
161	150 tellenae		Y	Y	O											villa
162	151 tellenae		Y	Y	Y											villa
163	cast.monte d.torri		Y											Y	Y	Roman villa, small high medieval fortress
164	sabellum??								Y	Y						area, small settlement with church (?)
165	flexu/ad lautolas?		Y									Y				casale and locus
166	fusumgnanum												P	Y	Y	castrum
167	loc. lo morto*												Y	Y		locus
168	procilianus??					Y	P	P	P							fundus
169	cast.presciano												Y	P	P	castle
170	area r. de scatii*											Y				agricultural area
171	m.nemus??		Y		Y											massa
172	sole luna		Y	Y	Y											Roman structures, early christian church and cemetery
173	cas.filippi											Y	P	P	P	medieval fortified borgo
174	vil.ottavi		Y	Y	Y	O										villa; part rebuilt into baptisterium
175	rocca papa		P									Y	Y	Y	Y	castle, castrum
176	nemi										P	Y	Y	Y	Y	castle, castrum
177	tiberia/castellone		Y									Y	Y	Y	Y	Roman villa/agricultural centre, medieval castello (monastery?)
178	fundus cosconis*							O	O		Y					fundus
179	casale antico*													Y		casale
180	ad c.guttas?		Y									Y	Y			valley, border marker
181	bal.novum??		P									Y	Y			waterbasin, border marker
182	s.m. dell'orto		Y									Y	Y	Y	Y	Roman villa, early christian tombs (catacambs), medieval church
183	colonnella												Y	Y		border marker
184	area agripparia*												Y	Y		area
185	regeta??						Y									area or place
186	mon.crescentuli?										Y					high medieval church
187	170 tellenae				O	O	O									large cistern
188	171 tellenae		Y	Y												villa
189	torretta corana		Y											Y	Y	tower. Built on a cisterna of a villa
190	marmosolio??		P										Y	P	P	monastery

OLIMsite	site name	middle ages	Roman	3rd	4rd	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th	site type, function
238	mon.s.magno	Y		P		O	Y	Y	Y	Y	Y	Y	Y	Y	Y	late Antique - early medieval graves; monastery pos from 6th certain 10th
239	79 tellenae		Y	Y	O											platform villa
240	anime sante		Y	O	O	O										unknown site type / function
241	villa sibilla	P	Y													Roman villa, possibly medieval walls
242	turricella de nimpha*													Y		tower
243	piombinara											Y	Y	Y	Y	medieval religious community
244	mon.s.lucia/s.stefano?													Y	Y	monastery
245	mon.s.m.canne?													Y	Y	monastery
246	mon.s.m. in selci??												Y	Y	Y	monastery, monastic community
247	mon.s.martina*	Y														monastic community
248	mon.s.niccolo?													Y	Y	monastery, monastic community
249	villa loc.casale		Y	Y	Y	Y	Y	Y	Y							villa, converted into a church
250	montelungo													Y	Y	settlement, pieve?
251	cacume													Y	Y	castle, settlement
252	amaseno												Y	Y	Y	town, (later?) castrum, pieve
253	ceccano		Y	Y	Y	Y			Y		P	Y	Y	Y	Y	Roman and medieval village/town
254	patrica									Y		Y	Y	Y	Y	Byz. castrum, settlement (later?) high med castrum
255	supino												Y	Y	Y	medieval village/town, castrum, pieve
256	s.stefano												Y	Y	Y	settlement, castrum
257	castro dei volsci						P	P	P	P	P	Y	Y	Y	Y	monastery, later settlement, later castrum
258	carpineto romano											Y	Y	Y	Y	medieval village/town, pieve
259	s.m.di viano													Y	Y	monastery
260	sgurgola												Y	Y	Y	village, pieve
261	gorga											Y	Y	Y	Y	settlement, pieve
262	collemezzo												Y	Y	Y	castle, pieve
263	pruni														Y	church, castrum
264	montelanico														Y	settlement, pieve
265	murum anticum?													Y		ruins, border marker
266	segni		Y	Y	Y	Y	Y	Y	Y	P	Y	Y	Y	Y	Y	Roman and medieval town, see
267	mon.s.m.rossilli		Y											Y	Y	monastery built on a Roman villa
268	mon.sacco*														Y	church and later monastery
269	valmontone										P	Y	Y	Y	Y	settlement, castrum
270	artena												Y	Y	Y	settlement, castrum
271	gavignano														Y	settlement, pieve
272	mon.palazzolo		Y									Y	Y	Y	Y	small heremite community on a Roman villa, later monastery
273	vallecorsa											Y	Y	Y	Y	castello
274	pastena											Y	Y	Y	Y	castello, village/town, (later?) castrum
275	ardea		Y	Y	Y	Y				Y	Y	Y	Y	Y	Y	Roman stronghold, high medieval castellum
276	t.dei masi												O	O	Y	tower
277	conca										P	P	Y	Y	Y	castrum
278	s.petri formis??												Y	Y	Y	church, monastery
279	arborem pirum*												Y	Y	Y	border marker
280	s.eleuterio		Y									Y	Y	P	P	Roman villa, medieval church / monastery
281	tor.annibaldi		Y											P	Y	(watch)tower built on Roman grave
282	s.cecilia??											Y	Y			monastery and church

OLIMsite	site name	middle ages	Roman	3rd	4rd	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th	site type, function
330	rpc 10145		Y	Y	Y											farmstead?
331	rpc 10509		Y	Y												platform villa
332	rpc 10905		Y	O												sanctuary / villa
333	rpc 10958		Y	Y	Y	Y										platform villa
334	rpc 10121		Y	Y												outbuilding?
335	rpc 10955		Y	O												farmstead?
336	rpc 10135		Y													farmstead/villa?
337	rpc 10514		Y	Y	Y											hamlet
338	rpc 10927		Y	Y												farmstead, villa
339	rpc 10873		Y	O												farmstead/villa?
340	rpc 10904		Y	O												platform villa
341	rpc 10510		Y	O												platform villa
342	rpc 10114		Y	O												farmstead?
343	rpc 10566															village?
344	rpc 10885/10886		Y	Y												village?
345	rpc 10558		Y													probably large farmstead
346	rpc 10557"		Y													probably large farmstead
347	rpc 10571		Y	O												villa
348	rpc 10144		Y	O												farmstead? cult site?
349	rpc 10895		Y	O												outbuilding? / part of villa complex?
350	rpc 10569								Y							probably a large farmstead
351	rpc 11024		Y	O												cistern / water basin
352	rpc 10130		Y	O												farmstead
354	rpc 10585		Y	O												probably a larger farmstead
355	rpc 10859		Y	O												farmstead?
356	rpc 10124		Y	Y	P	Y										farmstead; cultic site??
357	rpc 10113		Y	O												lithic scatter, farmstead/villa
358	rpc 10572		Y	O												large farmstead or outbuilding
359	rpc 10583	Y	Y	O									Y			probably a village
360	rpc 10131		Y	O												farmstead?
364	hosp.cantaro??												Y			hospitalis
365	palaverta		Y											Y	Y	Roman villa, medieval castle
366	castrum castelluzza		Y	Y										Y	Y	castrum
367	villa/torre appia		Y	Y	Y								Y	Y	P	Roman complex: grave or room of villa. Medieval tower
368	berreta prete		Y		Y								Y	Y	Y	Roman grave, high medieval church / chapell, later watchtower.
369	casale fiorano										Y	Y	Y	Y	Y	(fortified) casale and later castellion (castellum?), built on Roman villa
370	fundus camellianus*								Y						Y	fundus
371	tor.castellazza		Y											Y	Y	tower on a Roman cistern
372	tor.s.eufemia													Y	Y	tower
373	s.eufemia??							Y						Y		early medieval church; high medieval church and tower
374	cast.di leva		Y									Y	Y	Y	Y	casale, later castrum
375	falcognana		Y											Y	Y	watchtower
376	tor.d.grotte		Y	Y	P									Y	Y	Roman villa, high medieval tower
377	tor.castellaccia		Y											Y	Y	tower
378	mon.certosines													Y	Y	monastery, later casale
379	tor maggiore													Y	Y	tower
380	cerqueto													Y	Y	casale and tower
381	la torraccia													Y	Y	tower

OLIMsite	site name	middle ages	Roman	3rd	4rd	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th	site type, function
523	rpc 15127		Y	O	P											outhouse
524	rpc 67		Y	O												unknown site type / function
525	rpc 11023		Y	Y												platform villa
526	fundus pontianus*								Y							fundus
527	rpc 11065		Y	O												acqueduct
528	fundus tatianus*								Y							fundus
529	rpc 15108		Y													possibly a small settlement / hamlet
530	fundus barranus*								Y							fundus
531	fundus cacclanus*								Y							fundus
532	47 bovillae	Y														tomb
533	massa pontiana*								Y							massa
534	120 bovillae		Y	Y												villa
535	ad decimum		Y	Y	Y	O										road station. Settlement. Catacombs
536	145 bovillae		Y													villa, cistern
537	s.angeli											Y	Y	Y	Y	church
538	171 bovillae		Y							O	Y					Roman building with unknown function, medieval church
539	173 bovillae		Y	Y	Y	O										villa with therms/ninfeo
540	179/180 bovillae		Y	Y	Y									Y		villa with a therme, unspecified medieval phase (?); 13th century tower
541	184 bovillae		Y	Y	Y											rock tomb(s)
542	gallienus tomb		Y	Y												mausoleum
543	palombaro		Y	Y	Y	O					Y	Y	Y	Y	Y	villa, large tomb adjacent, medieval casale
544	262 bovillae		Y	P	Y											mausoleum
545	265 bovillae		Y	O	O											grave
546	315 bovillae		Y		O	O	O				P					chapell
547	341 bovillae	Y	Y													Roman tomb, re-used in the middle ages as tower
548	fund.civitella?		Y								Y					fundus
549	416 bovillae		Y	Y												villa and cistern
550	417 bovillae		Y	Y	Y											villa
551	rpc 11215		Y	Y												villa with thermal complex and a workshop (killn)
552	rpc 15015		Y													bridge
553	fundus aquilianus*								Y							fundus
554	rpc 15112		Y	O												unknown site type / function
555	fundus sancti petri*										Y					fundus
556	church s.antonio											Y	Y	Y	Y	high medieval church, fortified control location
557	chapell s.romano*												Y	Y	P	chapell
558	grotticelle	Y	Y													probably a Roman villa, re-used in the middle ages (unknown function)
559	aqua bersa?										Y					cistern, border marker
560	piscaria cum criptis*		P								Y					piscaria
561	fundum duo amanti*										Y					fundus
562	area quarantula*										Y					area
563	mill dorriga/cicianum*												Y			mill
564	duo rigora*												Y			area, piece of land
565	martiris clementis??										Y	P	Y			church
566	s.agapito??										Y					church? Border marker

Appendix 6.2 Queries

This appendix contains all relevant queries from the main site database

Diocese / bishopric, historical evidence

OLIMsite	site name	date in text	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th
17	sezze	1036								Y	Y	Y	
23	norma	960-ties							Y				
30	tres tabernae	313-592 & 769-868	Y	Y	Y		P	P					
31	terraccina	313?	P	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
32	antium	460-6th c		Y	Y								
50	fondi	500?			Y	Y	Y	Y	Y	Y	Y	Y	Y
53	s.andrea	592-?			Y	P							
58	privernum	769-12th c					Y	Y	Y	Y	Y		
147	velletri	465		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
155	castra albana	465		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
266	segni	499		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
392	ostia antica	313	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Border marker, historical evidence

OLIMsite	site name	historical evidence
22	Campo lombardo	P
28	Ad Medias, Mesa	P
94	s.anastasia	P
97	Fossatum de Lectere, area Littari	P
114	Capo de Aqua	Y
116	Petra Aquara	P
118	torre sessano	Y
150	Mons de Episcopo	Y
180	(Vallis) ad Centum Guttas	Y
181	balneum novum	Y
183	border marker colomnella	Y
189	torretta corana	Y
194	Fundus Sanctorum Andreae et Gregorii	Y
242	Turricella de Nimpha	Y
265	Murum Anticum	Y
279	Arborem Pirum	Y
283	torre petrara, torre di sezze	Y
402	la portella	Y
416	rpc site 11719, torrecchia vecchia	Y
559	Aqua de Bersa	Y
566	church on Montis de Sancto Agapito	Y

Casale, historical evidence

OLIMsite	site name	10th	11th	12th	13th	14th	15-19th
2	castel romano	Y					
16	Forum Appii						Y
28	Ad Medias, Mesa						Y
45	castellionem, casale campoleone						Y
47	pratica di mare					Y	
52	monastery of san pietro di villamagna			Y			Y
72	casale revolosa	Y					
77	locus and casale zenneti						Y
90	veprosa					Y	
118	torre sessano						P
162	site 151 forma italiae tellenae, villa al						Y
165	casale de flexu		Y				
166	Castrum Fusumgnanum						Y
173	casale filippi						Y
179	casale sito in antico				Y		
277	rpc site 15233, castrum di conca						Y
304	morena	Y					
365	castle palaverta						Y
369	casale di fiorano	Y					
374	castel di leva		Y				
378	monastery of the certosines						Y
380	cerqueto				Y		P
383	mandriola				Y		
384	casale squezanellum			Y			
386	castrum and casale della zolferata						Y
389	church, castrum and casale santa petronell						Y
391	dragoncella						
394	fusano					Y	P
395	Tor Ser Paolo				P	Y	
401	fundus maranus/torre d.marrana, dell'acqua						Y
506	Fundus Casaflorana / Floranus						
538	site 171 forma italiae bovillae, medieval						Y
543	casale palombaro	Y					
571	torre del Padiglione						Y
583	Falcognana (di sopra)					P	P
585	casa della torretta, tor di nona						Y

Castrum, historical evidence

OLIMsite	site name	lord executor	home base lord executor	owner - lord executor	10th	11th	12th	13th	14th
3	castrum s.petri			s.peters-?				Y	P
5	norma	tusculi?		pope?-tusculi?			Y		
17	sezze			pope?-			Y		
27	cori						Y		
47	pratica di mare	baronzini		?-baronzini			Y		
51	nettuno	tusculi		?-tusculi			Y		
54	roccagorga	annibaldi?		?-annibaldi?			Y		
55	roccasecca					P	Y		
56	maenza						Y		
57	cisterna	frangipani		pope-frangipani			Y		
60	castrum ambrifi			fondi -?		P	Y		
61	sonnino			?-lords of sonnino			Y		
62	bassiano	lrds.bassiano		?-lords of bassiano			Y		
64	astura								P
66	castellum unolcti			s.m. in aracoeli-?				P	
84	lanuvio							Y	
90	castrum nave	crescenzi?	rome	10th: s.alessio-crescenzi?	Y			Y	P
95	s.felice circeo								P
113	s.donato	crescenzi	velletri	s.erasmo-crescenzi	Y				
127	fogliano	crescenzi	velletri	s.erasmo-crescenzi	Y				
132	s.gennaro	annibaldi		13th: ?-annibaldi					P
133	c.vetus	crescenzi	velletri	946 AD: bs vellet-ri-crescenzi; 978 AD: s.andrea-crescenzi	Y			Y	
135	castel gandolfo	savelli		13th: ?-savelli				Y	
136	genzano			tre fontane-?				Y	
137	castrum novum							Y	
138	castrum s.andrea							Y	P
144	marino	frangipani		?-frangipani				Y	
145	castle malaffitto	annibaldi		?-annibaldi				Y	
156	castel savelli	savelli		savelli-savelli			P	P	P
159	ariccia	tusculi	tusculum	?-tusculi	Y				
166	fusugnanum	annibaldi?		?-annibaldi?				Y	
175	rocca di papa			13th: pope-?			Y	Y	
176	nemi			tre fontane-?			Y		
197	castrum trevi							Y	
201	prossedi								P
202	pisterzo								P
203	asprano					Y			
205	castel savelli							Y	
252	amaseno						Y		
254	patrica								P
255	supino	lrds.supino		pope?-lords of supino				Y	
256	villa s.stefano								P
257	castro dei volsci			11th: dioces of veroli-?		Y		Y	P

Castrum, historical evidence (continued)

OLIMsite	site name	lord executor	home base lord executor	owner - lord executor	10th	11th	12th	13th	14th
260	sgurgola			pope-?			Y		
263	prunio								P
269	valmontone						P	Y	
270	artena						P	P	
273	vallecorsa			11th: fondi -?		P			P
274	pastena			11th: fondi -?		P			P
275	ardea			s.paolo-?		P			
277	conca	malabranca?		12th: ?-malabranca			Y	Y	
285	castel de paolis	tusculi		grottaferrata?-tusculi?		Y			
287	castrum algido	tusculi		?-tusculi			Y		
288	castle lariano							P	
290	castle giuliano						P	P	
291	rocca massima							P	
296	castrum acquaviva			11th: fondi -?		P		Y	
297	giuliano	ceccani		?-ceccani			Y		
298	m.julianu	villamagna	villamagna	villamagna?-villamagna		Y			
299	lenola			fondi -?		P			
301	monte gabum	tusculi?		?-tusculi		Y			
306	colleferro							Y	
366	castrum castelluzza							Y	P
369	casale di fiorano			s.paolo-?				P	
374	castel di leva	savelli		pope? - savelli				Y	
385	castrum montis	annibaldi		?-annibaldi				Y	
386	zolferata							Y	P
387	decima			s.paolo-?		Y			
388	castel porziano			ss.andrea e saba-?					P
389	s.petronella							Y	
394	fusano			tre fontane-?				Y	
412	castrum bolocti							Y	

Cemetery / necropolis general, archaeological evidence

OLIMsite	site name	necropolis / burial grounds
10	site 22 forma italiae apiolae, villa and burials in Colli P	P
12	site 72 forma italiae apiolae, columbarium	Y
23	norba	Y
25	Privernum settlement	Y
31	town of terracina	Y
34	rpc site 15250, villa satricum	Y
37	site 124 forma italiae apiolae, necropolis	Y
50	Fondi	Y
52	monastery of san pietro di villamagna	Y

Cemetery / necropolis general, archaeological evidence (continued)

OLIMsite	site name	necropolis / burial grounds
58	priverno town	Y
65	villa and necropolis at ceriara	Y
70	site 42 forma italiae tellenae, villa	P
84	lanuvio, civita lavinia	Y
98	amphitheater castrum albanum	Y
118	torre sessano	Y
139	vicus augustanus laurentium	Y
155	Castra Albana, Albano Laziale	Y
158	Roman villa in localit... cavallacci	Y
172	archaeological remains on appia near Sole Luna	Y
182	church of s.maria dell'orto	Y
236	villa in loc. Maria at lago di nemi	Y
359	rpc site 10583, FOG218, village?	P
392	Ostia Antica	Y
410	rpc site 11540, CIR I.38, graves	Y
446	tombs - church, sito 54 toponym via giotto	Y
447	castello - tombs sito 61 in casale colleferro	Y
449	tomb(s), sito 76 toponym fosso di casa ripi	Y
450	sito 78, necropole, church(?) toponym casa ripi	Y
452	rpc site 15116, T3NS2, necropolis?	Y
541	site 184 forma italiae bovillae, tombs	Y
660	loc bufolareccia	Y

Christian cemetery/necropolis/catacomb, archaeological evidence

OLIMsite	site name	Christian cemetery	date range
12	site 72 forma italiae apiolae, columbarium	Y	
23	norba	Y	6-7/8/9/10?
25	Privernum settlement	Y	6th - ?
34	rpc site 15250, villa satricum	P	9-10th?
37	site 124 forma italiae apiolae, necropolis	Y	
50	Fondi	Y	
51	nettuno	Y	4th
52	monastery of san pietro di villamagna	Y	4-5th c
65	villa and necropolis at ceriara	Y	6-7th
84	lanuvio, civita lavinia	Y	5-6th
98	amphitheater castrum albanum	Y	11th
147	Velletri	Y	from 4th? onwards
155	Castra Albana, Albano Laziale	Y	6-9th
158	Roman villa in localit... cavallacci	Y	
172	archaeological remains on appia near Sole Luna	Y	4th
182	church of s.maria dell'orto	Y	
186	monte crescentuli, church of s.angeli	P	

Church or chapel, archaeological and historical evidence (continued)

OLIMsite	site name	archaeological evidence	historical evidence	first date in texts	last mentioning in texts	first archaeological evidence	last archaeological evidence	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th
47	pratica di mare, lavinium	Y	Y	314? 882? 12		8th			P	P			Y	Y		Y	Y	Y	Y
50	fondi	Y	Y	5th						Y	Y	Y	P	Y	Y	Y	Y	Y	Y
51	rpc site 15234, settlement of nettuno	Y	Y	1210 AD														Y	Y
52	monastery of san pietro di villamagna	Y								Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
53	church, monastery of s.andrea in silice	Y	Y	592 AD			after 1300				Y	P	Y	Y	Y	Y	Y	Y	Y
54	roccagorga	Y																	
56	maenza	Y																	
57	cisterna (di latina)	Y																	
58	priverno town	Y	Y			9-10th?							P	P	P	Y	Y	Y	Y
59	sermoneta	Y			1030 AD										Y	Y	Y	Y	Y
61	sonnino	Y																	
62	bassiano	Y	Y	12th c													Y	Y	Y
63	S.Angelo / S.Maria di monte Mirteto	Y	Y													P	Y	Y	Y
75	torre s.anastasio											P							
78	church of s. maria in caposelce		Y	1337, but pos 12 13?													P	Y	Y
80	church of s. giacomo		Y	11-13?	-											O	O	P	P
81	church of s. leonardo de silice		Y	11-13?	?											P	P	P	P
82	church of s.leonardo de barchis		Y	1194 AD												P	Y	Y	Y
84	lanuvio, civita lavinia	Y	Y	5th	-	5th				Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
88	piscaria grecesco																		P
89	Castello Vetera		P	?12th?													P		
90	cella S.Maria de Veprosa [...] and castrum Nave														Y				
91	villa s.vito	Y	P	11th?		7/8th						O	O	P	P	Y	Y	Y	Y
93	church and monastery of St. Helia		Y	1091? 1398												Y	Y	Y	Y
94	s.anastasia		Y	9th? 1158-1170										P	P	P	Y		
95	s.felice circeo	Y	Y																
98	amphitheater castrum albanum	Y				11th (chapell)										Y			
109	villa di castelfusano, 'of plinius'	Y						Y	P										
110	church, residence, storage on colle del vescovo	Y				12-13th											Y	Y	

Church or chapel, archaeological and historical evidence (continued)

OLIMsite	site name	archaeological evidence	historical evidence	first date in texts	last mentioning in texts	first archaeological evidence	last archaeological evidence	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th
112	s.silviano church and monastery		Y	10th											Y	Y	Y	Y	Y
113	church of s. donato		Y	594 or 977		8th					P		P	P	Y				
128	rpc site 11580, S.Maria della Sorresca	Y	Y	529, 967						Y	P	P	P	Y	Y	Y	Y	Y	Y
129	rpc site 11563, la casarina	Y				11/12th										P	Y	Y	Y
135	castel gandolfo	Y	Y	11th												Y	Y	Y	Y
136	genzano		Y	12th													Y	Y	Y
139	vicus augustanus laurentium	Y				?													
143	ecclesia S.Pauli		Y	1238 AD	18th c rebuilt	?												Y	P
144	marino	Y																	
147	velletri	Y	Y	436?						Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
155	castra albana, albano laziale	Y	Y	4th					Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
157	Castel di Molare	Y				12th?			P					P			P	P	P
159	ariccia	Y																	
164	sabellum		Y	777-795									Y						
172	archaeological remains on appia near sole luna	Y					4		Y										
173	casale filippi		Y	1085 AD												Y	Y	Y	Y
174	villa degli ottavi	Y				4/5th			Y	O									
175	rocca di papa	Y																	
176	nemi	Y															P	Y	Y
177	tiberia, castellone															Y			
182	church of s.maria dell'orto	Y	Y	11th												Y	Y	Y	Y
186	monte crescentuli, church of s.angeli		Y	955-962											Y				
190	monastery of marmosolio																Y	P	P
191	monastery valvisciolo carpinetano																	Y	P
192	knights templar fortress, monastery of s.francesco	Y				?													Y
197	castrum Trevi			14th															Y
200	church and monastery colle s.pietro	Y	Y	1159 AD		7/8th							O	O	P	P	P	Y	Y
202	pisterzo		Y	1328 AD															Y
203	Asprano		Y	1099 AD												Y	Y	Y	Y
204	monastery of s.lorenzo																		Y
205	Castel Savelli (Borghetto)	Y																	
206	basilicam sancti teodori martyr		Y	844-847										Y					

Church or chapel, archaeological and historical evidence (continued)

OLIMsite	site name	archaeological evidence	historical evidence	first date in texts	last mentioning in texts	first archaeological evidence	last archaeological evidence	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th
212	church sanctae mariae sita in Fonteiana / fundus crispinis		Y	5th and 8/9th c						Y	Y	P	Y	Y					
215	monastery of s.domenico	Y			?	13th	?											Y	Y
216	monte s.angelo, terracina	Y				9/10th								P	Y	Y	Y	Y	Y
218	area / fundus, church of s.thomas	P	Y	P 772-795 and Y 1201	1201 AD														
219	church / domusculta sancti Edisti		Y	before 772-795									Y	P					
222	basilica sancti theodori		Y	772-795	817 AD								Y	Y					
238	monastery of s.magno (and s.angelo)	Y								P	P	P	P	P	Y	Y	Y	Y	Y
243	Community S. Cecilia di Piombinara te Colleferro		Y	1051 AD												Y	Y	Y	Y
244	monastic community S. Lucia / S. Stefano																	Y	Y
245	abbey of S. Maria delle Canne																	Y	Y
246	monastic community S.Maria in Selci																Y	Y	Y
247	monastic community S. Martina																		Y
248	monastic community of S. Niccolo																	Y	Y
249	villa in localit... casale	Y				?							Y						
250	montelungo		Y	1298														Y	Y
251	cacume		Y	1328															Y
252	amaseno, castrum laurentii	Y	Y	1177													Y	Y	Y
253	ceccano, fabrateria vetus		Y	1196													Y	Y	Y
254	patrica		Y	1328															Y
255	supino		Y	1328															Y
257	castro (dei volsci)		Y	1108							P	P	P	P	P	Y	Y	Y	Y
258	carpineto romano	Y				11/12th										O	Y	Y	Y
259	church and abbey of s.maria di viano		Y	1298														Y	Y
260	sgurgola			13														Y	Y
261	gorga			14		13/14th												O	Y
262	collemezzo		Y	1328															Y
263	prunio, castrum pruni		Y	1328															Y
264	montelanico		Y	1328															Y
266	segni	Y								Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
267	monastery of s.maria de rossilli																Y	Y	Y

Church or chapel, archaeological and historical evidence (continued)

OLIMsite	site name	archaeological evidence	historical evidence	first date in texts	last mentioning in texts	first archaeological evidence	last archaeological evidence	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th
268	church and monastery "sacco"		Y	1328															Y
269	valmontone	Y													P	Y	Y	Y	Y
271	gavignano			14															Y
272	monastery of palazzolo	Y	Y	1023												Y	Y	Y	Y
273	vallecorsa		Y	1308															Y
274	pastena	Y		1308															Y
275	ardea																		Y
277	rpc site 15233, castrum di conca		Y	1115													Y	Y	Y
278	s.petri de forma, s.pietro in formis		Y	1116													Y	Y	Y
280	s.eleuterio	P	Y	11												Y	Y	P	P
282	church and monastery of s.cecilia		Y													Y	Y		
285	castel de paolis	Y	Y	1033												Y	Y	Y	Y
287	castrum algido			11												Y	Y	Y	P
288	castle lariano	P	P																
293	villa and church of s. cesareo	Y	Y	11-13	?	4th	5		Y	Y						O	O	O	
294	church of s.nicola		Y	1202														Y	P
300	massa juliana, monasterio sancti andree												Y	Y					
302	church of S.Trinit and S.Bartolomeo dei Valloni	Y	Y	13th c		12th											Y	Y	Y
305	monastery of grottaferrata	Y	Y													Y	Y	Y	Y
307	morolo		Y	1178													Y	Y	Y
363	church location "destruc-tum atque desertum in territorio vellet"			11												Y			
373	church of s.eufemia		Y	676-678, 1207						Y		Y						Y	
378	monastery of the certosines	Y				13th												Y	Y
383	casale mandra and torre della mandriola		Y	13													Y	Y	Y
387	decima		Y	1081												Y	Y	Y	Y
388	castel porziano			11?												P	P	P	P
389	church, castrum and casale santa petronella		Y	1005												Y	Y	Y	Y
390	church of s.cyriac, medi-eval tower?		Y	7								Y							
392	ostia antica	Y	Y			?	10		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
393	gregoriopolis													Y	Y	Y	Y	Y	Y

Church or chapel, archaeological and historical evidence (continued)

OLIMsite	site name	archaeological evidence	historical evidence	first date in texts	last mentioning in texts	first archaeological evidence	last archaeological evidence	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th
394	massa, castel fusano		Y	1161													Y	Y	Y
397	torre Chiesaccia	Y				12/13th											O	Y	Y
414	church of Sancti Angeli de Campo Mellis		Y	1203						Y							Y	Y	Y
428	rpc site 11052	P																	
441	church sito 39, toponym s. maria di piombinara	Y				12/13th											O	O	Y
446	tombs - church, sito 54 toponym via giotto	Y				late roman	high mid ages		P	P	P	P	P	P					
450	sito 78, necropole, church(?) toponym casa ripi	P				6/7th					P	P							
476	monastery of san salvatore de meleto															Y			
505	rpc site 68, church of s.maria ad martyres / S.Cesario	Y	Y	end of 6th c AD	until now	7th?					Y	Y	Y	Y	Y	Y	Y	Y	Y
537	church S.Angeli	Y	Y	1116		11th?										Y	Y	Y	Y
538	site 171 forma italiae bovil-lae, medieval church	Y				9-10th	no later finds							O	Y				
543	site 220 forma italiae bovil-lae, casale palombaro		PP																
546	site 315 forma italiae bovil-lae, chapell	Y		10?		late Rom/early Chr.			O	O	O				P				
556	church of s.antonio	Y	Y	11/12?	cont											Y	Y	Y	Y
557	chapell s.romano		Y	12	14?												Y	Y	P
565	church sancti Christi mar-tiris clementis		Y	954	1154										Y	P	Y		
566	church on Montis de Sancto Agapito		P	before middle of the 10th c											Y				
567	church of ss. Filippi et Iacobi et Sancti Pastoris et Sancti Antonini		Y	1091												Y			
568	area s. juvenalis		P																
569	church sancti potiti		Y	1158, 1196													Y		
573	civitana	Y				12/13th?											P	P	
578	church of S.Petri		Y	pre-10th (disser-tum)											Y				
582	church of s.maria dei genitricis		Y	945 (deserted)											P				
587	medieval deposit om Monte Artemisio	P				12th?	14?										P	P	P
589	Basilica di Pianabella	Y	Y	6th?		4th	9/10		Y	Y	Y	Y	Y	Y	P				

Church or chapel, archaeological and historical evidence (continued)

OLIMsite	site name	archaeological evidence	historical evidence	first date in texts	last mentioning in texts	first archaeological evidence	last archaeological evidence	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th
600	church of S.Lucia		Y	1032											Y				
601	church of S.Anastasio		Y	1032											Y				
629	ecclesia Sanctae Marie Seu Salvatoris		Y	pre-987											P				

Cistern, archaeological evidence

OLIMsite	site name	archaeological evidence for cistern
4	ninfa	Y
11	site 62 forma italiae apiolae, villa and med tower	Y
13	rpc site 15210, villa of Nero at Antium	Y
14	rpc site 11594, villa of Domitianus	Y
23	norba (plateau), civita	Y
24	site 122 forma italiae apiolae, villa	Y
25	Privernum settlement	Y
31	town of terracina	Y
34	rpc site 15250, villa satricum	Y
50	Fondi	Y
64	rpc site 11202, "Torre astura", Piccarreta 2	Y
65	villa and necropolis at ceriara	Y
73	villa di casale di grega	Y
76	villa di s.palomba, loc palazzo	Y
100	villa 'del discobolo'	Y
109	villa di castelfusano, 'of pliny'	Y
115	torre brunori	Y
128	rpc site 11580, S.Maria della Sorresca	Y
129	rpc site 11563, la casarina	P
131	(statio) sublanuvium	P
132	castle S. Gennaro	Y
135	castel gandolfo	Y
139	vicus augustanus laurentium	Y
144	marino	Y
147	Velletri	Y
174	villa degli ottavi	Y
180	(Vallis) ad Centum Guttas	Y
181	balneum novum	P

Cistern, archaeological evidence (continued)

OLIMsite	site name	archaeological evidence for cistern
187	site 170 forma italiae tellenae, large cistern	Y
189	torretta corana	Y
191	monastery valvisciolo carpinetano	Y
197	castrum Trevi	Y
199	rpc site 10907, villa "le grotte"	Y
203	Asprano	Y
205	Castel Savelli (Borghetto)	Y
236	villa in loc. Maria at lago di nemi	Y
241	villa rustica in loc.Sibilla	P
266	segni	Y
289	castle s. silvestro	P
302	church of S.Trinit and S.Bartolomeo dei Valloni	Y
304	villa, casale and torre di morena	Y
332	rpc site 10905, site Z&P 3	Y
351	rpc site 11024	P
354	rpc site 10585, FOG220	Y
366	castrum castelluzza	Y
367	Roman villa, torre appia	Y
371	torre castellazza	Y
392	Ostia Antica	Y
396	torretta del Sassone	P
401	fundus maranus/torre d.marrana, dell'acqua sottera	Y
413	rpc site 11789, toponym Monte S. Angelo	P
417	rpc site 11788, toponym Colle medico	Y
418	rpc site 11775, toponym Colle Perunio	Y
426	rpc site 11040	P
444	villa rustica - tomb sito 43, toponym colli s.pietro	Y
448	villa rustica, cisterna, substructure sito 64	Y
451	sito 79, villa rustica, necropole (?)	Y
492	rpc site 11054, Terracina Lugli TER II.33	Y
498	rpc site 11048, villa	Y
518	rpc site 11045, Terracina Lugli TER II.24, villa	Y
525	rpc site 11023, Terracina Lugli TER II.4, large villa	Y
536	site 145 forma italiae bovillae, villa rustica	Y
549	site 416 forma italiae bovillae, villa	Y
558	site "grotticelle"	Y
559	Aqua de Bersa	Y
573	civitana	Y
588	settlement on monte acuto	Y

Civitas, historical evidence

OLIMsite	site name	date in texts	historical evidence	possible interpretation
17	sezze	11th		high medieval town / see
23	norba (plateau), civita	14th	Y	ruines
47	Pratica di Mare, Lavinium	9th & 11th		high medieval town
49	imperial domain / Civitas Laurentum	4th	Y	Roman town
50	Fondi	4th & 11th	Y	Roman town & high medieval town / see
84	lanuvio, civita lavinia	13th & 14th	Y	Roman town; high medieval town
147	Velletri	6th	Y	Roman / medieval town / see
155	Castra Albana, Albano Laziale	4th; 6th	Y	Roman town
159	Ariccia	4th & LR-7th?	Y	Roman town
393	borgo di ostia, gregoriopoli	since 9th		medieval town (/ see?)
573	civitana	?		subrecent name? ruines? town?

Autonomous commune, historical evidence

OLIMsite	site name	historical evidence free commune	date	date specified
4	ninfa	Y	13th	1257
17	sezze	Y	10th? 13th	956? 1228 certain
31	terraccina	Y	13th	1207-middle 13th
58	priverno	Y	12th?	12th? (confl with pope: conceded temporarily)
147	velletri	Y	12th	possibly 1101: bolla pasquale II
201	prossedi	P	12th?	1175
252	amaseno	P	12th?	1175
258	carpineto romano	Y	13th	semi-autonomous in 1224

Curtis, historical evidence

OLIMsite	site name	archaeological evidence	historical evidence	date text
391	dragoncella	Y	Y	827-844
304	villa, casale and torre di morena	P	Y	962 & 992

Domusculta, historical evidence

OLIMsite	site name	text
105	domusculta lauretum	741-752
107	domusculta anthius	741-752
209	domusculta formia(s)	741-752
219	domusculta / church sancti edisti	772-795
400	domusculta calvisiana	772-795
415	domusculta sulficiano	772-795

Ecclesiastical interests

OLIMsite	site name	ecclesiastic party	home base ecl party	3 rd	4 th	5 th	6 th	7 th	8 th	9 th	10 th	11 th	12 th	13 th	14 th
3	s.p.formis	s.peter	rome											P	P
4	ninfa	pope	rome									Y	Y		
5	norma	pope	rome									P	Y		
6	c.romaniana	pope?	rome						Y						
7	f.folianus	pope?	rome						Y						
8	s.angelo	s.magno f	nw of fondi							Y	Y	P	P	P	
15	sorianus	subiaco	subiaco							Y	Y				
17	sezze	pope	rome							Y	Y	Y	Y		
22	cmp.lombrd	s.polito	sperlonga										Y		
27	cori	pope	rome							O	O	Y	Y	Y	Y
31	terraccina	montecas	montecas									Y			
31	terraccina	pope	rome						Y	Y	Y	Y	Y	Y	
33	astura	s.alessio	rome							Y	Y	Y	Y		
41	pic circe	pope	rome										Y	Y	
45	castllionm	s.alessio	rome											Y	
47	prat dmare	grotferrata	grotferrata												Y
47	prat dmare	pope	rome			Y	P	P	Y	Y					
47	prat dmare	s.croce	rome		Y										
47	prat dmare	s.paolo fm	rome							Y	Y	Y	Y		
49	laurentum	s.croce	rome		Y										
50	fondi	montecas	montecas									Y			
50	fondi	pope	rome							Y				Y	
51	nettuno	grotferrata	grotferrata									P	Y	Y	
53	s.andrea	bs velletri	velletri				Y								
54	roccagorga	pope	rome										Y	Y	Y
55	roccasecca	pope	rome										Y		
56	maenza	pope	rome										Y		
58	priverno	pope	rome										Y	Y	Y
59	sermoneta	fossanova	fossanova										Y		
59	sermoneta	pope	rome										Y	Y	
60	c.ambrifi	montecas	montecas									Y			Y
60	c.ambrifi	pope	rome											Y	
61	sonnino	pope	rome											Y	Y
62	bassiano	pope	rome											Y	
63	m.mirteto	pope	rome										Y	Y	
64	t.astura	s.alessio	rome								P	P	Y		
66	unolocti	s.maria ar	rome											Y	
67	quercum p.	s.magno f	nw of fondi								Y				
71	pisco mont	pope	rome											Y	Y
79	massa urb	s.giov lat	rome		Y										
84	lanuvio	pope	rome									P	P	P	
84	lanuvio	s.lorenzo fm	rome											Y	
88	pisc gr	grotferrata	grotferrata												Y
89	c.vetera	bs gaeta	gaeta										Y		

Ecclesiastical interests (continued)

OLIMsite	site name	ecclesiastic party	home base ecl party	3 rd	4 th	5 th	6 th	7 th	8 th	9 th	10 th	11 th	12 th	13 th	14 th
166	fusumgnam	s.alessio	rome											Y	
168	procilianus	s.croce	rome			Y	P	P							
168	procilianus	s.saba av	rome						P						
171	m.nemus	sg battista	albano		Y										
173	c.filippi	bs velletri	velletri									Y			
175	rocca di p	pope	rome									Y	Y		
176	nemi	pope	rome										Y		
176	nemi	tre fontane	tre fontane										Y		
177	tiberia	marmosolio	marmosolio										Y		
177	tiberia	pope	rome									Y	Y		
182	sm.d.orto	s.paolo fm	rome									Y	Y		
182	sm.d.orto	subiaco	subiaco									Y			
191	valvisciol	fossanova	fossanova											Y	
192	knights tmp	kn.templar	??										P	Y	
197	c.trevi	pope	rome										Y	Y	
197	c.trevi	dioc terrac	terraccina											Y	
200	s.pietro	s.maria priv	priverno										Y		
200	s.pietro	pope	rome										Y		
203	asprano	pope	rome											Y	
203	asprano	ch terracna	terraccina											Y	
208	f.maranus	pope?	rome						Y						
209	dm.formias	pope	rome						Y						
211	t.d.mole	pope	rome											Y	
212	sm.fontna	pope?	rome			Y	Y	P	Y	Y					
213	m.fontiana	pope	rome						Y						
214	m.fontiana	pope?	rome						Y						
217	caesarian	pope	rome						Y						
218	f.s.thomas	bs velletri	velletri								Y				
219	s.edisti	pope	rome						Y	Y					
221	m.aratiana	pope	rome						Y						
223	m.acutiana	pope	rome						Y						
224	curia calv	s.alessio	rome											Y	
225	monticuli	s.maria serm	sermoneta										Y		
235	f.julianus	pope	rome						Y						
238	s.magno	montecas	montecas									Y	Y		
243	s.cecilia	bs segni	segni										Y		
245	s.m.canne	pope	rome											Y	
254	patrica	pope	rome							Y					
255	supino	pope	rome										Y		
257	castro	dioc veroli	veroli									Y			
258	carpineto	bs anagni	anagni									Y			
258	carpineto	grotferrata	grotferrata									Y	Y		
260	sgurgola	pope	rome										Y	Y	
261	gorga	bs anagni	anagni									Y	P		

Ecclesiastical interests (continued)

OLIMsite	site name	ecclesiastic party	home base ecl party	3 rd	4 th	5 th	6 th	7 th	8 th	9 th	10 th	11 th	12 th	13 th	14 th
583	falcognana	mon ss.cos&d?	rome							P					
583	falcognana	s.sisto	rome												Y
586	campodim	montecas	montecas									Y			
589	pianabella	bs ostia	ostia			Y									
590	f.steianus	pope	rome						Y						
591	m.steiana	pope	rome						Y						
592	cornelianus	pope	rome						Y						
593	ursanus	pope	rome						Y						
594	victoriole	pope	rome						Y						
595	trabatiana	pope	rome						Y						
596	neviana	pope	rome						Y						
597	paganicum	bs velletri	velletri								Y				
599	papazano	bs velletri	velletri								Y				
604	sentiliana	s.giov lat	rome		Y										
609	marulis	pope	rome					Y	Y						
610	capitonis	pope?	rome					Y	Y						
611	m.ocris	pope?	rome					Y	Y						
620	caesariana	pope	rome						Y						
625	dometiorum	pope?	rome						Y						
629	s.salvatoris	s.alessio	rome								Y				
631	ps.lacum a	s.giov lat	rome		Y										
632	ps.lacum t	s.giov lat	rome		Y										
95	s.felice circeo	kn.templar	??												Y
258	carpineto	villamagn	villamagn										Y		
133	c.vetus	sgiovanni	rome												Y
20	valvisciolo	kn.templar	??										Y		
258	carpineto	kn.templar	??										Y		

Feudal arrangements

OLIMsite	site name	lord executor	home base lord executor	owner - lord executor	10th	11th	12th	13th	14th
5	norma	tusculi	tusculum	pope-tusculi			Y		
17	sezze	ceccani	??	pope-ceccani				Y	
17	sezze	comune(f?)	local	pope-comune				Y	
17	sezze	frangipani	??	pope-frangipani			Y		
27	cori	annibaldi	??	?-annibaldi				Y	
31	terraccina	crescenzi	??	pope-crescenzi	Y				
31	terraccina	daiferius	traeto	pope-daiferius	Y	Y			
31	terraccina	desiderio	montecass	pope-montecassino		Y			

Feudal arrangements (continued)

OLIMsite	site name	lord executor	home base lord executor	owner - lord executor	10th	11th	12th	13th	14th
31	terraccina	frangipani	??	pope-frangipani			Y		
45	castellionem	frangipani	??	s.alessio-frangipani				Y	
51	nettuno	orsini	??	??-orsini			Y	Y	Y
51	nettuno	tusculi	tusculum	grottaferrata-tusculi		P	Y		
54	roccagorga	annibaldi	??	?-annibaldi			P	Y	
54	roccagorga	ceccani	ceccano	pope-ceccani				Y	Y
58	priverno	ceccani	ceccano	?-ceccani			Y		
58	priverno	frangipani	??	?-frangipani			Y	Y	Y
60	ambrifi	??	??	pope-?				P	
61	sonnino	l.bassiano	??	?-lords of bassiano				P	
62	bassiano	annibaldi	??	pope-annibaldi				Y	
62	bassiano	caetani	??	pope-caetani				Y	Y
62	bassiano	l.bassiano	??	?-lords of bassiano			P		
64	torre astura	tusculi	tusculum	s.alessio-tusculi			Y		
78	caposele	frangipani	??	terraccina-frangipani				Y	
90	castrum nave	crescentii?	rome	s.alessio - crescentii?	Y				
101	acquapuzza	sanguigni?	??	?-sanguigni?			Y		
113	s.donato	crescenzi	velletri	s.erasmo-crescenzi	Y				
127	fogliano	crescenzi	velletri	s.erasmo-crescenzi	Y				
133	c.vetus	crescenzi	rome	s.andrea s-crescenzi	Y				
133	c.vetus	crescenzi	velletri	bs velletri-crescenzi	Y				
159	ariccia	tusculi	tusculum	?? - tusculi	Y				
159	ariccia	mlbranca	??	pope-mlbranca			Y		
159	ariccia	tusculi	tusculum	pope-tusculi		Y			
166	fusumgnanum	annibaldi	??	?-annibaldi				Y	
177	castellone	frangipani	??	?-frangipani			Y		
177	castellone	tusculi	tusculum	?-tusculi		P			
197	trevi	ceccani	ceccano	pope-ceccani				P	
203	asprano	ceccani	ceccano	pope-ceccani				P	
218	s.thomas	crescenzi	velletri	bs velletri-crescenzi	Y				
277	conca	mlbranca?	??	grottaferrata-mlbranca?			P		
277	conca	tusculi?	tusculum	grottaferrata-tusculi?			P		
285	c.paolis	tusculi	tusculum	grottaferrata-tusculi		Y	Y		
287	algido	tusculi	tusculum	?-tusculi			P		
290	giulianello	annibaldi	??	pope-annibaldi				Y	
290	giulianello	conti	??	pope-conti				Y	
297	giuliano	ceccani	ceccano	pope-ceccani			Y		
298	m.julianu	villamgna	villamgna	?-villamagna		Y			
579	sole luna	crescenzi	velletri	bs velletri-crescenzi	Y				
597	paganicum	crescenzi	velletri	bs velletri-crescenzi	Y				
599	papazano	crescenzi	velletri	bs velletri-crescenzi	Y				

Fortified all types, historical and archaeological evidence (continued)

OLIMsite	site name	fortified settlement	historical foundation date	historical end date	first archaeological date	last archaeological evidence	historical evidence	archaeological evidence	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th			
132	castle S. Gennaro	P	1270				Y	Y											P	P			
133	castrum vetus			1422, 1465			Y									Y	Y	Y	P	P			
135	castel gandolfo	P			11/12?		Y	Y										P	Y	Y	Y		
136	genzano	P					Y	Y											P	Y	Y		
137	castrum novum (same as castru						Y												P	Y	P		
138	castrum s.andrea (same as cas			1219, 1338-1342			Y													Y	Y		
139	vicus augustanus laurentium							P															
144	marino	Y	11-12?	1230			Y	Y										P	P	Y	Y		
145	castle malaffitto	P	P12	1249			Y	Y											P	Y	Y		
147	velletri	Y	14 (but prob earlier)				Y	Y													Y		
155	castra albana, albano laziale	Y	10 (savello built walls)?				Y	Y				P				Y	Y	Y	Y	Y	Y		
156	castel savelli	P	-				P	Y											P	P	P		
157	Castel di Molare	P	12	15			P	P											P	P	P		
159	ariccia						Y	Y								Y	Y	Y	Y	Y	Y		
166	Castrum Fusumgnanum			1423			Y												P	Y	Y		
169	castle of presciano							P															
173	casale filippi	P	11	cont?			Y	Y										P	P	P	P		
175	rocca di papa						Y	Y												Y	Y	Y	
176	nemi	P	11?				Y	Y											P	Y	Y	Y	
177	tiberia, castellone	P	11?&1383: turri diruta Tiberie	1447			P	Y											P	P	P	P	
192	knights templar fortress, mon							P															
197	castrum Trevi	P	1217?		12		Y	Y												P	Y	Y	
201	prossedi	Y	1027?; 1175 certain				Y	Y											P	Y	Y	Y	
202	pisterzo	P		13?			Y	Y													P	P	
203	Asprano						Y	Y												Y	Y	Y	Y
205	Castel Savelli (Borghetto)	P	1140	12? 1473			Y	Y												P	Y	P	
210	castellum valentinum, villa c	P	13? (castellum)					P													P		
226	castle of monticelli, monte s	Y	14		13?		Y	Y													P	Y	
229	tor paterno	P	12	-	8	10		P						P	P	P							
250	montelungo	P	13	?			P	P													P	P	
251	cacume	Y	13, 14 certain				P	Y													P	Y	
252	amaseno, castrum laurentii	P	12 (civitas next to castrum?)				Y	Y													Y	Y	Y

Fortified settlement general, historical and archaeological evidence (continued)

OLIMsite	site name	fortified settlement	historical foundation date	historical end date	first archaeological date	last archaeological evidence	historical evidence	archaeological evidence	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th	
77	locus and casale zenneti	P					P														
84	lanuvio, civita lavinia	Y			9th		Y	Y							Y	Y	Y	Y	Y	Y	Y
89	Castello Vetera	P	10-11?				P	P										P	P	P	
90	cella S.Maria de Veprosa [...]						Y									Y	Y	Y	Y	Y	Y
91	villa s.vito	Y	11 (church?)? 14				Y	Y									P	P	P	P	Y
94	s.anastasia						Y														P
95	s.felice circeo	P	1118?	1447			Y	Y										P	Y	Y	
101	castle of acquapuzza	P	12th	1447			P	P										P	P	P	
113	church of s. donato																				
127	settlement fulianum(?), castr		963, 977	977, 1469, 1477?			Y									Y	P				
128	rpc site 11580, S.Maria della	P			13			Y												P	P
132	castle S. Gennaro	P	1270				Y	Y												P	P
133	castrum vetus			1422, 1465			Y									Y	Y	Y	P	P	
135	castel gandolfo	P			11/ 12?		Y	Y									P	Y	Y	Y	Y
136	genzano	P					Y	Y											P	Y	Y
137	castrum novum (same as castru						Y												P	Y	P
138	castrum s.andrea (same as cas			1219, 1338-1342			Y													Y	Y
139	vicus augustanus laurentium							P													
144	marino	Y	11-12?	1230			Y	Y									P	P	Y	Y	
145	castle malaffitto	P	P12	1249			Y	Y											P	Y	Y
147	velletri	Y	14 (but prob earlier)				Y	Y													Y
155	castra albana, albano laziale	Y	10 (savello built walls)?				Y	Y				P				Y	Y	Y	Y	Y	Y
156	castel savelli	P	-				P	Y											P	P	P
157	Castel di Molare	P	12	15			P	P											P	P	P
159	ariccia						Y	Y								Y	Y	Y	Y	Y	Y

Fortified settlement general, historical and archaeological evidence (continued)

OLMsite	site name	fortified settlement	historical foundation date	historical end date	first archaeological date	last archaeological evidence	historical evidence	archaeological evidence	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th
166	Castrum Fusumgnanum			1423			Y											P	Y	Y
169	castle of presciano							P												
173	casale filippi	P	11	cont?			Y	Y									P	P	P	P
175	rocca di papa						Y	Y										Y	Y	Y
176	nemi	P	11?				Y	Y									P	Y	Y	Y
177	tiberia, castellone	P	11?&1383: turri diruta Tiberie	1447			P	Y									P	P	P	P
192	knights templar fortress, mon							P												
197	castrum Trevi	P	1217?		12		Y	Y										P	Y	Y
201	prossedi	Y	1027?; 1175 certain				Y	Y									P	Y	Y	Y
202	pisterzo	P		13?			Y	Y											P	P
203	Asprano						Y	Y									Y	Y	Y	Y
205	Castel Savelli (Borghetto)	P	1140	12? 1473			Y	Y										P	Y	P
210	castellum valentinum, villa c	P	13? (castellum)					P											P	
226	castle of monticelli, monte s	Y	14		13?		Y	Y											P	Y
229	tor paterno	P	12	-	8	10		P						P	P	P				
250	montelungo	P	13	?			P	P											P	P
251	cacume	Y	13, 14 certain				P	Y											P	Y
252	amaseno, castrum laurentii	P	12 (civitas next to castrum?)				Y	Y										Y	Y	Y
253	ceccano, fabrate-ria vetus	Y	11	-	11		Y	Y						P			Y	Y	Y	Y
254	patrica	Y	9? 11 certain				Y	Y					Y		P		Y	Y	Y	Y
255	supino	P					Y	Y											Y	Y
256	villa s.stefano, s.stephani c	P	1125				Y	Y												Y
257	castro (dei volsci)						Y										Y	Y	Y	Y
258	carpineto romano	Y	11				Y	Y									Y	Y	Y	Y
260	sgurgola						Y	P										Y	Y	Y
261	gorga	Y	11	cont			Y	Y									Y	Y	Y	Y
262	collemezzo	Y	12? 13 certain settlement	14			Y	Y										P	Y	Y

Fortified settlement general, historical and archaeological evidence (continued)

OLIMsite	site name	fortified settlement	historical foundation date	historical end date	first archaeological date	last archaeological evidence	historical evidence	archaeological evidence	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th		
263	prunio, castrum pruni						Y	Y													Y	
264	montelanico	Y	14				Y	Y														Y
266	segni	Y	?		? 16 in any case		Y	Y	P	P	P	P	P	P	P	Y	Y	Y	Y	Y	Y	Y
269	valmontone	P	1159 ("castrum speciale")?				Y	Y										Y	Y	Y	Y	Y
270	artena, montefortino	P	12 certain settlement	cont			Y	Y									P	P	Y	Y	Y	Y
271	gavignano	Y	14					Y														Y
273	vallecorsa	P	1072	12?			Y	Y									P	P	P	P	Y	Y
274	pastena	P	1072	12?			Y	Y									P	P	P	P	Y	Y
275	ardea	Y			9		Y	Y							Y	Y	Y	Y	Y	Y	Y	Y
277	rpc site 15233, castrum di co	P	10				Y	Y								P	P	Y	Y	Y	Y	Y
285	castel de paolis						Y										Y	Y	Y	Y	Y	Y
287	castrum algido	Y	11				Y	Y									Y	Y	Y	Y	P	P
288	castle lariano						P	Y												P		
289	castle s. silvestro							P														
290	castle giuliano, giulianello	Y	1202		12?		Y	Y										P	Y	Y	Y	Y
291	castle rocca massima	Y	13	cont			Y	Y												Y	Y	Y
296	castrum acquaviva						Y	P									P	P	Y	Y	Y	Y
297	giuliano (di roma)	Y					Y	Y										Y	Y	Y	Y	Y
298	castellum monte julianu						Y										Y					
299	lenola	Y	1072	cont			Y	Y									P	P	Y	Y	Y	Y
301	castrum qui dicitur monte Gabu						Y	P									Y					
304	villa, casale and torre di mo	P					P	P												P	P	P
306	colleferro	P					Y	Y												Y	Y	Y
307	morolo	Y	11	cont			Y	Y									Y	Y	Y	Y	Y	Y
365	castle palaverta	P			13?	cont	Y	Y												P	P	P
366	castrum castelluzza						Y	Y												Y	Y	Y
369	casale di fiorano	Y	13				Y													Y	Y	Y
374	castel di leva	P	11 (casale)				Y	Y									P	P	Y	Y	Y	Y

Fortified settlement general, historical and archaeological evidence (continued)

OLIMsite	site name	fortified settlement	historical foundation date	historical end date	first archaeological date	last archaeological evidence	historical evidence	archaeological evidence	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th
380	tor and casale cerqueto	P	13?				P												P	P
383	casale mandra and torre della	P	13		12?		P											P	P	P
384	casale squeezeanel-lum / torrett	Y	12	cont			Y	Y										Y	Y	Y
385	castrum Montis Milioris						Y												Y	Y
386	castrum and casale della zolf						Y												Y	Y
387	decima						Y	Y									Y	Y	Y	Y
388	castel porziano	Y	11?	-	13/14		Y	Y											Y	Y
389	church, castrum and casale sa	P					Y	P											Y	Y
392	ostia antica	P			4/5?	9?	Y		P	P	P	P	P	P	P					
393	borgo di ostia, gregoriopoli	Y	9?		13	cont	Y	Y							Y	Y	Y	Y	Y	Y
394	massa, castel fusano	P	12	1405			Y	P										P	Y	Y
395	Tor Ser Paolo	Y	13? 14					Y											P	Y
412	Castrum Bolocti						Y												Y	
416	rpc site 11719, torrecchia ve						P													
442	castello sito 40, torre piomb							P									P	P	P	P
447	castello - tombs sito 61 in c	P			10	18		P												
573	civitana	P			12/13?	?		Y										P	P	P
583	Falcognana (di sopra)	Y	14				Y	P												P
586	campodimele	Y	11	cont			Y	Y									P	Y	Y	Y
588	settlement on monte acuto	Y	13					Y											Y	Y
53	s.andrea in silice		592?									P	P							

Fundus, historical evidence

OLIMsite	site name	fundus in text	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th
6	Fundus Casaromaniana / Casa Romaniana	715-731						Y						
7	fundus Folianus	715-731						Y						
15	fundus soranianus	10 and 11th c								Y	Y			
72	fundus casale cerqua revolosa	946								Y				
123	fundus sulpicianus	314-335		Y										
124	fundus corbianus	314-335		Y										
125	fundus beruclas	314-335		Y										
136	genzano	12th c										Y		
156	castel savelli	1017 and 1024									Y			
168	Fundus Proclianus	5th			Y									
178	fundus cosconi(s)	7-8th c and 946					O	O		Y				
194	Fundus Sanctorum Andreae et Gregorii	961								Y				
208	fundus Maranus	715-731						Y						
212	church sanctae mariae sita in Fonteiana / fundus crispinis	492-496			Y									
217	fundus caesarianus	715-731						Y						
218	area / fundus, church of s.thomas	10th c								Y				
232	Fundus Scazzi	946								Y				
235	Fundus Julianus / Iulianus	715-732						Y						
303	Fundus Mucianus	7-8th c					O	O						
308	Fundus Praetoriolus	7-8th c					O	O						
309	Fundus Casacatelli	7-8th c					O	O						
315	Fundus Rumellianus	715-731						Y						
317	Fundus Octavianus / Octabianus	715-731						Y						
353	Fundus Burreianus	715-731						Y						
362	Fundus Oppianus	715-731						Y						
370	fundus camellianus	715-731						Y						
401	fundus maranus/torre d.marrana, dell'acqua sottera	1216											Y	
407	Fundus Vivianus	715-731						Y						
408	Fundus Cassis / Cassianus	604 and 715-731					Y	Y						
430	Fundus Arcipianus	715-731						Y						
431	Fundus Solificianus	715-731						Y						
496	Fundus Palmis	715-731						Y						
499	Fundus Sagari / Sagaris	715-731						Y						
501	fundus Sarturianus / Saturnianus	715-731						Y						
503	Fundus Canianus / Caninianus	715-731						Y						
504	Fundus Carbonaria	715-731						Y						
506	Fundus Casaflorana / Floranus	715-731						Y						
507	Fundus Priscianus	715-731						Y						
508	fundus Grassianus / Grassanus	715-731						Y						
513	Fundus Pascuranus	715-731						Y						
517	Fundus Varinianus	715-731						Y						
526	Fundus Pontianus	715-731						Y						
528	fundus Tatianus / Tattianus	715-731						Y						

Fundus, historical evidence (continued)

OLIMsite	site name	fundus in text	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th
530	Fundus Barranus	715-731						Y						
531	Fundus Cacclanus	715-731						Y						
548	fundus civitella	955								Y				
553	Fundus Aquilianus	715-731						Y						
555	fundus sancti petri	10								Y				
561	Fundum duo amanti	946								Y				
579	fundus sole luna	946								Y				
580	fundus ponte di nona	955-962								Y				
590	Fundus Steianus	715-731						Y						
592	Fundus Cornelianus	715-731						Y						
593	Fundus Ursanus	715-731						Y						
597	Fundus Paganicum	946								Y				
598	Fundus Paritorum	946								Y				
599	Fundus Papazano	946								Y				
602	fundus Priminianus	604					Y							
605	fundus Baccanas / Vaccanas	336 AD		Y										
606	fundus Orrea / Horrea	336 and 715-731		Y				Y						
610	fundus Capitonis	687-701 and 715-731					O	Y						
612	fundus Antinianus	715-731						Y						
613	fundus Antonianus	604 AD					Y							
615	fundus Curtianus	604 AD					Y							
618	fundus Beranus	715-731						Y						
619	fundus Bifurcus	604 AD					Y							
621	fundus Casaculi	715-731						Y						
622	fundus Casulam	687-701					O	O						
623	fundus Cattia	715-731						Y						
624	fundus Corellianus	715-731						Y						
625	fundus Dometiorum	715-731						Y						
626	fundus Dostianus	715-731						Y						
627	fundus Flabis	715-731						Y						
628	fundus Ostilianus	715-731						Y						
633	fundum Picturas	314-335		Y										
637	fundus Viricaria	715-731						Y						
638	fundus Villa Pertusa	604					Y							
639	fundus Tessellata	604					Y							
640	fundus Silonis	604					Y							

Hospitalis, historical evidence

OLIMsite	site name	historical hospitalis	date in text
82	church of s.leonardo de barchis	P	12th
28	Ad Medias, Mesa	Y	13th
53	church, monastery of s.andrea in silice	Y	12th
96	area de Hospitali	Y	13th
364	hospitalis of Cantaro near Albano	Y	12th

Locus, historical evidence

OLIMsite	site name	HIS_LOCUS	date in text	9th	10th	11th	12th	13th	14th	15th
23	norba / civita	Y	1379						Y	
28	mesa	Y	989		Y					
33	astura set	P	987?		P					
44	piscopio	Y	1037			Y				
64	torre astura	Y	987		Y					
68	mollela	Y	1162				Y			
77	zenneti	Y	1268					Y		
94	s.anastasia	Y	9th century	Y						
95	s.felice	Y	high middle ages							
117	ac vivam	Y	1298					Y		
127	castrum foglinao	Y	977		Y					
153	marcantrevola	Y	1347						Y	
156	castel savelli	Y	1024			Y				
165	flexu / lautolas	Y	1093			Y				
167	lo morto	Y	1200					Y		
391	dragoncella	Y	15th century							Y
577	marciana	Y	1028			Y				
807	apranu	Y	1024			Y				

Massa, historical evidence

OLIMsite	site name	date massa	3rd	4th	5th	6th	7th	8th	9th	10th	11th
79	urbana	314-335		Y							
92	nymphas	741-752 AD						Y			
107	domusc anthius	before 741-752						Y			
119	normas	741-752						Y			
120	verginis	4th c		Y							
121	statiliana	314-335		Y							
149	murinas	314-335		Y							
154	mareni	8th						Y			
171	nemus	314-335		Y							
209	domusculta formias	before 741-752						Y			

Monastery, archaeological and historical evidence (continued)

OLIMsite	site name	historical foundation date	historical end date monastery	first archaeology	order	situated distinct (rural) or within a larger settlement	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th
20	valvisciolo	1206		12th c	from at least 1206 cistercian	D										Y	Y	Y
27	cori	10-12?				I								O	O	Y	Y	Y
50	fondi					I												
52	villamagna	10th century	13?			D								Y	Y	Y	Y	
53	s.andrea in silice	978				D/I								Y	Y	Y	Y	Y
61	sonnino	1333				I												Y
62	bassiano	12th c			benedictine	I										Y	Y	Y
63	monte mirteto	1202			joachimite; 1212: cistercian	D									P	Y	Y	Y
75	torre s.anastasio	7th c AD?				D					P							
84	lanuvio	11/12th c; 13th c secure ref			benedictine	I									Y	P	Y	Y
88	piscaria grecesco	14?				D												P
90	veprosa / castrum nave	996				D/I								Y				
93	s. helia	1091			benedictine?	D									Y	Y	Y	Y
94	s.anastasia					D									Y			
110	col del vescovo			12-13th?		D										P	P	
112	s.silviano	10				D								Y	Y	Y	Y	Y
128	s.maria sorresca	967	-		benedictine, later basilian	D								Y	Y	Y	Y	Y
129	la casarina	11/12		11/12	benedictine, later basilian?	D									P	Y	Y	Y
136	genzano	12?			cistercienser	I										Y	Y	Y
147	velletri	1032	16			I									Y	Y	Y	Y
155	albano laziale	P8th c			greek (order?)	I						P						
157	c.dimolare	370 AD? reinstated in higher mid ages				D		P					P					
176	nemi	1153			cistercian?	I										P	P	
177	tiberia/castellone	11th and earlier				I									Y			
182	s.maria dellorto	12th c	18th		benedictine since 1143 (padr	D										Y	Y	Y

Monastery, archaeological and historical evidence (continued)

OLIMsite	site name	historical foundation date	historical end date monastery	first archaeology	order	situated distinct (rural) or within a larger settlement	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th
190	marmosolio	1154 (328)	13/14?		benedictine; 1154 cistercian?	D										Y	P	P
191	valvisciolo carpinetano	13th c			cistercian	D											Y	P
192	knights templar fortress / mon francesco	14th			franciscan	D												Y
197	castrum trevi	1313			clarisses	I												Y
200	colle s.pietro	1159			benedictine?	D										Y	Y	Y
203	asprano	14th c				I												Y
204	s.lorenzo	?		14	cistercian?	D												Y
215	s.domenico			13?	cistercian?	D/I											Y	Y
216	monte s.angelo	10		9/10		D/I							P	Y	Y	Y	Y	Y
238	mon s.magno	979	subrecent		benedictine	D	P			P	P	P	P	Y	Y	Y	Y	Y
243	s.cecilia piombinara	12th			benedictine?	D										Y	Y	Y
244	s.lucia / s.stefano	1289 or earlier	1313 or later		benedictine	D											Y	Y
245	s.maria d canne	1286	1313 (became unknown male mon)		benedictine, later cistercian	D											Y	Y
246	s.maria in selci	1182	15th		benedictine (certain 1250), I	D										Y	Y	Y
247	s.martina	before 1350	1350-1400		benedictine	D												Y
248	s.niccolo	1251	1304		benedictine	I											Y	Y
257	castro dei volschi	542?			benedictine	D				P	P	P	P	P				
259	s.maria di viano	1256	1431 or earlier		1298: cistercian, later bened	D											Y	Y
266	segni	11th c			benedictine	I									Y			
267	s.maria de rossilli	1182		11?		D										Y	Y	Y
268	“sacco”	1333				D												Y
269	valmontone	10/11				I								P	Y	Y	Y	Y

Monastery, archaeological and historical evidence (continued)

OLIMsite	site name	historical foundation date	historical end date monastery	first archaeology	order	situated distinct (rural) or within a larger settlement	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th
272	palazzolo	1244		11/12 here-mite colony	cistercian	D									P	Y	Y	Y
275	ardea	1218				I											Y	
278	s.pietro in formis	1140				D/I										Y		
280	s.eleuterio	11th c	12? 14?			D									Y	Y	P	P
282	s.cecilia	1081	12		benedictine	D									Y	Y		
300	massa juliana, mon ss.andree	795-816				?						Y	Y					
305	grottaferata	1004	cont		basiliani (greco-bizantine ri)	D									Y	Y	Y	Y
378	certosines	?		13	certosines	D											Y	Y
413	rpc 11789	?	16th: original source unclean			D												
476	s.salvatore de meleto	1027				D									Y			
505	church of s.maria ad martyres / s.cesario	medieval				D												
587	monte artemisio			12?		D										P	P	P

Roman or late Antique road station, archaeological and historical evidence

OLIMsite	site name	historical evidence	archaeological evidence
16	Forum Appii	Y	
18	Clostris, Clostra Romana	P	
19	Tripontium, S.Maria Tre Ponti	P	
25	Privernum settlement	Y	
26	Circeii	P	
28	Ad Medias, Mesa	Y	
30	tres tabernae	Y	P
31	town of terracina	Y	Y

Roman or late Antique road station, archaeological and historical evidence (continued)

OLIMsite	site name	historical evidence	archaeological evidence
32	Roman settlement of Antium	P	Y
33	Astura settlement	Y	
43	mutatio Ad Sponsas	Y	P
46	Ad Turres Albas	P	
47	Pratica di Mare, Lavinium	Y	P
48	Ad Turres	P	
49	praedium laurentum / civitas Laurentum	Y	
50	Fondi	Y	
51	nettuno		Y
86	bovillae	Y	Y
131	(statio) sublanuvium	Y	P
132	castle S. Gennaro		P
140	Osteriaccia	P	P
147	Velletri	Y	
155	Castra Albana, Albano Laziale	Y	
159	Ariccia	Y	
172	archaeological remains on appia near Sole Luna		P
185	area "Regeta"	P	
229	Tor Paterno		P
392	Ostia Antica	Y	Y
417	rpc site 11788, toponym Colle medico		P
535	site 121 forma italiae bovillae, Ad Decimum	Y	Y
581	mutatio Ad Nono	Y	

Roman sanctuary, archaeological / historical evidence

OLIMsite	site name	archaeological evidence	historical sources
1	rpc site 11588, Feronia	Y	Y
4	ninfa		P
23	norba (plateau), civita	Y	
25	Privernum settlement	Y	
27	cori	Y	
28	Ad Medias, Mesa	Y	
31	town of terracina	Y	Y
50	Fondi	Y	
52	villamagna	P	
84	lanuvio, civita lavinia	Y	Y
147	Velletri	Y	
216	monte s.angelo, terracina	Y	Y
266	segni	Y	
332	rpc site 10905, site Z&P 3	Y	
348	rpc site 10144, toponym Casale Massimetta	P	

Standalone tower, historical and archaeological evidence (continued)

OLIMsite	site name	singular tower	tower first in text	last written evidence	archaeology: date built	archaeology: last evidence	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th
127	settlement fulianum(?)	P	10											P				
136	genzano	P	12													P		
390	church of s.cyriac, me	P	13	16													P	P
396	torretta del Sassone	P	13?		12											P	P	P
416	rpc site 11719, torrec	P	1101													P	P	P
547	site 341 forma italiae	P			?	?												
571	torre del Padiglione	P			12/13?	-										P	P	P
576	rpc site 15202, torre	P			12/13?											P	P	P

Temple, historical and archaeological evidence

OLIMsite	name	archaeological evidence	historical evidence	diety
1	feronia	Y	Y	Feronia
4	ninfa		Y	nymphs
17	sezze	Y		
23	norba / civita	Y	Y	
25	privernum	Y		
27	cori	Y	Y	disocuri & hercules
28	mesa	Y	Y	Neptune?
31	terracina	Y	Y	cf site 216
41	rpc site 11533, picco di circe	Y	Y	circe
50	Fondi	Y	Y	
52	villamagna	P		emperor?
84	lanuvio, civita lavinia	Y	Y	Juno Sospita
147	Velletri	Y		
172	archaeological remains on appia near Sole Luna	Y		
216	monte s.angelo, terracina	Y	Y	2 tempels: Feronia/Jupiter Anxur/Ven
266	segni	Y	Y	
275	ardea	Y		
287	castrum algido		P	fortuna?
392	Ostia Antica	Y		
505	church of s.maria ad martyres / S.Cesario / rpc site 6		P	
579	fundus sole luna	Y		

Tomb / grave, archaeological evidence

OLIMsite	site name
10	site 22 forma italiae apiolae, villa and burials in Colli P
12	site 72 forma italiae apiolae, columbarium
23	norba
25	Privernum settlement
28	Ad Medias, Mesa
30	tres tabernae
31	town of terracina
34	rpc site 15250, villa satricum
37	site 124 forma italiae apiolae, necropolis
50	Fondi
52	monastery of san pietro di villamagna
58	priverno town
65	villa and necropolis at ceriara
70	site 42 forma italiae tellenae, villa
84	lanuvio, civita lavinia
98	amphitheater castrum albanum
106	site 144, forma italiae tellenae, tomb
118	torre sessano
139	vicus augustanus laurentium
155	Castra Albana, Albano Laziale
158	Roman villa in localita cavallacci
172	archaeological remains on appia near Sole Luna
182	church of s.maria dell'orto
186	monte crescentuli, church of s.angeli
195	site 75, forma italiae tellenae, tomb
236	villa in loc. Maria at lago di nemi
359	rpc site 10583, FOG218, village?
368	Berreta di Prete
392	Ostia Antica
410	rpc site 11540, CIR I.38, graves
444	villa rustica - tomb sito 43, toponym colli s.pietro
446	tombs - church, sito 54 toponym via giotto
447	castello - tombs sito 61 in casale colleferro
449	tomb(s), sito 76 toponym fosso di casa ripi
450	sito 78, necropole, church(?) toponym casa ripi
452	rpc site 15116, T3NS2, necropolis?
532	site 47 forma italiae bovillae, medieval grave
535	site 121 forma italiae bovillae, Ad Decimum
541	site 184 forma italiae bovillae, tombs
542	site 219 forma italiae bovillae, tomb of gallienus
543	site 220 forma italiae bovillae, casale palombaro
545	site 265 forma italiae bovillae, grave
549	site 416 forma italiae bovillae, villa
660	loc bufolareccia

Villa, historical and archaeological evidence

OLIMsite	site name	villa	platform / basis villa	agricultural villa all classifications	coastal villa all classifications	villa in texts	archaeology: date built	archaeology: last evidence	2nd	3rd	4th	5th	6th	7th	8th
2	castel romano (vecchio)	P													
9	monastery s. stefano e s. maria di fossanova	Y		P			?	7th?	Y	P	P	P	Y	Y	
10	site 22 forma italiae apiolae, villa and burials in Col	Y													
11	site 62 forma italiae apiolae, villa and med tower	Y					1 AD	4 AD	Y	Y	P				
13	rpc site 15210, villa of Nero at Antium	Y			Y	1st c AD	150-100 BC	4-6 AD	Y	Y	Y	O	O		
14	rpc site 11594, villa of Domitianus	Y	P		Y	domitian age	1st or start of 2nd AD	3rd AD	Y	Y					
24	site 122 forma italiae apiolae, villa	Y	P				1 BC	4/5 AD	Y	Y	P	P			
34	rpc site 15250, villa satricum	Y		P			1 AD	5 AD	Y	Y	Y	Y			
36	rpc site 11286, Piccarreta 86	Y		P			1 AD	3 AD	Y	Y					
51	Peutinger "Antium"??	Y			Y		?	?							
52	monastery of san pietro di villamagna	Y	Y	Y		2nd c AD	2 AD		Y	Y	Y	Y	Y	Y	P
64	rpc site 11202, "Torre astura", Piccarreta 2	Y			Y		1	6/7	Y	Y	Y	Y	Y	Y	O
65	villa and necropolis at ceriara	Y	P					edn 2nd AD	Y						
70	site 42 forma italiae tellenae, villa	Y		P				3	Y	Y					
73	villa di casale di grega	Y					2	3?	Y	Y					
74	villa di acilia	Y		P			2	4/5	Y	Y	Y	O			
75	torre s.anastasio	Y			P		?	?							
76	villa di s.palomba, loc palazzo	Y		Y			3 BC	4 AD	Y	Y	Y				
85	site 53 forma italiae tellenae, villa	Y					?	3/4	Y	Y	O				
91	villa s.vito	Y					?	?							
99	site 88 forma italiae tellenae, villa	Y		P			2	3/4	Y	Y	O				
100	villa 'del discobolo'	Y			Y		1 BC	4 AD	Y	Y	Y				
109	villa di castelfusano, 'of plinius'	Y			Y		BC	4	Y	Y	Y	P			
128	rpc site 11580, S.Maria della Sorresca	Y													
129	rpc site 11563, la casarina	Y													
130	area "orgiale"														
131	(statio) sublanuvium	P	P												
132	castle S. Gennaro	Y	Y												
141	rpc site 15085, Macotta area (all sites, minus 15063)	Y		Y			1 BC	7 AD?	Y	Y	Y	Y		P	
142	imperial villa at Muraccioli	Y			Y		2nd c AD	4rd c AD	Y	Y	Y				
143	ecclesia S.Pauli	P													
145	castle malaffitto	Y													
152	villa west of vicus augustanus	Y			Y		2nd c AD	3rd c AD	Y	Y					
155	Castra Albana, Albano Laziale	Y													
156	castel savelli	P													
158	Roman villa in localit... cavallacci	Y					1 BC	4 AD?	Y	Y	Y				

Villa, historical and archaeological evidence (continued)

OLIMsite	site name	villa	platform / basis villa	agricultural villa all classifications	coastal villa all classifications	villa in texts	archaeology: date built	archaeology: last evidence	2nd	3rd	4th	5th	6th	7th	8th
160	Turricellae	Y													
161	site 150 forma italiae tellenae, villa	Y					1 AD (or earlier)	3/4 AD	Y	Y	O				
162	site 151 forma italiae tellenae, villa al casale perna	Y		P			?	4	Y	Y	Y				
163	castle monte due torri	Y													
174	villa degli ottavi	Y		P			1 BC	4/5 AD	Y	Y	P	P			
177	tiberia, castellone	Y				first century AD?									
182	church of s.maria dellorto	Y													
188	site 171 forma italiae tellenae, villa	Y					3 (only)		P	Y					
189	torretta corana	Y					unknown	unknown							
199	rpc site 10907, villa "le grotte"	Y	Y				1 BC	3/4 AD?	Y	P	P				
210	castellum valentinum, villa castello valentino	Y	Y												
227	villa of Perseus	Y			Y		2 AD	4 AD	Y	Y	Y				
228	villa di grotte di piastra	Y			Y		1 BC	4/5 AD	Y	Y	Y	O			
229	Tor Paterno	Y			Y				Y	Y	Y	Y	Y	Y	
230	villa s. nicola (nemi), Lafon RM 74	Y					1 BC	2/3 AD	Y	O					
231	rpc site 11265, Piccarreta 65	P			P		rep	2/3	P	P					
233	Villa Ninfeo of San Caesaro (terracina), LT 30bis	Y		P	P			2/3	Y	O					
234	villa at alla scifele, LT 35	Y		P			2nd/ beginist c BC	2/3	Y	O					
236	villa in loc. Maria at lago di nemi	Y						2 AD	Y						
237	villa near santa anastasia, Lafon LT 57	Y			Y		1 AD	4 AD	Y	Y	Y				
239	site 79 forma italiae tellenae, villa	Y	Y	P			?	3/4 AD	Y	Y	O				
241	villa rustica in loc.Sibilla	Y		Y			rom	rom							
249	villa in localit... casale	Y					1 BC	8 AD	Y	Y	Y	Y	Y	Y	Y
267	monastery of s.maria de rossilli	Y													
272	monastery of palazzolo	Y													
280	s.eleuterio	Y													
285	castel de paolis	Y													
293	villa and church of s. cesareo	Y					2 BC	imperial	P	P	P	P			
304	villa, casale and torre di morena	Y		P			1 BC	4 AD	Y	Y	Y				
305	monastery of grottaferrata	Y													
306	colleferro	Y													
310	villa 'del confine', la chiesola	Y			Y		1st c AD	3rd c AD	Y	Y					
312	rpc site 10879, toponym Caracupa / Valvisciolo	Y					rep	2 AD?	P						
316	rpc site 10882, toponym Castel Ginetti	Y					rep	3?	Y	O					

Villa, historical and archaeological evidence (continued)

OLIMsite	site name	villa	platform / basis villa	agricultural villa all classifications	coastal villa all classifications	villa in texts	archaeology: date built	archaeology: last evidence	2nd	3rd	4th	5th	6th	7th	8th
318	rpc site 10881, toponym Cisterna	Y					?	3?	O	O					
323	rpc site 10887, toponym Colli s. Angelo	Y					?	3 AD?	Y	O					
324	rpc site 10888, toponym Colli s. Angelo	Y					?	4 AD	Y	Y	O				
325	rpc site 10860, toponym Grotticelle	P					?	2/3?	P	P					
326	rpc site 10957	Y	Y				?	2/3	Y	O					
328	rpc site 10504	Y	Y				?	2 AD	Y						
331	rpc site 10509, Brandizzi Vittucci Site 46	Y	Y				?	3 AD	Y	Y					
332	rpc site 10905, site Z&P 3	Y					?	2/3?	P	P					
333	rpc site 10958, platform villa	Y	Y				?	5 AD	Y	Y	Y	Y			
336	rpc site 10135, toponym Piano Marano	P					?	2 AD	P						
338	rpc site 10927, toponym Aqua Zolfa	Y					?	3 AD	Y	Y					
339	rpc site 10873, toponym Quarto d'Aquaviva	P						2/3 AD?	P	P					
340	rpc site 10904, toponym Contrada Antoniana	Y	Y				?	2/3?	Y	O					
341	rpc site 10510, toponym Pezze di Ninfa	Y	Y				?	2/3?	Y	O					
347	rpc site 10571, FOG206, villa	Y		P	P	384	?	3/4 (: 7 ?)	Y	O	P				P
349	rpc site 10895, toponym Colli s. Angelo	P													
357	rpc site 10113, toponym Ponte Loreto	P					?	2/3?	P	P					
365	castle palaverta	Y					?	?							
366	castrum castelluzza	Y													
367	Roman villa, torre appia	Y					?	3/4 AD	Y	Y	Y				
374	castel di leva	Y													
376	torre delle grotte	Y					1 AD	3/4 AD	Y	Y	P				
377	torre castellaccia	Y													
382	torre della castelluccia	Y					?	?							
384	casale squeezeanellum / torretta di schizzanello	Y													
395	Tor Ser Paolo	Y					?	?							
396	torretta del Sassone	Y					?	?							
401	fundus maranus/torre d.marrana, dell'acqua sottera	P													
404	rpc site 11339, Piccarreta 139	P													
413	rpc site 11789, toponym Monte S. Angelo	P													
417	rpc site 11788, toponym Colle medico	Y													
418	rpc site 11775, toponym Colle Perunio	Y	P				early imp								
420	rpc site 15014, Liboni 14, large villa	Y		Y			rep	7 AD	Y	Y	Y	Y	Y	P	

Villa, historical and archaeological evidence (continued)

OLIMsite	site name	villa	platform / basis villa	agricultural villa all classifications	coastal villa all classifications	villa in texts	archaeology: date built	archaeology: last evidence	2nd	3rd	4th	5th	6th	7th	8th
422	rpc site 15019, Liboni 19, unit 3005	Y		Y			rep	6 AD	Y	Y	Y	Y	Y		
428	rpc site 11052	Y													
429	rpc site 11113	Y					?	?							
432	villa sito 5, toponym il quartaccio	Y		P			1 BC	3 AD	Y	Y					
433	villa sito 6, toponym il quartaccio	Y		Y			rep	6 AD	Y	Y	Y	Y	Y		
436	villa sito 17 on km 47,500 s.s. 6 via casilina	Y		Y			4 BC	4 AD	Y	Y	Y				
437	villa - sanctuary (?) sito 21	Y		Y			2 BC	4 AD	Y	Y	Y				
438	villa sito 26, toponym fontana degli angeli	Y		Y			4 BC	5 AD	Y	Y	Y	Y			
439	villa - killn sito 28, toponym colle cisterna	Y		Y			rep	4 AD	Y	Y	Y				
440	villa sito 36, toponym fontana degli angeli	Y		Y			2 BC	5/6 AD	Y	Y	Y	Y	Y		
443	villa - sanctuary sito 42, casale federici	Y		Y			3 BC	5 AD	Y	Y	Y	Y			
444	villa rustica - tomb sito 43, toponym colli s.pietro	Y		Y			1 AD	5 AD	Y	Y	Y	Y			
445	villa rustica, sito 46, toponym valle dell'inferno	Y					imp?	5 AD	P	P	P	Y			
448	villa rustica, cisterna, substructure sito 64	Y	P	Y			4/3 BC	6 A	Y	Y	Y	Y	Y		
451	sito 79, villa rustica, necropole (?)	Y		Y			2 AD	5 AD	Y	Y	Y	Y			
453	rpc site 15150, "Villa Verdiana"	Y		Y			?	2/3 AD	Y	O					
455	rpc site 11294, Piccarreta 94	Y		Y			?	2/3 AD	Y	P					
456	rpc site 11318, piccarreta 118	Y		Y			?	3/4 AD	Y	P	P				
458	rpc site 15004, Liboni 4, villa	Y		Y			?	6/7 AD	Y	Y	Y	Y	O	P	
460	rpc site 15063, Liboni 63, Macotta area	Y		Y			?	7 AD?	Y	Y	P	P			
467	rpc site 11207, Piccarreta 7	Y			Y		?	3/4 AD	Y	Y	O				
470	rpc site 15082, Liboni 82	Y		Y			?	2 AD	Y						
477	rpc site 15083, Liboni 83	P		P			?	5 AD?	P	P	P	P			
480	rpc site 15003, Liboni 3	P		P			?	2 AD?	P						
482	rpc site 15001, Liboni 1, villa	Y		Y			?	2 AD?	P						
494	rpc site 11332, Piccarreta 132	Y		Y			?	2/3 AD?	O	O					
498	rpc site 11048, villa	Y		P			?	2/3 AD	Y	O					
502	rpc site 11208, Piccarreta 8	Y			Y										
509	rpc site 11037, Terracina Lugli TER II.16, villa	Y					?	2 AD	Y						
518	rpc site 11045, Terracina Lugli TER II.24, villa	Y					?	2/3 AD	Y	O					
521	rpc site 15111, T1S4, 0205-03	Y		Y			?	4/5 AD	Y	Y	Y	O			
525	rpc site 11023, Terracina Lugli TER II.4, large villa	Y	Y	P			?	3 AD	Y	Y					
534	site 120 forma italiae bovillae, villa	Y					1 AD	3 AD	Y	Y					

Villa, historical and archaeological evidence (continued)

OLIMsite	site name	villa	platform / basis villa	agricultural villa all classifications	coastal villa all classifications	villa in texts	archaeology: date built	archaeology: last evidence	2nd	3rd	4th	5th	6th	7th	8th
536	site 145 forma italiae bovillae, villa rustica	Y		Y											
539	site 173 forma italiae bovillae, villa of voconius poll	Y					rep	4/5 AD	Y	Y	Y	O			
540	site 179 & 180 forma italiae bovillae, villa	Y					?	4 AD	Y	Y	Y				
543	site 220 forma italiae bovillae, casale palombaro	Y					?	4/5 AD	Y	Y	Y	O			
548	fundus civitella	Y													
549	site 416 forma italiae bovillae, villa	Y					1 BC	3 AD	Y	Y					
550	site 417 forma italiae bovillae, villa	Y						3/4 AD	Y	Y	Y				
551	rpc site 11215, Piccarreta 15, "Le Grottacce"	Y			Y		?	3 AD?	Y	Y					
558	site "grotticelle"	Y					?	?							
583	Falcognana (di sopra)	Y													
642	prp 12904 campo di segni 1	Y	Y	Y			rep	5th?	Y	Y	Y	P			
644	prp 12935 prati pronacci 1 s6.8	Y					imp	7th?	Y	Y	Y	Y	Y	O	
646	villa pian della civita	Y	Y	Y			rep	5th	Y	Y	Y	Y			
647	villa loc. Borgo carso	Y		Y			rep	4th	Y	Y	Y				
648	villa loc. Bonifica la fossa	Y						5/6?	Y	Y	Y	P	P		
649	villa monte artemisio	Y						5th	Y	Y	Y	Y			
650	villa? loc. colle angelo	P						4th	Y	Y	Y				
651	villa? loc. via colle pipino	P						4th	Y	Y	Y				
652	villa loc. casa maggiore	Y						5th	Y	Y	Y	Y			
653	villa loc stazione	Y						5th	Y	Y	Y	Y			
654	villa via delle corti	Y						5th	Y	Y	Y	Y			
655	villa loc costa de saettoni	Y						5th	Y	Y	Y				
656	villa loc sp rioli	Y		Y				5th	Y	Y	Y	Y			
657	villa via ponte delle tre armi	Y		P				4th	Y	Y	Y				
658	villa loc via delle mole	Y						5th	Y	Y	Y	Y			
659	villa a - f dragoncello	Y		Y				4th	Y	Y	Y				
660	villa and necropolis loc bufolareccia	Y						late imp	Y	Y	Y	P			

Appendix 6.3 A list of infrastructure and hydrography

This appendix holds a list of infrastructure and hydrography mentioned in the text

OLIMinfra	name road / canal etc
1	pedemontana / Via Consolare (generic)
2	road north of Algidus to Rome
3	Via Severiana / long-distance coastal road
4	Via Appia
5	roads found during the Fogliano survey
6	decennovium/Linea Pia (18th century)
7	Ufente river
8	road Sezze-Priverno
9	road Sezze-Bassiano-Norba
10	road Sezze-Roccagorga
11	Il Portatore / Il Fiumetto
12	Cavata (river)
13	Rivo Martino (canal)/Rio Martino
14	Acqua Puzza (river)
15	S.Nicola (river)
16	Ninfa (/=Ninfeo?) river
17	Teppia river
18	Fiume Sisto (river/canal?)
19	canal between coastal lakes
20	Astura river / fiume di Conca
21	Fossa Augusta
22	Fogliano lake
23	fosso di Mastro Pietro
24	Rio Gordanello
25	road connecting the Via Appia and the Via Severiana
26	fosso di Foce Verde
27	canal connecting Rio Martino and the Monaci lake
28	Fogliano lake northern extensions (ONC maps)
29	Monaci lake
30	Fossa Cathega
31	Via Marittima
32	Paola lake
33	road Via Severiana-Via Appia from S.M. La Sorresca to La Sega
34	La Litoreana
35	canal connecting Paola lake to the sea
36	Via Mactorina
37	13th c route from Le Castella to Rome through Marino and Velletri
38	reroute of the Via Appia (near castel S.Gennaro)-Velletri-Le Castella
39	strada postale / via consolare (the same according to coste 136)
40	Appia Vecchia

OLIMinfra	name road / canal etc
41	Appia Nuova
42	Turno lake
43	acqueduct / cisterna Albano Laziale
44	Nemi lake
45	road Genzano to the coast through Monte Due Torri
46	road Cisterna (area)-Cori
47	inland road from Cori to Norba
48	Fondi lae (lacus fundanus of lacus amyclanus)
49	road Mesa to the pedemontana (and coast?)
50	road from La Sega to the pedemontana (coast?)
51	de Saracinesca (locks) in the Caterattino
52	Via Casalina (modern)
53	Via Tuscolana
54	Via Latina
55	road Via Appia south of Genzano-Algido
56	la Selciatella / strada romana del Nettuno / road Lanuvium-Antium
57	Via Transversa
58	Via Settina (modern)
59	road Segni-Rocca Massima-Cori-Pontine plain
60	road Segni-Carpineto-Maenza-Priverno
61	Il lagho di Vescovo (near Priverno, 1:25000 maps, 159 III NE)
62	lake l'acqua dei Preti (near Sermoneta, 1:25000, 159 IV SW)
63	lake Sorgente Lagoscillo (near Supino, 1:25000, 159 I NW)
64	lake Sorgente Pesciareello (near Gorga, 1:25000, 159 IV NE)
65	lake Sorgente Pescara (Ceccano, 1:25000, 159 I SW)
66	Via Labicana
67	road connecting Tyrrhenian coastal villa's
68	route Terracina-Priverno-Via Casilina
69	Via Ariana
70	Via Doganale (Artena/Monte Fortino-Cisterna-Conca)
71	Via Ardeatina (antica / vecchia) / Via Ardeatina east branch
72	Via Satricana (part of the Via Ardeatina Moderna)
73	Via Laurentina Moderna (partly the western branch of the Via Ardeatina Vecchia)
74	road connecting Schizzanello and Vendeta Trigatoria
75	Via Laurentina Antica (western-most road going south, called this way until Decima, from there Via Decima)
76	Via Decima (the Laurentina Antica from Decima southwards)
77	road connecting the Via Ostiense and Castel Porziano
78	Via Anagnina
79	Via Castrimense
80	Via Cavona
81	road from Cori to Velletri
82	Acqua Claudia
83	Via di Trigatoria (Via Lavinata)
84	Northern Trasversale, from the Via Lavinata (modern Via di Trigatoria) to the foot of the Colli Albani (near Fratocchie / Bovillae)
85	Southern Trasversale, modern Via del Mare, route Albano-Lavinium
86	Via Setina

OLIMinfra	name road / canal etc
87	pedemontana from Cori to Norba
88	Via Anziate / Via Nettunense (Map 36)
89	road Campomorto area-Via Appia (Cisterna area)
90	Stratam Sancti Angeli
91	Roman road at Piscina di Zaino
92	fossatum quod vocatur Duo Rigora
93	Cicarianum
94	Via Carraria
95	Via Caiano
96	road connecting the Via Trigatoria and the Via Ardeatina Vecchia (partly Via della Cecchignola)
97	Via San Cesario Mugilla
98	road Padiglione-Satricum
99	road Lanuvio-Ardea
100	Via Ostiense
101	Via Lavinata (Quilici, largely the Via Trigatoria)
102	Via Laurentina (Quilici)
103	road Forum Appii to Setia
104	Via Casilina
105	road Priverno-Via Latina/Colleferro
106	road Fondi-Ceprano
107	route Fondi-Via Latina
108	southern Sacco route
109	public road along the Astura river documented in 987
110	Roman Rio Martino
111	Roman road from Velletri to the Via Appia
112	Nettuno alternative of the Anziate - Nettunense
113	pedemontana detour Ninfa-Cisterna (area)
114	road Velletri-Marino-Tusculum-Via Tuscolana
115	road Velletri-Via Latina

Part II

Chapter 7 Data analysis

Part II (Chapter 7): Contents at a Glance

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Chapter 7 Combining all consulted sources: analysing activities throughout the landscape

Introduction

In this chapter, the final chronological and spatial analysis of the site database is presented. As explained in Chapter 1, the analysis is cut up in three research periods, in order to deal with imbalance and bias in the database. The three research periods, treated in separate subchapters, are:

- 7.I The 3rd to the 7th century
- 7.II The 7th to the 10th century
- 7.III The 10th to the 14th century

The analysis first of all exists of a description per period of the main developments in 10 defined key areas. These I have chosen on the basis of availability of data, and based on my intention to consistently cover the six main landscape zones including their main infrastructural arteries and junctions:

Key areas:

1. Nettuno-Anzio
2. Fogliano
3. Ostia and the Laurentine coast
4. Velletri – Le Castella
5. Fondi and surroundings
6. Southern Alban Hills and area to their west
7. Priverno-Fossanova
8. Lepine Mountains, pedemontana and Pontine plain between Norma and Sezze.
9. The northern Lepine Mountains and the Sacco Valley between Artena and Villamagna.
10. Terracina and surroundings

In analysing the developments within these key areas, contemporary and retrospective data, general biases, research history and knowledge of the physical landscape are integrated. Current ideas on the developments of the research period in the research area and other parts of the Italian peninsula are added to complete the picture. Of course, the information density differs per key area and per period, related to the volume of available data. The Nettuno-Anzio and Fogliano key areas are treated in most detail, not in the last place as the Groningen institute of archaeology (GIA) holds a long research tradition there. The chronological scope in these two key areas is extended by including the 2nd century in the analysis. The

study period covering the 3rd to 7th century hold most details on the environment, as the landscapes of the key areas are introduced here. Where needed, I return to the historical, archaeological and environmental aspects of the key areas throughout the analysis.

The database of 662 sites is the basis of my analysis of the developments in the landscapes of the key areas. The attested archaeological, historical and topographic specifics of each site have been inserted into a geodatabase. Using ArcGIS, distribution maps of sites are plotted from the geodatabase per century for each key area, thus allowing activity to be diachronically studied in a local setting. For each individual site the data are plotted, as discussed in Chapter 6.II, relating to the sites' function (type), physical appearance (layout and types of buildings) and the kind of activity on them. The GIS-tool is also used to map the political and economic interests of stakeholders involved (the pope, monasteries, bishops, elite families, foreign forces and communes), as well as the kind of activities related to these interests. By plotting per century the actors at work, and their interests, interaction is tracked, and regional diversity between key areas. Infrastructure is plotted too, based mostly on the reconstructions and interpretations of earlier research (see below).

The developments in the key areas are described along the following lines:

- General site distribution: monitoring of (change in) human activity
- Infrastructure
- Economy, production and trade
- Religion and worship
- Geo-politics: power relations, struggle and control strategies; secular activities

After the descriptions per key area, the focus is shifted to the whole study area.

First, the analysis is evaluated per period, discussing the main interpretative challenges of the found data in a regional perspective, and thus create the background needed to analyse the current dataset, and to effectively synthesise the data for this period. This evaluation touches upon, among others, the imbalanced distribution

of primary sources between the key areas, and discuss the data that are or may be missing on the distribution maps: what does the absence of evidence tell us? It should also treat the interpretative restrictions posed by the way the database is compiled and the maps are drawn.

Secondly, per period an overview is given of what happened in the entire study area, building on the combined results of the key areas. The goal of this overview is to enable a holistic analysis of results, assessing all evidence (on site distribution, infrastructure, economy, religion and geo-politics), biases and the degree of imbalance in the key areas' data. Moreover, the extent to which data are missing, or sites cannot be located, is discussed. The developments elsewhere on the peninsula act as a sounding board in this analysis. For each period a number of themes are treated, which represent the essence of the studied period; for these themes the database offers evidence that transcends the individual key areas.

The analysis per period is concluded with a partial synthesis, in which the main transformations that took place in the landscape and society of Tyrrhenian southern Lazio are discussed.

The general structure of the chapter is as follows:

- 7.I The 3rd to the 7th century
 - 7.I.1 The key areas throughout the 3rd to the 7th century
 - 7.I.2 Analysis and conclusions for the whole research area regarding the 3rd until the 7th century
 - 7.I.2.1 An evaluation of results, sources and methods used
 - 7.I.2.2 Analysis and conclusions – themes - synthesis
- 7.II The 7th to the 10th century
 - 7.II.1 The key areas throughout the 7th to 10th century
 - 7.II.2 Analysis and conclusions for the whole research area regarding the 7th until the 10th century
 - 7.II.2.1 An evaluation of results, sources and methods used
 - 7.II.2.2 Analysis and conclusions – themes - synthesis
- 7.III The 10th to the 14th century
 - 7.III.1 The key areas throughout the 10th to 14th century
 - 7.III.2 An analysis and resulting conclusions for the whole research area regarding the 10th until the 14th century
 - 7.III.2.1 An evaluation of results, sources and methods used
 - 7.III.2.2 Analysis and conclusions – themes - synthesis

In the final synthesis of this thesis (Part III, Chapter 8), the geographical and chronological strands are pulled together to present the long-term perspective of the whole studied period, of roughly 1000 years.

Plotting sites on maps

Before the analysis is presented, an explanation how sites are depicted on the distribution maps is in order.

First of all, there is the symbology. The following applies to the symbols used for sites on the maps:

- In all point symbols, the colour red stands for a *certain functional interpretation* (site function) and *secure date in the period* mapped (often: century), a yellow symbol stands for *possible*.
- A simple dot depicts a site with activity in the mapped period.
- A large transparent square symbolises a town/village.
- A square is a *castrum*.
- A triangles denotes a villa site.
- A star stands for a church.
- A flag is used for every fortified location; if this fortified location consists of an isolated (singular) tower, an additional upside-down pushpin is depicted.
- C denotes a *casale*.
- Aqueducts are represented by red lines.
- A necropolis/cemetery is marked by a symbol of three crosses (in key areas maps), or an x (in overview maps).
- As regards the 3rd to 7th century study period, the settlement symbology in the Nettuno and Fogliano key areas differs from the other key areas, because of the more detailed site classification made for these areas; here both a town/village and a hamlet can be distinguished: a small square denotes a hamlet; a large square is a town/village. In other key areas, only towns/villages are discerned, depicted as a large transparent square, and no lower order settlements.

A number of sites cannot be located, while the location of other sites can only be approximated. Before the analysis is presented, it is should be made clear how the degree of certainty of site location is depicted on maps in this study:

1. sites for which location and identification/interpretation are known and can be verified have no question mark; these are listed with an *exact known location* in the site database.
2. name/number + ? denotes a *probable* location, or a *probable* functional/morphological interpretation, or a location nearby. A site with a single question mark has an approximate identification/interpretation; there is enough evidence for a location nearby the mark on

the map. The single question mark is often used for historical entities without a clear physical (archaeological / built) position, but for which a clear description of its location exists, or of which the toponym can be approximately pinpointed. The mill of Monticule (OLIMsite 225) can serve as an example: this 12th century mill is probably situated on the spot where until the *bonifica integrale* a *Mola* was situated opposite the hill of Monticchio. One question mark is also used for archaeological sites for which the literature is not precise on its position (vague maps, no coordinates) or morphology (for example: “unclear extent, somewhere on the hill”) and its location cannot be pinpointed further through modern and historical maps or aerial photographs.

3. Name/number + ?? denotes insecurity on the topography of a historical site, when a historical entity has a *tentative or possible* location and/or functional/morphological interpretation/identification. The double question mark, for example, is used if the site’s exact location is unknown, but if it can feasibly be located in a given wider area¹. It is also used if there is no common view on its location, but the majority of publications tends to an approximate location. Two question marks can also show hesitation on its historical or topographical interpretation. An example of the latter is the *domusculta* (for example OLIMsite 219). These are estates of unknown size mentioned in the *Liber Pontificalis*; their location can be approximated through their toponym or the descriptions in the written source.

The reconstruction of roads

Before setting out on analysing the database per period and per key areas, it should be explained how the contemporary roads, depicted on the distribution maps, have been reconstructed.

Solid evidence for ancient roads are surviving fragments of roads, such as basalt blocks in situ. Other evidence is provided by historical references, such as contemporary itineraries. The reconstruction of late Roman and medieval road infrastructure cannot solely be established upon material remains and historical anecdotes. Road network reconstruction also requires the interpretation of contemporary settlement patterns, literarily drawing lines on the map between known points of activity of a given period. This should be combined with knowledge of landscape morphology, as the environment often imposes a physical restriction on the passage from one point to another, and with the available information on earlier and later trajectories in the studied area. The combined study of these elements has proven to be a fairly effective method in reconstructing ancient infrastructure².

Earlier studies dealing with the subject of roads came in a wide variety of focus and precision, and of the way results were presented. Some concentrated on particular infrastructural arteries, such as Coste 1990 (Via Appia), Quilici 1990b (Via Appia), Brandizzi Vittucci 1998 (the Via Severiana), Pietrobono 2006-2009 (Via Latina), Marchi 2019 (Via Appia). Others treated roads as parts of a study with a different focal point, such as De Rossi 1969 (focussed on towers), Corsi 2000a (the *cursus publicus*) and the *Forma Italiae*-volumes. The authors of these studies choose different chronological resolutions in their analyses. Some concentrated on the use of roads at a particular moment in time, like Brandizzi Vittucci (1998), who discussed the late Roman Via Severiana. Others monitored the changes in the road system over a long period of time, such as Coste (1990), who studied the Via Appia from the early middle ages until sub-recent times. The precision in dating varied too: most studies refrained from specifying phases of use and abandonment of roads. From the literature, it appears that it is often not possible to tell exactly when a road was first constructed, or ceased to be used. Moreover, it is often unclear when a route became known as a road: paved roads often where preceded by dirt roads or transhumance routes, such as La Selciatella³. The reconstructions of roads in the literature also differed much: some studies offered detailed trajectories, others very crude. An assessment of the dating and reconstructions of roads presented in earlier studies is often not possible, as the used method and consulted sources frequently were not made explicit.

Despite the varied output of earlier work, in terms of the quality of dating and of detail in reconstruction, I have accepted most reconstructions of roads for the current study, adopting the most recent and most precise for my maps. In my view eventual inconsistencies are acceptable, as the roads, although necessary elements of the distribution maps, are not the main focus of discussion. The main focus is on nodes of activity (sites). Road reconstructions should be seen as tools in contextualising the political, socio-economic and settlement activities within the landscape. Moreover, nearly all the reconstructed roads are main routes. It is good to realise that these “highways” only constitute part of the *connectivity* in the landscape. As has been well established⁴, much small-scale and subtle communication and mobility, along a variety of paths throughout the landscape, remains out of sight for the modern spectator.

In sum, I rely much on reconstructions of earlier research in mapping infrastructure. Some roads have been reconstructed by me, based on descriptions in the primary sources. In plotting the roads in ArcGIS, sometimes

historical maps were used in their reconstruction, as in the case of the Via Mactorina. Aerial photographs were used when the road's trajectory is still discernible from the sky. Often, however, only an approximate trajectory could be plotted in the GIS, in the cases that the literature offered a crude map, or the contemporary written sources provided a rudimentary description of a route ("along the Astura river"⁵) only. On the distribution maps of this thesis, a distinction is made between a. certain trajectories in the period under scrutiny, depicted as continuous lines, and b. reconstructed roads or hypothetical tracts, depicted as dashed lines.

In this study, three main dating categories for roads have been devised:

- a. Roman
- b. high medieval
- c. not specified

This is a very coarse distinction, based on the broad dating of infrastructure provided in earlier studies, which is often restricted to "Roman" or "high medieval"⁶. In many cases, the chronology of a road is not specified at all. Often, it is assumed, or implied, that its trajectory may have continued to be frequented throughout the research period. In these instances, the road falls under the dating category "not specified". Sometimes, however, the current study has helped tighten the date of infrastructure: the use of roads at a particular moment in time may be assessed by the recorded activity on sites, particularly of interests.

Concrete historical information, such as found in travel accounts, also helped in this.

Concretely, the reconstructed roads, depicted on the maps of this study, differ per study period. In the 3rd to 7th century study period, Roman roads and the ones with an unspecified dating are plotted. In the study period covering the 7th to 10th century, all three dating categories of roads are charted, as it is uncertain when "Roman" roads ceased to be used, or exactly when tracts dated as "high medieval" began to be frequented. In the 10th to 14th century study period, the "high medieval" and unspecified dated roads are plotted. As said, in some cases, a more specific date can be given to the use or disuse of a road; this is visible on the distribution maps, which are drawn per century.

A list of infrastructure (which includes roads, but also hydrography) mentioned in the text of this study, has been added as Appendix 6.3. Roads, rivers and canals treated in the texts of this study are given a number corresponding to this list of infrastructure, preceded by the words OLIMinfra, for example La Selciatella (OLIMinfra 56).

7.I The 3rd to the 7th century

The analysis of this study period first of all exists of descriptions of the main developments in the 10 defined key areas, numbered 7.I.1.1 to 7.I.1.10. In 7.I.2 the analysis

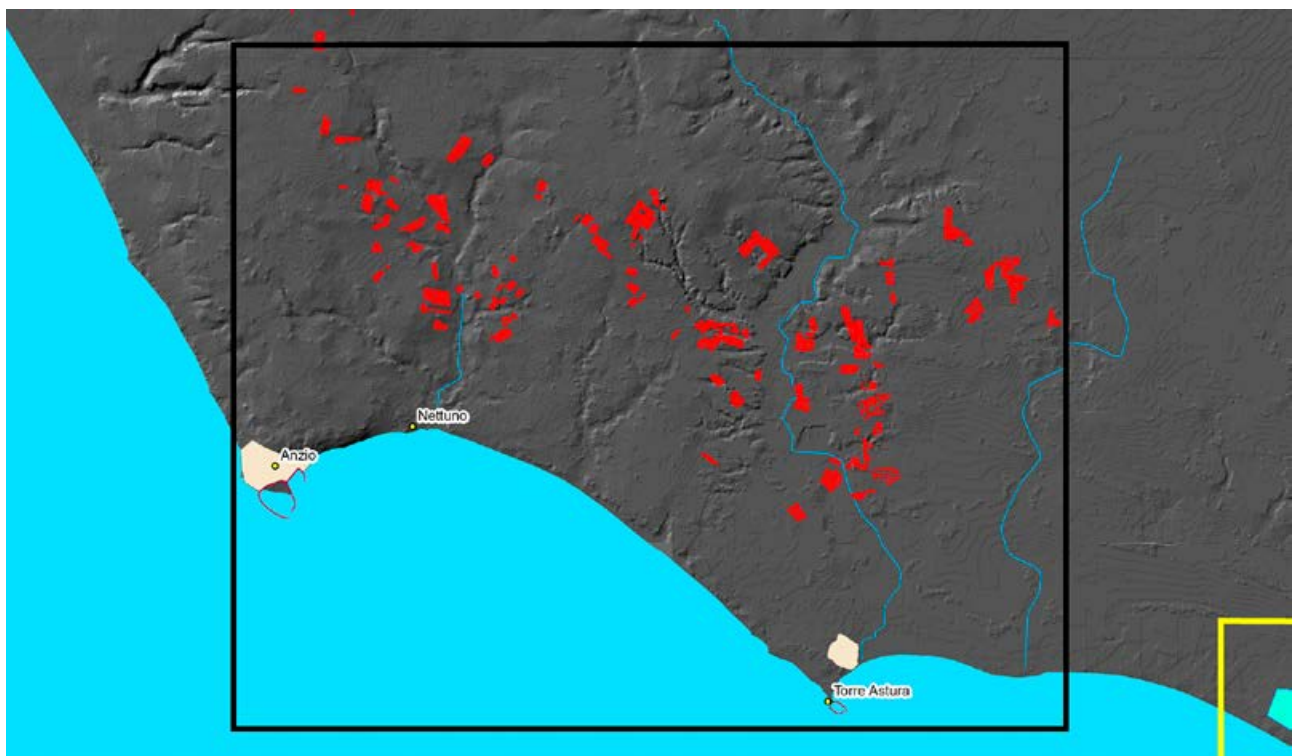


Figure 7.1. GIA surveyed fields in the Nettuno-Anzio key area.

and conclusions for the whole research area for this study period will be treated.

7.1.1 *The key areas throughout the 3rd to the 7th century*

The analysis of this study period starts with the best documented key area, which has been the subject of research of the Groningen Institute of Archaeology in the past 25 years: the Nettuno-Anzio key area.

7.1.1.1 The Nettuno-Anzio key area, from the 2nd to the 7th century

The Nettuno-Anzio key area is the best documented. The main reason for this is the long running GIA research in the area, which has resulted in the *Carta Archeologica di Nettuno*⁷. This Carta provides an extensive archaeological inventory of the area. Its site database was created by combining the results of survey research by the Groningen institute of Archaeology (see figure 7.1) and the material collected in the hinterland of Nettuno and Torre Astura by Arnaldo Liboni, then director of the Antiquarium of Nettuno.

As will be evident, this key area takes up more space than others, and should be seen as a showcase of this study. Especially in this section, research on *Campagna di Roma olim Latium* can get into detail. In this comprehensive picture, the 2nd century is included, allowing more chronological depth than in other key areas, in the study of changes taking place from the Late Empire onwards.

The extent of the Nettuno-Anzio key area is the same as that of the Carta Archeologica di Nettuno. In the Carta, the territory of the Comune di Anzio is incorporated as well. This dual study of Anzio and Nettuno makes sense as both centres are historically and archaeologically strongly connected. In Roman times, the territory of the current municipality of Nettuno belonged to the *municipium* of Roman Antium; possibly Nettuno was already under political control of Antium in pre-Roman times⁸. Contrary, the medieval town of Nettuno largely incorporated the current municipality of Anzio⁹. Beside their strongly interconnected history, both centres are part of the same landscape zone, the coastal strip of the Agro Pontino. Unfortunately, the archaeology of the area cannot be studied in a coherent manner, as a military base, the Poligono Militare di Nettuno, covers a large part of the coastal area, and is only available for survey by special permit. In addition, few recent archaeological studies have been done directly around the ancient town of Antium. Here, the GIA survey teams conducted only a limited amount of surveys, as the area is largely inaccessible. Moreover, a local pottery collection, like the Liboni collection, lacks for Antium. Pottery studies have not yet been conducted here¹⁰. And lastly, the built-up area of medieval and

modern-day Nettuno frustrates examination of the late Roman villas over a large section of the coast¹¹.

7.1.1.1.1 *General site distribution: monitoring of (change in) human activity*

The 2nd century: coastal and inland villas, Torre Astura and Antium

A site classification for late republican and imperial contexts has been set up for the Nettuno area by the GIA¹². This site classification was primarily focussed on functional aspects of the sites: location, physical remains (e.g. walls, mosaics, wall plaster) and on the surface finds from survey assemblages. The find circumstances prohibited the incorporation of site size as a parameter in this classification. On the basis of the functional analysis of samples and of the structures found¹³, the GIA research could differentiate between farmsteads/hamlets, outhouses to a villa, agricultural villas (focussed on rural production) and coastal villas (focussed on exhibiting status and production).

As can be seen on the overview map (figure 7.2), the seaside town of **Antium** (OLIMsite 13) played a central role in the 2nd century AD settlement constellation. At that time, Antium was an important port on the shipping routes along the Tyrrhenian coast. Earlier, from the late 2nd century BC onwards, the rural territory of Antium had expanded considerably¹⁴. In this period, a road was constructed, connecting the town of Antium with Lanuvium and the Via Appia in the north: **La Selciatella** (OLIMinfra 56). *La Selciatella* is the sub-recent name for the anonymous Roman road. La Selciatella may have been built following post-Archaic (480 – 350 BC) or even older transhumance routes running between the Alban Hills and the Lepine Mountains to the coast¹⁵. Its final construction took roughly a century: between the end of the 2nd century BC and the Augustan period¹⁶. As has become clear from Tol's analysis¹⁷, the road became the axis of settlement dynamics from that period onwards. The town of Antium became the decisive geo-economic factor and the focus of habitation and production along the road. Antium became, as Horden and Purcell would put it¹⁸, a gateway for the microecology of the wider Antium area. Indeed, in the period of the construction of the road, Antium grew rapidly. Along the road more and more villas were founded, all situated in the hilly landscape of the Holocene dunes. Between the 2nd century BC and the 1st century AD, socio-economic priorities seem to have shifted from natural favourable locations for agriculture only, to logistical-economically advantageous positions along the road. In this process, the natural circumstances did not play a large role in the choice of settlement; instead, the road was the determining factor. The

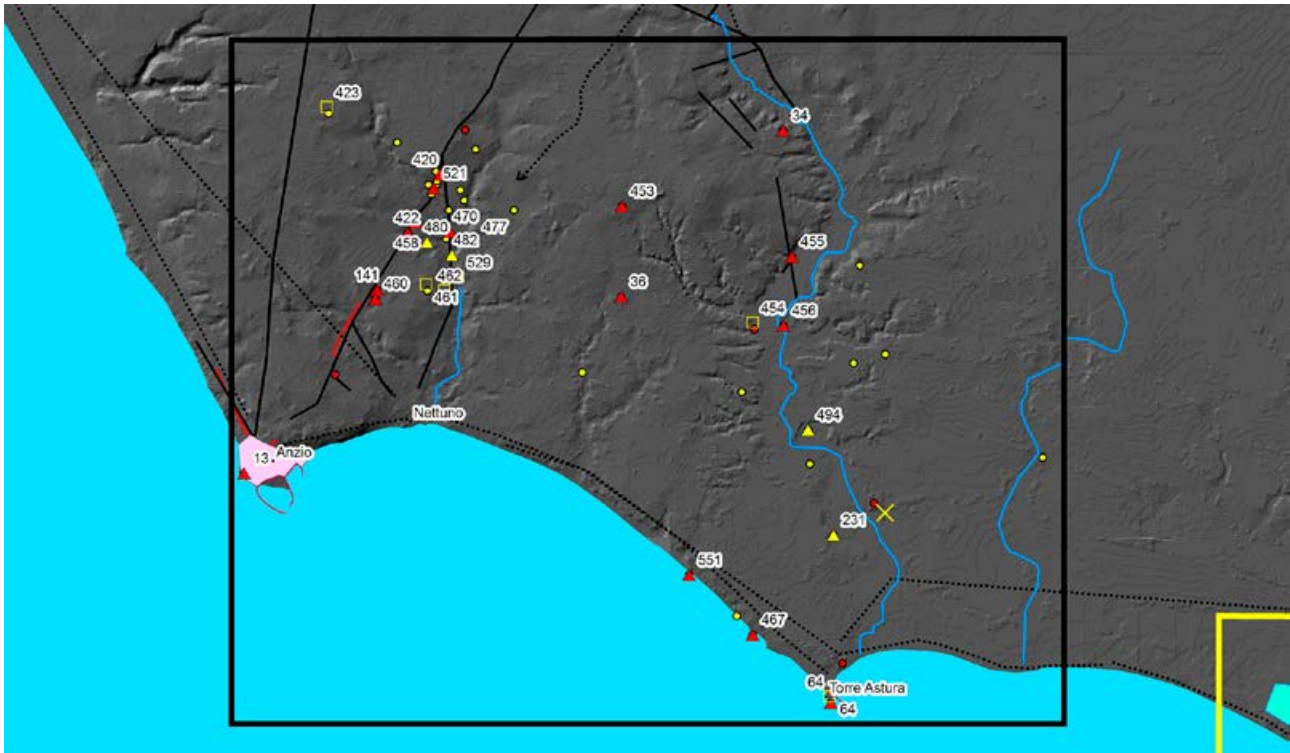


Figure 7.2. Overview of the Nettuno-Anzio key area in the 2nd century. Small squares represent (possible) hamlets. On this map, all dots stand for farmsteads/hamlets or outhouses. Triangles denote villa sites. The built area of the town of Antium is depicted, including the aqueducts (red lines). An x marks a possible necropolis.

new villas along the road probably functioned as agricultural production centres for the town of Antium¹⁹.

The effects of the construction of the new road were not only socio-economic, but also demographic: from the Augustan period onwards, habitation focus shifted from the central and eastern part of the Nettuno area to locations along the road. On or nearby the northern branch of La Selciatella towards Nettuno, three sites have been identified as possible hamlets, inhabited from the 2nd century AD onwards. On the northern branch of La Selciatella, two agricultural villas still functioned in the 2nd century. Away from La Selciatella, activity declined from that century onwards.

The agricultural villa sites along the road had their *floruit* between the middle of the 1st century and the 3rd century AD. In this period, the bulk of pottery and highest site density is recorded. Simultaneously, the city of Antium reached its prime. From the reign of Nero onwards, himself a regular resident of a large villa nearby, the town saw large complexes built under imperial patronage²⁰. Among these buildings are baths, a theatre and a Forum. At the same time, a new harbour was constructed. Improvements were made to the street network and water supply systems²¹.

On the coast, a different settlement constellation could be found. From late 2nd century BC, a total of 9 villas were

built along the coast in this key area. Some had pisciculture facilities. Amphoras and tiles were produced here until the late republic. Next to their economic purpose, these villas had to portray status and seem to have been very luxuriously facilitated²². Not all 9 coastal villa sites are depicted on the 2nd century overview map. On some, no 2nd century evidence has been found. Moreover, the coastal villas near Nettuno have not yet been studied; the strong urbanisation here has obstructed almost all archaeological study on the ground. None of the finds done in the modern town of Nettuno by Arnaldo Liboni, the director of the Antiquarium of Nettuno, has been securely located. In the present-day centre of Nettuno area, however, Roman activity (villas, a settlement?) may be surmised, given the lay-out of the reconstructed roads that led towards the coast here (see figure 7.6)²³.

At **Torre Astura** (OLIMsite 64), a coastal villa and a lighthouse were built on the strategically situated promontory, with open views both to the north (to Anzio) and to the south (to Circeo)²⁴. Through its monumentality and location, the villa clearly displayed status. The site features in several Roman written sources, and is said to have been the villa of Cicero²⁵. Originally built at the end of the republican age or start of the imperial period, the villa saw its *floruit* and largest expansion in the first two centuries AD. The villa consists of five parts: a terrace, a combined bridge and aqueduct, a large fish pond, a base villa and

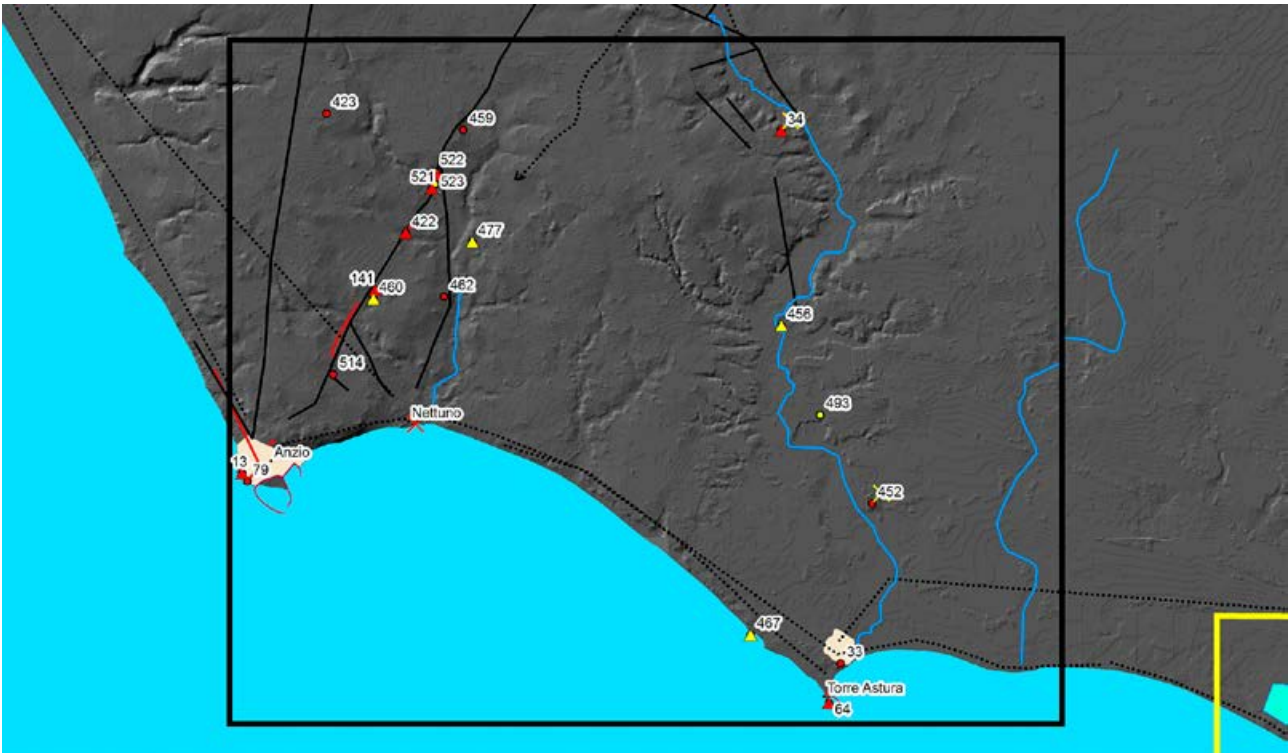


Figure 73. 4th century AD Nettuno-Anzio key area. The built area (exact extent is unknown) of the larger sites of Antium and Astura is depicted.

a harbour. The fish basin of 175 x 125 m is the largest in Lazio, possibly even of Italy²⁶. The harbour was possibly built in the 1st century AD²⁷. A small adjacent settlement may be assumed here during the Empire, as the bustling harbour activity must have required some lodging and transport facilities, and attached dwellings.

Diachronic trends

From the 2nd to 4th century

Looking at the 4th century map, the following picture emerges:

From the 2nd century AD onwards, building activities in **Antium** are limited to restorations. The monumental coastal villa of Nero was repaired under the Severan emperors²⁸. The Roman baths were the last building to be repaired, in the 4th century²⁹. Antium and La Selciatella, however, remain the geo-economic focal point for the area in the later Empire, as the site distribution map shows: as the settlement pattern becomes more diffuse from the 3rd century AD onwards, sites near to Antium seem to persevere longest; the sites in the north-eastern part of the Nettuno area seem to have been abandoned first, in the middle or the end of the 3rd century AD.³⁰ Agricultural villas closer to the town show continuation until the 4th century and later. The hamlets found in the survey on the Loricina river, still visible on the 2nd century map, begin to die out from that century onwards. The dying out of the hamlets in the late imperial period, may point to a shift in

focus along the road, from habitation to production concentrated on villas.

With the exception of **Le Grottacce** (OLIMsite 551), all studied coastal villas continue between the 2nd and 4th century AD. Inland, in the Astura Valley, somewhere between the middle/late 2nd century and the middle of the 3rd century habitation is thinning out. Although this process already seems to have started in the late republic or early Empire³¹, it may have worsened from around 200 AD. Unfortunately, it is difficult to master the chronology of this process. It is here that one is faced with bias in the knowledge of the available pottery. The survey sites in the Astura Valley have yielded a fair amount of ARSW and a few amphora sherds. The dating problem for the Astura valley lies first of all in the ARSW: the most frequent wares are Hayes 196 and 197, which have a broad date range. The amphora types found here (Dressel and Africana) also have a broad date range too³². Not only the pots cause problems, the dating of the *latericium* brickwork is problematic too³³. This generic broader chronology shows itself in many yellow symbols on the maps. What may comfortably be acknowledged, however, is the loss of significance of the Astura valley in the settlement pattern, somewhere between the middle 2nd century and the middle of the 3rd century. Ultimately, the area becomes void in the 4th century.

A late Roman habitation centre (*civitas*) near Nettuno?

On the 4th century distribution map, the square with question mark is the approximate location for a hypothetical late Roman habitation centre (*civitas*) near Nettuno, put forward by Brandizzi Vittucci. She proposed that the toponym of *Antium* (OLIMtoponym 15) on the Peutinger map, was situated near modern Nettuno. Here the larger population centre of Antium may have been situated³⁴. This idea is, first of all, based on the distances given on the Peutinger map, between Antium and Lavinium to the north and Astura to the south³⁵. Secondly, it would explain why no Roman habitation centre has yet been found in Antium³⁶. What is more, a late Roman imperial habitation centre separated (3-4 km) from the administrative centre at Antium, it is argued, is administratively feasible: as discussed³⁷, the area of modern-day Nettuno in Roman times fell under the jurisdiction of the *municipium* of Antium.

The discussion on a possible late Roman *civitas* near Nettuno is complicated. It is interesting, however, to go into the subject in more detail, as there is ample evidence to suggest late Roman activities in the Nettuno area. First of all, there are clues for Roman roads found near Nettuno³⁸. Additionally, all branches of the *La Selciatella* run in this direction (see figure 7.6). Implicitly too, the fact that these branches ran towards the Nettuno area, highlights the lack of evidence for ancient roads in and towards Roman Antium.

Brandizzi Vittucci³⁹ reconstructs the Peutinger *Antium* near the modern area *S.Biaggio*, somewhere between the contrada *I Marmi* (1 km north-west of the centre of Nettuno) and the current località *S.Barbara*, located several hundreds of meters from the centre of Nettuno⁴⁰. Indeed, there have been reports of antique remains, described by Soffredini⁴¹, near *I Marmi*, from which the local toponym has been derived. These vestiges have now all disappeared. Brandizzi Vittucci suggested that the local church of *S. Biaggio*, situated close to the località *S.Barbara*, might have been part of early Christian activity in the presumed *civitas*⁴². This church had been in ruins for several centuries, before it was demolished in the 19th century⁴³. Although it is certain that the cult of the 4th century Armenian saint started in the late Roman period⁴⁴, it cannot be ascertained that *S.Biaggio* is a local paleo-Christian toponym. Only two paleo-Christian artefacts have been found in our Nettuno research area: a possibly 4th century oil lamp with a *chi-rho* sign, found on **rpc site 15085, Macotta area** (OLIMsite 141), much further north on *La Selciatella*⁴⁵. And a fragment of an oil lamp with a *chi-rho* sign, found at **Astura settlement** (OLIMsite 33), dated to 450-550⁴⁶.

Additional information on the ancient situation *in situ* near Nettuno is provided by several 19th century authors⁴⁷. From their work it appears that, over the centuries, three

churches or chapels had been built at *S.Biaggio*. These were built on top of a grave, which was probably part of a large Roman cemetery⁴⁸. Several inhumations with grave finds have been recorded. The epigraphic evidence for the existence of this cemetery (20 inscriptions) is strong⁴⁹. This imperial cemetery suggests a nearby situated population centre, i.e. in the Nettuno area, and not Antium itself: the *Biaggio* cemetery seems too remote (3-3,5 km) to belong to Antium. In the Ostia area, for example, the largest distance of late Roman tombs from the town of Ostia Antica is 2700 m. One of the inscriptions⁵⁰ found at *S.Biaggio* is clearly Christian. It has been suggested that Antium's bishop's seat here may have been located here: early sees were often situated near Christian cemeteries⁵¹. It is also tempting to see this Christian inscription as an argument for the location of an suburban cemetery-church here, like at *Pianabella - Ostia* and near Rome and Terracina. Another hypothesis is to relate the cemetery to the villas and hamlets on *La Selciatella*. All this remains the subject of conjecture.

In the proposed *civitas* area no systematic surveys have been done by the GIA. Only one site nearby yielded archaeological proof from the late to post-Roman periods: **rpc site 15049, Liboni 49** (OLIMsite 514)⁵². This site, however, is not located exactly in the area of *S.Biaggio*, but more to the west, on the Roman road. It seems a real possibility that this is the location of Lanciani's observations of ancient walls, also described by De Rossi⁵³.

In sum, the hypothesis on a late Roman habitation centre near Nettuno is an interesting one, but cannot be proven. There are several arguments to be on your guard. As Brandizzi Vittucci acknowledges, in Strabo's time the seigniorial habitation centre was still located near the cape of Anzio⁵⁴. A possible relocation or foundation of a habitation centre, therefore, must have been effectuated later. Anzio, however, is the only location with clear evidence of republican, imperial and late Roman *domus*, indicators for centralised living⁵⁵. What is more, as was discussed, one has to be sceptical about locating stations based on Peutinger distances. There is no evidence how such a *civitas* might have looked like, for example what kind of structures were in place. The material evidence of the location near *I Marmi/S.Biaggio* cannot be checked, as the area is now totally overbuilt⁵⁶. And lastly, the roads running to and near Nettuno, argument for a *civitas* here, may also partly have been aimed at the villas here, three of which have been identified⁵⁷, but cannot be studied because of the fact that the medieval *borgo* of Nettuno was built over them.

To conclude: from the available evidence, the existence of a late Roman habitation centre or a bishop's seat near

Nettuno cannot be corroborated. All the evidence for the existence of a nearby *civitas* is circumstantial; the hypothesis cannot be verified by archaeological fieldwork as the area is largely overbuilt. The existence of a late Roman settlement centre in the neighbourhood can, however, be assumed, given the evidence found for a cemetery. This is an interesting idea to be included in every possible new fieldwork strategy in the Nettuno area⁵⁸.

Astura settlement (OLIMsite 33)

Piccarreta was the first to identify the large profile west of the Astura river mouth as belonging to a settlement⁵⁹. Piccarreta and Tol⁶⁰ made a case in identifying it as *Astura*, depicted on the Peutinger map. The sites' chronology, its large extent and the cautious interpretation of the distances⁶¹ on the Peutinger map, make identification with Peutinger *Astura* probable.

Astura settlement is geographically well situated, near the mouth of the river Astura and near the strategical promontory of Torre Astura, where a safe haven had developed. Although the Astura river was not navigable for ships, river transport on shallow-bottomed boats was possible⁶².

Historical evidence on the **settlement of Astura** is fuzzy⁶³. The Peutinger map is the only source on the existence of a settlement here⁶⁴. It has been suggested that this settlement originally developed as the habitation centre of a bustling harbour, which originated during the Latin period. In this harbour, goods might have been loaded on smaller ships for the Astura river and the upstream settlement of Satricum⁶⁵. Indeed, Strabo may have described an anchoring place harbour at the location Astura settlement, but his descriptions of the topography are not very precise⁶⁶. Whether or not a harbour at the river mouth was a fact, it is clear that Strabo did not refer to a settlement near here.

The archaeological evidence on the settlement is abundant. Recently, a GIA team restudied the site. During the 2007-2008 campaigns, the team studied and sampled the profile of roughly 2 x 100 metres, earlier mapped by Piccarreta. Large piles of building material and part of a wall were uncovered⁶⁷. A large amount of smaller objects was retrieved as well, like coins, glass fragments, marble plates, bronze artefacts, faunal remains, but most of all lots of pottery: impasto, amphorae, tegulae and fine wares. The well datable ware fragments in the profile show that the settlement took off from the 4th century AD onwards, although 1st to 3rd century evidence has been found too: mostly small fragments of amphorae, terra sigillata and African fine and cooking wares, considerably lower in number than the 4th to 6th century finds. Tol thought that these earlier fragments are no evidence

for a functioning settlement, but should be considered sparse finds, related to unspecified nearby activity⁶⁸. The exact extent of the site remains difficult to assess due the pine tree forest *Pineta di Astura*, but it is clear that the site covers a vast area.

The **villa and harbour of Torre Astura** (OLIMsite 64) might have been functionally connected to the settlement of Astura, given their proximity. One might suggest that the Torre Astura port served the larger ships, while smaller boats for local trade, focused on upstream Astura, might have used a harbour near the Astura settlement. Again, this remains speculative, as no signs of a harbour at Astura settlement itself have been found. It is interesting, however, to assume a connection between the building of the harbour at Torre Astura in the 1st century AD and the first recordable activity on the Astura settlement site, be it not as settlement. It seems certain that the fates of the port and of the Astura settlement in the later Empire were linked, as will be discussed⁶⁹.

In conclusion on the 2nd to 4th century

While a growth in settlement distribution and investments in sites has been attested until the early imperial period, the 2nd and 3rd century was the beginning of transformations and decline. In that period, the settlement pattern in the key area becomes more diffuse. Between the 2nd and 4th century the number of sites drops away from La Selciatella. Also the hamlets on the Loricina river begin to wane from that century onwards. While the coastal villas hold on, the Astura Valley starts to become empty, somewhere between the middle and late 2nd century and the middle of the 3rd century. Not only the rural sites show signs of transformation from the 2nd century onwards: from that century onwards, Antium saw only restorations from the 2nd century, after which there occurred no more new building schemes. The villa of Torre Astura had its floruit in the 1st and 2nd century AD, after which less investments seem to have been made here. The Astura settlement is an exception to this general decline: from the 4th century it developed into a village.

From the 4th to the 7th century

Antium continues as a regional centre. The number of historical references to the town, however, decreases from the end of the 4th century AD. The *Liber Pontificalis* reports that under Boniface I (418-422), rival Pope Eulalius stayed at S.Hermes in the city of Antium⁷⁰. The foundation of a see at Antium in 465, proves that the city was viable enough to become an ecclesiastical focal point in the 5th century⁷¹. The diocese of Antium, however, was cancelled in the 6th century⁷². Ultimately, the last historical reference to the town of Antium dates to the 6th century⁷³, when Procopius recorded the use of the harbour

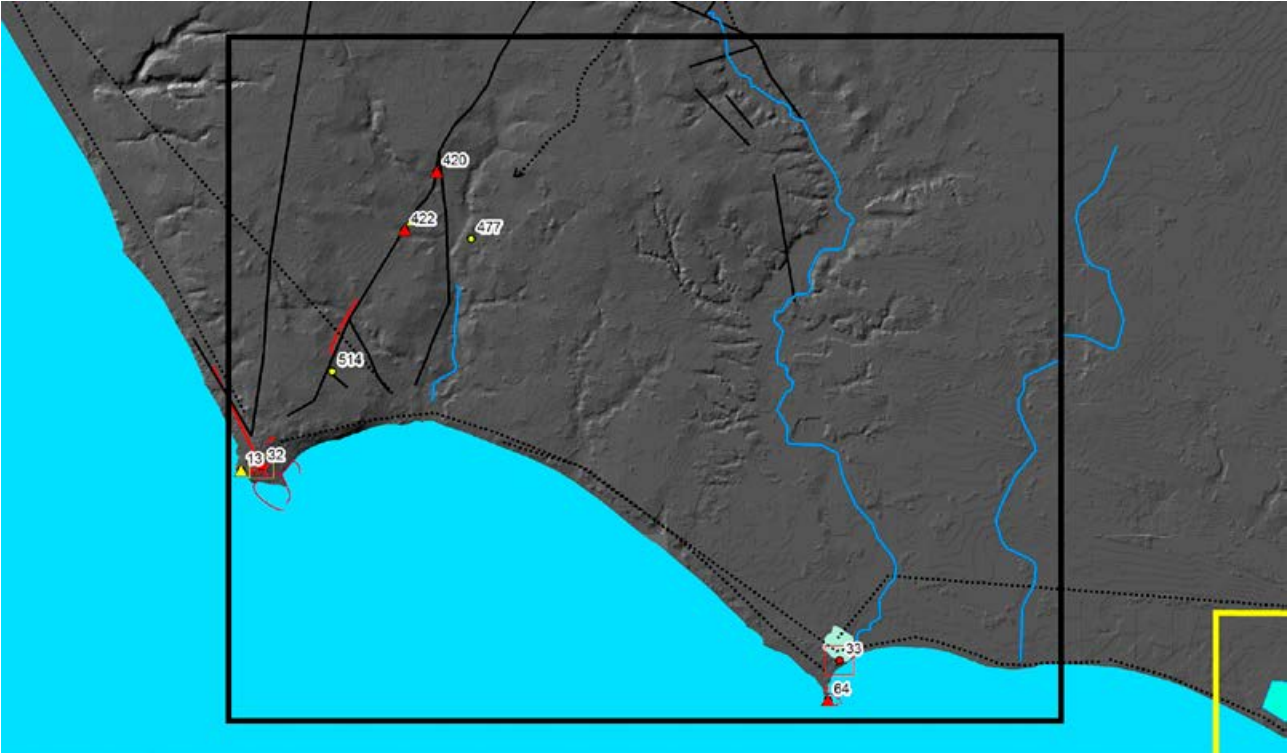


Figure 7.4. 6th century Nettuno-Anzio key area; it is unclear what activity took place in Antium. Activity here must have diminished in the 5th and 6th century, as can be deduced from historical and archaeological sources, and the fate of the sites along the road which seem to have had a close economic relationship with Antium.

(537 AD)⁷⁴. The latest secure archaeological evidence in Antium dates to the late 4th century⁷⁵.

The traditional historical view is that Antium waned when attention of the emperors faded and that the barbaric invasions caused the settlement to be depopulated⁷⁶. Demographic decline itself may have started a vicious circle of decline, causing the abandonment of the sea, which again may have led to less investments of people and resources in the area⁷⁷. It is possible, however, that activities at Antium never really ceased⁷⁸. The two basins of the harbour may have been serviceable for a long time⁷⁹. In the 8th century the domusculata Anthius (OLIMsite 107) was possibly founded here, on the earlier existing *massa urbana*.

A good indication of continued activities in Antium can be found on the villa sites situated along La Selciatella, which seem to have had an ongoing strong economic connection to the town:

La Selciatella as axis of late activity

From the 4th century onwards, La Selciatella more and more stands out in the archaeological record as the axis of continued economic activity. Of the 13 sites in use along this road in the 4th century, altogether five sites show possible continued activity until the 7th century⁸⁰. The

rationale for this continuity should be considered. A strategic motivation might be suggested for this time of insecurity and collapse of Roman state structures. The sites, however, can hardly have acted as defensive spots, given the poor defensive quality of the terrain, in which steep slopes are absent. Besides, the sites do not show defensive measures. All the available data, therefore, point to a continuation of the earlier socio-geographic constellation, in which the road seems to have maintained its position as the axis of settlement, related to its connection to Antium. The consistent chronology of the sites and Antium seem to confirm this: the villas further away from Antium die out first; the villas along the road closer to town show continuation until the 4th century. After that they decline too. It is probable that their waning is connected to a demographic and economic decline of Antium from the 4th century onwards, visible in archaeological and historical evidence.

To conclude: Activities in Antium seem to diminish from the 4th century on. The pace and extent of this process cannot be monitored because of the lack of (published) archaeological studies on late Roman contexts. The chronology of the villas along the road may be consistent with the activity in Antium as can be seen on the 6th and 7th century maps: diminishing but continued. The circumstances in the Antium hinterland shows also parallels

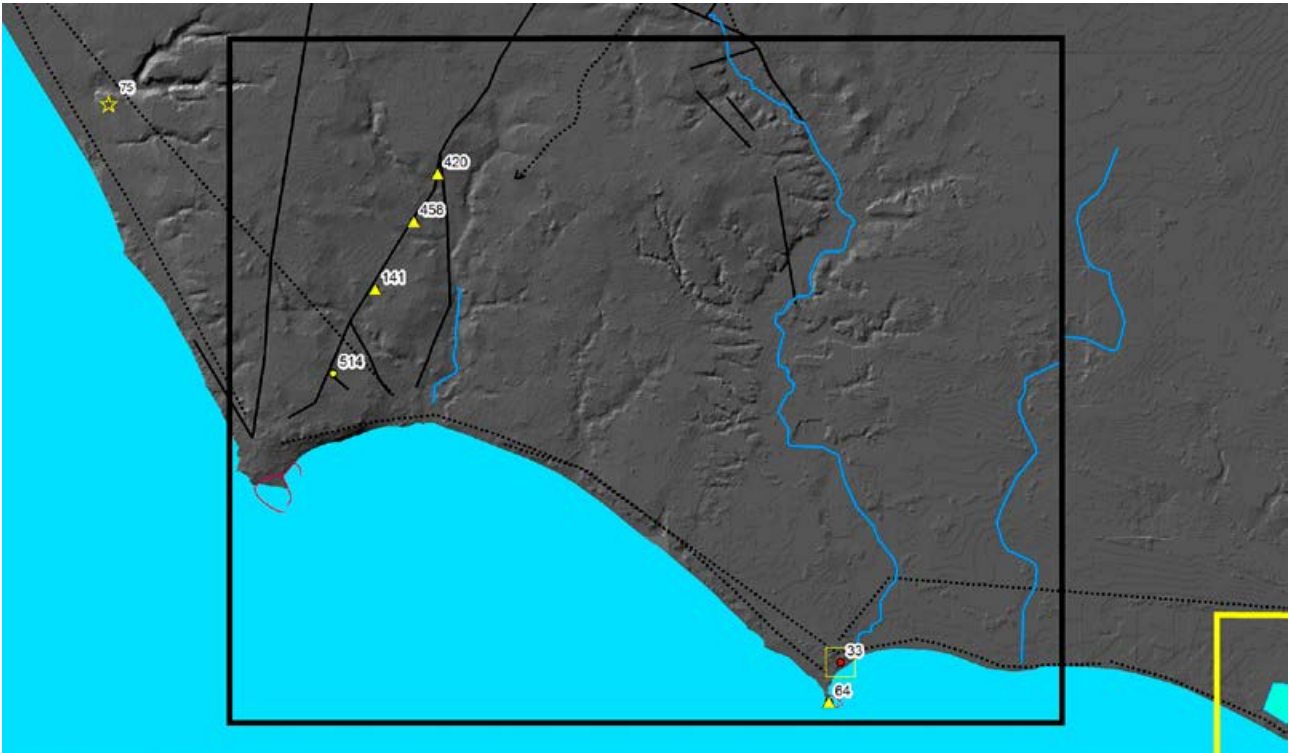


Figure 75. 7th century Nettuno-Anzio key area. The ports of Antium and Torre Astura are still depicted here. While the harbour of Torre Astura is possibly the site of continued use until even the 17th century, the last record on the harbour of Anzio dates to the 6th century; its structures, however, must still have been in place.

with the research done in Tuscany: here the inland landscapes demonstrate continued habitation and rural cultivation on locations along the functioning roads well into the 6th century⁸¹.

Villas on the coast

Earlier research in Tuscany has shown that there was a second category of continued life: maritime villas. Along the Tuscan coast, villas engaged in fish farming functioned until well into the 5th century. Later that century these sites underwent internal reorganisation and contraction⁸². Some coastal villas were converted into maritime settlements in the late 5th and early 6th century. An example is found at Cosa, where the remaining vestiges of a villa were reused to create a harbour⁸³.

Are there indications for the continued importance of pisciculture in the Nettuno area? Pisciculture may have continued, as all the villas in the Nettuno area dated to the 4th century testify to the presence of fish basins: i.e. **Piccarreta 7** (OLIMsite 467), the villa at **Torre Astura** (OLIMsite 64) and the **villa of Nero at Antium** (OLIMsite 13)⁸⁴. However, one cannot be sure whether these basins were actually used for breeding fish in the later Empire and afterwards. Only at Torre Astura, the *opus vittatum* restorations on the fish pond may provide concrete evidence for later pisciculture activities, although the *vittatum* brickwork has yet to be dated⁸⁵. In short, it is

possible that late Roman life at these locations was also (partly) supported by fish farming.

Are there indications for the internal reorganization of coastal villas? Maybe there are: Internal reorganisation may be shown by the aforementioned presence of *opus vittatum* brickwork. As research at **Ostia Antica** (OLIMsite 392) showed, *opus vittatum* was primarily used for ad hoc building activities, mostly repairs and renovations from the end of the 3rd century onwards⁸⁶. In the current key area, *opus vittatum* was found at **Piccarreta 7** (OLIMsite 467)⁸⁷, at the **villa of Nero** (OLIMsite 13), in the **town of Antium** (OLIMsite 32) and at the villa of **Torre Astura** (OLIMsite 64). At Antium, the *vittatum* technique was used for the unstructured repairs on main buildings. At the villa of Nero, the found *opus vittatum* B can be dated to the late 4th to 6th century. Unfortunately, on the other 3 sites the *vittatum* brickwork presently cannot be studied, nor are there pictures or descriptions of the masonry available. In sum, it remains unclear whether the *opus vittatum* actually stood for internal reorganisation; it cannot be used as evidence for the existence of maritime settlements.

Overall, to effectively say more about the later phases on these villa sites, the brickwork should be dated more precisely and the wider context of the site studied: for which

buildings was *vittatum* used, what spaces were created and which were abandoned? For this, test trenches are a minimum requirement. Only such invasive techniques, in combination with intensive pottery study, would enable us to make statements about possible internal reorganisation, or, ultimately, about conversions of coastal villas into maritime villages⁸⁸. The site of Fossanova (OLIMsite 9) shows how successful relatively small-scale excavations can be in understanding and dating the conversion of a villa site⁸⁹.

Torre Astura and Astura settlement

A candidate for a conversion into a maritime settlement is the villa at **Torre Astura** (OLIMsite 64), given the harbour at hand. Indeed, *opus vittatum* restorations have been attested at Torre Astura, on the residential area / basis villa and in the structures of the walls of the large fish pond⁹⁰. In order to investigate the possibility of a conversion into a settlement, a first step would be to categorise the *opus vittatum* in type A or B. Generally, however, it will be difficult to find proof for a late Antique/early medieval settlement, as the site was redeveloped several times afterwards.

Interestingly, a 6th or 7th century building phase has been suggested for the medieval tower, as morphological similarities have been found between the *opus latericium* on the lower wall on the inland side and well-studied Byzantine structures of that time⁹¹. The function of the site during this phase is unknown; possibly the Roman lighthouse was redone, or a fortress was built, or both. It has been well attested that the Byzantines created strong-points on strategic locations in the late 6th and 7th century⁹². The site of **Picco di Circe** (OLIMsite 41) may be an example of such a Byzantine fortress in the 6th century⁹³. A similar role could be envisaged for Torre Astura, possibly as part of defensive scheme along the coast, together with the Byzantine town of Terracina⁹⁴.

Future wall research could help verify this theory of a Byzantine phase at Astura. If confirmed, the site would help shed new light on Byzantine presence in Lazio. The physical impact of the Byzantines in rural central Italy was not large, or, in any case, often difficult to discern from local material culture⁹⁵. Only in Liguria large quantities of Byzantine artefacts have been found⁹⁶. The small-scale pottery research done on Torre Astura, shows two sherds which may be 6th or 7th century Byzantine (influenced) pottery⁹⁷.

I would be interesting to study if both the *opus vittatum* and the 6/7th century (Byzantine) phase were part of the same redevelopment. This remains for future research. Both phases, however, paint the picture of continued

interest in this harbour site. It is not certain when the villa was abandoned⁹⁸. It is clear that material on the site, on the villa site and the tower, dates until the late 6th or 7th century AD. As will be shown below, continued use of the strategic harbour is likely. This harbour must have continued to attract people and activities. The current tower was built in the 12th century.

Nearby, at **Astura settlement** (OS site 33), other eastern Roman / Byzantine archaeological evidence was found, be it of earlier date: numismatic evidence on this site seems to show that connections with the east, i.e. the eastern part of the Roman Empire, later the Byzantine Empire, already had existed since at least the early 4th century. A few late Roman eastern Mediterranean pottery shapes show that connections with the east continued into the 6th or even 7th century⁹⁹.

At Astura settlement, the material found in the profile indicates a continued life span into the late 7th century AD at least¹⁰⁰. Studies by the GIA on this site have revealed that the Astura site saw its floruit in the 4th to 6th century. After its zenith between the 4th and 6th century, the 7th century saw a considerable drop in the number of finds. There is no secure archaeological evidence after that period until the high middle ages (see period 7.III.1.1). According to Tol, the settlement between the 4th and 6th century was “a settlement of considerable importance” in which living and production were combined¹⁰¹. A fair amount of locally produced wares and imports show the economic vigour. Archaeozoological evidence shows that animals were only kept for consumption on the spot, not for cattle breeding on a wider scale or for pastoralism.

Discussion: new foci of aggregation and redeveloped sites in the late Roman period?

Conspicuously, the time of floruit of the **Astura settlement** is the period of a marked decline in activity on almost all sites in the Nettuno area. Indeed, the rise of this successful new centre may be part of a general tendency in the Italian landscape from the 3rd and 4th century onwards: a materialization of a (new) villages, as the new ‘focus of aggregation’¹⁰².

Tol suggested that one should look at Campania to see a similar shift in local economy¹⁰³. As the research of Paul Arthur in Campania shows, newly founded road stations, *vici*, began to flourish while traditional urban centres were on the wane; these *vici* became the new centres on which agricultural and economic activity and trade was concentrated¹⁰⁴. Because of their position on roads, these local trade centres became the hubs for supply of the hinterland. In my view, it is not primarily the road station function that instigated the growth of Astura development, but firstly its maritime qualities – because of the

nearby harbour of Torre Astura. Here the comparison with Tuscany, which Tol also mentions, provides even better parallels: the focus of the economy and trade in Tuscany began to lie on several redeveloped villas remodelled into maritime settlements. The importance of a harbour function of these new economic and demographic focal points, is evident from the imported pottery on these sites; the above-mentioned example of Cosa, where the remaining vestiges of the villa were reused in its construction, shows the effort put into providing for a harbour¹⁰⁵. As regards the Astura peninsula, the nearby port of Torre Astura, of which it is certain that it still functioned, in my view was the prime logistical factor for the success of the local economy. 5th and 6th century Tuscany saw habitation and rural cultivation concentrated on new centres in and around old (maritime) villas, and on locations along the functioning roads¹⁰⁶. Astura settlement combines both: road and maritime connectivity. Astura settlement until the late 6th century was involved in Mediterranean sea trade, as the pottery evidence shows. It was, with the harbour at Torre Astura, possibly one of several main ports acting in maritime trade network in the 4th to 6th century (see below 7.1.1.3). In the late 6th century, however, these imports seem to have come to a halt at Astura, as the pottery evidence shows, and the trade network collapsed. In the late 6th and 7th century, the economy of the site likely was locally oriented.

To retake the discussion on the possible redevelopment of the villa at Torre Astura into a maritime settlement: while we probably will never be able to study the extent and chronology of such a redeveloped villa into a settlement at Torre Astura, it seems certain that both Torre Astura and Astura settlement remained in use in the 4th to 6th century. A symbiotic arrangement is most feasible: while Astura settlement became the demographic and economic focus, Torre Astura developed into a logistical hub, and possibly a defensive centre for the area, for which the possible Byzantine phase of the tower may be given in evidence.

While activity on Astura settlement was on the rise from the early 4th century onwards, Antium slowly began to show signs of decline (although admittedly, we have to rely on a few archaeological and historical records). This decline however, is relative, i.e. compared to its heydays: Antium and its socio-economic hinterland, extended along the road, seem to have remained a focal point of activity in the landscape until the 6th or 7th century, while the archaeological record of other parts of the Nettuno-Anzio key area dies out. This too may be part of the development in which the village arose as focus of developments in the late Antique landscape.

In conclusion on the 4th to 7th century

The traditional archaeological and historical picture of the later 4th and 5th century of the Italian peninsula is one of progressive political division, collapsing Roman state systems, incursions of foreign peoples and demographic (urban) decline. This traditional generic picture of a breakdown of Roman state structures, does not manifest itself in the settlement pattern of the Nettuno-Anzio key area. The site density only slowly decreases between the 4th and 7th century. The slow decline in number of sites is comparable with the developments in the Farfa area. Only the Astura Valley lost its position in the socio-economic structuring of the area, somewhere between the 2nd and 4th century; this process, however, seems to have started already in the late republic or early imperial period. Along the coast, villas saw prolonged life, possibly involved in pisciculture. Possibly these coastal sites saw internal reorganisation, like in Tuscany.

The distribution map of the 5th to 7th century shows two areas of concentrated activity: Torre Astura - Astura settlement and Antium - La Selciatella. This tendency may be linked to the general development attested elsewhere on the peninsula, in which villages became the new focal points of developments from the 4th century onwards. Both settlements show continued activity until the 7th century, although at Torre Astura the wide date range of wares (ARSW) makes continuation into the 7th century uncertain. Astura settlement was active between the 4th and 6th century and may be considered a proper town, in which domestic activities and production were combined. In symbiosis with the harbour at Torre Astura, this town combined both road and maritime connectivity within an interregional or even pan-Mediterranean economy, which is the basis of its economic activity¹⁰⁷. It appears that the road from Lanuvium to Antium consolidated its primary position in the settlement pattern as focal point for habitation and production, in liaison with the (reduced) village of Antium; endurance along functioning roads until the 6th century is a well-documented process in Tuscany.

We cannot be sure if this sketch of developments between the 4th and 7th century is the whole picture: for dating of most sites we largely depend on imported goods. It remains unclear if sites with less or no access to trade actually ceased to function. There is a chance that, less readily recognisable, local wares were produced on some sites which disappear from the radar. The Tiber Valley (Farfa) project, during which a typology for local coarse wares was made, shows us that such locally oriented contexts may have been overlooked or misdated in the past. Such a typology has yet to be created for the Nettuno key area¹⁰⁸.

7.I.1.1.2 Infrastructure

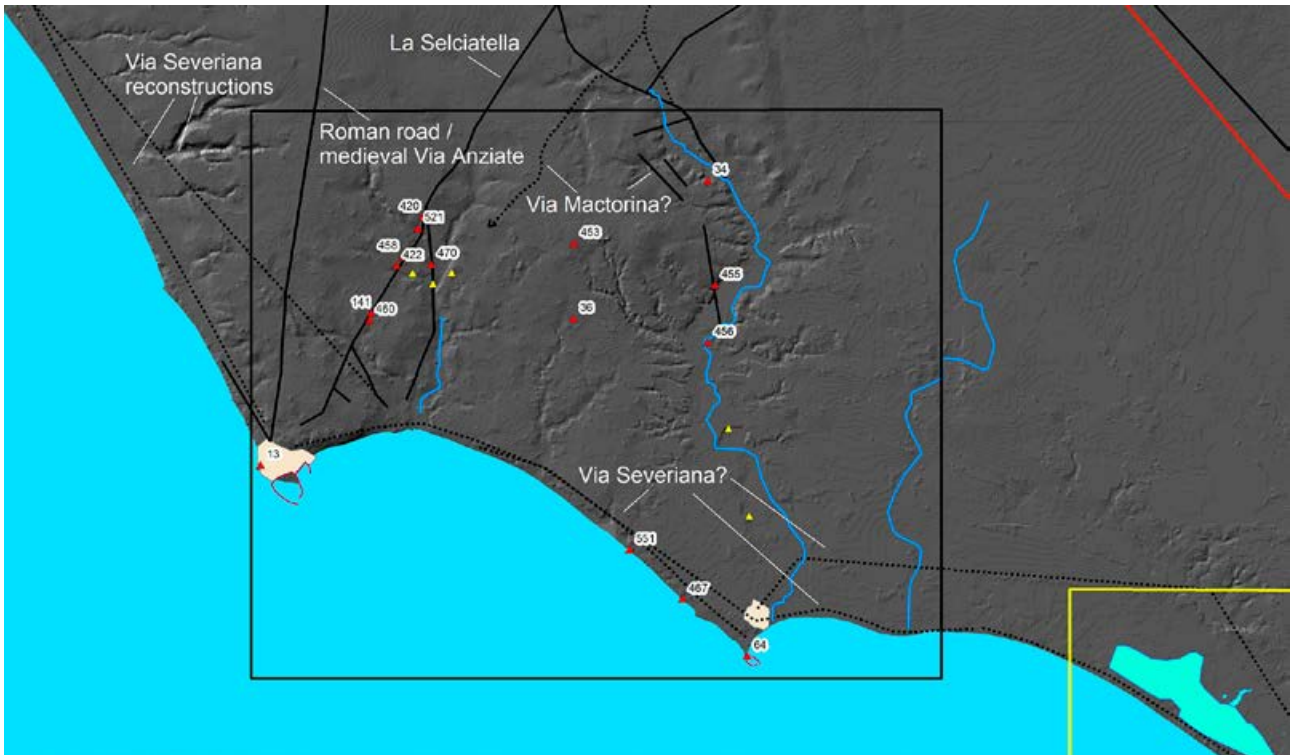


Figure 7.6. Infrastructure 2nd to 7th century AD. The map shows among others the western Via Mactorina.

Rivers

Sevink has shown that, although the rivers and streams (Astura, Loricina and Moscarello) in the key area were not navigable for seaworthy ships, river transport on shallow-bottomed boats was possible¹⁰⁹. Along the Astura, the importance of the river as transport route for agricultural produce is shown by the fact that the imperial sites which hold on longest along are the ones closest to the river¹¹⁰. The Astura river seems to become less important as means of transport during the (later) Empire. Possibly river transport lost out on road transport: sites along **La Selciatella** (OLIMinfra 56) receive the bulk of overseas imports from the 4th century onwards, while imports in the Astura Valley become rare. There are several hypotheses on the decrease in the number of Astura Valley sites (such as more subsistence farming, which is archaeologically more difficult to discern, see below¹¹¹), but an added factor in the long-term may be cost-effectiveness of transport: it is fair to assume that transport of overseas products was more economic via La Selciatella than via the Astura river. Not only was the road well built and maintained, it ran more or less straight, ensuring efficient transportation. Additionally, for road transport the cargo had to be offloaded once, from the ship on a cart, at Antium, while river transport implies a twofold transfer of the load, from seaworthy ships onto river boats (at Torre Astura presumably), and then onto a cart, somewhere along the river. It makes sense to concentrate on

easiest accessible routes in late Antiquity and the early middle ages, times in which the attraction of goods from distant regions, and from overseas, became more difficult, and resources had to be concentrated¹¹². One may suggest that the deteriorated environmental circumstances of the late Roman period became an additional disadvantage for river transport: the increased sedimentation may have made the river more unreliable¹¹³; rivers by nature are less easy to control than roads.

Roads

La Selciatella (OLIMinfra 56) plays an important role in the geo-economic and demographic developments from the late Republic onwards. **La Selciatella** may have been built following old transhumance routes, running between the Alban Hills and the Lepine Mountains to the coast¹¹⁴. Its status in Roman times remains uncertain. This road probably was a *via vicinale* (local road), as its name remains unmentioned in Roman written sources. On the other hand, it connected two important Roman centres: Antium and Lanuvium. It was paved on top of a pre-existing road in the end of the 2nd c BC or the start of 1st c BC. Tol proposed a possible later date, as sites along the road only seem to come into existence from the Augustan period onwards¹¹⁵. The trajectory of La Selciatella has been reconstructed by De Rossi, and was fine-tuned by a GIA team on the basis of the remains found in the survey project¹¹⁶. The road was probably built in the first place

to facilitate the Roman colony Antium¹¹⁷, connecting the town with its hinterland and the Via Appia¹¹⁸. Indeed, in the period of the construction of the road, Antium grew rapidly. From the settlement history, as reconstructed above, it appears that this road from Lanuvium to Antium consolidated its function in the settlement pattern as a focal point for habitation and production. Its connection with the Via Appia and Lanuvium further inland, must have contributed to its value. La Selciatella must have been repaired and maintained for a long time, at least until the 6th century, given the sites which show continuation until that time. It never ran out of use as it became frequented again during the high middle ages (see 7.III.1.1).

La Selciatella had two main branches, one two kilometres to the north, the other two kilometres to the south of **Torre del Monumento** (OLIMsite 576)¹¹⁹. Of the northern branch almost no remains are left. The southern branch probably ran straight to the centre of contemporary Nettuno. In the middle ages, this southern route must have still been in use, as the southern part of the high medieval to sub-recent **Nettuno alternative of the Anziate-Nettunense** (OLIMinfra 112). Evidence for this road was located by Lanciani¹²⁰. At Nettuno, the southern branch may have connected to the coastal **Via Severiana** (OLIMinfra 3).

A second road connecting the coastal area with the hinterland, runs between Antium and the Via Appia, swerving around the foothills of the Alban Hills. This route originated in imperial period, probably during Septimius Severus¹²¹. Not mentioned in Roman times, this road may have been a secondary route. In the middle ages, it became known as the **Via Anziate / Via Nettunense** (OLIMinfra 88)¹²². While in Roman times it ran straight to Antium, in the high middle ages it made a detour to the then flourishing town of Nettuno, hence its contemporary name Nettunense. No ancient remains of the Via Anziate have been reported, probably because it is still in use today¹²³.

A third road coming from the north is the “**Via Mactorina**” (OLIMinfra 36). The name *Mactorina* actually is a high medieval designation for the much older road (system) from Velletri to the coast¹²⁴. It seems certain that in Roman times this unnamed road connected Velletri and the sea¹²⁵. While we can be positive about its existence, the exact tract of this road remains obscure. On the Ameti map (Map XXXVI, 1693), its post-Renaissance trajectory is visible, passing by “*civitona diruta*” on the Via Appia, which is very probably the same as the archaeological site **on the Via Appia near Sole Luna** (OLIMsite 172)¹²⁶. Near modern Casale Campomorto this road may have bifurcated, a western branch heading for Nettuno / Antium, an eastern branch possibly for Astura¹²⁷.

The western road may have entered the Nettuno-Anzio key area not far from the La Selciatella; near Nettuno and Anzio no remains have been found, nor are there other indications for its trajectory. Indeed, it is likely that a road ran between Antium / Nettuno and the Satricum area during the lifespan of the town of Satricum (9th century BC until 5th century AD)¹²⁸. Its tract may have been copied by the Roman Mactorina. Near and south of the site of Satricum, several Roman tracts have been securely identified¹²⁹; possibly these are part of the eastern Mactorina branch towards Astura. The processes of erosion and deposition of the Astura river impede recovery of other parts of the road.

Another route reached the key area to the north: The Roman road **Campomorto area-Via Appia (Cisterna area)** (OLIMinfra 89)¹³⁰. It connected with the Via Appia near Cisterna, and from that point northwards connected with the **pedemontana road** (OLIMinfra 1) near Cori through the **road Cisterna (area)-Cori** (OLIMinfra 46)¹³¹, or through the **Via Setina** (OLIMinfra 86) (see figure 7.20). In sub-recent times, a transhumance route (*tratturo*) seems to have followed more or less the same route as the **road Campomorto area – Via Appia (Cisterna area)**. This *tratturo*, which ran from the Liri valley – Amaseno valley along the pedemontana zone to the coast in the current key area, may already have been frequented in Antiquity¹³². Generally, long term transhumance from the Lepine Mountains, and further inland areas towards the higher parts (marine terraces) on the coast between the Lago di Fogliano and Ostia, seems to go back as far as the 4th century BC¹³³. It is unknown however, if these transhumance routes were continued in the (early) middle ages¹³⁴. For more on transhumance routes see below the section on Economy, production and trade.

The coastal road, “Via Severiana”

The most unfathomable of Roman coastal roads crosses the research area: the **Via Severiana** (OLIMinfra 3). The discourse on trajectory, purpose and denomination of this road is all but decided. In topographical research, two main hypotheses on the tract of the Via Severiana have come to the fore. The first is based on Westphal’s 19th century reconstruction. In this tradition, the road is reconstructed following strictly the coastline (Miller, Lugli¹³⁵). The second, reconstructed more inland, has more recently been suggested by Paola Brandizzi Vittucci (1998), in a well-documented attempt to reconstruct the route. As diverse as the reconstructions of its route may be, there is general agreement that a long-distance road must have existed, running along the coast from Ostia southwards via Circeii to Terracina. It is uncertain if this road actually was called Severiana.

The Severiana has been seen as an *ex-novo* foundation by emperor Septimius Severus (192-213)¹³⁶, intended to facilitate traffic and trade between Rome and the resources of its southern hinterland. Others thought it was originally built in the 1st century AD, and restored and newly paved with basalt blocks during the Severan emperors¹³⁷. The most important historical source on the Severiana is the Peutinger map. As touched upon before, the distances on the map are not always reliable¹³⁸, although some authors have tried to find prove of its exactness. Copying errors, however, are the most likely explanation of some of these obvious errors. Moreover, it has been suggested that the numbers mentioned on the Peutinger map actually refer to the junctions to the places mentioned, *diverticuli* from the main road going south from Ostia to Terracina. As will be shown below in Ostia key area, this idea does not work for all obvious errors regarding the Via Severiana, for example at *Laurento*.

Parts of the Severiana can still be found south of Ostia. As shall be discussed in the Ostia key area, we lose track of the road's remains *in situ* from roughly Tor Paterno southwards. In all likelihood, the road from the Pratica di Mare area headed for the vicinity of S.Lorenzo and from there to S.Anastasia; in both areas basalt blocks have been found, 1-2 km inland. We do not know where the road reached or passed the town of Antium, or if, maybe, the statio *Antium* was located near modern Nettuno (see above 7.I.1.1.1). What is clear is that traces of ancient roads have been found in the wider Nettuno area, and in Nettuno itself. In the fortifications of Nettuno, ancient basalt blocks have been reused stemming from the surroundings and certainly from antique roads¹³⁹.

Running southwards from the Antium/Nettuno area, the Severian route poses new challenges. A pavement is reported by Lanciani in Nettuno in 1870¹⁴⁰, possibly indicating that the road followed the ancient road from Antium to Le Ferriere over a bridge across the Loracina stream¹⁴¹. From there, the road likely took a turn southward, although here too no evidence on the road has been found. Brandizzi Vittucci reconstructs the road from here southwards based on the Peutinger map: over the Poligono Militare di Nettuno via Cretarossa, Foglino and towards Acciarella. She suggested that at Casale Nuovo the road crossed the river Astura (see figure 7.10). Indeed, it is possible that the crossing over the Astura might have been on an inland location, given the more difficult conditions near the mouth of the river.

To conclude: although concrete evidence is absent, we can be sure that a long-distance route passed the Nettuno area, given the Peutinger map and the archaeological proof north of Antium. Whether or not this road followed a route close to the coast in our study area is unclear. One could be positive, however, that an infrastructural artery

must have existed that connected the coastal villas¹⁴² (see figure 7.6). Such a (local) road may have been distinct from the Severiana. However, such a coastal road has not yet been substantiated by material evidence, a fact that holds true for the Severiana as well. It is also feasible that the villas had individual access roads from the Severiana.

Harbours

As touched upon above, **Astura settlement** (OLIMsite 33) in the first millennium BC may have been a habitation centre connected to a harbour. A harbour near the mouth of the river may be expected because of the strategic position, certainly in the heydays of the town of Satricum (9th century to 5th century BC). Possibly a harbour near Astura settlement was eventually replaced by the more strategically situated and undoubtedly larger harbour of Torre Astura. Some have suggested this relocation of harbour activity took place when the mouth of the Astura had silted up¹⁴³. Altogether, no archaeological proof has yet been found for this harbour near the mouth of the Astura river.

The harbour of **Torre Astura** (OLIMsite 64), although part of the villa complex, must have been intended for more than private use only. It seems specifically constructed to protect ships against the recurrent strong winds of the Tyrrhenian coast; in case of strong unfavourable and violent southwestern winds, creating large waves, Torre Astura was the only large safe haven on the long stretch northwards from Circeo until Antium¹⁴⁴. Other Roman harbours on the Pontine coast were the artificial harbours of Anzio and Terracina. It is likely that the harbour was originally built for interregional sea traffic. First of all, it was much too large for private use. What is more, its construction seems not primarily intended for large scale commercial connections with the immediate hinterland: the harbour is only connected to land by the viaduct. The harbour facilitated local exchange; according to De Haas, its position near the mouth of the Astura river may indicate that the harbour acted as a transit place for agricultural yield from the Astura valley¹⁴⁵. As noted, there is evidence that a (small) facilitating waterfront settlement existed near the harbour in Roman times. In late Antiquity, the harbour of Torre Astura was intensively used. Through the numismatic evidence, the harbour of Torre Astura emerges as a port with contacts all over the Mediterranean in the 4th century. The population of Astura settlement (OLIMsite 33) will have made use of the Torre Astura harbour during the 4th to 6th century. The trading activities are connected to long distance sea trade, as the finds at Astura settlement show¹⁴⁶.

It may be assumed that the Byzantines used the harbour. The Roman tower at Torre Astura was redone in the 6th or 7th century, possibly by Byzantine builders (see above 7.I.1.1.1). The harbour may have functioned in the

Byzantine directed trade, for which on other sites pottery evidence has been found¹⁴⁷. Possibly the Byzantines present in Velletri and Lanuvium made use of the harbour¹⁴⁸. In all likelihood, the Torre Astura harbour continued to be used throughout the middle ages.

In the heydays of the Roman Empire, the port of **Antium** (OLIMsite 32) was the largest of the key area. The harbour was built by orders of Nero, and consisted of three piers, making up two dockyards. Because of its large capacity, it had regional importance, and was used to redistribute goods into Antium, its hinterland, and beyond¹⁴⁹. As noted, the last record on the harbour of Antium dates to the 6th century¹⁵⁰. Some continued activity in the harbour of Antium is feasible however. The piers may have been serviceable for a long time, as they were still visible until sub-recent times¹⁵¹, but it is unclear until when they were fully functional – at least for large scale use. In the high middle ages the importance of the harbour area could be deduced from the building of two (fortified) locations here, as attested by the *opera saracinesca*. Contrary to these ideas on continued use of the harbour, Miller suggested that Nero's harbour at Antium silted up from late Antiquity onwards. The silting up of the harbour of Antium may explain why activities in Antium diminished while Astura settlement – and the connected harbour of Torre Astura flourished in the late Roman period¹⁵².

7.1.1.1.3 Economy, production and trade

Inland activities

Since protohistoric times people occupied parts of the Astura valley, an area largely ecologically suitable for subsistence farming¹⁵³. During the Roman period, large parts of the Valley were exploited for agriculture. The clayey/sandy soils here have been classified as marginally suitable for wheat cultivation and for growing olives. The beach ridges, composing large parts of the Astura Valley, are especially suitable for specialised olive culture¹⁵⁴. Most of the Roman sites found by the GIA teams, have a post(Archaic) predecessor. In western parts of the Valley, a few republican villa structures have been found, probably small *villae rusticae* of dimensions comparable to the villas found in the Lepine margins (see below)¹⁵⁵. East of the Astura river, no villa has been attested. Overall, smaller agricultural sites dominate the record. Until the early Empire, site density in the Astura Valley was not much lower than the western parts of the Nettuno key area.

As discussed above, the archaeological record shows that from the time La Selciatella was built the Astura valley became more and more peripheral. While in the Astura valley and the area to the east the number of (small) sites drops, the sites along the road grow in number. Pottery

evidence indicates that these eastern areas become detached from (interregional) trading economic connections: in the 2nd and 3rd century the amphorae imports are much more abundant in the Campana area, close to Antium, than in the Astura valley. This fact might point to a slow but sure disconnection of the Astura valley from the trading network focussed on **Antium** and **Astura settlement / Torre Astura**. This may be part of the explanation of the abandonment of the Astura sites. As discussed in the paragraph on infrastructure, the fact that transport of the road is more effective than transport on the river Astura may be an additional factor in the decline of the Astura valley, or at least in the drop in overseas imports here.

Another hypothesis explaining the abandonment of the Astura sites is their possible function as production sites for the *villae maritimae* on the coast, inhabited by tenants working for the owners of the villas¹⁵⁶. It would explain the fact that villas on the coast seem to die out contemporaneously with these farms. That is, with the current state of research: as touched upon above, the late Roman chronology of these villa sites is yet to be studied further. Generally, the current state of research in the Nettuno – Anzio and the other key areas, does not allow establishing the functional relationship of villas with subsidiary farms, nor the fixture of the extent of the territory of the villa estates (see also below¹⁵⁷).

Transhumance

The Nettuno – Anzio key area in Antiquity was the objective for winter pasture in transhumance routes from the inland mountain ranges and valleys¹⁵⁸. In earlier scholarship, two such routes have been described in the current key area. Firstly, the Roman road **Campomorto area – Via Appia (Cisterna area)**. This road was possibly part of a *tratturo* which connected the Amaseno and the Liri valley with the Nettuno – Anzio key area, passing the lower Pontine plain to the north, more or less parallel to the *pedemontana*, and from that point ran to the marine terraces in the current key area¹⁵⁹. Secondly, the Roman road **La Selciatella**; as noted in 7.1.1.1.2, its tract may have been built following a route more inland continued between the Alban Hills and Lepine Mountains.

The objective for winter pasture were the coastal marine terraces. As Veenman (2002) has shown, the higher areas along the river Astura, together with lagoonal areas of Fogliano and Caprolace were the most suitable areas for winter pasture in southern Lazio¹⁶⁰. Local communities profited from the seasonal transhumance through the letting out of winter fields and by supplying the incoming transhumant groups with food supplies¹⁶¹. Secondary products of the animals involved (sheep and goats: wool, cheese) could be traded in local markets¹⁶². Wool, cheese, and meat, however, were also produced in the local

agricultural practice of animal husbandry. Breeding and raising livestock was a common practice in many parts of the Campagna Romana in sub-recent times¹⁶³.

The range of the transhumant trails is unclear, but it is possible that both local pastoral and long-distance transhumant strategies coexisted during the Roman period. It is unclear if the geo-political situation of late Antiquity and the early middle ages allowed for long-distance transhumance¹⁶⁴.

Coastal activities

There is ample evidence for the kind of economic activities the coastal villas were involved in from the late republic onwards. Most coastal villas had pisciculture facilities, large basins developed to raise fish, an activity that may have continued into the middle ages. Pottery production took place on at least one villa sites during the Late Republic. One villa probably exploited sulphur deposits¹⁶⁵. Lumbering may also have been a regular economic activity, given the forests which covered parts of the coastal area, for example on the Astura peninsula¹⁶⁶. As explained, most if not all coastal villas undoubtedly were designed to portray status, next to their economic purpose. The very luxurious facilities are clear signs of that¹⁶⁷.

The coastal villas did not function on their own. As discussed, these large complexes must have had a socio-economic relationship with the inland rural farmsteads and villas¹⁶⁸. How this relationship functioned needs further investigation, certainly in view of the rapidly changing settlement constellation of the inland areas in the late Empire. Unfortunately, no signs have been found for a coastal road, which undoubtedly connected the villas with each other. More knowledge in local coarse ware traditions (fabrics, shapes) will enable us say more on the inland activities during the later Empire; we will probably find more indications for longer continued activities. The excellent results of such pottery (re)studies have been demonstrated in the Tiber Valley (see 7.II.3.2).

Eastern connections at Astura

Numismatic evidence on **Astura settlement** shows that this newly evolving town already had established connections with the east from the early 4th century onwards, at least. The retrieved 4th and 5th century coins¹⁶⁹ on this site were struck in Aquileia, and eastern towns such as Constantinople and Thessaloniki. Although 50% of the coins at Astura settlement was struck in Rome, the percentage of foreign mint, mostly eastern Mediterranean, however, seems high. This percentage is markedly higher than the numismatic evidence on the site of **Pianabella** (OLIMsite 589, just south of Ostia Antica) for example, an area with more day-to-day connections with Rome

(location nearby, its harbour, the domus for aristocrats of Rome etc). The 4th century hoard of Torre Astura paints the same picture of eastern connections¹⁷⁰.

The fact that the percentage of foreign coins is relatively high, in the numismatics from both Torre Astura and Astura settlement, shows the interregional or even pan-Mediterranean character and importance of the area. The eastern link of Torre Astura/Astura settlement is no surprise given its strategic position. The harbour of Torre Astura must have been one of the main ports of call on the trading routes to the south and east. One may expect that in the period that the Byzantine ruled over Lazio, from the second quarter of the 6th century onwards until the middle of the 8th century, this eastern focus must have been strong. The possible Byzantine building activities at Torre Astura enhance this idea.

Conspicuously, western Mediterranean and Gallic mints are rare in the Astura area: they are absent in the Torre Astura hoard and at Astura settlement western Mediterranean and Gallic mints represent only 3 of the 40 identifiable mints. 50% of the coins at Astura settlement was struck in Rome. These figures show us that Rome was still the absolute focus of trade and travel for this site, and presumably for other coastal sites in Lazio as well, in the 4th century.

In comparison to the numismatic evidence, the pottery evidence does not point to an important eastern link in the Nettuno-Anzio key area. The absence of a clear volume of 6th and 7th century eastern Byzantine wares (i.e. manufactured in the Byzantine homeland¹⁷¹) is striking, given the fact that Byzantines ruled over Lazio in these centuries: In **Astura settlement**, a few late amphorae stem from the eastern Mediterranean¹⁷². On one site of the persisting sites along the road, **Liboni 4, rpc 15004** (OLIMsite 458) an amphora fragment has been found which can tentatively be identified as a late 6th or early 7th century amphora import from Samos¹⁷³. As discussed in 7.I.1.1, at Torre Astura only two fragments may have been Byzantine (influenced) pottery.

Zooming out, it can already be established that, eastern pottery, made in the Byzantine motherland is rare in our study area of southern Lazio¹⁷⁴. The lack of Byzantine wares can be explained by two factors: less dissemination and less recognisability. As on dissemination: first of all, Byzantium was further away than other pottery production centres, for example the easy accessible northern African ones. What is more, Byzantine (influenced) pottery outside large towns is rather rare. Byzantine rule on the Italian peninsula was primarily urbanocentric (except for Liguria); their archaeological impact is low outside

towns. In general, Byzantine ceramic evidence is especially scarce in the 7th century outside Liguria. In this region, Byzantine rule had much more impact on the ground, also outside towns¹⁷⁵. In our study area, only at Pianabella Byzantine style pottery has been found, dating to the 7th century¹⁷⁶. As on recognisability: Byzantine wares are very difficult to discern from local (coarse) wares; a typology of Byzantine pottery, locally made or imported, is still difficult to make, as it has no clear set of characteristics, or at least not yet well defined¹⁷⁷.

Astura settlement: a link in a maritime trade network between the 4th and 6th century

The abundant pottery evidence shows that the flourishing Astura settlement of the 4th to 6th century was involved in pan-Mediterranean sea trade. In that period, the settlement, with the Torre Astura harbour, likely was one of several main ports acting in a maritime trade network¹⁷⁸. This trade system consisted of several coastal centres on fixed routes, among which are Ostia, Portus, Rome, Naples, but also more distant centres such as Marsiglia and S. Antonino (Liguria). At these established trade hubs, ships would be able to dock and cargo could be handled. Evidence for this hypothetical trade network are the reoccurring of the same wares shapes and/or their relative share on all of these maritime centres¹⁷⁹. As of yet it is uncertain if this network was new, or only became visible in the 4th century. Indeed, Torre Astura was a likely partner in such an array as the only large safe haven on the long stretch northwards from Circeo until Antium, as touched upon above. In this arrangement of larger harbours, the artificial harbour of Terracina would almost certainly have been one of the main stops southwards¹⁸⁰. It has been suggested that this sea trade network was institutionalised rather than market led¹⁸¹.

Future study of the interaction of the ports with their hinterlands is crucial for a better understanding of the functioning of this and other trade networks. Such hinterland studies are rare in central Italy¹⁸². At Astura, one may assume that the direction of redistribution would have been inland, along the river Astura; its immediate hinterland was nearly void, at least with the current (pottery) evidence. The villas on the nearby coast seem to have waned in the 5th century, although more research is needed¹⁸³.

The excavations by the Groningen Institute of Archaeology demonstrated that in the late 6th century the imports from overseas almost entirely come to a halt at Astura. In the late 6th and 7th century, the economy of the site seemed regionally or locally oriented; samples taken from the fill of the structure and the northern part of the section contain coarse ware fragments, probably of regional or local origin¹⁸⁴.

How can the success of Astura settlement be explained? The location of the harbour of Torre Astura, its size and protective nature are obvious reasons. The finds as discussed show that the late Antique Astura settlement was largely dependent on its functioning in a larger sea trade array, effectively on its interregional importance as a harbour town. Its direct hinterland seems hardly occupied or even void from the 5th century onwards¹⁸⁵. Indeed, when long-distance trade stopped in the 6th century and local economy began to take over, the settlement only lasted for two or three more generations.

All in all, it is clear that Astura settlement functioned in international trade along the coast, and owed much of its success to it. But why in this period, why not before? The waning of the harbour of Antium may be put forward as a partial explanation, but there is no actual solid evidence for an abandonment of Nero's harbour. To explain Astura's floruit of the 4th to 6th century we may find answers in a regional geographical perspective: Torre Astura may have acted as an alternative harbour for Terracina. The Via Appia had become difficult to travel, possibly already in the 3rd or 4th century. This likely resulted in the cutting off of the communities of the eastern Alban Hills (e.g. Velletri – Lanuvium) and of the Lepine Mountains (e.g. Sezze – Cori) from the routes towards the southern plain. Contrary, the harbours of the current key area, Astura and Antium, could easily be reached through La Selciatella (in use until 6-7th century as the finds along it show), the Via Mactorina and the road **Campomorto area – Via Appia (Cisterna area)**. **By using the harbour of Astura (and possibly Antium)** the difficult (impossible), uncomfortable and inefficient travel through the (malaria infested) Pontine plain or the long detour along the pedemontana route was avoided.

There is proof for Byzantine presence at both Velletri and Astura: the administration of the city of Velletri was temporarily transferred to the Byzantine administration in Rome in the 6th century. The city of Velletri for a time was supervised by a tribune¹⁸⁶. Although the reasons for this change in administration are unknown, their active involvement itself shows the importance of the city (see) of Velletri to the Byzantines. Maybe there was a (military-strategic) correlation between the Byzantine presence of Velletri and the demonstrated 6/7th century Byzantine phase at Torre Astura. At Lanuvio too, Byzantine material has been found¹⁸⁷.

For now, the intensified *connectivity* of Astura with its further hinterland, as a basis for its success in the 4th to 6th century, must remain a hypothesis. One way to study this idea in the future, is to look at the resemblances in the assemblages from Lanuvio/Velletri and Astura¹⁸⁸.

7.I.1.1.4 Religion and worship

Remains of Roman sanctuaries have not been attested in the Nettuno-Anzio key area¹⁸⁹. The written sources that record early Christian activity are restricted to the town of Antium and its surroundings¹⁹⁰. The *Liber Pontificalis* mentions that the church of St. John Lateran (Rome) gained a part of the Antium area in the early 4th century, the *massa Urbana* (OLIMsite 79)¹⁹¹. Probably a gift of Constantine¹⁹², this *massa Urbana in territorio Antiano* was almost certainly situated on, or near, the imperial *praedium* at Antium. Evidence for this is the adjective “urbana”, which often means “residence”¹⁹³. Secondly, the *massa* was a gift by the emperor, who had a *palatium* at Antium since the times of Nero¹⁹⁴. The *massa* had a revenue of 240 solidi¹⁹⁵. A *massa* in this context should probably be interpreted as a grouping of several lands or farms¹⁹⁶.

The foundation of the *massa* epitomises the build-up of authority and economic interests in the countryside by the powerful Church institutions of the Rome, most of all the pope, from Constantine onwards. According to Marazzi, these early properties must be seen as outposts in this effort¹⁹⁷. Soon, an extensive number of ecclesiastical properties (*massae, fundi* and *possessiones*) was acquired in central Italy¹⁹⁸. It is often uncertain how large these were, how they functioned and interacted, and where the working populace was settled¹⁹⁹. The fact that they were recorded in the *Liber Pontificalis*, stresses the important role they played for the Church; their revenues, explicitly mentioned, were vital to the Church in general and for the individual churches. In the Nettuno-Anzio key area, the *massa Urbana* is the only early ecclesiastical property. Closer to Rome, the number of such properties was larger (see for example the Ostia key area). This is evident, as the ecclesiastical power in this era was concentrated in the Eternal City. Other ecclesiastical sources stem from the 5th century: the above-mentioned references in the *Liber Pontificalis* on Pope Eulalius’ stay. The foundation of the see of Antium is historically dated to 465; the see disappeared from the sources in the 6th century²⁰⁰.

Next to the historical evidence there is some archaeological confirmation for early Christian activity in the Nettuno area. As explained above, a Christian epitaph can be given in evidence for a Christian cemetery in the area of current Nettuno area. Possibly this cemetery was connected to the cult and church of S.Biaggio. On two sites, fragments of an oil lamp with a *chi-rho* sign have been found: at *rpc site 15085, Macotta area* (OLIMsite 141, possibly a 4th century oil lamp) and at *Astura settlement* (OLIMsite 33, oil lamp securely dated to 450-550).

7.I.1.1.5 Geo-politics: power relations, struggle and control strategies; secular activities

In the 5th and 6th century walls and enforcements of existing defences were effectuated on several locations in Lazio. This can be seen in among others Ostia Antica, Privernum, Terracina and in Rome (since the 3rd century)²⁰¹.

We may expect some kind of defensive measures at Antium in these centuries, in view of the threat of foreign troops roaming the Italian peninsula. Although it is unknown what kind of an impact the foundation of an early see had on the built environment at Antium, some amount of accumulated ecclesiastical wealth can be surmised, which may have attracted marauders. Indeed, as the story of the sees of Velletri and Tres Tabernae shows, bishoprics were in need of protection in these days of insecurity²⁰². Other early episcopal seats in Tyrrhenian southern Lazio were bolstered in the 5th and 6th century: **Terracina** (OLIMsite 31), **Ostia Antica** (OLIMsite 392) and possibly **Castra Albana** (OLIMsite 155)²⁰³. The latter settlement was documented in the 6th century as bishop’s seat “civitas Albona”, being transformed into a Byzantine stronghold²⁰⁴. At Antium, however, no evidence has been found for defensive measures until (possibly) the 9th century.

How the above described Byzantine(-inspired) structure at **Torre Astura** (OLIMsite 64) functioned is unknown. Its strategic position suggests a stronghold, although a lighthouse may have continued to function here. Considering the turbulent nature of Byzantine presence in central Italy, the first option is favourite. Possibly it offers testimony to the progressive militarization of Byzantine ruled Italian society in the later 6th and 7th centuries²⁰⁵. In these days, the Byzantines, while focussing their authority on the towns, created strongpoints on strategic locations.

7.I.1.2 The Fogliano key area, from the 2nd to the 7th century

In this key area, the intensive field and pottery research, conducted in the framework of the RPC project²⁰⁶, allows the drawing of a detailed picture of activity. Because of this thorough earlier research, the 2nd century can be included, to get more chronological depth.

The RPC survey research was focussed on the marine terraces behind the recent dunes (see figure 7.7). The low-lying clayish areas between the lakes were not covered, as these are likely to have been unfavourable (too wet) for settlement in the past, and have always suffered from river and sea flooding²⁰⁷. The RPC research has yielded 25 Roman sites, of which 25 had a republican phase, 23 an early imperial and 8 a middle imperial phase.



Figure 7.7. Fields surveyed by the GIA in the Fogliano key area²⁰⁸.

The number of late imperial sites in the Fogliano key area is considerably lower than in the Nettuno-Anzio area. This has much to do with the larger effective proportion of the landscape studied during the Nettuno survey project and the material available for (re)study (Liboni collection).

Next to the RPC-publications, the area saw scanty attention in the literature. The area is treated in only one local topographical-archaeological effort (Cecere 1989), and secondarily in several other studies (Hoffman 1956, Egidi 1980, Cancellieri 1985 and 1987, Cassatella 2003). History has been unkind to this area: Late Antique and early medieval ecclesiastical sources on this area are scarce.

7.1.1.2.1 *General site distribution: monitoring of (change in) human activity*

The 2nd century: a cluster of activity on the junction of the lakes and the Martino canal

In the Fogliano survey project, a growth in settlement intensity has been attested during the late republican and early imperial period. Van Leusen assumed a correlation to this growth with the expansion of the fish farming activities. Contrary to the Ostia and Nettuno – Anzio key areas, pisciculture here probably was not practiced from coastal villas on the seashore, but in the brackish Fogliano and Monaci lakes²⁰⁹. Coastal villas have not yet been attested in the Fogliano key area²¹⁰. Indeed, there are several indications that already in Roman times measures

were taken to control the water flow, as may be read from an inscription and may be inferred from local toponyms. Cecere maintained that the Roman Martino canal originally was dug intended for the supply of fresh water, necessary to improve fish farming conditions²¹¹.

The 2nd century distribution map (figure 7.8) shows a concentration of finds in an area of 2x2 km on both banks of the Roman dug (later: Martino) canal in the hinterland of Fogliano and Monaci lakes.

Here a large area of surface finds has been identified by the RPC team as a possible village: **rpc site 10583, FOG218 (OLIMsite 359)**²¹². The site is enormous: its approximate size is 60.000 m², but it is probably larger as its extent to the west and east is unclear. Here, numerous limestone and tuff blocks have been found, and many unclear (built) structures²¹³. Unfortunately, much of the area has been bulldozed. The village seems to have grown from the late republican period onwards²¹⁴. Earlier the site was interpreted as part of a Roman necropolis dating from 1st to 4th c AD, but a close study by the RPC team of the surface finds does not confer this interpretation²¹⁵. A necropolis of this size, if confirmed, would suggest a nearby larger settlement area.

Although initially identified as a larger farmstead, **rpc site 10585, FOG220 (OLIMsite 354)** was perhaps part of the same built environment, situated 300 m to the west. This site is approximately 3000 m², but its extension on the other side of the canal to the east is still unspecified²¹⁶.



Figure 7.8. All 2nd-3rd century sites of the Fogliano key area. A dot depicts a site with activity in this century. OLIMsite 347 is the only villa site, securely dated to the 2nd-3rd century. The yellow cross is the possible necropolis at OLIMsite 359. The possible course of the Roman canal is depicted, tentatively following the high medieval course of the Martino canal.

Several built structures have been found here²¹⁷. On both sites, republican and early to mid-imperial wares have been found. In all, given the cluster of finds here and their proximity, these two sites seem part of a large settlement agglomerate. This Roman cluster east of the Monaci lake was recorded by Hoffmann (1956) as well²¹⁸. This conglomerate is the most likely candidate for the location of Roman *Clostris* – *Clostra Romana* (OLIMsite 18), i.e. if such site ever existed. I will go into that below.

Another 2nd century site on this side of the canal is **rpc site 10558**, FOG103 (OLIMsite 345). Situated 500 meters to the east of the village, this was probably a large farmstead²¹⁹.

Other 2nd century sites in the 2x2 km area of attested intensive activity are situated on the northern bank of the canal:

- **rpc site 10569**, FOG204 (OLIMsite 350), probably a large farmstead
- **rpc site 10572**, FOG207 (OLIMsite 358), large farmstead
- **rpc site 10571**, FOG206 (OLIMsite 347), a main villa building, with residential function.

This latter site, near present-day Borgo Grappa, may correspond to the villa described by Elter (1884), possibly

owned by a certain Camenius until 384 AD²²⁰. This is the only late imperial villa identified in the Fogliano key area. It is likely, however, that other later imperial villas were located in this coastal area, as is the case along mostly the entire coast of Tyrrhenian southern Lazio. The GIA team expects that late Roman villas, albeit at the top of the local settlement hierarchy, might not have had the status of other well studied *villae maritimae* on the coast of this part of southern Lazio, such as the villa at **Torre Astura** (OLIMsite 64) and the **villa of Domitian** (OLIMsite 14) on the Paola lake²²¹. Coastal villas are lacking as of yet. Possibly this is caused by absence of survey possibilities or coastal erosion. Alternatively, this lack of evidence for large coastal villas should straightforwardly be seen as a sign of a less active exploitation of the region, compared to the Ostia and Nettuno area²²². A substantial coastal villa does not go unnoticed.

On the northern shore of the Fogliano lake two other sites have been identified. **Rpc site 10566**, FOG201 (OLIMsite 343) has been interpreted as a village because of its size 22500 m² and the building blocks found. This interpretation is uncertain, as levelling activities are probably the reason the finds were spread out over a large area²²³. In the north-eastern corner of the Fogliano key area **rpc site 10557**, FOG102 (OLIMsite 346) is a large farmstead.



Figure 7.9. 4th century Fogliano area.

Diachronic trends

From the 2nd to 4th century

While a growth in settlement intensity has been attested until the early imperial period, the number of sites drops between the 2nd and 4th century. From the survey data, it appears that already in the 2nd century the transformation and decline of the antique landscape may have started. In the 4th century only 3 survey sites remain: the villa *rpc* site 10571, FOG206 (OLIMsite 347)²²⁴, the large farmstead *rpc* site 10558, FOG103 (OLIMsite 345) and possibly the village *rpc* site 10583, FOG218 (OLIMsite 359); on the latter site pottery evidence continues into the 4th century, be it based on wares with a wide date range.

As touched upon, the number of late imperial sites in the Fogliano key area is considerably lower than in the Nettuno-Anzio area, partly caused by the larger effective proportion of the landscape studied during the Nettuno survey project. This discrepancy in research hours, however, does not account for the significant drop in the number of archaeological finds (numbers and distribution) from the early Empire onwards: the survey record provides evidence for continuity on several sites until about 300 AD. From that period onwards, the number of securely dated sites drops considerably.

Two hypotheses have been put forward for this drop in site numbers by the GIA team: the first is a socio-economic and demographic waning of the area into marginal

use. The second hypothesis is a shift in economic allocation: while at first the socio-economic development connected to pisciculture had a positive influence on settlement intensity in the wider Fogliano area, during the late republican and early imperial period, later on these activities may have gradually become concentrated on villa's. With this shift, the economic and demographic focus became concentrated on "larger centres associated with villa's"²²⁵. Indeed, the villa OLIMsite 347 may show the reality of the second hypothesis. This villa shows continued activity until the 4th century, and possibly even later. While other sites loose out, this site seems to grow: according to Elter the villa was extended until the 4th century. Elter saw clear indications that this site was involved in pisciculture. We have to be aware not to draw too firm a conclusion from this villa only: Only a small part of the landscape could be surveyed under often low visibility circumstances (dust). No other (agricultural, fish farming and / or coastal) villas have been found which can confirm this socio-economic relocation.

It is possible that with the increasing flooding of the area (see below infrastructure) the danger of malaria grew: brackish lagoon lakes are natural biotopes for malaria mosquitoes. On the other hand, salt water environments are not. In all, it is difficult to interpret the factor of malaria on living conditions.

The Peutinger map provides clues for the location of two historical sites in the 4th century, which may be located

in the Fogliano key area: **Clostris – Clostra Romana** (OLIMsite 18) and **Ad Turres Albas** (OLIMsite 46).

Clostris / Clostra Romana

The identity and location of the Roman toponym **Clostris – Clostra Romana** (OLIMsite 18) is much disputed. Pliny the Elder is the first to name Clostra Romana, without giving clues to what the place looked like²²⁶. Clostra later appears on all the neo-Ptolemean maps, copies of an originally 2nd century original²²⁷. On the late Antique to early medieval Peutinger map the toponymic variation *Clostris* is depicted.

Most authors thought that Clostra / Clostris was a settlement. Some authors have adopted the idea that Clostra Romana and Clostris are actually were two separate settlements²²⁸. Others, however, thought it likely that both denominations are in fact the same entity²²⁹. I agree with the latter party, for several reasons. First of all, the toponym *Clostris* (OLIMtoponym 17) only appears on the Peutinger map, a chart of which we know that it comprises a lot of copying and distance errors; the interpretation of the toponyms and distances depicted on that map is an intricate one²³⁰. Above all, there is the geo-toponymic factor: the sources locate both Clostra Romana and Clostris near the Fogliano lake area. Brandizzi Vittucci proposed that the settlements of Clostra Romana and Clostris existed simultaneously, located, in close proximity, on the Fogliano lake²³¹. This is doubtful. The current toponymic database shows no similar simultaneous toponyms located nearby in Antiquity. Indeed, [clostr] is a very distinctive toponymic root, with a specific connotation (canal / lock, see below), simply too strong to be used by nearby situated neighbouring settlements. To put it in modern day marketing principles: it would make dreadful town marketing to use similar distinctive names for nearby settlements. On the other hand, given the discussion on the interpretation of the toponyms on the Peutinger map (station or junctions?), and a close reading of the other sources that mention the toponym, one cannot be sure if Clostra actually was a settlement/station. The toponym could also have been a lock and/or a topographical marker for travellers. Below, I will pursue the argumentation of Clostra (and Ad Turres) as a settlement, bearing in mind these reservations.

If one matches Clostra Romana with Clostris as a working hypothesis, what can be said about its location? I would agree with most scholars, who suggest that Pliny's and Ptolemean Clostra Romana was probably situated somewhere on the south side of Fogliano lake. Pliny's description puts Clostra south of the Astura area, after the river Nymphaeus and before Monte Circeo. This description itself directs us to a rather wide geographical

area, somewhere on the southern Pontine coast. On the Ptolemean maps, Clostra is located somewhere near the Fogliano lake. The toponymic root [clostr], however, provides us with more clues. Some authors suggested that the name *clostra* means “locks on a canal”²³²; Others, however, suggested that *clostra* denotes connection canals, in brickwork, used for regulating water for pisciculture²³³.

Both etymological nuances conspicuously point to one particular area: the area between and in the hinterland of the Fogliano and Monaci lakes. Here we find the large Roman build Martino canal. Canalisation work, possibly to lock in fish²³⁴, has been attested here too. The area has a long history of pisciculture activities: epigraphic and historical references to this economic activity in this area are known from the 1st century BC until the 15th century (see below the section 7.I.1.2.3 on Economy, production and trade).

Another argument for locating Clostris – Clostra Romana just south of the Fogliano lake, is the possible crossing at this point of a vital road coming from the east. In her study of the centuriation systems in the central Pontine plain, Cancellieri²³⁵ observed parts of a road west and east of Mesa, the Roman settlement of Ad Medias (OLIMsite 28). As it turns out, this road followed the centuriation pattern in the graben area, in the central part of the Pontine plain, orientated west-east. The tract of this road was still visible in the 30s and on historical maps²³⁶. There was a second such road in situ (OLIMinfra 50), going west from the modern village of La Sega, situated 4 kilometres to the southeast of Mesa on the Via Appia. Cancellieri suggested that both roads might have run all the way from the pedemontana road, crossing the Via Appia (Ad Medias/La Sega), to the coast. In my view, it is feasible that a road station / settlement would be located at the western end of such vital transverse roads. Possibly, these roads were specifically aimed at larger settlements on the coast. To make my point: the suggested position of Clostris / Clostra Romana, south of the Fogliano lake, matches closely with the spot where the northern road might have reached the coast. It could be argued that the presence of “locks on a canal” and associated infrastructural investments and the presence of roads, constituted an economic stimulus that attracted settlement. For the southernmost transverse roads, it is tempting to hypothesise the location of the other Peutinger toponym: At Turres Albas (see figure 7.10 and below in the section on Ad Turres Albas).

Is there archaeological evidence to further specify the location Clostra Romana / Clostris at the hypothetical western end of the northern transverse road? Maybe there is. Brandizzi Vittucci relates the villa finds of Elter with Clostra, somewhere between Casale di Fogliano and Borgo Grappa²³⁷, i.e. probably **rpc site 10571, FOG206**



Figure 7.10. Tentative location of Clostra Romana / Clostris and Ad Turres Albas and possible routes. The map shows the swampy and waterlogged areas (in white) on the 1851 and ONC maps, found until a distance of 4 km inland. The extent of the Roman centuriation in the Pontine plain is demarcated by a striped white line.

(OLIMsite 347). The best candidate for Clostra, if it actually was a settlement, however is the large settlement agglomerate consisting of *rpc* site 10583, FOG218 (OLIMsite 359), and *rpc* site 10585, FOG220 (OLIMsite 354). One may hypothesise that both these sites are part of the built area of Clostris. This site and its surrounding constitutes by far the largest yet found area of Roman finds south of Astura settlement; the finds only date until the 4th century, but only a small part of the (former) large vestiges has been studied.

The idea of an economic and dense population cluster here, however, stands firm: around the possible site of Clostris (OLIMsite 354 and OLIMsite 359) some nearby large Roman farmsteads have been attested, Fogliano survey sites *nr* 204, *rpc* 10569 (OLIMsite 350), site *nr* 103, *rpc* 10588 (OLIMsite 345) and site *nr* 228, *rpc* 10593²³⁸. Other Roman farmstead and outbuilding sites are situated slightly further away (e.g. Fogliano survey sites 208-216, 002-003) at the mouth of the Rio Martino.²³⁹

Additional argumentation for a possible identification as Clostris is found in the natural favourable location of the site: between the lakes and on a higher position on the Aeolian sandy bodies and the Borgo Ermada beach ridge²⁴⁰. Its position near the canal makes it a perfect match for the clues, discussed above, in the toponym of [clostr]. The pre-*bonifica* ONC maps (Map 51) might give us a clue why this site might have been chosen for settlement purposes. Indeed, ONC map M6 shows that the

assumed location is strategically well situated: at the end of the Martino canal, on the western most available hill, above and between the marshy and waterlogged areas.

It would be interesting to investigate further the site, in order to see if both indeed *rpc* site 10583 and *rpc* site 10585 are part of one larger settlement. In further on-site study, we can get a better picture of size and chronology of the site, and of the nature of the many structures²⁴¹.

Ad Turres Albas

The status of Peutinger toponym **Ad Turres Albas** (OLIMsite 46) is still unknown. Possibly it was a road station evolving around a (coastal light) tower, given the toponym [turres] (OLIMtoponym 18).

Its location has been studied before. Some have positioned it on the above described cluster of activity²⁴². Talbert (2000) and Cassatella (2003) locate Ad Turres Albas at the northern tip of the Lago di Caprolace. Cassatella reports some structures here²⁴³. This location essentially is based on the hypothesis that Peutinger Clostris is located between the Fogliano and Monaci lake; the distance from there to the northern end of the Caprolace lake is roughly the Peutinger distance of 3 miles.

One may accept Talbert's and Cassatella's hypothesis on the position of Ad Turres Albas on the Caprolace lake, on the basis of a further argument: a road coming from the east. As touched upon in the discussion on Clostra Romana, parts of the road west of present-day

La Sega were still visible in the 1930s and on historical maps. If we accept the idea that this road continued up to the coast, it seems conceivable that a road station was situated at the point where these tracks reached the coast (see map)²⁴⁴. Indeed, this is an intriguing constellation: it is not improbable that both stations (?) on the Severiana, Clostris/Clostra Romana and Ad Turres Albas were both connected with the plain by parallel roads, following the orientation of the Roman centuriation in the plain. What is more, the hypothetical western ends of these roads (Clostra and Turres?) at the lakes are roughly 3200 meters apart (2,3 Roman miles), as the bird flies. This distance complies roughly with the distance indicated on the Peutinger map. If we take the difficult terrain into the equation, which might have caused the tract to swerve around the marshy areas, the 3 miles absolute distance between these farthest points is feasible. Again, this remains a hypothetical (but valuable) argument, given the challenges in interpreting the distances on the Peutinger map and assumptions on western extensions of the two roads in the Pontine plain.

On the map, I have tentatively pinpointed Ad Turres on the north side of Caprolace lake, in line with Cancellieri's road from La Sega to the coast. Cassatella near this spot, at Porto di San Nicola (still visible on ONC map N7), found an area with tile and bricks, possibly connected to the site of Ad Turres Albas. This is a 200 x 400 m plateau between 6 and 10 meters above sea level, a dry location, just on the north tip of the (current extent of the) Caprolace lake. Unfortunately, these finds have not been dated. Future fieldwork will shed more light on the extent and dating of this site²⁴⁵.

To conclude on Ad Turres Albas: there is no conclusive evidence to help identify the location, position in the settlement hierarchy and function of the toponym Ad Turres Albas, depicted on the Peutinger map. All we know is that it was a toponym on the coastal road, possibly to be identified with the Via Severiana. Then again, we have new clues that allow new vigour in the search for its exact location: the combined insights of local archaeological field study (Cassatella), new appreciation of old transverse roads and the new arguments on the Peutinger distances.

From the 4th to the 7th century

Only a few sites show sherds that date to the 4th to 7th century: on **rpc site 10569**, **FOG204** (OLIMsite 350), probably a large farmstead, one fragment is possibly 6th century, located nearby OLIMsite 347 (see figure 7.9)²⁴⁶. As touched upon before, the villa site OLIMsite 347 has yielded one possible 7th century ARSW fragment.

These are meagre results. The GIA team recognised that it might have overlooked pottery from this period, because of the earlier lacking knowledge of early to high medieval coarse ware pottery. The researchers, however, believed that the sharp decline in the number of sites since the mid-imperial period, does reflect the situation in late Antiquity²⁴⁷.

In coastal Tuscany, villas connected to pisciculture activity may have seen economic and demographic continuity throughout late Antiquity. There is no conclusive evidence for this in the Fogliano key area. The presence of such late Roman villas, focussed on pisciculture, has yet to be substantiated. The aptitude of the area for pisciculture, however, is historically well defined, as not only the Roman but also the high medieval sources show. On the other hand, it has yet to be confirmed if these activities saw continuity from the later Roman period to the high middle ages.

Church of S. Donato: a 6th century phase?

There is only one source in the 5th to 7th century on the Fogliano key area: a *privilegio* of Pope Gregory the Great dated to 594. The source refers to a “lacu foliani cum ecclesia sancti donati et cum turre cum colonis et colonabus suis”²⁴⁸. From the description, it becomes clear that the **church of S. Donato** (OLIMsite 113) was located near the Fogliano lake. Cecere²⁴⁹ thought this source is possibly a later falsification, but cannot give a more specific date. There is no more contemporary evidence for this church. The later archaeological record, however, provides us with more, possibly relevant, clues: an 8th century relief with cross has been found on the south side of the Fogliano lake. Its exact find spot is unknown²⁵⁰. In the 10th century, a source in the Register of Subiaco refers to a *locus* and a *castrum* on the lake of Fogliano “seu caput lacis in integris cum ecclesia sancti donati” (977 AD)²⁵¹. The description of *caput lacis* locates the 10th century *locus* and *castrum* on the head of the lake, almost certainly the south side: the caput of the Fogliano lake is its south side, i.e. seen from Rome.

To conclude: in all probability, an early to high medieval church functioned at the south side of the Fogliano lake. It remains unclear, however, if a church to S. Donato was already functioning in the 6th century, given doubts about the written evidence. It certainly was in the 10th century²⁵². There are no archaeological clues to where the tower mentioned in the 594 AD source may have been located.

In conclusion on the 4th to 7th century

While there is good reason to assume that activities connected to pisciculture saw continuity near or on centres associated with villas until the 4th century, it is feasible that the Fogliano area became largely marginalised

afterwards. Although coastal villas, and other possible indicators of continued late Roman activity, may be found in future research, the current dataset paints a picture of a drop into marginal use: first of all, the number of survey sites with a 5th to 7th century phase is small; although late Roman and medieval wares may have been overlooked by the surveys teams, the signs are unmistakable. Even after a restudy by De Haas of the ARSW²⁵³, almost no 5th to 7th century sherds have been attested. Another indicator is the lack of historical sources. There are no signs of imperial ownership or donation in the area. Most strikingly is the absence of ecclesiastical activities in the 4th to 7th century. While in all other key areas the papal court and individual Roman churches are active in acquiring lands, founding sees and building churches, there are no secure signs for this in our key area. The only possible exception is the source of 594, which refers to a church of S. Donato. This source however, may be a later falsification; if false, its true date of origin is not discussed in the literature.

The only location where some kind of clustering of continued activity may be presumed, is the location of the Roman cluster described for the 2nd century, tentatively the position of Clostris / Clostra Romana. Here we have indications for pisciculture, which in other areas on the Italian peninsula acts as an indicator for continued activities. In addition, the possible 6th century church of Donato and its possible 10th century successor, with

settlement on the southern *caput* of the lake, may be signs of continued late Antique and early medieval (ecclesiastical) activity. The 8th century cross found here may be connected to this activity. Nevertheless, we cannot be sure that a church of Donato saw continuity between the 6th and 10th century. The same 10th century source mentions ruins close to the church of Donato and the settlement: “et criptis cum parietinis destructis”. Possibly these ruins were connected to an earlier settlement on that spot.

7.1.1.2 Infrastructure

It may be assumed that the fish farming activities expanded in republican and early imperial times. Because of these expansions, infrastructural measures were taken from republican times onwards, to control water levels and the salinity of the water²⁵⁴. An evident Roman intervention in the hydrography of the coastal landscape is the Martino canal, running from the Via Appia to the coast. This canal was probably already constructed in republican times, dug through the horst system²⁵⁵. Through the Martino channel, waters would flow into the coastal watershed area right through the horst area. Some scholars say that it was not only built to drain the graben marshes in the Pontine Plain, but also to supply the lagoons with fresh water, necessary for sweet water fish farming activities²⁵⁶. The walls along the Rio Martino, observed in the 19th century, might have functioned as canalization works to



Figure 7.11. Infrastructure in the Fogliano area, 2nd to 7th century AD. The dashed black lines are the reconstructions of roads. The blue water drops denote (possible) locations of contemporary historical-toponymic sources for water regulating works: the toponym [clostr], and the 1st century epigraph noted by Elter on site 347. The original length of the Roman canal (later Rio Martino) is unknown.

facilitate pisciculture in the lakes²⁵⁷. Possibly the Roman Rio Martino did not (originally) discharge into the sea, as it does nowadays, but only partly into the Monaci lake and partly dispersing into the wider area, thus causing the area between the two lakes to become marshy²⁵⁸.

We also have historical-epigraphical evidence for interventions in the hydrography. The 1st century AD inscription found by Elter (1884) is a case in point: near the villa of Archi di San Donato (probably **rpc site 10571, FOG206 - OLIMsite 347**), a Roman inscription has been found. This inscription orders a certain Phaenippus to construct, or look after, the water management installations in the vicinity. According to Cecere, these installations relate to the Martino canal and pisciculture²⁵⁹. Interesting, too, is the notion that the toponymic root [clostri] in *Clostris / Clostra Romana* may refer to fish farming works (see above).

The material and written evidence for works relating to water management in the area are thus strong. The accumulated archaeological, historical and environmental evidence, leaves no doubt on the reality of a fish farming industry at the Fogliano coast. The aptitude of the area for fish farming, also becomes clear from several high medieval sources. Between 1201 and 1475 the rights to cultivate fish in the Fogliano lake were confirmed to several ecclesiastical institutions, such as the monasteries of S.Quiziano, S.Eufemia and S.Maria di Grottaferrata and a few Roman *basilicae*²⁶⁰. A late medieval source still records a *Piscaria Grecesco* (Greek monks) possibly connected to the Lago dei Monaci²⁶¹. Although it has yet to be confirmed if these pisciculture activities were continued from the later Roman period to the high middle ages, the recurring evidence for pisciculture activities in the Fogliano area constitutes a fine example of the potential of this research to study long term environmental possibilities and constraints of the landscape, and connected socio-economic strategies.

The lake area seems suitable for transport over water. Indeed, in the area around the Fogliano lake there are still local toponyms that may indicate ship transport. These toponyms and the related activity may go back to Roman times²⁶². More to the south, there are indications that transport between the coastal lakes took place in Roman times. Some scholars claimed that the Romans dug a canal between the Pontine lakes. Begun by Nero, this massive *Fossa Augusta* project might have required the digging of canals between the Caprolace, Paola and possibly even the Monaci and Fogliano lakes²⁶³. Conclusive evidence for such a canal between the Pontine coastal lakes, however, lacks as of yet, at least between the Fogliano and Monaci lakes. If such a connection between these lakes really existed, the Martino canal is unlikely to have ran until the

sea: it would then have had to cross the *Fossa*. On the possible *Fossa Augusta* tract, and on the individual lakes for that matter, a number of harbours must have functioned. For such harbours all historical and archaeological confirmation lacks, at least in the Fogliano area. No evidence here has been found for sea harbours as well.

Roads

The RPC team has found evidence for roads on sites north of the Lago di Caprolace²⁶⁴. The road-deck remains found at the lake might have functioned as boat ramps, to get the boats out of the lake²⁶⁵. A Roman road might have run nearby the villa 206, **rpc 10571 (OLIMsite 347)** as indicated by a local farmer. This observation has not yet been confirmed²⁶⁶.

Several transverse roads have been hypothesised running eastwards from the Fogliano area across the Pontine area. Egidi²⁶⁷ mentioned a possible transverse road from the northern shore of the Fogliano lake to Tripontium; for this idea, there is no archaeological evidence.

The possible Roman transverse roads that might have run all the way from the *pedemontana*, crossing the Via Appia (Ad Medias/La Sega), to the coast, have been treated in the discussion on Clostra Romana / Clostris and At Turres Albas (above, 7.I.1.2.1). It suffices to state no remains of roads have yet been found in the Fogliano area.

The trajectory of the coastal road Via Severiana in this zone, i.e. from Astura southwards, has been the subject of a firm scholarly discussion. The current study may shed some new light on this discussion:

Severian road from Astura to the Pontine lake area

Some earlier research suggests that the road from Astura to Clostris ran along the dunes that separate the coastal lakes from the sea²⁶⁸. Indeed, this is the shortest route from Astura to the south. Others, however, thought it probable it ran land inwards from the lakes because of the obstructing lagoons and marshes at the coast²⁶⁹.

Indeed, there is much to say for a detour inland: the many (seasonally) waterlogged areas along the coast must have made maintenance of a road on the coast a challenge. If the Severiana had an inland detour, it had to go around the marshy area along the river Rio Cicerchia, extending 1500 meters north-eastwards from the Fogliano lake (see figure 7.10)²⁷⁰. One may get an idea about the extent of these swamps in earlier times, by studying the pre-*bonifica* maps of the ONC (Map 51)²⁷¹. In Brandizzi Vittucci's reconstruction, the Severiana road makes an even larger detour, turning inland from Anzio, and swerving in a large curve around the lakes towards the Pontine lake area. This very large detour seems economically

inefficient for such a vital long-distance road, and would almost certainly make it unprofitable against shipping-traffic. What is more, in her reconstruction, the toponym of Astura was missed out on. The coastal route on the other hand, should not be ruled out. As the dunes are not very high, 8 meters at maximum, the shallower dune areas at the inside of the beach ridge would have made a good setting for a road. Maintenance might have been difficult, with sand being blown off continually from the coastal dunes, but not impossible. If indeed such a coastal tract existed, the road probably was not paved in these unstable and marshy areas; the constantly changing dune and lagoon environment may have meant that its tract may have had to be relayed from time to time²⁷². The Romans, as we know, were keen on sustainable paved roads for long-distance transport as a vital element in their military and economic success. The question is whether they would have settled for a dirt road on such a vital route. The answer is probably: the idea of an unpaved road is not unthinkable, as many major routes were not paved for the whole course, like the Via Appia²⁷³.

Is there some reality in a road on the dunes ridge of the Pontine coast? On most historical maps, a coastal route along the dunes is absent at the Fogliano, Monaci and Caprolace lakes; only the Paola lake shows a road along or on the coastal dunes, among others on the 1851 maps. On the ONC maps K2-K3-L4 and M5, however, clearly three (foot)paths are visible running on the land-side of the roughly 100 meters wide strip of beach ridges separating the sea from the Fogliano lake. Whether or not the coastal dunes were the tract of the long-distance (Severian) coastal road, for local travel a coastal road or a path is feasible.

Now, for both the coastal and inland tract there are good arguments. I specifically did not yet enclose the discussion on the Peutinger distances in my study to locate Clostra Romana / Clostris (see above). If we use the hypothetical location of Clostra Romana / Clostris between the Fogliano and Monaci lakes, it does not help settling the discussion between the coastal and inland route. On the Peutinger map, Clostris is situated on the Severiana, 9 Roman miles (12411 meters) from Astura and 3 miles (4137 meters) from Ad Turres Albas. The coastal route takes 11 miles from Astura to reach the Rio Martino. The inland route around the marshy areas takes at least 12 miles (see map). Consequently, both the inland and coastal routes are longer than the 9 miles indicated on the Peutinger map, with the coastal route coming closest.

To conclude: The discussion on the route of the Via Severiana south of Astura, is still not settled. No traces of a road have been found yet in the dunes, nor inland.

7.1.1.2.3 *Economy, production and trade*

In the Fogliano survey project during the RPC project, a growth in settlement intensity has been attested during the late republican and early imperial period. As explained before, this growth may have been associated with the expansions of pisciculture and correlated activities, such as fish processing, storage and trade. In that period of time there are several indications for infrastructural works to control water levels and the salinity of the water.

At first the connected socio-economic development had a positive influence on a wider area. Later on, these activities may gradually have been concentrated in economic and demographic centres connected to villa's²⁷⁴. The possible village of **rpc site 10583, FOG218** (OLIMsite 359) may have been such a centre; this village may have been the main market for fish farming related activities and for agricultural and pottery products from the wider Fogliano area (see below here). The 'service industry' (Van Leusen) to the owners of the villa's may have been located here as well²⁷⁵. As touched upon above, no other villas except for OLIMsite 347 have been found to confirm this socio-economic relocation. The lack of evidence for large coastal villas, usually associated with fish farming activities, has been seen as a sign of less intensive economic development of the area, compared to the other coastal areas such as the Ostia and Nettuno area²⁷⁶. It is thinkable inland pisciculture activity continued throughout late Antiquity, in analogy with coastal Tuscany, where pisciculture is an enduring strong economic factor. Nonetheless, there is no conclusive 5th to 7th century evidence for this; as noted, in the high middle ages, however, the evidence is strong²⁷⁷.

Next to the pisciculture activities a substantial pottery industry must have been active in the Fogliano area, utilizing the clay banks on the coast. These banks overall provide high quality clay. Except for **rpc site 10566, FOG201** (OLIMsite 343), a possible village, however, no mid or late imperial sites show kiln activity.

Other activities on the coastal and lagoon areas may have been lumbering²⁷⁸, hunting, fishing, and possibly salt extraction²⁷⁹. Non-breeding fishing must have taken place in the lakes, as finds of fish hooks and net weights in the area show²⁸⁰.

Additional economic activity was provided by winter pasture. The lagoons of Fogliano and Caprolace probably were the objective of transhumant groups, as these were the most suitable areas for winter pasture in southern Lazio, second only to the Astura valley; it is feasible that these activities, for which evidence exists during republican and imperial times, continued into late Antiquity and beyond. Transhumant groups yielded extra economic activity, especially during the winter²⁸¹.

A range of agricultural activities took place in the Fogliano key area as well. The beach ridges and aeolian part of the Borgo Grappa land system were suited for olive cultivation in Roman times²⁸².

Whether these economic activities were continued, and until when, after the structured Roman exploitation of the plain (and drainage) failed, is unknown. In the current study period, the Pontine plain may already have started to fall into a desolate state, because of drainage problems related to environmental deterioration. It is feasible that the Fogliano area, like other low lying coastal areas on the peninsula, from the late Roman period suffered from an overall increase in alluvial depositions. These extra depositions were caused by deforestation in the mountains, causing the swamping of this area (and other coastal lagoonal areas) to accelerate²⁸³. Van Joolen's land reconstruction of the Pontine landscape, showed a new phase of rapid colluviation in the eastern Pontine plain area between 400 and 800 AD²⁸⁴. Van Joolen maintained that this was likely caused by human neglect. It is unclear whether the coastal lagoonal areas suffered the same rate of colluviation.

7.1.1.2.4 Religion and worship

No Roman temples or sanctuaries have been found in the Fogliano key area. Apart from the possible 6th century church of S. Donato, there are no signs of ecclesiastical activity here in the 2nd to 7th century. The first secure evidence for the Christian faith is the above discussed 8th

century relief with cross, found on the south side of the Fogliano lake.

7.1.1.2.5 Geo-politics: power relations, struggle and control strategies; secular activities

Geo-political evidence relating to the Fogliano key area was not found in the available sources. Defensive structures are absent.

7.1.1.3 Ostia and the coastal area to the south, from the 3rd to the 7th century

7.1.1.3.1 General site distribution: monitoring of (change in) human activity

The 3rd century: the town of Ostia Antica, villages and maritime villas

At the start of the current research period, the settlement constellation in this key area was geographically focused on the city of *Ostia Antica* (OLIMsite 392) and the main road going southeast along the coast (see map). Ostia Antica is situated on the mouth ([Lat] Ostium) of the river Tiber. Functioning as the harbour city of Rome, Ostia in imperial times was densely populated and had a great diversity of buildings. The population at this time has been characterised as mixed and "international"²⁸⁵. Its relationship with Rome was tight, and for a long time Ostia was governed from Rome; Ostia got its own administration only in the 1st century BC. At first, the natural banks of the river were used as port, but in the 1st century



Figure 7.12. 3rd century Ostia and coastal area. An x marks a necropolis.

AD an artificial harbour was built, called *Portus*, to the north of the city²⁸⁶. The new docks were constructed to give shelter to larger ships. In the 2nd century, Ostia had its hey-day, and most of its buildings date to that century. Although the 3rd century saw still important building efforts²⁸⁷, this century is a turning point in the history of Ostia. The fortunes of the town began to wane (see below).

The main road going south from Ostia is often referred to as *Via Severiana* (OLIMinfra 3). The southbound roads in the vicinity of Ostia were one large arrangement of villas, farms and several rows of tombs²⁸⁸. Along the Severan road and smaller local roads southwards, these tombs formed a long-drawn out necropolis, reaching from just south of the *Porta Laurentina* to the swamp at *Canale dello Stagno* and to the east of it.

Along the *Via Severiana* several maritime villas functioned in the 3rd century. The first villa south of Ostia Antica is the so-called *villa of Perseus* (OLIMsite 227). As of yet, this suburban villa is the only villa site which yielded 3rd century or later remains close to Ostia. Before that century, many more, at least five must have functioned between Ostia and the Roman bridge over the *Canale dello Stagno*. From earlier research, it is unclear what function these villas had. It should be made clear that systematic (survey) study of the area just south of Ostia Antica has not yet been undertaken; many villa sites here are yet to be interpreted and dated more precisely. It is unlikely that all these villas had been abandoned before the 3rd century, certainly in view of the later evidence found on coastal villa sites elsewhere in Tyrrhenian southern Lazio and in Tuscany, and the 4th to 10th century archaeological contexts of *Pianabella* (OLIMsite 589).

The Ostia key area provides us with another, geographical, bias: The immediate inland parts of the key area, east of the *Via Severiana*, are largely unavailable for archaeological study. Near Ostia, the area is heavily urbanized, and to the south the presidential estate of *Castelporziano* stretches out into the hinterland. Consequently, the existence of inland activities, such as possible *villae (rusticae)*, cannot be studied.

Further to the south, along the *Via Severiana*, several sites have seen more scrutiny²⁸⁹. Here, a line of 7 late Roman maritime villas (complexes²⁹⁰) have provided evidence later than the 2nd century. Not all these sites have been extensively excavated. On the 1st to 3rd century site of *Villa 'del confine', La Chiesola* (OLIMsite 310) only basic archaeological field work was performed. The *Villa di Castelfusano, 'of Pliny'* (OLIMsite 109), however, has had much historical and archaeological attention. According to Lafon²⁹¹, this is a classic example of a *villa maritima* with residential, thermal and productive areas.

In this coastal area, two larger habitation centres have been identified: the *Vicus Augustanus Laurentium* (OLIMsite 229) and the area around *Tor Paterno* (OLIMsite 139). Both sites have yielded considerable Roman finds and have been interpreted as settlements or villages. The settlement site of *Vicus Augustanus Laurentium* (*vicus [Lat] is village*) has been convincingly identified as the village described by Pliny the younger. The excavators of *Tor Paterno* describe a 700x200 meters "urbanised area"²⁹². In the direct area three *thermae* (two of the 1st to 4th century, one 2nd century), two unknown edifices, an aqueduct, two villas (one generally Roman, one 1st to 4th century AD), a cistern and a *nymphaeum* have been located.

Although the discussion on its location is still not definitively settled, the *communis opinio* locates the historical *Laurento / praedium Laurentum / Civitas Laurentum* (OLIMsite 49) in the wider area of *Tor Paterno*, possibly extending towards the *Vicus Augustanus Laurentium*²⁹³. Both large excavated sites, the *Vicus* and *Tor Paterno*, may have been part of the imperial domain (*praedium*) of *Laurentum*, because of their size and stature, and, the *vicus*, by name. Several Roman sources, among others *Herodian*²⁹⁴, refer to an imperial domain here. The *Liber Pontificalis* (314-335) records the *civitas* (village) *Laurentum*²⁹⁵. Both the Antonine and Peutinger map bring up the toponym *Laurento*, very probably denoting the imperial domain²⁹⁶.

For the location of *Laurento* the relatively reliable Antonine itinerary (4th century AD) may be used. It puts *Laurento* at 16 miles from Rome; indeed the minimal distance, via the known Roman roads from the Aurelian walls to the coastal area near *Tor Paterno*, is 16 miles. The distance given on the Peutinger map, however, is wide off the mark, 16 miles from Ostia Antica. The challenges in interpreting the toponyms on the Peutinger map, however, are well noted²⁹⁷. The distance from the next stop on the Peutinger, *Lavinium*, identified with *Pratica di Mare*, however, is spot on: 6 miles from *Tor Paterno*²⁹⁸.

Although situated outside the Ostia research area, the historical settlement of *Lavinium* (OLIMsite 47) is treated here. The reason for this is the important role this settlement (*Pratica di Mare*), plays in the late Roman settlement configuration along the coast, and in the argumentation on distances on the Peutinger map. *Lavinium* shows up on the 4th century itineraries. For a long time the identification of *Lavinium* was uncertain, but it has now been accepted that *Lavinium* was located at *Pratica di Mare*²⁹⁹. Here, late Roman (4th century) thermal baths were found, east of the current *borgo*; these large residential facilitating structures point to a larger settlement nearby³⁰⁰. Earlier, *Lavinium* had tentatively been located near *Campo Selva*, based on the Peutinger distances³⁰¹. As discussed, these

distances are not always reliable. The distances on the Antonine itinerary fit the identification of Lavinium with Pratica di Mare. On this itinerary, Lavinio is situated 16 miles from Rome³⁰². This distance complies roughly with the actual 17-19 miles from Pratica to Rome, depending on the route, following either the modern Via di Trigoria or the modern Via di Decima (Laurentina). This distance, at least, is more correct than the route Rome-Campo di Selva, which measures 20-21 miles, depending on the route.

Diachronic trends

Late Antique Ostia and Portus have been the subject of many recent archaeological studies³⁰³. It is clear that Ostia and Portus remained the dominant settlements in this area in the late Roman period and afterwards. From the 3rd century onwards, however, Ostia was in transition and, in many ways, decline³⁰⁴. The site may have experienced the general downfall in socio-economic activities in the Late Empire. Other possible factors are the silting up of the harbour, the (correlated) growing danger of malaria in the area during the Empire³⁰⁵, and the success of the new port at Portus. Whatever the reasons behind it, the change in the appearance of Ostia is apparent. Many buildings that had become victim of earthquakes³⁰⁶ and a tsunami (possibly in 275)³⁰⁷ were not repaired. Another important indicator of declining activity is the number of graffiti³⁰⁸. In the 4th century, however, Ostia's economy was shortly revived. This is among others visible in the increase in new building activities, often done by reusing older materials, and by the number of (official) inscriptions³⁰⁹. The theatre was restored as well³¹⁰. From this period onwards until Theodoric, most new brickwork and repairs were done in *opus vittatum*.

Instead of a busy trader's hub, Ostia became a site of many luxurious houses (*domus*), of which many were constructed between the late 3rd and the beginning of the 5th century. Possibly a number of these houses belonged to aristocrats³¹¹. It is unclear what the function of these rich houses was. Some suggest that Ostia had become a "villaggio-dormitorio" for the officials connected with the grain administration in nearby Portus³¹². Possibly some kind of landed ownership was executed (from Ostia?) in the nearby countryside: the leader of the pagan aristocracy, Symmachus, owned a farm near Ostia in the late 4th century³¹³. The developments in the 4th century can be summarised by the words expansion and decay: some parts of the city fell into ruins from the period, while others were actively reorganised³¹⁴. From that period onwards, activities in Ostia more and more became focussed on the areas to the west and the south, away from the river³¹⁵.

Portus became an independent harbour city since Constantine and gradually, in the 4th and 5th century, took over Ostia's role as main port for Rome. By the 5th

century, most of the old city of Ostia began to fall in ruins. In the 5th century, the aqueduct in Ostia Antica ceased to function, probably the dead-blow for the Ostian community³¹⁶. In the late 5th century, most inhabitants of Ostia must have lived in a ruinous cityscape, and we find many burials within buildings that had already collapsed. At that period, Portus was still going strong.

Continuity in the ancient town of Ostia Antica is certain, in some kind of contracted settlement in the southern parts of the urban area. Temporarily a new nucleus may have developed³¹⁷: in the 5th or 6th century the theatre was converted into a small fortress by blocking the arcade on the ground floor³¹⁸. Later, until the final abandonment of Ostia, probably in the 9th century³¹⁹, the village probably shrivelled into a small area around the Constantinian Christian Basilica in the southwest part of the urban area³²⁰. Archaeological evidence in Ostia has been found dated until the 9th century³²¹. For the continuity of Ostia there is also historical evidence: founded in 313³²², the bishopric of Ostia is known from all Church councils since early 4th century. In the 9th century the *Liber Pontificalis* records that the settlement in the ancient town was officially abandoned for the stronghold of Gregoriopolis (OLIMsite 393), 700 meters to the north east. Ostia - Gregoriopolis, is an area of continued regional significance in the early and high middle ages. Its position on the Tiber river, the continuous lifeline for the city of Rome, is the largest factor in its continued importance.

The chronology of the **Basilica di Pianabella** (OLIMsite 392) is consistent with, and enhances that of Ostia. Situated 300 meters south of the Porta Laurentina, this early Christian church was erected at the end of the 4th century or start of the 5th century, on a former pagan necropolis. It probably was erected as a family cemetery church under private patronage, with a cult focused on a martyr. Like elsewhere, for example near Rome and Milan, this suburban church became a new focus in the Christian social and religious topography of the town, as Torres describes. From the funerary evidence alone it is unclear how and where the Christian community connected to the church was living; Torres suggested that the building of the church led to the residing of a Christian community in the suburbs of Ostia³²³. It saw modifications in the late 6th, early 7th and first half of the 9th century. The church was abandoned in the 10th century³²⁴.

More churches were built in the 4th century in the Ostia key area: in Ostia, obviously³²⁵, and on the site of villa of **Villa di Castelfusano**, 'of Pliny'.

Along the coast south of Ostia, several maritime villas remained in use in the 4th and 5th centuries. In the 4th century, only one of the eight 3rd century villas along the



Figure 7.13. 5th century Ostia key area. A dot depicts a site with activity in this period (red certain activity, yellow possible); a star denotes a church.

coast disappears from the archaeological record. In the 5th century the drop off is stronger: at the end of that century two villa sites are certainly occupied, the vicus and Tor Paterno, and two possibly, the Villa di Castelfusano, 'of Pliny' and **villa di grotte di piastre** (OLIMsite 228). In the 6th and 7th century, the villa complex / settlement of Tor Paterno is the only with certain archaeological evidence. Again, one should stress that in-depth study of many of the villa sites is still awaited.

The **Villa di Castelfusano, 'of Pliny'** (OLIMsite 109) traditionally saw much scholarly attention because of the echo of its alleged owner. Excavations took place in 1933, 1968 and 1989-1992. On this site, occupation seems to have been continuous until the 4th or early 5th century. In the final phase of the villa, a small paleo Christian church was erected on the south-east side of the enclosing wall³²⁶. This church is clearly connected to the (former) villa site, as it is located within the walls of its perimeter. The existence of a church might say something about continuity on this site. Possibly there is parallel with Tuscany and other part of Italy, where contemporary internal reorganisation of villa sites has been attested³²⁷; in coastal Tuscany these villa sites were often supplemented with the building of a church³²⁸. Interestingly, the continued life of the maritime villas in Tuscany was often supported by pisciculture, for which at Villa di Castelfusano also evidence has been found³²⁹.

At the nearby **Vicus Augustanus Laurentium** (OLIMsite 139), the *opus vittatum* brickwork, probably 4th century or later, used in a later phase of the *thermae*, may also be an indicator of a similar internal reorganisation (see Anzio-Nettuno key area³³⁰). To conclude, the site of Vicus Augustanus Laurentium is interpreted as a settlement with continuation until the 5th century AD³³¹. The site was reoccupied in the high middle ages (12th or 13th century) by a small fortified settlement, with a tower controlling the road³³².

At **Tor Paterno** the evidence for occupation after the Roman period is abundant. The contexts in the *thermae* show an early to high medieval reoccupation phase, after a short abandonment in late Antiquity³³³. It is tempting to see a kind of restructuring or the development of a contracted village in this. Too little archaeological details have been published to make a solid case of this idea. The excavators believed that the site saw continued occupation³³⁴. This is corroborated by the many (unpublished) wares, of which a few are visible in the museum of Castelporziano³³⁵. From the 12th century, the first historical reference to *Paterni* is known.

To conclude: late Antique village life shows some vigour in this area, at the vicus, at Tor Paterno and possibly at the **Villa di Castelfusano**. At Pratica di Mare (Lavinium) the end of the settlement came in the 5th century AD, possibly caused by an earthquake³³⁶.

In the 4th and 5th century, Church institutions acquired their fair share of the Ostian hinterland. As will be treated below in the paragraph on religion, church ownership in the Ostian hinterland was consolidated from that period onwards.

7.1.1.3.2 Infrastructure

Ostia Antica was not only connected with Rome by river, but also through the Via Ostiense. From Portus, situated north of the Tiber, two roads led to Rome: the Via Portuensis and Via Campana. The area immediately south of Ostia had an intricate orthogonal system of roads oriented north-west / south-east, probably built under August³³⁷. As touched upon above, the main road crossing the area is the Via Severiana³³⁸. As is shown on several occasions in this study, the actual tract of this road is difficult to reconstruct. Only near and south of Ostia, remains have been found (see picture). A bridge of the Severiana is known in the Ostia area, crossing the former Roman outlet of the inland swamp to the sea, nowadays canalised as Canale dello Stagno³³⁹. From *epigraphical evidence we know the bridge was restored* in 284 AD: “pontem Laurentibus adque Ostiensibus olim vetustate collabsum lapideum restituerunt” (“For the people of Laurentum and Ostia they restored with stone the bridge that had collapsed in the past, because it was old”)³⁴⁰. The bridge was destroyed in 1943³⁴¹.

From roughly Tor Paterno (Laurentum?) we lose track of the Via Severiana. From Laurentum the next tract on

the Peutinger Severan road is Laurento – Lavinium, 6 miles. Lavinium is probably Pratica di Mare (see above). As touched upon above, this distance between the proposed Laurento (Tor Paterno and surroundings) and the proposed location of Lavinium (Pratica di Mare) exactly complies with the Peutinger 6 miles³⁴². In sum, it seems possible that, coming from Laurentum, a detour from the coast was taken towards Lavinium. This deviation might have had a practical physical geographical reason too: in the marshy coastal area, nowadays drained as *bonifica Campo Selva*, maintaining a road must have been difficult indeed. Natural marshes and lakes make such a road improbable. These areas between Tor Paterno and Tor S.Lorenzo were already mentioned in Strabo for example.³⁴³

From Pratica di Mare it is unclear where and if the Severiana joined the coastline again before Antium. It either returned to the coast, or partly followed the Via Laurentina and the Via Ardeatina. There are indications that the road from the Pratica area headed for the vicinity of S.Lorenzo and from there to S.Anastasia; in both areas basalt blocks have been found³⁴⁴, 1-2 km inland³⁴⁵ (figure 7.14).

The restoration of the bridge is the last historical reference to the Severiana. There are no archaeological indications until when the Severiana, or the other roads, remained in use or were maintained.



Figure 7.14. Roman to early medieval road network with Severan alternatives (white striped lines).

One other contemporary road has been reconstructed in the Ostia key area, the **Via Laurentina** (OLIMinfra 75), which may have headed straight to the vicus at the coast³⁴⁶ (see map), or at least had a bypass to this area. A road from Rome straight to the coast is to be expected, given the importance of the area to Rome; its tract, however, might just the same have headed for the area around Tor Paterno (Laurentum). No evidence has yet been found to prove either hypothesis.

7.1.1.3.3 *Economy, production and trade*

Economically, **Ostia Antica** seems to have gained some strength during the 4th century, although its former economic glory of the 2nd century never returned. This is visible in an increase in building activities. Portus, an independent harbour city since Constantine, in the 4th and 5th century took over Ostia's role as main port for Rome³⁴⁷. Instead of a busy trader's hub, Ostia Antica became a site of many luxurious houses until the 5th century. Portus on the other hand, remained a large economic main port until the 6th century, when it too dwindled because of the collapsing economy and the attacks of the pillaging troops on their way to or from Rome. The Ostian area however, would remain frequented by traders and travellers. The area remained involved in pan-Mediterranean trade networks between the 4th and 7th century, as the archaeological (pottery) evidence in Ostia and Pianabella shows³⁴⁸. The port of Ostia would receive overseas goods until at least the 8th century³⁴⁹.

Some parts of Rome's northern hinterland were cut off from direct exchange relations with the City at some point in late Antiquity³⁵⁰. In the Ostia key area things turn out differently: the historical (bishopric) and archaeological (ceramic³⁵¹) evidence shows that Ostia - Pianabella and probably the whole coastal area to the south must have had an unbroken exchange relation with Rome throughout late Antiquity and the early middle ages³⁵².

Ostia was not only a key port for Rome, it was also a centre of salt production: from salt-pans (*salinae*) to the east and north of the city salt had been extracted, possibly already since the Middle and Late Bronze Age. This salt production seems to have continued through the early and high middle ages³⁵³.

It is unclear what economic activities took place on the maritime villas with their large residential and luxurious areas. The villa of Perseus was identified as a *villa maritima* by Lafon³⁵⁴. It is feasible that this suburban villa might have directly served the city with supplies of sorts. The Villa di Castelfusano ('Pliny') was involved in pisciculture; in analogy with Tuscany this might have been the case on more villa sites. Unfortunately, the possible (agrarian) inland villas cannot be studied, as the inland

parts of the key area are largely unavailable for archaeological study.

Two *fundi* (farms) in the immediate north-eastern hinterland of Ostia were owned by church institutions, i.e. the **fundus Procilianus** (OLIMsite 168) and a **fundus Crispinis** (OLIMsite 212)³⁵⁵. It is unclear what economic activities took place on these properties and how much was produced. Contemporary sources show that their dimensions should not be seen as one unitary plot of land, but that they probably consisted of several.

Some extra economic activity may have been provided by transhumant groups: According to Veenman all higher parts of the coastal area between the Lago di Fogliano and Ostia may have been the winter objectives for long distance transhumance during the republic and in imperial times³⁵⁶. The added economic activity during the winter provided by incoming transhumant groups is well documented.

7.1.1.3.4 *Religion and worship*

Ostia Antica was place to many Greco-Roman polytheistic temples and shrines, several of which are reported to have been destroyed by Christians, at a given point in time after Constantine³⁵⁷.

Historical studies show that Christians settled in Ostia in the 3rd century³⁵⁸. Churches pop up in the archaeological and historical record of the 4th century across the Ostia key area, as elsewhere in our research area³⁵⁹. The diocese of Ostia was founded in 313³⁶⁰ and has remained an independent bishopric until the present day. Its initial importance is apparent, as the bishop of Ostia consecrated the new pope in 336 AD³⁶¹; it is unknown until when this privilege lasted. Ostia is known as one of the few suburbicarian dioceses, which had an especially close relationship with the bishop of Rome. In the course of the early middle ages, these special duties and privileges were officially established by creating the Cardinal-bishops³⁶². In Ostia, a *basilica* church was built by Constantine. In the late Roman period, Christians were buried in the long-stretched necropolis along the roads southwards from the Porta Laurentina³⁶³. Within the necropolis it is not possible to discern a specific Christian zone.

Church institutions acquired parts of the Ostian hinterland in the 4th and 5th century. Constantine donated the *possessio Patras* (OLIMsite 47), situated in the "suburbs" of Laurentum³⁶⁴, to the Church of Rome (read: the pope). In all probability, this is an area in the vicinity of or containing Pratica di Mare, given its toponym [patras>pratica] (OLIMtoponym 369) and the reference to Laurentum. In an 9th century document by Pope Marinus I (882-884), the *civitas Patrica* is given to the monastery of S.Paolo;

later documents confirm this transaction³⁶⁵. It is probable that the *patras* and *patrica* are the same historical entity. In sum, the wider area of Patras / Pratica di Mare was apparently uninterruptedly owned by a church institution from Rome, from the 4th century onwards.

In the 5th century, the pope owned a **fundus Crispinis** (OLIMsite 212), located somewhere around the south-eastern border of the Ostia key area³⁶⁶. On this farm, a church dedicated to Mary was situated. The *Liber Pontificalis* documents (492-496 AD): “basilicam sanctiae Mariae, in via Laurentina in fundo crispinis miliario ab urde vicesimo”³⁶⁷. The description reads that the church was located on the 20th mile from Rome on the Via Laurentina, situated somewhere between Tor Paterno and Pratica di Mare; its exact location and that of the connected *fundus*, however, remains unknown. The same church reappears in the late 8th century and thus probably saw continuity.

In the 5th century, the church of Santa Croce in Gerusalemme (Rome) owned a **fundus Procilianus** (OLIMsite 168). This farm can be located somewhere in the area northeast (outside) of the key area, roughly 12 km east of Ostia (see 7.II.1.3.1). Its tentative location is based on the current toponym “casale S.Croce”, a farm near Castel Porziano [<procilian] (OLIMtoponym 57 and 149)³⁶⁸. This *fundus* too probably remained an ecclesiastical property until the 8th century³⁶⁹.

All three possessions reappear in the 8th century sources. It may be assumed therefore, that church ownership in the hinterland of Ostia was consolidated from the 4th century onwards until the 8th century and, as shall become clear in the next study periods, long afterwards. The lack of historical sources on these church properties between the 5th and 8th century exemplifies the bias in the available written sources, which causes the overrepresentation of 4th and the 8th century in the site database (see 3.II.2).

Another Church estate might have been situated in the area: the **massa Auriana** (OLIMsite 603). According to the *Liber Pontificalis*, this estate was owned by S.Giovanni in Laterano and situated somewhere in the territory of Laurentum³⁷⁰. Its location remains unclear.

In sum, the Ostia key area shows how the powerful Church institutions in Rome, the pope most of all, early on began to build up authority and economic interests in the countryside around Rome. These early Church properties must be seen as outposts in this effort³⁷¹.

7.I.1.3.5 *Geo-politics: power relations, struggle and control strategies; secular activities*

Although Ostia had its own administration, the emperors always had direct influence on the administrative matters

around the Tiber mouth. Under Constantine, Portus became an independent city: Civitas Flavia Constantina. Portus officially became the Portus Romae, Rome’s main harbour and vital for the supply of Rome. At the same time, Constantine transferred the municipal rights of Ostia to Portus, obviously a major setback for Ostia³⁷².

So, in the 4th century the current key area shows possibly 3 *civitates*, Portus, Ostia and Laurentum. What exactly was the status of the *civitas* Laurentum mentioned in the *Liber Pontificalis*, is unknown. There are no records on the way the *civitas* was governed. Possibly this was done in a specific manner as it was part of an imperial domain. After the 4th century there are no records on this *civitas*.

The town of Ostia Antica was conspicuously not fortified in late Antiquity: from the early Empire onwards the walls were not restored. The city seems to have been easy meat for invading conquerors, although it possibly only suffered a Vandal attack in 455, as was Portus³⁷³. The armed forces of Rome might have acted as protectors of Ostia and Portus, as the docks were of vital importance for the shipment of supplies. While under siege of the Goths in 537, Ostia and Portus were defended by the troops of Belisarius during the Gothic war³⁷⁴.

As discussed above, in the 6th century the remaining inhabitants of Ostia Antica had built a small fortress in the theatre, possibly the new nucleus of Ostia. It is unclear whether a stronghold was maintained in Ostia Antica until the building of the fortress of **Gregoriopolis** (OLIMsite 393) in the 9th century.

7.I.1.4 The Velletri – Le castella key area, from the 3rd to the 7th century

Earlier studies of the late Roman period and beyond are limited in numbers in this key area. Several historical studies and archaeological-topographical overviews treat individual sites, with much attention for the towns of Velletri and Lanuvio. The eastern part of the area is treated in the *Cora Forma Italiae* volume.

During the Pontine Region Project by the GIA, surveys were conducted in the so-called Cori transect. Later, the GIA team conducted intensive surveys in an area more to the west, during the Cisterna survey. One of the goals of the GIA team was to revisit *Forma Italiae* sites that had not yet been wiped out by the ongoing agricultural mechanization and urbanization of the Italian landscape. During the PRP research, intensive systematic pottery sampling was done. Sampling was missing from the topographical overviews of the *Forma Italiae*, which were primarily focussed on architectural remains and large pottery scatters. This way habitation phases which yield smaller scatters and less durable building material,

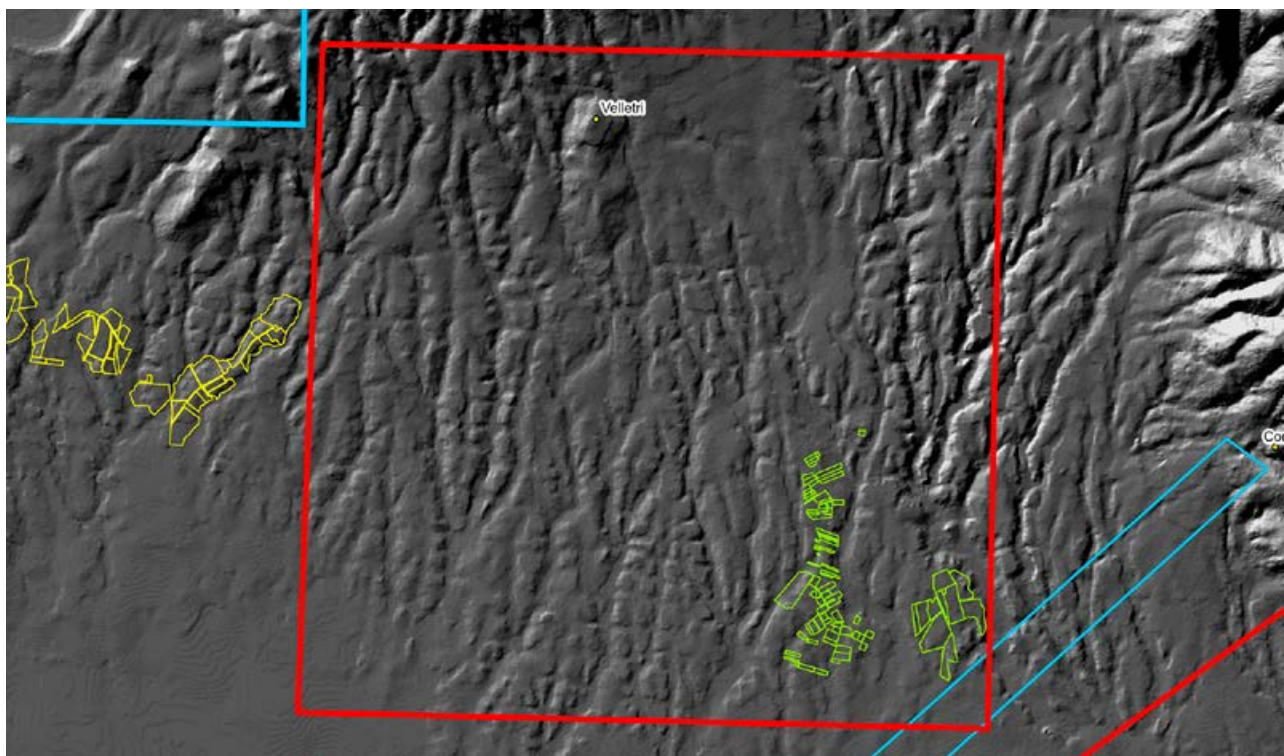


Figure 7.15. Earlier studies of the key Velletri – Le Castella area³⁷⁶. The Cisterna survey fields are illustrated in green. The Cori transect is the rectangular in blue in the right lower corner. The southern Lanuvio-Albano survey fields are illustrated in yellow.

i.e. pre-Roman and late Roman period, could be studied as well.

Although the focus of the PRP survey project by the GIA was not on late Roman context, its associated pottery samples (ARSW, amphorae) have been restudied by De Haas³⁷⁵ and thus provide insight on site activity in the late Empire (figure 7.15).

7.I.1.4.1 General site distribution: monitoring of (change in) human activity

The 3rd century: Velletri, Lanuvio, road stations and tuff hill farms

In the 3rd century, four elements dominated the landscape of the wider Velletri – Le Castella key area: the towns of **Velletri** (OLIMsite 147), **Lanuvio** (OLIMsite 84) and **Cori** (OLIMsite 27), and the important north-south axis of the Via Appia (OLIMinfra 4). The Via Appia was still in full swing in that period, as is clear from contemporary itineraries, and the many sites still functioning along its axis (see below 7.I.1.4.3 on infrastructure).

Although outside the current key area, a note on Lanuvio is called for, as this town undoubtedly influenced social (religious) and economic developments in the current key area. In Roman times known as *civitas lanuvina*, it was renowned for its sanctuary to Juno Sospita. It was built on a strategic position on the Via Appia and the road going to the coast to Nettuno (**La Selciatella**, OS infra 56), and a road going to Ardea (**road Lanuvio**

– **Ardea OLIMinfra 99**). The town of Velletri originally was founded as the Roman *colonia Velitrae*, and probably saw continuity through late Roman and medieval times, as shall be discussed. Not much is left of the Roman phase of the town, although there are traces from imperial times of temples, Roman baths, cisterns and an amphitheatre³⁷⁷. Few historical and archaeological sources are available on Cori in imperial times (figure 7.16).

The PRP surveys took place in the volcanic northwest-southeast oriented tuff hills, which are intersected by small streams. These are very fertile soils, suitable for all types of land use. Here several late Roman villas, farms and a possible village (**rpc site 10885 / 10886, toponym Castel Ginetti**, OLIMsite 344, OLIMtoponym 551) have been identified. It is feasible that these sites and their republican predecessors supplied the settlements of Cori, Velletri and Lanuvio. The GIA did not find indications for the development of large *latifundia* (estates) in the tuff hills, nor in the foothills of the Lepine Mountains. The sites identified are either small-size farmsteads, or medium-size villas. While the PRP area covers only a part of the tuff hill landscape between the Lepine Mountains and the Alban Hills, it seems fair to assume that during the Empire large parts of this geographical unit were occupied by the same kind of villas and farms.

As shall be shown in the analysis of Pedemontana key area (7.I.1.8.1), in the Lepine margins many farms were built on earth-filled large terraces, mostly contained by

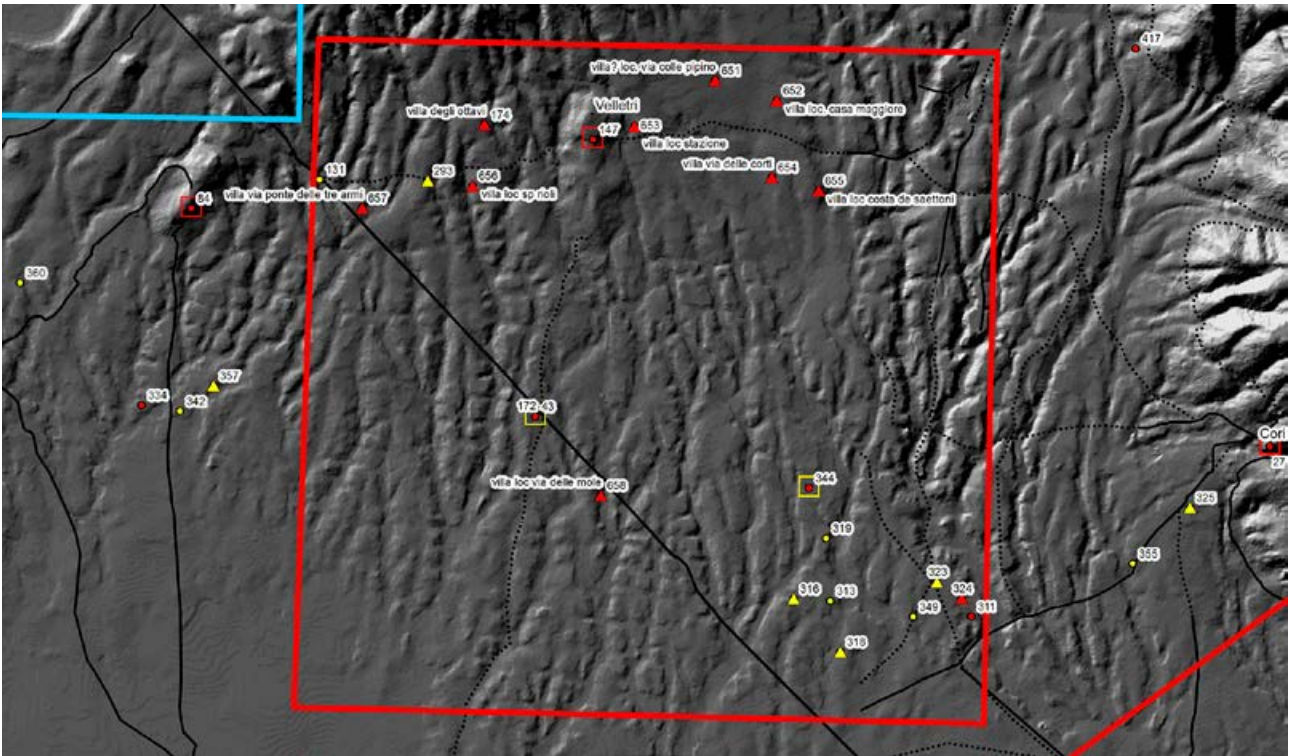


Figure 7.16. 3rd century Velletri - Le Castella key area. A red dot is a site with certain activity in the 3rd century, yellow possible. A square denotes a village or town. Triangles are villas.

polygonal walls. In the tuff hills these so-called platform villas lack as of yet³⁷⁸. While the platforms villas of the Lepine foothills often have ‘luxury’ indicators such as *tesserae* and painted wall plaster, these elements are absent on the farms and villas of the current key area. A possibly exception is a terracotta architectural element on **rpc site 10895, Colli S. Angelo** (OLIMsite 349).

In the northern part of the key area, the literature describes a number of villas³⁷⁹, the most complex sites being the **villa and church of S. Cesareo** (OLIMsite 293) and the **villa degli Ottavi** (OLIMsite 174). The functional arrangement of the first villa is not known. The latter villa was built in the 1st century BC and has been partly excavated in the years 1937-1938. It extends over two terraces measuring 125x90 m in total. An agricultural function can be assumed, as on the highest terrace a *pars rustica*, an utility, storage or production area, has been identified, on top of a large cistern. The villa is one of the candidates for the residence of the Ottavi, on which Augustus grew up³⁸⁰.

In the 3rd century probably two Appian roads stations were functioning in the Velletri – Le Castella key area. Firstly, the republican and imperial **archaeological remains on the Via Appia near Sole Luna** (OLIMsite 172). Situated near the crossing of the Via Appia with the “Via Mactorina”, these remains have convincingly been interpreted as a road station. The strongest arguments for

a functional interpretation as a *statio* are its location on the junction, and its large built environment. An associated village can be assumed, as the site covers a wide area³⁸¹. A 17th century drawing helps getting an idea of the plan and size of the structures, which now all have disappeared³⁸². On the site, several late Roman vestiges have been recorded: an early Christian church and an attached small Christian cemetery alongside the Appia, both dated to the 3rd/4th century. Two of the tombs have been dated to the 4th century, based on epigraphic evidence. The remains are visible on the map by Ameti (1693, Map 36), which depicts a *civittina diruta* on the crossing of the “Via Mactorina” with the Via Appia. These remains have been identified as the **mutatio Ad Sponsas** (OLIMsite 43)³⁸³. This mutatio is known from one historical source, the *Itinerarium Burdigalense* (333 AD). The case for this identification is not very strong, given the apparent faults in the distances in this itinerary³⁸⁴. But again, copying errors leave room for its tentative location near Sole Luna.

Ruins found near **castle S. Gennaro** (OLIMsite 132) have been associated with a second road station in the key area. These Roman structures in *peperino*, found on the base of the medieval wall of the castle, have been identified by most scholars as the **statio Sublanuvio** (OLIMsite 131), listed on the Peutinger map. Its toponym (OLIMtoponym 4) can only refer to a location near Lanuvio³⁸⁵; and indeed, the ruins are located on the near closest position on the Via Appia measured from Lanuvio³⁸⁶, and on the

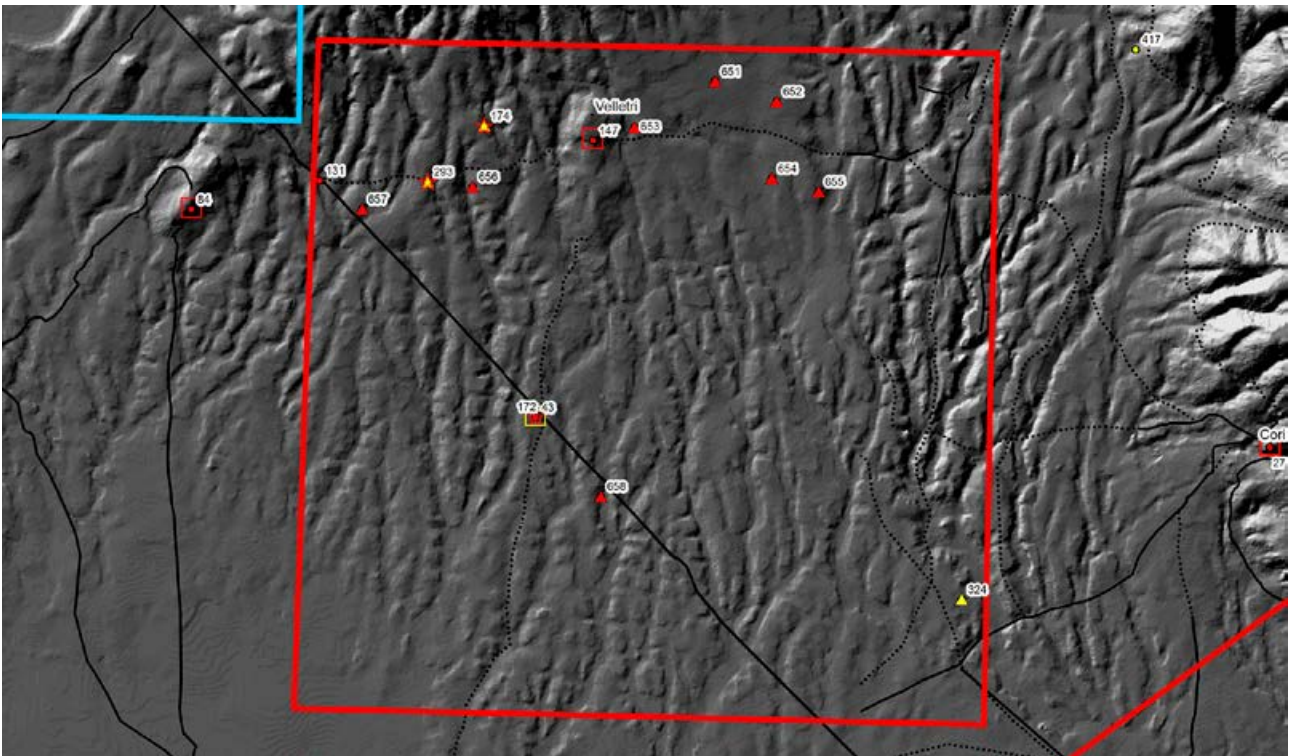


Figure 7.17. 4th century Velletri – Le Castella key area.

important junction of the road from Velletri (OLIMinfra 111) with the Via Appia. However, no distances are given to and from Sublanuvio on the Peutinger map.

Diachronic trends

4th to 7th century: early decline of rural structures in the tuff hills, continuation in towns

The rehash of the PRP survey pottery samples by De Haas indicates that late Roman pottery distribution in the tuff hills landscape and Lepine foothills diminishes from the 3rd or early 4th century onwards. This is early, compared to the coastal study areas Nettuno and Fogliano, where ARSW and eastern amphorae continued to circulate until the late 6th or early 7th century. The rural character of the tuff hill and foothill landscape is a likely factor in this early cut off from interregional / pan-Mediterranean pottery markets. Its inland position, of course, is also a factor, but by itself does not constitute an absolute impediment: inland circulation of ARSW in the Alban Hills continues, as shown by 6th century fragments on the necropolis of **villa in località S. Maria at lago di Nemi** (OLIMsite 236)³⁸⁷. At **Fossanova** (OLIMsite 9), 6th or 7th century ARSW sherds have been found³⁸⁸, and the **Villamagna** site shows examples of ARSW dated to the second half of the 6th century and possibly the 7th century³⁸⁹. ARSW was even found at the Lepine mountain top site of **Sancti Angeli de Campo Mellis** (OLIMsite 414)³⁹⁰.

Other evidence for continuity or discontinuity on the tuff hills farms lacks. As touched upon before, one has to

be careful to read too much accuracy into the 3rd and 4th century distribution maps: all late survey sites are dated by imported pottery, and one cannot be certain that sites with less or no access to easily recognisable traded pottery actually ceased to function. As the Tiber Valley (especially Farfa) project has shown, locally produced pottery may be present on the surface, but may have been overlooked³⁹¹. Indeed, for the tuff hill landscape and the Lepine margins knowledge of locally produced pottery has yet to be developed. In all, one has to take into account the possibility that sites in this area relapsed to acting within a local economy, the same as has been attested at Astura settlement, be it later, in the 6th or 7th century, or possibly to practising subsistence farming only.

The farm/villa site with maybe the longest chronology in the current tuff hills and foothill is **rpc site 10888, ColliS. Angelo** (OLIMsite 324). This was possibly a villa. Here an African cylindrical amphora has been attested, dated to the 3rd and 4th century. As the site chronology has been based solely on this wider date, the sites' continuation into the 4th century is uncertain.

Whereas the villas and farmsteads in the tuff hill landscape of the Cisterna survey seem to diminish in the 3rd or 4th century, the sites on the foothills of the Alban Hills show more resilience: here the **villa and church of S. Cesareo** (OLIMsite 293) and the **villa degli Ottavi** (OLIMsite 174) probably saw continuity until the 5th century³⁹². Their continuity is probably connected to their proximity to

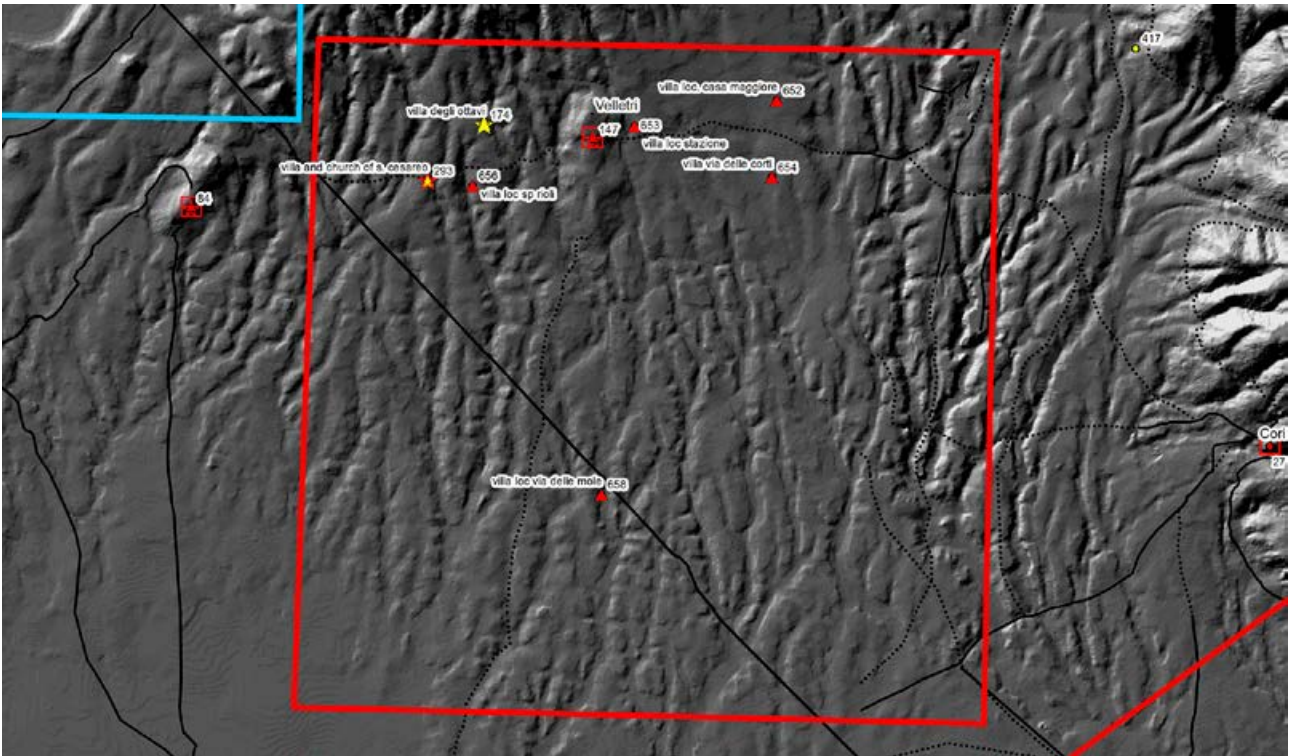


Figure 7.18. 5th century Velletri – Le Castella key area.

the large population centres (market) of Velletri and Lanuvium and the road to Rome. On the S.Cesareo site, a paleo-Christian baptistery was founded dated to the 4th or 5th century³⁹³.

In the town of **Velletri** restorations have been recorded on the amphitheatre in the years 364-367 AD by emperors Valentinianus I and Valens. The town is said to have suffered severely from a raid by the Visigoths in 410. Velletri is known as an important centre of the early Christian faith, and became a see in 465³⁹⁴. The episcopal complex was built on the old Forum. Not many paleo-Christian remains have been found, however, except for several burial tunnels and grave inscriptions dated to the 4th century and onwards. The Roman *basilica* was turned into a cathedral before the year 436 AD³⁹⁵. There are no remains of the oldest phase of the basilica of S. Clemens, probably dated to the 4th century. Its oldest phase is 6th century³⁹⁶. In that century, Velletri was placed under Byzantine administrative supervision from Rome (see below 7.I.1.4.5).

In **Lanuvio** a large number of early Christian tombs and artefacts have been found. Remarkable are a 4th century statue of Christ teaching, now in the Museo Nazionale Romano di Palazzo Massimo, and an oil lamp with a cross, dated to the 5th or 6th century³⁹⁷. In the 5th century the oldest church was built, dedicated to the Virgin Mary. Conspicuously, at Lanuvio clearly Byzantine artefacts have been found, pointing to Byzantine presence on

the ground. Among the finds are a marble plate, unique for Lazio, and decorations and inscriptions found, among others, in the church S.Maria³⁹⁸.

As Velletri, Lanuvio probably was a site of continued activity throughout the middle ages. Only the 7th century lacks in the historical and archaeological record. While the settlement may have been condensed, the church of S.Maria, however, probably remained in function in that century³⁹⁹.

Of **Cori**, the only recorded activity possibly dating to this study period is the conversion of the temple of Hercules into a church⁴⁰⁰. The temple probably owes its relatively good state of preservation to this transformation.

The transfer of episcopal seats of Velletri and Tres Tabernae to S.Andrea in Silice

In the 6th century a significant transfer took place in the wider Velletri area, illustrative for the turmoil of the period. A letter by Pope Gregory the Great of 592 AD orders the merger of the see of Tres Tabernae into the see of Velletri, and the transfer of the bishop's seat to *Arenata* at *S.Andrea the apostle*. He explicitly names the defensive reasons behind this decision: he states that it is safer to move the Velletrian see, given the fact that the barbarian threat can more easily be coped with here (*ab hostilitatis incursu liberior existere valeas*)⁴⁰¹. A second cause of the abandonment of the see of Tres Tabernae may have been the environmental problems and correlated decline of settlements in the Pontine plain⁴⁰².

The *Arenata* at *S.Andrea* mentioned in the source can be pinpointed on the site of **church, monastery of S.Andrea in Silice** (OLIMsite 53). First of all, the toponyms *Arenata* and *S.Andrea* are repeatedly recorded in tandem from the 6th to the 10th century (OLIMtoponym 187). Both toponyms are continually associated with the church and 10th century monastery on this position along the *silice* (road, i.e. the *Via Appia*)⁴⁰³. Although it is uncertain where exactly the monastery was located, there is no doubt that it was located on or near the current *Casale Le Castella*⁴⁰⁴. One can see why the site of *S.Andrea* in *Silice* is strategically and geographically perfectly positioned: it is located on the edge of a ridge on a junction of three valleys and on the edge of the Pontine plain. The surroundings offer good defensible qualities as the highest point of the area, on the outcrop of a ridge, reaching 30 m over the Appian road. During *incastellamento*, several *castra* would develop here. As a result of its history as stronghold, the area since sub-recent times is known as *Le Castella*. It is uncertain however, if the site saw fortification built around the time of the transfer. Geo-politically too, the site of *S.Andrea* in *Silice* is smartly positioned between the two abandoned sees. The site was thus easily accessible for the Christian communities of *Velletri* and *Tres Tabernae*, as well as for the *pedemontana* area, where from the 6/7th century the settlement of *Norba* could be found (see the *pedemontana* key area, 7.I.1.8.1).

Ployer Mione suggested that nearby a castle was erected to protect the see, possibly at *Civitana* (OLIMsite 573), a (former?) Roman fortified settlement. There is no evidence to support this idea; the first medieval occupation of this site is dated to the 12th or 13th century. Unfortunately, intensive field work on the site has not yet been undertaken⁴⁰⁵.

It is certain that this transfer was temporary, but it is unclear how long the episcopal seat of *Velletri* and *Tres Tabernae* remained on the *Via Appia*. The see of *Velletri* is listed in documents throughout the middle ages. It appears that the union of the dioceses of *Tres Tabernae* and the *Velletri* was only temporary: the bishop of *Tres Tabernae* is mentioned separately again in bishop's lists between 769 and 868⁴⁰⁶. It is not certain if this reappearance of the see in the sources actually means that the site *Tres Tabernae* was revived⁴⁰⁷; the most recent excavations, however, at the site identified as *Tres Tabernae* have revealed marble fragments that may have belonged to a church decoration dated to 8th or 9th century⁴⁰⁸ (see figure 7.19).

Discussion: the 7th century lacuna, a lack of activity or a question of availability of sources?

Conspicuously, all four sites with attested 6th century activity, *San Andrea* in *Silice*, *Lanuvio*, *Velletri*, and *Cori*, lack reliable evidence from the 7th century. These sites,

however, provide ample evidence again in the 8th century, except for *Cori*. This 7th century lacuna deserves a more detailed study, as this may help contextualise common late Antiquity and early medieval continuity and discontinuity in our database.

At *Lanuvio*, activity between the 7th and 9th century was possibly limited to a church covering the pagan cult site⁴⁰⁹. Although the see of *Velletri* shows continuation throughout the Middle Ages, its provisional transfer to *San Andrea* in *Silice* in 592 may show that the town of *Velletri* experienced a temporary steep decline. In the towns of *Lanuvio* and *Velletri*, therefore, continued activity is probable. Here the 7th century lacuna in evidence may be a matter of a lack in clearly recognizable building phases and historical sources.

At *San Andrea*, secure 7th century evidence lacks too. Remains of a church have been studied here, showing an *opus sectile* floor probably dating to the 6th century. The *Liber Pontificalis* describes in the late 8th century how this “Basilica beati Andrae apostoli, sitam via Appiae in silicea” was restored⁴¹⁰. Therefore, at *San Andrea* too, the 7th century lacuna is probably a matter of recognizable evidence.

As for *Cori*, activity has not been recorded after the late 6th century. Its position made it an objective of marauders at large in the countryside of southern Lazio: (sub-recent) local tradition tells it was sacked by the Vandals and Alans in the 5th century, and by the Ostrogoths in the 6th century⁴¹¹; there is no written record to confirm these events. It is unclear if the early Christian church, that was founded in the *Hercules* temple, continued to function in the 7th century and onwards. Its continuity, however, maybe witnessed by the good state of conservation of this temple turned church.

To conclude: 7th century evidence lacks on three sites which may be assumed to have experienced continued occupation from late Antiquity to the high middle ages. This warns us, again, to be especially careful in reading *absence* in our database. Does this lack of evidence mean actual discontinuity? This issue returns on many occasions in the current study. For more on the factors behind the absence of evidence late Antiquity and the early middle ages in general, see the Evaluation of the 7th to 10th century (7.II.2.1).

7.I.1.4.2 Infrastructure

The *Velletri* – *Le Castella* key area was an important crossroads in Lazio: here the northwest-southeast running Appian road meets several routes going south and west to the coast and others going northwards to the *Sacco Valley*. In this constellation, *Lanuvio* is located on a prime strategic position: nearby the *Via Appia*, on *La*

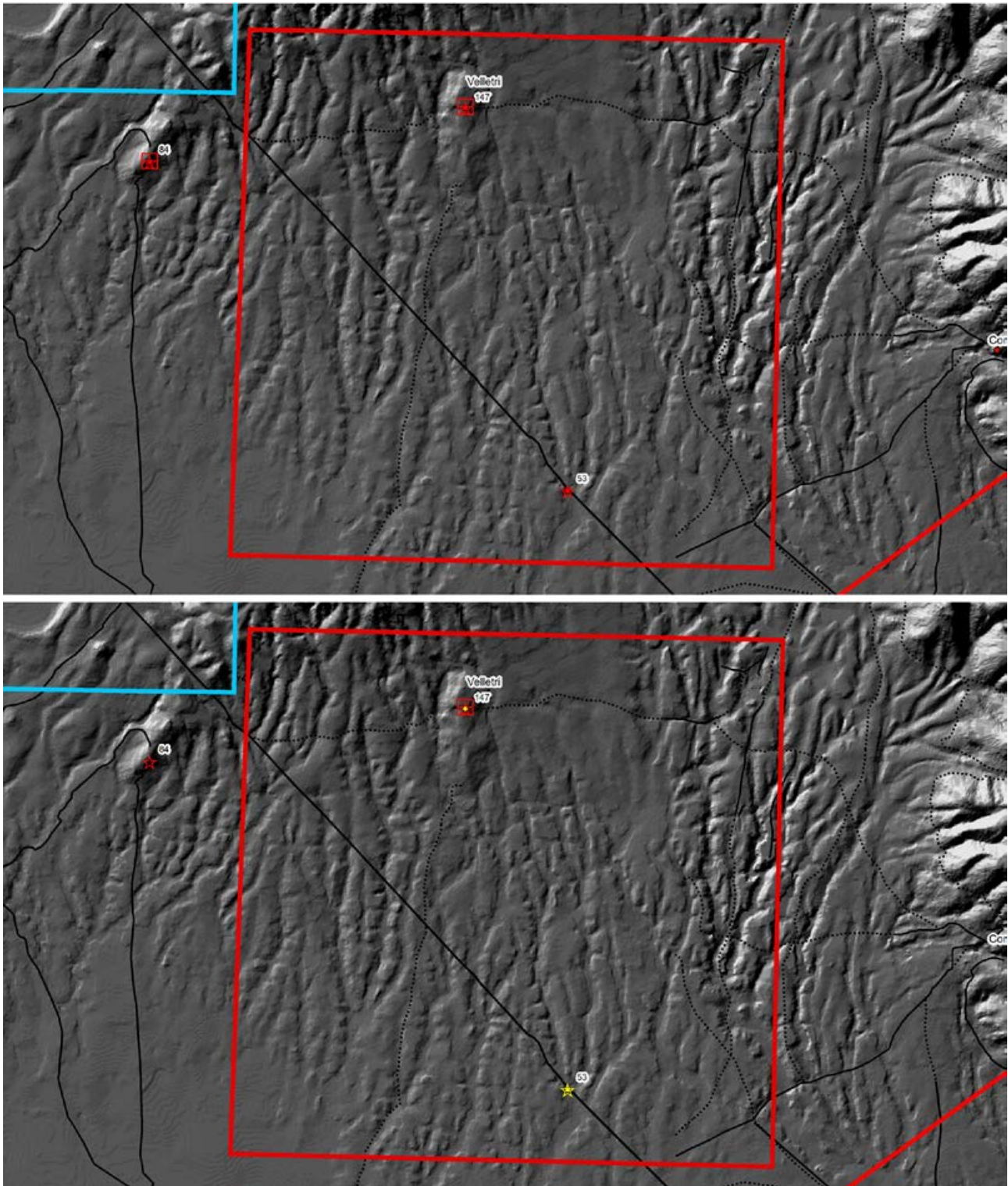


Figure 7.19. 6th (above) and 7th century (below) Velletri – Le Castella key area.

Selciatella (OLIMinfra 56) and on the road Lanuvio – Ardea (OLIMinfra 99).

The late 4th century BC built Via Appia was still functioning fully in this area throughout late Antiquity. Further south, drainage problems might have rendered part of the route in the Pontine plain (seasonally?) impassable.

Velletri too was centrally located. From here a road connected to routes passing between the Alban Hills and the Lepine Mountains to the Sacco Valley. Velletri was probably connected to the coast via the “Via Mactorina”, a high medieval designation for the much older road (system) connecting the town with the Via Appia and the coast near Antium – Astura (see also the Nettuno Anzio key

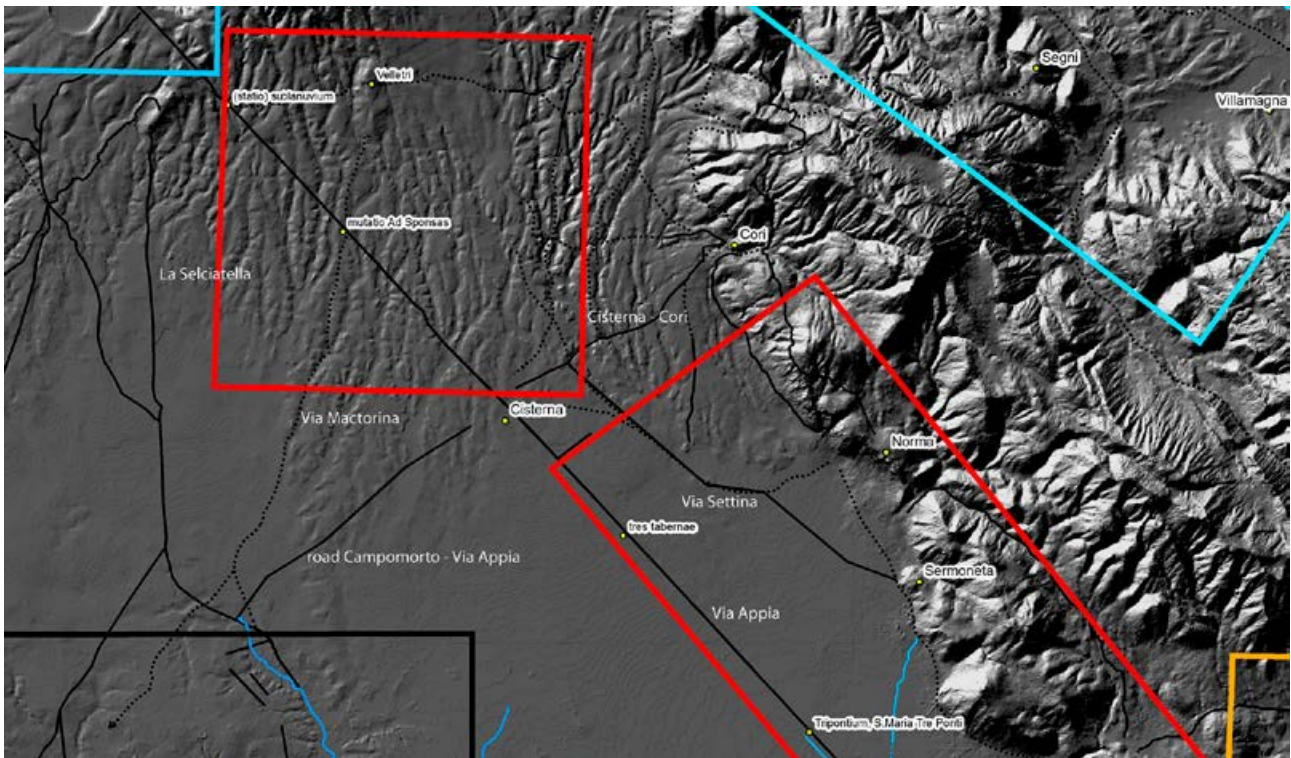


Figure 7.20. Roman to early medieval roads in the wider zone around the Velletri – Le Castella key area.

area, 7.I.1.1.2). This road crossed the Appia at the site of Sole Luna (OLIMsite 172), possibly *mutatio* Ad Sponsas (OLIMsite 43).

In all probability, a direct road ran between Velletri and the Via Appia (OLIMinfra 111), given Velletri's importance as an early see and its 6th century placement under administrative supervision from Rome (see below). Along this road the villa and church of S.Cesareo (OLIMsite 293) and the villa degli Ottavi (OLIMsite 174) probably saw continuity until the 5th century. The road may have benefited the continuity of the villa, which may have functioned as agricultural production centre for Velletri and possibly Rome. Its exact route is uncertain, but possibly its tract is partly the same as the road now known as *Appia Vecchia*, reaching the Appia at S.Gennaro (possible *statio* Sublanuvio). Later, in the 13th century, this road would become the detour of the Appian road, through Velletri⁴¹² (see figure 7.20).

Another important route ran through the key area: The Roman roads *road Campomorto area – Via Appia (Cisterna area)* (OLIMinfra 89)⁴¹³ and *Cisterna (area) – Cori* (OLIMinfra 46), connecting the coast with the Via Appia and the pedemontana.

7.I.1.4.3 Economy, production and trade

The PRP farm sites in the tuff hills, found during the Cori transect and Cisterna survey projects, probably had evolved as production centres for the settlements (*colonia*) of Cori, Velletri and Lanuvium. Their size is modest

to average: no large *latifundia* have been found in the wider area of the Lepine foothills. The tuff hill area intersected by small rivers, comprising much of the Velletri – Le Castella key area, is characterised by very fertile soils. These soils are suitable for all types of land use: olive culture, grapes (nowadays the most frequent use of land) and cereals. The villas, farms and the possible village attested were probably involved in farming focussed on these crops⁴¹⁴. The 1851 maps seem to confirm this suggested land use from a sub-recent perspective: the south-eastern part of the key area consisted of a mixture of meadows-grasslands and vineyard-olive yards⁴¹⁵.

As touched upon above, pottery evidence indicates that the tuff hills were cut off from interregional / pan-Mediterranean pottery markets in the 3rd and 4th century. And although locally produced pottery for the period 3rd to 7th century may have been overlooked in the surveys, the villas and farm sites in this area in all likelihood were deserted or reverted to operate in a local economy and/or practising subsistence farming. The rural character of these parts of the tuff hill landscape may have been a factor in the marginalisation of the area.

This is possibly different for the villa sites in northern part of the key area: the *villa and church of S.Cesareo* (OLIMsite 293) and the *villa degli Ottavi* (OLIMsite 174) continued into the 5th century, probably supplying Lanuvium, Velletri, and (being situated near the Via Appia) even Rome. This area, the southern Alban Hills,

is depicted on the 1851 maps as an area with intensive viticulture, olive culture and/or more extensive forms of arboriculture⁴¹⁶.

7.I.1.4.4 Religion and worship

The religious topographical information in this key area is focussed on the towns and villages, with the exception of the villa and church of S.Cesareo (OLIMsite 293). In Cori and Lanuvio early Christian churches were built on pagan sites. Velletri seems to have played an important role in the early propagation of the Christian faith in the area. Tradition tells us that it was the place where St.Peter stopped on the way to Rome⁴¹⁷. Christian presence in **Velletri** is certain from the beginning of the 4th century, but the new faith probably found a base here much earlier⁴¹⁸. The diocese of Velletri, founded in 465, was, and is, one of the few suburbicarian dioceses, which had an especially close relationship with the bishop of Rome throughout the early middle ages. Its transfer to S.Andrea in 592, as discussed above, shows that the administrative units of early dioceses were still flexible. The 6th century was a time in which fundamental ecclesiastical institutions, such as dioceses, were still developing their definitive form (see 2.I.13).

7.I.1.4.5 Geo-politics: power relations, struggle and control strategies; secular activities

The historically close ties of **Velletri** with the city of Rome were confirmed in the 6th century, as the administration of the city was temporarily transferred to the Byzantine rule in Rome; the city became under supervision of a tribune⁴¹⁹.

The transfer of the sees of Velletri and **Tres Tabernae** for defensive reasons is indicative for the dangers of the period. It also shows the vulnerability of this region, that was easily reachable from all sides: the coast at Antium and Astura, the southern Pontine plain and the Sacco valley (Via Latina⁴²⁰). It is a striking fact that the ancient town of Velletri, a see since 465, was not well defensible. The old walls had been demolished in the 4th century BC, after the Romans had definitively conquered the town, as Livy wrote⁴²¹. The area around *Le Castella*, indeed, reads more favourable for defence, as touched upon above. If fortifications were built at that site around the time of the transfer is unclear. *Le Castella* may also have been more easily reachable for defensive troops from Rome or the episcopal town of Castra Albana, which was probably fortified during the Gothic war, because of the still functioning Via Appia. The role of **Civitana** in the protection of the see seems speculative. No evidence for late Antique or early medieval occupation has been found there yet.

7.I.1.5 Fondi and its inland mountain range, from the 3rd to the 7th century

The Fondi key area consists of the plain surrounding the town of Fondi, and the inland mountain ranges of the Ausoni and Aurunci to the north. None of the archaeological-topographical overviews covers the Fondi key area, except for Di Rosa's landscape archaeological research on the territory of Fondi (2015). The only site which attracted much attention of scholars is the town of Fondi⁴²². No large-scale systematic field work focussed on late Antiquity and the early middle ages has been done in the area. One excavation of a rural site has yielded early medieval contexts: Villa S.Vito.

7.I.1.5.1 General site distribution: monitoring of (change in) human activity

The lack of attention of overview studies, and of archaeological field work, shows itself on the site map: only three sites exhibit signs of activity between the 3rd and 7th century; evidence on these sites is primarily historical. The low number of sites obstructs a chronological analysis of activities within the landscape (see figure 7.21).

Fondi (OLIMsite 50) is the only site in the key area with evidence for continued activity from the 3rd to 7th century AD⁴²³. Advantageously located on the main passage through the mountains, the town was already documented as *civitas* in 334 BC. The Roman walls probably originated in this period; the current enclosure is mostly high medieval. The plan of the original Roman *castrum* is still visible in its street patterns. Fondi is listed on the *Itinerarium Burdigalense* in 333 AD ("ciuitas fundis"), on the early 4th century *Itinerarium Antonini* ("Fundis") and the Peutinger map ("Fundis").

In the 4th and 5th century a number of churches was erected in the town of Fondi. In that period, the cathedral of St.Peter was built on top of a Jupiter temple. Its construction date has been dated based on the iconography and placement techniques of the mosaics. The church was enlarged in the 5th century by Saint Paulinus (Paolino) of Nola⁴²⁴. The diocese of Fondi was founded in late Antiquity, possibly in the beginning of the 6th century. In view of these ecclesiastical activities, it may be assumed that the Roman walls of Fondi still functioned in these days. Around 600 Gregory the Great mentioned the town of Fondi in one of his letters; he described the devastation of the town by the Lombards in the year of 592.⁴²⁵

The first secure historical source on the **monastery of S.Magno (and S.Angelo)** (OLIMsite 238) is the *Liber Censuum* of 979 AD⁴²⁶. The origin of the monastery, however, possibly goes back to the 5th or 6th century: from the *Dialogues* of Gregory the Great it may be deduced that the convent was founded by S.Honoratus of Fondi, on the site of the old hermitage of the 3rd century S.Paternus

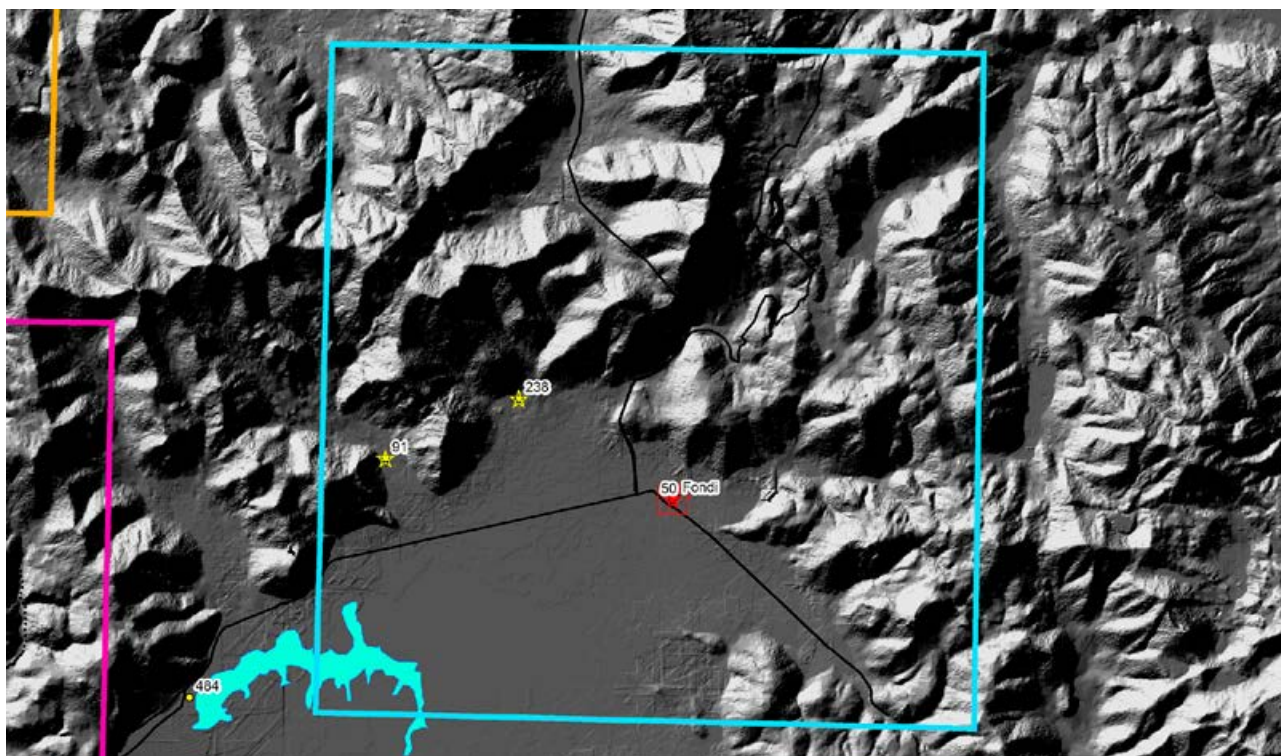


Figure 7.21. The Fondi key area in the 3rd to 7th century.

and S.Magnus of Anagni⁴²⁷. According to Pope Gregory, the convent consisted of 200 monks. Recent excavations did not provide any evidence of the late Antique monastery⁴²⁸. These excavations, however, allowed to identify the remains of a Roman substructure, perhaps related to a building of worship⁴²⁹, on which the medieval church is set⁴³⁰. Nowadays the impressive complex, near the source of the river Ligola, still overlooks the Fondi plain. Tucked away in the Ausoni foothills, rising 20-30 m above the plain, the monastery is on a strategic position, from which troubles can be spotted from afar.

The site of Villa S.Vito (OLIMsite 91) only yields secure evidence from the 7th or 8th century onwards. The site is situated on the slopes of the Ausoni Mountains. It consists of a Roman villa, of unknown date, near which in the 7th or 8th century a church was built, probably dedicated to S.Vito. Excavations have revealed a rectangular building in *opus incertum*, of which the marble decorative sculpture fragments have typologically been dated in the 7th or 8th century. A fortified settlement gradually developed around this church.

One late Roman coastal villa has been attested, the villa near Santa Anastasia, Lafon LT 57 (OLIMsite 237). This *villa maritima* (in Lafon's site classification) was probably founded in the second half of the 1st century AD, a date based on the *reticulatum* walls. Occupation lasted until the 4th century AD at least, as the numismatic and ceramic studies show⁴³¹.

7.1.1.5.2 Infrastructure

Since its construction in the 4th century BC, the Via Appia dominated traffic to and from the Fondi area. Its route in the area was largely predetermined by natural circumstances: squeezed between the Monte S. Angelo and the sea, and further on avoiding the lacus Fundanus, the road ran from Terracina towards Fondi. Inside the walls of Fondi, the Via Appia continued, with a small detour, as *decumanus*. Eastwards still only one logical route existed, heading for the passage near Masseria Mole Perito through the Aurunci Mountains, going straight for Formiae.

North of Fondi, the main late Roman passage through the Ausoni Mountains started in the valley near present-day Madonna degli Angeli. From this valley, two routes branched off⁴³²: the first (OLIMinfra 107) ran straight to north to the Via Latina near Castro (dei Volsci) (OLIMsite 257), where in the 6th century possibly a monastery functioned, and from there possibly north-westwards to Ceccano / Fabrateria Vetus (OLIMsite 253). A second route (OLIMinfra 106) headed north-east through the mountains to the Sacco Valley, possibly calling at the settlements, located outside this thesis's study area, of Fabrateria Nova (3 km to the south-east of Ceprano) and Fregellae (near modern Ceprano). Both routes through the mountain ranges were unnamed in Roman times, i.e. secondary roads. Their importance, however, should not be underestimated. These tracts constitute one of the few relatively easy passages through the Lepine, Ausoni and

Aurunci mountain chains, connecting both main consular roads from Rome southwards: the Via Appia and the Via Latina.

7.I.1.5.3 *Economy, production and trade*

In Roman times, the wider Fondi area was known for its wines. The Fundanus and Cecubus wines were celebrated⁴³³. It is not clear if and when the viticulture in the area ceased. The suitability of these soils for this kind of crops is corroborated from a sub-recent perspective: on the 1851 maps the plain directly to the south east of Fondi stretching until the Lepine foothills was exploited for intensive viticulture, olive culture and/or more extensive forms of arboriculture⁴³⁴.

In the Fondi lake, Roman pisciculture activities can be assumed, in analogy with the Fogliano lake area and Tuscany, possibly connected to villas on the coast. Evidence for pisciculture lacks as of yet.

7.I.1.5.4 *Religion and worship*

With the 5/6th century foundation of the monastery of S.Magno, the area shows its importance for early monastic life in Lazio. The diocese of Fondi was possibly founded around 500 AD⁴³⁵. Secure sources on its foundation lack however. Whether the see knew continuity throughout the middle ages is unclear: Fondi is absent on the bishop's lists between 680-853 and 862-939.

7.I.1.5.5 *Geo-politics: power relations, struggle and control strategies; secular activities*

In the 4th and 5th centuries much ecclesiastical building activity took place in Fondi. In view of these activities, and of the fact that possibly a bishopric evolved in late Antiquity, it is likely that the republican walls of Fondi were maintained⁴³⁶. Indeed, as discussed earlier in this chapter, the presence of a possible see must have had some attraction from plunderers: as the story of the sees of Velletri and Tres Tabernae shows, an episcopal seat needed specific protection in these days of insecurity. Indeed, on several other sees in the current research area defensive measures were taken in the 6th century⁴³⁷. The attack of the Lombards on the city in 592 shows Fondi's attraction to brigands. Other interested parties may have been pirates, from the sea, and marauders and foreign troops that may have roamed the countryside from the early 5th century onwards, like the Ostrogoths, Vandals and Visigoths.

The Fondi area was firmly in Byzantine hands from the second half of the 6th century onwards. Besides the attack on Fondi of 592, the harsh Lombard – Byzantine conflicts in the late 6th and first half of the 7th century took place far south of the research area⁴³⁸. Only by the 8th century the border of Lombard territory may have crept northward until south of Terracina - Fondi, in the mountainous

areas east of the Fondi area⁴³⁹. Maybe the fortified character of the settlement of S.Vito must be seen in that light.

7.I.1.6 *The southern Alban Hills and area to their west, from the 3rd to the 7th century*

In this key area, systematic large-scale survey and reconnaissance field work with a focus on late Antique and early medieval contexts is scarce. The focus of much studies of the late Empire and onwards, is on the well visible and historically favourably documented towns, such as Albano Laziale (OLIMsite 155), or on larger rural sites, like the **villa in località Maria** (OLIMsite 236) or **Forma Italiae Apiolae site 122** (OLIMsite 24). Most of the data on the research on the key area was found in the *Cora Forma Italiae* volumes: Tellenae, Apiolae and Bovillae. The recent book *Alle pendici dei Colli Albani* (Fischetti & Attema 2019) shows that a number of prolific archaeological survey projects and historical-topographical studies have been initiated in this key area with a broad chronological perspective, including late Antiquity and the middle ages. The first results of these projects have been incorporated into the current research.

During the Pontine Region Project, surveys in the south of the key area were conducted (the Lanuvio-Albano survey). Executed in 1995 in the catchment of ancient Lanuvium, the focus of the PRP Lanuvio survey was on protohistoric period. It aimed at establishing a regional fabric classification system of common wares and at creating an understanding of the changes in ceramic technology and production. Roman villas were left out of this study⁴⁴⁰.

7.I.1.6.1 *General site distribution: monitoring of (change in) human activity*

The 3rd century: large villa's, road side towns and road stations

The Alban Hills key area covers the volcanic complex of the Alban Hills, that radiates out from the old Volcano Laziale, and the tuff hills to the west of the Alban Hills. There are two lakes that fill the calderas of the former volcano: lake Nemi and lake Albano. The area of the Alban Hills has been densely settled since prehistoric times.

Most scholars agree that, from a regional perspective, the larger (inland) residential villas predominantly were located in zones close to Rome⁴⁴¹. The current key area is one of these zones. Indeed, from the 2nd century BC onwards the Alban Hills were settled with large residential villas. The emperors claimed their share of the area to build retreats: Large parts of the wider Alban Hills became property of the emperor from the beginning of the imperial age⁴⁴². Several imperial residences evolved,

such as **villa degli Ottavi** (OLIMsite 174) on the south side of the Alban Hills (see the Velletri key area, 7.I.1.4). In the Colli key area, the famous villa of Domitian on the western shore of the Albano lake was built, stretching from the lake to the Via Appia. Although it is feasible that the site remained in use in the late Roman period, given its fantastic location, for this site the late imperial archaeological and historical record is absent in the literature.

The 3rd century site map shows that most of the documented settled areas consisted of larger (inland) residential villas⁴⁴³, often with luxury living facilities: **site 88 forma italiae tellenae** (OLIMsite 99), **site 62 forma italiae apiolae** (OLIMsite 11), **site 122 forma italiae apiolae** (OLIMsite 24, with a thermal complex), **villa di S.Palomba, località Palazzo** (OLIMsite 76), **site 171 forma italiae tellenae** (OLIMsite 188), and **site 42 forma italiae tellenae** (OLIMsite 70). In all likelihood, these villa's functioned as *villae rusticate*, with a residential function and production facilities. Their function as living quarters is clear from the many lavish details, like mosaics and wall plasters, and from the monumental tombs found on these sites. Production facilities have been recorded on some of these sites as well.

Several of the villas are built on artificial terracings overlooking the landscape: OLIMsite 11, 70 and 188. Their high position was appreciated in later times: at least two of these villas were used as base for high medieval watchtowers (OLIMsite 11 and 376).

Two Roman *necropoli* had developed by the 3rd century AD: a small one north-east of the **Roman villa in località Cavallacci** (OLIMsite 158); this necropolis lasted until the 4th century⁴⁴⁴. **Site 124 forma italiae apiolae** (OLIMsite 37) is a necropolis proper, according to the De Rossi (*Forma Italiae*)⁴⁴⁵.

The Lanuvio-Albano survey yielded three farmstead sites that date to the 3rd century: **rpc site 10146, Casale Massimetta** (OLIMsite 329), **rpc site 10145, Casale Massimetta** (OLIMsite 330) and **rpc site 10144, Casale Massimetta** (OLIMsite 348)⁴⁴⁶.

The Appian road is the axis on which the larger settlements, all historically attested road stations, were located: the settlement of **Bovillae** (OLIMsite 86), and the towns of **Castra Albana** (OLIMsite 155) and **Ariccia** (OLIMsite 159).

Bovillae was a village strategically located between the 12th and 13th mile from Rome, a *statio* on the junction of the Via Appia with several routes: **The Via Cavona** (OLIMinfra 80, a sub-recent designation of an unnamed Roman road) the **Via Anziate-Nettunense** (OLIMinfra 80, medieval designation, unnamed in Roman times) and on the **northern transverse road Via Laviniate-foot of the**

Alban Hills (OLIMinfra 80, unnamed in Roman times). Bovillae was probably the first *statio/mansio* on the Via Appia coming from Rome, although there is one *mutatio* closer to Rome: **Mutatio ad Nono** (OLIMsite 581). On the Peutinger map it is listed as *Bobellas*, located 3 miles from *Aricia*.

Castra Albana in Roman times was a *civitas*, in the meaning of "town"⁴⁴⁷. Here, a settlement developed from the camp of the Second Parthian legion. This is still visible in the current street pattern, in which the *decumanus* and *cardo* stand out. The Legion left Castra Albana in the second half of the 3rd century AD⁴⁴⁸.

Ariccia was the second Roman *civitas* in the area, located on a promontory above the Via Appia, 27 km from Rome. While in name the town of Ariccia was a road station, the actual location of the stop must have been 300 m south of the town, at **Osteriaccia** (OLIMsite 140). On the Peutinger map it is listed as *Aricia*, with a next toponym southwards at *Sublanubio*, **Sublanuvium** (OLIMsite 131).

On the north side of the current town of **Marino** (OLIMsite 144), in Roman times a small settlement was located on Colle Cimino, *municipium castrimoenium*. It originated in the 1st century BC (see figure 7.22).

Diachronic trends

Because of its proximity to Rome, continued activity can be assumed throughout the late Roman period and early to high middle ages, especially near the roads to and from Rome. As will be shown, continuity can only be proven for the large roadside centres on the Via Appia. Outside the larger sites and towns, the insights into the late Roman period are limited. This is caused by a lack of (published) intensive archaeological research in rural areas, with the exception of the Lanuvio-Albano survey, and the fact that research into late Roman and medieval pottery has not yet profited from the latest insights.

Unfortunately, none of the large villas in the area, except for the **villa in località S.Maria at the Nemi lake** (OLIMsite 236)⁴⁴⁹, have seen thorough late Roman (ARSW) or medieval pottery studies. Promising are the excavations in progress on the **Roman villa in località Cavallacci** (OLIMsite 158), with a focus on the late Antique and medieval phases of the villa⁴⁵⁰.

The 4th century: villa's start to disappear from the record, papal possessions, first churches built

Whether or not caused by a lack of (published) intensive studies on late Roman phases, the 4th century map shows a marked drop in the number of (certain) occupied villa sites. This trend is continued in the 5th century, when evidence is available for only one villa: the large *villa rustica* **site 122 forma italiae apiolae** (OLIMsite 24). In the

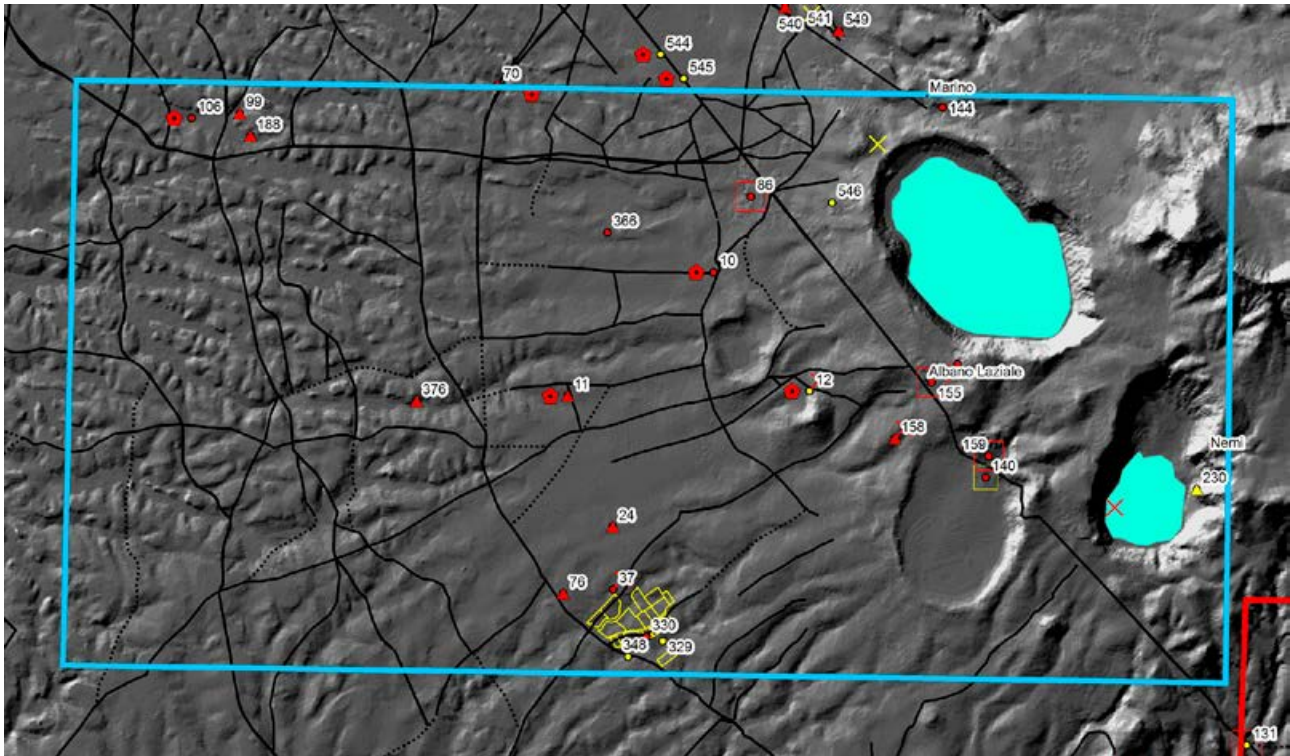


Figure 7.22. 3rd century Alban Hills and west key area. Pentagons with a black dot represent late Roman monumental tombs (of unknown date). An x marks a necropolis.

Lanuvio-Albano survey area, the farmsteads date no later than the 4th century⁴⁵¹ (see figure 7.23).

In the 4th century, the first churches and chapels were built in the key area, at site 315 *forma italiae bovillae* (OLIMsite 546) and at *Castra Albana*.

Castra Albana and *Ariccia* are listed on the in *Itinerarium Burdigalense* (333 AD) as *ciuitas aricia et albana*. *Castra Albana*, founded in the Severian age, lacks on the Peutinger map, possibly because the archetype of the *Tabula* dates to the 1st century AD. According to the *Liber Pontificalis* the abandoned barracks of this *castrum* were given by Constantine as a gift to the church at the start of the 4th century⁴⁵². During the reign of Constantine, the St. John the Baptist church was constructed.

In the 4th century the papacy gained a vast number of landed properties outside of Rome. Several of these properties can be located in the Alban Hills key area with some degree of certainty: the *possessio lacum Turni* (OLIMsite 632), *possessio lacum Albanensis* (OLIMsite 631), *massa Nemus* (OLIMsite 171), and *Castra Albana* itself. What the rural possessions and the *massa* consisted of, or how they were organised or interacted with each other, is not well known. The *massa Nemus* is probably part of the Nemi lake area, given the toponym (OLIMtoponym 235) and the fact that the *Liber Pontificalis* describes it as a gift to the cathedral of Albano⁴⁵³.

5th to 7th century: recorded continuity near roads

Archaeological and historical evidence of activities slowly retreats to the main axis of the area in the 5th to 7th century: the *Via Appia* and the northern transverse road (see figures 7.24-7.25). This may show that only those socio-economic and ecclesiastical activities that had connections with or investments from Rome could survive. Again, we cannot be certain of what happened in more marginal areas, as these have not yet been thoroughly studied. With the current evidence, continuity seems concentrated along the roads, most of all along the Appian road.

Exemplary for continuity is *Castra Albana*. Local tradition tells that in the 5th century this town was occupied by Ostrogoths for a few decennia, although solid historical evidence for this occupation is lacking⁴⁵⁴. The old camp turned town became an episcopal seat in 455 AD⁴⁵⁵. In the 6th century the St. Peter's church was built by Pope Hormisdas (514-523)⁴⁵⁶. The catacombs of *Castra Albana* were dated from the 6th to the 9th century. By the 6th century the town was listed as *municipium* (autonomous city). One tradition tells that *Castra Albana* in the 6th century was converted into a contracted fortified settlement, an *oppidulum*⁴⁵⁷. In all, continuity of activity at *Castra Albana* is certain. For every century throughout the middle ages archaeological or historical evidence is available. Especially the episcopal records provide evidence for permanent bustle here.

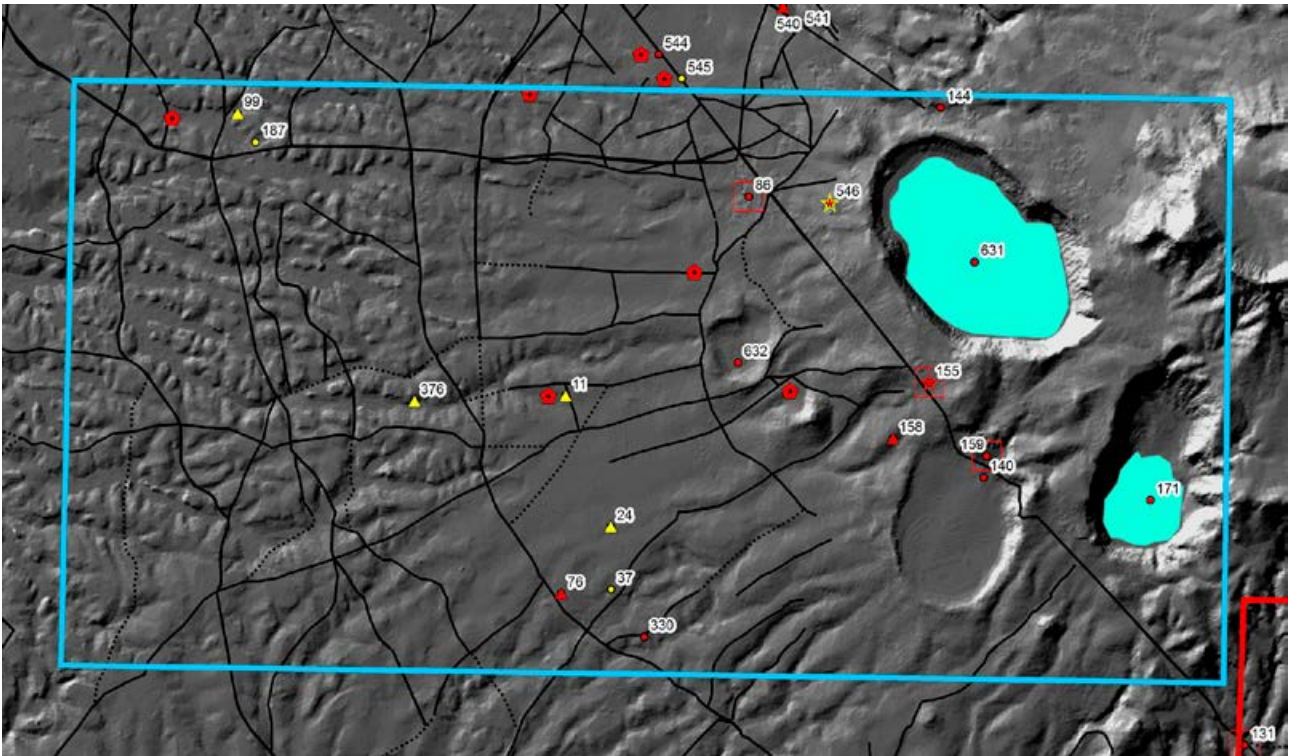


Figure 7.23, 4th century Alban Hills and west key area.

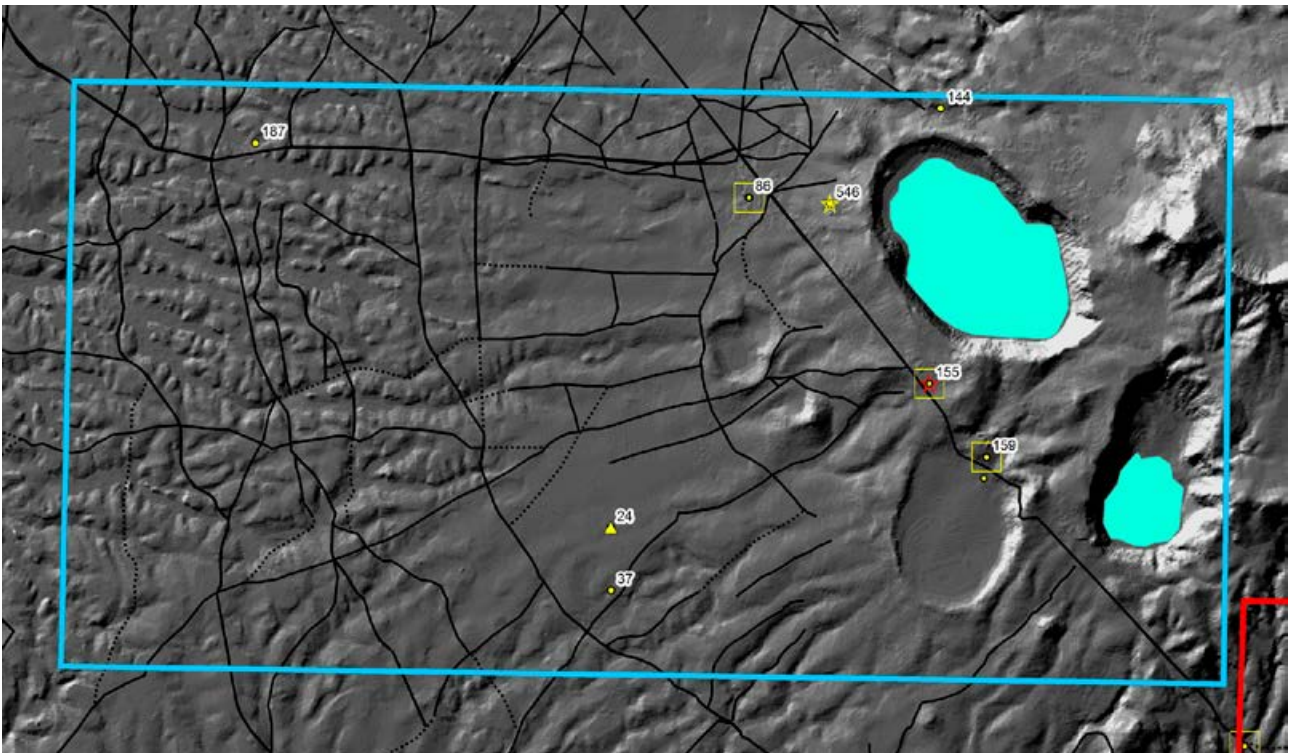


Figure 7.24, 5th century Alban Hills and west key area.

After its (presumed) sack by Goths and Vandals, Ariccia disappears from the radar from the 6th century until the 10th century, although some kind of continuity has been suggested.⁴⁵⁸

Bovillae in the 4th and 5th century still was an important settlement; many early Christian remains have been found here⁴⁵⁹. Continuity on this site is possible, given its position on the Via Appia and nearness to Rome. As

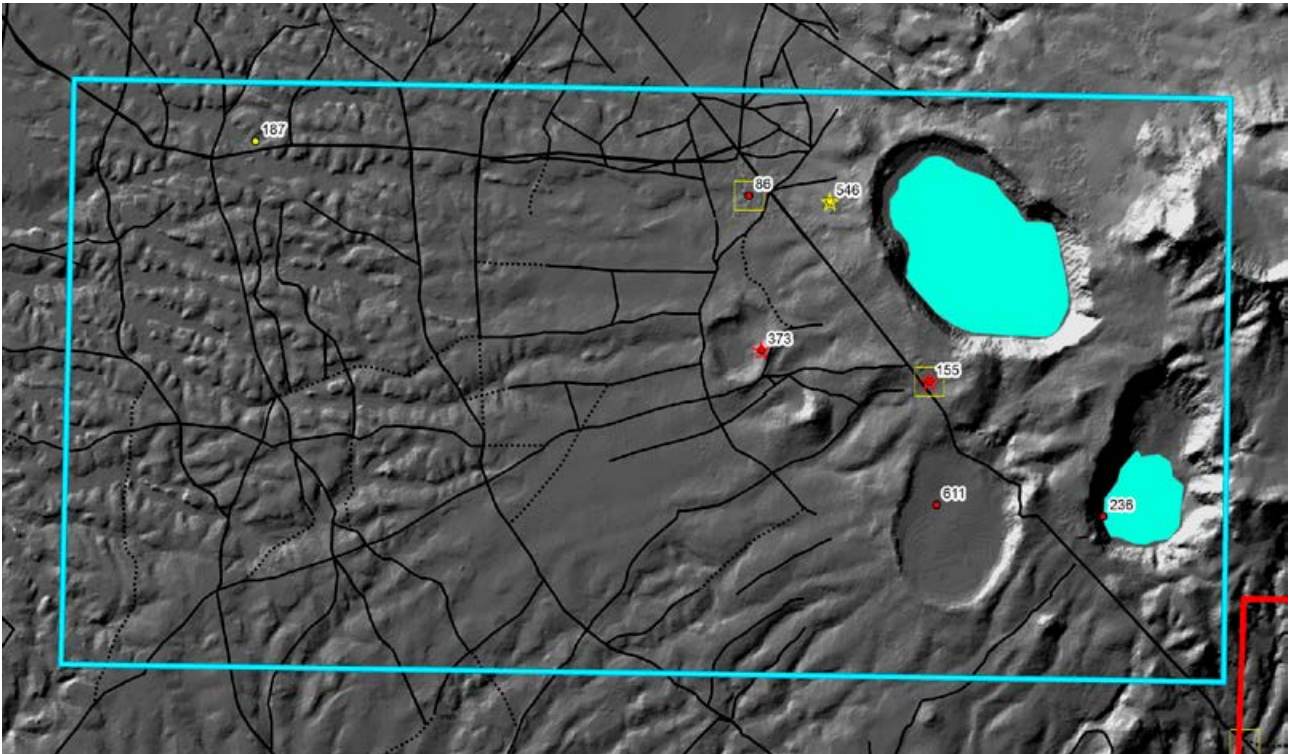


Figure 7.25. 6th and 7th century Alban Hills and west key area.

at Ariccia, all evidence for activity lacks from the 6th onwards. It has been claimed that Bovillae was burned by Saracens in 846 AD⁴⁶⁰, although concrete historical or archaeological evidence for this event is not available.

The villa in località S.Maria at the Nemi lake (OLIMsite 236), earlier abandoned in the 2nd century AD, was reused as a necropolis in the 6th century⁴⁶¹. As a consequence, we can be certain of continued settlement in the Nemi area until that date. Possibly the estate of *massa Nemus* (OLIMsite 171) was located nearby, although no record of this *fundus* exists after the 4th century.

As in other key areas (Velletri, Fondi), the late 6th and 7th century shows a lacuna in historical evidence on activities on most sites. The only exception is the episcopal record of Castra Albana. In the late 7th century new written (epigraphic) evidence becomes available: the *massa Ocris / Ocrana* (OLIMsite 611) is a church possession, of which the name was engraved on an inscription in the S.Susanna in Rome, dated 687-701 AD⁴⁶². Later, this *massa* is also mentioned in episcopal canon 149, dated 715-731 AD⁴⁶³.

The 7th century saw the building of the rural church dedicated to S.Eufemia (OLIMsite 373). Constructed by orders of Pope Donus (676-678)⁴⁶⁴, its exact location is not known. It was probably situated in the area west of Castra Albana, close to the Via Appia.

7.1.1.6.2 Infrastructure (figure 7.26)

No less than 5 main north-south routes crossed the area, from west to east:

- Via Ardeatina Vecchia western branch (OLIMinfra 73)
- Via Ardeatina Vecchia eastern branch (OLIMinfra 71), southwards called the “Via Satricana” (OLIMinfra 72)⁴⁶⁵.
- the Via Anziate - Via Nettunense (OLIMinfra 88). The road between the Via Appia and the sea near Antium, swerving around the foothills of the Alban Hills. This road is unnamed in Roman times and thus may have been a secondary road.
- the Via Appia (OLIMinfra 4).

Most of the roads in the key area were unnamed in Roman times, meaning that they were secondary roads. Scholars often used anachronistic names for them, such as ‘Via Satricana’ and ‘Via Lavinata’⁴⁶⁶. At least two roads with a name, i.e. main routes or *viae publicae*, ran through the area in the Roman period: the Via Ardeatina and Via Appia. With its many trajectories directed north-south and intricate arrangement, the complex road system in this key area seems to illustrate the intensity of interaction between Rome and its hinterland. Most of the main routes to Rome probably remained in use until (sub) recent times. Their long-lasting usage leaves archaeologically easily detectable traces, visible on the ground and on aerial photographs⁴⁶⁷. Moreover, many of these routes are

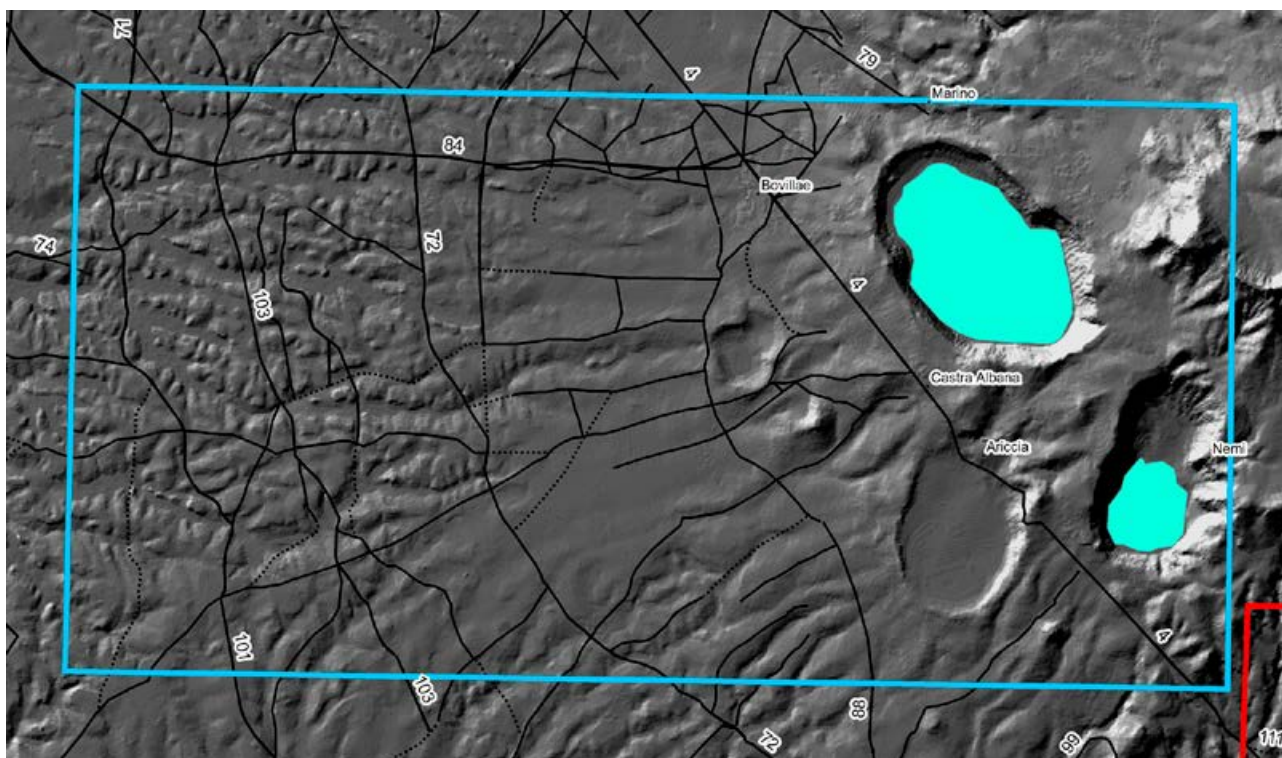


Figure 7.26. Roman to early medieval roads in the Colli - west key area, with OLIMinfra numbers.

still in use in our time. On detailed historical maps, like De Prony 1811 (Map 45) and the 1851 Austrian map (Map 49), the same road pattern is basically still visible.

Two unnamed roads crossed the area, from west to east: the **northern transverse road to the foot of the Alban Hills** (OLIMinfra 84), and a **southern trasversale**, modern Via del Mare (OS infra 85). The latter road ran from Castra Albana to Pratica (Lavinium) on the coast.

7.1.1.6.3 Economy, production and trade

The current study area is part of the natural hinterland of Rome: the northern boundary of the Alban Hills key area is located 12 km from the S. Sebastiano gate. Rome undoubtedly was the main market for the revenues from the villas in the area, with the many north-south routes facilitating transport.

The Alban Hills are known for their olive yards and vineyards. The 1851 maps show that in pre-industrial times most of the Alban Hills, especially the area west of the Via Appia until roughly the Via Satricana, were exploited for extensive arboriculture, intensive viticulture, olive culture and possibly horticulture⁴⁶⁸. The peperino tuff offers the mineral-rich substrate that is particularly suitable for growing grape vines.

The western part of the key area is suitable for all kinds of crop production, as it is fertile and less undulating than the area closer to the former Volcano. On several sites

here, production facilities have been found (see map 3rd century).

The pope acquired several rural possessions from the early 4th century onwards in the Colli key area. The main geo-political rationale behind the acquisition of landed possessions was, in all probability, direct production of supplies for Rome. The importance of the productive capacity of these estates can be read in the *Liber Pontificalis*, from the fact that their revenues are explicitly mentioned. The *massa Nemus*, for example, yielded 280 solidi (standard gold coin)⁴⁶⁹, while *possessio Lacum Albanensis* (OLIMsite 631) had a revenue of 250 solidi. We do not yet have a concrete clue on the size of the *massa* and possession nor on how these precisely functioned and interacted, and where the working population was settled⁴⁷⁰.

Although the evidence on the villas evaporates from the 4th century onwards, the newly acquired papal landed properties show that the role of the Alban Hills area as agricultural production area for Rome continued throughout late Antiquity, and beyond⁴⁷¹.

7.1.1.6.4 Religion and worship

Several of newly acquired 4th century papal landed properties outside of Rome were located in the Alban Hills key area.

Castra Albana played an important role in the proliferation of the Christian faith into the hinterland of Rome. It

was one of the suburbicarian dioceses, the bishoprics closest to Rome with an especially close relationship with the papacy⁴⁷². It was the only town donated by Constantine. Constantine personally ordered the construction, in concordance with the church, of the St. John the Baptist church⁴⁷³. This church probably stood on the location of the present cathedral, built on Domitian's Roman baths of the former camp. Early Christian catacombs are found here.

The earliest known churches and chapels in key area arose at **Castra Albana** and **site 315 forma italiae bovilae** (OLIMsite 546). Both church sites are located close to the Via Appia. This proximity to the Appian road may be given in evidence for the idea that early churches were built in centres along the main Roman roads⁴⁷⁴. Evidence in other parts of the study area seems to paint the same picture⁴⁷⁵. A third early Christian church evolved at **S.Eufemia** (OLIMsite 373, 7th century), also located near the Appia⁴⁷⁶.

7.I.1.6.5 *Geo-politics: power relations, struggle and control strategies; secular activities*

The many roads to and from the area make it a seemingly vulnerable region, easy penetrable for intruders from the sea and the south, especially the Via Appia, the **southern trasversale** (OS infra 85) and the **Via Anziate/Nettunense** (OLIMinfra 88). The last two ran straight from the sea to the Alban Hills. The possible 6th century conversion of Castra Albana into a fortified settlement may be connected to this vulnerability. As discussed, undocumented local traditions tells us that in the 5th century Castra Albana was occupied by Ostrogoths for a few decennia, and that Ariccia was sacked by Ostrogoths and Vandals in the same century. Despite the insecurity of the late Roman times, no stronghold has been attested in the area. Only for Castra Albana, the written record is explicit: There Procopius recorded the foundation of a Byzantine fortification during the Gothic war during the 6th century⁴⁷⁷. The Alban hill key area is exemplary for most of the other key areas: evidence of building or re-bolstering defences in the post-Roman period is meagre. As Christie shows, this is caused by the lack of visibility: the archaeological proof for such activities is difficult to ascertain⁴⁷⁸.

7.I.1.7 The Priverno-Fossanova key area, from the 3rd to the 7th century

Systematic archaeological research in rural parts has been done foremost in the southern most edge of the current key area: here reconnaissance work has been done under the direction of Margherita Cancellieri⁴⁷⁹. Pottery studies have been done at Ceriara⁴⁸⁰.

One site particularly stands out in this key area: Privernum. This site has been the subject of long running

archaeological and historical studies into late Roman to high medieval contexts. Here, the latest typological knowledge of late Antique and early medieval pottery is brought into practice; the ceramics laboratory of the Privernum research team has even become a centre of pioneering medieval pottery studies.

7.I.1.7.1 *General site distribution: monitoring of (change in) human activity*

Diachronic trends

3rd to 5th century: Privernum and Fossanova villa site
(see figure 7.27)

It cannot be ruled out that this area, tucked away between the Lepine and Ausoni Mountains and the Pontine and Sacco Valleys, saw less activity compared to other parts of Tyrrhenian southern Lazio. However, I presume that a lack of (published) research is the main cause of a nearly void late Roman landscape map⁴⁸¹: only two sites in the key area provide evidence for late Roman activities, the town of **Privernum** (OLIMsite 25) and a villa on the site of the later monastery of **Fossanova** (OLIMsite 9).

In the heart of the Amaseno plain, in località Mezzagosto, north of the current town of Priverno, lies the site of the *municipum* of **Privernum**. Discovered in 1899, it is a skillfully excavated site with well-documented stratigraphies. The town originally was a republican Roman camp. The Roman urban area shows among others Roman baths, a 1st century AD amphitheatre and a sanctuary. In the 5th century the amphitheatre was converted into a fortress⁴⁸².

The Roman villa on the site of the later monastery of **Fossanova** has a well-documented stratigraphy until the middle imperial period. Excavations, below the current cloister and refectory, show that this probably was a basis villa with residential function⁴⁸³. Next to the living quarters a thermal complex has been unearthed, including still connected water pipes. Production facilities have not been found. A paved Roman road ran from the villa in the direction of the Amaseno river.

Just south of the key area lies the **late imperial structure in contrada Anime Sante** (OLIMsite 240). The function of this structure is unknown. Finds include walls with plaster, tiles and amphorae, all embedded in alluvial layers from the river Amaseno⁴⁸⁴.

6th and 7th century:

evidence for churches and burial grounds

The excavations at **Privernum** have revealed an urban area with a certain level of continued activities until at least the 14th century. Here, a church was built in the 6th century which remained in use until the high middle ages.

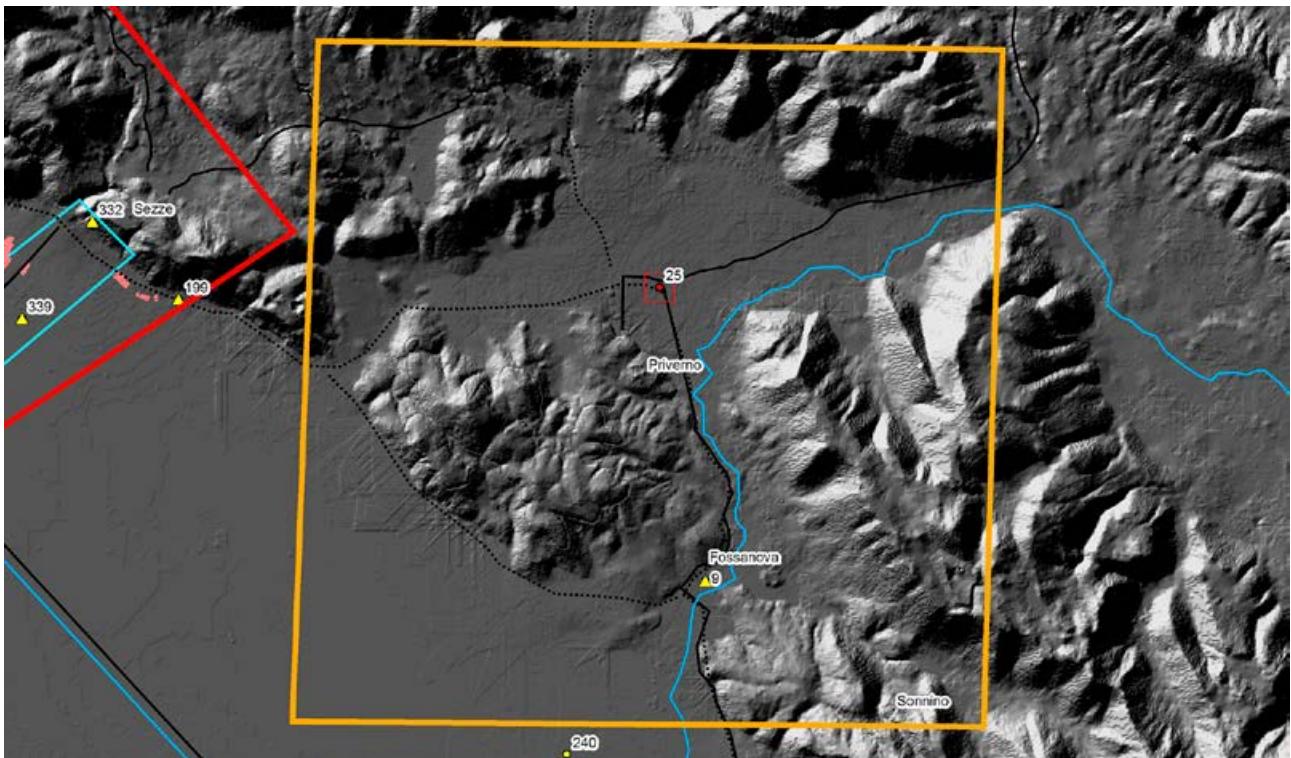


Figure 7.27. 3rd to 5th century Privernum-Fossanova key area.

On the site of Privernum a large cemetery developed from the 6th century onwards. Privernum is one of the few Roman sites in Tyrrhenian southern Lazio for which continuity until the high middle ages has been proven; it is also one of the few sites where such extensive stratigraphical research has been carried out. Somewhere between the later early and high middle ages, (part of) the population of Privernum was resettled on the location of the current town of Priverno.

During the Hidden Landscape project⁴⁸⁵, at the Lepine mountain top site of **Sancti Angeli de Campo Mellis** (OLIMsite 414) 6th or 7th century pottery has been found. This shows how imported wares in this period still found their way far inland⁴⁸⁶. It is unknown what activities took place at the site.

At the site of **Ceriara** (OLIMsite 65) a large burial ground has been discovered, situated near the site of a Roman platform basis with a chronology until the late 2nd century AD. The graves are spread out over a large area, and have been dated to the 6th and 7th century on the basis of the pottery⁴⁸⁷. Here we have a unique case of a well-studied late Antique cemetery in a marginal setting, raising the issue of ethnicity of the period. By some scholars, the burial ground has tentatively been linked to a Lombard population. Then again, “autochtone” and Byzantine elements (fibulae of the 7th century) have been found too. Quite understandably, scholars have focussed on the interesting

notion of a possible Lombard population here. The diagnostic material found was scarce, but a Lombard identification of several assemblages cannot be ruled out given the parallels with Lombard necropoleis in other parts of Central and southern Italy. In the high middle ages, the site again saw activity, as is proven by the wares found⁴⁸⁸. For more on the subject of mixed cultural assemblages, see the discussion below (7.I.1.7.5, Discussion: Ceriara, emblematic for mixed ethnical contexts in 6th and 7th century inland south-eastern Lazio?).

On the **Fossanova** site, an early and middle imperial phase has been documented. The late Empire yields less evidence. The excavations on the refectory, however, seem to show that this was a site of continued activity into the early middle ages, and beyond. Here a floor level has been excavated, dated to the 6th or 7th century AD, part of a restructuring of the site⁴⁸⁹. The excavators believed the floor is evidence for the last phase of the villa. It is unclear what the status of the sites was after this restructuring, perhaps a small settlement. Possibly the site was an example of what is seen in Tuscany, where only few selected sites survived, centres on which habitation and rural cultivation were concentrated. Often these were situated in and around old (maritime) villas and locations along the functioning roads⁴⁹⁰. There is a change that the site saw continued activities into the 8th century and beyond. In anticipation of more excavations, Fossanova is one of the few sites (with among others Villamagna (OLIMsite 52))

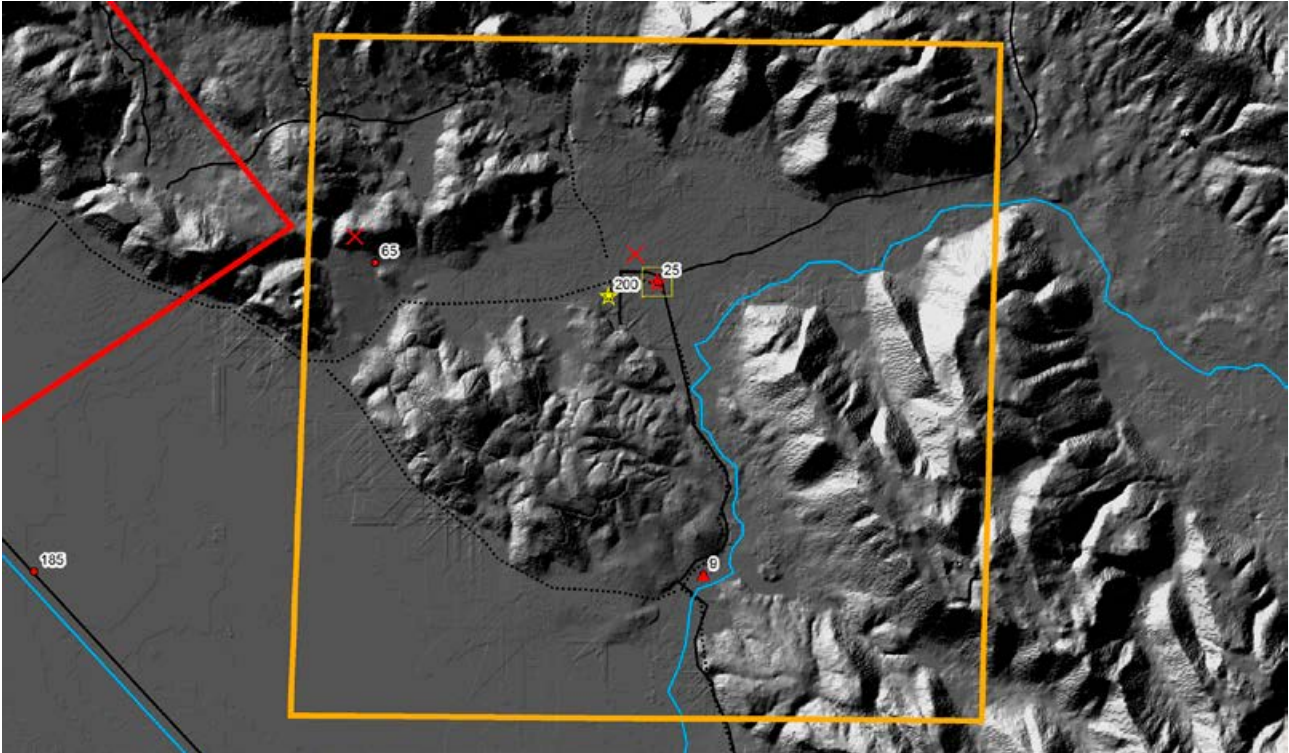


Figure 7.28. 6th and 7th century Privernum-Fossanova key area. Nr 63 marks the burial ground of Ceriara.

in the studied part of southern Lazio on which continued activity until the high middle ages may eventually be proven, from a Roman villa into a monastic settlement⁴⁹¹. The first document on the Abbey of Fossanova dates to 1089.

In the 7th or 8th century the rural church of **Colle S.Pietro** (OLIMsite 200) was erected to the west of Privernum. This date is based on marble fragments with decorations⁴⁹².

7.I.1.7.2 Infrastructure

The Amaseno Valley constitutes a vital natural corridor through the Lepine Mountains. In ancient times, several routes ran through it. Even today, the main road from the coast and Pontine Plain to the Sacco Valley (the N156) runs through this valley. The valley is connected to the Pontine plain by two passages: one to the west, 4 km south of Sezze, and one to the south, reaching the plain at Fossanova. Northwards the Amaseno valley is connected to the Sacco Valley by two main routes. First of all, the **Signia-Privernum route** (OLIMinfra 60), the black dashed route on the map. In Roman times, this road was an important bypass from the Via Latina⁴⁹³, connecting the Sacco valley and the Pontine plain. Since its foundation as a *colonia*, Segni must have acted as a control point for this route⁴⁹⁴.

A second road northwards is the direct route **Privernum – Via Latina** (OLIMinfra 105). This road, the

shortest route between Terracina and the Sacco Valley, followed an ancient route. The road was probably paved in Roman times⁴⁹⁵. It reached the Sacco Valley roughly 4 km west of the Roman and medieval town of **Fabrateria Vetus - Ceccano** (OLIMsite 253)⁴⁹⁶.

As touched upon in the Fogliano key area (7.I.1.2), the Pontine plain suffered from increased flooding and sedimentation from the late Roman period onwards. The resulting abandonment of the Via Appia in the central Pontine plain must have meant a boost for long-distance travel along the route from Privernum to Terracina. With the obstruction the Appian route, the main artery from the northern plain southwards was relayed to pedemontana, turning to the Amaseno Valley south of Sezze, passing Privernum and then south again (on the map the dashed route with the white arrows). A transverse road (OLIMinfra 57), keeping to the pedemontana along the base of the mountains south of Sezze, may have been used in the early and high middle ages as well, probably for local traffic. The depleted terrain here, may have caused regular (seasonal) flooding of this road⁴⁹⁷, rendering a lasting and intensive use of the route problematical⁴⁹⁸. It is unknown when the pedemontana took over from the route through the central plain; a date in the 6th or 7th century is likely⁴⁹⁹. On post-Renaissance maps, the detour over Privernum is sometimes explicitly depicted. The Map La Campagne de Romme by Gilles Boileau de Bouillon (1555, Map 17), for example, depicting the pedemontana

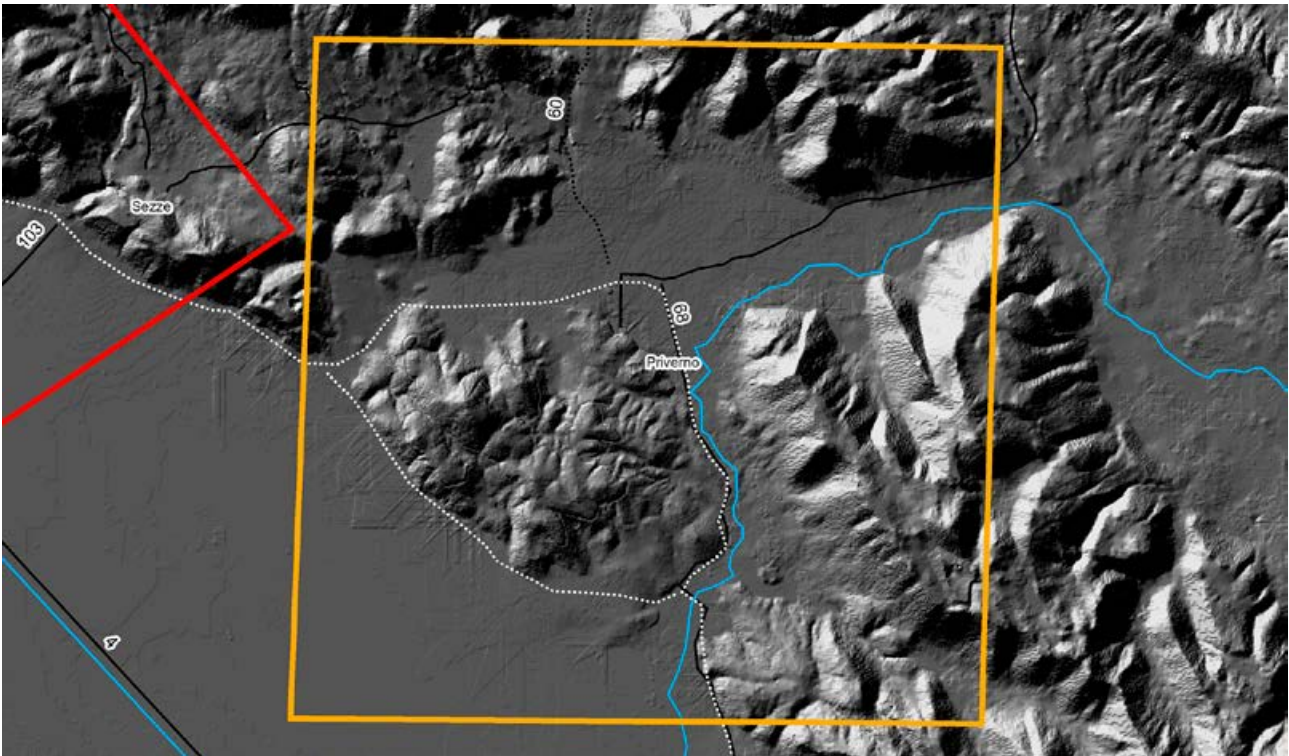


Figure 7.29. Infrastructure Privernum-Fossanova key area 3rd to 7th century. Possible early to high medieval rerouting of the road from Rome to Terracina in dashed lines.

route from Rome to Naples, explicitly shows the detour via Priverno/Piperno. On the location of the Pontine swamps an annotation is made, reading “le chemin tourne ainsi pourque est endroli [endroit= place?] est marecugeux”, which probably translates as “the road is detoured because it is flooded at this spot”.

It is unclear whether the river Amaseno was navigable at a given point in time, and until what point upstream. According to De Rossi, the river Amaseno was (again?) navigable in the middle ages, from Terracina west and northwards until the Fossanova monastery at least⁵⁰⁰.

South of the current key area, the tentative tract of the northern Pontine transverse road (OLIMinfra 49) may have reached the base of the Ausoni Mountains (see figure 7.10 and 7.43). This road, and a parallel road more to the south, might have run all the way from the pedemontana, crossing the Via Appia, to the coast. As sections of these transverse roads were still visible in the 1930s, continued use (of parts) of these tracts from the Roman period onwards until sub-recent times may be assumed⁵⁰¹. These roads must have profoundly impacted the socio-economic circumstances of the central Pontine plain area, opening up the western coastal zone.

7.1.1.7.3 Economy, production and trade

At Privernum (OLIMsite 25) the pottery evidence shows a early discontinuity of African imports, as only few sherds

have been found dating later than the early 6th century. Eastern wares are scarce as well. From the 6th onwards most ceramics were locally produced, although a lack of chemical analysis does not allow further specifications⁵⁰². All 6th and 7th common wares are generally comparable, although with some local particularities, to contemporary pottery found in Tyrrhenian southern Lazio, the Adriatic coast and Campania. Privernum in Roman times was known for its wines, as Pliny the Elder tells us⁵⁰³. The 1851 maps show the potential of the soils in the Amaseno valley for this kind of land use: parts of the area in the middle of the 19th century were used for viticulture and olive culture.

Part of the exploitation of the Pontine plain may have been directed from or towards the pedemontana villas, such as the one attested at the site of Fossanova. The villa at Fossanova had a well-documented residential function. It seems unlikely that this villa, located in the fertile fluvio-colluvial plain of the Amaseno, was used for dwelling only. Van Joolen's land evaluation in Pontine Region showed that, in the Archaic and Roman period, this part of Pontine plain was suited for all kinds of crop production: barley, millet, other wheats and specialized olive cultivation⁵⁰⁴. On the foothills near Fossanova mixed land use is visible on the 1851 maps: intensive viticulture, olive culture and/or more extensive forms of arboriculture⁵⁰⁵. The pottery evidence (Hayes 90 sherds) found in the wall

foundation below the refectory, shows that interregional/pan-Mediterranean trade found its way into the lower Pontine plain until the 6th or 7th century.

The archaeological studies at **Privernum** and **Ceriara** show that the Amaseno Valley from the 6th-7th century until the 9th-10th century was involved in trade/exchange systems originating in the southern Sacco Valley and south-eastern Lazio⁵⁰⁶. The cemetery of Ceriara seems a case in point of the role of the Amaseno valley as passageway in view of its mixed cultural pallet, which seems typical for the southern Sacco and Liri-Garigliano region (see below here in 5. Geo-politics). Terracina may have been the end station of such detour of these trade routes from the Via Latina and through the Amaseno Valley, as it may have controlled the ancient route from the Amaseno Valley to the coast in late Antiquity and the early middle ages⁵⁰⁷. The lack of (published) pottery studies in Terracina impedes the corroboration of this hypothesis.

In the central basin of the Pontine plain, a Roman centuriation system had been reconstructed in the late 4th/early 3rd century BC⁵⁰⁸. Laid in blocks of 10 *actus* (ca. 350 meters), it is visible in the road network stretching from the Via Appia into the plain. It is uncertain until when this system of canals and fields, and associated agricultural production, was upheld. It has been established, however, that elements of the centuriation persisted in post-Roman times. Its impact on the shape of the central plain was lasting. The current division of drainage canals largely copies the centuriation layout.

Cancellieri provided evidence for a centuriation system functioning in the Amaseno Valley as well, a clear sign that the area in the Roman period was developed for agricultural production⁵⁰⁹. The retrospective view may show the environmental rationale behind this centuriation : Map 40, *Pinata delle Paludi Pontine formata per ordine di Nro Sigre Pio papa VI 1785* by Gaetano Astolfi⁵¹⁰, shows a large *stagno* near Priverno. The 1851 maps paint the same picture. This is an indication for the enduring challenges of living and producing in the Priverno plain, at least in sub-recent times. It is unclear if the hydrological conditions in Roman times were as bad as in the 18th and 19th century: The post-Roman increase in sedimentation, as discussed above, may later have enlarged the hydrological problems in the plain⁵¹¹.

7.1.1.7.4 Religion and worship

There are no indications for early Church involvement (ownership) in the area. The first signs of the Christian faith become visible in the 6th century. Only in the 8th century the area was bestowed with a bishopric, at Privernum.

7.1.1.7.5 Geo-politics: power relations, struggle and control strategies; secular activities

The Privernum – Fossanova key area yields no evidence for late Antique defensive activities, except for the 5th century fortification in **Privernum**. Here, the archaeological evidence shows the defensive nature of the amphitheatre in the 5th and 6th century. It is unclear whether this fortress was still in use afterwards. Such *ad hoc* defences have also been attested elsewhere in the research area, at Ostia.

Discussion: Ceriara, emblematic for mixed ethnical contexts in 6th and 7th century inland south-eastern Lazio?

The 6th or 7th century burial ground of **Ceriara** (OLIMsite 65) is the only archaeological site with certain Lombard elements in the research area. A stable Lombard community in the nearby area, however, is implausible. The direct influence of the Lombards on most of the research area must have been limited, as the borders of Lombard territory lie remote from the research area⁵¹². Lombard incursions in the research area were mostly restricted to occasional raids, such as on Fondi in 592. Indeed, there is no historical or archaeological evidence suggesting permanent Lombard settlement in the wider region.

The mixed cultural assemblages at Ceriara, however, match with other 6th and 7th century sites in the southern Sacco Valley. An example is the 6th century hoard found at **Castro dei Volsci** (OLIMsite 257), consisting of 1461 Byzantine, Vandal and Ostrogoth coins. At Casale di Madonna del Piano, close to Castro dei Volsci, late Antique (up to 7th century) grave finds include locally manufactured and Byzantine ornamented objects, coarse ware pottery in late Roman tradition and possible Lombard influenced belt-fittings. The 6th and 7th century graves near the cathedral of Veroli (situated outside the research area) shows the same blending of cultural elements⁵¹³.

The significance of these mixtures of different cultural elements is difficult to understand. Corsi wrote that these mixed assemblages show both social insecurity and active exchange between the coast and inland areas⁵¹⁴. What is clear, is that in south-eastern Lazio in the 6th and 7th century (local) material cultural blending took place. The factors behind these mixed assemblages are difficult to grasp. What seems certain is that active exchange / trade systems functioned on a wide range in the Sacco and Liri-Garigliano valleys⁵¹⁵. Maybe the contexts found can be explained by a combination of a highly interactive exchange system and the volatile socio/geo-political situation. Possibly, in the areas where the Duchy of Rome had more power on the ground, on the coast, near main roads, and near Rome and towns like Terracina, areas where the socio-political situation was more stable, ethnic blending may have been less. Further conceptualisation

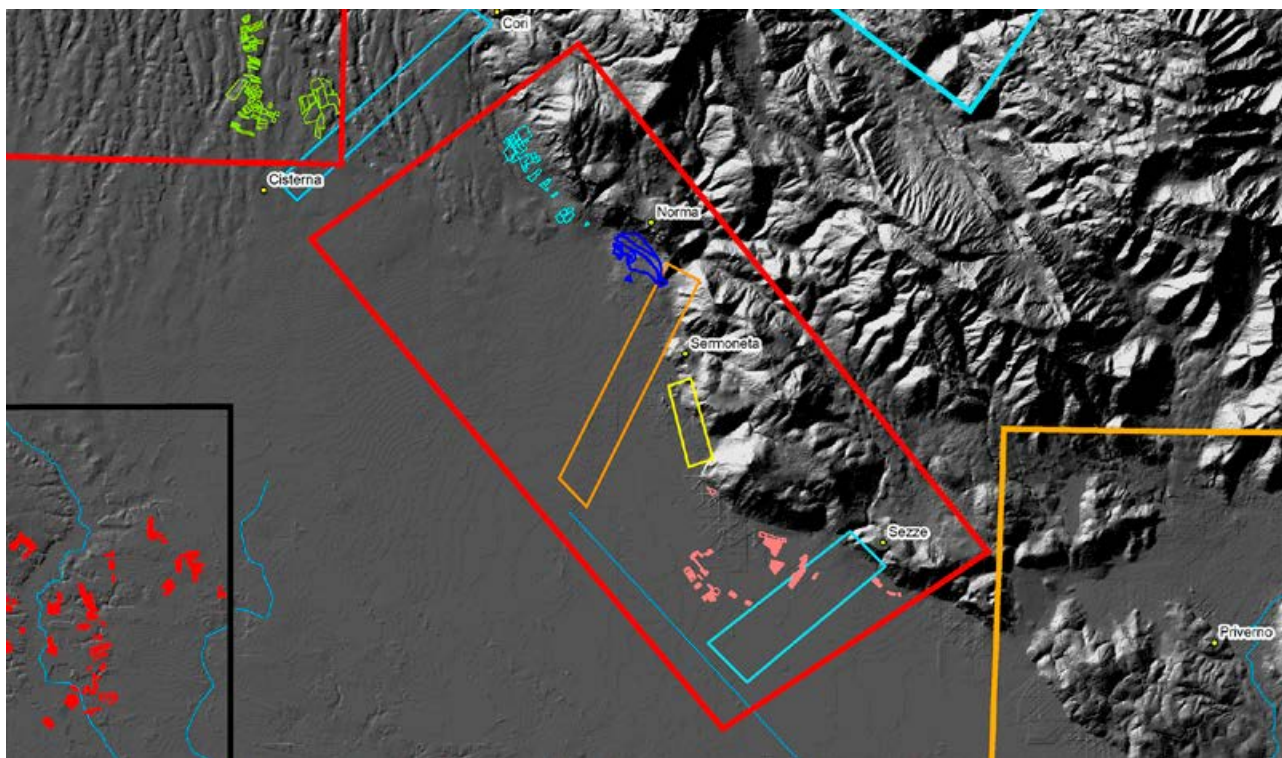


Figure 7.30. Earlier studies in the pedemontana key area. The large centrally placed red square marks the outline of the key area. The Ninfa survey fields are illustrated in light blue, the Norba fields in dark blue and the Sezze fields in light red. The Norba, Norba-additional and Sezze survey transects are depicted in respectively orange, yellow and blue.

on the subject should be preserved for future studies. Nevertheless, the Ceriara cemetery is the western most manifestation of this mixed material culture in south-eastern Lazio. The presence of this mixed-culture in the Amaseno Valley may have been caused by the direction of trade/exchange routes from inland areas. Corsi maintained that the Amaseno-Sacco corridor was a branch in several trade routes coming from south-eastern Lazio (Sacco-Liri-Garigliano), with its blended cultural pallet; possibly Terracina was the end station of this branch⁵¹⁶.

As noted earlier, a sub-recent transhumant *tratturo* coming from the Liri valley – Amaseno valley ran through the Amaseno Valley. It was directed towards the Pontine *pedemontana* and from there to the winter pasture fields on the Nettuno – Anzio coast⁵¹⁷. It is possible that this transhumance route was also in use in late Antiquity. This movement of peoples and goods may have contributed to the exchange of goods from the Sacco-Liri region, which have been found in the Ceriara cemetery.

7.I.1.8 The pedemontana and plain between Norma and Sezze, from the 3rd to the 7th century

In the late 1980s and 1990s the GIA conducted transect surveys in the key area, near Norba and Sezze. This was followed by intensive field surveys in the foothills, near Ninfa, Norba and Sezze. Below Sezze, also parts of the plain were thus intensively surveyed. During the different

survey projects, environmental studies were carried out as well. One of the goals of the Ninfa survey was to revisit *Forma Italiae* sites that had not yet disappeared. Like in the Cisterna survey, the samples of all these surveys have been restudied by De Haas⁵¹⁸. The northern part of the pedemontana key area is treated in the *Cora Forma Italiae* volume. Thorough excavations have been undertaken on the sites of Norba⁵¹⁹, *Tres Tabernae*⁵²⁰ and *Forum Appii*⁵²¹. The last two sites have seen comprehensive pottery studies.

7.I.1.8.1 General site distribution: monitoring of (change in) human activity (figure 7.31)

3rd century: platform villas and farmsteads in the Lepine margins, villages on the Appian road

The GIA surveys in the foothills between Ninfa and Sezze recorded several late Roman villas, farmsteads, one possible sanctuary and a hamlet. These studies show that the number of sites declines from early imperial times onwards. At that time, the urban centre of Norba (OLIMsite 23) had already waned⁵²². Around the base of the mountains, seven platform villas and a few smaller farmsteads show continued occupation until the 3rd century. Platform villas are farms built on earth-filled large terraces, usually contained by polygonal walls. Typical for the Lepine foothills⁵²³, these villas are domestic rural structures, as becomes clear from the presence of fine

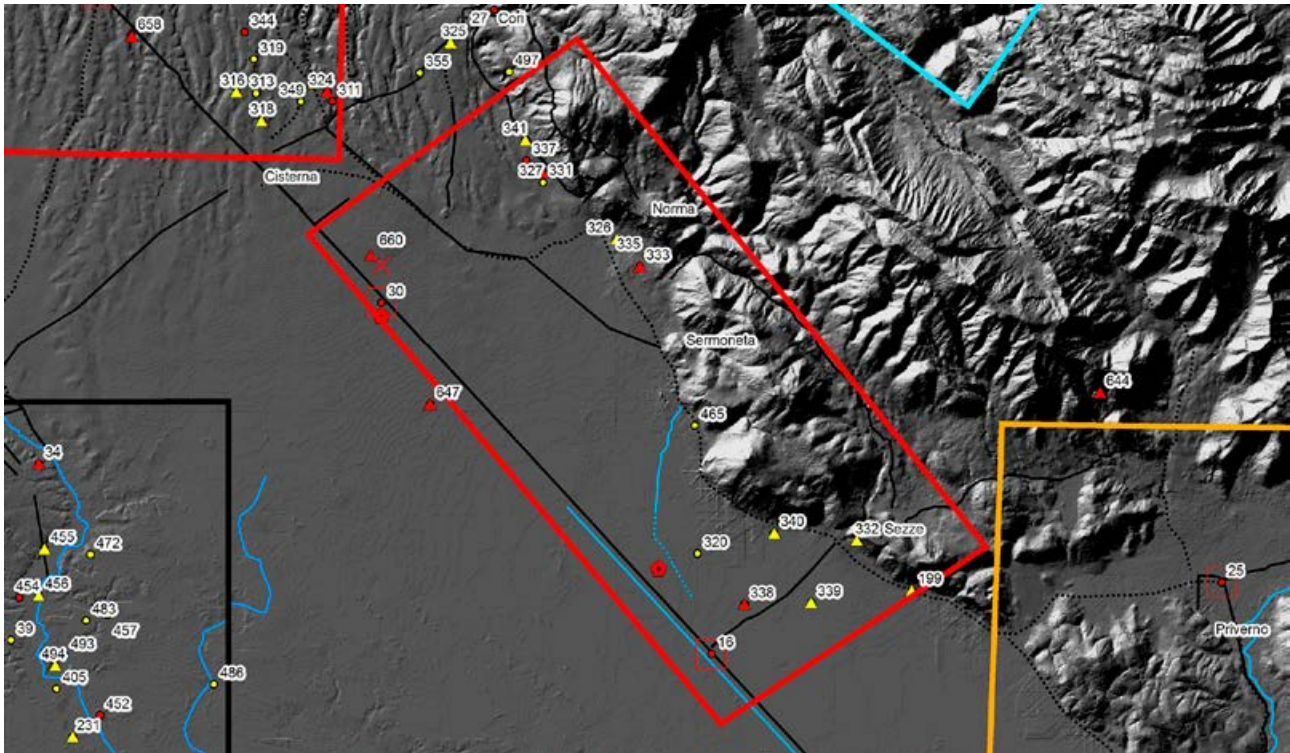


Figure 7.31. 3rd century pedemontana key area. Triangles are villas. A pentagon with a black dot represents a Roman monumental tomb (of unknown date). An x marks a cemetery.

ware. In the late phases of their existence, some platform villas show elaborate architectural elements, such as tesserae and painted wall plaster⁵²⁴. The high site density of such structures in the area indicates a modest size for the platform villa estates. No large *latifundia* have been attested in the pedemontana key area. Next to platform villas, simpler farmsteads functioned in the pedemontana as well.

The most elaborately equipped platform villa is **rpc site 10907, villa “le grotte”** (OLIMsite 199). Here several elaborate architectural elements and signs of luxury living have been found, such as mosaics, wall plaster, a vaulted platform in *opus caementicium/incertum*, two cryptoporticoes in *opus incertum* and a cistern⁵²⁵. A hamlet has been found at **rpc site 10514** (OLIMsite 337). The size of the surface scatter is 4 hectares.

The site found on the Via Appia in località *Piscina di Zaino* is probably the historically recorded road station / bishopric of **Tres Tabernae** (OLIMsite 30). In Roman times, Tres Tabernae was well-known as transit and rest point, as among others Cicero testified⁵²⁶; it was also recorded in several itineraries and became the home of an early bishopric⁵²⁷. The identification of this road station/episcopal center with the mentioned remains is not certain, but the evidence make a good case for it: its position along the Appia, its large size (2500 m²), a diverticulum of the Via

Appia found, but also its chronology, consistent with the historical record (1st century AD – 9th century AD)⁵²⁸. The vestiges found here paint a picture of a large settlement with four sectors of occupation⁵²⁹. Walls have been found dated between the 1st and 6th century AD, some of which are constructed in *opus vittatum*. A monumental Roman tumulus tomb has been found, dated in the 3rd to 5th century AD⁵³⁰. However, concrete remains for the site’s functioning as road station (such as stables) and the bishopric have not been found. One cannot therefore be certain if the site relates to either the road station or the bishopric, or both.

Roughly 2 kilometre to the north-west of the site in località *Piscina di Zaino* a villa with a large burial ground was unearthed in località *Bufolareccia* (OLIMsite 660). The burial ground was dated from the 1st century until the 4th / 5th century. Up until recently 650 graves were found, mostly inhumations⁵³¹. In view of its size, the burial ground must have been related to a larger population centre, the most likely of which is the complex possibly to be identified with Tres Tabernae.

Located 8,5 km to the south, **Tripontium** (OLIMsite 19) was a small Roman settlement and road station. It is depicted on none of the distribution maps, as it did not yield late Antique or early medieval evidence. Only in the 12th century, there again is historical evidence on activities here. At Tripontium, the river Ninfa probably

reached the Appia. Here, three bridges (*ponti*) were situated. It is unclear if the river in Roman times was diverted into the canal along the Via Appia, or if it continued into the inner graben basin.

Forum Appii (OLIMsite 16) was a Roman road station on the Via Appia, documented by several Roman authors (Juvenal, Horace) and on the *Itinerarium Antonini* as “foro appio” (at the start of the 4th century) and on the *Itineraria Burdigalense* (dated 333 AD) as “mutatio appi foro”. It was known as a harbour on the canal along the Via Appia. Horace, in the second half of the 1st century BC, for example, explicitly describes Forum Appii as place of embankment for boats on the canal to Terracina⁵³². From Juvenal, who wrote in the first decades of the 2nd century AD, Forum Appii appears as a safe haven within the plain where bands of highway robbers roamed about⁵³³.

Forum Appii has been identified with the archaeological remains of Casale / Astoria di Frappe, near Borgo Faiti.⁵³⁴ The site provides evidence for a small Roman village. According to Bruckner, the archaeology shows a site with a volatile history: there is much 1st century material, while (parts) of the site seems to have been abandoned at the end of that century. In the late 2nd and early part of the 3rd century, most of the site was abandoned. In the 4th century the number of finds increased. Recently, buildings associated with the river port (described by Horace) have been discovered by the GIA through a geophysical survey⁵³⁵.

Diachronic trends

The 4th and 5th century: drop in rural sites, papal possession in the area, continuity along the Appia (figures 7.32-7.33)

In the 4th and 5th century, the number of rural sites drops. This decline, however, is based on imported pottery. As discussed earlier, one cannot be certain that all sites with less or no access to easily recognisable traded goods, actually ceased to function⁵³⁶.

The historical 4th century **fundus Corbianus** (OLIMsite 124) can possibly be found in the key area. A connection of this toponym with Monte Corbinus/Corbianus, modern Monte Corvino/ Carbolino, seems possible (OLIMtoponym 378, and possibly OLIMtoponym 310). This *fundus* is listed as ecclesiastical ownership in the *Liber Pontificalis*, in the life of Sylvester I (314-335). It was owned by the titulus of Equitius, the later S.Martino ai Monti in Rome; its revenue is 60 solidi. If the identification with the area of Monte Corbinus is correct, this is the ecclesiastical estate located furthest from Rome in the 4th century (figure 7.33).

The 6th and 7th century: settlements in the plain abandoned, Norba plateau reoccupied

The archaeology of **Forum Appii** shows that the site was likely definitively abandoned from the middle of the 6th century⁵³⁷. This is exactly after the last recorded late Antique drainage works in the central Pontine, during the reign of Theodoric⁵³⁸. During these works, under

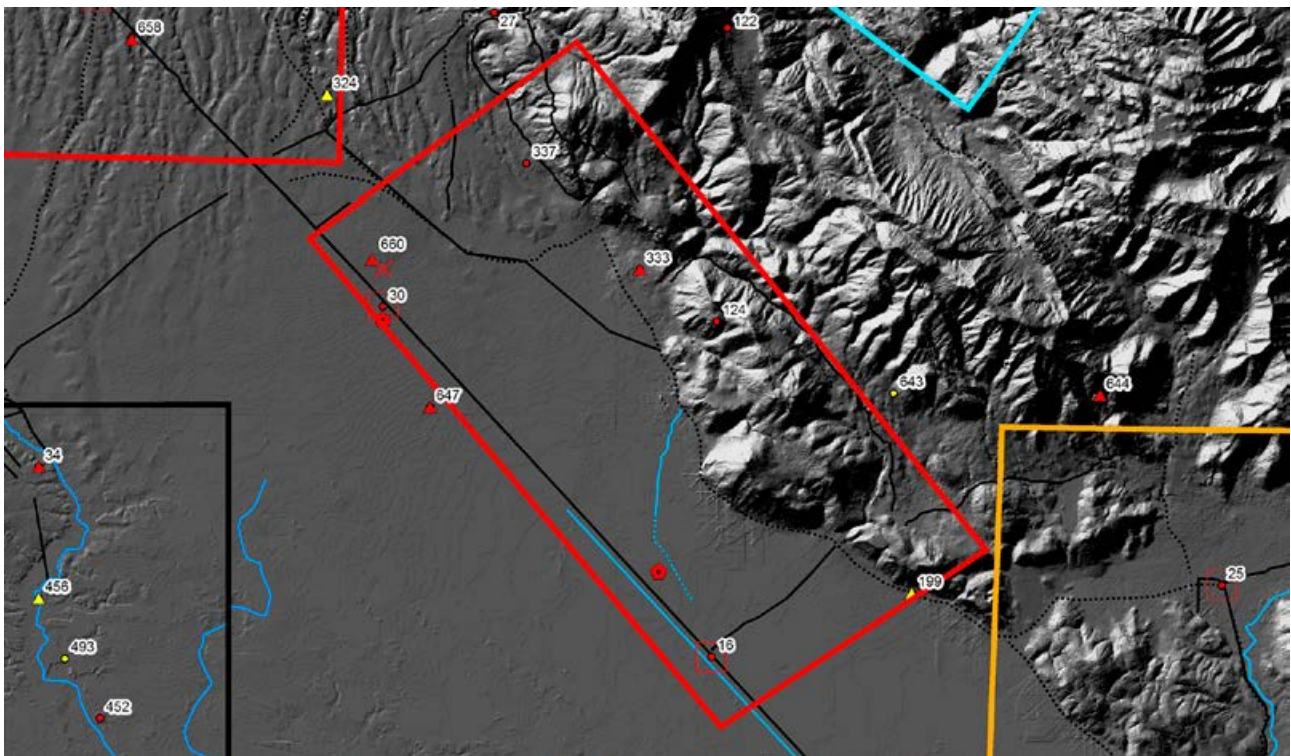


Figure 7.32. 4th century pedemontana key area.

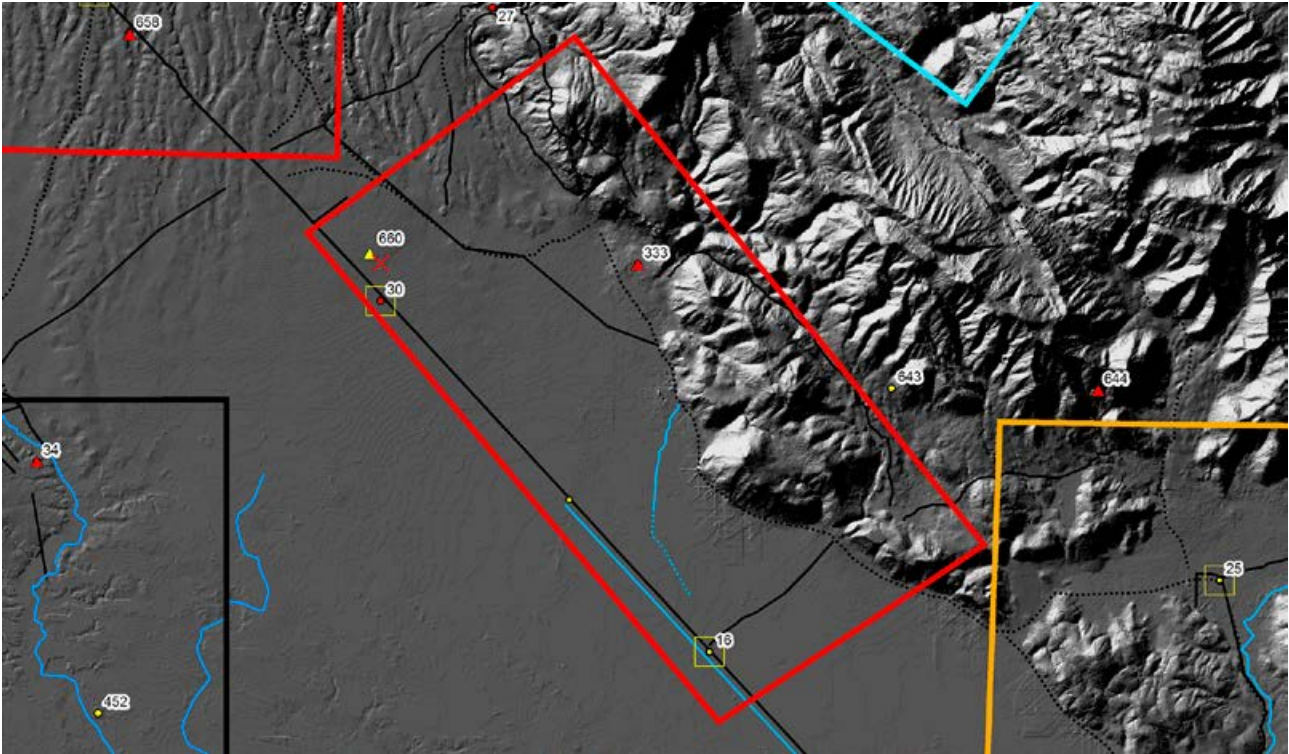


Figure 7.33. 5th century pedemontana key area.

the direction of Decius Caecina, the *decennovium* from Tripontium to Terracina was restored, as can be read in Cassiodorus⁵³⁹. One may assume that after these efforts, soon the drainage problems increased again⁵⁴⁰. Maybe as a result, Forum Appii, situated in the heart of the Pontine plain, was definitively abandoned⁵⁴¹.

At the site likely to be identified as *Tres Tabernae* a different chronology has been attested: A number of 6th or 7th century bronzes was found⁵⁴². The latest excavations revealed architectural fragments of the 8th-9th century based on their decoration, although structural remains of that date were not found as of yet⁵⁴³. Here too, archaeology seems to match history, as discussed earlier, with the definitive historical abandonment of the see of *Tres Tabernae* in the 9th century. The material evidence leaves open the possibility that the site was abandoned in the 7th/8th century.

In sum, the decline of the road site settlements may be directly correlated to the drainage problems in the plain and maintenance of the *Via Appia* (see also below). Another reason for the abandonment of *Tres Tabernae* and *Forum Appii* may have been their vulnerability for attacks from troops roaming about. Several of these attacks since the early 5th century have been described above; in the 6th century Lombard incursions were the most acute. The transfer of bishop's seat from *Velletri* (and *Tres Tabernae*) to *S. Andrea in Silice* (OLIMsite 53) is a case in point. As discussed, Gregory the Great explicitly describes the defensive motives behind this transfer⁵⁴⁴.

Adding to the (seasonal) inundations, malaria too may have had its impact on the living conditions in the plain. Strabo already mentioned the unhealthy conditions in "some parts of the territory of *Setia*"⁵⁴⁵. The increased sedimentation in the Pontine area from the late Empire onwards must have complicated drainage, possibly causing progressive stagnant waters, breeding place of malaria mosquitoes.

Malaria as a factor in demography is a complicated matter⁵⁴⁶. It is a well-documented fact, however, that in the late Roman period and late Antiquity high and dry locations were seen as healthy compared to waterlogged plains. *Antyllus* (2nd century AD) and *Procopius* (6th century) wrote as much⁵⁴⁷ (figure 7.34).

While in the plain the settlements were barely hanging on, the site of *Norba* (OLIMsite 23) was reoccupied in the 6th or 7th century⁵⁴⁸. Excavated since the early 20th century⁵⁴⁹, the intensive excavations, and typological parallels, have enabled a dating of the reoccupation phase in the 6th-7th century. Among the late Antique vestiges found was a church, located in the remains of a small temple.

Why was the site of *Norba* revived? The danger of malaria is a likely factor⁵⁵⁰. What is more, the site of *Norba* is well defensible. The standing walls of the old *colonia* might still have functioned in this period. However, the rationale behind *Norba's* revival becomes visible if one looks at the dynamics of the Pontine plain in the 6th and

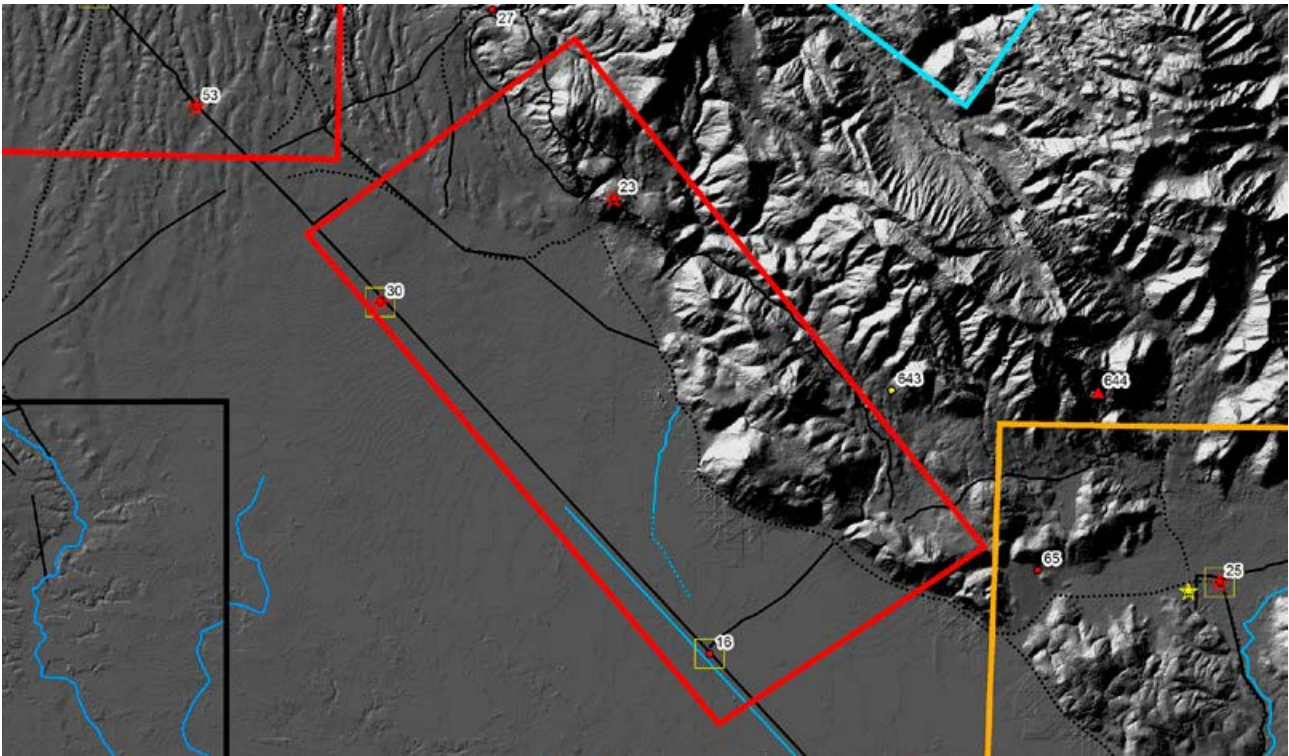


Figure 7.34. 6/7th century pedemontana key area.

7th century as a whole: the increasing drainage problems in the plain, and the synchronous abandonment of Forum Appii / Tres Tabernae (possible abandoned in the 7th/8th century) and reoccupation of Norba. Together these developments point to a shift of focus from the plain to the pedemontana. It can be assumed that in this period the main route southwards was rerouted, from the Appia to the pedemontana, which must have stimulated activities along the foothills of the Lepine Mountains. It is feasible that with the rerouting of the Via Appia towards the pedemontana, the old citadel of Norba became the first choice of settlement. The plateau itself, roughly 500 x 500 m, offered fields large enough to produce at least a portion of the crops needed to feed to population of a small settlement, without having to depend on fields in the plain only; grazing may have taken place as well, on the plateau but also in the nearby maintain plains⁵⁵¹. The 8th century *massa normas* (OLIMsite 119), a *massa* being a grouping of several lands or farms, may have been located (partly) on the Norba plateau. The Norba plateau and its late Antique and early medieval contexts would be a good subject for further study, as it may substantiate an important transitional phase in the Pontine area⁵⁵².

A small note should be made on the inland Lepine Mountains. Few primary sources are available on the developments within the mountains, on the summits, highland plains and the valley. The Hidden Landscapes study has shown that these parts too saw continued activity, and remained connected to (pan) regional pottery

markets. Pottery dated until the 6th or 7th century has been found on several mountain hilltop and valley foot slope sites: OLIMsites 414 and 641-644⁵⁵³.

7.1.1.8.2 Infrastructure

The Pontine Appia: a challenging passageway

Already since its construction, in the 4th century BC, regular interventions had to be undertaken to keep the Appian route open in the Pontine plain. The largest of these works were executed by consul Cornelius Carthegus in 162 BC and by Nerva and Trajan⁵⁵⁴. In all likelihood, the Appian road was a constant challenge. In the late Roman period, the road was increasingly difficult to maintain, related to environmental deterioration and the lack of resources for maintenance⁵⁵⁵. The most difficult parts to maintain would have been the central graben basin, south of Tres Tabernae and north of Forum Appii. The 1851 maps clearly delineate this area as a large waterlogged area, measuring roughly 10 x 10 km. During Theodoric, the last large-scale reclamation works in the Pontine plain were executed. Finally, the Appian road definitively closed as continuous route, probably in the late 6th / 7th century. However. Parts of the Pontine Appian tract may still have been used for local traffic. The archaeological evidence reveals activity at the site identified as Tres Tabernae in the 8th or 9th century⁵⁵⁶. In the 10th century, secure new activity on the Via Appia south of Tres Tabernae is documented, at Ad Medias⁵⁵⁷.

The pedemontana alternative

The pedemontana became the alternative route for traffic going south. Northwards, the Via Appia was still important. The question is, where did the Via Appia connect to the pedemontana? As has been noted, the area directly south of Tres Tabernae was most vulnerable for flooding. It is possible, therefore, that Tres Tabernae for some time was the last reachable position on the Via Appia. Most likely, the main detour from the Appian road to the pedemontana was laid north of Tres Tabernae, not at Tres Tabernae itself. There are two candidates for the main “bypass” from the Appian route to the pedemontana, which may have functioned simultaneously. First, the road from Cisterna to Cori (OLIMinfra 46), a Roman road that was reused in the middle ages⁵⁵⁸. Secondly, the **pedemontana detour Ninfa - Cisterna (area)** (OLIMinfra 113), for which high medieval, and later, evidence exists⁵⁵⁹. Possibly this route was already in use from the 6/7th century onwards. Possibly this route copied part of the trajectory of the Roman **Via Setina** (OLIMinfra 86), which also may still have functioned⁵⁶⁰. All variants of the pedemontana “bypass” connected with the Via Appia near Cisterna. It is feasible that this was an important factor in the later growth of Cisterna (OLIMsite 57), possibly from the 9th or 10th century onwards⁵⁶¹.

The canal along the Via Appia (*decennovium*)

At **Forum Appii** the river Cavata reached the Via Appia. In Roman times, the river from Forum Appii southwards was led into a canal that ran towards Terracina along the Via Appia⁵⁶², the so-called *decennovium*⁵⁶³. This canal, which started at Tripontium, seems to have had a two-fold function: the transport of goods and people, and the drainage of the area. It was probably dug during the construction of the Via Appia, or in the 1st century BC⁵⁶⁴, as part of the necessary waterworks to keep the Appian road from seasonally flooding. Forum Appii was known as harbour on this canal, as was mentioned by Horace and Strabo⁵⁶⁵. As noted, Cassiodorus wrote how Decius Caecina under Theodoric restored the canal⁵⁶⁶. For this there is epigraphic evidence too⁵⁶⁷. The mentioning of Tripontium is interesting, because earlier sources only refer to a canal from Forum Appii southwards. Whether this refers to a new extension is unknown.

It is feasible that the canal was a real alternative for the travel on the road. Horace already in the first century AD wrote that the travel between Forum Appii and Feronia through the plain was quite uncomfortable. He preferred to take the boat from Forum Appii to Terracina⁵⁶⁸. Strabo also explicitly described the travel by boat on the canal as an alternative for travelling by road⁵⁶⁹. One may assume that during the wet season, or after a certain point in time, the canal going south from Forum Appii became the only

way of passing through the marshes. It is unknown if the canal remained in use during the entire middle ages, as there is no evidence on the fate of the canal from the 6th century onwards. In the 18th century, the canal was restored by order of Pope Pius VI, and since then is called the *Linea Pia*.

7.1.1.8.3 *Economy, production and trade*

As in the Velletri key area, the PRP survey pottery samples indicate that the Lepine foothills were cut off from regional trade since the 3rd or early 4th century⁵⁷⁰. This is early compared to the coastal study areas Nettuno and Fogliano. This does not mean that all sites were abandoned, as discussed. Possibly a number of villa and farmstead sites relapsed to acting within a local economy, or started practising subsistence farming.

As Van Joolen's study showed, little sedimentation took place in the Pontine plain in the Roman period⁵⁷¹. The Roman expenditure on maintaining the terraces in the valleys, and on the plain as an agricultural area, created a relatively stable environment. This changed, as is shown by environmental studies in the eastern Pontine plain: the Pontine area experienced increased sedimentation in the late Roman period, especially from 400 AD onwards⁵⁷². It is unknown how long the terraces and centuriation⁵⁷³ in the central plain were upheld, and when the plain ceased to function as an agricultural production area. The request of Decius Caecina to Theodoric for ownership of the Pontine lands he would reclaim⁵⁷⁴, shows the value of these lands was still high. Possibly the area still was exploitable for agriculture, or perhaps was already used for extensive grazing, like in sub-recent times.

On the pedemontana estates associated with the found platform villas and farmsteads, it is suggested olives in combination with cereals were grown. The small-sized to moderate sites here probably specialized in olive culture, as the pollen evidence shows. This idea is supported by the sporadic finds of press beds⁵⁷⁵. According to Van Joolen, present-day land use may reflect land use in Roman times: olive culture in the foothills and grazing higher up the slopes and in the uplands. It is feasible that the pedemontana sites and their republican predecessors supplied the settlements of Cori, Norba and Setia, and later, the road station settlements on the Via Appia. The fields belonging to the Lepine margin sites, situated slightly above the plain, and the higher plateau's, such as the one of Norma, did not suffer from the environmental deterioration as the ones in the plain proper.

In Roman times wine was produced in the foothills and mountains near Sezze, as can be read in Pliny (23-79 AD)⁵⁷⁶. It is feasible that this continued well into the

middle ages; on the 1851 maps, small vineyards / olive yards are visible in the foothills and in the mountain plains around Sezze.

7.1.1.8.4 Religion and worship

The town of *Tres Tabernae* evidently played such a central role in the wider area, that it became an episcopal seat from the start of official Church administration, in 313; in this thesis' research area, only Ostia and Terracina became a see at such an early date. The see's position in the plain does not only corroborate the idea that the Christian faith spread its wings along the roads from Rome (2.I.13), it also highlights the absence of large urban centres in the Lepine Mountains.

7.1.1.8.5 Geo-politics: power relations, struggle and control strategies; secular activities

As has been discussed above, the wider Pontine area was vulnerable for attacks, as is illustrated by the transfer of the see of *Tres Tabernae*. One of the incentives to resettle Norba may have been its defensive qualities.

7.1.1.9 The northern Lepine Mountains and the Sacco Valley between Artena and Villamagna, from the 3rd to the 7th century

Two surveys projects have been conducted in this key area. Below the town of Segni, parts of the Sacco plain were intensively surveyed by the GIA (see figure 7.35). As

in the Cisterna, Ninfa, Norba and Sezze surveys, the samples of these earlier surveys have recently been restudied by De Haas⁵⁷⁷. In a wider area of Colferro, the Gruppo Archeologico Toleriense conducted field surveys as well. This study has yielded many late Antique and early medieval sites, some of which provided evidence of continuity from Roman times into the high middle ages⁵⁷⁸.

The most important excavations for the late Antique and early medieval period in the area took place on the magnificent site of *Villamagna* (OLIMsite 52), situated 7 km east of Segni. Research here included several excavation campaigns and a magnetometric survey, carried out by the University of Pennsylvania, the British School, the AIAC and the Soprintendenza di Lazio, under the direction of Elisabeth Fentress⁵⁷⁹.

7.1.1.9.1 General site distribution: monitoring of (change in) human activity

3rd century: a large number of villa sites, Segni is the only large settlement

Twelve late Roman villa sites have been found by the reconnaissance activities by the Gruppo Archeologico Toleriense, all interpreted as *villa rustica*. Adding to this are three sites found by the GIA, all of unknown function. This density of sites paints a picture of an intensively exploited area, especially in the Sacco plain, known as

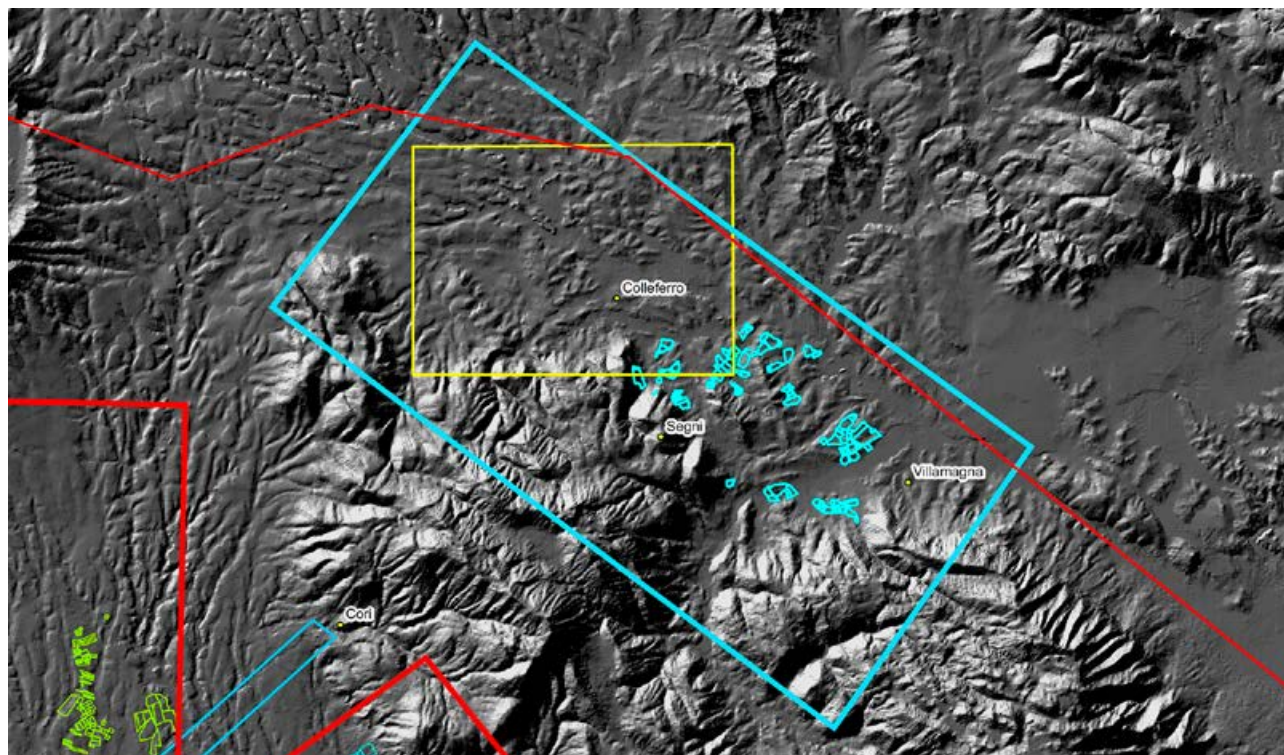


Figure 7.35. Earlier studies in the northern Lepine Mountains and Sacco Valley key area. The large centrally placed blue square marks the outline of the key area. The top most red line demarcates the boundary of this thesis' study area. The yellow rectangle shows the area covered by the Gruppo Archeologico Toleriense. The light blue areas were surveyed by the GIA.

Valle Latina in Roman times. One is a burial ground: **sito 76 fosso di Casa Ripi** (OLIMsite 449).

This large site of Villamagna, covering at least 12 hectares, consists of four major sub-sites: site A (*basis villae*, the Casale and bath complex), site B (residential area of the Roman villa, later the church and monastery), site D (possibly barracks), and a complex of cisterns. A Roman amphitheatre was discovered 500 m south of site A, through the study of 1940s aerial photographs made by the RAF⁵⁸⁰. During the 2006-2010 campaigns, excavations and a geophysical (magnetometric) survey of 8.5 hectares were carried out⁵⁸¹. Villamagna was the scene of practically continuous activities until the high middle ages: a late Roman villa and an early Christian church were built here, and later a high medieval monastery and Casale arose. Only between roughly 470 and 550 AD the site seems to have been abandoned. Villamagna experienced a low tide in the 7th and 8th century, during which the church remained in use.

The large Roman villa, probably built in the 2nd century AD, was mentioned by Marcus Aurelius in two letters to his tutor Fronto⁵⁸². Based on these letters, the villa is identified as an imperial residential villa, one of many built in Tyrrhenian southern Lazio. The villa is also referred to in an inscription which mentions the paving of a road from Anagni to the villa⁵⁸³.

Site A, located in the south-eastern part of the site, shows the remains of terraces contained by polygonal walls. These have been interpreted as a platform villa, or

basis villae, as the excavators call it. This *basis villa* was part of a much larger Roman villa estate. On Site A the outlines of the productive area of the villa, with paved marble floors, have been recorded. In this area wine was pressed and stored⁵⁸⁴.

Site B was part of the northern section of the Roman villa. Here eventually the church and the monastery were built, on top of what appears to have been the imperial residence. Underneath the 6th century church, a 3rd century building has been unearthed, with the same orientation as the later church. Too early to have been a church, it may have been a ceremonial structure, a reception hall or a temple dedicated to the cult of the emperor⁵⁸⁵.

Site D, in the north-eastern part of the site, shows a Roman paved road running east west. Along this road, structures have been found which collapsed in the period of abandonment of Villamagna, 470 to 550 AD⁵⁸⁶. These structures may have been barracks, possibly family units, as can be deduced from the infant burials found⁵⁸⁷. These barracks have been tentatively interpreted as slave barracks. The notion of family units is an interesting one: in none of the archaeological publications in our research area, nor in our own GIA dataset, much detail is available on rural habitation in the late Empire.

The town of Segni (OLIMsite 266) dominated the area in the 3rd century. Originally a Volscan settlement, according to the sources it became a Roman *colonia* in the 5th century BC. The town of *Signia* was continuously inhabited throughout the Roman republic and the Empire. It is situated on a strategic position, on a hilltop

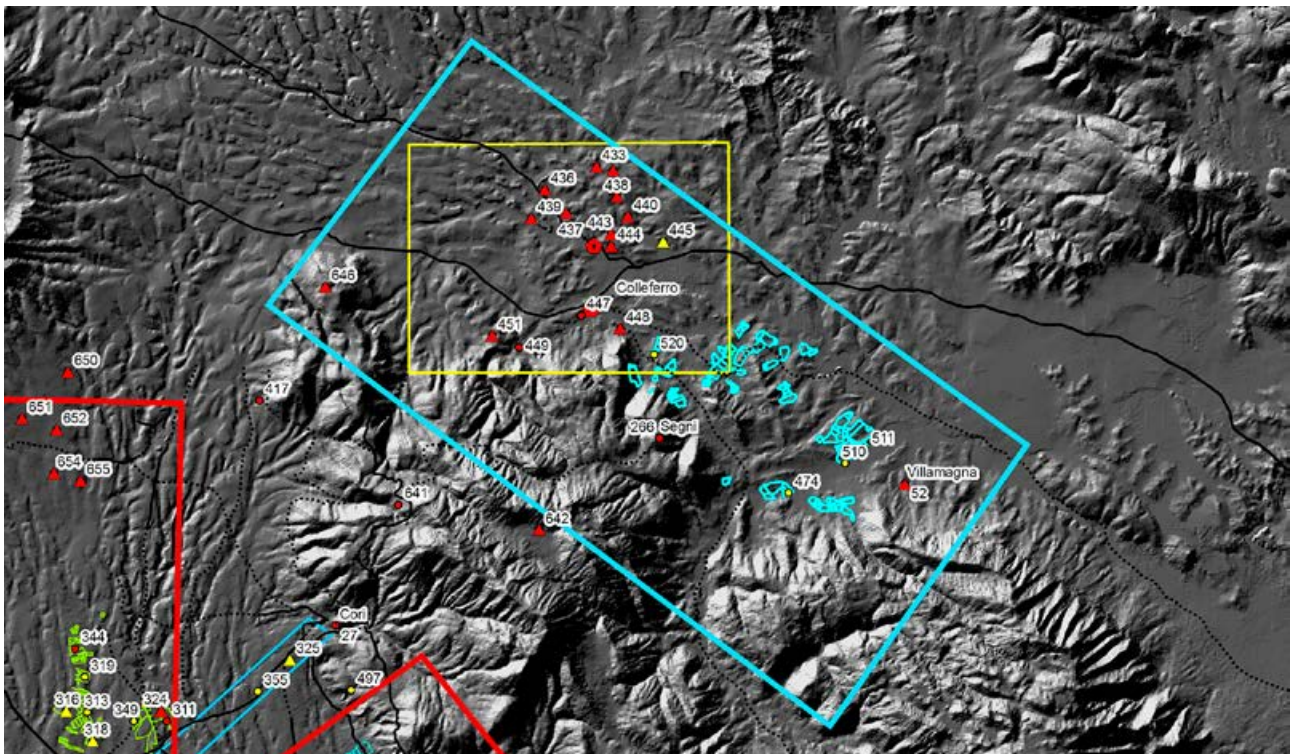


Figure 7.36. 3rd century northern Lepine Mountains and Sacco Valley key area.

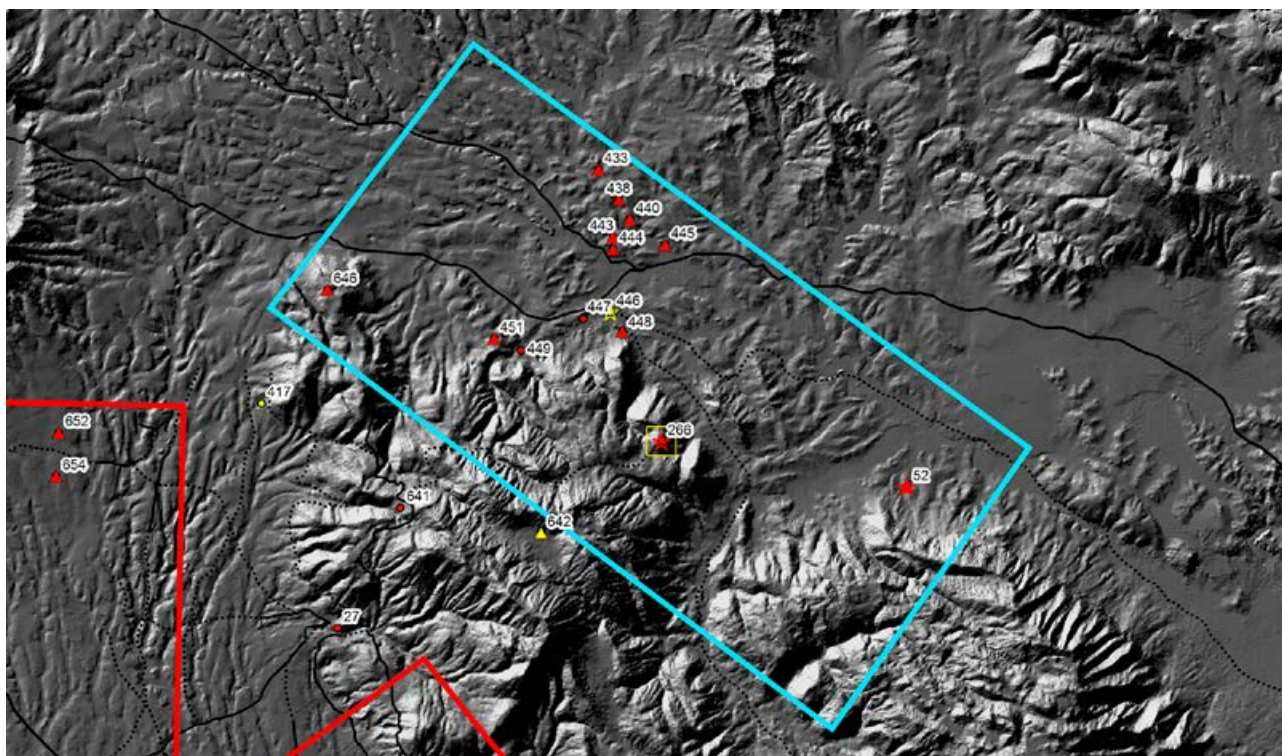


Figure 7.37. 5th century northern Lepine Mountains and Sacco Valley key area.

dominating both the Sacco Valley and the only road directly connecting the region with the Pontine plain (Via Appia) and Terracina, passing through Privernum⁵⁸⁸.

Diachronic trends

4th to 7th century: a slow decrease in the number of villa sites of the Gruppo Archeologico Toleriense, continuity at Segni and Villamagna

The Segni survey sites recorded by the GIA all die out in the 4th century⁵⁸⁹. In contrast, the number of *villa rustica* sites attested by the Gruppo Archeologico Toleriense only slowly decreases between the 4th and 6th century, with a sharp decline between the 5th and 6th century. Possibly the villas located in the central parts of the Sacco Valley continued longer than the possibly more peripherally located GIA survey sites, because of their proximity to the Via Latina and Via Labicana, i.e. the market in the wider area, Palestrina, Anagni and even maybe Rome (figure 7.37).

In the 4th and 5th century, the first signs of the Christian faith are found in the key area. The rural church on site 54 Via Giotto (OLIMsite 446) dates to the 4th or 5th century. The town of Segni became an episcopal seat in 499 AD. Segni probably remained occupied throughout the middle ages, as appears from the archaeological evidence⁵⁹⁰ and the documents on its diocese. In the 7th century Segni is listed as a Byzantine *castrum* (stronghold)⁵⁹¹ (figure 7.38).

At Villamagna, the second half 6th century saw the demolition to the ground of the earlier ceremonial structure / reception hall and the construction, in *opus vittatum*, of a church building⁵⁹². During this 6th century reconstruction phase⁵⁹³, a *cella vinaria* (winery) with large dolia was created. This reconstruction phase (church, *vinaria*) at the centre of the old estate, was part of the general reoccupation of the site, after an abandonment between 470 and 550⁵⁹⁴. The scale of the renewal may point to an intervention of the fisc or (Byzantine) central government, represented by an imperial procurator or another administrator. The intention of the refurbishment may have been to recreate this site as an economic centre, and to collect taxes from its hinterland⁵⁹⁵. It is not clear how long this renewed (possibly imperial) exploitation lasted.

On site B, two sunken-floor buildings have been unearthed as well, probably used for storage, dating to the end of the 6th and start of 7th century. By some scholars such structures have been linked to the Lombards, or to external influences at large⁵⁹⁶. Possibly they were used for grain storage. Although their origins remain unclear, these sunken-floor structures were tentatively linked by Elisabeth Fentress to the contemporaneous (possible) defensive structures recorded on the Villamagna site. An example of such defensive structures is found on site D⁵⁹⁷. Here in the late 6th or early 7th century a ditch was cut through the road and the building identified as barracks; rubble to the west of this ditch may have been a palisade. Possible remains of a defensive tower have been found

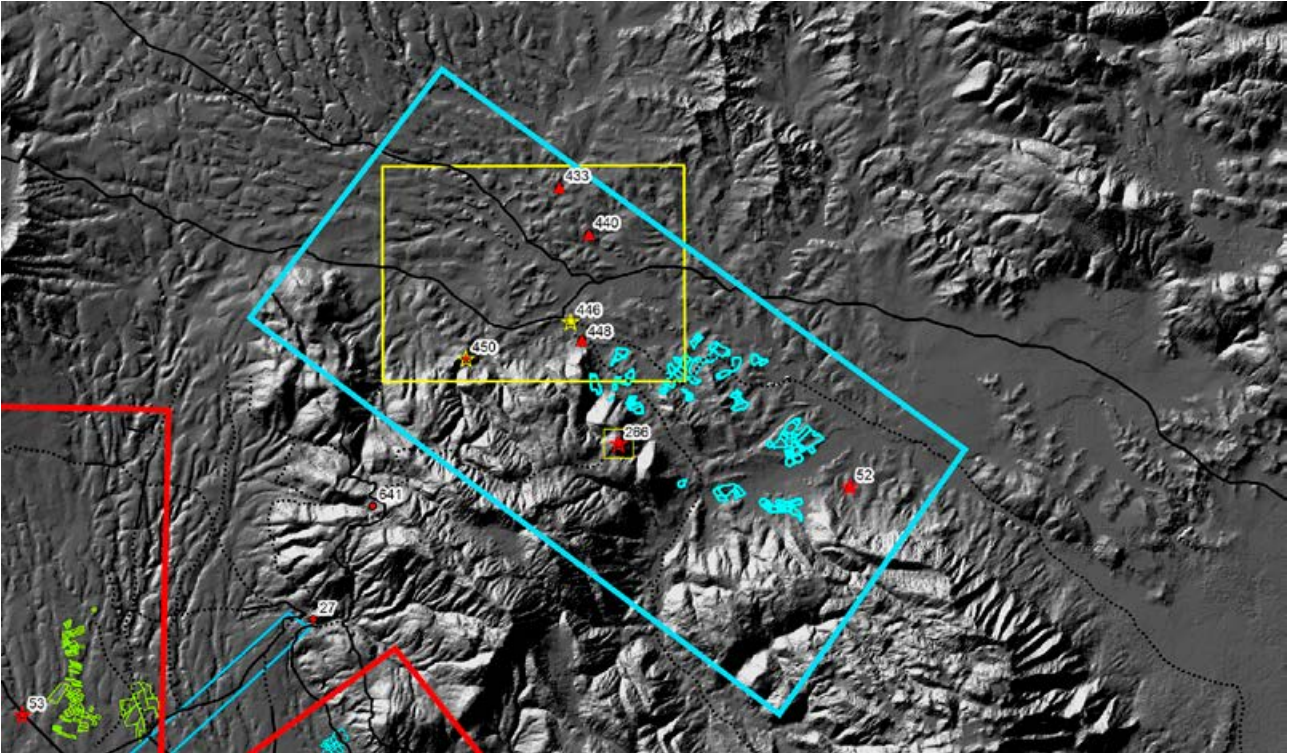


Figure 7.38. 6th century northern Lepine Mountains and Sacco Valley key area.

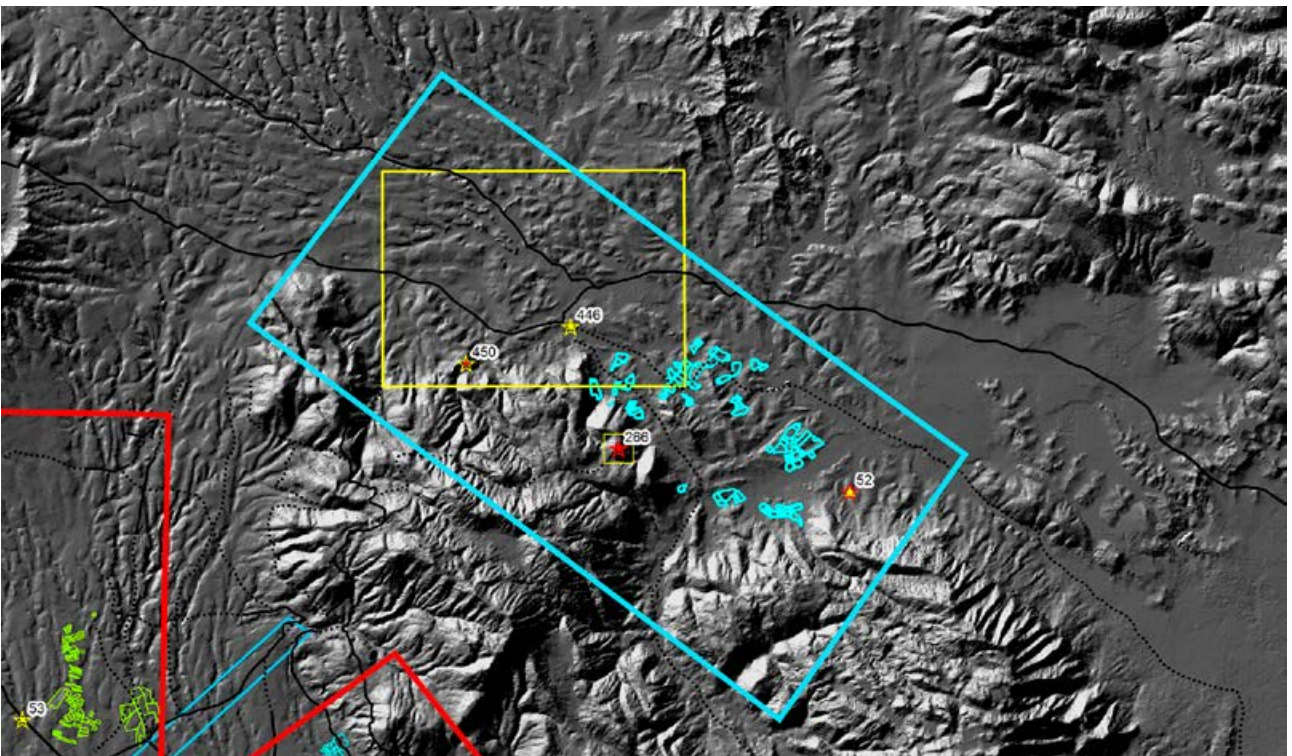


Figure 7.39. 7th century northern Lepine Mountains and Sacco Valley key area. Activity at the site of Villamagna (OLIMsite 52) is possibly confined to (occasional) use of the church.

here as well⁵⁹⁸. Possibly this was one of the 7th century Byzantine *castra* for which there are textual references in the Sacco Valley⁵⁹⁹. The exact nature of the structures at

Villamagna, however, has not been securely identified⁶⁰⁰ (figure 7.39).

7.I.1.9.2 *Infrastructure*

The Sacco Valley is connected directly to Rome by two main roads: the *Via Latina* (OLIMinfra 54), which runs from Capua to Rome and the *Via Labicana* (OLIMinfra 66). The last is effectively a detour from the *Via Latina*. In Roman times, there must have been a southern route through the Sacco Valley (the dotted line on the map), possibly partly along the *pedemontana*, the tract of which is difficult to reconstruct. This road remained unnamed. Another main route in the key area ran from the Sacco Valley through the Lepine Mountains to Privernum (OLIMinfra 60), a road which Segni controlled. A direct road ran from the villa at Villamagna to Anagni, as has been attested by epigraphic evidence⁶⁰¹. More of these transverse roads must have run across the Sacco Valley.

7.I.1.9.3 *Economy, production and trade*

The production of the villas may have been directed towards the markets of Segni and Anagni. The direct road from the villa to Anagni points to a direct socio-economic or administrative link of the villa with this town.

Given its status as imperial residence, the Villamagna villa likely had direct economic ties with Rome during the Empire. Later, the villa may have been restored as a profitable centre with the 6th century renovations on the site. These may point to a direct administrative (fiscal) or economic link with the (Byzantine) imperial court⁶⁰². How this exactly worked is unclear. Possibly, an imperial procurator or other administrator collected tax from the surrounding area, from within the estate, or from a nearby town.

Parallel to the Priverno - Fossanova key area, post-6th century assemblages with elements of southern origin (south-eastern Lazio and Campania) and a mixed ethnical background would be expected in the current key area, as the Sacco Valley is one of the axes of the central trade/exchange routes from the south-eastern Lazio towards Rome⁶⁰³. There is no concrete evidence from this, except for the sunken-floor structures of the 6th and start of 7th century at Villamagna, which may point to external (Lombard?) influence.

7.I.1.9.4 *Religion and worship*

The first signs of the Christian faith in the northern Lepine Mountains – Sacco key area are visible in the 4th or 5th century. The rural church on *sito 54 Via Giotto* (OLIMsite 446) was founded in the 4th or 5th century. At Villamagna, in the second half of the 6th century a church was erected⁶⁰⁴. These developments may have been connected to the foundation of the diocese of Anagni, in 487⁶⁰⁵; the site of Villamagna was directly connected to Anagni by a road in Roman imperial times. The foundation of the episcopal seat of Segni dates to roughly the

same period: 499 AD. These relatively late foundations may show that the organisation of the ecclesiastical institutions in the area took place at a slower rate than near Rome and on the Appia. Whether this is connected to a slower rate of christianisation in the countryside in general⁶⁰⁶, away from the traditional early Christian centres of Rome, larger towns and the road side centres⁶⁰⁷, cannot be studied here.

Pope Vitalian (657-672) was born in Segni. In the high middle ages, the bishop of Segni was one of the cardinal-bishops. It is not clear from the sources if this was already the case before that time⁶⁰⁸.

7.I.1.9.5 *Geo-politics: power relations, struggle and control strategies; secular activities*

Villamagna was at first a Roman imperial residence, as can be deduced from the two letters of Marcus Aurelius. Later, in the 6th century, it may have become a Byzantine imperial economic centre for the immediate area, as the excavators hypothesise. It is unknown if and how such imperial authority was enforced. As discussed, defensive structures seem to have been built at Villamagna in the late 6th or early 7th century. On site D, the rubble to the west of a ditch has been identified as a palisade and the remains of what may have been a defensive tower have been unearthed⁶⁰⁹. The discussion on the actual defensive nature of these edifices has not been settled. Furthermore, it has been put forward that these structures are connected to the sunken-floor buildings found elsewhere on the Villamagna site, for which a foreign (Lombard?) origin has been suggested. This remains a hypothesis. External influence is not unthinkable, but actual foreign presence is unlikely at the time of the construction of these structures. In the late 6th and 7th century the Byzantines had established a firm authority in the research area, i.e. the Duchy of Rome. This is illustrated by the fact that no attacks of foreign troops have been recorded from the middle of the 6th century onwards in the research area⁶¹⁰; at that time, the Byzantines were able to focus on the struggles with the Lombards, taking place far from the current study area, on the borders of the Duchy. The Lombards managed only one recorded attack in the second half of the 6th century in the current study area: Fondi was shortly attacked in 592. So, if these possible defensive structures actually are the remnants of a short-lived foreign (Lombard) presence, they must be dated to that period, or the 8th century. The Sacco Valley almost certainly remained in the hands of the Byzantines throughout the 7th century⁶¹¹. In the middle of 8th century the Lombards were able to reach the Lepine Mountains, as becomes clear from the short occupation of Ceccano in 752⁶¹².

It may be assumed that at Segni parts of the old fortifications of the *colonia* were used⁶¹³. Indeed, as the story of the sees of Velletri and Tres Tabernae shows (7.I.1.4),

the episcopal seat of Segni may have needed protection in these years of insecurity.

7.I.1.10 Terracina and its surroundings, from the 3rd to the 7th century

Late Antique Terracina has been the subject of several local historical studies⁶¹⁴, among which several on the early Christian presence in the area⁶¹⁵. Archaeological research in the town of Terracina has been mostly focused on standing structures and the Forum⁶¹⁶, and includes some fine studies on the 5th century fortifications⁶¹⁷. Field Archaeological studies of the surrounding countryside, certainly those with a focus on medieval contexts, are scarce⁶¹⁸. *Forma Italiae's Ager pomptinus 1: Anxur-Tarracina* (1926) offers a valuable topographical-archaeological overview of the vestiges found in Terracina and its hinterland⁶¹⁹.

The most extensive topographical-archaeological reports on Terracina and surrounding countryside were conducted by Lugli (*Forma Italiae*)⁶²⁰ and Cancellieri⁶²¹.

7.I.1.10.1 General site distribution: monitoring of (change in) human activity

3rd century: Terracina central town, sanctuaries in the mountain ranges, villas in the Valle di Terracina

Terracina (OLIMsite 31) is situated on a strategic location, on the point where the Ausoni Mountains reach the sea, leaving only a small passage from the lower Pontine to the

Fondi plain. The former *colonia* Terracina in the 3rd century AD was still an important city, listed on all late Roman itineraries and equipped with a crucial harbour on the sea routes up and down the Tyrrhenian coast.

Bianchini maintained that Terracina had many contacts with the eastern Mediterranean. Many people of eastern Mediterranean origin lived among the 20000 inhabitants of the 1st century BC. Eastern cults may have been present in Terracina. Bianchini suggested that the common language was Greek in that period, although secure evidence for this hypothesis lacks⁶²². Whether or not Greek was much spoken, it appears from the epigraphic evidence that late Roman Terracina was a harbour town of "international" stature, just like Ostia⁶²³. The existence of a Jewish population and a synagogue has been reported, be it only in the 6th century⁶²⁴.

From the edges of town, tombs flanked the roads just outside Terracina. On the Via Appia running from to the north-western part of town, a string of Roman graves stretched into the countryside, possibly all the way across the plain until the sanctuary of Feronia. The same was the case on the road from the town to the sanctuary of Monte S. Angelo⁶²⁵.

Feronia (OLIMsite 1), situated at the foot of the Monte Leano, and the sanctuary on Monte S. Angelo (Latin *Mons Neptunius*, OLIMsite 216)⁶²⁶ were two Greco-Roman polytheistic sanctuaries functioning in the 3rd century

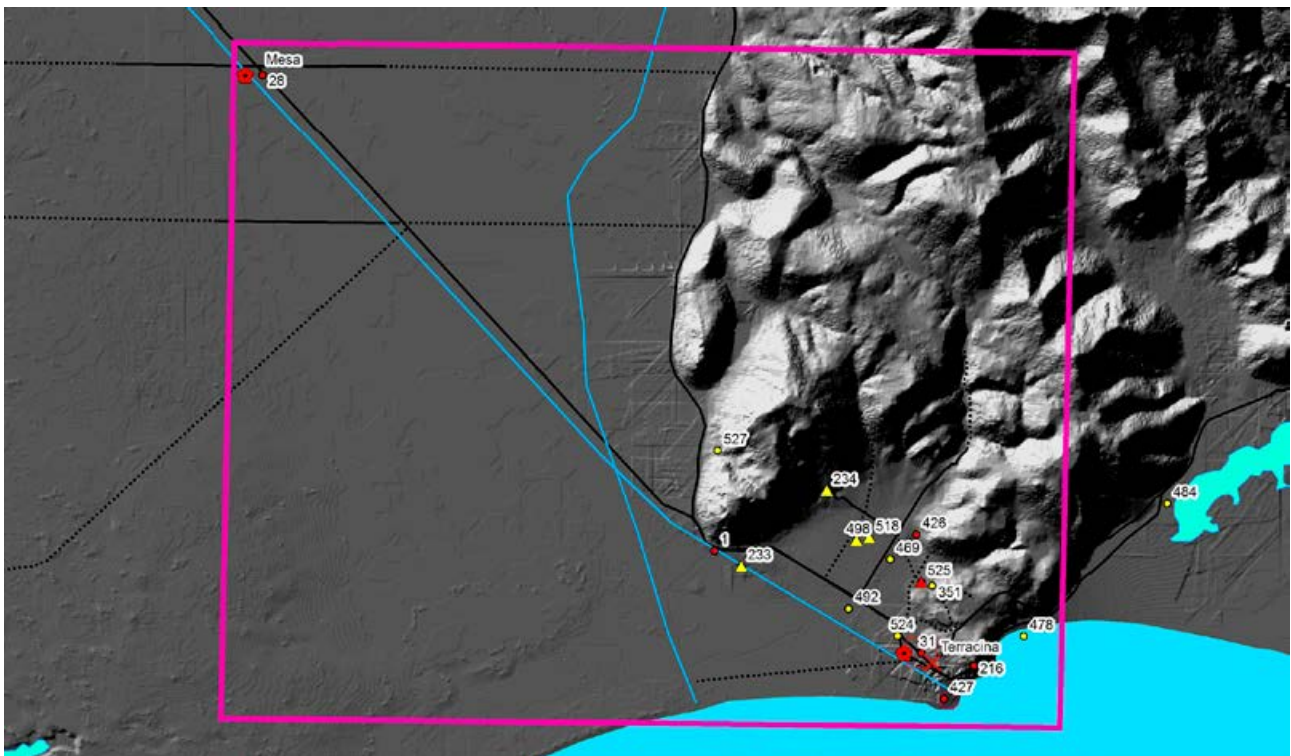


Figure 7.40. 3rd century Terracina key area. An x marks the graves along the roads outside Terracina. Details within the town of Terracina (sanctuaries) are not depicted.

countryside, each situated on an outer edge of the Ausoni promontories. The latter site is situated 227 m above sea level, right above the narrow passage from the Pontine to the Fondi plain (figure 7.40).

The hinterland of Terracina, especially the Valle di Terracina, the small valley north east of the town, provides much evidence of the 3rd century, as can be seen on the distribution map. It has to be stressed that several of Lugli's mid and late imperial sites within the current town of Terracina are not incorporated in the site database, nor plotted separately on the map; these are treated as part of the town of Terracina⁶²⁷.

Many Roman villas have been found on the countryside of Terracina⁶²⁸. Only a few of these date to the research period. The 3rd century map shows five villas, one of which has been categorised as a platform villa: **rpc site 11023, Terracina Lugli TER II.4** (OLIMsite 525).

Rpc site 11024 (OLIMsite 351), **rpc site 11054, Terracina Lugli TER II.33** (OLIMsite 492) and **rpc site 11040** (OLIMsite 426) are large reservoirs or cisterns⁶²⁹. The function of mid-imperial sites **rpc site 11050** (OLIMsite 469) and **rpc site 11118** (OLIMsite 478) is unknown.

The remains of **rpc site 11429 at Le Arene** (OLIMsite 427), situated near the harbour, were part of a complex building, possibly a nymphaeum or fountain, or thermal baths. **Rpc site 11142** (OLIMsite 484) is probably a mid-imperial monument built in honour of the restoration of the Via Appia by Trajan, at the start of the 2nd century.

Diachronic trends

4th to 7th century: drop in the number of evidence on villa sites, Terracina remains an important centre, churches in and near Terracina

Apart from the historically well-documented town of Terracina, knowledge of the late Antique and early medieval period is limited. This is caused by a lack of (published) archaeological research. For imperial and medieval sites in the countryside, we depend heavily on overview studies which did not yet utilise the current insights into late Roman and medieval pottery. Probably later phases of several sites have been missed out on.

For these reasons, the number of rural sites drops in the 4th century. No villas have 4th century or later phases.

It is unknown until when Greco-Roman cults on the sanctuaries of Feronia and Monte S. Angelo continued. During the late 19th century excavations at Feronia, a 4th century head of goddess Feronia was found in a thermal complex⁶³⁰. The site of Monte S. Angelo possibly saw activities until the 6th century, when Theodoric may have had his quarters here⁶³¹.

Terracina remained an important centre during the late Roman period and in late Antiquity, and would remain so until the present day. In the early 4th century (313 AD), it may have become one of the early episcopal seats of Lazio⁶³², although this early date has been doubted⁶³³. In the 5th century, the focus of the town was moved from the lower old port and surroundings to the republican hilltop

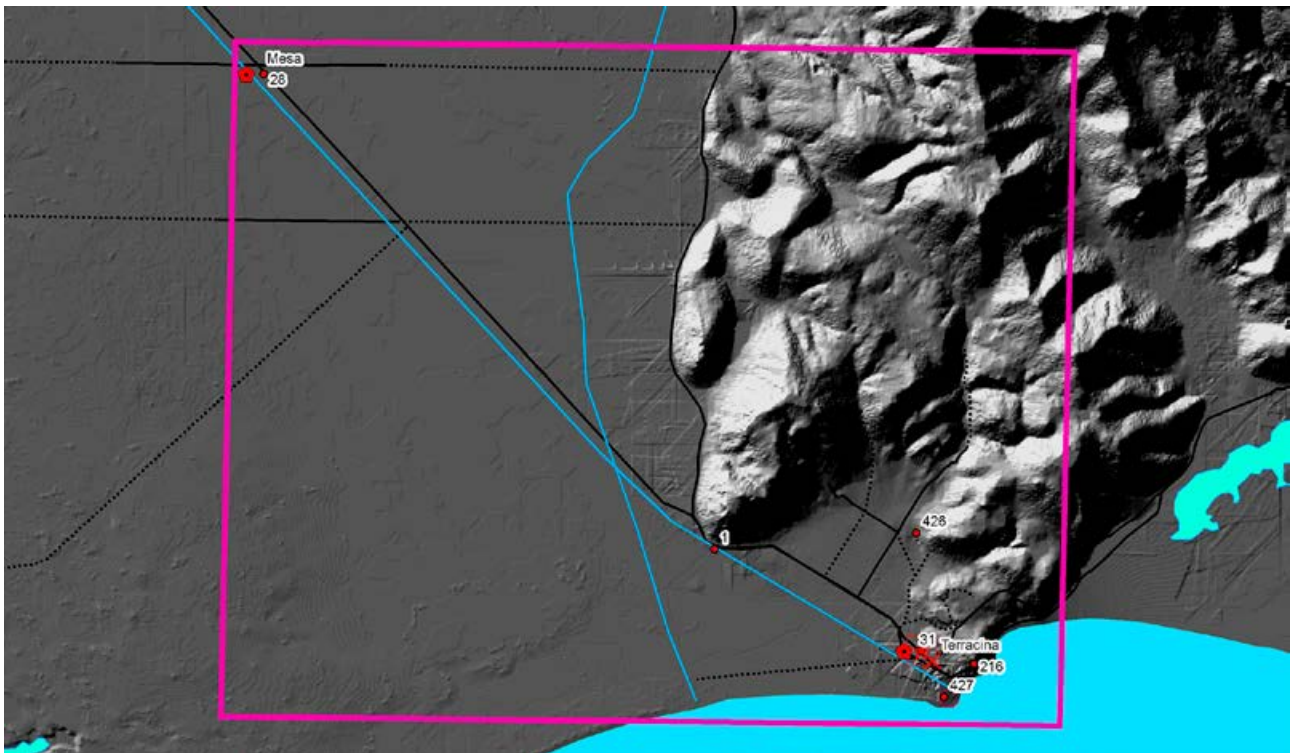


Figure 7.41, 4th century Terracina key area.

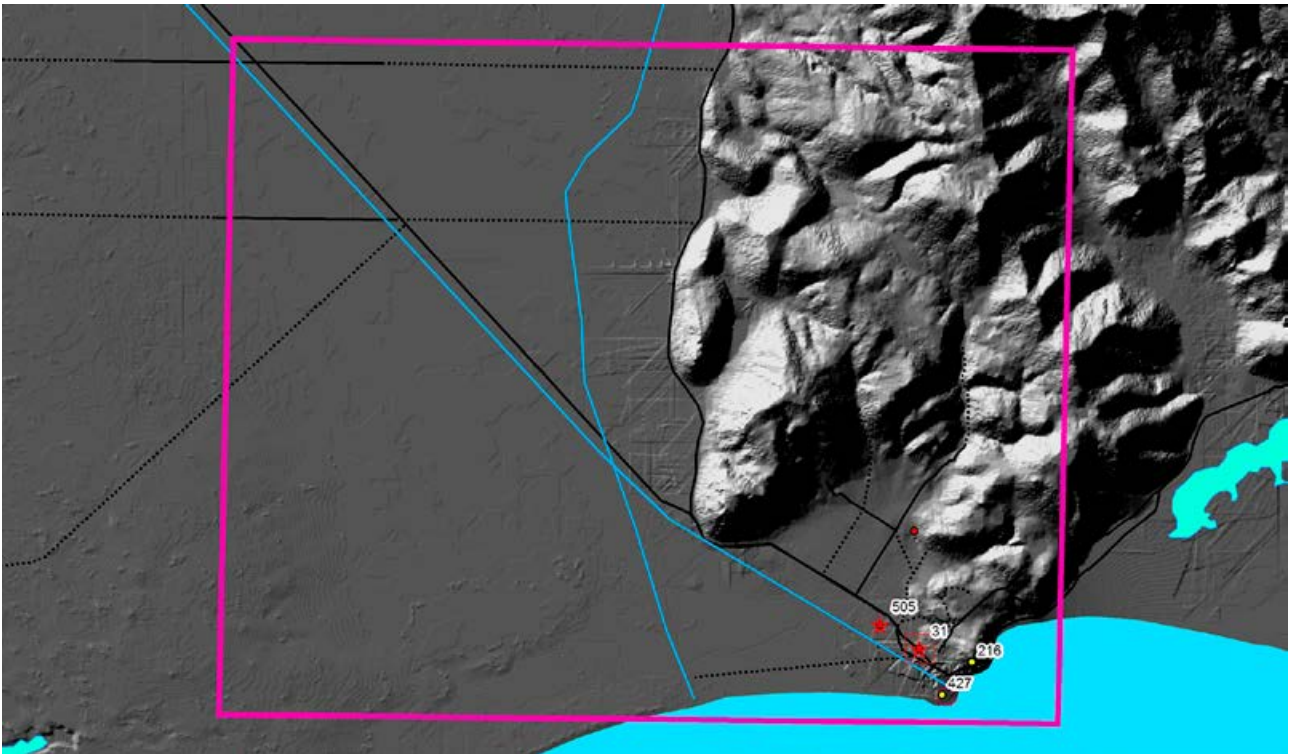


Figure 7.42. 5-7th century Terracina key area.

settlement: here the old republican 3th century BC walls were reinforced by military engineers, and the new episcopal seat was installed. It also became the residence of the local governor. It is unclear how the new town was laid out exactly⁶³⁴. These early 5th century walls, partly reconstructed with *opus vittatum* (*listatum*) masonry⁶³⁵, were to play an important role in the Gothic war (535-553)⁶³⁶ when Terracina would become an important Byzantine stronghold⁶³⁷. Terracina was a vital Byzantine military bridgehead, especially in the struggle with the Lombards, after the Lombard conquest of large parts of the Italian peninsula in the late 6th century. The Byzantine presence is visible from a possible 7th century graffiti on a column in Greek in the cathedral of S.Cesario⁶³⁸ and a Greek inscription of that period found at the suburban church of S.Maria ad Martyres – later S.Cesario (OLIMsite 505). If and how much the population of Terracina dropped with the decline of the Roman state and the Gothic war is unknown. Bianchini maintained that the 5th century walls could contain no more than 4000 inhabitants⁶³⁹. The Forum remained the focal point for the town: the cathedral was built over the central temple of the Forum, and the Forum square kept its function as marketplace⁶⁴⁰. The conversion of the Forum temple into a Christian cathedral took place at some point in the early middle ages⁶⁴¹. A Byzantine Duke George “tidied up” the forum in the 7th century. This can be read from epigraphic evidence in the cathedral⁶⁴² (see figure 7.42).

In the 6th century, a Christian church S.Maria ad Martyres, rpc site 68 (OLIMsite 505) was built outside the town, just off the tract of the Via Appia⁶⁴³. This church may have acted as a suburban cemetery-church, becoming a focus for the new Christian faith, comparable to the basilica of Pianabella (OLIMsite 589) near Ostia. The church later became part of a monastery, at an uncertain date in the middle ages. A graffiti in Greek has been found on the site, dating to the 7th century AD⁶⁴⁴. At first the church was dedicated to S.Maria; in the 11th century S.Cesario became its patron⁶⁴⁵.

7.1.1.10.2 Infrastructure

Terracina is located on a crucial point in the interregional infrastructure: here the Via Appia reaches the Tyrrhenian shore after its crossing of the Pontine plain. Passing through Terracina, the Via Appia kept to the coast through the passageway at Pisco Montano. This small corridor was probably dug under Trajan, but maybe earlier; before that, the Appian road ran over the promontory of the Ausoni Mountains, on the north side of the Monte S.Angelo⁶⁴⁶. The 2nd century AD road side memorial Rpc site 11142 (OLIMsite 484), dedicated to the repair of the Via Appia, shows that keeping up a long-distance road was an ongoing process, and a prestige enterprise. Terracina was also the point where the Via Appia connects to the coastal road from Antium – Clostra Romana – Circeo, called *Via Severiana* on the Peutinger map (see figure 7.43).

From Terracina boat travel through the Pontine plain was possible as well, along the *decennovium* canal. Decius Caecina restored the waterworks in the Pontine plain during the reign of Theodoric⁶⁴⁷, repairing the decennovium from Tripontium to Terracina.

Terracina was also the site of a large sea harbour. It was a favourably located safe haven, crucial for boats in case of violent southwestern winds, often occurring in the periods of the equinox⁶⁴⁸. The southwestern winds, called *Libeccio*, create particularly large waves because of the large so-called *fetch*, the number of miles of open sea over which the winds can generate energy⁶⁴⁹. In times of these southwestern winds, the taking of the Cape of Circeo and sailing along the open long coast towards Anzio was a perilous undertaking. In that case, the harbour of Terracina was a well needed safe haven. On the sea route northwards, Torre Astura was the first safe haven going northwards.

The harbour of Terracina is nowadays filled up, but still visible in the shoreline. Probably constructed during the reign of Trajan, it was a large harbour of 125000 m², with a relative small entrance of 120 m and may have had up to 60 docking posts⁶⁵⁰.

7.1.1.10.3 Economy, production and trade

In Roman times, Terracina was known for its wine production⁶⁵¹, like its neighbouring towns in the southern Pontine area, Fondi and Privernum. The 1851 maps show the aptitude of the soils in the *Valle di Terracina* for this

land use, displaying intensive viticulture, but also extensive arboriculture and intensive olive culture⁶⁵². Nowadays, the foothills of the Valle mainly are exploited for growing olives. Little evidence is available on the late Roman agricultural produce of the villas of the area. Their production may have been connected to viticulture, intended for an interregional market. Its crops may have been intended for local consumption and the town of Terracina as well.

Corsi⁶⁵³ rightfully stated that because of its large sea port and the important Byzantine stronghold here, early (to late) medieval Terracina must have controlled the important inland communication routes: not only the Appian way, from the 6/7th century replaced by the pedemontana road⁶⁵⁴, but also the ancient trade route from the Amaseno Valley (Privernum) to the coast. Archaeological studies at **Ceriara** (OLIMsite 65) and **Privernum** (OLIMsite 25) indicate that the Amaseno valley until the 9th-10th century was a passageway in exchange systems originating in south-eastern Lazio (Sacco-Liri-Garigliano)⁶⁵⁵. The Fossanova site (OLIMsite 9) may have played a role in these communications. As touched upon above in the Privernum key area, it is possible that Terracina received southern goods through this exchange passageway⁶⁵⁶. Unfortunately, little archaeological (pottery) research in Terracina has been done which can shed light on the circulation of late Antique and early medieval goods via the town and its port.

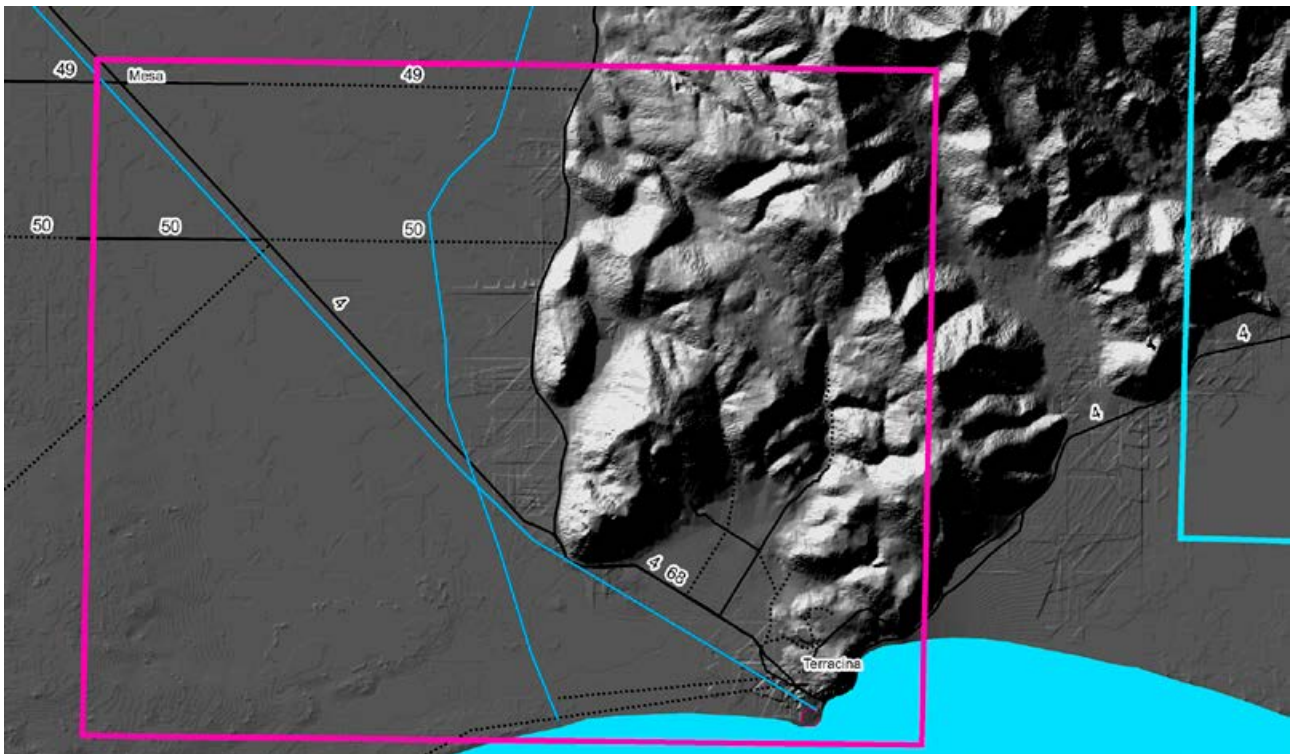


Figure 7.43. Infrastructure in the Terracina key area.

7.I.1.10.4 *Religion and worship*

According to Bianchini, Terracina is, together with Rome, Ostia and Pozzuoli was one of the oldest Christian communities in the West⁶⁵⁷. He links this to the intense eastern connections of the town. The central temple of the Forum was at some point during the early middle ages converted into the new cathedral. Tradition tells that the christianisation of the mountain communities nearby took place from Terracina along the pedemontana⁶⁵⁸. How much the developing Christian populations of Privernum, which became a bishopric in 769, and Sezze owed to the influence of Terracina is not certain, but according to Bianchini the *primogeniture* of the church of Terracina initially was recognised in these Lepine communities⁶⁵⁹.

Christianity was not the only religion practiced in late Antique Terracina. In the 6th century Terracina had a synagogue, as can be read in a letter by Gregory the Great⁶⁶⁰. Gregory ordered the bishop of Terracina, Peter, to restore the rights of the Jews of Terracina to assemble in the synagogue.

7.I.1.10.5 *Geo-politics: power relations, struggle and control strategies; secular activities*

Terracina was put under the jurisdiction of the consul of Campania between 333 and 438. Lugli saw this as a sign that the passage towards Rome over the Pontine Marshes was difficult⁶⁶¹. Brandizzi Vittucci rightfully counter argued that the whole coast south of the Tiber came under this jurisdiction of the consul of Campania, including areas which did not have historically attested infrastructural or other problems⁶⁶².

The late Antique walls of Terracina date to the 5th century, well before the Byzantines took control in the second quarter of the 6th century⁶⁶³. The late Roman inhabitants of Terracina restored and buttressed the republican walls. These were carefully rebuilt, not ad hoc, but accurately planned⁶⁶⁴. Nowadays, the walls still exhibit seven well preserved rectangular towers, projecting from the wall. The gate in the north-west side of the town, the entrance of the Appia into town, is also well preserved. The efficiently defended late Antique upper town measured 340 x 160 m in total⁶⁶⁵. Christie showed how the lower part of the town and the harbour was not actively defended by walls, but reactively defended from within the upper town: in this set-up, protecting the heart of the town was deemed vital, a strategy also used in Naples (walled in the 440s)⁶⁶⁶.

Terracina developed into a vital Byzantine stronghold. Together with the, possibly Byzantine, fortresses of **Picco di Circe** (OLIMsite 41) and **Torre Astura** (OLIMsite 64) it may have formed a defensive scheme along the coast⁶⁶⁷.

7.I.2. *Analysis and conclusions for the whole research area regarding the 3rd to the 7th century*

Above, all the key areas have been described. In these descriptions, contemporary and retrospective data, general biases, research history and landscape have been incorporated. Now it is time for a general analysis of the research area during the current study period. Before integrating the data and painting the regional picture, it is imperative to shortly evaluate the analyses of the key areas. By doing so, we get a grip on the main interpretative challenges of these data in a regional perspective and thus create the background needed to appreciate and analyse the current dataset, and to effectively synthesise the data for this period.

7.I.2.1 An evaluation of results, sources and methods used

These are the main observations from this evaluation:

1. Imbalanced primary sources

As stated before, a major challenge is comparing the distribution maps of the key areas. It is good to have evaluated the most important factors involved in the found differences in resolution.

1a. recent archaeology study provides detail

Although this is beating on an open door, it must be stated that there is a large difference in depth of insights in late Antique activity between areas and sites which have seen (relatively) recent systematic archaeological studies, and other areas. Recently studies have taken place in the GIA surveyed parts of the Nettuno – Anzio and Fogliano, Alban Hills, Velletri-Le Castella, Segni-Villamagna and pedemontana key areas. In the Ostia key area, the sites of the Vicus, Tor Paterno and Basilica di Pianabella furnish such in-depth insights, and in the Privernum key area, the sites of Privernum and Fossanova; and in the Segni-Villamagna, of course the site of Villamagna. In these areas and on these sites, the archaeological evidence gives us much detail on site chronology, site function and land use. These parts of the study area show well-documented and detailed late Antique distribution maps. A major factor in the high archaeological resolution in these areas is the use of up-to-date pottery typologies.

1b. inland villa sites lack (recent) study

Villas have been found throughout the study area. Many of the villas on the coast have been well studied recently, usually with incorporation of the latest insights into late Roman pottery typologies (ARSW and amphorae). Contrary, the current database shows that this is not the case on most of the inland villa sites⁶⁶⁸. The fact that recent archaeological studies on inland villas are quite

rare, is corroborated in overview studies such as *Un repertorio bibliografico per la carta archeologica della Provincia di Roma*⁶⁶⁹, *Le ville dell'Agro Romano*⁶⁷⁰, the *Lexicon topographicum urbis Romae: Suburbium*⁶⁷¹ and *Le villae del Latium adiectum*⁶⁷². These relatively recent overviews show that in the hinterland of Rome, from Ardea to Grottaferrata, and especially in the wider Alban Hills, many Roman villas were located. Yet that most of these sites lack a detailed chronology and functional analysis. This poor state of published research results in the near absence of 5th century or later phases on these sites.

This lack of published recent studies on the larger villas creates a bias in the database, and establishes an impediment in comparing the maps of key areas. Insight into related late Roman economic systems and distribution to and from these large estates remains scanty. The lack of recent pottery studies on these sites likely is the prime reason that almost none of the *villae rusticae* in the Alban Hills and Velletri research area has been dated later than the 5th century. Continuity into the 6th and 7th century on some of these sites there is highly probable, given the continuous need of Rome for supplies, the sites' positions in a well-developed road system, their strategic location on (artificial) hills etc. This continuity has been attested on the coast, and north of Rome, areas that have seen, as stipulated, recent studies.

2. Dependence on imported pottery and heuristics

For the chronology of many late Roman sites we largely depend on imported goods. As has been stipulated for several key areas, it usually remains unclear if sites that disappear from the radar in the 3rd to 5th century and that had limited or no access to trade, for example sites located far from the sea and main routes, actually ceased to function. There is a chance that, less readily recognisable, local wares were produced on some of these sites⁶⁷³. Traded pots are more easily recognised, because they are often more luxurious. Moreover, due allowance should be made for the use of wooden vessels. Here we stumble upon a delicate question of heuristics: There is no way of knowing if sites with less or no access to trade, and thus traded goods, actually ceased to function. To put it differently: if evidence of imported pottery denotes activity (or continuity) on a site, does a lack of such imports on that site mean inactivity (or discontinuity)? As Sallares has put it: "absence of evidence is not equivalent to evidence of absence"⁶⁷⁴.

The studies in Tiber Valley (Farfa) show the importance of knowledge of local pottery. Here, restudies of survey pottery, and new field work (including excavations), make clear that many Roman to high medieval sites had been overlooked because of the earlier limited knowledge of locally produced (early) medieval pottery. It was concluded that the breakdown in imports and a change from

a world system to a network of regional and local supply was one of the main reasons for the invisibility of many sites⁶⁷⁵: locally produced (coarse) wares took over from imported pots. The Tiber Valley shows us that a first step to overcome the bias in accessibility and to create possible new evidence for late Antique and early medieval contexts, is an in-depth (re)study of local coarse wares, and preferably excavation of a key site⁶⁷⁶. Such a typology has yet to be created for large parts of the research area. The research by Tol (among others a first small excavation at Astura settlement) is only a first step in such a (re)study.

All in all, the lesson learned is to be careful in reading local late Roman demographic and economic activity (and discontinuity) from evidence based on imported wares only. Imports of course, on the other hand, are valuable in analysing the persistence and routing of inter-regional / pan-Mediterranean trade.

Missing sites: historical sites that cannot be located

Many sites in the database that are documented through historical sources cannot be pinpointed; descriptions and clues in the primary source lack or are too vague or absent for a positive location, and toponymic analysis is of no help. The total number (for all three study periods) of these unlocated sites in the database is 102. Many *massae* and *fundi* rank among these sites, as do several enigmatic churches and monasteries, towers, border markers, domains/areas, *loci*, *casali*, *possessi*, castles, a *piscaria*, a mill and a bridge. Such sites are absent on the distribution maps but should still be given attention in the analysis of the developments within the landscape. Although these unlocated sites are not plotted on the distribution maps, because of the absence of their locality, they are, of course, present in the final geodatabase. All vital site data related to each of these sites is represented in it: data about function (type), physical appearance (layout and types of buildings), kinds of activity, interest or presence⁶⁷⁷.

7.I.2.2 Analysis and conclusions

This part offers an overview of the main developments in the whole research area between the 3rd and 7th century. It provides a combined analysis of evidence on site distribution, infrastructure, economy, religion and geo-politics, biases and the unbalanced data between key areas, and the conclusions that can be drawn from it. At the same time, an effort is made to point out the data that are missing or the sites that cannot be located. The developments in other parts of the Italian peninsula are used as a sounding board. This overview is cut in two parts. First of all, a review is given of three historical themes, which represent the essence of the period under scrutiny: The expansion of the Church, Defensive measures and strategies in this time of insecurity, and Trade and Economy. And secondly

a synthesis, in which the main transformations that took place in the landscape and society of Tyrrhenian southern Lazio are treated.

7.1.2.2.1 *Theme: expanding Christian activity throughout the landscape*

The expanding influence of Christianity on the Italian peninsula has been studied abundantly before. The Christian faith is believed to have radiated into the countryside from the larger cities, especially Milan and Rome: churches were built, sees and monastic communities were founded, and pieces of land were acquired by ecclesiastical institutions, most by bequest from emperors and aristocrats⁶⁷⁸. The ecclesiastical beneficiary of these inheritances of landed goods often was an individual *titulus* church or *basilica*, but in most cases the papal court⁶⁷⁹. This Theme explores the evidence for early Christian activity in the studied landscape, in a chronological and spatial analysis. A second topic is the role churches played as new focal points in the changing rural landscape of the 4th to 6th century.

There are limitations to the study of early Christianity in the current study area. First of all, a study of the resilience of Greco-Roman polytheism (traditionally: paganism) and (active) christianisation of the landscape is out of its scope. This is an intricate subject, that is difficult to find in the archaeological record. Historical sources on the subject are scarce too, at least in the study area. A few anecdotal instances of temple conversions, however, have been recorded in the study area⁶⁸⁰:

- the temple of Hercules in Cori (OLIMsite 27) was transformed into a church and probably owes its preservation to this; the date of conversion is unknown, but can possibly be dated already in late Antiquity as the temple is relatively well preserved.
- **Fondi** (OLIMsite 50): St. Peter's cathedral was built on top of a Jupiter temple at some point in late Antiquity or the early middle ages.
- At **Terracina** (OLIMsite 31) a conversion of the Forum temple into cathedral was executed, probably already in late Antiquity⁶⁸¹.
- **Norba** (OLIMsite 23): a small temple of Juno Lucina was converted into a church which functioned somewhere in the 8th to 10th century⁶⁸².
- **Ostia Antica** (OLIMsite 392): on top of the *mithraeum* an oratory (a small church) was built – probably no twist of fate but a deliberate act⁶⁸³.
- At **Villamagna** (OLIMsite 52), the ceremonial building on site B (medieval church and monastery site) was demolished and rebuilt as a church in the 6th century⁶⁸⁴

A study of the gradual ecclesiastical organisation of the countryside is outside of the scope of this study too⁶⁸⁵. There is insufficient documentation available to establish a generic picture of the relation between a parish church and the rural community. We do not know how dioceses tended to their constituencies. The way Church authority was enforced cannot be studied as well. Indeed, as Marazzi shows, the legal status of early churches and ecclesiastical properties is very complicated⁶⁸⁶. Altogether, the current database does not allow a detailed study of the development of different types of ecclesiastical landed properties and legal ownership. The idea, for example, that the papal court was able to use the bureaucratic apparatus of the Roman Empire, in order to better control their estates, cannot be corroborated here⁶⁸⁷.

This study, however, enables a generic regional chronological and spatial analysis of the first phase of Christianity: how did the new dominant faith spread over the landscape? Leaving out the detail, it may be established where and when in the countryside churches were founded, sees were established, monasteries were founded, Christian graves were dug, and Church possessions acquired. In this analysis, as in every topic of this study, it is vital to determine the influence of biases in the primary sources.

7.1.2.2.1.a Chronological and spatial analysis of the development of Christian activity

The bulk evidence of the new faith becomes available from the early 4th century onwards in the current study area; earlier Christian activity is rarely recorded, in contrast to Rome.

Three records in the database may help sharpen the chronological and spatial contours of the expansion of the Christian faith and its institutions. First of all, the ecclesiastical (organisational) evidence, which is accumulated in the database record *ecclesiastical possessions, authority and interests*. This database entry⁶⁸⁸ records all evidence of the first phases of institutionalised Christianity, listing, among others, donations mentioned in the *Liber Pontificalis*, descriptions of power politics of popes, the existence of a see, and the mentioning of a functioning monastery. Secondly the archaeologically and historically attested *functioning churches or chapels*. And thirdly, the evidence for *early Christian burials and cemeteries*. For all three entries there is evidence from the 4th century onwards in the research area.

To provide an overview, the earliest dioceses should be listed. In our study area, the dioceses shown in table 7.1 were founded⁶⁸⁹.

Other early bishoprics, nearby but outside the research area were Portus (founded 314) and Anagni (founded 487).

Table 7.1. Foundation dates of bishoprics within the study area.

OLIMsite	diocese	Date foundation, years in function
17	sezze	1036 - present
25/58	privernum	769-12th century
30	tres tabernae	313-592 and 769-868
31	terraccina	313? (middle 5th century? Lanzoni 1927, 156) - present
32	antium	460- 6th century
50	fondi	around 500?
53	s.andrea in silice	592 (physical see, officially see of Velletri) – until ?
147	velletri	465 - present
155	castra albana, albano laziale	465 – present; Aglietti & Busch 2019, 204 date the foundation of the bishopric to the early 4th century.
266	segni	499 - present
392	ostia antica	313 - present

Table 7.2. The earliest records on monastic activity in southern Lazio.

OLIMsite	name	3rd c.	4th c.	5th c.	6th c.	7th c.	8th c.
75	torre s.anastasio					P	
155	castra albana, albano laziale						P
157	castel di molare		P				
238	monastery of s.magno (and s.angelo)	P		P	P	P	P
257	castro (dei volsci)				P	P	P
300	massa juliana, monasterio sancti andree						Y

Table 7.3. Church ownership, authority and interests in the 4th century.

OLIMsite	location	name	owner	Constantinian donation in Liber Pontificalis	4th century church owner / authority
30	?	tres tabernae	= see		Y
31	certain	terraccina	= see		Y
47	certain	pratica di mare (lavinium)	papal court	Y	Y
49	??	praedium laurentum	s.croce	Y	Y
79	??	massa urbana	st.john lateran	P	Y
120	unknown	massa verginis	papal court	Y	Y
121	unknown	massa, possessio statiliana	papal court	Y	Y
122	??	possessio amarthiana	st.john (albano)	Y	Y
123	unknown	fundus sulpicianus	titulus of Pope sylvester/equitius	Y	Y
124	??	fundus corbianus	titulus equitius		Y
125	unknown	fundus beruclas	titulus of Pope sylvester/equitius	Y	Y
149	unknown	massa murinas	st.john lateran	Y	Y
151	unknown	possessio marinas	st.john (albano)	Y	Y
155	certain	castra albana, albano laziale	papal court	Y	Y
157	certain	castel di molare	= a cenobion?		P

Table 7.3 continued. Church ownership, authority and interests in the 4th century.

OLIMsite	location	name	owner	Constantinian donation in Liber Pontificalis	4th century church owner / authority
171	??	massa nemus	st.john (albano)	Y	Y
392	certain	ostia antica	= see		Y
603	unknown	massa auriana	st.john lateran	P	Y
604	??	massa sentiliana	st.john lateran	P	Y
605	unknown	fundus baccanas / vaccanas	titulus church of pope marc	Y	Y
606	unknown	fundus orrea / horrea	papal court	Y	Y
631	?	possessio lacum albanensis	st.john lateran	Y	Y
632	?	possessio lacum turni	st.john lateran	Y	Y
633	unknown	fundum picturas	basilicae of peter and paul		Y
634	unknown	possessio balneolum	papal court	Y	Y
635	unknown	possessio quiriti / quirini	papal court	Y	Y
636	unknown	possessio grecorum	papal court	Y	Y

Table 7.4. 4th century functioning churches or chapels.

OLIMsite	name	4th century archaeological evidence	4th century historical evidence	church building 4th century
30	tres tabernae	P	Y	Y
31	town of terracina	Y	Y	P
47	pratica di mare (lavinium)	Y	Y	P
109	villa di castelfusano, <of plinius>	Y		Y
155	castra albana, albano laziale	Y	Y	Y
157	castel di Molare	Y		P
172	arch. remains on appia near sole luna	Y		Y
174	villa degli ottavi	Y		Y
293	villa and church of s. cesareo	Y	Y	Y
392	ostia antica	Y	Y	Y
446	tombs - church, sito 54 via giotto	Y		P
546	site 315 forma italiae bovillae, chapell	Y		O
589	basilica di Pianabella	Y	Y	Y

Table 7.5. (early) Christian burials / cemeteries.

OLIMsite	name	4th c.	5th c.	6th c.	7th c.	8th c.
23	norba (plateau), civita			Y	Y	Y
25	privernum settlement			Y	Y	Y
51	Nettuno (area)	Y				
52	villamagna	Y	Y			
65	ceriara			Y	Y	
84	lanuvio, civita lavinia		Y	Y		
98	amphitheater castrum albanum					
147	velletri	P	Y	Y	Y	Y
155	castra albana, albano laziale			Y	Y	Y

Table 7.5 continued. (early) Christian burials / cemeteries:

OLIMsite	name	4th c.	5th c.	6th c.	7th c.	8th c.
172	archaeological remains on appia near sole luna	Y				
236	villa lake nemi			Y		
450	sito 78, necropole, church(?) toponym casa ripi			Y	Y	
535	ad decimum	Y				
589	pianabella		Y	Y	Y	Y

The importance of monasteries or monastic communities in the Tyrrhenian part of southern Lazio seems limited, certainly in contrast to northern and southernmost Lazio, where the monasteries of Montecassino, Farfa and S. Sebastiano were founded in late Antiquity. In our study area, the number of monasteries is low until the 10th century. The first securely attested monastery dates to the 8th century, although some high medieval monasteries may go back to as early as the 3rd century (S. Magno as a hermitage) or 4th century (Castel di Molare, a cenobium). The earliest records on monastic activity in Tyrrhenian Southern Lazio are shown in table 7.2.

7.1.2.2.1.a1 The 4th century

Table 7.3 holds the list of all instances of church ownership, authority and interests in the 4th century; the *location* row shows that most ecclesiastical presence cannot be located through the historical, toponymic or archaeological analysis of this thesis. Table 7.4 shows the 4th century functioning churches or chapels (see note 690). Table 7.5 holds the list of all (early) Christian burials / cemeteries.

In the current database, there is no evidence for Christian graves outside Rome earlier than the 4th century. Especially the geographical location of the 4th to 8th century rural Christian burials / cemeteries is interesting. Earlier scholarship shows that burial regulation seems absent before the 9th century: interment took place in private churches and chapels or outside the built areas of settlements⁶⁹¹; since then, baptismal churches had the monopoly of burial in parish cemeteries, although exceptions were made for the elite.

The following can be said about early Christian cemeteries in the current research area⁶⁹²:

- The position of the 5th century Christian cemetery near Ostia, around the basilica of **Pianabella** (OLIMsite 589), is reminiscent of the situation in Rome, being located on the outskirts of town. Indeed, in many cities on the Italian peninsula, new habitation centres evolved around suburban cemetery-churches⁶⁹³. In that context, it may be

suggested that the possibly 4th century Christian graves near Nettuno were part of a suburban cemetery of Antium⁶⁹⁴. The **S. Maria ad Martyres** church (OLIMsite 505) near Terracina is another example of a suburban cemetery-church. Here no large settlement arose. The cemetery of **Sole Luna** (OLIMsite 172) is not suburban, but its cemetery might have acted as a burial centre for the surrounding area⁶⁹⁵.

- Some of the cemeteries are located on abandoned Roman sites: At **Ceriara** (OLIMsite 65), a 6th and 7th century burial ground may be linked to an old villa site. The **Villa in località Maria** at the Nemi lake (OLIMsite 236) was abandoned in the 2nd century AD and reused as burial ground in the 6th century. Early Christian cemeteries could also be found near churches inside a settlement. At **Privernum** (OLIMsite 25), for example, from the 6th century onwards a necropolis developed in town, near the main church. The same seems true for the 5th or 6th century cemetery on the acropolis of **Lanuvio** (OLIMsite 84).
- Cemeteries were also located near rural churches as in the case of **Sito 78, Casa Ripi** (OLIMsite 450), where a burial ground developed in the 6/7th century.
- In the current research area two catacombs are known, both located in or near a settlement: the catacombs in **Castra Albana** (OLIMsite 155), in use from the 6th to 9th century and the catacombs at **Ad Decimum** (OLIMsite 535), which functioned until the 4th century.

From the combined three available records on Christian activity the following may be concluded (figure 7.44):

- Christian activity from all three records seem to be focused on Rome; almost all related sites are situated in the northern part of the research area, within 50 km from Rome; Terracina is an obvious exception.
- Almost all sites with Christian activity are situated on or close to the main arteries of this part of southern Lazio⁶⁹⁶: the Via Appia, the Tyrrhenian coastal road (Severiana?), the Via Laurentina and the Via Latina.

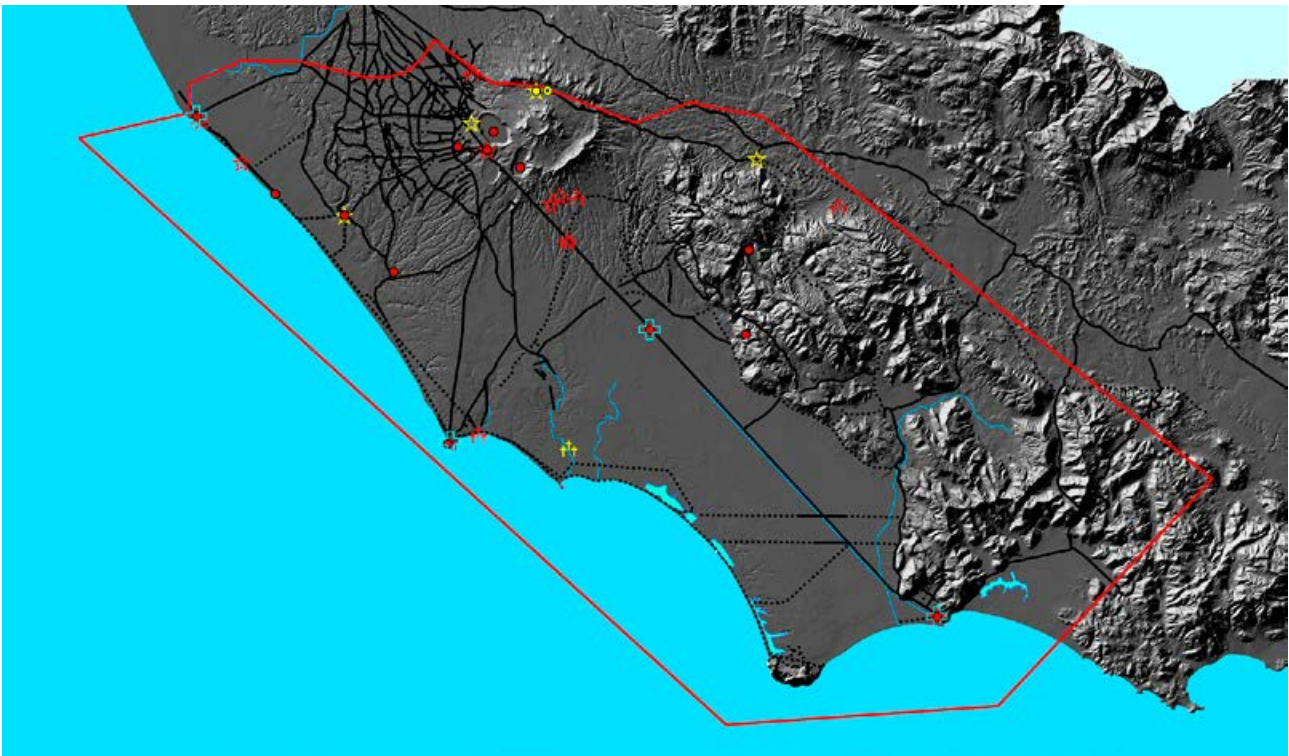


Figure 7.44. Christian activity in the 4th century. A dot stands for (possible) church ownership or authority, a star is a (possibly) functioning church building. Three crosses denote a Christian burial/cemetery. A Singular blue cross denotes an episcopal seat. A small circle with a dot denotes a (possible) monastery.

- From the latter point it is inferred that most properties, authority and interests of ecclesiastical institutions are situated on or close to the main arteries.

The available evidence seems to confirm the communis opinio on the development of the early Church: Church expansion started in the large cities and subsequently spread along the main Roman roads⁶⁹⁷. Again, it should be stressed that much primary data is missed out on.

It is difficult to comment on the forces shaping this distribution of early Christian activity. As said, there is not enough evidence to pinpoint active ecclesiastical organisation of the countryside. However, given the evidence at hand it is fair to assume that accessibility (to/from Rome) was an important aspect for church institutions in extending their ownership and authority. Regarding the ecclesiastical landed properties, it is feasible that the transport of their revenues is a factor involved. Indeed, the *Liber Pontificalis* explicitly records the importance of these possessions for the production of goods for Rome. Other possible factors involved in the distribution of ecclesiastical estates, such as soil fertility, remain out of sight.

7.I.2.2.1.a2 The advancement of Christian activity between the 4th and 8th century

For a chronological overview, we should first discuss

numbers of sites with Christian activity, combining the three above discussed database entries. From the 4th to the 8th century, this is the total number of unique sites with possible or certain Christian activity:

- 4th century: 39 (13 standing churches/chapels, 27 ownership/authority, 5 graves/cemeteries);
- 5th century: 28 (19 standing churches, 20 ownership/authority, 4 graves/cemeteries);
- 6th century: 27 (23 standing churches/chapels, 14 ownership/authority, 9 graves/cemeteries);
- 7th century: 37 (24 standing churches/chapels, 24 ownership/authority, 7 graves/cemeteries);
- 8th century: 103 (29 standing churches/chapels, 88 ownership/authority, 5 graves/cemeteries).

These numbers do not paint the contemporary situation, as they are biased: the sum of unique sites of Christian activity is distorted by the overrepresentation of the 4th and especially the 8th century as regards the written evidence on ownership and authority, as is treated in 3.II.2⁶⁹⁸. The lesser availability of written evidence on church properties from the 5th century onwards, or –for that matter– the overrepresentation in the 4th century, creates a marked gap between the 4th and 5-6th century. Indeed, it is not feasible that church influence waned between the 5th and 7th century. Such a decline is not corroborated by

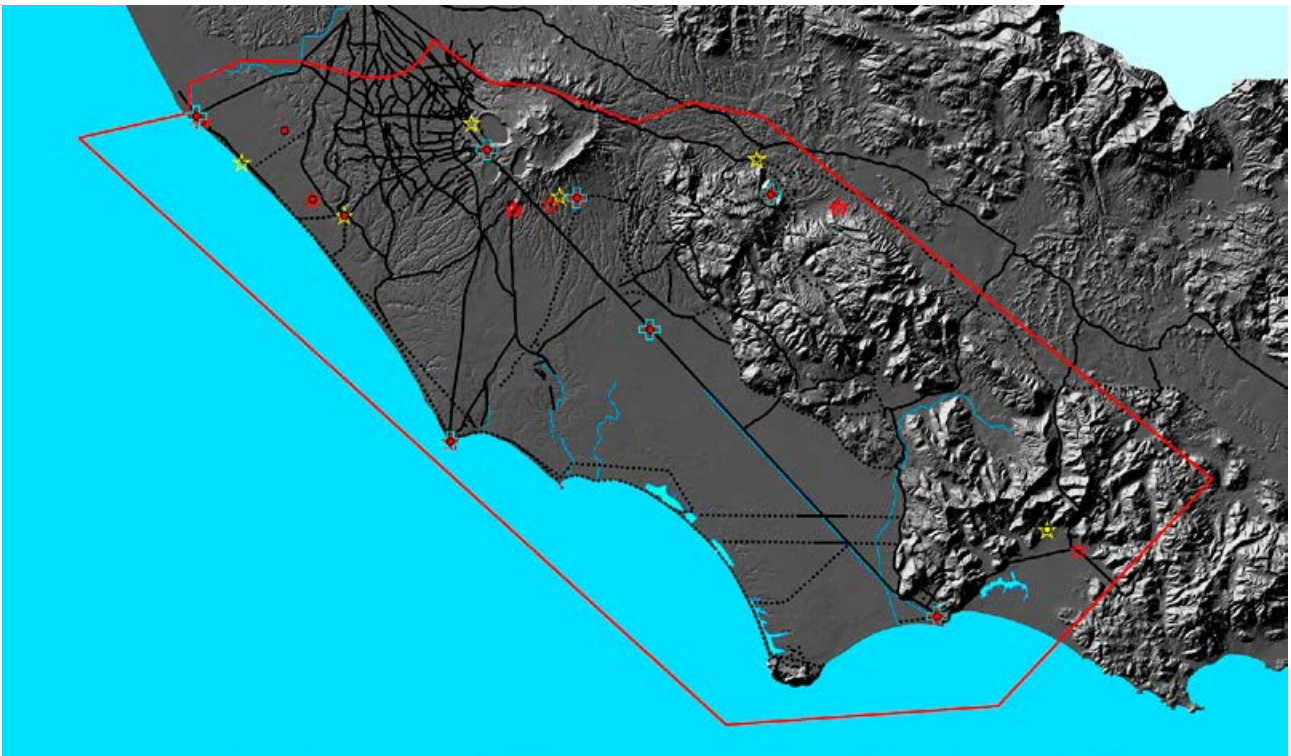


Figure 7.45. 5th century Christian activity in the landscape.

any other evidence, nor in the research area, nor in Rome and other regions in Italy⁶⁹⁹.

The sharp increase in *ecclesiastical possessions, authority and interests* in the 8th century not only has to do with bias: by then, the church started to gain properties on a large scale⁷⁰⁰.

The number of functioning church buildings is likely less affected by biases in the written sources, as the archaeological evidence weighs heavier in this record: functioning churches are easily identified by material evidence, and relatively well dated, through a combination of typological studies of building materials and valuables, and historical sources. The number of functioning churches shows a steady growth between the 4th and 8th century: 13, 19, 23, 24, 29. This is in line with the idea of a steadily growing number of rural churches on the Italian peninsula⁷⁰¹.

Church expansion should also be studied from a spatial viewpoint. By looking at the distribution we can take into account the quality of the location (how certain can we pinpoint the historical site?) and identification (certain – in red- or possible –in yellow– church sites). Figures 7.45-7.48 show the diachronic distribution of *ecclesiastical presence in the landscape* between the 4th and 8th century: a combination of the two discussed database records.

Three things can be observed:

- It has been stipulated that church institutions in the 4th century seemed fixed on Rome and on the main roads. The 5th century seems to paint the same picture: Although a few sites are located on roads of less importance, ecclesiastical presence is mainly found close to Rome and on main roads.
- Between the 4th and 6th century Christian activity seem to have disseminated all over the study area⁷⁰². In the 6th century this process is completed: Christian activity and ecclesiastical institutions had found their way into the smallest vein of the landscape. It is in the same century that fundamental ecclesiastical institutions, such as dioceses, became definitively established⁷⁰³. It may be assumed that these two observations are correlated.
- In the late 6th and 7th century, there is little proof for Christian presence on the coast south of the Ostian area⁷⁰⁴.

This third observation needs further exploration. What may this void on the map imply? 6th and 7th century churches can provide strong indications for a continued occupation of the rural landscape, where wood-building and undiagnostic pottery make occupation difficult to see in the archaeological record. Moreover, studies elsewhere show how churches may have acted as hubs for the ecclesiastical or demographic organisation of the countryside 7th and 8th century⁷⁰⁵. All this articulates the absence of Church activities on the coast. It is tempting to see this as

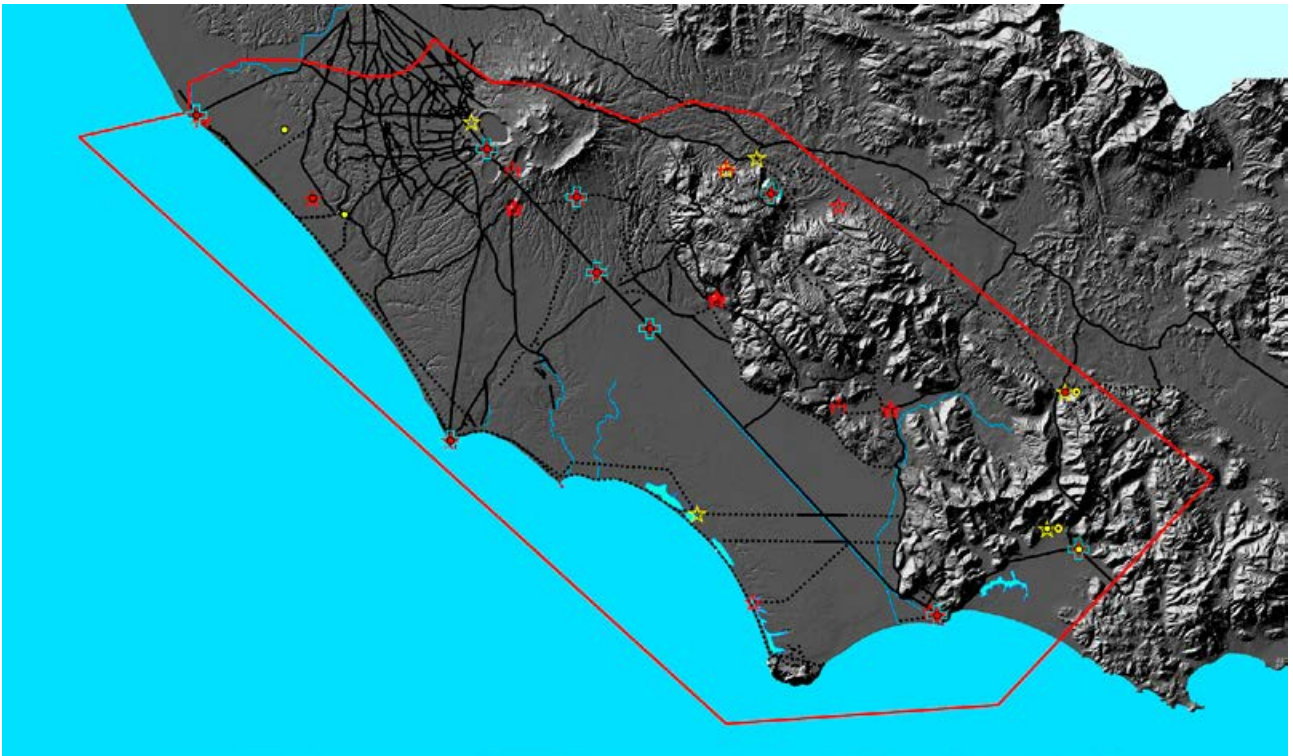


Figure 7.46. 6th century Christian activity in the landscape.

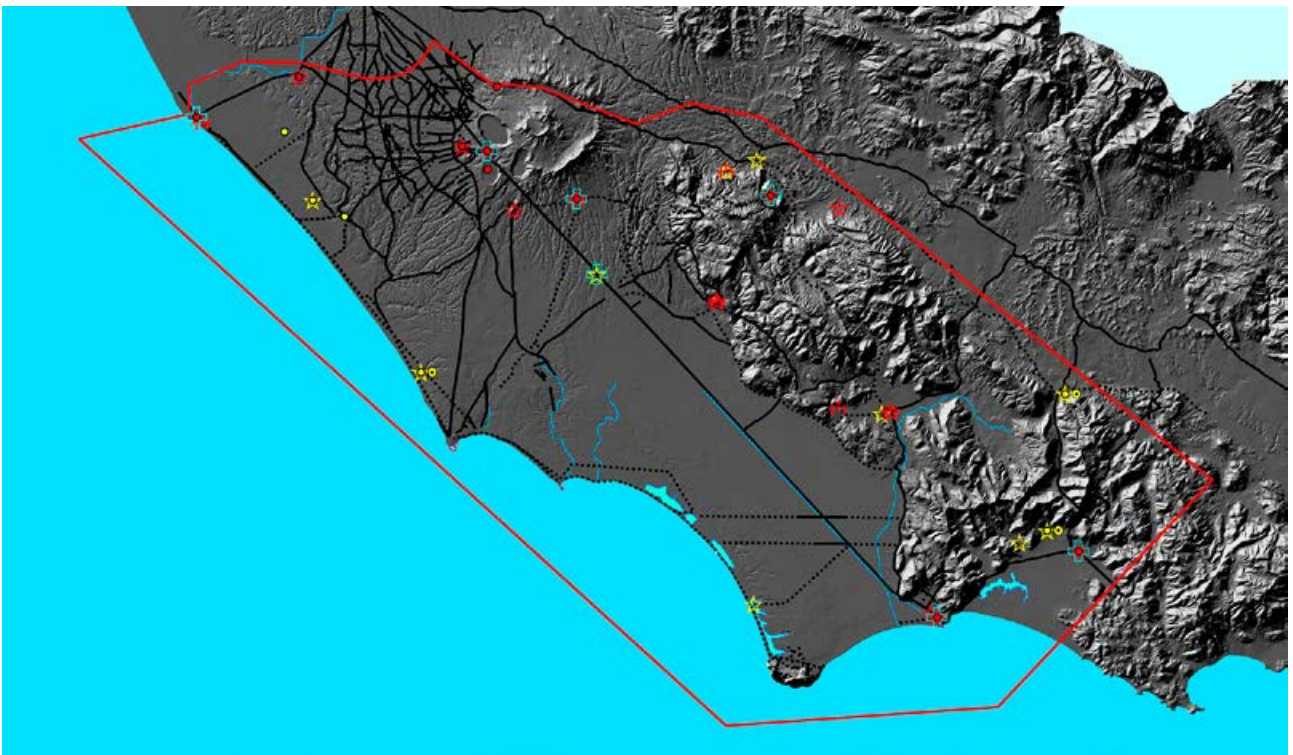


Figure 7.47. 7th century Christian activity in the landscape.

an effect of demography: maybe not many people lived on the Tyrrhenian coast in the late 6th and 7th century. Following this line of reasoning, one may correlate the nonexistence of Church possessions to the absence of a sufficient working force.

The abandonment of the diocese of **Antium** (OLIMsite 32) may be a case in point for demographic decline as a factor: a drop in population is seen as a factor in the process of disappearing diocese in other parts of the Italian peninsula⁷⁰⁶. Indeed, from the GIA survey material it is

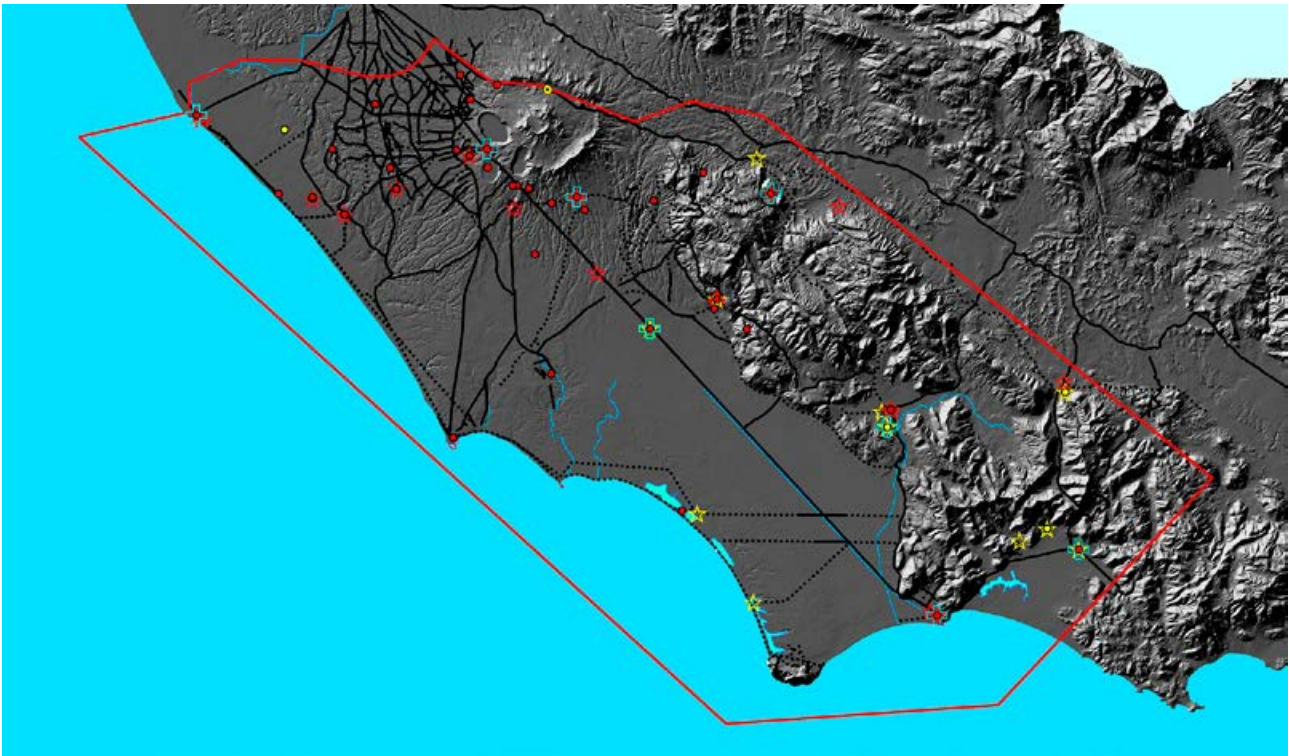


Figure 7.48. 8th century Christian activity in the landscape.

clear that sites in the hinterland of Antium were on the wane. The area however, certainly was not void of activity in these centuries. Other factors affecting the sustainability of the see of Antium have been proposed: less interest and investment by the emperors in the town⁷⁰⁷, and the defensive vulnerability of Antium⁷⁰⁸.

There may be another factor involved: visibility, or availability of primary data⁷⁰⁹. On several key sites, evident contemporary churches have not been documented yet, archaeologically or historically, for example in Antium. It may also be assumed that **Astura settlement** (OLIMsite 33), booming until at least the late 6th century, was equipped with a church⁷¹⁰.

In sum, the vacuum in ecclesiastical activity on the coast in the database is an interesting observation, that may be related to demographic decline and defensive vulnerability. It may also be a question of bias: the fact remains that these centuries are archaeologically difficult to trace. Coastal southern Lazio saw new Church activities in the 8th century, with the foundation of the papal *domuscul-tae* of Anthius, Formias and Laurentum; although these estates undoubtedly were equipped with churches and chapels, evidence on these churches is absent. This again shows the importance of the factor of visibility.

7.I.2.2.1.a3 Conclusions

The database seems to corroborate the ideas on the expansion of Christianity from Rome and along the main

routes from Rome into the countryside. In the 6th century this process is completed: Christian activity was found throughout the landscape. The number of functioning churches and chapels shows a steady growth between the 4th and the 8th century. The analysis also poses new questions, which are difficult to answer: what does the void in ecclesiastical influence on the coast imply: demographic decline, lack of defensive qualities, less visible archaeology? These new questions delineate the limits of this study of early Christianity.

7.I.2.2.1.b The church as focal point in the changing landscape in the 4th to 6th century⁷¹¹

An evolving network of rural churches became a vital factor in the changing allocation of activities all over the Italian peninsula⁷¹². Churches and chapels disseminated from the large cities, developing within existing settlements, in (former) villas (often turned settlements, sometimes deserted⁷¹³), in former pagan sanctuaries, and in suburban areas. It has been suggested that the building of churches might have rejuvenated waning or even disappeared Roman centres⁷¹⁴. Churches often acted as hubs for the ecclesiastical organisation of rural areas⁷¹⁵ or for the active regrouping of inhabitants of the countryside by an urban elite in the 6th and 7th century⁷¹⁶. In many cities on the peninsula, new habitation centres evolved around suburban cemetery-churches. These suburban churches had become focal points for the Christian community and contact points for the surrounding countryside⁷¹⁷.

Overall, this generic picture is corroborated in the current study area. First of all, churches indeed seem to have disseminated along the main routes into the landscape of Tyrrhenian southern Lazio. On most larger settlements with confirmed activity in the 5th to 7th century a contemporary church has been attested⁷¹⁸. However, we do not have much unmistakable causal evidence for the acclaimed rejuvenation of Roman centres because of the building of a church, and the resources and people it attracted. Nevertheless, there is some indirect evidence for a positive influence of churches on the vigour of sites: the building of the 6th church of Villamagna (OLIMsite 52) was contemporaneous to a new, short-lived, flourish of the site. The same may be true for the Norba plateau (OLIMsite 23).

The presence of a church as pull factor for a populace becomes clear in the suburban church of Pianabella near Ostia (OLIMsite 589). This church was erected at the end of the 4th century, 300 m south of the Porta Laurentina. It evolved into a demographic pull factor for the Christian community. It is tempting to correlate the tentative *civitas* near Nettuno to a suburban cemetery church (i.e. suburban for the bishop's town of Antium) as well. Evidence for a Christian cemetery has been found here; it is one of the few early clues for Church presence in the area. To stretch the imagination even further, one can speculate that such a church was located on the crossroads of the Severiana and La Selciatella. This way it would serve both Antium, a *civitas* and villas along the coast. All in all, the idea of a suburban (cemetery) church in the wider Nettuno area is not unsound, but evidence remains poor. A further example of a suburban church is 6th century S.Maria ad Martyres (OLIMsite 505) near Terracina.

Apart from the influence of larger centres, there are indications that churches and chapels may have acted as focal points for the surrounding countryside. The 4th century church at Sole Luna (OLIMsite 172) may have acted as a new focal point for the surrounding area, being located on a crossing of two main roads. The same may be true for the several churches built on (former) villa sites, such as the *baptisteria* of the villas of S.Cesareo and villa dei Ottavi near Velletri and Lanuvio (OLIMsites 293 and 174), and the possible 6th century church on the site of S.Maria della Sorresca (OLIMsite 128). The presence of these churches show how an empty landscape, on the maps, may be deceiving: most of these churches must have served the people in the surrounding countryside, who are as of yet absent in our database. The 5th century church at Villamagna too must have served a local community, possibly not only the inhabitants of the site itself (cf. barracks), but also of the surrounding countryside. The 4th or 5th century church in the villa of Pliny (OLIMsite 109) may have had a similar function. However, not all churches on villa sites may reflect the

presence of a rural population: as research elsewhere on the Italian peninsula shows, some of these villa churches were built by the (elite) for private worship⁷¹⁹.

7.1.2.2.2 Theme: defensive measures and strategies

The start of the 5th century is characterized by a final loss of territorial integrity of the Roman Empire and growing insecurity. Britain was lost and Rome was sacked by the Goths in the same year, 410 AD. The Vandals plundered Rome again in 455. The unease caused by the recurrent raids may have been one of the incentives for the abandonment of parts of the countryside. In the literature, the defensive nature of many sites in this period is stressed. Many towns took up (re)building their walls in the 5th century, for example Albenga, Ravenna, Grado and Rome⁷²⁰. As Procopius' *History of the Gothic War* shows, towns without protective walls were an exception. Later, after the Gothic war, a new military elite developed both in Byzantine and Lombard areas⁷²¹, the top-end of a strongly militarized society. The rise of settlements on defensive (mostly hill-top) positions and on strategic points in many parts of Italy in the late 6th and 7th century bears testimony to this militarization⁷²².

The question is: How does the database reflect these political-strategic and military-strategic developments of the 5th to 7th century? Where do we see operational defensive measures taken? Are there specific places of larger vulnerability? Can one infer specific tactics or geopolitical strategies from these measures?

7.1.2.2.2.a An overview of the evidence on military defensive measures and activities

As figure 7.49 and table 7.6 show, a number of operational defensive measures taken in the 5th to 7th century has been documented in the studied part of southern Lazio, such as the use of or restoration of strongholds (stand-alone fortifications or fortified settlements) and tactical-operational movements.⁷²³

Around the time that Honorius upgraded the Aurelian walls, in 401 AD, the first recorded bolstering of walls to the south of Rome took place in Terracina (OLIMsite 31). Terracina would become a vital stronghold in future military strategies, first of all as a Byzantine military bridgehead in the struggle with the Lombards from the late sixth century onwards. Terracina was one of the few fortified locations in the south of Italy in late Antiquity⁷²⁴

At Torre Astura (OLIMsite 64)⁷²⁵ and Picco di Circe (OLIMsite 41)⁷²⁶ new strongholds seem to have a likely date in the 6th or 7th century. Although their interpretation as Byzantine fortress still has to be confirmed definitively, it is an interesting idea to see both strategically located sites as part of a defensive scheme along the coast

Table 7.6. Evidence for defensive activity 5-7th century.

OLIMsite	name	defensive activities	date activity
25	privernum	Y	5-6(-7) th century
31	terraccina	Y	5-6-7 th century
41	picco circeo	P	6 th century
52	villamagna	P	6-7 th century
53	s.andrea in silice	P	6(-7) th century
64	torre astura	P	6 or 7 th century
155	castra albana	P	6(-7) th century
254	patrica	Y	7 th century
266	segni	Y	7 th century
392	ostia antica	Y	5 or 6(-7) th century

of Tyrrhenian southern Lazio, in concert with **Terracina**. Undeniably, it has been well attested that the Byzantines created strongholds on strategic locations across their territories, specifically along the coast, in the late 6th and 7th century⁷²⁷. Like Terracina, both fortifications may have played a part in the Gothic wars or the volatile period afterwards, in which conflicts with the Lombard forces in Italy now and again resumed. Future research should consider such a hypothetical defensive system along the coast. As the discovery of Byzantine wall-facings at Torre Astura showed, such research should focus on (Byzantine) building techniques⁷²⁸.

Inland, military activities related to the Gothic war have been recorded as well: tradition holds that the *municipium* of **Castra Albana** (OLIMsite 155), in which a see was founded in 455 AD⁷²⁹, was transformed into a small fortified town during the Gothic war⁷³⁰. Concrete evidence on this transformation lacks however, and it remains unclear when exactly these activities took place and who conducted them.

In the Sacco Valley a Byzantine defensive system of *castra* has been documented in the written sources⁷³¹: Segni, Patrica and Gradon – unidentified as of yet – on the southern edges of the valley Anagni, Alatri, Ferentino and Veroli on the northern. Other 6th or 7th century defensive structures have been suggested at **Villamagna** (OLIMsite 52), explaining some of the remains found on site D; these may have been part of this Byzantine system, given their date and the possible imperial background of the 6th century restorations on the site⁷³². Here, a ditch was cut through the road and the building in the late 6th or early 7th century. Rubble to the west of this ditch has been tentatively interpreted as a palisade. Moreover, the possible remains of a defensive tower have been unearthed⁷³³. The defensive nature of these structures, however, is not certain⁷³⁴. Two sunken-floor storage buildings on site B, in the southern parts of the villa complex, have been linked to the possible

defensive structures of site D. These sunken-floor constructions may point to Lombard or other external, possible foreign, influence⁷³⁵.

Ad hoc defences have been set up as well. Theatres seem to have had excellent defensive qualities: In **Privernum** (OLIMsite 25) as well as **Ostia** (OLIMsite 392) the old (amphi)theatre was transformed into a fortress. These transformations show us that the population, the available resources and organisational level of these towns had reached too low a level to uphold the perimeter of the old walls. At Privernum, the archaeological evidence in the theatre dates to the 5th and 6th century. It is unclear whether this fortress was still in use afterwards. The theatre of Ostia was used as a fortress in the 5th or 6th century. Conspicuously, the town of Ostia itself had not been fortified in late Antiquity: from the early Empire onwards the walls were not restored. Maybe such measures were deemed unnecessary as the military forces in Rome may have acted as a deterrent for invaders⁷³⁶. Indeed, an active role of these troops in Ostia is feasible, as Ostia (and nearby Portus) remained of vital importance for the shipment of supplies to Rome. Under siege of the Goths in 537, Ostia and Portus were defended by the troops of Belisarius during the Gothic war⁷³⁷. In spite of this, there is no evidence to suggest that Ostia was part of a scheme of Byzantine strongholds along the coast, as discussed above. There are no historical sources suggesting permanent Byzantine presence here⁷³⁸. The theatre turned fortress may have temporarily developed into the nucleus of Ostia. It is unclear whether a stronghold was maintained in Ostia, until the building of the fortress of **Gregoriopolis** (OLIMsite 393) in the 9th century. It is feasible that some kind of fortification was in place during the 7th and 8th century, as the see of Ostia continued to function throughout the middle ages.

The historically well-documented events around of the sees of Velletri and Tres Tabernae demonstrate the

vulnerability of bishoprics in this period. As becomes clear from a letter by Gregory the Great, these two sees were united, and transferred to a safer location at **S.Andrea in Silice** (OLIMsite 53) in 592 AD. Gregory described explicitly that this transfer was motivated by the threat of incursions and the lack of defensive possibilities of their original constituencies⁷³⁹. The site of S.Andrea is strategically and geographically well located: on a defensible position above the Via Appia and on the edge of the Pontine plain⁷⁴⁰. Although plausible, it remains uncertain if the site saw fortifications built around the time of the transfer. It has been suggested that nearby a castle was built to protect the see. A possible candidate for such a castle is **Civitana** (OLIMsite 573), an old Roman fortified settlement. The site of Civitana does not provide evidence to support this idea.

What about the other sees in Tyrrhenian southern Lazio? The evidence shows that during the 6th century defensive measures were taken in the episcopal towns of Terracina, Ostia and Castra Albana. On the dioceses of **Fondi** (OLIMsite 50, see founded possible around 500 AD), **Antium** (OLIMsite 32, see founded 465) and **Segni** (OLIMsite 266, see founded 499) evidence for defensive activities is absent. In my view, it is possible that the old republican walls were still in use at Fondi and Segni.

To take this last thought further: on figure 7.49 I have plotted the sites on which 5-7th century defensive activities have been attested, and all republican and imperial Roman fortified settlements on which, non-defensive, activity has been recorded in the 5th, 6th or 7th century⁷⁴¹. These sites were originally republican and imperial built colonies, towns with walls or walled army quarters. Many of these older sites must still have exhibited standing walls, some of which may still (or again) effectively have been used as defensive measure in this period of insecurity⁷⁴². In most cases it is unclear until when the walls of these old fortified settlements functioned⁷⁴³. Only at Terracina restoration activities on parts of the old walls have been recorded.

To create a complete picture of all the evidence on military defensive measures and activities, the (local traditional stories on) contemporary attacks are brought into the equation (see map):

Historical sources or (local) traditions on attacks or occupations in Tyrrhenian southern Lazio and Rome until 700 AD⁷⁴⁴:

- **Rome.** 410 Alaric sacks Rome, 455 Gaiseric, king of the Vandals, occupies Rome, 472 Ricimer sacks Rome, 493 Theodoric captures Rome, 536 Belisarius occupies Rome, 537 Goths besiege Rome, 546

The Ostrogoth king Totila captures Rome, but Rome recaptured by Belisarius, 549 Ostrogoths retake Rome, 552 definitive seizure of Rome by the Byzantines under general Narses.

- **Cori** was sacked by King Genseric of the Vandals and Alans in the 5th century and by King Totila of the Ostrogoths in the 6th century.
- **Velletri** was raided by Visigoth King Alaric in 410.
- **Ariccia.** Tradition tells about 5th century sieges and destructions by Vandals and Goths
- **Castra Albana** was occupied by Ostrogoths for a few decennia in the 5th century.
- **Monte Circeo (San Felice Circeo).** Tradition tells about the conquering of Monte Circeo (or: San Felice Circeo) by 546 Totila, king of Ostrogoths.
- **Portus (outside research area).** Attacked by the Vandals in 455. While under siege of the Goths in 537, defended by the troops of Belisarius during the Gothic war.
- **Ostia** possible suffered a Vandal attack in 455; under siege of the Goths in 537.
- **Fondi.** Gregory mentions the attack of the Lombards on the city in 592.

The traditionally stories of attacks on Velletri and Cori (for both towns it is all but certain if these incidents actually took place) and Fondi (an assault which is solidly documented) may be explained by the exposure of their location, as visible on the map: all three are strategically located on a crossroads of main routes, some of which ran to the sea. Fondi was particularly exposed, because of its position on two main routes from the south and near the sea.

Conspicuously there are no historical records on 7th century attacks. The attack on Fondi of 592 was the last recorded incursion by the Lombards in the study area. This must have been the result of the Byzantine *pax romana* of the Duchy of Rome. The current study area was firmly in Byzantine hands in the second half from the 6th century onwards. By that time, the enduring battle of the Byzantines with the Lombards had taken central stage. In the late 6th and first half of the 7th century the Lombard – Byzantine conflicts seem to have unfolded far south of the research area⁷⁴⁵, on the borders of the Duchy of Rome, in the region of Aquino and Montecassino. These hostilities would last until the middle of the 8th century; the capture of Ceccano (752 AD) is the last hostile act in this struggle. By that time the border of Lombard territory may have crept northward until south-east of Fondi⁷⁴⁶.

7.I.2.2.2.b Discussion: a rather bleak militarized landscape

It must be concluded that the evidence of building or rebolstering defences in the post-Roman period is rather

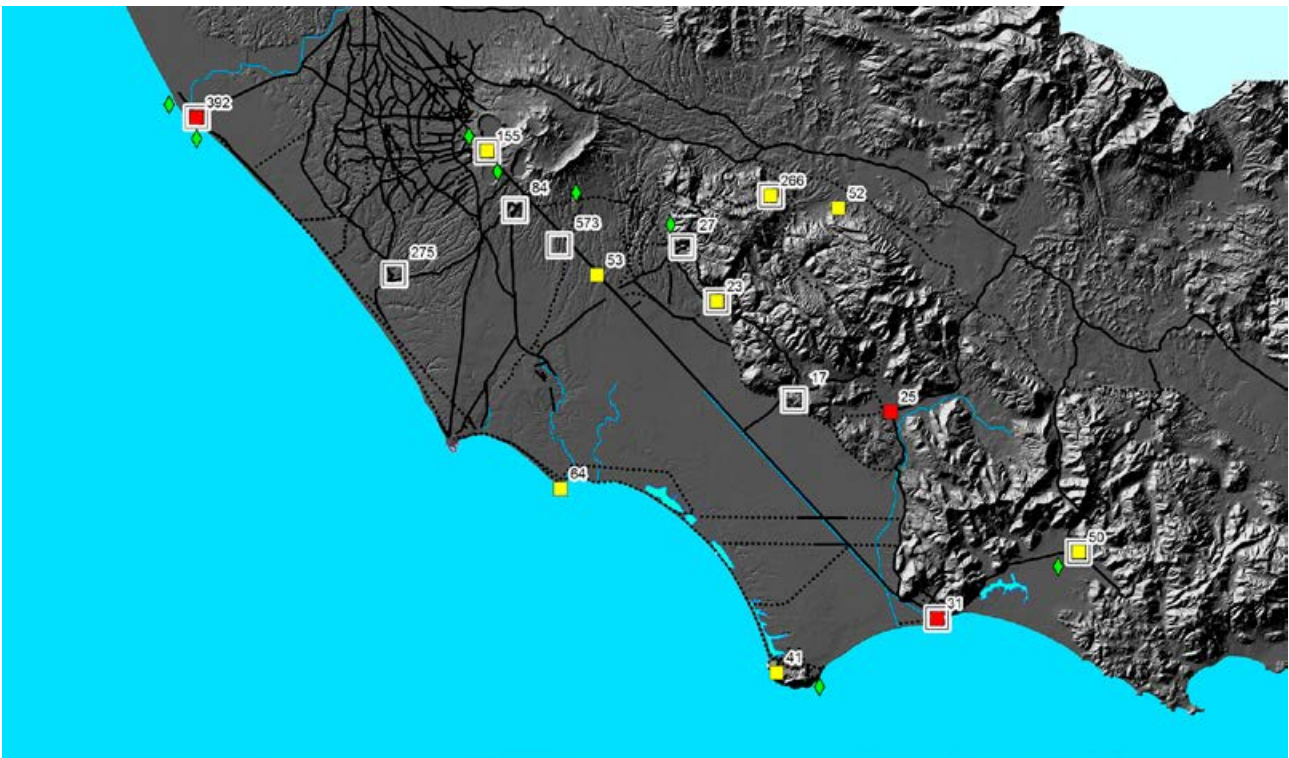


Figure 7.49. Functioning fortifications and defensive measures, old fortifications and historical attacks in the 5th-7th century. Coloured small squares denote sites on which defensive activities have been attested: red means certain defensive activity, yellow possible. Larger white symbols are originally republican and imperial built Roman fortified settlements, on which activities have been recorded somewhere in the 5th to 7th century, and on which standing walls may still have functioned in this period. The green diamond denotes a (possible) attack or occupation by foreign troops (recorded in historical sources or by local tradition) during the 5-7th century.

meagre. There are 10 instances of contemporary defensive measures in the research area, creating a rather bleak archaeological picture of a militarized landscape in the perspective of the turmoil of the time. In the current record there is no concrete instance of a flight into the hills, as suggested for the Ager Faliscus, or the rise of the hilltop settlements on defensive positions, as attested north of Rome and in Friuli⁷⁴⁷. The occupation of the Norba plateau, however, a site on which walls were still standing, may have been stimulated by its defensive qualities⁷⁴⁸. Overall, the idea put forward by Christie, of a more limited “fortification” of the landscape to the south of Rome, within the larger picture of the militarized landscape of 5th and 7th century Italy, seems to be corroborated⁷⁴⁹. Not only walls and towers are meagrely represented. The presence of other types of buildings associated with military functions, such as barracks, headquarters, stables, perhaps even granaries (almost) lack as well. In this respect, however, the current research area is no different than any other part of Italy⁷⁵⁰.

There are however, mitigating circumstances for this meagre picture. As Christie wrote, secure dating of the late Antique and early medieval walls is difficult⁷⁵¹. Exemplary are the post-Roman walls of Ardea (OLIMsite

275). These walls were earlier seen as Byzantine and are now securely dated to the 9th century AD and later⁷⁵². Terracina provides another example of the difficulties of dating post-Roman walls: the restorations of the republican fortifications were traditionally dated in the 9th and 10th century. Recent study, however, reveals that these repairs were largely done in the first half of the 5th century⁷⁵³.

Secondly, archaeological visibility may play a role. As has been argued, several of the old fortified towns and fortresses, such as the ones still present at the time in Ardea, Cori, the Norba plateau, Sezze, or Segni, may still have been used as bulwark, and may have seen *ad hoc* repairs in these insecure times. Such use is difficult to identify in the archaeological record: the late Antique status of the old republican walls is difficult to establish, and possible makeshift or temporary refurbishments do not stand out against the massive original republican walls. Moreover, such restorations are not the subject of much archaeological-architectural study; only in Terracina these have actually been recorded.

In addition, several sites with old fortresses were reoccupied in later times, in the high or late middle ages, and some are still occupied today, such as Ardea, Cori, Lanuvio and Fondi; this makes medieval temporary

repairs difficult to study. This may also hold true for newly built fortresses of the 5th to 7th century, as Christie pointed out⁷⁵⁴.

7.I.2.2.2.c Conclusions

All in all, 10 sites in the database actually show operational defensive measures taken. It is not possible to find a conclusive common denominator for the nature of these fortifications: the character of defensive activity varies, from seemingly improvised reuse of theatres, to newly built defences (Picco di Circe) and repaired walls (Terracina). Certainly not all defensive activity is recorded. It is feasible that the defences on some of the old Roman fortifications or fortified towns still functioned in some form. Contemporary defensive measures can be assumed on all early Christian sees. The spatial distribution of the few defensive measures confirms the logical places which are most vulnerable for attacks of marauding troops: sites on main roads and near the sea. The roads are of prime economic and military importance. Through these axes the enemy is able to advance quickly. Is it possible to see military strategies in the available data? Maybe: the attested defensive measures may tentatively be seen as evidence for a Byzantine centrally led military strategy. The Church must have organised defences around churches, monasteries and dioceses. In view of the rather slow ecclesiastical organisation within the countryside, such measures may at first have been organised at a local level⁷⁵⁵. The protection of individual churches is difficult to grasp; there are no historical sources to elucidate the matter. The protection of individual parishes often depended on the worldly contacts of the clerics⁷⁵⁶; how this resulted in defensive measures taken is unclear. Monasteries are all but absent in our study area. Only for the dioceses there is evidence for actual operational measures taken, such as the transfer of the sees of Velletri and Tres Tabernae at the end of the 6th century. It is likely that ecclesiastical and Byzantine defensive strategies complimented each other, for example at Terracina, Castra Albana and, outside of the research area, Anagni and Ferentino, the latter both being 7th Byzantine defensive *castra*⁷⁵⁷. These four settlements were vital (Byzantine) strongholds and episcopal seats. However, it is unclear how such complementary strategies were organised and who took the lead.

7.I.2.2.3 Theme: the economy and systems of redistribution

This section is an important part of the synthesis, not only for this study period, but for each of the three, as it touches upon many aspects of medieval life. The theme generally deals with three overlapping aspects (or levels) of economic development in the study area: local economic activity of farmers, estates and settlements, the larger, regional economic picture, and systems of redistribution

(exchange, trade⁷⁵⁸). Transhumance and local practice of animal husbandry is another aspect of economic activity in the countryside of southern Lazio. Overall, as shall be shown throughout this analysis, the primary evidence allows only glimpses on local or microregional economic activity. A synthesising study of late Antique economy at a regional level lacks in this study area. For the current study too, such synthesis is hard to establish, because of the fragmented evidence. Much can be learned, however, from some of the valuable synthesising regional contributions in other parts Lazio, especially on Rome (for example Delogu 1989 and Hodges 1993) and north of Rome (for example Patterson and Roberts 1998). Patterns of redistribution still lack synthesis in the current study area, although some first attempts prove its potential (for example Corsi 2007).

As the analysis of the separate key areas has shown, the evidence on economic development and patterns of redistribution is largely based on archaeology, in particular on ceramic chronology and distribution. However, historical sources too, provide valuable glimpses on local economic activity, especially activity related to the exploitation of Church estates in late Antiquity and the early middle ages, and the dealings of the elite families and local communities in the high middle ages. Ethno-historical study of land use and pastoralism adds to the picture.

7.I.2.2.3.a Local economic activity, 3rd-7th century: villa estates

This section starts with a good look at one of the fundamental, and best documented, elements of (late) Roman economy: the villa. In our study area, research has provided little information on the local economy of villas, for example on the extent of the estates, their internal organisation, and their interaction with the surrounding countryside. And this is not only true for the scantily documented inland villas estates in the direct hinterland of Rome⁷⁵⁹; detailed socio-economic analysis of villas is difficult even in well studied coastal areas of, for example, Nettuno and Ostia. In fact, this not only applies to late Antiquity, but, to a lesser extent, also for republican and early to middle imperial times.

For the well-studied areas it has been hypothesised that in imperial times smaller structures nearby villas (outhouses, farmsteads, hamlets) had a subsidiary relationship with the villa. The rural sites of the Astura valley, for example, may have functioned as production sites for the *villae maritimae* on the coast, inhabited by tenants working for the owners of the villas⁷⁶⁰. This study, with its focus on late Roman contexts, however, does not allow further investigation of the functional relationship of Roman villas with their subsidiaries, the extent of the villa territories,

and the possibly changing socio-economic role of villas in their surroundings. For such insights, a more intense level of micro-regional field studies would be necessary⁷⁶¹.

With regard to the role of villas in systems of redistribution, the picture is also meagre. One cannot draw an overall picture of, and microregional difference within, the (re)distribution of resources from villas to local markets, for instance to a nearby settlement, to Rome, or even across the Mediterranean⁷⁶².

There are positive points to be made, however. The current database now and then offers a glimpse into the socio-economic relationship of the villa estates within a local economy, especially with nearby towns, and the changes in this connection in late Antiquity. Accessibility seems to play a role in the continued economic relationship between villa and town, as may be read from the persistence of villas along the road into the hinterland of Ostia, Antium and possibly Velletri⁷⁶³. The concurrent chronology of Antium and the road side villas may be an additional indication of that. How the economic relation between villas and town exactly worked however, is unclear.

7.1.2.2.3.b Economy on a regional scale, 3rd-7th century

The crux in understanding the economy of post-Roman landscapes lies in the pottery typologies. Contrary to pottery-focussed studies (like Patterson & Arthur 1994, Patterson & Roberts 1998, and Patterson 2003) the current database does not permit comprehensive statements on the development of late Antique and early medieval regional economy of Tyrrhenian southern Lazio based on the ceramic record. From the available evidence it is not possible to say in detail how and when regional economic systems changed, for example from a market focussed on Rome to more marginal socio-economic systems, in which local production and consumption dominated, like in the Sabina of the 8th and 9th century. Nor can one sharply discern regional redistribution systems, clearly pinpoint regional markets or clearly identify trade hubs (except for Rome and several coastal ports, such as Ostia and Terracina).

The limited picture of regional economies, certainly compared to northern Lazio, is mostly caused by a lack of (published) coherent research of local pottery. The studies in Ostia, Privernum, Villamagna, and the recent work done by the GIA (Astura settlement, in Pontine plain) are exceptions. Indeed, as the Tiber Valley studies have shown, the change from a world system to a network of regional and local supply, or for that matter, a transition from imported pots towards locally produced (coarse) wares, can only be effectively studied through in-depth research on local wares acquired by excavation, and of

their distribution⁷⁶⁴. The excavations of Villamagna are an example of such in-depth research. At that site new (local) wares and fabrics were introduced in the 6th and 7th century, which is seen as the outcome of the introduction of new methods of food preparation and/or as a result of a decline in imported ceramics. The new forms of pottery show regional connections within Lazio and Naples, and, especially, with Rome⁷⁶⁵. At Privernum too, local production of common wares took over from imported pottery from the early 6th century onwards. The 6th and 7th century common wares found at the site of Privernum are generally comparable to pottery found in Tyrrhenian southern Lazio, the Adriatic coast and in Campania⁷⁶⁶.

For these reasons it is not possible here to say something definitive on what happened in the parts of the landscape that were disconnected from the integrated market, for example the rural parts in the Lepine margins and Velletri tuff hills in the 3rd and 4th century⁷⁶⁷. Possibly, sites in these parts saw continued activity within a local economy. In general, subsistence farming is difficult to discern⁷⁶⁸, as it will function in a local market system. In contextualising the “empty landscape” as visible on late Antique maps, therefore, one should take into account that production and consumption within a local network may not be visible.

However, there are glimpses of real local economies. Local pottery was produced in Ostia from the mid-5th century onwards⁷⁶⁹. The Ostian example shows how developing local production intersected with continued elements of a pan-regional market: the area of Ostia saw sustained overseas imports until the 8th century, and strong ongoing economic relation with Rome until the 10th century. At Astura settlement too local pottery production has been attested, from the late 6th onwards, at a time that “international” imports ceased on the site.

7.1.2.2.3.b1 Imports as indicators for (dis)continuity of systems of redistribution

While local or regional systems of redistribution are hard to discern, the primary evidence does offer insight in the development of “international” exchange systems until the 6th and 7th centuries, through the study of the distribution of overseas imported (and imitated import) pottery, especially ARSW and amphorae. In many parts of the current study area indeed, ARSW has been studied⁷⁷⁰.

The “international” nature of much pottery on almost all well studied sites seems to point to a continuous (inter) regional economic system until the 2nd and 3rd century. Traditional Roman economic and trade networks seem to hold on in these centuries, functioning within an integrated market. Within this integrated market, many parts

of the current study area must have had close ties with the economy of Rome (see also below here).

As the study of the key areas has shown, things changed from the 3rd and 4th century onwards. ARSW studies show that in these centuries some rural inland areas further away from Rome and the main roads got disconnected from the overseas market⁷⁷¹. Francovich and Hodges saw this end of widespread ARSW circulation as a sign that the regional market systems had collapsed⁷⁷². Cost-profit motives might be responsible for the decline in distribution, as difficult inland markets are simply too expensive to exploit⁷⁷³. Again, the absence itself of evidence for this traded pottery on the inland sites in the 4th to 7th century itself does not imply discontinuity of activities in these sites, as has been discussed⁷⁷⁴.

The current evidence does not totally confer with the conclusions elsewhere: in most parts of the Italian peninsula, like the Liri Valley, the (early) 5th century provides a break with the widespread distribution of imported wares in inland rural areas⁷⁷⁵. Such a clear breaking point on inland sites lacks here. The Hidden Landscape surveys even recorded late 6th and possibly 7th century ASRW pottery at sites in marginal parts of the Lepine Mountains.

The pottery evidence shows that the break in interregional redistribution systems took place in the late 6th / 7th century. Although 6/7th century pottery has been found inland, the bulk of late imported wares has been found on the coast. In the Nettuno – Anzio, Ostia and Fogliano key areas, ARSW is found until that period on farmsteads, villas and in settlements/towns. In Ostia imports from Gaul even continued until at least the 8th century. These coastal late pottery sites are all located on the seaside and along roads going inland. How much the late imports were a remnant of the former integrated market, and if these were traded within a free market is unclear: possibly new redistribution networks had been started.

To conclude: Just as has been attested in other parts of the Italian peninsula, pan-Mediterranean trade almost ceased in the late 7th century. As will be discussed in the next study period, there is, as of yet, no archaeological evidence (pottery, numismatics) to show imports from outside Lazio in the 8th century, except for the contemporary pots from Gaul found in the Ostian area. In Rome too, the Crypta Balbi and other assemblages show that pan-Mediterranean trade into Rome almost ended somewhere in the late 7th century⁷⁷⁶. In all, pottery production and trade went toward a further reduction and decrease at the end of the 7th century but we have no clue about the other categories of goods. It is fair to assume that small-scale long-distance trade never ceased completely⁷⁷⁷.

7.1.2.2.3.b2 The hinterland of Rome: continued economic ties with the City

Rome was the economic focal point of its wider hinterland within the integrated market of the Roman Empire. The close economic ties between Rome and its surrounding countryside continued in the late Roman period, as many nearby areas would continue to produce for the City. Ceramic studies show that in the Sabina the close economic links with the City lasted until the third quarter of the 6th century⁷⁷⁸. These economic ties must have become even more important, when the attraction of resources from distant regions and from overseas became more difficult, especially in the 7th century⁷⁷⁹.

Despite the decrease in population and urban inhabited area, Rome remained a principal interregional centre and a market for international pottery imports⁷⁸⁰. The close relationship with Rome ensured the continuous influx of imports into Rome's hinterland, as archaeological research north of Rome shows. In the northern hinterland, relatively large quantities of pottery were imported from (Byzantine) Northern Africa⁷⁸¹ until the 7th century, just like in Byzantine occupied Liguria⁷⁸², Calabria and Naples.

In the current study area, a correlation between proximity to Rome and imports cannot be clearly attested; the lack of (published) comprehensive late Antique and early medieval pottery studies in much of direct hinterland of Rome likely is the main reason for this. The coastal area near the City (Ostia) and the Astura peninsula are the exceptions, as these provide the best archaeological track record, both in state of research and in the publication rate of the results. In Ostia, and the area to the south of it, there is evidence for a continued direct economic relationship with Rome. Here an unbroken exchange relation with Rome during the Dark Ages has been proven. The clearest archaeological evidence is offered by the pottery assemblages at Pianabella: these show remarkable resemblances with contexts in Rome until the 10th century⁷⁸³. As regards the imports, the Ostian area would receive overseas imports until at least the 8th century. Its position on the Tiber mouth has everything to do with this⁷⁸⁴. Other coastal evidence of continued late Roman ties is found at Astura settlement and Torre Astura. Still 50% of the coins from 4th and 5th century here were minted in Rome. At Pianabella this percentage was even higher.

There is not enough archaeological resolution to monitor the possible continuation of close economic ties of the countryside with the City, a continuation that can be expected, especially in the direct hinterland of Rome. Likewise, there is no clear evidence for the process of deteriorating connections between city (in general, not only Rome) and countryside, as attested in other parts

of the Italian peninsula, which according to Francovich and Hodges⁷⁸⁵ is fundamental to the eventual 'provincialisation' of Italy, and the decline of the villa. In fact, the proximity of, and accessibility to, a town seems a factor in continuity of villa sites, as was discussed⁷⁸⁶.

In contrast to the archaeology, historical evidence on economic relations between the City and the countryside is abundant. The written sources suggest a strong element of continuation. The *Liber Pontificalis* shows that from the 4th century onwards the papacy acquired many lands in Tyrrhenian southern Lazio, which continued to function as subsidiaries to Rome throughout late Antiquity and the early middle ages. As will be treated in the next study period, papal possessions were concentrated in a wide circle around Rome, but the *Patrimonium Petri* also contained lands overseas (Sicily, Calabria). These estates produced goods which were intended specifically for the city of Rome, for example for the *servitium luminum*, the provision of light to the churches of the City. The revenues of these estates are explicitly mentioned in the *Liber Pontificalis*. Until Gregory the Great, the extent of and revenues from the papal estates in the whole of Lazio grew⁷⁸⁷. It seems that after the death of Gregory, in the 7th century there was a slump in these papal revenues, partly caused by the pressure of the Lombard conquests on the availability of lands⁷⁸⁸. These estates in Lazio would become even more essential for Rome when the pope lost Sicily and southern Italy in the 8th century, under Byzantine emperor Leo III, probably in the year 732⁷⁸⁹. On the other hand, the market demand from Rome itself must have been smallest between the later 7th and later 8th century, the period of the lowest socio-economic ebb of the city of Rome⁷⁹⁰. The construction of the *domuscultae* in the course of the 8th century may have been an attempt to develop a new coordinated production system, some kind of new (closed) market for Rome.

While the existence and economic importance of the papal estates is well documented in the historical sources, it is difficult to comment on which areas produced what crops, and how exactly the yield of these estates was distributed into the City.

7.I.2.2.3.b3 Interregional trade networks in the study area

There is archaeological evidence for two specific trade networks in which parts of our study area were involved: one between several harbour sites on the Tyrrhenian coast in the 4th to the 6th century, and a second between the far south of Lazio and the Amaseno Valley – Terracina in the form the 6th-7th century until the 9th-10th century.

The assemblages (especially pottery finds) between the 4th and 6th century on several harbour sites on the Italian

west coast show marked resemblances, in the occurrence of wares, shapes and the relative share of these⁷⁹¹. From this evidence it can be deduced that a network functioned between several coastal towns, among which are Astura settlement, Ostia, Portus, Naples, and more distant centres such as Marsiglia and S. Antonio. The significant port of Terracina must have been one of the stops on this redistribution route, although the pottery evidence for this lacks as of yet.

It is uncertain if this network was new, or only becomes visible in the 4th century. It has been suggested that this sea trade network was institutionalised rather than market led⁷⁹², which cannot be studied here. The possibility of a continuous strictly directed 4th to 6th century trade system, in my opinion, is not very likely in these times of turmoil, disintegration and change; maintaining a continuous large-scale controlled trade port system under these circumstances would have been very difficult. In Byzantine times (i.e. from 535 onwards) such an institutionalised network, between Byzantine controlled ports, is more probable⁷⁹³. Byzantine (eastern) material influence in our study area in general however, is limited because of its limited dissemination and low recognisability⁷⁹⁴.

A second exchange system may appear from the evidence of material influence from south-eastern Lazio in the Amaseno Valley. The cemetery of Ceriara provides the clearest evidence for this influence. Its mixed cultural pallet (Lombard, Byzantine and "autochthon" elements) seems typical for the southern Sacco and Liri-Garigliano region. Southern material influence can be seen in the 6th to 10th century assemblages at Privernum as well⁷⁹⁵. It is unclear whether the influx of southern goods was the result of trade only, or if people actually settled in these parts. Altogether, it is certain that Amaseno Valley was part of an redistribution network with connections to inner southern Lazio and Campania from the 6th-7th century until the 9th-10th century. Corsi upholds the idea that Terracina may have been the end station of a branch in an exchange network originating in the south, running from the Sacco Valley through the Amaseno Valley and southwards again towards Terracina. This idea is not unsound: indeed, this corridor seems to have been the easiest passageway through the Lepine Mountains from the Sacco Valley to Tyrrhenian coast. If Terracina actually received goods via this route cannot be checked as (published) pottery studies lack here. In the 6th and 7th century, the Privernum-Fossanova key area also saw African imports (at Fossanova and Privernum), possibly also transported over this central route from the Via Latina to Terracina, but in the opposite direction.

7.I.2.2.3.c Transhumance and animal husbandry

Although there are no direct primary sources on transhumant activities in the current study period, it may be assumed that a certain level of transhumant interchange with the inland mountain ranges continued during the middle ages. This may have been the case in the Nettuno – Anzio area which is especially suitable for winter pasture; as has been suggested, in Roman times the area was the objective of several transhumance drove roads between the inland mountain ranges and valleys and the coast. Large parts of the Astura valley, of which the higher parts were particularly suitable for pastoral activities, and the pedemontana and Lepine Mountains adjacent to the plain may have seen continued pastoral activities. Local land-owners (among others the Church), farmers and communities would have benefited from seasonal incoming groups, for example by letting out fields. Secondary products of the animals (wool, cheese) could be traded in local markets⁷⁹⁶. Wool, cheese, and meat, however, were also produced in the local agricultural practice of animal husbandry. Breeding and raising livestock was a common practice in many parts of the Campagna Romana in sub-recent times⁷⁹⁷. Transhumance and animal husbandry are intrinsic elements of the Pontine area. The different short and long distance forms of pastoralism shall be treated in detail further on in this study⁷⁹⁸.

7.I.2.2.4 *Synthesis: Tyrrhenian southern Lazio between the 3rd and 7th century*

7.I.2.2.4.a Transformations

The historical, archaeological and environmental evidence provides clear signs that the landscape of Tyrrhenian southern Lazio was changing. To name a few indications for change: environmental deterioration from the mid-imperial period, the general drop in the number of sites, the end of international imports in more peripheral parts since the 3rd or 4th century, the redevelopment of many sites from the 4th century onwards, the build-up of defences since the 5th century, the abandonment of parts of the landscape (Appian road) in the 6th and 7th century, and the simultaneous reoccupation of sites (Norba).

While for individual sites and areas the causes of change can often be pinpointed, it is difficult to describe the chronology of causality on a regional scale: collapsing Roman systems, the rise of new authority (Church), environmental deterioration and growing insecurity are all processes which in one way or another contribute to change. A treatment of the complex theme of causality is out of reach here. In this analysis the focus, therefore, will be on providing an overview of the factual transformations that can be observed.

There is not one decisive moment of change from Roman society to another condition, no dramatic collapse as was

postulated by scholarship until 30 years ago, as appears from the overview in Chapter 2. The Farfa project shows a constantly changing Sabine landscape and society, in which at least four transitional phases can be observed. In the current research area, (glimpses of) comparable slow and constant transformatory processes can be seen. In these processes, micro-regional variation is a fact: while in some parts living, producing and trade seem to hold largely on until the 6th or 7th century, especially on the coast, in other peripheral parts there is collapse of trade or production, or possibly abandonment, already in the 3rd or 4th century. At the same time, towns are centres of sustained vitality.

The current review study, however, does not offer as much detail as the Farfa project with its long-running studies in the field and of written sources, leading to detailed ‘histories of transformations’ and sharply dated phases. The current database can only demarcate the outlines of transformation, often aided by the background of results from studies conducted elsewhere. These outlines for the 3rd to 7th century will be analysed further, together with the study periods of 7th to 10th and 10th to 14th century, in the synthesis for the long-term developments in the landscape of Chapter 8.

The following transformations can be observed between the 3rd and 7th century:

1. First changes in the landscape: 2nd and 3rd century

In most studies, the 2nd and 3rd century AD is seen as the start of transformations and decline of the antique landscapes, manifested by a drop in the number of sites and a deterioration of organisational level. The transformations in the north of Italy started in the 3rd century⁷⁹⁹. In the Farfa area the decline already started in the 2nd century⁸⁰⁰.

The generic picture of other parts of Italy is corroborated by the data in well surveyed areas of the current study, the Anzio-Nettuno and Fogliano key areas. From the survey samples it appears that already in the 2nd century and 3rd a transformation, and decline, of the antique landscape started. Although the 1st and 2nd century AD is outside the scope of this study, the earlier GIA work done in these areas, combined with the current distribution maps, shows that the settlement pattern becomes more diffuse from the 2nd century onwards. Not only the survey data show this, also the evidence from excavations and architectural study on major sites, for example in Antium and at Torre Astura. Investments in Antium and at Torre Astura seem to become less from respectively the 2nd and 3rd century onwards. Antium saw only restorations from the 2nd century onwards, from that point onwards no new major investments were made. In the Nettuno area, the Astura settlement is an exception in this

picture of decline: from the 4th century the site developed into a town. As will be shown below, this is not unusual. In the observed decline, depopulation is probable but difficult to quantify, just like in other regions⁸⁰¹.

2. Internal reorganisation and contraction of sites between the 4th and 6th century

Many sites on the Italian peninsula underwent internal reorganisation and contraction between the 4th and at least the 6th century. Such reorganisations have been especially well studied in Tuscany, on both inland sites and on coastal villas. In our research area too, there are indications for such reorganisations, mostly on the coast. The evidence for reorganisation is often indirect. *Opus vittatum* is such a secondary indicator. The use of this wall-facing technique is a possible sign for the (crude) building activities associated with internal reorganisation and contraction of sites from the 3rd century onwards, as the excavations in Ostia Antica show. In the Ostia key area, *opus vittatum* outside the town of Ostia itself has been found at the Vicus Augustanus Laurentium; in the Anzio-Nettuno key area on Piccarreta 7, at the villa of Nero, in the town of Antium and at the villa of Torre Astura. Unfortunately, at most sites the *vittatum* brickwork presently cannot be studied, nor are there pictures or descriptions of the masonry available for typological breakdown. This is unfortunate as this brickwork should be dated more precisely and its context studied to effectively say more about its potential as an indicator for reorganisation: for which buildings was *vittatum* used, what spaces were created? For this, architectural survey and excavations are needed.

The evidence for reorganisations is mostly found on the coast, but this may be due to the often meagre documentation of many inland sites. Inland sites with evidence for *opus vittatum* are Tres Tabernae and several Forma Italiae Tellenae sites, and one Forma Italiae Bovillae site. The early 5th century walls of Terracina were also partly reconstructed with *opus vittatum* masonry, as was the 6th century church of Villamagna⁸⁰². The construction of the later church represents a major reorganisation of the Villamagna site. The fact that the entire church at Villamagna and large segments of the enclosing wall of Terracina were constructed in *opus vittatum* shows that this masonry technique was not used for *ad hoc* repairs only.

A clear example of late Roman reorganisation is the development of the camp of the Second Parthian legion into the village of Castra Albana, from the 3rd century onwards. The villa of Satricum is a further example: the site was rearranged in the 4th century, resulting in the abandonment of a part of the (former) villa⁸⁰³. The inland villa site of Fossanova also shows signs of reorganisation. Here a 6th or 7th century floor level has been excavated

which has been interpreted as part of the last phase of the villa. It is unclear what the status of the site was after this restructuring. Perhaps a settlement was founded.

As research elsewhere shows (Bowes 2002), the 5th and 6th century building of a church on villa sites can be an indicator for internal reorganisation. Churches built within (former) villa sites may relate to the redevelopment of the villa into a small settlement for several families, in which the church was built for the new congregation. As has been discussed above on the other hand, the construction of a church on a villa site may also have been a place for private worship by the villa owners, without a small settlement developing⁸⁰⁴. The distinction between such a public or private (elite) use of churches is archaeologically difficult to make⁸⁰⁵. In the current research area there is not much direct evidence correlating the construction of a church to the reorganisation of a villa site. The Villamagna site is the only possible example. Here we see a redeveloped villa site in late Roman times, showing contemporaneous (5th century) evidence for the construction of a church and an existing populace, in the barracks of site D. The largest reconstructions on this site here, however, among which the rebuilding of the church, took place in the 6th century, at a time the barracks seem to have been demolished⁸⁰⁶.

Larger settlements and towns also underwent internal reorganisation, as Ostia Antica shows. In the 4th century, parts of the town were reorganised, while other parts decayed. A contraction of activity took place, focussed on the areas to the west and the south. In the 6th century the town had possibly shrunk to an area around the fortress-theatre and small area around the Constantinian Basilica in the southwest part of the urban area; the last phase of permanent settlement is a 7/8th century concentration around the basilica, although activity in the area continued into the 9/10th century. A similar contraction must have taken place at Privernum, where the amphitheatre became a fortress in the 5th or 6th century. The partial walling of Terracina is also an example of concentration for defensive purposes, of which the use of the (amphi) theatres in Privernum and Ostia are the most extreme examples in the study area. The former Roman habitation centre of Tor Paterno may have seen contraction into a nucleated settlement as well. Here, the contexts in the thermae show an early to high medieval occupation, after a short abandonment in late Antiquity.

In conclusion: Like in other parts of the Italian peninsula, the current research area shows indications for internal reorganisation and contraction of sites. The causes of concentration seem to vary, but on many sites change may have involved a combination of economic and demographic

wane and/or of defensive need, in which concentration of resources became necessary. In the research area, the study of the major changes taken place on sites of the 4th to 6th century is still in its infancy. While Ostia and several of the coastal villas in the Ostia and the Privernum area (Privernum town and Fossanova) and Villamagna have been thoroughly studied, most other key areas lack published intensive research for the period. Excavations are a prerequisite for insights into the changing set up of sites in late Antiquity, as the only two recently and thoroughly (with new typologies) studied inland sites shows: Villamagna and Fossanova. Excavations are a precondition for true comprehension of this period. Good stratigraphies and intensive pottery studies will finally enable us to get a grip on local pottery, like in the Tiber Valley.

3. 4th century revival

Elsewhere on the peninsula, the 4th century is also a period of signs of continued vitality, even of recovery. In that century some sites were revitalized, especially villas and villages. The evidence in our research area paints the same picture, especially on the villages. Archaeological evidence for this has been found on Astura settlement, which developed into a considerable settlement from the 4th century onwards. At Ostia Antica, recovery is related to the above discussed reorganisation. The town underwent a period of revival and shift of habitation. At Forum Appii activity increased in the 4th century. The archaeological remains on the Via Appia near Sole Luna also show new building vigour in late 3rd or 4th century: here a church and cemetery evolved, indicating that a Christian community was living nearby or on the spot. At Pianabella too, a new church was built, just south of Ostia Antica. This suburban cemetery church was erected at the end of the 4th century or start of the 5th century, on top of a pagan necropolis. Although it was erected as a family cemetery church under private patronage, the church at a given point became a focal point for the residing of a Christian community somewhere in the area⁸⁰⁷.

7.I.2.2.4.b New foci of activity in the landscape

Having dealt with the subject of the transformations, a sketch of the redistribution of activity within the landscape from the 3rd century onwards may be made. Like elsewhere on the Italian peninsula, selection processes led to new foci of living, producing, worship and of defence. The following new focal points may be observed in the research area between the 3rd and 7th century:

1. Villages and towns

Villages / towns⁸⁰⁸ become nodes of vitality within the landscape of southern Tyrrhenian Lazio landscape from the 3rd or 4th century onwards. It seems that, as in many parts of the Italian peninsula, the above described phase

of 4th century revitalisation was connected to the start of the age of villages as the new 'focus of aggregation'.

Villages stand out as joints of continued activity from the 5th century onwards in several parts of the study area, as in the key areas of Ostia, Velletri and the Alban Hills (see table 7.7). In the Nettuno key area, Astura settlement is a newly developing village from the 4th century onwards. Antium too held on as a centre of economic and ecclesiastical activity in the 5th to 7th century, be it on a lower level than in its imperial heyday. Sites close to Antium on a direct road out of town seem to hold on longest (see below). The same is true for Velletri: here the rural sites close to Velletri and the road hold on until the 5th century. We have to be careful however, to see these villages as beacons of continuity within a landscape void of activity, as was discussed: the bias of accessibility of imports may impede archaeological recognition of (possibly continued) marginal sites⁸⁰⁹. In my view, this bias does not blur the fact that villages stick out as focal points of continuity for trade, (local) economy and habitation in the late Roman period and onwards.

Interesting is the role of churches in the retained vitality of towns in late Antiquity, and, as will be discussed in the next study period, in the early middle ages. Indeed, some rural or suburban churches became demographic pull factors (e.g. Pianabella, possibly Sole Luna). However, there is not unambiguous and causal evidence for the rejuvenation of Roman centres as a result of the building of a church, as was suggested in earlier studies. Moreover, rural churches do not always point to large parishes, but can be a focal point for private worship as well.

There is no clear evidence in our research area for the conversion of old (maritime) villas into settlements - villages, as has been attested in Tuscany. It could be that the former villa on the continuously used harbour of Torre Astura was converted into a maritime settlement. Proof for this however, lacks, except for the indirect evidence of *opus vittatum*. Candidates for transformations from villa to village are the villas of Pliny, Villamagna and Fossanova, as has been discussed earlier⁸¹⁰.

Transformations of *mansiones* and sentry posts, as suggested for Tuscany, lack in the current database. However, on several *thermae* in the research area, like in Tuscany, late Antique or early medieval restorations were performed, in Antium and Pratica di Mare in the 4th century, and at Tor Paterno somewhere between the early and high middle ages. It is tempting to link these refurbishments to some kind of settlement reorganisation, but more precise evidence is not available.

Episcopal seats were among the most successful towns. The presence of a see must have contributed to the continued interest and investments in these settlements: Ostia

Table 7.7. Large settlements-villages-towns in the research area between the 3rd and 7th century AD.

OLIMsite	name	evidence
32	Antium	Archaeological and historical evidence until at least 6th century.
159	Ariccia	Evidence until the 5th century; 5-8th century lacks in the database.
33	Astura settlement	Last archaeological record dates to the late 6th/early 7th century.
86	Bovillae	Evidence until 6th; secure evidence of the 7-11th century lacks in the database.
155	Castra Albana	Continuity, all centuries provide evidence.
27	Cori	Evidence until the 6th century.
50	Fondi	Continuity. Only 8th century provides no clear evidence, but continuity seems certain.
16	Forum Appii	Evidence until the 6th century.
9	Fossanova	Presumed continued activities, the 8th and 9th century evidence is not secure.
47	Lavinium (Pratica di Mare)	Abandoned in the 5th century, possibly caused by an earthquake.
84	Lanuvio	Presumed continued activities. Only the 7th century lacks in the historical and archaeological record.
392	Ostia/Portus	From 3rd c onwards decline, 4th century revival, 5th century most in ruins. Contracted continuity, possibly in theatre in 5th and 6th century, and later around Constantinian basilica until the 9/10th century. Portus: a large economic main port until the 6th century.
25	Privernum	Continuity, all centuries provide evidence.
266	Segni	Continuity, only the 9th century provides no clear evidence.
30	Tres Tabernae	Until 6th century activities, then (historical) transfer to S.Andrea in Silice. Possible 6th-7th century and 8th/9th archaeological evidence. Recorded in the 8th-9th sources, but these may refer to the titular see of Tres Tabernae within the Velletri see.
31	Terracina	Continuity, all centuries provide evidence.
147	Velletri	Presumed continuity. Only the 7th century lacks in the historical and archaeological record.
139	Vicus Augustanus	Last evidence dates to the 5th century.
229	Villa complex / settlement of Tor Paterno	Continued activity, all centuries provide evidence.

(313), Terracina (313), Tres Tabernae (313), Portus (314), Velletri (465), Fondi (around 500), Segni (499), Antium (465), Castra Albana and Aricia (465) and Anagni (487). Only the sees of Antium and, possibly temporarily, Tres Tabernae were eventually abandoned, in the 6th century for specific reasons: The see of Tres Tabernae for reasons of insecurity⁸¹¹, Antium possibly due to a combination of insecurity, a drop in papal investment and/or population decline.

All in all, from the database it is clear that villages and towns were nodes for continued activity. This is shown by the below list of the large settlements / villages / towns in the research area between the 3rd and 7th century AD. The date of the start of the decline or last available evidence is given, and some detail on later developments.

Despite the notion that villages and towns were nodes for continued activity, it is unknown how large their service area was. With service area, I mean the radius of direct economic (daily) ties and the way rural production found its way to the village market. Roads undoubtedly must

have stretched their action radius. It remains difficult to say something about scale, although Antium offers some idea: here the 6th and 7th century villas connected to the town stretched 7 km inland.

It is not possible with the current database to comment on Paul Arthur's suggestion of farmers cultivating the lands from the towns itself, explaining the drops of smaller rural sites⁸¹².

The religious service area of villages (and certainly of sees) is also difficult to estimate. Suburban churches were erected that functioned as bridgeheads in religious organisation of the hinterland.

Arthur and Patterson (1994) discerned successful (enduring) and unsuccessful late Antique and early medieval towns, in their pottery-based analysis of the central and southern Italian economy. They stressed size and economic viability (i.e. means and populace to uphold a -local- market) and trade possibilities (e.g. of harbour towns) as key elements for success. Thus, the historical large centres of the peninsula, such as Rome and Naples, remained successful; in these cities regionalization did not occur⁸¹³. For much of the reasons of their post-antique

survival, most of these successful towns are still thriving today.

Arthur and Patterson's focus on economy and trade is obvious given the fact that they studied traded goods. For our study area, the economic potential and access to other markets also seem factors of success. The coastal towns and inland larger road side settlements with obvious opportunities for trade, hold on longest. The maintenance of a (local) market, however, is difficult to study with the available sources. In the current study area, defensive qualities are a likely common factor in perseverance as well. Well defended settlements show continuity: Fondi, Terracina, Castra Albana. Another success factor is ecclesiastical importance (episcopal seats). Arthur and Patterson describe how some towns were not totally wiped out, but held on with limited numbers of people, focussed on local needs. In our study area, the same may be visible on a number of sites, as has been treated above in the section on contraction. An additional example is Forum Appii, where only part of the site remained in use between the late 2nd or first part of the 3rd century and the 6th century; at Lanuvio, too, activities were limited to a small area around the church between the 7th and 9th century.

2. Fish farming sites?

In other regions (for example Tuscany) availability of fish and/or possibilities for fish culture production seems to be a factor in continued activity on coastal villas. Interestingly, studies of human remains in catacombs of Rome show that fish became an ingredient in the diet of the 3rd to 5th century inhabitants of the Eternal City⁸¹⁴.

In our study area, there is indirect proof for a correlation between fish culture activities and continuity. All coastal villas in the Nettuno key area with 4th century or later activities, had fish basins: Piccarreta 7 (OLIMsite 467), the villa at Torre Astura (OLIMsite 64) and the villa of Nero at Antium (OLIMsite 13)⁸¹⁵. We cannot be sure, however, if these basins were actually used in the late Empire and afterwards: except for *opus vittatum* restorations at Torre Astura basin, there is not much stratigraphical context which may date the evidence for pisciculture to this period. Other evidence for fish culture, such as fish hooks, has not been found. Contemporary canalisation efforts, typically associated with pisciculture, cannot be identified.

All things considered, it is possible that late Roman life on coastal villa sites was (partly) supported by fish farming. Although a likely cause of economic success of many coastal estates in Roman times, especially the ones equipped with fish basins, or located near the Pontine lakes, there is not much evidence available for pisciculture as a factor for resilience in late Roman and post-antique times.

3. Well-connected locations

Historical sources show that from the 4th century onwards, parts of the once infamous Roman infrastructure were in a poor condition and that many secondary roads were abandoned, or came to occupy a lower position in the hierarchy of roads and consequently disappeared from our view⁸¹⁶. This made travelling and trade difficult and perilous undertakings, certainly because bands of robbers roamed about in the 4th and 5th century⁸¹⁷. Against this background it is interesting that the research area provides evidence for easy accessibility / connectability as a factor of continuity: accessible or well-connected sites, via roads, the sea and rivers⁸¹⁸, provide the bulk of evidence for continued or new activity in late Antiquity and in early medieval times.

The location of the successful new Astura settlement seems a case in point. This village, which saw its floruit in the 4th to 6th century, was located on a long-distance route along the coast, the Severiana, on a route to inland parts, the river Astura (and the road along it), and on maritime routes⁸¹⁹. The location of the site thus provides parallels with the evidence found in Tuscany. Here habitation and rural cultivation in the 5th and 6th century was concentrated on maritime centres and along the functioning roads.

The importance of accessibility / connectability by sea in resilience is provided by the chronology of the known maritime centres and still functioning Roman harbours in Tyrrhenian southern Lazio: all show evidence of activities into the 6th or 7th century, or later⁸²⁰.

Inland too, location on roads seems to have been a factor for continuity, or visibility in the archaeological record at least⁸²¹: population, defensive and church activities relate to the main arteries. For example, in the Velletri area, the rural sites close to the road and to Velletri hold on longest, as far as archaeologically visible. The Alban Hills area as well shows how (visible) activities slowly retreat to the main axis of the area in the 5th to 7th century, the Via Appia and the northern transverse road. Unfortunately, the larger villas of this area, many of them located off the main tracts, remain unstudied for late Antique and early medieval phases⁸²². Location on a main road may have been a factor for continuity for the Ostian key area south of Ostia as well: both Pianabella and Tor Paterno, being located on the Severiana, experienced continued activities into the high middle ages⁸²³.

The importance of accessibility / connectability must for a large part be linked to sustained economic purposes and trade⁸²⁴. Roads facilitated transport to Rome and larger local market centres, although these markets remain

unspecified. It is also possible however, to see roads as a means of defence, as was discussed in 7.I.2.2.2 Theme: defensive measures and strategies. Vulnerable rural areas and villages located near main routes and close to main centres with a military function (Rome, Castra Albana, Terracina) could maintain their appeal for continued activity, as these roads were potential transporters of troops. Ostia, which had no walls in late Antiquity, may be a case in point. The importance of roads for the expansion of ecclesiastical authority within the landscape has also become clear in the Theme on the expanding Church. As regards the correlation between *accessibility* and demographic distribution, the picture is less certain. Although demography and connectivity seem correlated, as all large villages are located along main land and sea route, the bias of accessibility may cause a possible smokescreen: i.e. international goods are absent in the more marginal parts of the landscape, away from the main arteries⁸²⁵. With the current state of research is unclear if these parts were inhabited by an “invisible” rural population, which will have practised subsistence farming and were involved in strictly local markets. If indeed indications for the existence of such a rural population could be found through studies of locally made pottery, it would be difficult to tell how large it (still) was, and how the transformations in landscape and society chronologically may have effected its numbers.

In the context of accessibility / connectability as a factor within the changing allocations of activity within the landscape, the abandonment of a main road is a major process, and should have consequences for settlements alongside it. The abandonment of the Via Appia, in the 6th or 7th century is such an event. The exact cause of this abandonment is not clear: maybe it was a result of a combination of environmental deterioration, less investment in infrastructural maintenance and the vulnerability of travel on this route in the open plain. Leaving out the causes, the closure of this route and its relay over the pedemontana is likely correlated (causal or not) to the (possibly temporary) abandonment of Tres Tabernae and Forum Appii (in respectively the 6/7th and 6th century) and the simultaneous (re)occupation of Norba plateau.

4. Defensive locations

Defensive qualities of sites also seem to have been a factor in the development of new foci and continuity, as has been discussed earlier. Defensive building activities seem focussed on main roads and the sea. Fortresses were built on places with the highest strategic value, such as Terracina and Torre Astura. Vulnerability for attacks of marauding troops was also a factor in the active occupation of defensible sites (as can be seen in the transfer of the sees of Tres Tabernae and Velletri to Le Castella;

possibly the reoccupation of the Norba plateau is another example), and, for that matter, the abandonment of vulnerable sites (although we cannot be sure if this was the decisive factor), such as Antium, Tres Tabernae and Forum Appii. There is, however, no sign for a ‘flight into the hills’ in late Antiquity, as earlier had been attested in the Ager Faliscus (Potter 1979) – a scenario that has been under revision in the last 25 years.

5. Churches

As was discussed in the *Theme: expanding Christian activity throughout the landscape*, a growing network of churches became a factor in the transformations in many parts of the peninsula. At the same time, suburban churches became focal points for the Christian community and contact point for the surrounding countryside. The current research overall confirms these conclusions drawn in studies on other parts of the Italian peninsula⁸²⁶. Like in other parts of Italy churches in the research area seem to have radiated from the large cities and along the main roads into the countryside. Moreover, in our study area many churches seem to have become centres for ecclesiastical and demographic organisation of rural areas, as was attested elsewhere. Churches developed within settlements, in villas, in former pagan sanctuaries and in suburban areas. Several churches seem to have developed into hubs for the regrouping of the scattered inhabitants of the countryside, in suburban (e.g. at Ostia) or rural (possibly at Sole Luna) environments. Earlier studies, however, show that, although 5th to 7th century churches are strong indications for a continued activity within the countryside, their presence may not always be a demographic indicator – but sometimes merely a sign of private devotion and status⁸²⁷.

6. Environmental safe locations: malaria?

For the water-challenged Pontine plain area it has been suggested that malaria was the reason for abandonment of some sites, and for the success of other sites. The need for shelter against malaria infections might have grown with the environmental deterioration from the late Roman period onwards⁸²⁸. The 6th and 7th century reoccupation of the Norba plateau and the foundation of the Villa S.Vito (possibly a summer shelter) in the 7th or 8th century may be related to an increase in malaria infestations in the plains. The 17th century story of Norba as a retreat from the malaria infested plain fits into this picture. The database and maps, however, do not contain clear and causal examples of abandonment of lower areas for higher ground because of unhealthy conditions in the plain. The reoccupation of the Norba plateau may also be explained by inaccessibility of the plain for traffic, the new success of the pedemontana and the defensive qualities of the site.

7. Other factors for concentrated new or continued activity in the landscape

Besides these foci of continuity and new activity, there are general factors explaining the found activity in the landscape, pointing to less specific types of locations: Nearness to Rome is one such possible settlement factor, as the City had to be supplied (see 7.I.2.2.3 Theme: the economy and systems of redistribution). This idea cannot be systematically studied through material culture, as the areas closest to Rome, have not seen thorough archaeological research. The historical records however, show how vital estates in the hinterland, especially in the Alban Hills, were for in supplying the population of Rome.

Another possible factor in new or continued activity is soil fertility; favourable grounds always attract more activity than unfavourable. It is not possible here to study changing or concentrated land use in late Antiquity and early middle ages, and to pinpoint specific types of settlement locations based on such study; this has been the subject of a separate dissertation (Van Joolen 2003).

The research in the Farfa area yields a possible 'sense of place', existing within late Antique communities: in that area, a significant number of 6th and 7th century sites was founded on locations deserted during the late second - early third century dislocations⁸²⁹. This is not visible in the current record. Only the Norba plateau shows a clear re-occupation. Although this site was abandoned well before the 2nd or 3rd century, it is an obvious site for the materialisation of 'sense of place' as the magnificent walls were still standing firmly. The lack of signs for 'sense of place' may be due to the lack of in-depth archaeological study of smaller sites, or because of the fact that many locations were occupied over long periods of time, which makes a temporary abandonment difficult to detect.

Conclusions

In the research area, a settlement pattern of new foci becomes visible, which more or less seems to correspond to the picture seen elsewhere. Within the landscape of Tyrrhenian southern Lazio of the 3rd to 7th century, four types of features seem to have evolved as the focal points for new or continued activities: villages, roads/coasts, churches and secure(d) locations. Moreover, proximity to Rome and soil fertility must have been geographical factors for contemporary activity. Other earlier identified possible favourable circumstances, like existing facilities for fish farming or malaria-free conditions, do not unmistakably appear as factors in late Antique resilience.

Finally, as a nuance to these conclusions, the bias of accessibility of traded goods should be mentioned: smaller sites and sites away from the main infrastructure may have continued, but will not be visible in the available data.

Endnotes

- 1 The available evidence for a tentative location in a certain wider area may range from the description in historical sources, the possible toponymic evidence and the topographical situation on the ground (maps/aerial photographs).
- 2 Of which De Rossi 1969 and Coste 1990 are good examples.
- 3 See 7.I.1.1.
- 4 Horden & Purcell 2000, see also 8.I.1.3.
- 5 See 7.III.1.
- 6 Usually "high medieval" denotes a date from roughly 1000 AD onwards, see Glossary of periodisation.
- 7 Attema, De Haas & Tol 2006; 2009
- 8 Vittucci 2000, 141-143; Guaitoli 1984, 382; Matteucci 1872, 18-19; the territory of the *municipium* of Roman Antium likely stretched until Torre Astura.
- 9 Tol 2005, 16
- 10 Cf. Jaia 2008, 18 ff. and De Haas 2011, 174 on the status quo on research in Antium. It is clear that the archaeological evidence from the several 19th and 20th century excavations done in Antium is not well published. However, currently the Roman Università La Sapienza is conducting a restudy of some of the available archaeological evidence, which is regularly published in the *Lazio e Sabina* series.
- 11 On the location of present-day Nettuno, several *villae maritimae* must have been situated, as indicated by the remains of three fish ponds and walls in *reticulatum*. The walls of the medieval *borgo* of Nettuno contain many spolia, De Haas 2011, 199.
- 12 Tol 2005, 75
- 13 Tol 2005, 80
- 14 Attema & De Haas 2011
- 15 De Rossi 1981, 89 ff., see also below 7.I.1.1.3.
- 16 De Rossi 1981; Tol 2006, 29
- 17 Tol 2006, 29 ff.
- 18 Horden & Purcell 2000, 133
- 19 Tol 2006, 29
- 20 Nero founded a colony for veterans, villa and harbour at Antium; the town saw large building projects lasting until the age of emperor Hadrian.
- 21 Tol 2006, 29
- 22 Tol 2006, 29
- 23 See below *A late Roman habitation centre (civitas) near Nettuno?*
- 24 Piccarreta 1977, 21 ff, 66; De Rossi 1980, 49-53; Tol 2005, 143 ff; Galeazzi 2008, 67 ff.
- 25 Pliny *NH* 32, 4 and *NH* 3, 57
- 26 Lafon 2001, 368, RM 97, fig. 93
- 27 Higginbotham 1997, 145
- 28 Brandizzi Vittucci 1998, 967
- 29 Epigraphy shows that the thermal baths were repaired in 379-382, by proconsul Anicius Bassus: *CIL* X, 6656.
- 30 Tol 2006, 30
- 31 Tol 2006, 29
- 32 On two sites amphorae (Dressel, Africana) provide a broad chronology: site *rpc site 11318*, Piccarreta 118 (OLIMsite 456): Dressel 2-4, late 1st c BC - mid 2nd c AD, and probably Dressel 20 (1st-late 3rd c AD) and probably Africana II (late 2nd - late 4th c AD). *Rpc site 11331*, Piccarreta 131 (OLIMsite 493): possibly Africana II (late 2nd - late 4th c AD).
- 33 Mostly dated 2nd century, possibly to the 3rd century.

- 34 Brandizzi Vittucci 1998, 944-948. However, recent research may indicate that the Peutinger map should be considered as a taphonomic document rather than a depiction of the topography of the 4th century. It may be a palimpsest of historical landscapes from the 1st century AD to the (later) early middle ages, see 5.VI (Map 1). On the other hand, it is good to pursue the argument of an imperial habitation centre near Antium, as such a centre may be presumed nearby the town of Antium, whilst keeping in mind the developing ideas on the interpretation of the Tabula.
- 35 As discussed in Chapter 5.VI, the toponyms (and distances) depicted on the Tabula do not necessarily refer to stations themselves. There are more and more indications that these toponyms are mere reference points in the road network, pointing to the station itself or to the presence of a junction leading to that place. Moreover, copying errors on the Peutinger map are a reality. The distances on the Peutinger prove to be an intricate subject matter. Despite this, I think it is still valuable to go into these distances, and not only for argument's sake. When confronted with the combined knowledge of the contemporary natural environment, local toponymy and archaeological evidence on the ground, such treatment can still yield valuable argumentation in the context of reconstructing roads and locate/identify place names mentioned on the map (whether or not being a station, or a junction). In this case a location of Peutinger *Antium* near Nettuno would explain the distances on the Peutinger map, as these do not concur with an Antium on the capo d'Anzio. The distance between Astura and Antium on the Peutinger map is 7 miles, while in fact this is 9 miles. See also the discussion on the identification of Lavinium, 7.I.1.3.1.
- 36 Brandizzi Vittucci 2000, 126-128; Tol 2005, 27
- 37 See the introduction to 7.I.1.1 above.
- 38 In the fortifications of Nettuno, basalt blocks have been reused which must stem from the surroundings, Brandizzi Vittucci 1998, 948, n. 81. In Nettuno, a basalt road was still visible in the 19th century, 2 km north of the centre, maybe a section of the Via Severiana.
- 39 Brandizzi Vittucci 1998, 957 and note 117; Brandizzi Vittucci 2000, 126 and 134, n. 627; based on ancient topographical works and cartography.
- 40 In the current property of Tamburrini see Brandizzi Vittucci 2000, 134 fig. 64.
- 41 Soffredini 1879, 103
- 42 On the changing meaning of the term *civitas*, see 6.I.2.
- 43 Brandizzi Vittucci 2000, 134 dated the demolition in 1877.
- 44 S.Biaggio (S. Blaise in English) is a 4th century Armenian saint, patron saint of wild animals; in Russia of herds.
- 45 Oil lamp cat. nr. macotta 92301. The *Macotta* site (OLIMsite 141) actually is a conglomerate of sites, listed in this database as one. It contains possibly 6 separate inland villas with primarily agricultural functions. The samples done here have earlier been studied as one site. Closer research, however, might reveal how the site was arranged and what the individual date range of the villas is. Until such research, the conglomerate is depicted on the distribution map as a single villa site (with the separate rpc number 15085). The site shows continuity until at least the late 5th and possibly into the 7th century.
- 46 Tol 2012: Ast' 08 S.D./G.S./31.
- 47 Lanciani 1870; Soffredini 1879, 182; Brandizzi Vittucci 2000, 135, n. 628 for further references; see also Tomassetti 1979 I, 381
- 48 Caneva & Travaglini 2003, 342; This grave was described (dimensions 4,60 x 7,20 m) and dated by Lanciani as imperial. **Rpc site 15116, T3NS2, necropolis?** (OLIMsite 452) is the second late Roman necropolis in the Nettuno-Anzio key area, located 4 km north of Torre Astura, on the east bank of the river Astura. Here, republican to late 4th – early 5th century AD pottery has been found. No signs of Christian burials have been found.
- 49 Brandizzi Vittucci 2000, 135, n. 633 for the relevant references.
- 50 *CIL* X, 8303
- 51 Brandizzi Vittucci 2000, 136-137; F. Di Mario and L. Ceccarelli in: Caneva & Travaglini 2003, 95 also do not reject this hypothesis. For this episcopal see historical sources exist until the start of the 6th century, see above in 7.I.1.1..
- 52 Situated northwest of I Marmi. This site has produced material from republican time until the 7th century, with ARSW dated to 150 AD - 620 AD.
- 53 Attema, De Haas & Tol 2006, 103 referring to De Rossi 1981, 102.
- 54 Strabo *Geography* 5.3.5
- 55 These domus have in the last years provided evidence for late Roman occupation, evidence not yet available to Brandizzi Vittucci, De Haas 2011, 189
- 56 Brandizzi Vittucci 2000, 135
- 57 Lafon 2001, 355, fig. 84 and 89; Conte 2008, 59ff.
- 58 See the recommendations for future study, 8.II.2.
- 59 Piccarreta 1977, 21 ff
- 60 Tol 2012, 2018
- 61 On the challenges in interpreting the distances in the current key area, see below 7.I.1.1.2.
- 62 Sevink 2009
- 63 Cf. Brandizzi Vittucci 1998, 954-955, n.105
- 64 Astura is also mentioned on the 7th century *Ravennatis Anonymi Cosmographia*, a listing of all the towns and road-stations in the then known world, see Schnetz 1940, Staab 1976 and Dillemann 1976. This source, however unique for its date, overall does not reflect the actual topography of the time it was written. It is compiled of several sources, most importantly the Peutinger map. Copying errors are abundant.
- 65 Piccarreta 1977, 21. See also below 7.I.1.1.2, the paragraphs on *Rivers* and *Harbours*.
- 66 Strabo *Geographica* 5.3.5: "Between Antium and Circaeum is the River Storas, and also, near it, an anchoring-place".
- 67 Attema, Derks & Tol, 2010. Tol, De Haas, Attema & Armstrong, 2018.
- 68 Tol 2012, 317
- 69 See below in this section 7.I.1.1.1, the paragraph *Discussion: new foci of aggregation and redeveloped sites in the late Roman period?*
- 70 *Liber Pontificalis* Life 44.2, Davis 2000, 34. Eulalis was the rival of Pope Boniface; they ruled together for 7 months, according to the *Liber Pontificalis*.
- 71 Duchesne 1892
- 72 Duchesne 1886 I, 192, n. 38: in 502 AD, the last reference on a bishop of Antium was recorded. Bishop Vindemio of Anzio attended a synod. See also Brandizzi Vittucci 2000, 137, n. 640.
- 73 Antium is also in the 7th century list of the *Ravennatis Anonymi Cosmographia* as Antium Antianum; this source, however, is unreliable as a dating tool, see earlier in 7.I.1.1.1.

- 74 Procopius *Wars*, I.26
- 75 At the nearby villa of Nero, however, *opus vittatum mixtum* B can be seen, Brandizzi Vittucci 2000 Tav I. This wall-facing technique dates between the late 4th to 6th century, see 3.I.2.
- 76 Brandizzi Vittucci 2000, 5, 3
- 77 Population decline in most parts of Italy is seen as a factor in this process of disappearing dioceses, see 7.I.2.2.1 Theme: expanding Christian activity throughout the landscape.
- 78 It is good to acknowledge that no dedicated research has been done in Antium on late Roman and (early) medieval contexts, as touched upon above; see also Jaia 2008, De Haas 2011, 174.
- 79 See 7.I.1.1.2, paragraph *Harbours*.
- 80 This is proven by the pottery evidence. It should be stressed that most of the late Roman ceramics found along La Selciatella are imports, mainly ARSW and amphorae. However, locally produced utilitarian wares have been found too, be it in low numbers, Tol 2012, 98, 226. On **rpc site 15014** (OLIMsite 420), fragments of 2nd and 3rd century AD utilitarian wares have been found as on **rpc site 15085** (OLIMsite 141); the latter site also yielded a casserole, nr. IV-XVII.19, dated 300-600 AD, Tol 2012, 164. Fragments of late Roman casseroles have also been collected on **rpc site 15004** (OLIMsite 458), nr. III-XXI.44, dated 400-600, Tol 2012, 93. Away from the road, such casseroles have been collected at **Torre Astura** (OLIMsite 64), nr. XXXVIII.43, dated 500-700 AD. See also Tol 2012, 320, n. 492. At **Astura settlement** (OLIMsite 32), large quantities of locally produced wares have been found, dated between the 4th and 7th century AD, Tol 2012, 317 ff. and below in this section 7.I.1.1.1, the paragraph *Torre Astura and Astura settlement*.
- 81 Francovich & Hodges 2003, 57
- 82 As has been attested for inland areas too, from the 4th century onwards, cf. Francovich & Hodges 2003, 40 and Valenti 1996.
- 83 Francovich & Hodges 2003, 57 referring to Fentress & Perkins 1989, and Cambi in Carandini & Cambi 2002, 239-241.
- 84 The coastal villas on the location of present-day Nettuno also were equipped with a fish basin; their chronology unfortunately cannot be studied because of the medieval and later building activities in the area.
- 85 Piccarreta 1977, 24 and 55; Conte 2008, 64. See the recommendations for future study, 8.II.2.
- 86 Heres 1982; Bakker & Heres, Website Ostia: glossary [Accessed April 2006]. As explained in 3.I.2, this masonry is characterised by blocks of tufa intersected by one or more brick bands, and is generically dated from the Severan period until the 8th century.
- 87 The site of **Piccarreta 7** (OLIMsite 467) will be interesting for future study: it is a relatively well-preserved site on which a large fishpond can still be seen.
- 88 See the recommendations for future study, 8.II.2..
- 89 See 7.I.1.7.
- 90 Piccarreta 1977, 24 and 55
- 91 Galeazzi 2008, 76
- 92 Christie 1989, 273 ff.
- 93 De Rossi 1971, 147; According to Rossi, that fortress played a role in the Gothic wars, although its interpretation as Byzantine fortress still has to be confirmed
- 94 More on Byzantine Terracina, see 7.I.1.10; more on a possible Byzantine defensive scheme, see 7.I.2.2.2 *Theme: defensive measures and strategies*.
- 95 See 2.II.2.1
- 96 Christie 1989, 254
- 97 See the results of my pottery study of the late Antique to high medieval pottery of Torre Astura, to be published separately: inv.nr: ta.111.22.09 and Ta.111.22.08. Ta.111.22.09 is a ARSW (Hayes 34) imitation with possible Byzantine decorative features, dated 6th or 7th century; both fragments, however, may also be Lombard.
- 98 Piccarreta 1977, 55
- 99 The overall picture is a sharp decline in pan-Mediterranean trade on the site after the late 6th century, Tol 2012, 303. For more on eastern trade connections see below 7.I.1.1.3.
- 100 Tol 2012, 301 ff. and 317 ff. Tol 2018. Dating is primarily based on the pottery evidence. The date range of most ware types is broad, which makes changes in supply and consumption difficult to trace. The last phase of the site's chronology is also difficult to pinpoint. Although several ware types have a chronology that runs into the 8th century, Tol was convinced that the site's life span had ended before, in the late 7th century: no new wares types have been found that are typical for the 8th century, while the number of finds before that century is overwhelming. He uses this criteria for all his survey sites. Late Antique pottery found in the profile includes ARSW dated until 6th – early 7th century, among others Hayes 91+99 (510 - 620 AD), 5th to 7th century locally produced *ceramica acroma depurata* and amphorae finds. The latter category includes several late types, however, again all with fairly long date ranges (for example Keay 52: 4th-7th century AD).
- 101 Tol 2012, 319. It is clear that 4th to 6th century Astura was a settlement of considerable size. Tol classifies the site as town, because of its position within the settlement hierarchy, its connection with Torre Astura, the length of the profile and the amounts of artefacts found in this exposure (Tol pers. comm.). As was pointed out in Chapter 6, it is difficult to distinguish between a town and village. Size is not a defining criterion. Villages usually focus on agrarian or fish cultivation activities; the distinguishing characteristic of a town is a public building, proof for a centralised administration. At Astura settlement the criterion on a public building still lacks. For further insight in the sites' status, more research is needed, beyond the small window provide by the exposure. See the recommendations for future study, 8.II.2.
- 102 See 2.II.2, introduction and 2.II.2.A.
- 103 Tol 2012, 320
- 104 Arthur 2004, 104-105
- 105 Francovich & Hodges 2003, 57; Fentress and Perkins 1989; Cambi in Carandini & Cambi 2002, 239-241
- 106 See 2.II.2.2; Francovich & Hodges 2003, 57
- 107 The growing importance of the symbiotic Torre Astura harbour - Astura settlement in the late Roman period may be related to the abandonment of the Appian road, and, as a result, the inaccessibility of the harbour of Terracina for the inhabitants of the Alban and Lepine communities (Velletri). See below 7.I.1.1.3.
- 108 With the PhD thesis of Tol (2012) a first step in creating a typology for late Antique local coarse wares was made in the current key area. The finds of the partly excavated key site of Astura settlement were essential in this effort. See Tol *et al.* 2018 for the status quo of the pottery research on Astura settlement.
- 109 On the hypothesis of the navigable Astura river as means of transport and Astura settlement as possible port Piccarreta 1977, 21; Attema 2008, 17 and Sevink 2009. Attema and his teams, however, have not been able to find proof for such use of the river. The PRP teams did not find any archaeological evidence supporting the hypothesis on two suggested

- most plausible ports for river transport, Astura and Satricum. Contrary to Piccarreta, Attema thought it more likely that Torre Astura was the natural harbour for possible river transport on the Astura, not Astura settlement. See above 7.I.1.1.1. and 7.I.1.1.3. However, as Cristina Corsi in a personal communication points out, the presence of a harbour at the mouth of a river solely does not prove the use of the river for water transport. It has been recently demonstrated (see e.g. the Rencontres internationales Instrumentum meeting *Les modes de transport dans l'Antiquité et au Moyen-âge. Mobiliers d'équipement et d'entretien des véhicules terrestres, fluviaux et maritimes*, Arles, June 14-16 2017) that the use of rivers for transport implied the construction and maintenance of huge infrastructures, and that the low volume of trade often is not worth those investments. Harbours at the mouths of rivers should often be interpreted as stopping places for cabotage routes and/or a facility for loading and unloading vessels.
- 110 De Haas 2011, 70
- 111 See 7.I.1.1.3, paragraph *Inland activities*.
- 112 See also 7.I.2.2.3 *Theme: the economy and systems of redistribution*.
- 113 Environmental deterioration has been attested by Van Joolen (2003) in the eastern Pontine region from 400 onwards; increased sedimentation and swamping in the late Roman period is seen on the whole Italian peninsula.
- 114 De Rossi 1981, 89 ff. thought this road goes back to post-Archaic period or even earlier.
- 115 Tol 2006, 29
- 116 De Rossi 1981, map page 92. De Rossi 1981 among other made use of 17th and 18th century travel stories. Tol 2006 has been able to finetune De Rossi's finding, by locating remains of the road during the survey research: basalt blocks, a bridge (site rpc 15015) and other *in situ* remains.
- 117 Officially founded as a Roman colony in 467 and definitively 338 BC, but already part of the first wave of Roman colonisation in late 6th and early 5th century BC; for this period archaeological evidence is meagre, cf. Tol 2005, 16 ff.
- 118 Tol 2006, 30
- 119 Attema, De Haas & Tol 2006, 103 and De Rossi 1981, 90.
- 120 Lanciani 1870; Caneva & Travaglini 2003, 342
- 121 De Rossi 1970 introduction
- 122 Some scholars (Fischetti 2004) used the term *Via Antiatina*, which is an anachronism and should not be used, as this name suggests a Roman denomination.
- 123 The detour of the *Via Anziata* to Nettuno probably did not originate in Roman times. Material evidence (e.g. of road pavement) lacks, although its tract is not built over or in use nowadays. This lack of evidence is in contrast to the clear remains of Roman roads reported nearby (La Selciatella, and its detours). See also 7.II.1.1.2.
- 124 Mucci 1975
- 125 It is unknown, however, how frequently used the *Mactorina* was. In Roman times, the route must have been a secondary road as it remained undesignated. See also 7.II.1.1.2.
- 126 Here republican and imperial remains have been found.
- 127 Mucci 1975
- 128 Attema, De Haas & Tol 2009, 33
- 129 De Rossi 1981
- 130 De Rossi 1981, 92
- 131 Carbonara & Messineo 1998, 43. The name Cisterna area is used here as the settlement of Cisterna (OLIMsite 57) did not yet exist in late Roman times.
- 132 De Haas 2011; 210, Bruckner 2003, 75 ff; Cassieri 2004
- 133 As noted earlier in 7.I.1.1., La Selciatella may have been built following post-Archaic or even older transhumance routes as well, cf. De Rossi 1981, 89 ff.
- 134 Veenman, in her study of transhumance in the Pontine area (2002), focusses on post-Archaic to imperial periods.
- 135 Miller 1916, Lugli 1926 and 1928
- 136 Brandizzi Vittucci 1998, 966
- 137 Bakker & Heres, Website Ostia Antica [Accessed 20 April 2006]
- 138 For example, Astura-Antium is 7 Roman miles, instead of the actual 9. On the discussion of distances and interpretation of the toponyms found on the Peutinger 5.VI.
- 139 Brandizzi Vittucci 1998, 948, n. 81
- 140 Lanciani 1870, 15; Caneva & Travaglini 2003, 342
- 141 Still visible in the 19th century, among others reported by Nibby, for references see Brandizzi Vittucci 1998, 958, n. 121.
- 142 The hypothesised coastal roads connecting the maritime villas on the coast is OLIMinfra 67.
- 143 Piccarreta 1977, 65
- 144 Strabo *Geography*. V.3.6 mentioned an anchorage near Torre Astura, explicitly describing how the whole stretch of coast from that point until Monte Circeo is exposed to south-western winds. Cf. also Bianchini 1972, 7 and Alessandri 2009, 474 ff. For more on prevailing winds in the study area, see 7.I.1.10.
- 145 De Haas 2011, 177
- 146 Cf. Tol *et al.* 2018.
- 147 See below 7.I.1.1.3, the paragraph *Astura settlement: a link in a maritime trade network between the 4th and 6th century* and 7.I.2.2.3 *Theme: the economy and systems of redistribution, paragraph 2.3. Interregional trade networks in the study area*.
- 148 See 7.I.1.4.5.
- 149 De Haas 2011, 177.
- 150 See 7.I.1.1.
- 151 Miller 1916, 346. The piers were still visible in the 18th century.
- 152 Although there is no concrete evidence for a silting up of Antium's harbour from late Antiquity onwards, the idea of a possible parallel with Minturnae is an interesting one: its harbour seems to have suffered from increasing sedimentation, and eventual silted up, possibly causing the abandonment of Minturnae in the 6th century, Arthur 1991b, 158. The harbour of Ostia suffered the effect of silting up in the late Empire, and from the correlated growing danger of malaria in stagnant waters in the area, Sallares 2002, 85. See also 7.I.1.2.
- 153 Van Joolen 2003, 142-146; Attema & De Haas 2005, 10 ff.
- 154 Van Joolen 2003, 142-146
- 155 Attema & De Haas 2005, 9, see 7.I.1.8.
- 156 De Haas 2011, 66, 166 and 196; De Haas, Attema & Pape 2007/2008, 521-523; Attema, De Haas & Tol 2009, 84
- 157 See 7.I.2.2.3 *Theme: the economy and systems of redistribution*.
- 158 Veenman 2002, 113, 122, 139 ff; De Haas 2011, 210; Bruckner 2003, 75 ff; Cassieri 2004
- 159 In sub-recent times, this *tratturo* has been recorded, Bruckner 2003, 75 ff. Cassieri 2004 thought this transhumance route goes back until Antiquity. Cf. also De Haas 2011, 210.
- 160 Veenman 2002, 139; 113; According to Veenman, all higher (dry) parts of the coastal area between the Fogliano lake and

- Ostia may have been the winter objectives for long distance transhumance since the 4th century BC, Veenman 2002, 124
- 161 Veenman 2002, 124
- 162 Veenman 2002, 124
- 163 Attema pers. comm.
- 164 See also 7.I.2.2.3 Theme: the economy and systems of redistribution
- 165 Attema & De Haas 2005, 10
- 166 The Pontine coast area was forested in pre- and protohistoric times, as the archaeobotanical study by Van Joolen (2002) shows. The pollen core taken in the nearby Fogliano lagoonal area (with a date range of 1500 to 400 BC), shows a continuous forest vegetation, although the composition of arboreal pollen changes, Van Joolen 2002, 164. Veenman 1996, however, demonstrated that nearby more inland at Campoverde (just north of the Nettuno – Anzio key area) deforestation took place in the Roman period. These archaeobotanical studies, however, do not unmistakably make clear if and how much the coastal area also experienced deforestation in the Roman period. Nowadays, the Astura peninsula is covered with a pine tree forest, the Pineta di Astura; the earliest reference to this forest dates to the 10th century: on the 987 source, see 7.II.1.1.1, a *pinetum* near the sea is already mentioned. Given the deforestation attested by Veenman nearby, and the absence of a Roman source on a forest here, it is not known if the Astura was already forested in Roman times, nor if the area was (re)forested in the early middle ages. It is certain, however, that the pine tree is native to the Pontine coastal area as the Fogliano and Colle S.Lorenzo (taken 11 km north of Antium) cores show, Van Joolen 2002, 164.
- 167 Tol 2005, 80; For Tol the usual classification as *villa maritima* is not fitting. This term primarily implies a retreat, and does not effectively describe the intricate parts of status and production of these villas. Instead he chose not to use a fixed label, but to describe their characteristics: coastal villas, with status indicators and/or production facilities.
- 168 Attema & De Haas 2005, 10
- 169 The main bulk of coins at the Astura settlement, however, dates to the 4th century. Tol 2012, 311 ff.
- 170 Attema, Derks and Tol, 2010, 449 The site of Torre Astura has yielded a hoard of the fourth century AD. Of the 1700 coins in the hoard, 77% of the hoards mints stem from the city of Rome itself. Interestingly, the rest of the hoard's mints are located in the eastern trading ports (Constantinople, Cyzicus, Antioch, Nicomedia and Alexandria). The numerous stray finds from Torre Astura seem to match the eastern characteristics of the hoard.
- 171 On the definition of what is "Byzantine" cf. Corsi 2007. She includes the 6th and early 7th north African imports as Byzantine, and I agree. the Byzantines held northern Africa between 535 and the first half of the 7th century – parts of Tunisia even until the end of that century. Here they established the Exarchate of Ravenna from 591 onwards, the second Exarchate in the West after Ravenna, Ostrogorsky 1989, 80. In that sense, imports from northern Africa (ARSW) can be considered Byzantine facilitated trade. The stable Byzantine rule of Northern Africa helped keeping the trade route to the traditional pottery industry of Northern Africa open, Christie 1989, 259. As Christie points out, the Byzantine recapturing of Northern Africa did not mean a large-scale revitalisation of the Tunisian workshops. Production levels kept going down until the Arab conquest. My point here is the lack or near absence of evidence for connections with the eastern Mediterranean Byzantine homeland.
- 172 Tol 2012, 303. Late eastern pots mainly consist of shapes named 'Late Roman amphorae', LRA nrs. 1 to 3: "The LRA 1 was certainly produced in Cyprus and *Cilicia*; the LRA 2 probably originated in the *Argolid* and the LRA 3 probably derives from Asia Minor". Examples: LRA 1 (Ast'08 S.H./211), dated 350 – 650 AD. LRA 2 (Ast'07 S.F./18; Ast'08 S.I./356, Ast'08 S.I./778), 325 – 650 AD. LRA 3 (Ast'08 S.F.19 +32), 375 – 600 AD and. On rim fragment of a jug, possibly a LRA 1 (Ast'08 S.I./302) is dated in the 7th century.
- 173 Inv.nr. Net 05 2188.05/40. For the typological analogy for this amphora fragment, see Crypta Balbi volumes, volume II, Vendittelli & Paroli 2004, 192 (nr.76). Tol, however, is not certain about its determination.
- 174 Arthur 1989b wrote that Byzantine evidence is very scarce between Rome and Naples. Byzantine amphorae were absent in his review dataset.
- 175 Christie 1989, 260
- 176 Paroli 1993, 164; this pottery is comparable to what has been found at Crypta Balbi.
- 177 Christie 1989, 263
- 178 Tol 2012,319 ff; Arthur 1989a, 138 ff; Martin 1993, 212 ff. and Ciarrochi 1995
- 179 Not only ARSW, southern Italian (among others Calabrian Keay 52) and eastern Mediterranean imports were found on the Astura settlement, Tol 2012, 319 ff. Especially interesting on the Astura settlement site are a group of *casserole*s that probably that were produced in Liguria, dated between 300 and 600, Tol 2012, 317. This ware is clear evidence for trade between northern and southern partners on a coastal network: the ware explicitly passed by on the large and obvious market of Rome (via Ostia/Portus).
- 180 Unfortunately, pottery studies have not yet been conducted on archaeological contexts in Terracina (see Terracina key area).
- 181 Arthur 1989a, 138-139, Martin 1993, 212 and Arthur & Patterson 1994, 412; Although difficult to substantiate, directional trade was demonstrated in this 4th to 6th century trade network, primarily based on the fact that only a few specific shapes were found on the ports involved. Later too, in the late 6th and 7th century, the distribution of *Samos cistern type* amphora on the Italian peninsula provides evidence of such *dirigisme*. These amphorae, fabricated on Samos, are only found on large towns, and on smaller sites which must have played a role in a Byzantine political strategy: Arthur & Patterson 1994, 412. Large towns on which this amphora type has been recorded: Portus/Rome, Naples, Ravenna/Classe, also Carthage. Smaller sites: Byzantine fortresses in north-eastern Italy and around Naples and the port of Kaukana on Sicily. In our study area, there is no proof for the 6th and 7th century trade network of *Samos cistern type* amphora. The only clear fragment of the Samian cistern amphorae type in the Nettuno – Anzio key area has been found at Liboni 4, rpc 15004 (OLIMsite 458).
- 182 Tol pers. comm.
- 183 See 3.I.2. on the potential of *opus vittatum* studies.
- 184 Tol 2012, 318
- 185 See above in this section 7.I.1.1.3 *Inland activities* on the factors involved in the abandonment of the Astura Valley.
- 186 See 7.I.1.4.1.
- 187 See 7.I.1.4.5.
- 188 See the recommendations for future study, 8.II.2.

- 189 No trace of the temple of Fortune near Antium, referred to by Horace in *Odes* I.35, has been found. Tradition holds that medieval Nettuno evolved on the spot of the ancient temple of Neptune, situated on the spot of the *borgo medievale*, hence the toponym [Nettuno] (OLIMtoponym 23), cf. Brandizzi Vittucci 2000, 149 ff.
- 190 With the possible exception of the ecclesia Sanctae Marie Seu Salvatoris (OLIMsite 629), which had been abandoned in the late 10th century. This church, all likelihood, was located on then abandoned (?) site of Astura settlement.
- 191 *Liber Pontificalis* Life 34.12 (Sylvester), Davis 2000, 17: “massa urbana in territorio Antiano, preast.sol. CCXL”
- 192 Although not explicitly clear from the *Liber Pontificalis*.
- 193 Cf. *CIL* XV, 7827, 909
- 194 Brandizzi Vittucci 2000, 10
- 195 Davis 2000, 125. A *solidus* was the standard gold coin since the rule of Constantine; Davis 2000, 137 explained that in the 4th century 1 solidus was worth 1000 lb (450 kg) of bread or 200 lb (90 kg) of meat. To survive in these days, less than 3 *solidi* a year would have sufficed.
- 196 See 6.I.2. Used definitions.
- 197 Marazzi 1998a, 1 ff.
- 198 Arthur 1991a, 94 on Northern Campania
- 199 Cf. Marazzi 1998a
- 200 Duchesne 1892
- 201 See respectively the Ostia, Privernum and Terracina key areas. As for Rome: from the 3rd century onwards the Aurelian walls were gradually enforced.
- 202 See 7.I.1.4.5.
- 203 On the sites of the other bishoprics of southern Lazio, **Signia** (OLIMsite 266) and **Fondi** (OLIMsite 50), such evidence lacks as of yet. In these towns, however, existing older fortifications may still have served their purpose, see also 7.I.2.2.2 Theme: defensive measures and strategies.
- 204 Procopius *Wars*, II.7
- 205 See 2.I.4.
- 206 The Regional Pathways to Complexity (RPC) project, was a multi-regional project conducted by the Groningen Institute of Archaeology (GIA) and the Archaeological Centre of the Free University of Amsterdam (ACVU), see Attema, Burgers & Van Leusen 2010, 1 ff.
- 207 On the biases of research in this area cf. Attema *et al.* 2002, 153–154
- 208 The shadow marks that can be seen in the area between the lakes are related to local inaccuracies in the Digital Elevation Model.
- 209 For more on the evidence for pisciculture in the area see below 7.I.1.1.2.3.
- 210 Van Leusen 2002, 10-12
- 211 Cecere 1989, 22
- 212 Attema, De Haas & La Rosa, 2005, 130 and 187; Attema, Delvigne & Haagsma 1999, 155
- 213 Van Leusen pers. comm.
- 214 Van Leusen 2002, 10-2
- 215 Earlier interpretation by M. Alfisi and A. Gigetto, cf. Attema *et al.* 1998/1999, 155
- 216 Finds have also been described on the other side of the canal under a modern house by the owner. These are probably part of the same site. Earlier in the 20th century, the remains seem to have extended even further, towards the other side of the lake. De Haas 2006-1, Table: survey sites; query: midimp and later sites; Attema, Delvigne & Haagsma 1999, 155; Attema, De Haas & La Rosa, 2005, 192.
- 217 Finds include a Roman wall in *opus caementicium* near the bridge of La Fossella. Wall remains in *opus reticulatum* form a row of small rooms. A cistern has been found, as well as brick columns forming a portico.
- 218 Hoffmann 1956, 1227 “ausgedehntes Ruinenfeld bis zum ende des lago dei Monaci”; no further specifics are given.
- 219 Attema, De Haas & La Rosa 2005, 130
- 220 Elter 1884, 56. The tomb was dated in 384 AD by the epigraphic evidence found on the site. Underneath the tomb, Elter identified the remains of a Roman villa, which he called the *villa of Archi di San Donato*. The RPC team thought it likely that the large site of rpc site 10571 corresponds to the Elter site, De Haas 2006-1. I would agree, given the structures found, the size of the site (5000 m2, but extending to the south and east of the surveyed field – and the possibly connected outbuildings) and its location near Borgo Grappa. The site has been categorised as main villa building, with residential function. Rpc sites 10570 (OLIMsite 196 – dated Archaic to early imperial wares, outside the study period from the 2nd century onwards) and 10572 (OLIMsite 358) are probably connected to this villa as outbuildings. The villa site yielded several stone blocks and other building remains, sculpture fragments and marble. The ARSW pottery finds have a large date range, but the pottery allows for continuity until at least the 3rd or 4th century, conferring with the epigraphical evidence. One ARSW sherd can possibly be diagnosed as a Hayes 91 flanged bowl, dated 600-650 AD. According to local farmer, a Roman road probably passed nearby, see below 7.I.1.2.2.
- 221 Attema, De Haas La Rosa 2005, 139
- 222 Attema & De Haas 2005, 10
- 223 The site shows two high density finds areas of app. 5000 m2. Attema, Delvigne & Haagsma 1999, 155; Attema, De Haas & La Rosa, 2005, 169.
- 224 Although the ARSW evidence is not conclusive, continuity until this century seems evident given the epigraphic evidence of Elter, probably found here, and the later pottery found: the above mentioned ARSW sherd possibly dated 600-650 AD.
- 225 Van Leusen 2002, 10-2
- 226 Pliny *NH* 3, 57 (1st century AD) describes Clostra Romana: “dein quondam Aphrodisium, Antium colonia, Astura flumen et insula, fluvius Nymphaeus, Clostra Romana, Circei, quondam insula inmenso quidem mari circumdata, ut creditor Homero, et nunc planitae...”
- 227 See 5.VI.
- 228 Brandizzi Vittucci 1998
- 229 Miller 1916, Cecere 1989, Cassatella 2003
- 230 On the Peutinger map, Ostia, for example, is denominated *Hostis*. On the *Ravennatis Anonymi Cosmographia* Colostris (V.2.7) and Plostris (IV.32.7) are listed; on the reliability of this source see 7.I.1.1.1; on the discussion of distances on the Peutinger map, see 5.VI.
- 231 Brandizzi Vittucci 1998, 959 locates Clostris on the north side of the Fogliano lake. There is no further proof to substantiate this.
- 232 Cf. Brandizzi Vittucci 1998, 959, n. 129; indeed, Clostra might stem from the noun *claustra* meaning “that by which anything is shut up or closed, a lock, bar, bolt”, and specifically “a door or

- gate that shuts up any place, a dam, a dike" (Charlton T. Lewis, Charles Short, *A Latin Dictionary*).
- 233 De Paolis & Tetro 1985, 15.
- 234 Elter, 1884, 76–77
- 235 Cancellieri 1987, 45 ff. and 64, 66 ff; she based the reconstruction of this centuriation system, a large-scale land division scheme, on topographic maps and aerial photographs. Cf. also Attema & De Haas 2005 and most recently De Haas 2017.
- 236 Cancellieri 1987, 67, earlier recorded by Lugli in the early 20th century. Cancellieri wrote that this road (OLIMinfra 49) is visible on a map in 1803, on the modern CTR maps; part of the route is still visible on aerial photographs (between the rivers Sisto and Uffente). There are still remains in situ between 52 and 53 *migliara*.
- 237 Elter 1884, 56 ff. and 76 ff; Brandizzi Vittucci 1998, 960, n. 129
- 238 The latter is not incorporated in my database, as only post-Archaic to mid-imperial wares have been found here.
- 239 These sites too are not incorporated in the database, as these are only early imperial or earlier or have no medieval phase.
- 240 Attema, Delvigne & Haagsma 1999; Van Leusen 2002, 10–8
- 241 See the recommendations for future study in the final Chapter, 8.II.2.
- 242 Egidi 1980, for example, locates it on the Elter villa (OLIMsite 347).
- 243 Cassatella 2003, 212
- 244 According to Lugli, in several unpublished notes, traces of this road were still visible westwards until at least the Sisto river, Cancellieri 1987, 69.
- 245 See recommendations for future study, 8.II.2.
- 246 Attema, Delvigne & Haagsma 1999, 155: Hayes 99b but diameter larger, 530–580; Hayes 103, 500–3rd quarter 6th century AD?
- 247 Attema, De Haas & La Rosa 2005, 131
- 248 RS 253, nr.216
- 249 Cecere 1989, 31, n. 44
- 250 De Paolis & Tetro, 1986, 29
- 251 RS 977, nr.51. See also Cecere, 31, n. 46, Toubert 1973, 323
- 252 More on the church of S.Donato, and for a study of the 10th century *castrum* site, see 7.II.1.2.
- 253 De Haas 2006–1
- 254 Van Leusen 2002, 10–2
- 255 Cf. Elter, 1884, 74–75; Egidi 1980, 123; Linoli 2005, 31. Most scholars believed that "Rio Martino" is a name given in the 11th century, after the restoration of an earlier canal, that probably had been dug in 160 BC, by Cornelius Cethegus. According to Cecere 1989, it was Boniface VIII who ordered the constructed the current Rio Martino, around 1300 AD, in all likelihood on the location of the Roman canal.
- 256 Cecere 1989, 22
- 257 Attema, De Haas & La Rosa 2005, 135; Cf. Elter, 1884, 76–77
- 258 Van Leusen 2002, 10–12. Besides this theory, it is likely that the Fogliano area, like other low lying coastal areas on the Peninsula, from the late Roman period century suffered from an overall increase in alluvial depositions. See also 7.I.1.2.3.
- 259 Elter, 1884, 73–74; Cecere 1989, 23, n. 16
- 260 *Regesta chartarum*, I, 134, 145; Cf. Cecere 1989, 29 and Tomassetti 1910–1926, IV, 302. See 7.III.1.2.3.
- 261 In 1368 Giovanni Caetani sold a *piscaria* bordering a "alia piscaria que dicitur lo Grescesco monasterii Sancte Marie Gripte Ferrate", *Regesta chartarum* II, 282–282, n. 798. De Rossi tentatively links this reference to the Monaci lake, a lake for which the rights later were kept by that Greek monastery (in the 16th century). As toponymic research shows, *pescaria*, *peschiera* or *piscaria* in the high middle ages mostly refer to coastal fluvial or lake fish ponds, sometimes also the remnants of Roman basins or *piscinae*, see 6.I.2.
- 262 Cassatella 2003, 211
- 263 Cassatella 2003, 209 ff; De Paolis 1985, 8; Nowadays the Canale Papale may follow the tract of the *Fossa Augusta*. Evidence for these infrastructural works has been reported on the ground in the south of the Pontine region, and its tract is said to be still visible on aerial photographs. The fossa possibly also ran north of the Circeo mountain between Torre Paola and Torre Olevola: here aerial photography would show its tract.
- 264 Van Leusen 2002: Rpc sites 109 and 110
- 265 Van Leusen pers. comm.
- 266 Attema, De Haas & La Rosa 2005, 172
- 267 Egidi 1980, 123
- 268 cf. Lugli 1928, 42–43; Egidi, 1980, 123; De Paolis & Tetro, 1986, 6
- 269 Miller 1916, Brandizzi Vittucci 1998; Attema, De Haas & La Rosa 2005, 140, n. 18: "The presence of the lagoons and marshes along the coast makes it indeed very plausible that the road ran land inwards from the lagoons and not along the dunes separating the coastal lakes from the sea, as is sometimes claimed".
- 270 This is a lagoonal area, where the river Rio Cicerchia runs into the Fogliano lake, cf. Van Leusen 2002, 10–4. On the ONC map L5, the area is indicated as swampy. This area today is still indicated on the 1990 Corine Land Cover 1990 map as "marshy area".
- 271 It would be very useful to study the 1851 maps for the contemporary soils and waters in the Pontine coastal lagoonal area. The legend on the 1851 maps, however, makes such a study difficult; the maps lack detail in these coastal areas (most is depicted as mixed or unclear land use), and the copies of the maps are unfortunately rather blurred here. The borders of the lakes, for example, are difficult to distinguish.
- 272 Cassatella 2003, 209 envisaged for the coastal route from Astura to Circeii a road that was not paved with *basoli*, which therefore is no longer recognisable; only in the towns this road might have been paved.
- 273 Maybe we have to look for analogies in Belgium, Germany and the Netherlands, where roads were constructed on wooden substructures and were made up of earth from side-ditches. Some roads were constructed on dikes in the sea. Cf. Cassatella 2003, 208–209.
- 274 Van Leusen 2002, 10–10
- 275 Van Leusen 2002, 10–13
- 276 Attema & De Haas 2005, 10
- 277 See 7.III.1.3.1
- 278 See 7.I.1.1.3
- 279 Attema & De Haas 2005, 10
- 280 De Paolis & Tetro, 1986, 22–29. At the Monaci lake at the start of the 20th century many fish hooks were found; these finds have not been dated.
- 281 Veenman 2002, 113, 139
- 282 Van Joolen 2003, 145
- 283 Veenman 2002, 122 quoting Mc Neill 1992 and Toynbee 1965, 566. See also 1.I.3. on the theory of the silting up of the harbours

- of Ostia and Minturnae. Potter 1981 maintained that the changing expenditure in drainage works has been one of the factors involved in the increased sedimentation and swamping in the late Roman period. The proposed claim of a climatic change from the 1st century onwards (Vita-Finzi 1969 and Potter 1981) may have enhanced this effect. A recent study shows increased climatic variability in Europe from 250 to 600 AD: U. Büntgen *et al.* 2011. 2500 Years of European Climate Variability and Human Susceptibility, *Science* 331 (6017), 578–582.
- 284 Van Joolen 2003, 81-84. The date of 800 is only a rough indication. It is based on sampling of one part of the landscape only: the alluvium core of the Amaseno river. Although the dating should be finetuned with more core drilling research, Van Joolen study leaves little doubt that environmental deterioration took place from late Antiquity onwards.
- 285 Torres 1998, 25 ff; this international character of ancient Ostia is exemplified by the building of the first Synagogue in Europe. See also Torres 1998, 87 on the numismatic evidence on the Constantinian basilica, which shows off the cosmopolitan nature of the population in the 4th century and onwards.
- 286 Cf. Keay, Millett *et al.* 2007
- 287 For example, a large round temple was built to the west of the Forum during the reign of Alexander Severus (222-235 AD).
- 288 Bakker & Heres, Website Ostia Antica [Accessed 1 April 2009]: The area to the south and east
- 289 If we go even more south, to the coast outside the Ostia key area, coastal villas are almost impossible to study. Here the coast is not protected from building activities by the presence of the presidential domain. The area is intensively used for recreational purposes, all the way to Anzio.
- 290 Tor Paterno (OLIMsite 139) shows several late Roman villas; on the map, these are depicted as one, as these were possibly part of a (sort of) settlement.
- 291 Lafon 2001, 356, RM 51
- 292 Lauro 1988b
- 293 Lauro 1998, 180, Brandizzi Vittucci 1998, 940 ff., Claridge 1993 and the Laurentine Shore Project 2007, intro. Most authors are convinced that the *praedium* Laurentium was centred on Tor Paterno; the extent of the estate, however is unknown. Claridge included the vicus in it: “The Imperial estate was probably centred on the villa at Tor Paterno, but the extent of its holdings is unknown. They could certainly have included the Vicus, whose imperial title alone implies dependency”.
- 294 *Herodian* 1.12.2, a source dated to 191 AD.
- 295 *Liber Pontificalis* Life 34.22
- 296 Laurentum and Lavinium are also mentioned on the 7th century *Ravennatis Anonymi Cosmographia*, This source, however unique for its date, does not reflect the actual topography of the time of its conception, see 7.I.1.1.1.
- 297 See 5.VI (Map 1).
- 298 The “Laurento” depicted on the Peutinger might also have been the name of a detour or junction on the Peutinger road, situated on an inland route, Brandizzi Vittucci 1998, 944.
- 299 Fenelli 1995; 2003; <http://www.fastionline.org> [Accessed 9th November 2019]; L. Quilici, S. Quilici Gigli, Jeffrey Becker, DARMC, Tom Elliott, Sean Gillies, Brady Kiesling, R. Talbert, and Johan Åhlfeldt, ‘Lavinium: a Pleiades place resource’, Pleiades: A Gazetteer of Past Places, 2018, on <https://pleiades.stoa.org/places/422960> [Accessed 30 November 2019].
- 300 Fenelli 1995; 2003
- 301 Brandizzi Vittucci 1998, 946, n. 72, identified Lavinium with Campo Selva, based only on the distances on the Peutinger map and toponymic derivations.
- 302 On the Peutinger map, from Cuntz 1939, 45:
- 6 Ab urbe Hostis m.p. XVI
- 7 Laurento m.p. XVI
- 8 Lanuvio (= Lavinium, see OLIMtoponym 14) m.p. XVI
- 303 Ostia cf. the Progetto Ostia Marina, David *et al.* 2014; Insula IV: David & De Togni, 2019; Portus: for an overview see Keay & Paroli 2011
- 304 Torres 1998, 18; David *et al.* 2014, 174 ff.
- 305 Sallares 2002, 85. While the Ostian harbour silted up and the coastal plain extended more and more into the sea, the local lagoons, for example the lagoon which was drained by the above mentioned (Roman) Canale dello Stagno, developed into stagnant unhealthy pools, breeding places for malaria mosquitos.
- 306 Heinzelmann 2002
- 307 Torres 1998, 19
- 308 Bakker & Heres, Website Ostia Antica [Accessed 1 April 2009]
- 309 Meiggs 1973, 92-93. Not only ad hoc repairs, but clear signs of new luxurious building and signs of wealth (use of marble, heating systems built etc).
- 310 Pensabene 2007, 420
- 311 Torres 1998, 15, n. 48
- 312 Pavolini 1996, 264. According to Torres 1998, 16, n. 49 there is iconographic evidence as well for the presence of these officials.
- 313 Torres 1998, 16, n. 50; Pavolini 1996, 266 on the other hand, denies this idea, because in these days the countryside of Ostia (Ager Ostiensis) was not suitable for agricultural production.
- 314 DeLaine 1995, 98-100; the insula declined while the domus plan began to thrive.
- 315 Torres 1998, 22
- 316 Bakker & Heres, Website Ostia Antica [Accessed 1 April 2009]
- 317 Bakker & Heres, Website Ostia Antica [Accessed 23 April 2009]: Regio II - Insula VII - Teatro (II,VII,2) and overview From Late Antiquity until the middle Ages. The theatre was converted into a fortress by blocking the arches of the first level.
- 318 Pensabene 2007, 420 after Gismondi 1955, 293-294.
- 319 See 7.II.1.3.
- 320 Martin 2006, cf. also Torres 1998, 39; Heinzelmann & Martin 2000, 277-283
- 321 On the pottery evidence Paroli 1993. Cf. also Martin 2006.
- 322 Duchesne 1892
- 323 Torres 1998, 252; in the town Ostia itself, churches were built in the 4th century as well, Torres 1998, fig. 6.
- 324 Torres 1998, 6, Paroli 1993, 163
- 325 Torres 1998, fig. 6; fig. 15: the Constantinian basilica was the largest church; it had a nave with a length of 79 m.
- 326 Ramieri 1995, 407 ff, on the church 416; De Franceschini 2005, 260 ff.
- 327 On Tuscany: Valenti 1996 and Valenti 2004, 158 ff. ; Francovich & Hodges 2003, 40
- 328 On converted churches on villa sites see 7.I.2.2.1 Theme: expanding Christian activity throughout the landscape. Cf. also Bowes 2002
- 329 Lauro & Claridge 1998, 39 ff.

- 330 7.I.1.1.1. Unfortunately, no picture or description of the masonry at the vicus has been published, impeding a closer identification and dating of the *vittatum*.
- 331 A summary of old and recent research in Claridge 1993
- 332 See 7.III.1.3.1.
- 333 Lauro 1998, 99
- 334 Lauro pers. comm.
- 335 These museum collection holds large quantities of ARSW until the 7th century, and many 8th to 10th century wares, see also 7.II.1.3. Unfortunately, not all types of wares are on exhibit in the museum. Only part of the results has been published (e.g. the Castelporziano III volume by Niella publishers, Lauro 1998).
- 336 <http://www.fastionline.org> [Accessed 9th November 2019]
- 337 Bakker & Heres, Website Ostia Antica [Accessed 26 April 2009]: The area to the south and east
- 338 Brandizzi Vittucci 1998, 929 ff. suggested that only the small tract near Ostia may have had the name Severiana.
- 339 See also above 7.I.1.3.1.
- 340 *CIL* XIV, 126
- 341 Bakker and Heres, Website Ostia Antica [Accessed 2 April 2009]: The area to the south and east;
- 342 That is, if the ancient road going west of Pratica is taken (see map) of which the eastern part is still in use. I want to suggest that this road was taken, which until the 1990s passed through the forest of Capanna Murata and now halts in the service area of the air force base of Pratica di Mare; part of its trajectory in the forest is still visible on the Ortofoto digitali 2000.
- 343 Strabo *Geography* 5.3.5. See also Brandizzi Vittucci 1998, 937, 944 and n. 34
- 344 Brandizzi Vittucci 1998, 945, n. 65 and 66; at S.Lorenzo blocks have been reported by Nibby 1837 I, 450
- 345 Possibly the “*via littoralis severianae vestigia*” depicted on the Ameti map of 1693 (Map 36) is another indication of material still visible *in situ*. It might also be a historical anachronistic reconstruction. The road on the map runs until the *stagno* (pool or swamp) just before the Torre del Vaianico. This *stagno*, on the other hand, is another indication that a route strictly on the coast is not very likely.
- 346 Quilici 1990, 39; The actual track of the Via Laurentina is unknown, see the discussion in Quilici 1990, 44 ff. and De Rossi 1969, 59. It is clear that no actual fragments of the road-surface have been found in the area between Decima and the coast. Possible tracks of the Laurentina have only been found near Rome (EUR), cf. De Rossi 1969 map and Quilici 1990, 45.
- 347 Bakker & Heres, Website Ostia Antica [Accessed 26 April 2009]: introduction
- 348 Patterson 1993b
- 349 Cf. Martin 2006 who recorded imports from Gaul in the 8th century.
- 350 See 2.II.3. The studies done north of Rome show that this took place from the end of the 6th century. For generic conclusions on pottery distribution in the current study area see 7.I.2.2.3 Theme: the economy and systems of redistribution.
- 351 The pottery assemblages at Pianabella are very similar to Rome until the 10th century. Patterson 1993b, see 7.II.1.3.3.
- 352 Hodges 1990, Paroli 1993; See also 7.II.1.3.3.
- 353 Bakker & Heres, Website Ostia Antica [Accessed 26 April 2009]: introduction; Wickham 2015, 102
- 354 Lafon 2001, 113, 356; RM 50
- 355 See below 7.I.1.3.5.
- 356 Veenman 2002, 124. See the discussion on transhumance in 7.I.1.1.3.
- 357 Bakker & Heres, Website Ostia Antica [Accessed 26 April 2009]
- 358 Torres 1998, 69.
- 359 See 7.II.2.2.1 Theme: *The expansion of the patrimonium petri, and the creation of the Papal States*.
- 360 Duchesne 1892
- 361 Benigni 1911 [Catholic encyclopaedia online, accessed March 12 2010]; Bakker & Heres, Website Ostia Antica [Accessed 26 April 2009]: introduction
- 362 See 2.I.13.
- 363 Torres 1998, 130 ff; Bakker & Heres, Website Ostia Antica [Accessed 13 November 2005]: The area to the south and east
- 364 *Liber Pontificalis* Life 34.22, Davis 2000, 22.
- 365 See 7.III.1.3.1.
- 366 For a detailed discussion on its location see 7.II.1.3.1.
- 367 *Liber Pontificalis* Life 51.5, Davis 2000, 44
- 368 De Rossi 1969, 64
- 369 De Rossi 1969, 64; Del Lungo 1996, 125-126: In the 8th century it was owned by the monastery of S.Saba (Rome). This can be read in retrospective from a *bolla* of Pope Gregory VII (1073-1085).
- 370 Marazzi 1990, 123; Davis 2000, 17
- 371 See 2.I.2 and 7.I.1.1.4; Marazzi 1998a, 1 ff.
- 372 Torres 1998, 21
- 373 Bakker & Heres, Website Ostia Antica [Accessed 26 April 2009]: introduction
- 374 Bakker & Heres, Website Ostia Antica [Accessed 26 April 2009]: introduction
- 375 De Haas 2005
- 376 The extent of the overview study of villas by Venditti 2011 is not depicted as it covers a much larger area. The same holds true for the study by Teichmann 2017, who paid specific attention to the wider Velletri area in the period 400 BC to 400 AD. The Carta Archeologica of Velletri by Lilli 2008 covers roughly the red square as depicted on the map, extending to the north outside of the research area.
- 377 L. Crescerai, 1981 *Velletri. Archeologia, territorio, museo, Velletri*.
- 378 There is one possible exception: the Roman structures found in *peperino* on the base of the medieval wall of **castel S.Gennaro** (OLIMsite 132). These are possibly part of a villa, Del Lungo 1996, 128. Unfortunately, no more architectural details and dating are given in the literature.
- 379 For the villas in the direct hinterland of Velletri see Lilli 2006 (*Velletri. Carta Archeologica*).
- 380 Severini 2001, 84, (nr. 47), tav. 2; Venditti 2011, 108-109
- 381 Corsi 2000a, 114
- 382 Severini 2001, 10, 81, fig. 97
- 383 For example, Mucci 1975, Cassieri 1995 and Corsi 2000, 114
- 384 On the *Itinerarium Burdigalense* (333 AD), Cuntz 1939: “mutatio sponsas milia vii”, i.e. 12 miles from Forum Appii (OLIMsite 16). This should be 18 Roman miles (a Roman mile = 1479 meters) measured from Sole Luna.
- “ciuitas aricia et albona milia xiiii”, i.e. 14 miles from Ariccia (OLIMsite 159) and Castra Albano (OLIMsite 155). This should be 8 and 9 miles from Sole Luna.

- 385 Del Lungo 1996, 128
- 386 Severini 2001, 10, 69, TAV ii, 30 located Sublanuvio on the monte Cagnolo/Cagnoletto, 500 m to west of castle S.Gennaro. Severini's hypothesis is based on the Latin root [cambio] meaning "change". In my view, 500 meters from the road is too large a detour for a station along the vital Appian route. Del Lungo 1996, 103, 95, n.24 thought that only the memory of a *statio* (change) is preserved in this toponym of Monte Cagnolo.
- 387 Bilde 2003, 259 ff; Moltesen & Bøggild Johannsen 2010
- 388 De Rossi 2002
- 389 Villamagna Excavation report 2010; Totten 2015, 573 ff; Fentress, Goodson & Maiuro 2016, 164; see also Van Leusen, Tol and Anastasia 2010 on late ARSW finds in the Lepine margins and Lepine mountains during the Hidden Landscapes survey campaigns
- 390 Van Leusen 2010, 385; other late Roman sites found by the Hidden Landscapes team in the Lepine mountains are OLIMsites 414, 641-644.
- 391 See 2.II.3.2.
- 392 It is unclear how long the actual villa on the villa degli Ottavi site continued to function as agricultural villa estate; its south-eastern part was rebuilt into a *baptisterium* in the 4th or 5th century, Venditti 2011, 108
- 393 De' Spagnolis 2012
- 394 Duchesne 1892
- 395 Hoffmann 1956, 1218
- 396 Severini 2001, 130
- 397 Mauri, 2007, 13
- 398 Mauri 2007, 10 ff.
- 399 Mauri 2007, 12
- 400 On conversion of temples into churches see also 7.I.2.2.1 Theme: expanding Christian activity throughout the landscape.
- 401 The sees of Tres Tabernae and Velletri were united and transferred in 592 AD to a safer location, because of, as the historical sources suggest, the threat of incursions and the lack of defensive possibilities of their original constituencies. A letter by Gregory the Great stated that it is safer to move the Velletrian see to Arenata at S.Andrea the Apostol, very probably Le Castella OLIMsite 711, given the fact that the barbarian threat can more easily be coped with ("*ab hostilitatis incursum liberior existere valeas*"), John the Deacon *Vita Greg.* I.3.17. See also Ployer Mione 1995, 52.
- 402 See 7.I.1.8.2, *The Pontine Appia: a challenging passageway.*
- 403 Ployer Mione 1995, 52, Del Lungo 2001, 88 and 110, Toubert 1973, 322 and 628, nr. 3 on the toponymic discussion. The *Liber Pontificalis* Life 97.76, Davis 2007, 32 mentioned the restored *Basilica beati Andrae apostoli, sitam via Appiae in silice* in 772-795. *S.Andrea in Silice et Arenati* is listed in 977 and 987. The monastery of S.Andrea is first referred to in the castrum Vetus chart (978 AD). See Chapter 4 on the toponyms and Toubert, 628, nr. 3 on the meaning of *silice*.
- 404 Coste 1990, Severini 2001, 133, Toubert 1973, 322, 628. On the small-scale excavations of the site of S.Andrea see A. Sogliano 1900. Di un centro abitato, medievale, alle Castella, presso la via Appia, *Notizie Scavi* 1900, 195-198.
- 405 Del Lungo 1996, 167-169 and Del Lungo 2001, 117; Ployer Mione 1995, 52. The toponym *civitas* here possibly denoted ruins. On the changing meaning of the term *civitas*, 6.I.2. It is unknown when the toponym *civitana* was first used for this site. In the 1910s Plezer Wagner did some reconnaissance on the terrace. Although levelling activities have cleared most remains, as visible on the *ortofoto*, it would be interesting to revisit the site. Field strategy should be focused on late Roman activity given the suggested strategic importance of the site at the end of the 6th century. See the recommendations for future study, 8.II.2.
- 406 Duchesne 1892; Severini 2001, 117 suggested that the union only became definitive in the 9th century.
- 407 See also 7.II.1.8.1.
- 408 Fiocchi Nicolai 2015, 219-130
- 409 Mauri 2007. On Lanuvio (OLIMsite 84) in Roman times see Garofalo 2018.
- 410 *Liber Pontificalis* Life 97.76, Davis 2007, 32; see also above in this section.
- 411 Carbonara & Messineo 1998, 19
- 412 See 7.III.1.4.2.
- 413 De Rossi 1981, 92
- 414 Attema & De Haas 2005, 6
- 415 More on the Austrian maps of 1851 as evidence for ancient land use see 5.IV, and 7.II.1.4.3.
- 416 See 5.IV on the legend of the 1851 maps.
- 417 Severini 2001, 117. Here, he trusted the town of Velletri to St.Clemens. Later a church for St.Clemens was built in town, the current basilica. The S.Clemente is mentioned in life Leo III, nr 44 (797-816), Davis 2007, 196.
- 418 Severini 2001, 117
- 419 Severini 2001, 117
- 420 The Via Latina as strategic military route in the 6th century is evident from several historical events, such as the march from Naples to Rome by Belisarius. Procopius, *Wars*, I.14.16 and II.5.2. Corsi's numismatic evidence shows the 5th and 6th century Gothic, Vandal and Lombard presence in the Sacco Valley, Corsi 2007, 250 ff.
- 421 Livy *History* 8.14
- 422 For a recent historiographic overview of Fondi see D'Onofrio & Gianandrea 2017.
- 423 Cf. Crova 2017, 79 ff.
- 424 Carbonara & Messineo 1998, 132, Piazza 2017, 13 ff.
- 425 Gregory the Great, *Registrum epistolarum*, III.13-14 described how bishop Agnello of Fondi was forced to flee from Fondi to the Byzantine stronghold of Terracina because of this attack. Fondi also appears in Gregory's *Dialogi*, III.7.
- 426 *Liber Censuum* I, 257-258, n. XXIV
- 427 This 3rd century hermitage would be the earliest example of monastic life in this study. Its origin and founding date, however, is not certain. Pope Gregory the Great (*Dialogi*, I.7) in the 590s refers to the monastery as a new foundation. Carbonara & Messineo 1998, 127 date the founding of the monastery to 592 AD, which seems too recent, as according to the Dialogues Honoratus had built up a convent of 200 monks, and already had passed away. The current abbot dates the foundation of the monastery to the 5th century. For more on the origin of the site as a Roman / Christian cult place and for an overview of the written sources on the foundation of the monastery see Cassieri & Quadrino 2015.
- 428 Cassieri & Fiocchi Nicolai 2013
- 429 Cassieri 2013, 14-15; based on a small terracotta figurine found.
- 430 Fiocchi Nicolai 2013, 37
- 431 Lafon 2001, 377, LT 57.

- 432 Monti 1996, 12
- 433 Carbonara & Messineo 1998, 129
- 434 More on the Austrian maps of 1851 as evidence for ancient land use see 5.IV, and 7.II.1.4.3.
- 435 Moroni 1844, 149; Duchesne 1892 did not list the diocese of Fondi.
- 436 The plan of the original Roman walls was still intact in the 14th century, when the Caetani reinforced them.
- 437 See also 7.I.1.1.5.
- 438 Cf. Corsi 2007, 251 ff. on the impact of the Lombards in the region of Aquino and Montecassino, attacking the borders of the Duchy of Rome. These attacks also appear in Gregory's *Dialogues* (in the 590s).
- 439 See 2.I.5.
- 440 Attema & Van Oortmerssen 2001
- 441 Attema & De Haas 2005, 13; Severini 2001, 10
- 442 Severini 2001, 10
- 443 Attema & De Haas 2005, 13
- 444 Chiarucci 2003, 231; Cuccurullo 2007, 613
- 445 De Rossi 1970, 78, site 124
- 446 The scatter found may also have been a kind of cultic site, given the terracotta votive found here, Attema & Van Leusen 2004
- 447 On the changing meaning of *civitas*, see 6.I.2.
- 448 On Castra Albana, its history and wide range of remains see the volume De Angelis (ed.), 2015 and Aglietti & Busch 2019, 197 ff.
- 449 Moltesen & Bøggild Johannsen 2010
- 450 Chiarucci 2003, 231; Cuccurullo 2007, 613
- 451 As the focus of the PRP Lanuvio survey was on protohistoric site distribution (and pottery), and Roman republican and imperial villas were omitted from the study, nothing can be said here with great certainty about continuity or discontinuity in late Roman times. See paragraph *The Pontine Region Project* in 3.I.1 Archaeological sources.
- 452 *Liber Pontificalis* Life 34.30, Davis 2000, 26 and xxxvi
- 453 A *massa* is a grouping of lands or farms, or an estate, see 6.I.2.
- 454 Severini 2001, 31, who did not provide the concrete historical evidence for this.
- 455 Duchesne 1892; Aglietti & Busch 2019, 204 date the foundation of the bishopric to the early 4th century, based on the use of the term *civitas* (*civitas* Albana).
- 456 Davis 2000, 48
- 457 Riccy 1789
- 458 Severini 2001, 52 wrote that only in the 9th century the site was recorded again, when it was besieged and sacked by Saracens (in 827); there is no historical record to corroborate this idea. For more on the Saracene attacks, see 7.II.2.2.2 Theme: The Saracene threat.
- 459 De Rossi 1979, 298 ff.
- 460 De Rossi 1979, 298
- 461 Bilde 2003, 259 ff.
- 462 De Rossi 1870, 89-112
- 463 *ColCan*. Lib III.149
- 464 *Liber Pontificalis* 80.1, Davis 2000, 74
- 465 The Via Satricana is not mentioned in ancient sources. It has been used by several scholars to give a name to a road going towards the Campomorto area. Quilici 1990, 47; De Rossi 1969, 49.
- 466 The 'Via Laviniate', referred to by Quilici 1990, 9, is nowadays called Via Trigoria, located outside, to the west of the current key area. The unnamed Roman road Via Laviniate / Via Trigoria is listed as OLIMinfra 83.
- 467 As illustrated in the three *Forma Italiae* volumes, Tellena, Apiolae and Bovillae, De Rossi 1967, 1970 and 1979 respectively.
- 468 Horticulture as interpreted by Attema 1993, 52. For an overview of the sub-recent land use on the 1851 maps see 7.II.1.6.3. More on the Austrian maps of 1851 as evidence for ancient land use see 5.IV, and 7.II.1.4.3.
- 469 Davis 2000, 125.
- 470 See also 7.I.2.2.3 Theme: the economy and systems of redistribution.
- 471 See the next study period, 7.II.1.4 and 7.II.1.6.
- 472 2.I.13
- 473 *Liber Pontificalis* Life 34.30, Davis 2000, 25
- 474 Toubert 1973, 794; Azzara 2002, 91; see 2.I.13 A short introduction: The Christian organisation of the late Antique to high medieval Italian landscape.
- 475 See 7.I.2.2.1 Theme: expanding Christian activity throughout the landscape.
- 476 The *Liber Pontificalis* explicitly describes its location on the Appian road, *Liber Pontificalis* Life 80.1, Davis 2000, 75
- 477 Procopius *Wars*, II.7
- 478 Christie 1989, 273
- 479 Cancellieri 1985; 1987. The coverage of this research is shown by a red rectangular on the 3rd century map.
- 480 Mazzucato 1987
- 481 According to Cancellieri 1987, 46 there are only scarce archaeological remains in the Amaseno valley, while on the other hand there are clear signs that the area was fully exploited, at least in the Roman period.
- 482 See among others Cancellieri & Ceci 2003, and most recently Amici 2016. General information on the site was also provided by personal communication with M. Cancellieri.
- 483 De Rossi 2002, 7 ff.
- 484 Cancellieri 1987, 47-48
- 485 See 3.I.1.
- 486 Van Leusen 2010, 385
- 487 Mazzucato 1987; Angelini 1979-1982, 120-121. Ashby visited the site in 1893. On this site see also Del Lungo 2001, 34-35.
- 488 Mazzucato 1987
- 489 De Rossi 2002, 25,79 and Coccia & Fabiani 1997, 75. A fragment of a ARSW Hayes 90 has been found in walls of the floor, dated to the middle of the 6th or start of the 7th century, is an important *terminus postquem*. Late Roman imitation African wares have been found here too, of unknown date.
- 490 Francovich & Hodges 2003, 57
- 491 Coccia & Fabiani 1997, 84 however, warn not to take the idea of continuity for granted, as the 6th/7th century wall is the last certainly dated structure. See also 7.II.1.7.
- 492 Del Lungo 2001, 98
- 493 Monti 1995, 12
- 494 Monti 1995, 65
- 495 Toubert 1973, 629; Monti 1995, 12
- 496 This Roman *municipium* still functioned in the 5th century, as epigraphical evidence shows: *CIL* X, 5651

- 497 The low position of the terrain is visible on ONC map sheet H12 and I12 (Map 51), especially near the *dolines* of Laghi dei Vescovo. Dolines are sinkholes caused by running water in the sub-surface. This water dissolves chalk in the ground, and thus in time produces cracks and eventually large holes in the surface.
- 498 On the 1851 Austrian maps a footpath is visible here. Even nowadays, only a small local road runs along the base of the mountains, a road which could only be constructed as a result of the *bonifica* works. Because of the unfavourable conditions along the base of the Lepine Mountains, the railway consortium was forced to dig two railway tunnels in the base of the mountains. Cf. also Coste 1990, 128
- 499 See 7.I.1.8.
- 500 De Rossi 2002, 23
- 501 Cancellieri 1987, 67. See also 7.I.1.2.
- 502 Leotta & Rinnaudo 2015, 566
- 503 Pliny *NH* 3, 60; 14, 63
- 504 Van Joolen 2003, 144
- 505 See 5.IV for more on the legend of the 1851 maps.
- 506 See 7.II.1.7.3.
- 507 Corsi 2007
- 508 De Haas 2017
- 509 Cancellieri 1985, 44 ff; Cf. also Cancellieri 1987, 46
- 510 Frutaz, 1972: XLII.2b-c, tavola 203-204, discussion on pages 94-95
- 511 See also 7.I.1.2 and 7.I.1.7.2.
- 512 See 2.I.5. It is certain that the Sacco Valley remained in Byzantine hands throughout the 7th century at least, Fentress, Goodson & Maiuro 2016, 259. There are no indications for permanent Lombards presence here, nor in the areas more westwards, into the papal homeland of the Duchy (*patriomonium appiae*)
- 513 For a summary of the finds discussed and literature see Corsi 2007, 252 ff.
- 514 Corsi 2007, 252. The debate is highly enriched by the current discourse on cultural change in Italian archaeology, see Corsi 2017 for a review of the literature.
- 515 Corsi 2007, 254, stressed that archaeological evidence from the 6/7th century onwards (it is as of yet unknown until when) shows that the area of the southern Sacco – Liri – Montecassino was also strongly connected with southern parts of the Peninsula, among others along the old Via Latina to Naples, and via trans-Appennine routes with the Adriatic coast.
- 516 Corsi 2007, 250 on the late Antique and early medieval stronghold Terracina controlling the prehistoric route from the Amaseno Valley (Privernum) to the coast. Unfortunately, little archaeological pottery research within Terracina itself has been conducted as to shed light on the circulation of late Antique and early medieval goods via this town and its port (see Terracina key area, 7.I.1.10).
- 517 See 7.I.1.1.3
- 518 De Haas 2005
- 519 Savignoni & Mengarelli 1901, 514; 1903, 229; 1904, 403; Quilici Gigli 2009; Gizzi 2018
- 520 Mucci 1975; Cassieri 1995 and 2018; Fiocchi Nicolai 2015, 129
- 521 Bruckner 1995; More recently, intensive surveys have been carried in and around Forum Appii by the Minor Centres project team, De Haas 2017.
- 522 Attema & De Haas 2005, 6. Norba was devastated by Silla in the civil war of the early 1st century BC, Gizzi 2018, 7. Pliny described Norba as an abandoned city in the 1st century AD, *NH* 3, 68.
- 523 See also 7.I.1.4.
- 524 Attema & De Haas 2005, 7; De Haas, Attema & Tol 2011/2012, 199 ff. and fig. 3
- 525 The only example of a cistern on the foothill platform villa sites, except for Fossanova (OLIMsite 9)
- 526 Cicero, Atticus I, 13, 1; II, 10; II, 12, 2; II, 13, 1
- 527 Duchesne 1892
- 528 A summary of the arguments in Mucci 1975, Cassieri 1995, Bruckner 1995, 198, Corsi 2000a, 114; an expose of the results of the recent excavations in Cassieri 2018, 37.
- 529 Cassieri 1995, 581 on the archaeological evidence.
- 530 Cassieri 1995, 578
- 531 Cassieri 2018, 35-37
- 532 Horace *Sat.* 5.12 ff. During his trip in 37 BC to Capua, Horace reached Forum Appii. He described it as very busy place, with many skippers present. He adds that there was a lot of activity, because it was convenient to leave the road from here and take a boat towards Terracina.
- 533 Juvenal *Sat* III 307, written roughly 112 AD, see Rudd 1992, 15 ff.
- 534 Cancellieri 1990, 61-67; Coste 1990, 127; Bruckner 1995; Corsi 2000a, 85; Ullrich *et al.* 2015; De Haas *et al.* 2017; .
- 535 Ullrich *et al.* 2015, 392
- 536 See also 2.II.3.2 and 7.I.1.4.1.
- 537 Bruckner 1995, 199 and Tol and Satijn 2014; the pottery evidence dries out from that period onwards. Later 6th century diagnostics lack. On the late Roman pottery found here see also De Haas *et al.* 2017
- 538 Restorations of Theodoric dated in 507-511, Sallares 2002, 91. As Cristina Corsi points out, the effective activity of Theodoric versus his efforts of boosting favourable “press” is a hot topic at the moment among Italian scholars. Indeed, for several of these historically acclaimed restoration activities there is no archaeological confirmation whatsoever. For the central Pontine plain however, evidence does exist: a plate found in Terracina, describing that Decius restored the canal from *Tripontio usque Tarracinam* (*CIL* X, 6850). On the issue of late Antique restorations of the Via Appia see e.g. Mosca 1990, 182 ff.
- 539 Cassiodorus *Variae* II.32 and 35: Cassiodorus describes the efforts of Theodoric to restore the Via Appia; Decius Caecina formally requested to execute these reclamation works, in return for which he requested ownership of the recovered lands.
- 540 See also 7.I.1.2.3; cf. also Linoli 2005, 32.
- 541 Next to the troubled Via Appia route and *decennovium*, the **Roman road connecting Forum Appii with Sezze** (OLIMinfra 103) may have been a lifeline for the site until its abandonment cf. De Haas 2011, 210; Zaccheo and Pasquali 1972; Cancellieri 1985, 1987; Bruckner 1995.
- 542 Cassieri 1995, 581
- 543 Fiocchi Nicolai 2015, 219-130; historical sources on the see seem to indicate that the site was revived in the late 8th century, Duchesne 1892, see also Cassieri 1995, 581
- 544 See 7.I.1.4.1,
- 545 Strabo *Geography* 5.3.5.231C. Strabo’s topographical description of Pontine swamps exactly matches the extent of the waterlogged areas that is visible on some of the historical maps studied in this thesis, specifically the 1851 maps.

- 546 Sallares 2002, 72 ff. on the discussion. It remains unclear if in Roman times there was less danger for malaria, as put forward by several authors, and whether the Roman republican and imperial canalisation works diminished or actually enhanced the danger of malaria in plains.
- 547 Antyllus in Stobaios, *Florilegium* 101.18; Procopius *Wars*, II.4.30
- 548 Savignoni & Mengarelli 1901, 541 ff; Quilici Gigli, S., 2018
- 549 For an overview of the recent excavations on the site see S. Quilici Gigli (ed.) 2018. *Norba: scavi e ricerche*. Atlante tematico di topografia antica. Supplementi 22, Rome.
- 550 Sallares 2002, 58: "Situated on top of a hill overlooking the Pontine plain, modern Norma and the ancient Roman colony of Norba (450 metres above sea level), which lies beyond it, did not have endemic malaria, since mosquitoes are weak fliers." A retrospective anecdote may show the reality of Norba as a retreat from the malaria infested plain: from documents, it becomes clear that in the late 17th century, Norma was malaria free, and that Ninfa, situated below Norma in the plain, had been deserted, probably because of the danger of malaria infection. Sallares 2002, 57.
- 551 See also 7.II.1.8.3.
- 552 See the recommendations for future study, 8.II.2.
- 553 Van Leusen 2010, 327, 356, 374, 380, 385
- 554 For a summary of the history of these works see Linoli 2005, 30 ff.
- 555 Cf. Linoli 2005, 30 ff., Brandizzi Vittucci 1998, 970 and Fantini 1953, 6
- 556 Fiocchi Nicolai 2015, 219-130
- 557 See 7.II.1.8.1; however, recent studies conducted during the Minor Centres project show that *ceramica a vetrina pesante*, or Forum Ware (dated 9-13th century) and *ceramica a vetrina sparsa* (dated 9-11th century) found its way into the central Pontine plain, at Forum Appii and Ad Medias, and in the space between, De Haas 2017. The ceramic evidence, therefore, might predate the 10th century historical surge in activities in the plain.
- 558 Carbonara & Messineo 1998, 18
- 559 Coste 1990, fig. 2
- 560 The Via Setina, originally built to connect the Roman *coloniae* Setia and Vellitrae, branched off from the pedomontana near (the later town of) Sermoneta. It may have intersected near Cisterna with the road Cisterna (area) - Cori (OLIMinfra 46).
- 561 The Roman road **Satricum - Cisterna (area)** (OLIMinfra 89, cf. De Rossi 1981, 92) and the Roman road **Cisterna (area) - Cori** (OLIMinfra 46, cf. Carbonara & Messineo 1998, 43), connecting the coast with the pedomontana near Cori may also have been a factor in the progressive growth of Cisterna.
- 562 Ippoliti 1975, 11
- 563 It is unclear since when this name was used. The 6th century writers Procopius (*Wars*, I.11.2) and Cassiodorus (*Variae*, II.32-33) were the first to explicitly use the name *decennovium*. See also Linoli 2005, 31. However, some scholars claimed that this name may have been used earlier, for example Carbonara & Messineo 1998, 7, 9.
- 564 Ippoliti 1975, 92
- 565 Horace *Sat.* 5.12 ff., Strabo *Geography* 5.3.6.33
- 566 See above 7.I.1.8.1.
- 567 *CIL* X, 6850: a marble plaque found in Terracina, describing that Decius restored the canal from *Tripontio usque Tarracinam*.
- 568 Horace *Sat.* 5.12 ff. and *Sat.* 5.3-23
- 569 Strabo *Geography* 5.3.6
- 570 De Haas 2005; see also 7.I.1.4.1
- 571 Van Joolen 2003, 84
- 572 However, the evidence is based on the study of the Amaseno depositions only, Van Joolen 2003; more core drilling research is needed to definitively put a date to increasing of sedimentation around the Pontine plain and the coast.
- 573 See 7.I.1.7.3.
- 574 See 7.I.1.8.2.
- 575 Attema & De Haas 2005, 6; De Haas, Attema & Tol 2012, 2005. On none of the sites in the current database.
- 576 Pliny *NH* 14.8.61: "Augustus of blessed memory preferred Setinum [wine] to all the others as did almost all the other emperors after him, due to experience: you need not fear that a taste for it might give you stomach reflux. It grows on the heights above Forum Appii."
- 577 Attema & Van Leusen 2004; De Haas 2005
- 578 The dating methods used have not yet been published by the Gruppo. It is therefore not clear if in-depth pottery studies have been done and if the latest typologies have been incorporated in the study of pottery from all these sites, making it difficult to assess the compatibility of the results with the data from the other key areas. The dating of the Gruppo has been incorporated in this thesis' database, but caution should be exercised in the chronological analysis of site distribution. The sites in the Casa Ripi area, OLIMsites 449, 450 and 451 are an exception: the (pottery) dating methods used on these sites have been reported in Luttazzi 2001.
- 579 Fentress, Goodson & Maiuro 2016, Fentress and Maiuro 2011, Fentress 2006 and Fentress *et al.* Excavation reports 2006-2010
- 580 Villamagna Excavation report 2010
- 581 Fentress 2006; Fentress *et al.* Excavation reports 2006-2010; Fentress, Goodson & Maiuro 2016. The magnetometric study produced a clear outline plan of the northern half of the villa.
- 582 Fronto, Letters, book IV, letter 5-6, 114 AD, translated by M. Andrews in Fentress, Goodson & Maiuro 2016.
- 583 *CIL* X, 5909 (207 AD); this road is attributed to emperor Septimius Severus.
- 584 Villamagna Excavation report 2006 ; Fentress, Goodson & Maiuro 2016, 89 ff.
- 585 Fentress, Goodson & Maiuro 2016, 193
- 586 Villamagna Excavation report 2007, 2008 and 2010; Fentress, Goodson & Maiuro 2016, 196 ff.
- 587 Villamagna Excavation report 2009; Fentress, Goodson & Maiuro 2016, 231 ff.
- 588 Monti 1995, 65
- 589 A factor in this may have been the underrepresentation of ARSW in the original sampling. De Haas pers.com.
- 590 Federica Colaiacomo, scholar connected to the museum of Segni, pers.com.
- 591 Zanini 1998, 270
- 592 Villamagna Excavation report 2010 ; Fentress, Goodson & Maiuro 2016, 193. This building would last until the construction of the Romanesque church.
- 593 Probably during the reign of Justinian. Dating provided by coins, ARSW and amphorae. Villamagna Excavation report 2010

- 594 Villamagna Excavation report 2010; Fentress, Goodson & Maiuro 2016, 196 ff. Little numismatic or pottery evidence has been found at Villamagna between 470 and 550.
- 595 Coins of Justinian have been found at site D, Villamagna Excavation report 2010; Fentress, Goodson & Maiuro 2016, 146
- 596 The 6th/7th century sunken-floor structures of Villamagna may be of Lombard origin as close parallels are found in northern Italy, where Lombard presence was more apparent than along the Sacco Valley. A short Lombard occupation of the site could not be ruled out. However, the structures are impossible to definitively attribute to Lombards, as no evidently Lombard material was found at Villamagna, Fentress, Goodson & Maiuro 2016, 259
- 597 Fentress, Goodson & Maiuro 2016, 257; The building of site D, possibly a barracks, was reoccupied in the late 4th, until the middle of the 5th century. During the assumed abandonment phase of Villamagna (470-550), the barracks collapsed, Villamagna Excavation report 2009 and 2010.
- 598 Villamagna Excavation report 2007 and 2010
- 599 Zanini 1998, 270, who referred to the writer George of Cyprus.
- 600 Pers. comm. Marco Maiuro
- 601 See above, 7.I.1.9.1; *CIL* X, 5909 (207 AD).
- 602 Villamagna Excavation report 2010. Fentress, Goodson & Maiuro 2016, 254
- 603 Corsi 2007, map
- 604 Fentress, Goodson & Maiuro 2016, 193
- 605 Duchesne 1892
- 606 Bianchini 1972, 11
- 607 See 2.I.13.
- 608 Benigni 1912 [Catholic encyclopaedia online, accessed April 23 2010]
- 609 Villamagna Excavation report 2007 and 2010; Fentress, Goodson & Maiuro 2016, 235 ff.
- 610 See also 7.I.2.2.2 Theme: defensive measures and strategies.
- 611 Fentress, Goodson & Maiuro 2016, 259
- 612 *Liber Pontificalis* Life 44.17 (Stephanus II), Davis 2007, 59
- 613 See also 7.I.2.2.2 Theme: defensive measures and strategies.
- 614 For example M. R. de La Blanchère 1884. Terracine. Essai d'histoire locale, *Bibliothèque des Écoles françaises d'Athènes et de Rome* 34, 1-218; Bianchini 1952; Rech 1989; for an overview of the late Antique historical record on Terracina, see Bonanni 2000.
- 615 For example U. Broccoli 1982. Memorie paleocristiane nel territorio di Terracina: la Valle dei Santi come continuità di vita rurale dell'atichità al medio evo, in: *Il paleocristiano nel Lazio costiero meridionale. Formia 3-4 maggio 1980*, 221-249; A. Bianchini, 1972. *Notizie sulla diocesi di Terracina e descrizione delle chiese della città*, Priverno
- 616 For example L. Rossini 1846. Scavi di Terracina, *Bullinst* X, 145-146; B. Conticello 1966. Scavi a Terracina nel foro Emiliano, *Archeologia* IV, 22, 71-72 and B. Conticello 1967. L'antica Terracina risorge, *Le vie d'Italia*, LXXIII 3, 329-337.
- 617 Christie and Rushworth 1988, Christie 2006.
- 618 An exception is the book by the Comune di Terracina, published in 1983: *La valle di Terracina dall'età romana al medioevo. Ricerca e documentazione di testimonianze archeologiche*.
- 619 Lugli 1926. In the framework of the RPC study, these sites have been renumbered as RPC sites; I use both the RPC and Lugli listings in my database.
- 620 Lugli 1926
- 621 Cancellieri 1987
- 622 Bianchini 1972, 9
- 623 See below here, *Diachronic trends*.
- 624 See 7.I.1.10.4.
- 625 Carbonara & Messineo 1998, 100
- 626 The dedication of the sanctuary on Monte S. Angelo is still undecided; while a small structure in the complex was possibly devoted to Feronia, earlier research has assigned the main temple to both Jupiter Anxur and Venus, Carbonara & Messineo 1998, 117
- 627 I have chosen to incorporate these within the site of Terracina (OLIMsite 31) as these sites appear to have been part of (late) Roman town. This concerns the following mid-imperial sites with a possible date until 3rd century (with function, if known, and with the site number used in the RPC and Lugli database): rpc site 11410, Terracina Lugli TER III.66, (thermae?); rpc site 11180, Terracina Lugli TER III.36; rpc site 11406, Terracina Lugli TER III.62; rpc site 11193, Terracina Lugli TER III.49; rpc site 11188, Terracina Lugli, TER III.45; rpc site 11189, Terracina Lugli, TER III.46; rpc site 11412, Terracina Lugli TER III.68; rpc site 11152, Terracina Lugli, TER III.7; rpc site 11411, Terracina Lugli, TER III.67; rpc site 11181, Terracina Lugli TER III.37; rpc site 11423, Terracina Lugli, TER IV.77. Concerning 3rd or 4th century sites: rpc site 11156 73, nr III.11, a subterranean room or corridor; rpc site 11164 Lugli Terracina III.19, a house outside but close to town. Rpc site 11418, Terracina Lugli TER IV.73 is the port of Terracina, probably in use throughout late Antiquity and the early middle ages.
- 628 Lafon 2001, 370, fig. 95
- 629 In the current key area, a number of cisterns or water reservoirs is incorporated into the current database. This is because of the specific date given to these stand-alone cistern sites by Lugli. In other archaeological-topographical overviews, like the other *Forma Italiae* volumes, such cistern sites, without the context of a residential or production function, usually are not individually dated.
- 630 Lugli 1928, CIR II.39, 59; Carbonara & Messineo 1998, 9, 99. Now in the Antiquarium of Terracina.
- 631 Del Lungo 2001, 105. Traditionally the ruins of the sanctuary of Monte S. Angelo are called *Palazzo di Teodorico*; this attribution to the Ostrogoth King is all but certain and may be a high medieval anachronism.
- 632 Duchesne 1892
- 633 Lanzoni 1927, 154 ff.; the first solid evidence on a bishop dates to the middle of the 5th century.
- 634 Christie 2006, 202
- 635 Carbonara & Messineo 1998, 103
- 636 Carbonara & Messineo, 1998, 9 and 100. Here, the older wall layout was largely copied in the northern part of town, and partly in the southern.
- 637 Procopius mentions its garrison and its first-rate harbour: Procopius *Wars*, I.15.22, II.4.19-24, II.2.1-3 and II.5.4. Gregory the Great was the first to write about Terracina's *castrum* or *castellum*: *Registrum epistolarum* I.34, II.6, III.13-14.
- 638 Bianchini 1972, 9; The dating of the inscription is given by Bianchini without argumentation.
- 639 Bianchini 1952, 356
- 640 Christie 2006, 215

- 641 Cristina Corsi pers. comm., probably during the 9th century; Christie 2006, 133 and 217 proposed an earlier, 6th century, date for this conversion, which is now generally seen as too early.
- 642 Christie 2006, 215 and Ward-Perkins 1984, 184
- 643 Bianchini 1972, 24
- 644 Bianchini 1972, 24
- 645 Lugli 1926, 6, nr. I.5
- 646 Carbonara & Messineo 1998, 101
- 647 Cassiodorus *Variae* II.32 and 35
- 648 Bianchini 1952, 172, 7
- 649 Alessandri 2009, 474 ff.
- 650 Lugli 1926
- 651 Carbonara & Messineo 1998, 100.
- 652 More on the Austrian maps of 1851 as evidence for ancient land use see 5.IV, and 7.II.1.4.3.
- 653 Corsi 2007, 250
- 654 See 7.I.1.8.
- 655 See 7.I.1.7.5, *Discussion: Ceriara, emblematic for mixed ethnical contexts in 6th and 7th century inland south-eastern Lazio?*
- 656 See 7.I.1.7.5.
- 657 Bianchini 1972, 5
- 658 Bianchini 1972, 5 ff.
- 659 Bianchini 1972, 11
- 660 Gregory the Great *Registrum epistolarum* I.35
- 661 Lugli 1929, c. XIX
- 662 Brandizzi Vittucci 1998, 971
- 663 Christie 1989, 274; Nuzzo 2013, 594
- 664 Christie and Rushworth 1988; Christie 2006, 346
- 665 Christie and Rushworth 1988
- 666 Christie 2006, 346
- 667 See 7.I.2.2.2 Theme: defensive measures and strategies.
- 668 The western part of the Alban hills key area is a case in point, 7.I.1.1.6.
- 669 Amendolea 2004
- 670 De Franceschini 2005
- 671 La Regina 2001-2008
- 672 Venditti 2011, specifically page 15 on the state affairs in the research on inland villas vs. the coastal villas.
- 673 This is the explanation now given for the evidence on Interamna Lirenas and other sites of inner southern-most Lazio. For Interamna Lirenas see Hay et. al 2012, 608, Bellini *et al.* 2015, 590 and Launaro forthcoming.
- 674 Sallares 2002, 31; see also below in the evaluation of the next study period, 7.II.2.1.a, specifically the section *What does (dis) continuity of sites imply?*
- 675 See 2.II.3.2.
- 676 A key site with clear stratigraphy is necessary to effectively study local traditions and the connections with Rome. In the Farfa area, the discovery of a characteristic late 6th and early 7th century homogenous pottery assemblage at Casale San Donato was crucial. See paragraph 2.II.3.3.
- 677 See 6.II.
- 678 2.I.13. As discussed above in the key areas, the first recorded donations to the ecclesiastical institutions were done in the early 4th century by the largest testator of all: Emperor Constantine. Davis 2000, xxvii and xxix stresses that information concerning the donations by Constantine described in the *Liber Pontificalis* should be considered authentic. These actual donations may have inspired the 8th century forged imperial decree known as the Donation of Constantine. See also 3.II.2.
- 679 Indeed, from Constantine onwards the pope built up authority and economic interests in the countryside around Rome by acquiring many properties, all together called the *Patrimonium Petri*. See also 2.I.2 and 2.I.4. The growth of the pope's authority in terms of both religious matters and worldly ownership, ultimately cumulating into the Papal States of the 8th century is a complex subject. Its manifestation in the current research area is treated in detail in 7.II.2.2.1 Theme *The expansion of the patrimonium petri, and the creation of the Papal States.*
- 680 Conversion into a Christian cult place is often seen an intentional effort to prove the superiority of the new religion over the old gods. This intention, however, is difficult to establish. As Christie 2006, 132 pointed out, conversions from temple into church are often difficult to date. In Rome, this could only be securely proven from the 7th century onwards, for example at the Pantheon and S.Lorenzo in Miranda. Christie maintained that only by the 7th century the orders on preservation of old temples may have dissolved; at that time, the Church may have seized the opportunity to begin to make use of buildings formerly dedicated to the Greco-Roman gods. This may be different with market halls (*basilicae*), which are reported to have been converted into churches already in the 4th century, for example in Velletri and Trier.
- 681 Christie 2006, 133
- 682 Savignoni & Mengarelli 1901, 541 ff; Gizzi 2018
- 683 See Bakker 2009 website ostia-antica.org: Destruction of pagan monuments by Christians
- 684 Fentress et al 2009; Fentress, Goodson & Maiuro 2016, 193
- 685 While the development of Church administration within the cities is fairly well established, its formation in the countryside of the peninsula between the 4th and 8th century is hard to assess, Azzara 2002, 89 ff., see also 2.I.13. The current research area is no exception.
- 686 Marazzi 1998a, 48-51
- 687 Marazzi 1998a, 1 ff. According to Marazzi, these properties may be seen as outposts, used to build up authority in the countryside around Rome. It is difficult to comment on this idea. There are restrictions to what can be said about the way church possessions were managed. See also 6.I.2 Used definitions: *domus-culta, fundus* and *massa*.
- 688 See also 6.II. The database record *ecclesiastical possessions, authority and interests* is intended to get an overview of the early developing Christian institutions. It has a broader scope than the database record 'ecclesiastical interests', explored in the next two study periods. In the *possessions* record all evidence for the expanding Church is gathered, while 'ecclesiastical interests' merely focusses on signs of significance to or influence of a church institute of which the origin can be pinpointed. In comparison to 'ecclesiastical interests' record therefore, the *possessions* record holds functioning bishoprics and monasteries, and both sites that can be located and that cannot be located.
- 689 After Duchesne 1892 and Moroni 1844, 149 (on Fondi)
- 690 For some cemeteries, an early Christian phase has been presumed but not no clear date is given, see Appendix 6.2. The publication on the necropolis at Bufolareccia (OLIMsite 660) on the Via Appia does not mentioned Christian graves, Cassieri 2018, 35-37.

- 691 Azzara 2002, 91; On early Christian private churches in peripheral zones of rural estates see Fiocchi Nicolai 2017.
- 692 For an in-depth study of early Christian cemeteries in Lazio: Fiocchi Nicolai, V. 1988-2009 *I cimiteri paleocristiani del Lazio*, Volume 1 and 2.
- 693 Cf. Briogolo 1999, 103 and Cantino Wataghin 1996. See also below here the paragraph *The church as focal point in the changing landscape in the 4th to 6th century*.
- 694 See 7.I.1.1.
- 695 See 7.I.1.4.1
- 696 Except for the two (tentative) positions of OLIMsite122 and OLIMsite 124
- 697 See 2.I.13.
- 698 As explained in Chapter 3, the main reasons for the 4th to 8th century overrepresentation is the fact that we rely heavily on the *Liber Pontificalis*, which provides less information on properties and foundations from the middle of the 6th century onwards. Epigraphy and more detail in the *Liber Pontificalis* are responsible for the growth in the number of ecclesiastical sites in the 8th century.
- 699 See 2.I.13 A short introduction: The Christian organisation of the late Antique to high medieval Italian landscape.
- 700 This shall be discussed below in 7.II.2.2.1 *Theme: The expansion of the papal patrimonium and the creation of the Papal States*
- 701 Cf. Azzara 2002, 89 ff; Francovich & Hodges 2003, 57. See also 2.I.13.
- 702 In this analysis, the origin of expansion is not studied. It is feasible that much initiative in ecclesiastical expansion came from Rome: the papal court, monasteries and influential large churches. Likewise, there are sources that point to the influence of dioceses in the development of local parishes, like the influence of the diocese of Terracina in the developing Christian populations of the Lepine mountains. The building of many early Christian churches was initiated by local parishes and by the elite on their properties, motivated by display of status and private devotion, Azzara 2002, 90; see also 7.I.2.2.1 *Theme: expanding Christian activity throughout the landscape*.
- 703 See 2.I.13.
- 704 The unconvincing 6th and 7th century phases of monastic communities at Torre S.Anastasio (OLIMsite 75) and S.Maria della Sorresca (OLIMsite 128) provide the only evidence for Christian activity. The only early Christian source on the church/monastery of S.Maria della Sorresca dates to 591 AD; the next documented evidence dates to the 10th century.
- 705 See 2.I.2 and 2.I.13.
- 706 See 2.I.13.
- 707 See 7.I.1.1.1
- 708 Military insecurity as factor of abandonment of episcopal seats is historically well-documented, and made explicit in the transfer of the sees of Velletri and Tres Tabernae. See also 7.I.2.2.2 *Theme: defensive measures and strategies*.
- 709 See also 7.II.2.1 An evaluation of results, sources and methods used.
- 710 This church may be identified with the *ecclesia Sanctae Marie Seu Salvatoris* (OLIMsite 629), which was reported in the late 10th century, see 7.II.1.1.
- 711 This paragraph focusses on the 4th to 6th century. As shall be treated below, in later centuries churches also played a major role in the transformations of the landscape, acting as focal point of the continuity. This is dealt with in the next study period, see 7.II.2.2.5.a *Synthesis: observations on Tyrrhenian southern Lazio between the 7th and 10th century, The 7-8th century: churches as hubs for continuity*.
- 712 See 2.II.2.
- 713 In other regions of the peninsula, in the 5th and 6th century churches were built on (former) villa sites, cf. Bowes 2005. Some of these villas already had been deserted, or had been cut up to serve as a home for many families and acted as a kind of settlement; in that context, the churches must have had a certain amount of (local) public ecclesiastical use. The deserted villa of Marcellino in the Chianti region, which became a new habitational focal point for the surrounding area, is an example of churches on former villa sites.
- 714 Azzara 2002, 91
- 715 Francovich & Hodges 2003, 57. See also 2.I.13.
- 716 Brogiolo 2001, 199 ff.
- 717 Cf. Briogolo 1999, 103 and Cantino Wataghin 1996
- 718 As of yet, Astura settlement has not yielded any evidence for a church. In all likelihood, this has to do with the fact that only a fraction of the site has been studied.
- 719 Cf. Bowes 2005; see also below the paragraph on the reorganisation of sites. As noted above, Azzara 2002 made the same point for the 7th and 8th century: Referring not only to churches on villa sites, but to all rural churches, Azzara warned to be careful to read too much demographic patterns in the location of functioning churches in the 7th and 8th century: The building of many of these churches was initiated by elite members of society, on their properties, motivated by display of status and private devotion and the potential for new donations, not the need of the community in the area surrounding the churches. It should be stipulated that generally, patterns in late Antique and early medieval civic (non-ecclesiastic) elite activity are hard to establish from the current database. In other parts of the Italian countryside, their presence is somewhat better visible. In the Liri Valley for example, the rural elite is documented both in material culture and in the written record, cf. Hayes and Martini 1994, 43.
- 720 Cf. Christie 1989, 273 ff.
- 721 Francovich & Hodges 2003, 107
- 722 Francovich & Hodges 2003, 53. On Byzantine fortification on strategic points like passes, river-crossings etcetera, see Christie 1989, 273 ff.
- 723 This overview of defensive activities is confined to the 5th to 7th century. Earlier defensive activities in our research area have not been recorded yet. The 8th century and later is left out of the equation here as the geo-political situation by then seems to have become more stable than during the phase of disintegration and insecurity of the 5th and 6th centuries. New forces enter the arena from the middle of the 6th century onwards, creating some kind of prolonged but vulnerable security in Tyrrhenian southern Lazio (and Rome): Byzantines, Carolingians and the papacy on the rise.
- 724 Christie 2006, 365. As Christie pointed out, Byzantine sources, among others Cassiodorus and Procopius, seem to indicate that within the well militarized landscape of Italy in the 5th to 7th century, the south of Italy seemed less well equipped with fortified towns and fortifications than the north: in Campania, only Cumae and Naples were fortified in these centuries.
- 725 The exact function of the site in this phase is unknown. It seems that the Roman lighthouse was redone or a fortress was built (or both), see also 7.I.1.1.

- 726 Rossi 1973, 147
- 727 See 2.II.2.1.
- 728 Galeazzi 2008
- 729 Duchesne 1892
- 730 Procopius *Wars*, II.7
- 731 Zanini 1998, 270, who referred to the writer George of Cyprus.
- 732 Fentress, Goodson & Maiuro 2016, 257
- 733 Villamagna Excavation report 2007 and 2010; Fentress, Goodson & Maiuro 2016, 234 ff.
- 734 Pers.comm Marco Maiuro
- 735 Villamagna Excavation report 2010; Fentress, Goodson & Maiuro 2016, 259. For the discussion see the northern Lepine Mountains – Sacco key area, 7.I.1.9.1.
- 736 Two (possible) attack on Ostia Antica have been recorded: the Vandals may have plundered the town in 455, see 7.I.2.2.2.a; The Goths may have besieged the town in 537.
- 737 Bakker & Heres, Website Ostia Antica [Accessed 26 April 2009]: introduction
- 738 The only archaeological proof of Byzantine presence in the Ostian area is the Byzantine influenced pottery at Pianabella; these are traded goods. Comparable pots have been found at Crypta Balbi, Paroli 1993, 164; see below 7-10th century. Procopius recurrently referred to the town as *the harbour of the Romans*, Procopius *Wars*, VI.4, VI.5. and VI.7. Moreover, the 5th or 6th century fortification of the theatre is likely an *ad hoc* effort, not a part of a wide scale military strategy.
- 739 See 7.I.1.4.1.
- 740 See 7.I.1.4.1. Later, during *incastellamento*, this would be the location of several *castra*.
- 741 I have plotted Civitana as well, a Roman fortified settlement, although there are no actual historical or archaeological indications for activity on this site in these centuries; some, however, have suggested that the see of Velletri and Tres Tabernae was transferred here, or protected from this location; Cf. Ployer Mione 1995, 52
- 742 As Christie points out, the use of old fortresses was common for the Byzantines, Christie 1989, 273 ff. Sites with old standing walls which may have still functioned as defensive measure in the 5th to 7th century are Sezze (OLIMsite 7), Norba (plateau)-Civita (OLIMsite 23), Privernum (OLIMsite 25), Cori (OLIMsite 27), Terracina (31), Fondi (50), Lanuvio, Civita Lavinia (84), Castra Albana (155), Segni (266), Ardea (275), Ostia Antica (392), Civitana (573).
- I have chosen to focus here on Roman republican and imperial fortified settlements, and not to incorporate individual Roman strongholds, which also might have shown standing walls in these periods. These individual sites are rarely identified in the available literature, at least in the current research period. For Tyrrhenian southern Lazio, these are absent in the database. I have left out the Roman lighthouses from this list too: Torre Astura and the enigmatic At Turres Albas and Ad Turres, probably situated on the southern latial coast. Their defensive nature in Roman imperial times is unclear.
- Like elsewhere in our analysis of the database, we have to be aware of the factor of varying availability of primary data: the above listed fortified settlements are the ones which have caught the attention or scholars in the past. Others unfortunately await study, for example *Fabrateria Vetus – Ceccano* (OLIMsite 253). This settlement possibly was continuously settled until the 8th century, when it was occupied by the Lombards, as can be read in the *Liber Pontificalis* Life 44. However, its late Roman and medieval phase have not yet been the focus of study.
- 743 Exemplary is the reoccupied site of **Norba (plateau)** of the 6th century (OLIMsite 23). The inhabitants of this site might have used the old *colonia* fortification as a stronghold; concrete proof however lacks, for a fortified nature of the site at that moment in time.
- 744 Many of the “sacks” of specific towns and villages are inferred from very generic historical accounts on events taking place in large geographical areas. They have been introduced in local literature and never verified since then. For example, the nowadays much echoed story of Totila’s attack on Cori can only be found in the sub-recent local historiography *Memorie storiche dell’antichissima città di Cori* (by S.Viola, 1825). See also the discussion on local traditions of Saracene attacks, 7.II.2.2.2.
- 745 Cf. Corsi 2007, p 251 ff.
- 746 See 2.I.5.
- 747 See 2.I.2
- 748 Severini 2001, 58 suggested that the Roman structures on the hill top of Genzano were reused in late Antiquity by the population of the nearby plain, for reasons of insecurity. No concrete evidence for this reuse is available.
- 749 Christie 2006, 365. See also 7.I.2.2.2.a
- 750 Augenti 2016, 94
- 751 Christie 1989, 273
- 752 Mauri 2007, 47
- 753 In *opus vittatum*, with rectangular towers. In this bolstering effort, the classical plan was largely copied in the northern part of town, and partly in the southern, cf. Carbonara & Messineo 1998, 9 and 103.
- 754 Christie 1989
- 755 As has been treated in Chapter 2, these were the years in which fundamental ecclesiastical institutions, like dioceses, became definitively established. The pope more and more gained control over the church in the 5th and 6th century, see 2.I.13.
- 756 The fact that many of the higher clerics stemmed from aristocratic families, helped them in this task, in their political duties in particular.
- 757 See above here in 7.I.2.2.2.a
- 758 I have chosen to use the word redistribution in the header of this theme, rather than the often used word exchange. Redistribution is the neutral term used by Horden and Purcell “for all process by which goods change hand, of which the more commercial forms of exchange are only a subset”, Horden & Purcell 2000, 607. Without further specification such as an adjective, the terms redistribution and exchange as used in this text, however, should be seen as synonymous.
- 759 See the Evaluation, 7.I.2.1.
- 760 Attema, De Haas & Tol 2009, 84
- 761 Such research should incorporate surveys over large coherent areas, a study of (local) wares, production facilities, local infrastructure and building techniques. Availability for survey partly explains the current state of research: in the Ostia and Nettuno area, much of the hinterland of the coastal villas cannot be studied because of the current economic uses of the areas.
- 762 For continued Mediterranean exchange see 8.I.2.2.
- 763 See also 7.I.2.2.4.b
- 764 See the evaluation of 7.I.2.1, specifically the paragraph *dependence on imported pottery and heuristics*.
- 765 Fentress, Goodson & Maiuro 2016, 242 ff, Attema 2018, 764

- 766 Leotta & Rinnaudo 2015, 566
- 767 See 7.I.1.4.3 and 7.I.2.1
- 768 Cf. Francovich & Hodges 2003, 51; see also 2.II.2.1.
- 769 Ciarrochi 1995
- 770 The work done by the GIA is helpful; as has been discussed in the Evaluation (7.I.2.1) however, the lack of published modern archaeological studies in the hinterland of Rome creates a bias in the study of these imports.
- 771 See 7.I.1.1 and 7.I.1.4.
- 772 Francovich & Hodges 2003, 58
- 773 Wickham 1994, 106
- 774 7.I.2.1 An evaluation of results, sources and methods used
- 775 Arthur & Patterson 1994, 415: until the 5th century, ceramics were consumed in the same way on the countryside as in urban areas.
- 776 See 1.I.1; Molinari, Santangeli Valenzani & Spera 2016, specifically 5 ff. for an overview of the status quo and Rascaglia & Russo 2016.
- 777 Horden & Purcell 2000, 153
- 778 Patterson & Roberts 1998, see also 2.II.3.
- 779 Historical sources until the second half of the 5th century describe how grain was imported from Sardinia and Sicily, oil and pottery from northern Africa, and metals from Sardinia. From other parts of the peninsula wine and oil were attracted. Sidonius *Apollinaris Epistulae* I, 179, for example, describes how wheat and honey were imported from Brindisium. After a period of interrupted production for Rome (Vandals) in the late 5th and early 6th century, Sardinia and Sicily became available for the market of Rome again as the papacy gained extensive lands here. In the 7th century Egypt and large parts of Northern Africa were lost as production areas because of the conquests by the Islam.
- 780 Until the late 7th century. In the 8th most Crypta Balbi imports originate from Lazio itself and from southern Italy. See Crypta Balbi volumes, Arena *et al.* 2001, Vendittelli and Paroli 2004.
- 781 As it appears now, Rome and its hinterland saw fewer North African imports than for example Liguria until the seventh century, but significantly more than most other regions of Italy. For Rome see Crypta Balbi volumes and Moreland 1993, 97 (on the Farfa area and Southern Etruria). According to Hayes 1998 the middle of the 6th century saw the end of widespread ARSW imports in the hinterland of Rome, with some rare examples of local replacements.
- 782 In western Liguria (Ventimiglia and Albenga) African imports were abundant between 550 and 625. For an overview of earlier studies on Liguria see Christie 1989, 259, more recently Balzaretto 2013, 94 ff. Liguria was Byzantine ruled until 643.
- 783 See 7.I.1.3.3.
- 784 In the 6th century, the Ostian area seems to have lost out considerably as bulk harbour for Rome, as can be read in Procopius *Wars*, I.27.187-189. Procopius stated in 540 that the Via Ostiensis had been overgrown by woods, and that the Tiber had been deprived of its ships; it seems certain however that a road from Rome to Ostia must have continued to be used throughout the middle ages, possibly via an alternative tract. See also the study of the Ostia key area in the 7th to 10th century, 7.II.1.3.1.
- 785 Francovich & Hodges 2003, 51
- 786 Above in the Nettuno-Anzio key area 7.I.1.1
- 787 Costambeys 2000, 370; in the 6th century, the papacy acquired landed goods in Sicily and Calabria as well. Cf. also Hodges 1993 and Marazzi 1991
- 788 Costambeys 2000, 370
- 789 See 2.I.4.
- 790 See 2.I.4.
- 791 See 7.I.1.1.3. The assemblages on these sites contain ARSW, and southern Italian and eastern Mediterranean imports.
- 792 See 7.I.1.1.3.
- 793 The Byzantine led regions of Lazio, the Exarchate of Ravenna, Abruzzo, Naples, Calabria and Liguria were among the few regions dynamically engaged in Mediterranean exchange systems in the 6th and 7th century. Pottery evidence shows this. Francovich & Hodges 2003, 51; see also 2.II.2.
- 794 See 7.I.1.1.3. Outside of the current study area, the distribution of the *Samos cistern type* amphora may show the reality of such Byzantine dirigism in the 7th century: these amphorae, fabricated on Samos, are only found on large towns, and on smaller sites which seem to have played a role in a Byzantine political strategy, Arthur & Patterson 1994, 412; see also 7.I.1.1.3
- 795 See 7.I.1.7.3.
- 796 Veenman 2002, 124; see also 7.I.1.1.3.
- 797 Attema pers. comm.
- 798 See above 7.I.2.2.3.c and below 7.III.2.2.3.c2 Different strategies.
- 799 Francovich & Hodges 2003, 37 ff.
- 800 Moreland 2005, 932
- 801 For example in the Liri Valley: Hayes and Martini 1994, 46
- 802 The reorganisation of Villamagna site B (the old residential area) included the foundation of a *vinaria*. These reconstructions at the centre of the old estate were part of the general reoccupation of the site, after a phase of abandonment between 470 and 550. See 7.I.1.9.1.
- 803 Raaijmakers 2007, 90. A few spaces of the villa remained in use from the 4th century onwards. Three graves bear witness to this phase.
- 804 Next to serving the community of the redeveloped villas or a single landowner, a third type of church use on villa sites has been observed in other parts of Italy: Churches were also built on in already deserted villas. In these cases, the church may have served a purpose for the wider area, possibly a rural community.
- 805 As Bowes (2002) has shown, it is difficult to tell whether a church in a villa is private (elite) or public (for a community), and if the ties of the church to the see were strong.
- 806 In our study area, early Christian churches are observed on several other villa sites: in the 5th century at the villa of Pliny (probably dated to the 5th century), at S.Maria della Sorresca in the 6th century, and on the villa of S.Vito (possibly dated to the 7th century). The status of these, private or public, is unknown. Other villa sites on which an ecclesiastical building was found are the villa dei Ottavi and the villa of S.Cesareo near Velletri. Here parts of the villas were converted in a baptistery. Which congregation these baptisteries served is not known.
- 807 See below here 7.I.2.2.4.b New foci of activity in the landscape, 5. Churches
- 808 When I use the term village in this paragraph it should read village / town, and the other way around. For the differentiation between town and village, see the definitions of 6.I.2. and the discussion on the classification of Astura settlement as village or town in 7.I.1.1.1.

- 809 See 7.I.2.1.
- 810 The function of the rearranged villa of Satricum remains unclear, whether or not it was abandoned by its owners, losing its former function (as *villa rustica*?) and being reused for habitation of more families. Whatever the new status, in its new arrangement the site seems too small to speak of a village, i.e. providing living space for several families and facilitating a market function, cf. Raaijmakers 2007
- 811 Recent excavations, however, may show there was continuity until the 8th/9th century on the site of Piscina di Zaino, which has been identified with Tres Tabernae, see 7.I.1.8.1.
- 812 Arthur 1991, 158
- 813 Naples and Rome always were provided with good quality pottery, an indication of continued markets for these products; Arthur & Patterson 1994, 414.
- 814 Rutgers *et al.* 2008
- 815 The coastal villas in modern Nettuno also were equipped with a fish basin; their chronology unfortunately cannot be studied, see 7.I.1.1.1.
- 816 See 2.I.1; Christie 1996, 261
- 817 The *Codex Theodosianus* makes several references to highwayman roaming the countryside of Italy: 7.13.4; 7.18.10-15; 7.20.12. Already in 2nd century AD, Juvenal described the Pontine plain as infested with bands of highway robbers roamed about, *Juvenal* Sat III 305.
- 818 Transport and traffic over rivers in the study area has seen little study. There are no large rivers (except for the Tiber). In the Pontine plain, the course of the rivers in the plain and their transport capabilities are difficult to reconstruct. The drainage problems there must have made the rivers unreliable. The construction of the *decennovium* canal, used for both drainage and traffic is likely connected to these unfavourable natural circumstances. It did contribute, however, to the continued success of Terracina. The Astura river likely was a major factor in the growth of Astura settlement, from the 4th century onwards. Likewise the river Tiber influenced sustained activity at Ostia / Portus / (later) Gregoriopolis. Next to the *decennovium*, clear evidence for additional transport canals lacks: there are no archaeological signs of the Fossa Augusta, presumed to have been situated in the Pontine lake area. The Rio Martino was probably built for drainage. It is also not known if it ran all the way to the coast.
- 819 As the abundant evidence for maritime sea trade shows, see above 7.I.2.2.3.b3 Interregional trade networks in the study area.
- 820 **Ostia/Portus.** In the 4th and 5th century, Portus took over Ostia's role as main port for Rome, possibly because of the silting up of the harbour. At Ostia ARSW was imported until the 7th century. **Portus** remained a large economic main port until the 6th century, dwindled because of the collapsing economy and the attacks of the pillaging troops on their way to or from Rome. The Ostia/Portus area however, shows evidence of traded overseas goods until the 8th century.
- Antium.** The harbour of Antium may have ceased to function in the 6th or 7th century, as the historical sources and the imported ARSW seem to show; it is possible however, that the remaining piers saw continued activities (*domuscultae*, *opera saracinesca*, see below). It has been suggested that this is connected to the silting up of the harbour. Evidence for this idea lacks.
- Torre Astura/Astura settlement.** Torre Astura is the only safe haven on the long stretch northwards from Circeo until Antium; in all likelihood it continued to function throughout the middle ages: archaeological and historical evidence in combination is available for all centuries except for the 8th century.
- Terracina.** Although the archaeological evidence on this large harbour has not yet been published, historical sources document that the harbour of Terracina continued to function until the present day.
- Minturnae.** At Minturnae the silting up process of the harbour has been put forward as one of the main causes for the abandonment of the town in the 6th century.
- 821 The bias of availability of traded goods has to be taken into account as well, 7.I.2.1 An evaluation of results, sources and methods used, 2. dependence on imported pottery and heuristics. Appreciating this bias, road and seaside locations still clearly stand out as focal point of continuity for trade and (local) economy, defensive activities and the development of the Church.
- 822 See the Evaluation, 7.I.2.1.
- 823 On the other hand, the inland area, away from the direct road to and from Ostia, cannot be studied. For this reason, the correlation between nearness of the town - road and continued activity cannot be fully studied here.
- 824 See 7.I.2.2.3.a Local economic activity, 3rd-7th century: villa estates
- 825 See 7.I.2.1 An evaluation of results, sources and methods used, 2. dependence on imported pottery and heuristics.
- 826 The Theme focusses on the numbers and locations of early churches, this part focusses on the church as hub for the ecclesiastical and demographic reorganisation within the landscape.
- 827 See 7.I.2.2.1 Theme: expanding Christian activity throughout the landscape.
- 828 Cf. among others Linoli 2005, 32.
- 829 Moreland 2005, 932.

7.II The 7th to the 10th century

The descriptions of the main developments of the current study period in the 10 defined key areas are numbered 7.II.1.1 to 7.II.1.10. In 7.II.2 the analysis and conclusions for the whole research area regarding this study period will be treated.

7.II.1 *The key areas throughout the 7th to 10th century*

Like in sections 7.I and 7.III, the analysis of the current study period starts off with the best documented key area: the Nettuno-Anzio key area.

7.II.1.1 The Nettuno-Anzio area, from the 7th to the 10th century

7.II.1.1.1 *General site distribution: monitoring of (change in) human activity*

The 7th and 8th century: little archaeological evidence, written sources on domuscultae (figure 7.50)

As was discussed in the section on the previous study period, the number of sites in the Nettuno –Anzio key area slowly decreased until the 7th century. The available archaeological evidence paints a picture of at least two areas of continued activity into that century: **Torre Astura - Astura settlement** and the area **Antium - La Selciatella**. Although decline had set in from the 4th century onwards,

and the see was abandoned in the 5th century, the town of **Antium** had consolidated its primary position in the settlement pattern as focal point for habitation and production until the 6th century. From that century onwards, things become less clear in this town of former imperial patronage. The 7th century provides only indirect evidence of possible continued activity in Antium through the Selciatella sites, whose chronology over the previous centuries had been consistent with the activity in the town. The **Astura settlement** (OLIMsite 33) provides the only clear 7th century archaeological evidence for a functioning settlement in this key area, be it with activity on a much lower level than before; by then the settlement was acting within a local economy, in sharp contrast to its earlier role as node in trade routes that connected with much of the Mediterranean.

At the site of **Torre Astura** (OLIMsite 64), the ARSW evidence is not conclusive for the 7th century¹, while the 8th century here is absent in the database. Continued activity in this period and beyond however, is likely, considering the continuous accessibility of the large harbour, with its protecting piers still present², and the potential of the site for pisciculture³. It is plausible that the Byzantines made use of this harbour on route from Rome towards the motherland in the east, because of its strategic location, size and protective nature against the strong winds; it is the only large safe haven on the long stretch of coast to Circeo and Terracina⁴. Earlier, their interest in the Astura

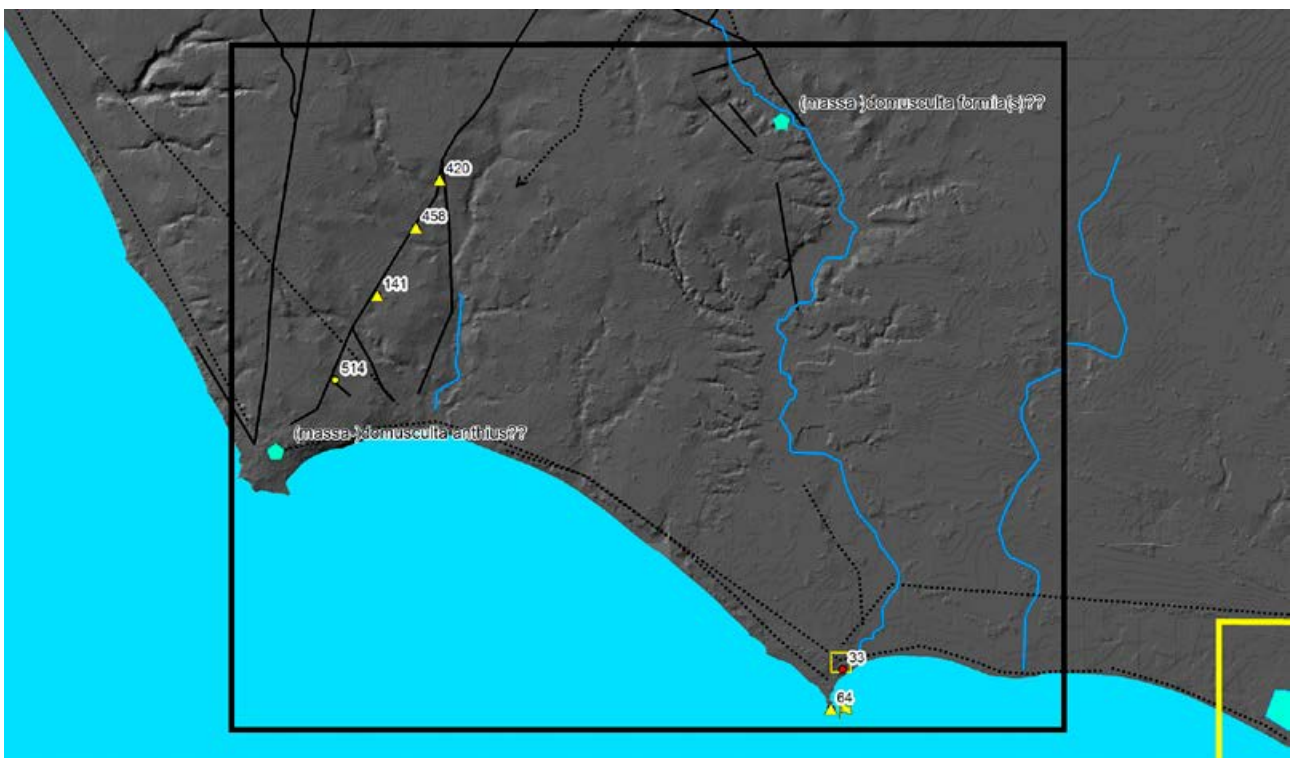


Figure 7.50. Nettuno-Anzio key area in the 7th and 8th century. A red symbol is a certain securely dated site, a yellow symbol a possibly functioning site. Triangles are villa sites; a square denotes a village, red certain, yellow possible. The blue pentagons denote the domuscultae; their exact size is unknown, but it is likely that they covered a considerable terrain.

promontory seems to appear from the Byzantine influence in the rebuilding of the Roman lighthouse, dated to the 6th or 7th century⁵. The harbour was reported in 1166 on a navigation act of the coast between Genoa and Rome and surroundings⁶. It was probably used until the 17th century, when its role was taken over by the new large port of Nettuno.

Torre Astura is emblematic for the 8th century in this key area, which is archaeologically void. The road side villa sites, Astura settlement and Torre Astura all (temporarily) disappear from the archaeological radar. As was discussed in Chapter 1 and 2, this void may be explained by the actual absence of contemporary material culture, but also by the earlier difficulties in recognising it. The lack of published local archaeological studies does not help either. Future pottery studies should shed new light on this period; the potential and necessity of building new local pottery typologies is shown by the current study of the late Antique to high medieval pottery of Torre Astura, and the work done in the Ostia and Privernum key area, and outside the study area, in the Tiber Valley.

As material culture lacks, we totally rely on historical evidence for an idea of 8th activity in the Nettuno – Anzio key area. This written evidence is limited however: only the *Liber Pontificalis* refers to activity in our key area. This contrasts with other parts of central Italy, for example Sabina, where the archives of the large Farfa monastery hold written records on local subjects from the middle of the 8th century onwards.

The *Liber Pontificalis* testifies that the Nettuno - Anzio area became the founding ground for two *domuscultae*.

The *domuscultae* of Anthius and Formias

The *Liber Pontificalis* writes that Pope Zachary (741-752) founded two *domuscultae*, called *Ant(h)ius* and *Formias*: “by his efforts he acquired for St Peter’s ownership the estates (*massae*) called Anzio and Formiae; these he also established as a *domusculta*”⁷. Most scholars located both *domuscultae* in the wider area of Anzio – Nettuno.

In all probability, the *massa* / *domusculta* of Anthius (OLIMsite 107) was located near Anzio⁸. However, a specification for its position or size cannot be given. Maybe the *massa* Anthius is in some way connected to earlier (4th century) recorded ecclesiastical possession nearby, the *massa Urbana* (OLIMsite 79)⁹. This *massa*, likely located on or near the imperial *praedium* at Antium, was owned by the church of St. John in Laterano. The gap of four centuries however, is too large to make a solid case for such a connection¹⁰. In the 8th century as well, a *fundus Antinianus* (OLIMsite 612) is known from the written

sources; except the tentative morphological connection of the root of the toponym (OLIMtoponym 400) to Antium, there are no other clues to positively link this *fundus* to the territory¹¹.

Archaeologically, activity near Anzio during the existence of this *domusculta* is limited. We do not know if parts of the ancient town of **Antium** (OLIMsite 32) functioned as an estate (centre) within first the *massa* Anthius, and later, within the *domusculta* Anthius. As stressed earlier however, the lack of published excavations and modern pottery studies impedes a secure statement on Antium beyond the 6/7th century¹². In a general sense, the remains of the old town must have offered good quality building material for new activity, as seen elsewhere (Ostia, Privernum). Contemporary activity in this (former) town is feasible, as parts of the large protecting piers of the harbour of Antium were likely still available in the early to high middle ages¹³. The continued importance of the harbour area during the middle ages may be confirmed by the building of two fortified locations here, at the **villa of Nero** (OLIMsite 13) and **Torre di Capo d’Anzio** (OLIMsite 35). The latter is located just north of the western most pier of the old harbour. Here structures were built in so-called *opera saracinesca*, a term used for the common high medieval wall-building technique based on reused and cut up basalt or tuff blocks, broadly dated between the 9th and 13th century¹⁴. However, this wide date range does not allow an effective incorporation of these structures in the chronological analysis of activity for this, and the next study period. A connection between these structures and the *domusculta* of Anthius can therefore not be established.

The only (potentially) other contemporary material evidence close to Antium has been observed at **rpc 15036, Liboni 36** (OLIMsite 466). This evidence, however, consists of one possible 9th century coarse ware shard only¹⁵.

Locating the *massa* and *domusculta* **Formias** (OLIMsite 209) is less straightforward. The most probable setting of this estate is the Anzio hinterland. The most convincing argument for this is the fact that both the *domusculta* of Anthius (Anzio) and Formias are mentioned in the same sentence in the *Liber Pontificalis*, likely referring to the same geographical context¹⁶. Undeniably too, the toponymic root [form] is found in the name of the medieval **church of S.Pietro in Formis** (OLIMsite 278, OLIMtoponym 293) recorded in the written sources since the early 12th century and on historical maps depicting the Campomorto area¹⁷. Although the church certainly was located in the Campomorto area, the exact location of this church remains unclear.

Other scholars however, link this *domusculta* to environs of the ancient city of Formia, near Gaeta¹⁸. A strong argument against the location near Gaeta is the fact that

all other *domusculta* centres are situated near Rome, at a maximum of 34 km from the City. Formia is situated at a distance of 100 km from Rome. In addition, proximity of *domuscultae* to Rome makes sense, as their prime function is providing supplies for the city.

As the research of Chapter 4 shows, the location of a toponym can sometimes be established by a semantical-etymological analysis of the root; such a study can provide clues to the physical appearance and use of the area connected to the toponym, and thus help identify it. Two possible toponymic-semantical derivations exist for the root [formias] (OLIMtoponym 190 and 293, and possibly OLIMtoponym 171). The first is *formare*, “to canalise”¹⁹. If we go with the most likely hypothesis for the location of the *domusculta*, in the wider Anzio area, the noun *formare* may tentatively be connected to the drainage work in the area in former times called *Campomorto*. This area is located north-east of Borgo le Ferriere and has a well-documented (sub-recent) tradition in works for regulating the water flow²⁰.

The second possible derivation of [formias] is from the Latin noun *forma* (pl. *formae*), which can denote “tomb in the ground”²¹. Tombs complying with this connotation have been found in the wider area of Campomorto²². Specifically at Satricum (Borgo Le Ferriere) many Roman and medieval graves are known which may comply with the term *forma*²³.

Indeed, the semantic-toponymic background constitutes good circumstantial evidence for pinpointing the *domusculta* Formias in the wider Campomorto – Le Ferriere area. In 2002 the first archaeological evidence was found that may corroborate this hypothesis: during the excavations at Satricum by the UvA three Forum Ware (*ceramica a vetrina pesante*) shards were found. This pottery may also (cautiously) be given in evidence for a *domusculta* centre here. First of all, these specific fragments date to the right period, the 9th century²⁴. Secondly, evidence in northern Lazio shows that Forum Ware may be considered an indicator for rural sites involved in supply networks focussed on Rome, and often tied to the papacy, most prominent of which are a number of *domuscultae* centres²⁵.

To conclude: Although the evidence is mostly circumstantial, the combined archaeological, historical and retrospective evidence could be given in evidence for the identification of the site of Satricum as a centre of the *domusculta* Formias. The appearance of the site of Satricum, situated on an “open” and comparatively elevated position, reminds us of the *domusculta* site of Santa Cornelia²⁶ north of Rome. The Forum Ware pottery may show that the 8th century *domusculta* centre was still occupied in the 9th century.

The case however, is all but decided as we do not have good medieval stratigraphies on the site, nor do we have any evidence for storage and habitation, main features of the three *domusculta* sites north of Rome. The GIA surveys and pottery studies in the area do not show any evidence for contemporary occupation, except for the above noted **Liboni 36** (OLIMsite 466)²⁷. Future studies, preferably specific excavations on the site are needed to corroborate the hypothesis of Satricum as a *domusculta* centre: only this way we can verify if Satricum was inhabited in the late 8th and 9th century, and if contemporary storage facilities were available. Studies on the provenance of the pottery are required to see if there was a close economic link to Rome, a prerequisite of a *domusculta* site.

One site is an additional candidate for a centre of the *domusculta* Formias: the site of **Borgo Montello – Conca** (OLIMsite 277). With Satricum, it is the second natural prominent elevated position in the Astura basin. However, there are no indications for early medieval activity on the site; the first written documentation on this site probably dates to the late 10th century.

9th and 10th century: meagre historical and archaeological record (figure 7.51)

In the 9th century the written sources are silent on the Nettuno – Anzio key area. The *domuscultae* of Anthius and Formias (Satricum?) may have continued to function, as such estate centres elsewhere continued into the 9th century at least²⁸.

While the historical sources sit mum, the 9th century again shows some archaeological evidence, in the shape of pottery finds at **Torre Astura** (OLIMsite 64) and **Satricum** (OLIMsite 34), and possibly at **rpc site 15036** (OLIMsite 466). Likewise, the structures in *opera saracinesca* at **Torre S. Anastasio** (OLIMsite 75, immediately outside the Nettuno – Anzio key area), at the **villa of Nero** (OLIMsite 13) and at **Torre di Capo d’Anzio** (OLIMsite 35) may have had their origin in the 9th century (dated between the 9th and 13th century). These structures are possibly of defensive nature, in view of their location on the spot of (later) towers²⁹.

The fate of the town of **Antium** (OLIMsite 32) from the 7th century onwards is unknown. There is a strong research tradition stating that Antium had been abandoned only in the 9th century, as a result of the attacks of Saracens³⁰; it has been assumed Antium was abandoned in favour of a location near Nettuno, which would have been better suited as a refuge³¹. Generally, scholars stress the vulnerability of Antium³². The walls of cut-up basalt blocks (*opera saracinesca*) at the villa of Nero and at Torre di Capo d’Anzio have been presented as evidence for Saracen presence³³.

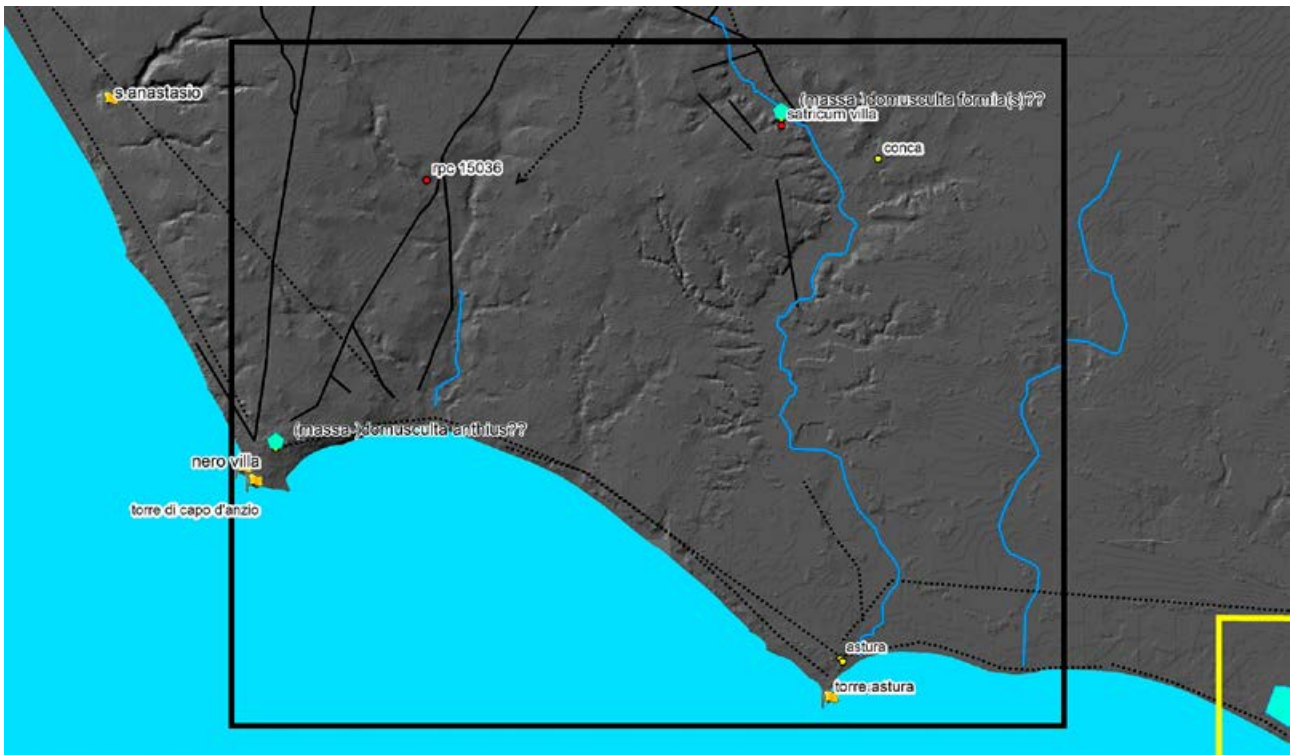


Figure 7.51. Nettuno-Anzio key area in the 9th and 10th century. The domusculitae are still depicted. The yellow flags depict fortified locations.

These ideas neither on continuity until the 9th century, nor on Saracen presence in Antium are borne out by the available archaeological and documentary evidence. Although continued activity here may be assumed (given the remains of the old harbour and the hypothetical presence of a *domusculita*), it cannot be substantiated³⁴. Demographic dislocation caused by the Saracen threat is not unthinkable, in view of the well-documented re-establishment of the community of Ostia at nearby Gregoriopolis and devastations at Farfa and S.Vincenzo al Volturno³⁵. The contemporary written sources, however, do not report incidents related to the Saracens in the area. Clear archaeological markers of devastation and abandonment, such as the fire patterns found at Farfa or Saracen arrow heads excavated at S.Vincenzo al Volturno, are absent as well. The term *opera saracinesca* is a sub-recent anachronism and there is no evidence this technique actually was influenced by Muslim builders. Besides, the broad date (9th to 13th century) of the *saracinesca* walls provides no evidence for (dis)continuity. Additionally, there is no sign of contemporary activity on present-day Nettuno (see below *Theories on the end of Antium and the origin of Nettuno*).

In sum, it remains unknown if and when the town and harbour of Antium were abandoned. The use of *opera saracinesca*, however, is proof of high medieval activity in that part of the town, near its harbour and on the site of Nero's villa.

While the 8th century is absent at **Torre Astura**, the 9th century again shows archaeological (pottery) evidence, be it very fragmentary³⁶. Torre Astura seems a good candidate for one of Charlemagne's "stationes et excubias" (stations and sentinels). The idea remains a long shot, as it is unclear what *usque Romam* means³⁷ and the source is not specific enough to specify any of these *stationes et excubias* along the Italian coast (figure 7.51).

Chapter 3 shows that the main bulk of high medieval historical sources on the currently studied part of southern Lazio becomes available from the late 10th century onwards. This is illustrated by the Nettuno – Anzio key area. The first high medieval text in this area dates to 987 AD, a bull of the monastery of S.Alessio all'Aventino featuring the wider Astura peninsula. A Count Benedictus and his wife Stefania donate their properties here to the monastery of S.Alessio³⁸: "Terris sementariis [...], in loco qui dicitur Astura, cum parietinis, in qua olim fuit ecclesia Sanctae Marie Seu Salvatoris [...]; et inter affines: ab uno latere mare sive pinetum et ab alio latere via publica secus fluvium de insula superscripti monasteri vestry [...] a tertio latere [not readable]...". Further on in the text: "Predicta namque terra sementaria [...], iuxta portum Asture, cum parietinis suis..."³⁹. This Benedictus may be Benedictus I Campaninus, who married Stephania Senatrix of Rome; she was member of the mighty Crescentii family, which dominated Roman politics in the second half of the 10th and first quarter of the

11th century. He died 1005 in Rome⁴⁰. The donated property consists of fields in the *loco Astura*, and of fields in the area of which the three borders are described. The text does not clarify if *loco Astura* and the bordered area are two separate properties, or if the *locus* is positioned within the described borders. A third property consists of lands near the *portum Asture*.

Careful reading of this record reveals (former) activity on three historical entities:

- “loco [...] Astura, cum parietinis”, translates as “the area/place Astura, with ruins”
- the “former” (“olim”) church of *ecclesia Sanctae Marie Seu Salvatoris*, which used to be located within the ruins of this *locus* called Astura.
- the harbour of Torre Astura and its ruins, “portum Asture, cum parietinis suis.”

The *loco Astura* is an area of undisclosed proportions around the mouth of the river Astura. There is circumstantial evidence to identify the ruins of this *locus* with the site of **Astura settlement** (OLIMsite 33), and the **ecclesia Sanctae Marie Seu Salvatoris** (OLIMsite 629) as an abandoned church within it:

- A first hint are the ruins itself (“cum parietinis”). Whether or not this means that the whole Astura settlement site was ruinous remains unclear; the fact is that with the current state of research the site of Astura settlement had been abandoned long before 987, or at least the (western) excavated part of the site⁴¹.
- Secondly, this *locus Astura* is not Torre Astura: the *portum Asture* is separately mentioned in this source, with its own ruins.
- Thirdly, the word *locus* in high medieval contexts may be translated as “settlement”⁴²; the other possible meaning is, more traditionally, “place / location / space”. Although the noun *locus* itself does not provide information on the site’s function, it leaves open the possibility of a settlement.
- And fourthly, the “inter affines” area topographically fits the (wider) Astura settlement site, despite the fact that the text on the third border is not readable: between the sea and pinewood forest of Torre Astura (still visible today) and the river delta⁴³.
- The former church to S.Mary seems to have been located within the mentioned ruins: “in qua” can only refer to the “parietinis” (feminine noun). Indeed, it is certain that Astura settlement had a church at one point in time; this has not yet been found. The use of the word *olim* may refer to the ruinous state of both the church and the Astura settlement. This is the only reference to a church with this name in the area, although the toponym (OLIMtoponym 21) may

be connected to the *Isola di S.Maria*, depicted on a 16th century map⁴⁴.

All things considered is it plausible that ruins (“parietinis”) of “loco Astura” describe the ruins of the Astura settlement site, as visible at that point in time. Without a doubt the remains of this village must still have been visible in the late 10th century. If indeed the “loco Astura” matches (the wider area of) Astura settlement, it is most likely that the site had been abandoned. Nothing in the text suggests a functioning settlement or community. A church is explicitly mentioned as deserted, set within the ruins. In that case, *locus* should translate as “place”. We should, however, not rule out the possibility of some kind of contracted settlement, i.e. *locus* as “settlement”. Ostia and Privernum show that concentrated activity in parts of ruinous areas is not uncommon in medieval Tyrrhenian southern Lazio.

The archaeology of the Astura settlement site as of yet lacks 8th to 10th century contexts. This may be caused by the fact that the study of the western section only gives us a small window on this sizeable site. This section displays only distorted layers with very little useful stratigraphy. All things considered, there is much reason to excavate other sections of the site. Questions that could be addressed during the excavation are: Is there 8th to 10th century evidence in other parts of the site and does this point to a permanent continued (contracted) settlement, maybe around the church of *ecclesia Sanctae Marie Seu Salvatoris*⁴⁵, or, for example, ad hoc use of available building material. Is there evidence for Byzantine material culture? If there is no 8th to 10th century evidence, can more be said about the reasons for the abandonment of the site, like a gradual marginalisation, as the current pottery evidence seems to indicate? Is there evidence for an early medieval church, possibly to S.Mary, and when was it abandoned? Was there a high medieval successor to this church, connected to the next phase of occupation of Astura, from the 11th or 12th century onwards?

The 987 source also names the harbour of **Torre Astura** (OLIMsite 64): “portum Asture”. The word *portum* suggests the active use of the harbour in this period. There is another documented late 10th event in which the harbour of Torre Astura may have played a part: In the last quarter of the 10th century, anti-Pope John XVI is said to have fled from Rome, being pursued by the troops of the Holy Roman Empire. At Torre Astura he supposedly waited for Byzantine-Greek forces to rescue him; he was however captured⁴⁶. These two 10th century sources suggest an operational harbour, which it probably was, in view of the earlier discussed generic reasons for its continued use⁴⁷. There is no archaeological proof if the adjacent villa and lighthouse site were permanently occupied at that time.

The “parietinis” of “Portum Astura” may relate to each of them. The 10th century is absent in the Torre Astura pottery collection as of yet⁴⁸. The current tower dates to the 12th century.

A document dated to 988 may constitute the first reference to **Conca** (OLIMsite 277)⁴⁹. Conca can be identified with modern-day Borgo Montello. It would develop into a *castrum* in the 12th century.

Theories on the end of Antium and the origin of Nettuno

The Saracen hypothesis on the end of Antium has been linked to the foundation of Nettuno. It has been proposed that the population of Antium resettled near an ancient temple, situated on the spot of the *borgo medievale* of Nettuno. This temple, dedicated to Neptune, is said to have been used as a refuge; the toponym *Nettuno* (OLIMtoponym 23) became a permanent marker of the foundation of a settlement around the temple⁵⁰. Another local tradition states that Nettuno was founded in the 9th century by the Saracens themselves. The seemingly eastern nature of local costume, as reported by several 19th century travellers⁵¹, has been given in evidence for this idea. Nibby noted that the Nettuno costumes were similar to those at Naples and Ponza⁵². Both were Saracen strongholds for some time⁵³.

Both the “Saracene” hypotheses, the forced abandonment of Antium, and the foundation of Nettuno as a result of Saracen influence, fit into local traditions that we see in many parts of Italy. Regularly, Saracens have been adopted to give meaning to change in local histories⁵⁴. For many of these local legends and scholarly traditions however, evidence is scarce. While direct evidence for much local traditions lacks, the Saracen threat was a reality in many parts of Italy as is shown, not just historically but also archaeologically, in Ostia (Gregoriopolis), Rome, San Vincenzo and Farfa.

For the sake of argument, let us break down the local traditions on the events of the 9th and 10th century in the current key area. What actual proof do we have, and what evidence is missing, to corroborate or dismiss such theories on external influence, on (dis)continuity and inception of settlement? For this we should split up the arguments along the lines of reasoning:

- **incursions or demographic stimulus of Saracens in the area.** The danger of intrusions on this coast must have been real, given the documentary evidence for other parts of Italy in the 9th and early 10th century. In this key area however, actual incursions or even demographic reallocation for reasons of safety (as in

the case of Ostia – Gregoriopolis) remain undocumented.

- **coeval abandonment of Antium and foundation of Nettuno.** As noted above, in Antium neither continuity until the 9th century nor Saracen presence can be proven. Equally, there is no sign of contemporary activity in Nettuno. In the Liboni collection no pottery from Nettuno dates before the late middle ages.
- **the presence of a temple to Neptune.** On a positive note for the temple theory, there is historical evidence for the existence of a Roman temple near Nettuno, dedicated to Neptune. On the *ex antiqua pictura*, a 16th century copy of a 2nd century drawing of the cape of Antium, a temple of Neptune is depicted in the part of the picture closest to Nettuno. Likewise, the *spolia* of columns and sculptures used in the Borgo might originate from this temple. Lombardi records a number of four altars found, dedicated to Neptune⁵⁵. Therefore, a temple to Neptune may have existed in the area. There is no certainty however on its location and appearance.
- **the suitability of this temple as a refuge.** The topographical rationale for a settlement on a temple building, possibly at the mouth of Loricina stream (Nettuno), is unclear: it is doubtful if the remains of a temple, and this particular location, would be a better location to make a stand against intruders than the vestiges of a town. What is more: this temple may have had collapsed in the 9th century, unless it had been given a new purpose previously, for instance as a church (as in Terracina) or a stronghold (as at Picco di Circe, OLIMsite 41).
- **an etymological link of the toponym Nettuno to this temple.** There is no conclusive etymological link of the toponym *Nettuno* to Neptune, the God of the sea, as there are three possible semantical-topographical origins for the toponym. Moreover, tracing the root of the town name is complicated by the fact that there are different early root variants of the toponym, [Ne(p)tun], [Lettun] and [Noctun] (OLIMtoponym 23)⁵⁶.
- **the nature of local costume as proof for Saracen presence.** Indeed, eastern influence on local dress has been convincingly demonstrated by 19th century scholars, who had a sharp eye for ethnological detail (Lombardi 1847 and Nibby 1848). Moorish elements in costumes seem to have common on the Italian coast (Amalfi, Gaeta, Naples, Salerno and Venice) until the first half of the 20th century⁵⁷. This is no surprise, given the long period of Muslim presence in southern Italy, and their dominance of the seas, between the start of their conquest in the 9th century

until their eviction from Sicily in 1061. Moorish inspired costumes themselves, however, are no proof for actual occupation, i.e. of Saracene founders of Nettuno. Not all areas with Moorish cultural influences, costume, but also architecture, were once occupied by the Saracens, as can be seen in Venice⁵⁸. Moorish influence in Nettuno may have come from nearby Ponza, a former Saracen stronghold. After all, the Anzio-Nettuno key area and its harbours constitute the mainland area closest to the Pontine Islands of which Ponza is a part. Nowadays Anzio is the prime hub for the supply of this island group.

To conclude: The evidence for a 9th century population transfer from Antium to Nettuno is insubstantial. There is little evidence, and no obvious rationale backing this hypothesis. The most urgent lacuna in the Saracen hypothesis is the lack of proof for an abandonment of Antium in the 9th century and for activity in that period in Nettuno. Saracen culture likely had influence in this coastal area during their presence in southern Italy, as in many coastal parts of Italy. It is possible that the town of Nettuno got its name from a temple that once stood nearby. The actual survival of the temple until the 9th century remains unsubstantiated, and its usefulness as a shelter is doubtful.

The available evidence suggests that **Nettuno** started off as a *castrum* somewhere in the high middle ages. This fortified settlement would eventually evolve into the medieval *borgo*. Several authors dated this *castrum* to the 10th century. The main argument for a 10th century origin of the *castrum* is the analogy with Northern Lazio, where during the *incastellamento* process many castles were built from that century onwards. The archaeological and historical proof to substantiate this 10th century date is absent⁵⁹. The first secure documents referring to the toponym *Nettuno* dates to the first half of the 12th century. A letter by Tolomeus of Tusculum is the first to mention the *castrum Neptuni* (1126 AD)⁶⁰.

In contrast to several other key areas, and especially to the regions north and east of the current study area, the Nettuno – Anzio key area seem not to have been involved in the first wave of *castra* of the *incastellamento* process. The second *castrum* in this key area, Conca (Borgo Montello), was founded in the 12th century as well. The closest early *castrum* can be found north of the key area, at Casale Buonriposo. Here *castrum Nave* (OLIMsite 90) and the adjacent small monastery *S.Maria de Veprosa* (*cella*) were functioning as early as the late 10th century⁶¹. It is feasible that the monastery of S.Alessio (owner of the grounds) and possibly the Crescentii family were involved in the *incastellamento* project here. More on

incastellamento in the Anzio-Nettuno key area in the next study period.

7.II.1.1.2 Infrastructure

As explained in the introduction to this chapter, all main three dating categories of roads (Roman, high medieval and of unspecified date) are plotted for the current period, as one cannot be sure when “Roman” roads ceased to be used, or exactly when tracts which are dated as “high medieval” began to be frequented. Compared to the previous study period, two sections of roads could be added to the infrastructure map (figure 7.52):

1. The public road along the Astura river (OLIMinfra 109).

This public road is described in the 987 source as running from an island in the Astura towards the river delta. This “island” was probably shaped by the course of the river: a stretch of land that was clenched between the river Astura and one of its branches which ran more or less parallel for some distance⁶²; on historical maps such an *insula* in the Astura river is still visible, named *Isola di S.Maria* (16th century)⁶³ and *Isola del’Oro* (1851 maps)⁶⁴. No traces of this road have been found near Astura. Possibly it was connected northwards to the remains of Roman roads noted by De Rossi (1981), just south of Satricum (see figure 7.52)⁶⁵. Although the source says nothing about its trajectory along the river, I have plotted the road on the west bank of the Astura river. This is the most likely side given the location of the Astura area, and the fact that the eastern bank had larger off-branches and suffered more from seasonable swamping (cf. the pre-*bonifica* ONC maps and geological maps of the area)⁶⁶.

The length of the road is not described, but it is certain that such a public route continued far inland, towards one or several major settlements. For transport over shorter distances, the river Astura may have been used as well. Sevink has shown that, although the rivers and streams (Astura, Loricina and Moscarello) in the key area were not navigable for seaworthy ships, river transport on shallow-bottomed boats was possible⁶⁷. The harbour of Torre Astura⁶⁸ may have acted as a transfer harbour for both the carts and river boats in the 10th century.

Discussion:

continuous routes form the sea to inland areas?

The 10th century public road probably has a long history. An inland connection along the river Astura northwards may have existed in the 8th and 9th century, in view of the enduring harbour of Torre Astura and the *domusculta* activities in the area. It has been assumed that such a route existed since (pre)Roman times⁶⁹. The first concrete evidence is provided in 44 BC by Cicero, who wrote twice explicitly about a transfer from Astura to Tusculum,



Figure 7.52. Infrastructure in the Nettuno-Anzio key area, 7-10th century. The current course of the rivers is depicted. All roads, Roman, high medieval and of unspecified date are plotted. The high medieval Nettuno alternative of the Via Anziata – Nettunense (OLIMinfra 112) is depicted in red. The green dotted line is the road referred to in the 987 source, running along the river Astura (OLIMinfra 109).

passing by Lanuvium and Velletri⁷⁰; such transfer in all likelihood followed a tract along the Astura towards La Selciatella / Via Mactorina via the Campomorto area. The use of a direct route from Astura with the eastern Alban Hills (Velletri – Lanuvium) may have intensified during the heydays of Astura settlement, the 4th to 6th century AD, as discussed earlier⁷¹.

Regular traffic between the coast and Velletri and Lanuvium almost certainly was sustained throughout the middle ages. Velletri remained an important town, and although Lanuvium was reduced in the 7th century, it saw again (building) activities from the 9th century onwards⁷². Some of the medieval traffic on or along the Selciatella route may have consisted of transhumant groups: it is possible that the ancient transhumance route passing through the Velletri area towards the coast continued into the early middle ages and beyond⁷³.

The map of reconstructed infrastructure (figures 7.52 and 7.62) shows that the Campomorto area was a region through which many of the roads from the Nettuno – Anzio coastal zone to inland areas ran at some point during the current study period: the **Via Mactorina**, **La Selciatella** and the old Roman road **Campomorto area – Via Appia (Cisterna area)** (OLIMinfra 89). The first two roads possibly continued to be used during late Antiquity and the early medieval period, as noted above⁷⁴. This is probably also the case for the latter tract, as it is the

quickest route towards/from the Tyrrhenian coast for traffic on the **pedemontana** (OLIMinfra 1)⁷⁵. Traffic on the pedemontana in the early middle ages must have been busy, as it had become the new main inland route southwards. Another argument for a continued use of the road **Campomorto area – Via Appia (Cisterna area)** is found in ethnographic studies: an ancient transhumance route Liri – Amaseno valley – Pontine pedemontana – coast approximately may have followed this route. It is possible that this *tratturo* remained in use during the (early) middle ages⁷⁶. A last argument for a continued use of the road Campomorto area – Via Appia is the simultaneous acquisition by Pope Zachary of the *domuscultae* Anthius and Formias, and the **massa Normas** (OLIMsite 119 – almost certainly located on the Norba plateau) and **massa Nymphas** (OLIMsite 92, Ninfa). A correlation between both events has been stipulated in earlier research⁷⁷: with these acquisitions the papacy gained control of much of the northern Pontine plain. No straightforward rationale behind these synchronized acquisitions has been formulated yet. I believe the rationale may be found in a combination of logistical, strategic and economic reasons (see below on geo-politics). Whatever the case may be, it is likely that these papal possessions were linked by a direct route, i.e. the old Roman road **Campomorto area – Via Appia (Cisterna area)**. Whether this road was continued after the *domuscultae* had faded (in the 9th or 10th century) is unclear; it is probable however, that the

inhabitants of the town of **Cisterna** (OLIMsite 57), which began to flourish from the 10th century onwards, made use of this tract towards the coast⁷⁸.

These reflections on the use of infrastructure between Astura and inland areas remain hypotheses as concrete evidence for the use of any of the above-mentioned roads is absent between the 1st and 10th century, both historical and archaeological (for example similar pottery assemblages at Velletri and Astura settlement, contemporary sites along the roads). Moreover, part of the Campomorto / Astura basin area at some point in time may have seen drainage problems, as later historical maps seem to show⁷⁹.

2. The probable high medieval to sub-recent **Nettuno alternative of the Anziate – Nettunense** (OLIMinfra 112).

The Roman road connecting the imperial harbour town of Antium with the Via Appia, **Via Anziate – Nettunense** (OLIMinfra 88)⁸⁰, was furnished with a detour towards Nettuno in post-Roman times. This detour became necessary when the town began to thrive in the high middle ages⁸¹. Its route can be reconstructed. Starting point of this reconstruction is the premise that the road used the quickest route from the entrance of the *castrum*, the later *borgo di Nettuno*, northwards, as also De Rossi has proposed⁸². Undeniably such post-Roman route exists, as can be established in detail in the current street pattern of Nettuno and outside town in the secondary and

dirt roads (see figure 7.53): from the borgo the route starts with the Roman road to the La Selciatella (the “southern branch” mentioned earlier⁸³) along the current *Via S.Giacomo* and *Via Romana Antica*. Northwards of the crossing with *La Selciatella* (OLIMinfra 56), the curving tract is still very well readable in the modern street pattern. Certainly the route is high or late medieval from this position onwards: no Roman evidence (e.g. basalt blocks) has been found here⁸⁴, even though not much of its tract is built over or in use nowadays. This is in sharp contrast to the visible remains of Roman roads reported nearby, especially *La Selciatella* and its “southern branch”⁸⁵. The fact that the Roman roads uncovered in the area were constructed in more or less straight lines⁸⁶ is another argument for the post-Roman origin of the detour north of *La Selciatella*⁸⁷. A medieval tower of unknown date, now in ruins, has been reported on the crossing of the road with *La Selciatella*⁸⁸, showing that both the Nettuno alternative and this section of *La Selciatella* were used in the high middle ages (see below in this section). It would be interesting to study possible remains or old photographs of this tower, considering the importance of this intersection of the routes Nettuno - Rome and Antium/Nettuno – Lanuvium/Velletri. As has been noted, from this junction northwards the tract is clearly recognisable by its curves, contrasting sharply with the linear patterns of the modern roads. It follows the current *Via delle Cinque Giornate* and the *Via della Pineta*, and a dirt road further northwards towards the junction of the modern *Via*



Figure 7.53. The Nettuno alternative, crossing the modern *Via Nettunense*. In red the trajectory of the detour, as still visible in the current dirt road and street patterns. Source: Ortofoto digitali 2000.

Nettunense with the Strada Provinciale Padiglione. The northern part of the route is no longer visible in the current street pattern, but its ancient trajectory can be established by connecting the still visible (secondary and dirt) roads and field boundaries, and by some of its contours visible on aerial photos (figure 7.53). Conspicuously, the present eastern border between the *Comune di Nettuno* and *Anzio* runs exactly over the reconstructed route. At the time of establishment of the commune borders, therefore, the road must still have been visible or in use.

The trajectory of this detour of the **Nettuno alternative of the Anziate – Nettunense** is also visible on the geodetically precise 1851 maps, depicted as a cart road aligned by trees⁸⁹. In all likelihood, this Nettuno alternative constitutes the sharply curving southern trajectory of the Via Anziate / Nettunense as depicted on historical maps, such as on Ameti's map (1693, Map 36) as "Strada Romana di Nettuno"⁹⁰.

It is not known when the tract / detour was constructed. The shady founding history of Nettuno is no help in getting a date. There are no objective signs that Nettuno existed before the 12th century. According to Coste the Via Nettunense was already in use somewhere in the 11th century⁹¹. A further study of the medieval tower at the junction of La Selciatella and the Nettuno alternative may provide a *terminus ante quem* for the route.

We do not know if and when the Roman tract of the **Via Anziate – Nettunense** was abandoned, or came to occupy a lower position in the hierarchy of roads, thus disappearing from our view. In fact, because of the lack of physical evidence⁹², we are not sure at all about the trajectory of that Roman road, by most scholars reconstructed on top of or not far from the current (early 19th century) Via Nettunense (SS207)⁹³. What we do know is that the trajectory of the above discussed Nettuno alternative is continued northwards on the other side of the proposed Via Anziate (current SS207). From here it runs in a curving tract until somewhere in the Casale Buonriposo area. As it is doubtful that both roads were used simultaneously, this may show that at one point in time this curving trajectory replaced the straight line of the Roman road. Or, at least until the point where the Nettuno alternative reached the assumed tract of that Roman road (before modern-day Aprilia). Local abandonment of parts of the Roman tracts may also have occurred, as the Via Appia in the Pontine plain shows.

Whether or not the old Roman trajectory was used, or later the new Nettuno alternative, it can be assumed that the strategic cape of Antium and surroundings remained to be frequented from the inland areas, certainly if the

establishment of the *domuscultae* Anthius and Formias is a reality. Roads towards the Antium area from inland areas likely still or again were in use in the 10th century: the **monastery S.Maria de Veprosa and castrum Nave** (OLIMsite 90) at Buonriposo are described in late 10th century sources. These institutions must have required seaward connections (i.e. for the purpose of trade), and, simultaneously, a road towards the Appian road, which is the focal point of early *incastellamento* in Tyrrhenian southern Lazio. Traffic to the coast/harbours will have been maintained either through the ancient harbour of Antium or (later) the newly established town of Nettuno, using either the old Roman road and/or the Nettuno alternative. The fastest route to travel towards Rome for the lords of the castrum Nave will have been the "Via Satricana" (OLIMinfra 72), an ancient route now following the *Ardeatina moderna*, detouring from the Anziate near Monte Giove.

Other roads:

It is unknown if and when La Selciatella towards Lanuvio was cut off. It must have continued until at least the 7th century given the evidence on the villa sites⁹⁴. The fragmentary 9th century evidence on **Liboni 36** (OLIMsite 466) does not prove continued use. It is clear, however, that La Selciatella was not forgotten or completely buried in the 7th to 10th century: The discussed tower on the crossing of the **Nettuno alternative of the Anziate – Nettunense** and the 12/13th century phase of the **Torre del Monumento** (OLIMsite 576) shows that this section of La Selciatella was used in the high middle ages; this was possibly true for the tract all the way up to Lanuvio (see below 7.III.1.1.2).

There are no specifics on the fate of the "Via Mactorina" in the 7th to 10th century; in the 10th century however, the reference to a fundus Sole Luna seems to indicate that this site on the crossroads of the Via Appia with the Via Mactorina was still occupied (see Velletri key area, 7.II.1.4.1); this may indicate that the Mactorina was still frequented in that century. The route is still visible on historical maps (Ameti Map 36, 1693), heading from Velletri towards Nettuno.

At Nettuno the "southern branch" may have connected to a coastal road, possibly the enigmatic long-distance route **Via Severiana** (OLIMinfra 3). It is unclear if a long distance coastal route ran in this key area, but it is likely that a road from Antium – Nettuno towards the Astura area remained in use. The presence of a road from the current key area northwards towards Ostia is probable as well, as the Ostian coast shows many signs of continued vigour, at Tor Paterno, Ostia – Gregoriopolis and Pianabella.

Infrastructure and the *domuscultae* Anthius and Formias

The availability of good infrastructure was of the essence for *domuscultae*, not only for the effective transport supply of Rome, but also for the swift local movement of troops in view of their proposed purpose as bridgeheads for papal authority in the countryside. Undeniably, for all the suggested *domuscultae* sites, the local road infrastructure is intricate, enabling easy deployment of troops in the wider area around the proposed centres. Although only in theory a *domusculta* centre, Satricum indeed is strategically located, on a crossing of the river and at the cross point of roads towards the Alban Hills, the pedemontana and the coast.

It is possible that the harbours of Antium and Torre Astura played a role in the operation of the *domuscultae* of Anthius and Formias. To take this thought further: the choice of a relative remote location of these production estates may have been related to the presence of (remains of) these harbours. Let me begin to make my point, by painting the topographical picture: the *domuscultae* of Anthius and Formias are located furthest of all, as the crow flies roughly 50 km from the centre of Rome, a distance significantly larger from Rome than all others (see figure 7.54). The furthest *domusculta* centre north of Rome, Casale di San Donato, is situated 34 km from the City's centre (see figure 7.98). Unlike the established *domusculta* centres north of Rome and the suggested locations of the

domusculta centres in the current study areas, the road network of the Nettuno – Anzio key area towards Rome is not favourable: it can be reached through secondary roads only, none of which are securely mentioned in the ancient sources, i.e. the Via Anziante, the Via Satricana and the Via Severiana.

Additionally, the undulating landscape east and north of Ardea, intersected by many streams, makes a direct trajectory towards Rome impossible. The plausible land transport routes over the coastal Ardeatina (Vecchia, OLIMinfra 71)⁹⁵ or Via Severiana (OLIMinfra 4), or inland through the “Via Satricana” (OLIMinfra 72) or Via Anziante – Appia (OLIMinfra 88) take at least 3 km extra because of this natural barrier, allowing for the “normal” curving nature of roads. To continue my case: seen from Rome, the current key area is the first part, of the newly founded Papal States equipped with not one but two large harbours, capable of transporting bulk transports. Both harbours may still have been (partly) serviceable, with Torre Astura providing concrete (fragmentary) evidence for activity during the *domusculta* age (9th century). With bulk sea transport the papacy was less dependent on the maintenance of roads. At the time of foundation of the *domuscultae*, the Saracens did not yet pose a constant danger for sea transport.

Despite all these good arguments however, such line of reasoning remains a hypothesis until more concrete evidence for 8th and 9th century *domusculta* related activity

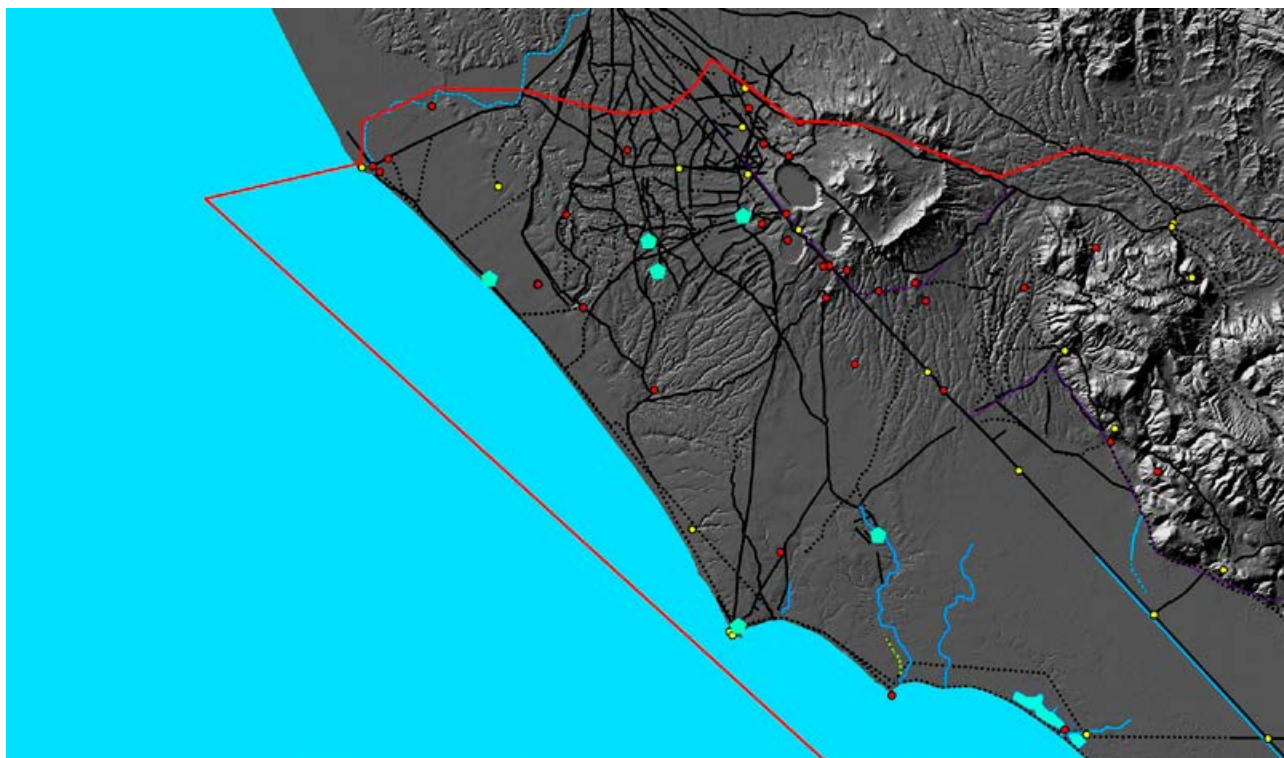


Figure 7.54. The assumed locations of *domuscultae*. The contours of the current research area are demarcated by a red line. The dots represent possible (yellow) and certain (red) sites in the 8th and 9th century.

is attested in the Nettuno – Anzio key area. Evidence for these activities at Antium or Torre Astura would back up the idea, evidence found along the inland roads mentioned would contradict it.

7.II.1.1.3 *Economy, production and trade*

As discussed earlier, the available archaeological data show that pan-Mediterranean trade on this part of the coast ceased in the 7th century, although we have to bear in mind that the lack of attention to late Antique early medieval (coarse) ware-typologies obscures our vision. The absence of 8th and 9th century overseas imports in this key area is corroborated by studies elsewhere. In central Italy, 8th century pottery finds from other parts of the Mediterranean are rare, on the coast⁹⁶, and in inland contexts, even in well studied sites such as that of Privernum; 8th century pottery finds are even rare in Rome⁹⁷.

Because of the Byzantine rule over Rome and rural southern Lazio, one would expect a good amount of Byzantine (eastern and southern Italian) imports in the 7th and 8th century. These imports however are all but absent in the archaeological record⁹⁸. As discussed earlier, this lack of Byzantine wares can be explained by two factors: less dissemination and less recognisability⁹⁹.

For the current study period, nothing can be added to the local economic activities earlier described for the late Roman period, such as lumbering, pisciculture and fishing¹⁰⁰. The beach ridges of the Astura valley had become more peripheral in the late Roman period, mostly being used for subsistence farming¹⁰¹. It can be assumed, therefore, that large parts of the valley were not intensively used in the early middle ages. This may have changed with the foundation of the *domuscultae*.

Domuscultae

Domuscultae are considered agricultural production annexes for the papal court and the city of Rome¹⁰². Like elsewhere, the *domuscultae* of Anthius and Formias do not offer information about their internal productive structures and administration. We do not know what was produced, except that the yields were meant for the populace of Rome. Parts of the Nettuno – Anzio area were suitable for specialised olive culture, especially the Astura Valley¹⁰³. Maybe agricultural (olive) production on the fertile Astura beach ridges was again picked up after their marginalisation in late Roman period. Grain would have been an important crop as well. And possibly *domuscul*a production not only entailed agricultural but also a typically coastal produce: fish. Transhumant activities may have contributed to the yields of the *domuscul*a estates.

Transhumance

The Nettuno – Anzio key area seems to have an important focus in pastoral strategies in Antiquity as the higher parts along the river Astura were among the most suitable for winter pasture in southern Lazio¹⁰⁴. Given the particular suitability of the Nettuno – Anzio area for winter pasture, it may be assumed that transhumant interchange with the inland mountains ranges continued during the middle ages. The marginal use (usually in the form of subsistence farming) of the lands in the Astura valley from the late Roman period must have meant that large parts of the valley were not intensively used. Local landowners (among others the Church), farmers and communities would gladly benefit from seasonal incoming groups, for example by letting out fields.

These notions must remain hypothetical as there are no contemporary records on transhumant pastoralism; we rely on the extrapolation of documented sub-recent transhumance and the research done on (pre-)Roman pastoral activities¹⁰⁵. Nothing concrete can be said about who may have let out and who rented, and how this was administered: there are no early medieval records on economic transactions or ownership in the area until the earlier discussed document of S.Alessio of 987, with the exception of the entries in the *Liber Pontificalis* on the 8th century ecclesiastical possessions (*massae*, *domuscultae*). Likewise, it is not known what kind of pastoral or rural strategies were used in the middle ages. It may be assumed that several kinds of local and regional (long-distance or short-distance) strategies coexisted, just as in Roman and sub-recent times¹⁰⁶.

7.II.1.1.4 *Religion and worship*

After the 6th century abandonment of the diocese of Antium there is no written or material evidence for early ecclesiastical activity in the Nettuno-Anzio key area. The 8th century papal acquisitions of two local *massae* and subsequent foundation of the *domuscultae* shows an increased, economically and geo-strategically motivated, interest in the area. Although one can be certain that *domuscultae* must have resulted in the erection of churches and chapels, signs of contemporary churches lack in the key area. The exception is the church of **Sanctae Marie Seu Salvatoris** (OLIMsite 629), which had been abandoned by the late 10th century and was probably located on the site of **Astura settlement** (OLIMsite 33). This church is featured on the above discussed bull of S.Alessio all'Aventino, which itself is a proof of monastic ownership of the Astura peninsula. Astura would remain a possession of S.Alessio all'Aventino from the 10th until 12th century, as recorded in the publications of the Società Romana di Storia Patria¹⁰⁷.

7.II.1.1.5 *Geo-politics: power relations, struggle and control strategies; secular activities*

As noted above, the possible “Byzantine” tower of Torre Astura is the only indication of the elsewhere attested progressive militarization of Byzantine Italy in the later 6th and 7th centuries¹⁰⁸, in which the Byzantines created strongpoints on strategic locations. The later diminishing of Byzantine power in the 8th century does not appear from the available evidence. The *domuscultae*, however, are an indirect pointer to the loss of Byzantine authority, as they represent the upcoming new power player in Lazio of the late 8th century and onwards: the papacy.

A correlation between the foundation of the *domuscultae* Anthius and Formias by Pope Zachary, and the simultaneous donation to the same pope of the *massa Normas* (OLIMsite 119 - almost certainly located on the Norba plateau) and *massa Nymphas* (OLIMsite 92, Ninfa) has been stipulated in earlier research¹⁰⁹. It seems no coincidence that the papacy simultaneously acquired these relatively closely situated estates. By doing so, the papacy secured control of much of the northern Pontine plain. No straightforward logic behind these synchronized acquisitions has been formulated yet. The rationale may be one or a combination of the following:

- logistical-administrative: collective management and transport of produce of both the *domuscultae* and *massae* – via the ports of Antium / Astura – is cost-effective.
- military-strategic: by acquiring these assets the papacy effectively ascertained control of the northern Pontine area and the traffic passing through it. Establishing papal authority is one of the assumed *raison d'être* of the *domuscultae*¹¹⁰.
- economic: The geographical location of the estates ensured that they controlled the winter pasture grounds on the higher parts of the coastal area and the pastoral routes towards them. Indeed, the area west of Latina is best suited for such activities in Tyrrhenian southern Lazio, as treated earlier. At least two ancient transhumance routes passed by these *massae* and *domuscultae*: the above described *tratturo* Liri valley – Amaseno valley – pedemontana - marine terraces of the current key area and the old pastoral route through the Lepine Mountains which entered the plain at Caracupa Valvisciolo near Norba (OLIMinfra 9)¹¹¹.

An early source on secular ownership in Tyrrhenian southern Lazio

Compared to other regions, Tyrrhenian southern Lazio is relatively poor as regards the availability of written sources in the 8th and 9th century; the absence of rural monasteries may be seen as the cause of this¹¹². From the 10th

century onwards, monasteries from Rome itself begin to register activities in the *suburbium* and in the areas further south and in the coastal areas. These documents record the possessions of these monasteries in the area and, less frequently, of the newly arising aristocracy. The above mentioned document of the monastery of S. Alessio all'Aventino (dated 987) is the first available written source on secular rural ownership in this part of southern Lazio after the Roman period and the third sign of secular ownership, after the donation of Fondi and Terracina to the Byzantines of Gaeta in 870 and the early 10th century respectively¹¹³. The document records that Count Benedictus and his wife Stefania donated their properties to the said monastery. Other contemporary sources usually describe a more or less reverse arrangement: ecclesiastical estates managed by local lords, for example in the early examples of *lord entrepreneurs* involved in *incastellamento* (for example castrum Vetus, OLIMsite 133)¹¹⁴.

***Domusculta* sites as bridgeheads for papal authority**

The evidence suggests that *domuscultae* were founded (or positioned) according to a strategy intended to secure papal authority in the countryside, besides their agricultural production focus¹¹⁵. The *domuscultae* centres north of Rome show us that such (defensive) strategy must have been focussed on creating bridgeheads (strategic locations) rather than strongholds (defendable centres) as these sites are located on strategic but not very well defendable locations. Although these sites were equipped with walls in the first half of the 9th century, they lack obvious defensive elements such as towers and ditches¹¹⁶. The two suggested locations of *domuscultae* centres in the current key area, Antium and Satricum, largely comply to this image of strategic location, and a lack of defensive qualities. Both were positioned on strategic spots which may have acted as a bridgehead: on infrastructural hubs (harbour at Antium, a cross points of roads at Satricum) and with a visual overview of the surroundings. Moreover, Satricum is strategically located on one of the few locations where the Astura river can be crossed, a confluence of streams¹¹⁷. Both sites are not known for their defensive qualities: the site of Satricum, like S. Cornelia, is situated on a stumpy acropolis in an “open” setting. The same holds true for Antium. The meagre defensive qualities of Antium have been discussed above (7.II.1.1.5). On the other hand, at Satricum, the *agger* of the 5-4th century BC, still present at the site until the 20th century, may still have had some defensive benefits.

Charlemagne's *stationes et excubias* on the Nettuno-Anzio coast?

It was suggested that the high medieval towers at S. Anastasio, Antium, Nettuno and Torre Astura started off as defended locations in Charlemagne's system of

“stationes et excubias” (stations and sentinels), as such being intended to defend strategical locations along the coast of Italy¹¹⁸. These posts at ports and river mouths were deemed to be a measure against the Saracene threat which was growing from the start of the 9th century. In this study, no new evidence for contemporary posts on these locations has been found. On the other hand, strong-points on some of these positions have been recorded later in the middle ages. Only at Torre Astura actual contemporary evidence was found¹¹⁹, but this is insufficient proof to claim that the site actually was used as Carolingian station or sentinel.

7.II.1.2 The Fogliano key area, from the 7th to the 10th century

7.II.1.2.1 General site distribution: monitoring of (change in) human activity

Archaeologically, the early and high middle ages in the Fogliano key area are obscure. The only finds recorded dating between the 7th and 10th century are a possible 7th century ARSW shard on villa site **rpc 10571** (OLIMsite 347), an unspecified 8th century relief with cross found on the south side of the Fogliano lake¹²⁰, 8th century sparse materials noted by Elter (1884)¹²¹ and 10/11th walls¹²² near Villa di Fogliano on the Fogliano lake¹²³ (see figure 7.55).

It may be assumed that the Fogliano key area in the middle ages, like earlier in the (pre)Roman era and in later times (until the *bonifica*), was less densely populated

and less intensively exploited than most other parts of Tyrrhenian southern Lazio. This assumption is based on the areas' relative remote position from Rome, and away from known long-distance infrastructure and well-documented continuous dynamic parts of Tyrrhenian southern Lazio, such as Ostia, Terracina and Velletri. The lack of evidence for large coastal villas may be seen as a sign of less intensive economic development of the area in the Roman period, compared for example to the Ostia and Nettuno area¹²⁴.

Having said this however, the near absence of material culture for the current study period may not only be related to the actual small population and low site density. The limited research history in the area seems responsible as well: the area has drawn only a few archaeological studies. For the early and high medieval periods, the lack of a local (museum) pottery collection is felt as well, certainly in comparison to the Nettuno-Anzio and Ostia key area.

The number of early and high medieval written sources recording activities in this area is limited, except for the second half of the 10th century. The first medieval text relating to the Fogliano area is the 8th century *episcopal canon 149*¹²⁶. This source refers to a “fundus Folianus” (713-715), which was part of the *Patrimonium Appiae*, the generic name for the papal possessions in the area south of Rome¹²⁷. Five *massae* belonged to this *fundus*. On the



Figure 7.55. 7th to 10th century Fogliano key area¹²⁵. Sites depicted are 10th century, with the exception of the *fundus Folianus* (8th century) and site 347 (7th century). Triangles are villa sites, a square is a *castrum*. A star is a church; the wrong side up pushpin is a (possible) isolated tower, the “*turrem*”.

map I have situated this **fundus Folianus** (OLIMsite 7) in the Fogliano lake area, but its actual location and size is unknown (see below)¹²⁸. In the year 917, the Fogliano area was donated by Pope John X to the Subiaco monastery, as part of possessions of the monastery of S.Erasmo al Celio. This donation was later confirmed by Pope Leo VII (936-939)¹²⁹.

Early *incastellamento* on the “caput lacis”

Two late 10th century records in the Register of Subiaco provide strong indications that the southern end of the Fogliano lake area was the scene of an early example of *incastellamento*, with a monastery as owner of the lands that had to be developed, and one specific aristocratic family as executors. In this study this *incastellamento* site is named (re)settlement / **castrum southside Fogliano / S.Donato** (OLIMsite 127).

The two sources are:

- An agreement on the repopulation of [unknown entity] “Fuglianum ubi turrem edificatum abere (sic) videtur” in the “Patrimonium Appiae” by the abbot Benedictus of S.Erasmo al Celio (Rome, part of the *patrimonium* of the Subiaco monastery) and a Duke called Demetrio, dated to 963¹³⁰. This Duke is almost certainly Demetrio de Melioso, from the important Crescentii family, who lived in this period (died 987) and had a son called Giovanni. He was the lord involved in the *castrum Vetus* (see below). What is more, he was during his lifetime one of the main benefactors of the Subiaco monastery¹³¹, a monastery that had also a large stake in the Fogliano area from the 10th century onwards¹³².
- A concession, dating to 977, valid until the third generation, of a domain including “lacus qui appellatur fuliano” and a “Fuliano ubi turre est” to Giovanni son of Duke Demetrio by abbot Benedetto of S.Erasmo al Celio (Rome)¹³³. Duke Demetrio is most probably the same person as in the 963 document. The source refers to a “caput lacis” where “locus [...] qui appellatur fuliano et castrum ubi turrem edificatam” were situated “cum ecclesiam sancti donati” and “criptis and parietinis destructis”.

There is no doubt that “Fuglianum” (963) and “fuliano” (977) denote the Fogliano lake¹³⁴; the association of the toponym [fogliano] to a lake and to the toponym [s.donato] (see below) are strong arguments for that. “Caput lacis” must denote the southern end of the lake, i.e. its “head” seen from Rome. An additional argument for this is the observation that the northern end of the lake seems less favourable (marshy) for substantial settlement and economic exploitation. The word *locus* in 10th century contexts can be translated as “settlement” or, more traditionally, as “place / location / space”¹³⁵. In this

case it is probable that the *locus* referred to a settlement, as a *castrum* in 10th century contexts denoted a fortified settlement¹³⁶. Cecere suggested that the *castrum* and tower mentioned in the 977 source, in earlier times had constituted the centre of the 8th century domain **fundus Folianus** (OLIMsite 7). This is possible, given the toponym (OLIMtoponym 413 and 26) and the fact that both are ecclesiastical possessions, but the idea must remain tentative: the exact location of the *fundus* cannot be derived from the 8th century text, and we do not know if this domain actually had a (administrative) centre.

There is little doubt that the two late 10th century records relate to the same area, given the matching elements of the toponym, the “turrem” and the recurring parties involved, one specific monastery and aristocratic family. The combination of a resettlement agreement and a *castrum* clearly point to a case of *incastellamento*. Toubert too accepts the 963 source as an *incastellamento* chart¹³⁷.

In both sources a “turrem” is mentioned. It is not clear what this “turrem” stands for. It could denote a (watch) tower. From a retrospective standpoint, a tower on this location on the coast makes sense: in sub-recent times a coastal tower, the Torre di Fogliano, demarcated the mouth of the Rio Martino; dating from the 17th century, this tower was destroyed in the second World War. Cecere believed that a “turrem” here may have denoted a “jurisdictional tower” in the first place, an early medieval juridical term denoting a population centre; he maintained that this connotation to the term was mostly used in the centuries before the *castra* appeared in Lazio (in the 10th century)¹³⁸. Cecere’s point is an interesting one: the population connected to this jurisdictional tower could be the “colonis” and “colonabus” mentioned in the 977 document, to be translated as “farmers / tenants”, or as “colonists”: “lacu foliani cum ecclesia sancti donati et cum turre cum colonis et colonabus suis”¹³⁹. The connotation of “colonist” would fit the repopulation act of the 963 source.

The toponym “San Donato” (OLIMtoponym 28) was linked to a number of Roman to high medieval landscape features in the area between the Fogliano lake and Borgo San Donato: Roman archaeological sites (among others a villa¹⁴⁰), an early to high medieval church (OLIMsite 113), a high medieval “*castrum diruti*” (see 7.III.1.2.1) and a modern settlement (Borgo di S.Donato, situated 6300 m east of the Fogliano lake). I have been able to chronologically and spatially disentangle these features, as treated in the three period studies on this key area. San Donato first appears in the 6th century as a church. Some scholars, however, suggested that the document to prove this, a *privilegio* of Pope Gregory the Great dated to 594, may be a later falsification¹⁴¹. The first secure reference to the

church San Donato is the above treated record of 977 AD. Combining the topographical-toponymic clues in the sources, one may be certain that this 10th century church is related (situated near or within) to the resettlement site (963 source) and *castrum / turrem* (977 source). Other early medieval evidence for this church lacks, except possibly for the above noted 8th century relief with cross found on the south side of the Fogliano lake.

It is possible that the church of San Donato played a role in the *incastellamento* taking place in the Fogliano area, as *castra* not only became centres of social control, production and distribution, but also foci in a new religious topography – as has been associated with *incastellamento* foundations¹⁴².

The location of the *castrum*

The topographical and toponymic clues leave little doubt that the *castrum* was located somewhere near the southern end of the Fogliano lake. Having said this, there are three possible locations for the (re)settlement / *castrum* south side Fogliano / S.Donato (OLIMsite 127):

The first candidate site are the large Roman vestiges consisting of **rpc site 10583**, **FOG218** (OLIMsite 359), and **rpc site 10585**, **FOG220** (OLIMsite 354), possibly to be associated with Clostra Romana as well (see 7.I.1.2.1). One thing speaks against this candidate: no medieval phase has been proven here, yet. However, given the fact that only a small part of the large vestiges has been surveyed¹⁴³, the site seems the best working hypothesis, and is therefore used as the *castrum*'s tentative location on the maps: not only for the considerable size of the vestiges, its position on the “caput lacu”, but also for its favourable setting. It is located between the lakes, on a higher position, and on two major infrastructural arteries, the Rio Martino and at the (virtual) end of the Pontine transverse road coming from Mesa and the pedemontana, which may have continued to function (see below on infrastructure). The spot is also the terrain most suitable for building activities close to the later Torre di Fogliano, possibly a successor of the “turrem”.

A second possible position is right on the Fogliano lake. Here, near the modern hamlet Villa di Fogliano, **walls have been found possibly dating to the 10/11th century** (OLIMsite 645)¹⁴⁴. The best argument for this candidate for the *castrum* site is its location on the south-western shore of the Fogliano lake. This is the only spot right on the southern end of the lake which seems suitable for a larger settlement, in view of the extent of waterlogged areas visible on the 1851 and ONC maps (map 50 and 51). The observed walls are nowadays incorporated in a storage facility near a harbour. Although archaeological surveys have been executed nearby by the PRP, no medieval

finds have been recorded. In future research on this location, a starting point should be the typological study of the wall-facing technique.

The third possible site for the *castrum* is **rpc site 10571**, **FOG206** (OLIMsite 347), a Roman villa site with residential function. This may be one of the sites of the earlier discussed late Roman economic and demographic reorientation on “larger centres associated with villas”¹⁴⁵. This site is also Cecere's candidate¹⁴⁶. Geographically, this site is a less probable candidate than the other two, as this is not the “caput lacu”. However, the structures found and the size of the site (5000 m², but extending to the south and east of the surveyed fields) seem to point to a larger Roman centre. The late Roman evidence beyond the 4th century is all but absent however; no medieval traces have been identified yet. On the other hand, the site is as of yet the only one with possible 7th century evidence in the Fogliano key area, be it only one shard.

To conclude: there is no conclusive location of the late 10th century (re)settlement / *castrum*. All three possible locations deserve further investigation, with the anticipation of recovering finds from Roman to sub-recent contexts. I believe these three locations stick out in the Fogliano area for their archaeological potential, their geographical position (on high parts, on infrastructural arteries), and their size; the medieval topographical documentary evidence (“caput lacu”) provides extra argumentation to their potential, especially the large site of **rpc site 10583** (OLIMsite 359) / **rpc site 10585** (OLIMsite 354) and the site of the **10/11th century walls** (OLIMsite 645). Their intrinsic favourable position may be reflected in the fact that both **rpc site 10571** (OLIMsite 347) and the site of the **10/11th century walls** (OLIMsite 645) are located on or near modern settlements.

Why *incastellamento* here?

It is not straightforward to determine the rationale for the monastery of S.Erasmo al Celio (Rome) and *lord entrepreneur* Duke Demetrio to found a *castrum* on this relatively marginal spot in the southern Pontine region. *Incastellamento* can be described as a kind of colonising movement, by which the elite increased its authority and sought to expand production. The *castra* were the means to control the population, production and distribution.

In view of these general observations on *incastellamento*, and leaving out the question of the exact location for the *castrum*, the *raison d'être* for *incastellamento* on the southern end of the Fogliano lake likely is a combination of its geo-strategic position and its economic potential. Geo-strategically the southern end of the Fogliano lake is the best location in the wider area, making effective control over the wider region and infrastructure possible:

here we find two navigable lakes and the mouth of the Rio Martino¹⁴⁷. Here too the extension of the transverse road coming from Mesa (OLIMsite 28) and the pedemontana may have reached the coast. The area is rich in good clay, and salt could be extracted here. Moreover, the area is suitable for pisciculture and non-breeding fishing in the lakes (see below the section on economy). Possibly olive cultivation was picked up again. Transhumant activities may have contributed as well. In the 11th century, the monastery of Subiaco went at lengths to claim and secure its possessions in the Fogliano area, and in the late middle ages monasteries documented their privileges to execute pisciculture (see 7.III.1.2.5).

In view of the presence of Clostra Romana, the existence (repopulation) of an unknown pre-10th century settlement, and the 10th century foundation of a *castrum*, the southern Fogliano area arises as an area of some socio-economic or demographic significance during much of the Roman period and middle ages. Maybe some clarification for this may be found in Horden and Purcell's observation, that lagoonal and waterlogged coastal areas are excellent connectable areas, allowing communication along the seaboard, and between the sea with the inland, especially where navigable rivers and lakes are present. They see wetlands as nodes in networks of redistribution¹⁴⁸. It is possible, therefore, that the southern Fogliano lake area historically played a role in redistribution and communication between the sea and the mountains / foothills, as seen by Horden and Purcell in many regions across the Mediterranean, even in seemingly remote locations.

7.II.1.2.2 Infrastructure

No separate map on infrastructure is shown here. Compared to the previous study period, no new sections of roads could be added to the infrastructure map.

The hypothesis of a coastal extension of the northern transverse road in the central plain, discussed in the previous study period (7.I.1.2.1), for which until relatively recently *in situ* evidence was available, holds as much value for the *incastellamento* phase as the Roman period. Not only does it make sense that the *castrum* was connected with the Pontine hinterland, i.e. the *decennovium*¹⁴⁹ / Via Appia (which may experience a revival in this period of time, see 7.II.1.8.2), and thus Terracina and the pedemontana. The site of Mesa (OLIMsite 28), to which the southernmost transverse road may have ran in this period, indeed may provide evidence for the 9-10th century activity (see 7.II.1.10.1).

7.II.1.2.3 Economy, production and trade

As has been noted in the previous study period, in late Roman times the economic (agricultural) activities in the Fogliano area may have been discontinued because of the deteriorating environmental circumstances. The failing Roman structures may have contributed to this economic wane. Which activities were continued, and until when is unknown, but it can be assumed that the *incastellamento* phase meant a new economic boost in the 10th century. As attested elsewhere in Italy, the *castra* enterprises meant rationalised production and storage and the attraction of new people and resources. It is not certain what economic activities exactly were upheld from within the *castrum* of Fogliano. Salt extraction and lumbering could have been picked up easily, as was pisciculture and non-breeding fishing in the lakes, as for these activities the area is intrinsically suitable¹⁵⁰. Olives may have been produced as well: as noted earlier, the beach ridges and aeolian part of the Borgo Grappa land system were suitable for olive cultivation, at least in Roman times¹⁵¹. Given the particular suitability of the area for winter pasture, transhumant activities between the inland mountains ranges and the current study area may have continued during the middle ages¹⁵², as well as local types of animal husbandry, which have been observed in many parts of the Campagna Romana in sub-recent times. Having said this, these assumptions on local production are built on analogies with other examples of the *incastellamento* process and the Roman period: there is no concrete evidence for the expected (renewed) economic zeal in the current study period. No pottery has been found yet dating to the 8th to 10th century.

7.II.1.2.4 Religion and worship

As discussed earlier, an 8th century relief with cross, found on the south side of the Fogliano lake, holds the first secure evidence for the Christian faith. Church institutions had interests (ownership, economic investment) in the Fogliano area from the 8th century onwards and throughout the middle ages, as appears from the historical sources. The *fundus Folianus* (713-715) was owned by the papacy as part of the *patrimonium appiae*. As noted earlier, Pope John X granted the Fogliano area to the Subiaco monastery in 917, as part of possessions of the monastery of S.Erasmo al Celio¹⁵³. The 963 and 977 sources show that the monastery Subiaco maintained its possessions in the area¹⁵⁴. A local parish community must have frequented the San Donato church. Later, in the 12th century, the monastery of Farfa acquired lands in the Fogliano area¹⁵⁵.

7.II.1.2.5 Geo-politics: power relations, struggle and control strategies; secular activities

The Saracene threat on this part of the coast must have been felt, as nearby Monte Circeo was held by the Saracens for some time in the late 9th century¹⁵⁶. De Paolis and

Tetro suggested that church properties along the coast formed a defensive system dealing with the Saracene threats of the 9th and 10th century¹⁵⁷. This defensive system should have consisted of the properties of La Casarina and S.Maria della Sorresca on the Paola lake, and S.Andrea and S.Donato in the Fogliano area. There is no proof for such a system. Contemporary activities on these properties are limited to the south side of the Fogliano lake and S.Maria della Sorresca (OLIMsite 128). Historically, the *castrum* is the only indisputable proof for a defensive measure in the Fogliano key area. The “tur-rem” mentioned in the source of 977 AD is a second such indication, at the same time designating a jurisdictional “tower”, i.e. a population centre (see above 7.II.1.2.1). Nowhere along the long coastline between Antium and Terracina can archaeological evidence be found for other contemporary defensive features.

7.II.1.3 Ostia and the coastal area to the south, from the 7th to the 10th century

7.II.1.3.1 *General site distribution: monitoring of (change in) human activity*

7th and 8th century: archaeological evidence for shrinking Ostia, continuity at Tor Paterno and Pianabella, written sources on church possessions and domusculta Laurentum

After the temporary use of the theatre as fortress in the 5th or 6th century, Ostia (OLIMsite 392) seems to have finally shrivelled into a small area around the Constantinian Basilica in the southwest part of the urban area. It is

unclear when exactly the concentration around the Constantinian Basilica took place, probably somewhere in the 7th or 8th century¹⁵⁸. This church, discovered by a geophysical survey by the DAI, was probably the location of the bishop's seat and Ostia's basilica¹⁵⁹.

The suburban church of Pianabella (OLIMsite 392), a pull factor for the early Christian community¹⁶⁰, continued to attract activities throughout the early middle ages. The excavations executed here show that the church was modified several times, in the late 6th, early 7th and first half of the 9th century (figure 7.56).

The complex / settlement of **Tor Paterno** (OLIMsite 229) is the only former late Roman maritime villa site with certain archaeological evidence from the 7th century onwards. The archaeological research in the thermal complex has shown that the site, after a short abandonment in late Antiquity, was continuously occupied in the early and high middle ages¹⁶¹. This is clearly visible from the many, mostly unpublished, wares found, several of which are on display in the museum of Castelporziano¹⁶².

The documentary evidence shows that in the wider southern part of the current key area, roughly in the area between Tor Paterno – Pratica and Tor Vaianica and the Via Laurentina, several Church possessions were located from the late Roman period onwards (see also the previous study period, 7.I.1.3.1). These estates disappear in the 6th century from the historical record, but resurface in the 8th century. It is likely that these sites continued

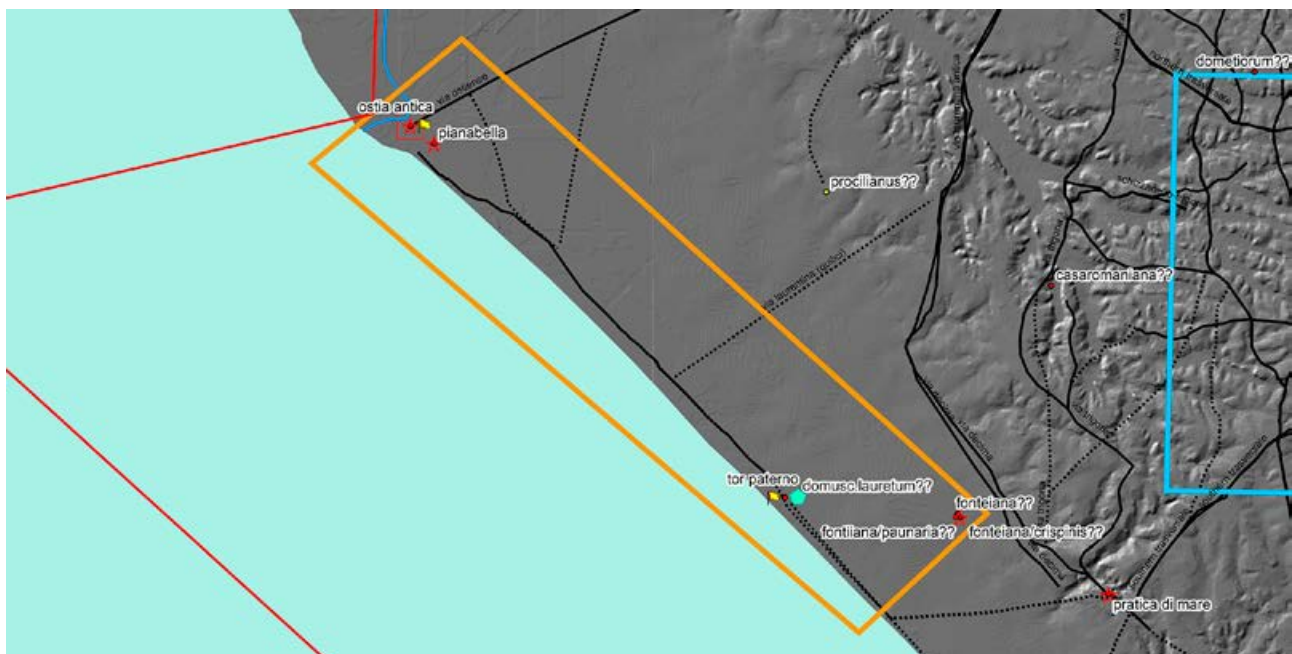


Figure 7.56. The Ostia key area in the 7th and 8th century. The blue pentagon denotes the domusculta Laurentum, its exact size is unknown. A transparent square denotes a village. Somewhere near the Via Laurentina and in the area between Tor Paterno, Pratica di Mare and later Tor Vaianica three church possessions, probably (part of) the same estate, connected to the toponym root [fonte(i)an] can be located.

as rural church estates, but that they disappear from the radar because of the lack of surviving written sources from the intermediate period. This bias in the database has been stipulated before (3.II.2). One of the reappearing sites is the church *sanctae Mariae sita in Fonteiana / fundus Crispinis* (OLIMsite 212, OLIMtoponym 245), a 5/6th century papal possession. It resurfaces at the end of the 8th century. The *Liber Pontificalis* writes (795-816) that the “*ecclesiam sanctae dei genetricis semperque virginis Mariae dominae nostrae*” was renewed by Pope Leo III. In all probability this site was connected to, or is identifiable as, two other 8th century *massae* in this area with the toponymic root [*font(e)iana*], the *massa Fontiiana / Paunaria* (OLIMsite 213, OLIMtoponym 247) and the *massa Fonteiana* (OLIMsite 214, OLIMtoponym 386). The *massa Fonteiana* (OLIMsite 214) is described in a register dated during the pontificate of Pope Gregory II (715-731) which writes “*fossam, quae dicitur vaianicum iuxta campum veneris miliar. Ab urbe Roma plus minus XX, ex corpore massae fonteianae (or forteianae), patrimonii appiae*”¹⁶³. The *massa Fontiiana / Paunaria* (OLIMsite 213) features in the *Liber Pontificalis*, Life of Zachary (741-752)¹⁶⁴. The historical sources combined provide enough topographical and toponymic clues to link and to approximately locate these three sites, all three described as papal possession (see also 4.III). Among the strongest clues are the references in the source on *massa Fonteiana* to “*vaianicum*”, and its position in the *Patrimonium Appiae*. The “*Fossam quae dicitur Vaianicum*”, about 20 miles from Rome, must have been located not far inland from the 16th century watchtower Tor Vaianica: the *massa Fonteiana* is situated at some distance (“*ex corpore*”) from this *fossam*. The location inside the *Patrimonium Appiae* seems to indicate that it was a papal possession south of the river Tiber, as the *Patrimonium Appiae* usually indicates papal possessions in a south-western quarter of the *suburbium*¹⁶⁵. The above noted reference in the *Liber Pontificalis* to “*basilica sanctae Mariae*” (OLIMtoponym 199) is an added clue: in the 5th century this church is described as located 20 miles from Rome as well, and on the *via Laurentina* (OLIMinfra 75) which runs from Rome towards and southwards parallel to the coast¹⁶⁶. Lastly, the source on the *massa Fontiiana / Paunaria* (OLIMsite 213) refers to the *domusculta Lauretum* (OLIMsite 105, see below) to which the *massa* was added, suggesting a nearby location. Its connection to the *massa Fontiiana / Paunaria* is one of the reasons to locate the *domusculta Lauretum* in this area; there are however additional motives for this (see below). On the whole, the toponymic root [*fonteian*], connected to probably one and the same papal estate, and the *domusculta Lauretum*, offer reciprocal proof for their location in this area.

Outside the Ostia key area, the *fundus Proclianus* (OLIMsite 168, OLIMtoponym 57 and 149), possibly located on or near the site of later Castelporziano, reappears in the 8th century sources as well (See also the previous study period, 7.I.1.3.1). Owned in the 5th century by the church of Santa Croce in Gerusalemme (Rome), it was owned in the 8th century by the monastery of S.Saba (Rome) as can be read, in retrospective, from a *bolla* of Pope Gregory VII (1073-1085)¹⁶⁷. There is no archaeological evidence to corroborate the existence of the historical 8th century *fundus*.

The 10th century *Castel Romano* (Vecchio) (OLIMsite 2, see below) may have been preceded in the 8th century by *fundus Casaromaniana / Casa Romaniana* (OLIMsite 6)¹⁶⁸. This *fundus*, a papal possession featuring in the collection of epigraphs of St. Peter and Paul churches (715-731), contained 10 *massae*.

Domusculta Lauretum

The *Liber Pontificalis* writes that Pope Zachary (741-752) “*newly arranged the domusculta Lauretum, adding it to the massa Fontiiana, known also as Paunaria*”¹⁶⁹. Most scholars place the *domusculta Lauretum* (OLIMsite) and the earlier discussed *massa Fontiiana* (OLIMsite 213, toponym 386) in southern coastal area somewhere between the vicus, Tor Paterno and Pratica di Mare (the Roman ager Laurens)¹⁷⁰. The fact that *domuscultae* were implanted upon earlier foundations has also been seen north of Rome, on the sites linked to the *domusculta* of Capracorum¹⁷¹.

There are several reasons to locate the *domusculta* in the wider southern end of the current key area, specifically the area around Tor Paterno. First of all, the toponym *Lauretum* (OLIMtoponym 383) which morphologically seems connected to the root [*laurent*] (OLIMtoponym 13), used in the Roman name for this area, the *ager Laurens*¹⁷², the nearby running Via Laurentina and the *vicus Laurentum Augustanorum* (OLIMsite 139). Marazzi (1990) and Claridge (1993) believed that the *domusculta* was connected to the (former) Roman imperial estate of Laurentum, which they thought was located on Tor Paterno and surroundings¹⁷³. Secondly, the above noted connection to *massa Fontiiana / Paunaria* (OLIMsite 213)¹⁷⁴, which can be securely located in the wider area of Tor Paterno, and which according to the *Liber Pontificalis* was added to the *domusculta* of Lauretum.

Indeed, Tor Paterno is a good candidate for a centre of *domusculta Lauretum*. Here, a large quantity of *ceramica a vetrina pesante* (Forum Ware) has been found, dating to the right period, the 9th and 10th century, and later¹⁷⁵. Moreover, the site archaeologically provides abundant

evidence for continuous importance from the Roman period onwards. As to its position in the landscape, the site of Tor Paterno does not stand out in the *ager Laurens*. Its position, however, is comparable to San Donato, in an “open” setting and located slightly higher than the surrounding (wet) area, between the mouths of two small streams.

There is another site with Forum Ware finds in the area: the vicus Laurentum Augustanorum. Indeed, the site used to be tentatively identified with the *domusculta* of Laurentum¹⁷⁶. The most recent archaeological fieldwork, however, has shown that the site was occupied until the 5th century and reoccupied as late as the 12th century. The *ceramica a vetrina pesante* potsherds found are from a late (11/12th century) type. An identification as a *domusculta* centre has therefore been refuted, although only a part of the site has been excavated.

9th and 10th century:

archaeological evidence for abandonment of Ostia Antica and Pianabella, new defensive locations at Gregoriopolis, Boacciana and Tor Paterno

The archaeological evidence indicates that the final abandonment of Ostia took place in the 9th century¹⁷⁷. This date confirms the entries in the *Liber Pontificalis*, which records that the ancient town was abandoned in the middle of the 9th century for the stronghold of **Gregoriopolis** (OLIMsite 393), 700 meters to the north east, located in the centre of the modern village of Ostia. As can be read in the *Liber Pontificalis*, the transfer was motivated by the incursions of the Saracens. In response, Pope Gregory IV (827-844) built Gregoriopolis on the location of the already

existing church of S.Aurea, probably in 841/42¹⁷⁸. Initially Gregoriopolis was probably a small fortress, although no structures from this early phase can be detected in the current architecture. After it had been taken by the Saracens, Gregoriopolis was reinforced and extended by Pope Nicholas I (858-867), as the *Liber Pontificalis* records¹⁷⁹. In the 10th and 11th century Gregoriopolis was named a *civitas*, generally meaning “fortified town”¹⁸⁰.

On the coast near Ostia the **tower of Boacciana** (OLIMsite 399) was built, possibly in the 9th century. According to De Rossi its construction may have been connected to the contemporaneous foundation of Gregoriopolis. The rectangular tower of 10 x 5 m was built on top of a Roman tower, possibly the well-documented lighthouse of Ostia¹⁸¹. Although the lower part of the tower shows crude wall-facing techniques, possibly from an earlier phase than the 13th century exterior of the tower, its assumed 9th century foundation date cannot be corroborated. On the other hand, it makes sense to build a watchtower on the coast in addition to Gregoriopolis, which is situated at some distance from the sea, to warn for incoming Saracene ships.

After the final refurbishment of the church in the first half of the 9th century, activity around the Pianabella basilica ceased in the 10th century¹⁸².

Altogether, the archaeological and historical data show that the area of Ostia – Gregoriopolis was a centre of unbroken regional significance in the early and high middle ages (figure 7.57). Its position as bishops’ see and



Figure 7.57. The Ostia key area 9th and 10th century. A flag depicts fortified locations, an upside-down pushpin is an isolated tower. C denotes a casale. Ostia was abandoned in the 9th century for Gregoriopolis. Both Gregoriopolis and Pratica are listed as *civitas* in the 9th century.

as Rome's prime harbour and perpetual lifeline on the Tiber river must have been key factors in its continued importance.

Another resurfacing church estate is the 4th century *possessio Patras* (OLIMsite 47, see the previous study period, 7.I.1.3.1). In an undisclosed 9th century document by Pope Marinus I (882-884), the *civitas Patrica* is given to the monastery of S. Paolo; later documents confirm this transaction¹⁸³. The *civitas Patrica* was later renamed Pratica (di Mare) (OLIMtoponym 369, [patras>pratica]). As treated before, the *possessio Patras* can therefore be located in the vicinity of or containing the site of the later *civitas Patrica* / Pratica di Mare. Indeed, the site of Pratica di Mare seems favourable for continued activity being located on a strategic position, on a hilltop and on a stream. It is not exactly known what the site of *civitas Pratica* looked like; there are no clear 9th century structures visible in the architecture of the current *Borgo*. Other contemporary *civitates* in the studied part of southern Lazio, of which the built environment and town/village plan at the time are better documented (Gregoriopolis, Lanuvio), may show that the term in the case of Pratica could denote "fortified town" or more specifically "fortified town on Roman vestiges"¹⁸⁴.

Among the wares found at **Tor Paterno** (OLIMsite 229), on display in the museum of Castelporziano, are 9th century amphorae in *ceramica acroma depurata* and the above noted 9th and 10th century Forum Ware pots. These pots show the sites continued vigour and the areas sustained direct economic ties with Rome. De Rossi assumed that in the 10th century a tower was built on top of one of the Roman villas¹⁸⁵. The first historical reference to *Paterni* dates to the 12th century¹⁸⁶.

Outside the Ostia key area, the site of **Castel Romano (Vecchio)** (OLIMsite 2) is mentioned for the first time in a *bolla* dated to 998: "casale quod dicitur romano"¹⁸⁷. The site, located on a hill nearby current Castel Romano Nuova, shows medieval fortifications and other structures of unknown date, now almost disappeared, possibly on the remains of a Roman villa. This *casale* is found in the records until the 16th century; its remains leave no doubt that it played an important role in the surrounding area and on the (possibly still / again functioning) western Ardeatina. It is unknown what this 10th century *casale* looked like, as the meaning of *casale* varied through time. Generally, a late-early and high medieval *casale* should be interpreted as a rural settlement.

To conclude: The Ostia key area shows continuous bustle, in contrast to many other parts of Tyrrhenian southern Lazio. It is one of the few regions in central Italy where archaeological and historical sources complement each

other, bridging the gap between the early and high middle ages. The first reason for this is the fact that the area appeared in written sources throughout the middle ages, which itself can be explained by its proximity and continued close ties to Rome and the Church. Secondly, the archaeological record is abundant, for late Antiquity and the early medieval as well as the high medieval period. This is the result of the year-long archaeological projects executed on the coast. In these projects the latest pottery typologies have been used, shedding light on the medieval contexts which often remain obscured elsewhere. Archaeological studies in the area are focussed on the well-known large sites on the coast; the relationship between these larger centres and their immediate hinterland and contributory sites has yet to be explored.

7.II.1.3.2 Infrastructure

It is probable that a coastal road from Ostia – Gregoriopolis southwards remained in operation during the current study period, either the late Roman *Via Severiana* (OLIMinfra 3) or an unnamed alternative. The existence of a coastal road may be deduced from the large sites of Pianabella, Tor Paterno, the *domusculta* Laurentum and the Vicus Augustanus Laurentium (from the 12th century onwards) that provide evidence for constant activity along the coast.

Although the name *Via Laurentina* (OLIMinfra 75) was last used in the 5th century¹⁸⁸, the road (named Via di Decima in sub-recent times) was continued to be used from the 6th century onwards. This assumption is based on the presence of sites of unbroken activities on the coast, such as the *domuscultae*, Tor Paterno, Pratica di Mare. For these sites the Laurentina is the quickest route towards Rome. As has been noted, the exact tract of the Laurentina is mostly unknown (7.I.1.3.2). There is no proof for the suggested **detour of the Laurentina** (Quilici 1990, OLIMinfra 102) towards the coast nearby the Vicus. It is feasible, however, that at least one shortcut towards the Via Laurentina existed from the sites with continued activity on the coast).

The road on the map (figure 7.58) with the modern name **Via Trigatoria**, or the anachronistic name **Via Lavinata** (OLIMinfra 83), was an unnamed Roman route that has been partly reconstructed by aerial photography¹⁸⁹; this road, too, must have continued to be used, given the 8th century Casaromania, and Castel Romano developing here in the 10th century. De Rossi (1969) believed that new off-branches of this road developed in the high middle ages (4 on the map), as is the case with the western Ardeatina (5)¹⁹⁰.

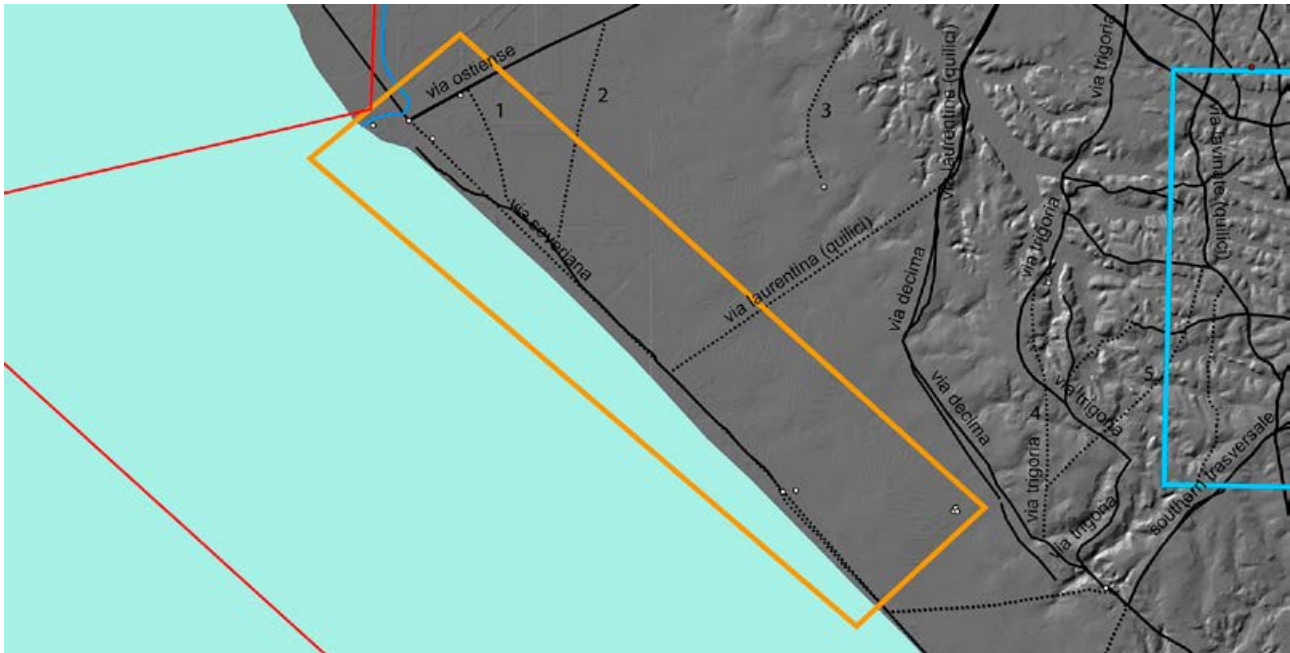


Figure 7.58. Infrastructure Ostia key area 7-10th century. Compared to the previous study period, three sections of roads could be added to the infrastructure map: the shortcuts from Gregoriopolis to the coastal road (1 on the map) and the shortcut from the via Ostiense to Fusano (OLIMsite 394: evidence from the 11th century onwards), the road to Proclianus (3) and several bypasses southward from the unnamed Roman road now called Via Trigoria (4) and the western Ardeatina (5).

In the year 540, Procopius wrote that the **Via Ostiensis** (OLIMinfra 100) had fallen into disuse and was covered by woods, possibly intended to indicate bad maintenance¹⁹¹. This story cannot be verified. It is certain, however, that a road from Rome to the Ostia area continued to be used throughout the middle ages, in view of the bishopric and connected centres of activity such as Pianabella – and later Gregoriopolis. Traffic possibly took a substitute tract on the southern bank of the Tiber. The Ostia – Pianabella pottery evidence shows very close economic ties with Rome, which seem difficult to uphold by ship transport alone, which would not be cost- and time effective at such a short distance.

7.II.1.3.3 Economy, production and trade

Located on a strategic position on the Tiber mouth, Ostia remained a port centre in pan-Mediterranean trade networks until the 7th century. Unlike most other ports in central Italy, which were cut off from international trade, Ostia would receive overseas goods until the 8th century¹⁹². Because of its position on the Tiber river, the wider Ostian area (Ostia Antica – Pianabella – Gregoriopolis) saw continued economic activities. The presence of salt pans (*salinae*) to the east and north of Ostia may be an added reason: production seems to have continued throughout the early middle ages¹⁹³.

Parts of northern Lazio were cut off from direct exchange relations with the Rome from the 6-7th century onwards¹⁹⁴.

In the Ostia key area this is not the case: the archaeological (ceramic) but also the historical (bishopric, church possessions) evidence shows that the Ostia – Pianabella area and the whole coastal area, until Tor Paterno at least, must have had an unbroken direct relation with Rome during the early and early high middle ages¹⁹⁵. Indicative is the pottery found at Pianabella, which shows strong resemblances to the assemblages in Rome, demonstrating a close exchange connection with Rome between the late Roman period and the 10th century¹⁹⁶. At Tor Paterno, the pottery evidence shows a range comparable with Rome as well, for example in the excavated 9th century amphorae in *ceramica acroma depurata* and the 9th and 10th century Forum Ware¹⁹⁷. Forum Ware has been found at Pianabella and at Portus¹⁹⁸ as well. How exactly production and distribution of the 8th to 10th century wares were organised, and which local markets functioned, and who were the consumers, has yet to be established. This is especially interesting for Forum Ware, a pottery class that during the Tiber Valley Project was linked to (elite) sites involved in supply networks focussed on Rome, and often tied to the papacy¹⁹⁹.

The enduring close economic ties of the Ostia region with Rome may have meant that the area experienced a late 8th and 9th century economic revival, as documented in Rome and other parts of Rome's hinterland (Farfa). However, the current database does not paint a clear picture of revival. This likely is a question of the availability of evidence. The available publications do not offer enough

archaeological detail century for century to be able to see trends, for example in raw pottery quantities. Moreover, the available local written records do not provide enough administrative data to reconstruct socio-economic developments. On the other hand, the 9th century foundation of Gregoriopolis and Tor Boacciana may be seen as the outcome of the renewed energy of this period.

The *domuscultae* contributed to the revitalization of Rome's economy, as agricultural production centres. It cannot be reconstructed what was produced by the Lauretum estate, as is the case with most *domuscultae* in southern Lazio. Neither contemporary sources, such as the *Liber Pontificalis*, nor the retrospective study offer insight into the possible land use or the products of the estates. Probably generic crop production of grain and vines took place, such as attested on these estates north of Rome. In all likelihood, however, wood production took place on the estate: since ancient times large parts of the ager Laurens were covered with woods²⁰⁰. Lauretum in Latin stands for "laurel".

Possibly the transhumant activities in Roman times on the higher parts of the coastal area south of Ostia were continued into the middle ages, adding economic activity during the winter²⁰¹, coexisting with local types of animal husbandry. As was argued in the study of the *domuscultae* of Anthius and Formias, long distance pastoralism may have been one of the economic activities on the *domuscultae* situated on the Pontine coast.

7.II.1.3.4 Religion and worship

The diocese of Ostia, founded in 313, one of the suburbicarian dioceses, has remained an independent bishopric throughout the early middle ages and until the present day²⁰². The bishops' seat was probably relocated to the new settlement of Gregoriopolis in the 9th century, although this is not explicitly mentioned in the written sources.

As has been touched upon in the earlier study period, the early church possession *possessio Patras* (OLIMsite 47), *fundus Crispinis* (OLIMsite 212) *fundus Procilianus* (OLIMsite 168) reappear in the 8th century sources, likely indicating that Church ownership in the Ostian hinterland was continued until the 8th century.

In fact, more than any other key area, equalled only by the Velletri area perhaps, the Ostia key area is in strong ecclesiastical hands in the 8th and 10th century, as the documentary evidence shows: the *fundus Casaromaniana* and the *domusculata Lauretum* and *Fonteiana* are well-documented papal estates and the papacy later cemented its interest in the area by building Gregoriopolis. Estates belonging to the monasteries in Rome, like the 8th century *fundus Procilianus* and 9th century *Pratica di Mare*, add to the picture.

7.II.1.3.5 Geo-politics: power relations, struggle and control strategies; secular activities

We do not know if a stronghold was maintained in Ostia Antica after the abandonment of the temporary fortress at the theatre until the building of the fortress of **Gregoriopolis** (OLIMsite 393) in the 9th century. It may be assumed, however, that before this transfer a kind of defensible location was constructed for the bishop and its entourage.

There is a historical-topographical tradition upholding the idea of a series of defensive towers on the coast south of Rome in the 9th century, built in defence against the Saracens: Among these towers, it was proposed, were Torre Astura, Torre S.Anastasio, Tor Paterno, Tor Boacciana and Torre di Capo d'Anzio. Indeed, the above treated medieval structures in *opera saracinesca* at the **villa of Nero** (OLIMsite 13), **Torre di Capo d'Anzio** (OLIMsite 35) and **Torre S.Anastasio** (OLIMsite 75) are possibly of defensive nature, in view of their location on the spot of (later) towers. They may be traced back to the 9th century, although the broad dating of the *opera saracinesca* (between the 9th and 13th century) makes it impossible to make definitive statements about an anti-Saracene defensive coastal line. The possible first phase of the tower at Tor Paterno is said to date from this phase. For this hypothesis there is no proof²⁰³. For the **tower of Boacciana** (OLIMsite 399) there is more to say for a 9th century origin: it seems the logic thing to build a warning post on the coast against the Saracens for Gregoriopolis. The medieval tower was built on top of a Roman lighthouse; it is possible that the site, near the mouth of Tiber, was continuously occupied.

There are no other indications for coastal defences in the Ostia key area until the 12th century, when a fortress functioned for a short period at the **vicus Augustanus Laurentium** (OLIMsite 113) and a *castrum* is listed at **Fusano** (OLIMsite 394).

7.II.1.4 The Velletri – Le Castella key area, from the 7th to 10th century

As explained in 3.II.2, the Velletri – Le Castella key area may be overrepresented in the database for this study period. Two specific ecclesiastical written sources, which both document a large number of sites, contribute to this possible overrepresentation. First of all, the commemorative or grave stone of Gregory II in the Vatican basilica, dated to 715-732 AD. This plate lists 38 estates (6 *masae* and 32 *fundi*)²⁰⁴, owned by the Church (probably the papacy²⁰⁵), several of which can be tentatively located in the countryside of the current study area, as the toponymic study of Chapter 5 shows²⁰⁶. And secondly the *incastellamento* concession of bishop Leon of Velletri to Demetrius de Melioso dated 946²⁰⁷, which described 32 *fundi* and 18

other toponyms in the wider Velletri area, 6 of which can be located (see below). This Duke was also involved in the *castrum* on the Fogliano lake (see 7.II.1.2.1). It is difficult to interpret the significance of this relative overrepresentation in contemporary documentation, i.e. church sources (which were the only available sources until the 10/11th century -when secular writing would become available). Possibly the Velletri area by chance is the only key area which has enough surviving (epigraphic) sources to show us the actual contemporary distribution of ecclesiastical *fundi* and *massae* in hinterland of Rome. This may also be no coincidence however: it is certainly possible that the Church had a relatively greater interest in this than in other areas. Indeed, it has been stipulated before, the church traditionally was strongly present in the Velletri area, from the early Christian period onwards; the area is also closely located to Rome, and large infrastructural arteries ran through it. This, however, holds also true for the Ostian region, the Alban Hills and Terracina (as regards church presence) – which show much less evidence for papal estates in the 8th and 9th century. It is outside the scope of this study to further comment on the overrepresentation of the current key area in the historical record.

The overrepresentation of the key area in the written sources contrasts with the archaeological evidence: published archaeological evidence dating to the current study period is all but absent, the site of Lanuvio (Mauri 2007) being the only exception. The pottery collection on display in the museum of Velletri, however, shows the importance for future publication of these early and high medieval finds.

7.II.1.4.1 General site distribution: monitoring of (change in) human activity

The 7th century provides us with little evidence in the Velletri area, probably due to a lack of clearly recognizable building phases and historical sources. For the sites of San Andrea in Silice, Lanuvio and Velletri we may assume continuation of activity during the 7th century, despite the lack of concrete evidence²⁰⁸; all three sites again yield 8th century evidence.

8th century and 9th century: evidence restricted to larger sites with uninterrupted histories, a local insight in distribution of church estates

Activity in Lanuvio (OLIMsite 84) in the 8th and 9th century is limited to a church built on top of the Greco-Roman cult site, as a recent archaeological study shows²⁰⁹. The town of Velletri (OLIMsite 147) is referred to in written sources continuously from the 8th century onwards. Many of these sources, like the *Liber Pontificalis*, concern the bishopric, which continues to function until the present day. The see of Velletri was transferred temporarily to Arenata at *S.Andrea the apostle*, the site of *S.Andrea in Silice* (OLIMsite 53), for reasons of security (see 7.II.1.4.5). It is unknown when the episcopal seat was transferred back to Velletri, but this must have taken place somewhere in the 7th or 8th century. Velletri was attacked by the Saracene troops roaming the countryside in 877, but seems to have withstood these forces²¹⁰. Just like Velletri, *S.Andrea in Silice* itself probably continued to be occupied during the 6th to 8th century, probably centred around the church which gave the settlement its name. The 6th century church was restored in the 8th

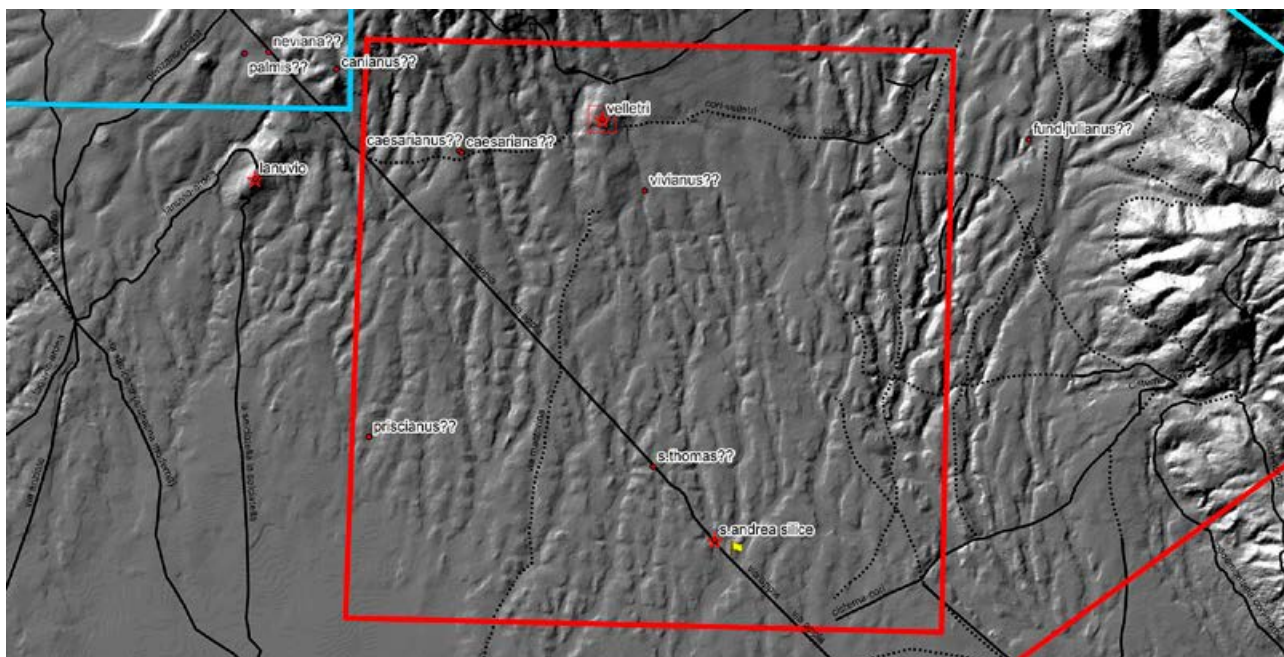


Figure 7.59. The Velletri - Le Castella key area in the 7th and 8th century.

century, as witnessed? by an 8th century record in the *Liber Pontificalis*²¹¹ (see also figure 7.59).

As I mentioned above, despite the overrepresentation of the Velletri key area in the database, a study of site distribution of this period is warranted within the context of the wider Velletri key area and parts of adjacent key areas. The following other estates on the 715-732 marble inscription have been tentatively located in the wider Velletri – Le Castella key area, by linking their toponyms to securely located medieval, sub-recent and modern (CTR/IGM) toponyms, or by the topographical indications on the inscription²¹² (see also figure 7.59):

- The **fundus Caesarianus** (OLIM site 217) and the **massa Caesariana** (OLIMsite 620). Although the *fundus* and *massa* are separately listed on the inscription, both are probably part of the same estate, as the toponymic root [caesarian] is identical (OLIMtoponym 316 and 391). Tomassetti interprets the inscription as such that the fundus is part of the *massa*²¹³.
- **Fundus Vivianus** (OLIMsite 407, OLIMtoponym 303)
- **Fundus Priscianus** (OLIMsite 507, OLIMtoponym 312)
- In the southern Alban Hills key area:
- **Massa Neviana** (OLIMsite 296) is the only site which can be located through the topographical detail on the commemorative stone: “via appia, mil. Ab. Urbe Roma, plus minus XX”, i.e. somewhere south of the Nemi lake.
- **Fundus Palmis** (OLIMsite 496, OLIMtoponym 306)
- **Fundus Canianus / Caninanus** (OLIMsite 503, OLIMtoponym 309)
- to the east of the current key area:
- **Fundus Julianus / Iulianus** (OLIMsite 235, OLIMtoponym 302)

If we look at the distribution map of these tentatively located sites, a concentration may be seen in the area south of the Nemi lake, near the Appian road / on roads leading to the Via Appia: Massa Nevi, fundus Caesarianus / massa Caesariana, fundus Palmis and fundus Canianus / Caninanus may be located here. It is easy to interpret this concentration near a main axis as an indication of a production-distribution strategy focussed on Rome, where the patron (the papal court) and most consumers of the estates would be found. As regards their agricultural potential there is a second possible tendency, if we look at the land use from a retrospective perspective, the 1851 maps: almost all locatable *fundi*, including the ones further away from the Appian road, are situated in areas which in sub-recent times were used for intensive viticulture, olive culture and/or for extensive arboriculture

(see also the section on economy, production and trade, 7.II.1.4.3).

Such sketched tendency must remain tentative. First of all, the location of these sites through their toponym is uncertain. As stipulated, (published) archaeological evidence cannot corroborate the existence of any of the sites, as such evidence is all but absent in the current study period. Secondly, we know little about these estates, beside the fact that they were owned by a Church institution, probably Pope Gregory II, for whom the discussed commemorative stone was erected. Nothing is historically known about their function, organisation and production capacity. Lastly, the number of sites located is not significant enough to make definite statements on distribution strategies, given the fact that only 11 of the 38 estates listed in the source can be pinpointed (figure 7.60).

The site of **S.Thomas** (OLIMsite 218, OLIMtoponym 188) is first mentioned in the *Liber Pontificalis*, Life of Hadrian I (772-795). One may assume occupation on this site from that period onwards until at least the late middle ages, because it was mentioned in the above source of 946 and in a 13th century source, and was still noted on an 18th century map (see 7.III.1.4.1). I have tentatively located S.Thomas on the modern toponym “santo tomao” (CTR maps / IGM toponyms)²¹⁴.

10th century:

castrum Vetus and connected fundi, monasteries at S.Andrea and Cori (?), new walls at Lanuvio

Lanuvio saw new walls built in the first half of the 9th century, constructed in techniques comparable to the walls found in Ardea, and to the Leonine walls at Rome²¹⁵. It appears that a new town grew within the new fortified perimeter. Like the walls of Ardea and the *domusculta* sites north of Rome²¹⁶, the fortifications of Lanuvio lack clear defensive elements.

S.Andrea in Silice (OLIMsite 53), the temporary location for bishopric of Velletri / Tres Tabernae in the late 6th century, is strategically and geographically well situated on a junction of three valleys, and on the edge of the Pontine plain. It was located on or near the current Casale Le Castella, although it is uncertain where exactly the church and monastery were located. The surroundings offer good defensible qualities as the highest point of the area, on the outcrop of a ridge, reaches 30 m over the Appian road²¹⁷. This favourable position in all probability in the 10th century became the site of the first *castrum* in Tyrrhenian southern Lazio: **castrum Vetus** (OLIMsite 133), indicated by the sub-recent toponym for the area. The “castrum quod dicitur vetus” was repopulated in 978, as can be implied from documentary evidence²¹⁸. The fact that it was repopulated implies an earlier phase;

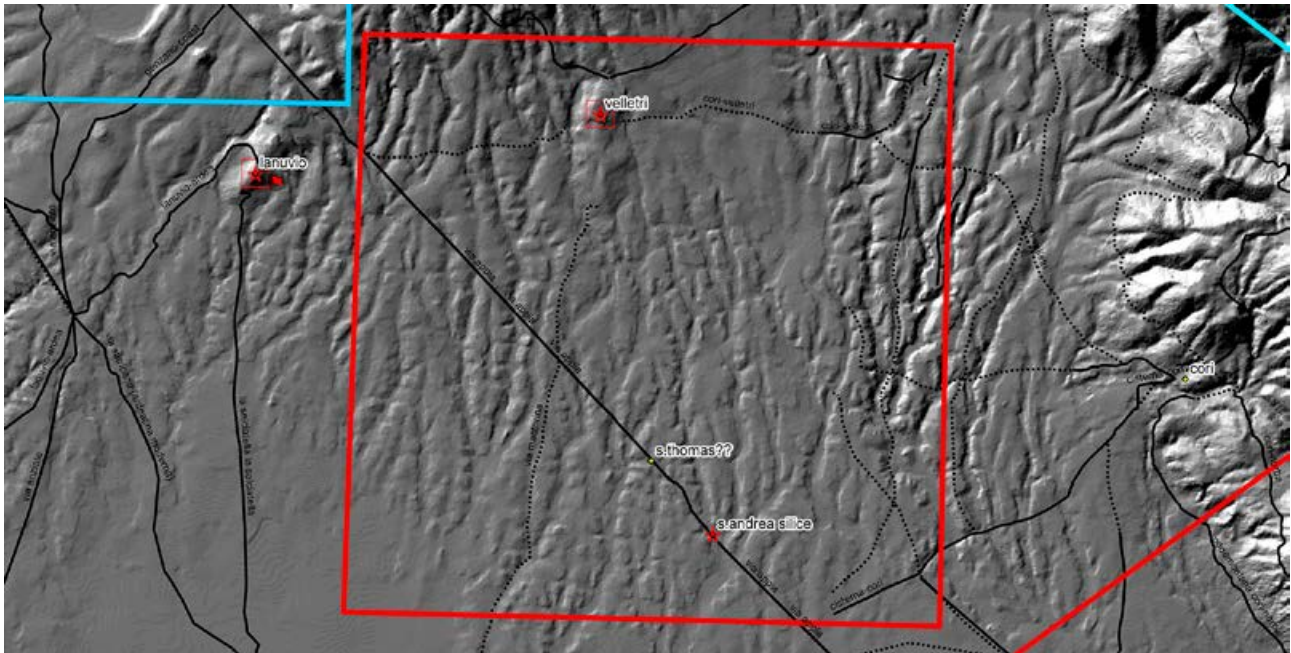


Figure 7.60. The Velletri - Le Castella key area in the 9th century.

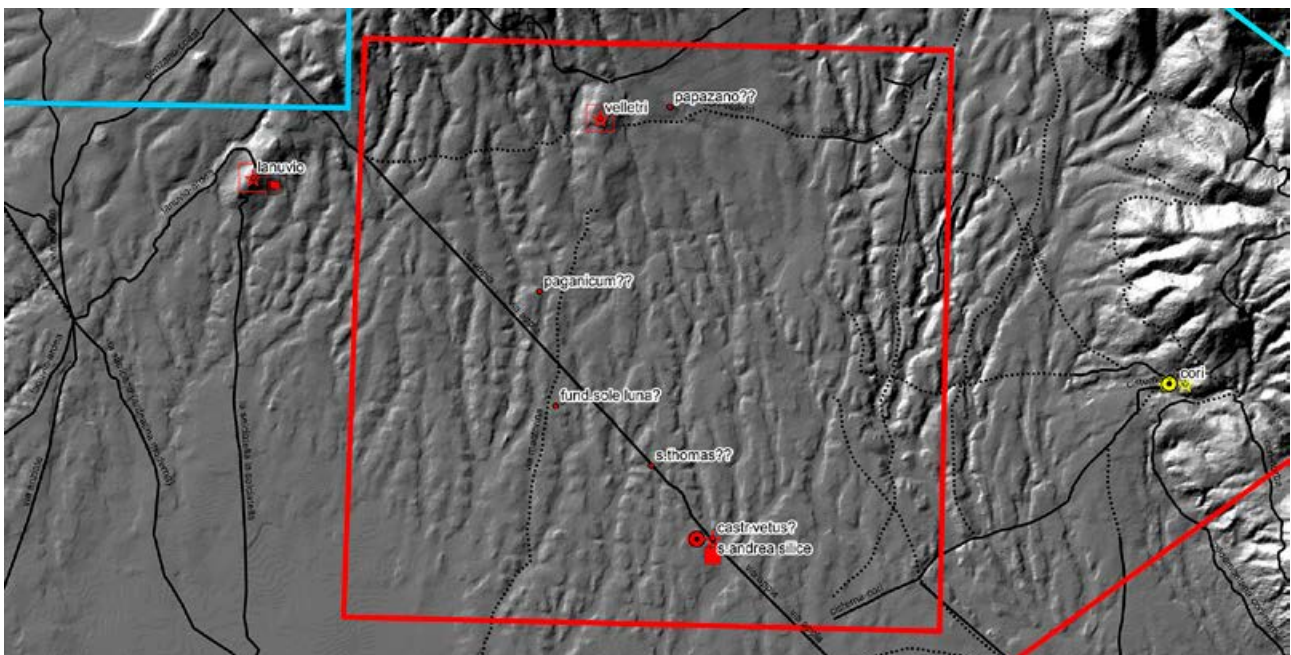


Figure 7.61. The Velletri - Le Castella key area in the 10th century.

this is confirmed by the concession dated to 946 (or 965) discussed in the introduction. This document refers to a “monte uno in intergo ad castellum faciendum”, which according to most scholars is the same *incastellamento* process as on the 978 repopulation²¹⁹. Although in the past doubts have been expressed on the identification of the castrum Vetus with the modern toponym of Le Castella²²⁰, it is the most likely spot given the topographical indications in the chart of 978 and the medieval to (sub)recent toponyms connected to this location²²¹.

The names of the initiators of the *incastellamento* “project” of castrum Vetus are known. From the concession of 946 it becomes clear that the bishop of Velletri was initiator/ proprietor and Demetrius de Melioso (Duke and consul of Velletri) *lord entrepreneur*. The condition for the lease of the *fundi* by the Duke was the building and exploitation of a castle, in which a population was to be settled. This *incastellamento* process seems to have failed, for reasons unknown, as the monastery of S. Andrea in Selci is reported to have restarted the *incastellamento* enterprise in 978; in this second *incastellamento* enterprise the

Roman aristocrat Crescentius de Theodora was involved as executing manager²²².

Specifics on the layout, size of the *castrum* are not known from the written sources; archaeological research has proven difficult as the area is largely built over nowadays²²³. Who was living here, i.e. where the colonising population came from, is unknown. Unfortunately, the primary source on the lease of 946 is unclear on the relation of the leased *fundi* with the *castrum* itself. This lease document records 50 toponyms in total: 32 *fundi* and 18 undefined toponyms in the Velletri territory. Six of these 50 can be located (figure 7.61): the *castrum Vetus*, San Andrea in Selci, **fundus Paganicum** (OLIMsite 597), **fundus Papazano** (OLIMsite 599)²²⁴, **fundus Sole Luna** (OLIMsite 579)²²⁵, **fundus S.Thomas** (OLIMsite 218)²²⁶.

It seems probable that most of these estates functioned as production sites for the castle, given the production targets set in the leasing contract (see also below on economy), but also for the town of Velletri, as all these *fundi* were leased by the Duke of Velletri. The distribution of the 4 identifiable *fundi* is no clear indication for the extent of the service or activity area of the castle, as most of the *fundi* mentioned in the source cannot be pinpointed. The *fundus Sole Luna* and *fundus S.Thomas* may have belonged to it, as these are situated in close proximity, and directly connected to the *castrum* by road (Via Appia, see figure 7.61). For *fundus Paganicum* this is less clear. *Fundus Papazano*, if located correctly, undoubtedly was focussed on Velletri.

The 978 source shows that in the 10th century a monastery was functioning at S.Andrea in Silice. One cannot be sure if the convent was founded in this period, or earlier. Some believe the *castrum* was founded to protect the monastery²²⁷.

Cori (OLIMsite 27) is meagrely documented in late Antique period and the early middle ages, with the exception of the (unproven local tradition of a) sack by the Ostrogoths²²⁸ in the 6th century. The first new signs of activity in or around the old Roman town date to the 9th century, although the evidence is insubstantial. Some modern scholars assumed that Cori was devastated by Saracene troops in the aftermath of the sack of Rome; for this idea there is no concrete historical evidence²²⁹. The first certain historical source mentioning Cori is the entry on Sergius II in the *Liber Pontificalis* (844-847): “basilicam sancti teodori martyris in coranis”. It is uncertain however if the church was actually situated in the former Roman town, or in its direct hinterland.

It is likewise unclear if the church that was founded in the Hercules temple had continued in the intervening time. It seems probable, however, that the church was continuously used from the early Christian period onward as

indicated by the good state of conservation of this converted temple. A monastery seems to have developed at Cori from the 10th century onwards: the convent of S.Trinità of Cori has been documented between the 10th and the 12th century²³⁰. The evidence on this monastic community is not strong: its date is uncertain and it may also be located in the direct hinterland of the former Roman town. All in all, the toponym [cori] pops up in the 9th and 10th century, connected to several historically documented ecclesiastical bodies with uncertain locations. It is not known if Cori was a population centre in that period.

7.II.1.4.2 Infrastructure

As has been observed in the section on the previous study period, the Velletri – Le Castella key area was an important crossroads. It may be assumed that several of the originally Roman roads continued to be used (figure 7.62):

- The road from the Appian road to Velletri (OLIMinfra 111) is one of them, given the importance of Velletri and its day-to-day contacts with Rome. On this road the *fundus Caesarianus* / *massa Caesariana* was functioning in the 8th century.
- The reference to Sole Luna on the crossroads of the Mactorina and Via Appia suggests that the Mactorina (OLIMinfra 36) was still in use, one of the direct roads from Velletri to the coast. This is corroborated by historical maps which depict this road was still visible on (Ameti, Map 36, 1693). Large-scale ancient remains on the site of Sole Luna were still visible in the 17th century.
- The Via Appia continued to be frequented during the early middle ages, as becomes clear from indirect evidence, like the existence of functioning sites along its route, and from direct references in historical sources: the Via Appia was mentioned for example in 850 and 961 in the Subiaco register²³¹.
- Just to the south of the current key area, a major junction of roads likely continued to function: near Cisterna, the Appian road met the **road Campomorto area – Via Appia (Cisterna area)** (OLIMinfra 89)²³², which ran to the coast, the **road Cisterna (area) – Cori** (OLIMinfra 46)²³³, and the **Via Setina** (OLIMinfra 86) towards the Lepine Mountains and pedemontana; as discussed earlier, the redirecting of the main Appian route to Terracina over the pedemontana route possibly already had taken place in the 6/7th century²³⁴. On this crossroads Cisterna (OLIMsite 57) grew in importance from the 10th century onwards.
- The road Ardea – Lanuvio (OLIMinfra 99) may have functioned in 9th century: on both sites walls are found which are built in the same technique,

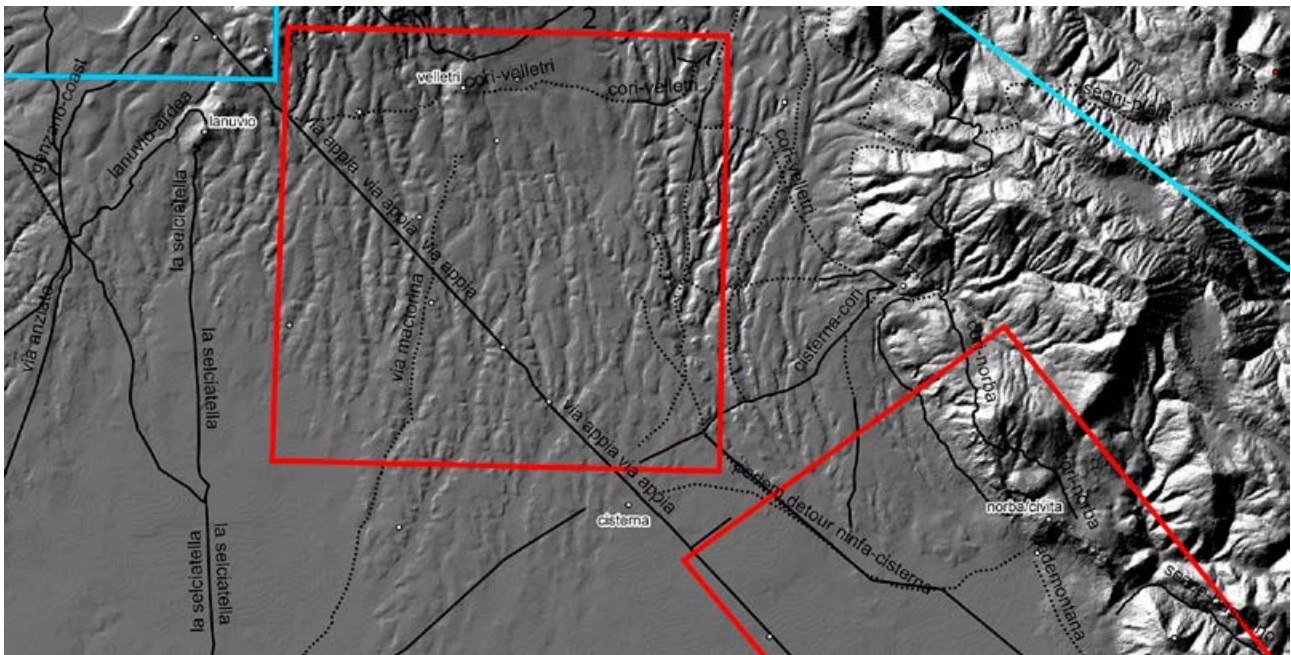


Figure 7.62. Infrastructure Velletri - Le Castella key area 7th to 10th century. Compared to the previous study period, two sections of roads could be added to the infrastructure map: the road Velletri - Marino - Tusculum - Via Tuscolana (OLIMinfra 114), number 1 on the map, and the road Velletri - Via Latina (OLIMinfra 115). Both are still or again in use in the 10th to the 12th century.

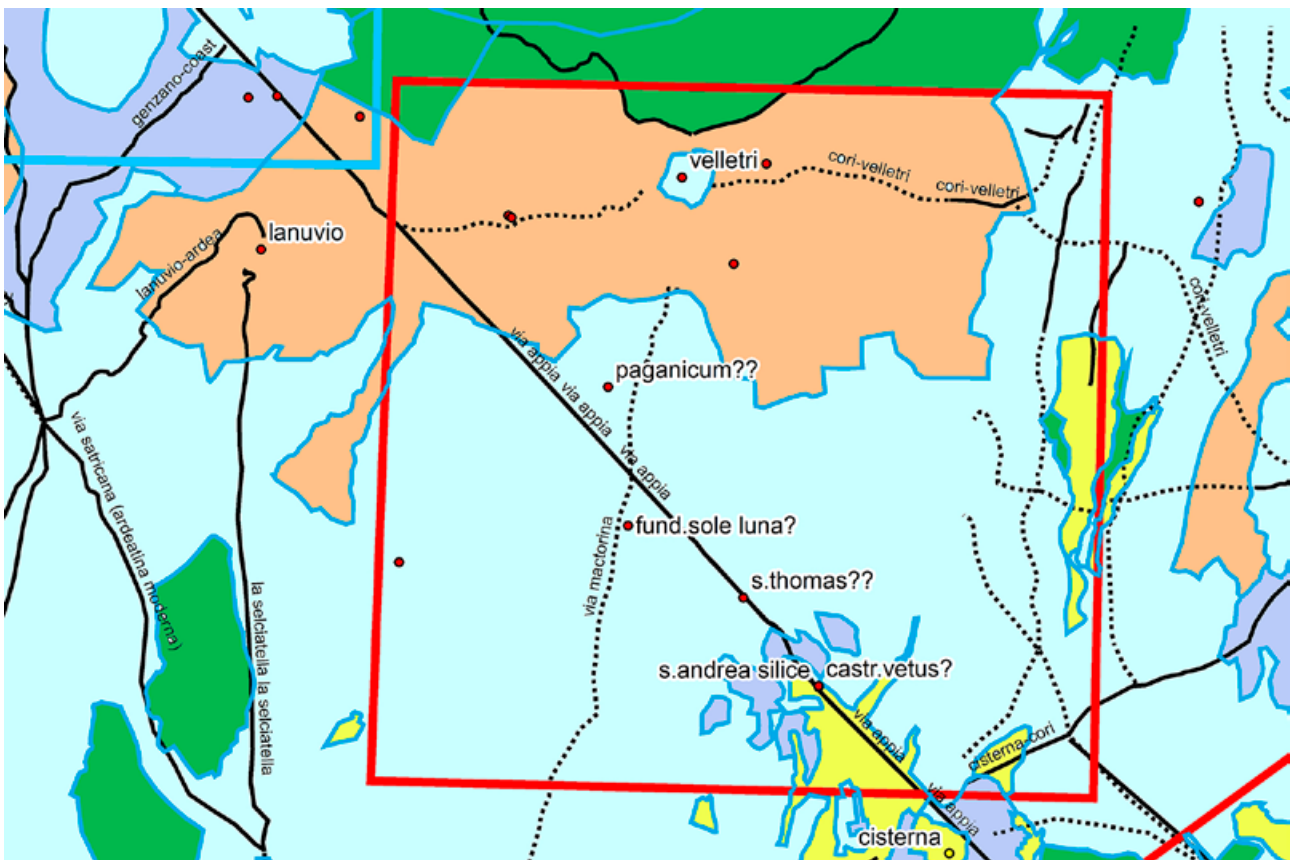


Figure 7.63. Land use in the wider Velletri - Le Castella area as depicted on the Austrian maps of 1851, with 8th to 10th century sites plotted in. Purple areas are involved in intensive viticulture and/or olive culture, orange extensive arboriculture / intensive viticulture and/or olive culture, green denotes forests, yellow meadows and grasslands. Light blue denotes no specific or unspecified use or built over areas.

suggesting a connection between the settlements of Ardea and Lanuvio²³⁵.

7.II.1.4.3 Economy, production and trade (figure 7.63)

As treated above, the trend that may be read from the distribution of the 8th century *fundi* near infrastructure towards Rome, where patron and consumers of the estates would be found, must remain tentative²³⁶.

A common denominator in the agricultural potential of the 8th century *fundi* in the Velletri key area has been discussed shortly above: from the retrospective viewpoint of the 1851 maps it may appear that all *fundi* that can be tentatively pinpointed, except for fundus Priscianus, are located in the area close to the Alban Hills or the foothills of the Lepine Mountains; these were areas in sub-recent times used for intensive viticulture and/or olive culture, or for extensive arboriculture alternated by vineyards or olive yards (see figure 7.63)²³⁷. Maybe, therefore, the allotment strategy of papal *fundi* may have been based firstly on soils suitable for the production of wine and olives. These observations seem to be confirmed in the Alban Hills key area²³⁸. As noted however, such observations must remain tentative, largely because only a few of the estates can be located.

The prime reason to organise a 10th century *castrum* at Le Castella seems its geo-strategic position. Not only could the surrounding area be exploited efficiently from this (defendable) high position. Transport towards nearby large market centres (Velletri, Lanuvio, the new town of Cisterna) and Rome (Via Appia) was efficient too. As said above, it seems probable that the estates close to the *castrum* functioned as production sites for the castle, given the targets set in the *incastellamento* concession of 946. This concession by the bishop of Velletri to *consul et dux* Demetrio of Velletri shows us what was produced, and generally demonstrates how an early *incastellamento* arrangement between owner and executer worked. As said, it involved 32 *fundi*; the condition for gaining lease over these estates was the building of the castle to settle a population. The return for the bishop would be *in natura*: The Duke of Velletri had to set aside for the bishop among others one fourth of the wine produced and 10% of the reared pigs and sheep, 30 *moggia* (bushels) of wheat and an ox. The retrospective evidence for the agricultural potential of the area of the 1851 maps confirms that the area surrounding the *castrum* could provide for these products: the immediate surrounding area of Le Castella in the middle of the 19th century is characterised by meadows and grasslands, suitable for extensive stock breeding, and by large areas in use for intensive viticulture and/or olive culture.

7.II.1.4.4 Religion and worship

The Velletri – Le Castella key area holds many Church properties in the 8th century (cf. Vatican plate) and the 10th century (cf. the 946 and 978 *incastellamento* concessions). As has been stipulated in the introduction, we cannot be sure if this is coincidence, i.e. the change survival of sources, or an indication of continued special interest of the Church in this area, which has been attested for the early Christian period.

The site of S.Andrea in Silice (OLIMsite 53) undoubtedly continued to be a centre of religious activity. Here a monastery has been recorded in the 10th century. With the establishment of the monastery, which itself initiated the second phase of *castrum* Vetus in the 10th century, S.Andrea in Silice must have constituted an ecclesiastical focal point for the wider area²³⁹.

As said before, it is unknown when the Episcopal seat was returned from S.Andrea to Velletri. Whatever military weakness the bishop of Velletri may have shown in the 6th and 7th century, he arises as a potent worldly leader and landowner in the 10th century, in view of his active role in the *incastellamento* process and possessions in the wider Velletri area. The suburbicarian diocese of Velletri kept a special close relationship with the pope throughout the early and high middle ages.

7.II.1.4.5 Geo-politics: power relations, struggle and control strategies; secular activities

The walls of Lanuvio (and Ardea) are thought to have been built to cope with the Saracene threat²⁴⁰. Such rationale seems a real possibility, as the Saracene incursions have been abundantly documented in contemporary written sources, such as the *Liber Pontificalis* and several papal letters²⁴¹. The fortifications at Lanuvio conspicuously lack clear defensive elements, like towers and ditches, which is typical for Lazio in the 9th century²⁴².

Somewhere in the 7th or 8th century, the episcopal seat was transferred back to Velletri. There is no archaeological or historical evidence for a bolstering of the walls of Velletri by that time, to overcome the earlier experienced insecurity. Such a reinforcement, however, may be assumed given the permanent threat of the Saracens of the time. A letter by Pope John VIII (872-882) seems to confirm this premise: it recounts the events of 877, during which the Saracene forces reached Velletri by horse, but apparently did not capture the town; such capture is at least not explicitly mentioned in the source²⁴³. Whatever fortifications withstood the Saracens in the 9th century, possibly walls comparable to the ones of Lanuvio and Ardea, these were replaced by the current massive walls, which date to the late middle ages.

Although we know nothing about its appearance and set up, the *castrum Vetus* must have been a formidable geo-political force in the wider area, given its favourable (defendable) and strategic position on the main route from the south to and from Rome. Historically, the foundation of a *castrum* by the bishop and Duke of Velletri makes sense: earlier the site of S.Andrea in Silice had been the defensive retreat for the episcopal seat of Velletri. The *castrum* ensured control of the main route towards the town of Velletri from the south, the Appian road. From the position of the fundus Sole Luna, part of the concession, the *castrum* “consortium” could monitor traffic over the Via Mactorina as well, the main road from Velletri to the coast.

7.II.1.5 Fondi and its inland mountain range, from the 7th to the 10th century

Between the 7th and 9th century the site distribution map of the Fondi key area does not change. Fondi, the Villa S.Vito and S.Magno continued to function. From the 10th century onwards the number of available written sources grew rapidly, as attested elsewhere²⁴⁴. Through this documentary evidence, several new sites are added to the 10th century site map, and more depth is given to the histories of three sites with continued activity. The Registers of Montecassino (*Tabularium Casinense*) are the prime reason for this. The 10th century blast of documentary evidence contrasts greatly with the (published) archaeological record, which remains almost mum throughout this study period.

The Fondi key area is exemplary for the whole study area as it shows how the sudden availability of documentary evidence, from the late 9th century onwards, gives colour to the site distribution map and provides insights into the activity on the ground. This key area, however, also shows this study’s dependency on chance availability: without the registers of the nearby monastery of Montecassino, the Fondi area would have had little body in the 10th century. The new written evidence in the Fondi area reminds us that much activity must remain obscured for us in the period before the written sources. The contrast with the Farfa area, where the distribution map is full of historical recorded activity from the 8th century onwards, the period in which the *Regestum farfense* became available, is great²⁴⁵. At Farfa, the British studies have revealed that this historical landscape can be traced archaeologically as well, with the right research strategy.

7.II.1.5.1 General site distribution: monitoring of (change in) human activity

In all likelihood, in Fondi (OLIMsite 50) activities were continued within its still standing Roman walls throughout the middle ages. Only for the 8th century concrete

historical references lack. The 5th century St Peter’s church must have remained in use²⁴⁶. In the second and third quarter of the 9th century Fondi suffered much from Saracene attacks, first possibly in 846, in the aftermath of the sack of Rome²⁴⁷. A letter by Pope John VIII dated 877 describes the devastation he witnessed in Fondi and Terracina during his trip along the Via Appia²⁴⁸. The letter of Pope John VII implies that both towns were occupied by the Saracens for some time, months rather than years. In the 870s, the town of Fondi was donated by Pope John VIII (872-882) to the Byzantine Duke of Gaeta, a donation confirmed by Pope John X (914-928) at the start of the 10th century²⁴⁹. In the latter treaty, the whole coastal area of the southern Campania (including Terracina) was given to the alliance connected to Gaetan Dukes. Later, in 945, the power of the Dukes of Gaeta was divided into a branch in Fondi and one in Terracina²⁵⁰. Thus the duchy of Fondi was established. Fondi would remain in the hands of the Dukes of Gaeta until the 12th century (figure 7.64).

The first secure historical source on the **monastery of S.Magno (and S.Angelo)** (OLIMsite 238) is the *Liber Censuum* of 979 AD²⁵¹. As discussed, it is not certain that the monastery already existed in the 6th century, as may be inferred from the writings of Gregory the Great²⁵². The recent archaeological investigations carried out on the site between 2006 and 2009 did yield any material evidence on structures of the monastery mentioned by him. However, a late Antique-early medieval burial ground has been identified, with tombs dated between the 6th and the 10th century, based on the results of 14C analysis. These tombs may have belonged to a monastery on the site, but this is not certain²⁵³. Roughly 300 m from the monastery, in the località Casale Mosillo, a church has been excavated, which can be traced back to the Carolingian era, as is confirmed by the numerous early medieval sculptural elements²⁵⁴.

The site of **Villa S.Vito** (OLIMsite 91) is a Roman villa of unknown date, next to which a church was built in the 7th or 8th century, probably dedicated to S.Vito. Excavations have revealed a rectangular building in *opus incertum* of which the marble decorative sculpture fragments have typologically been dated in the 7th or 8th century. A fortified settlement gradually developed around this church. It has been suggested that the site functioned as a seasonal dwelling place for the inhabitants of the Fondi plain during the summer, the time of year when the risk of malaria infection was highest²⁵⁵. The settlement in the 11th century became known as *Sancti Viti*.

In the 10th century, several sites were first documented in the Fondi key area (figure 7.65):

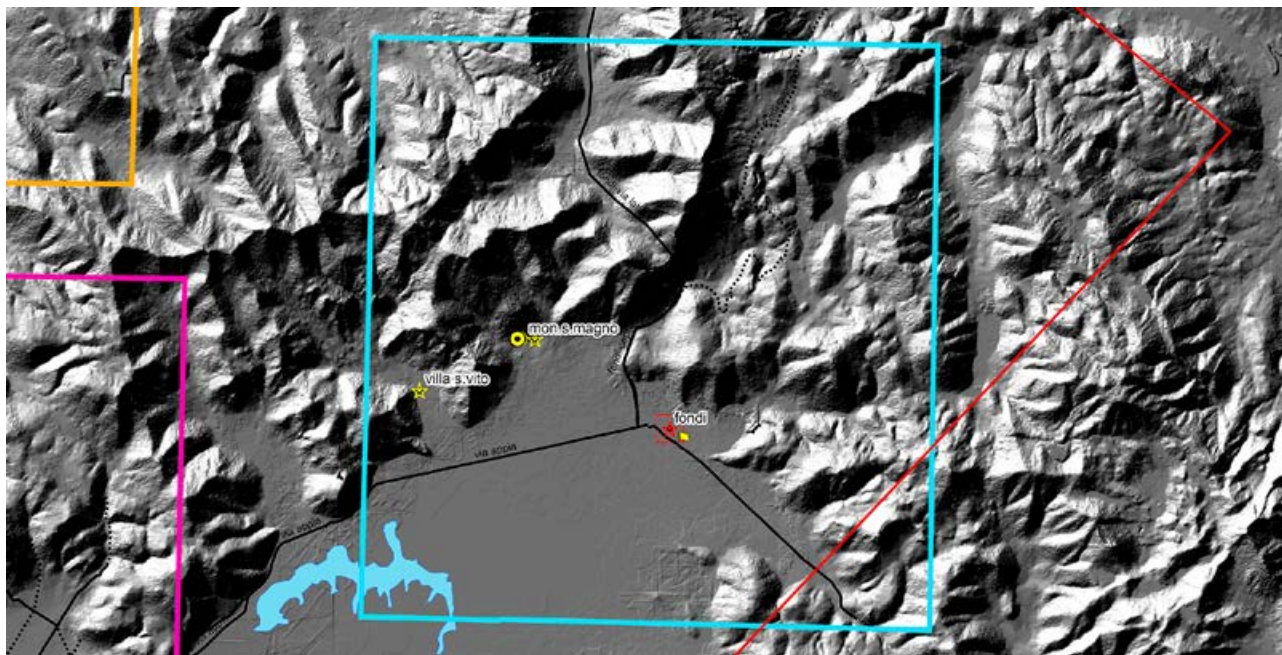


Figure 7.64. The Fondi key area in the 7th to 9th century.

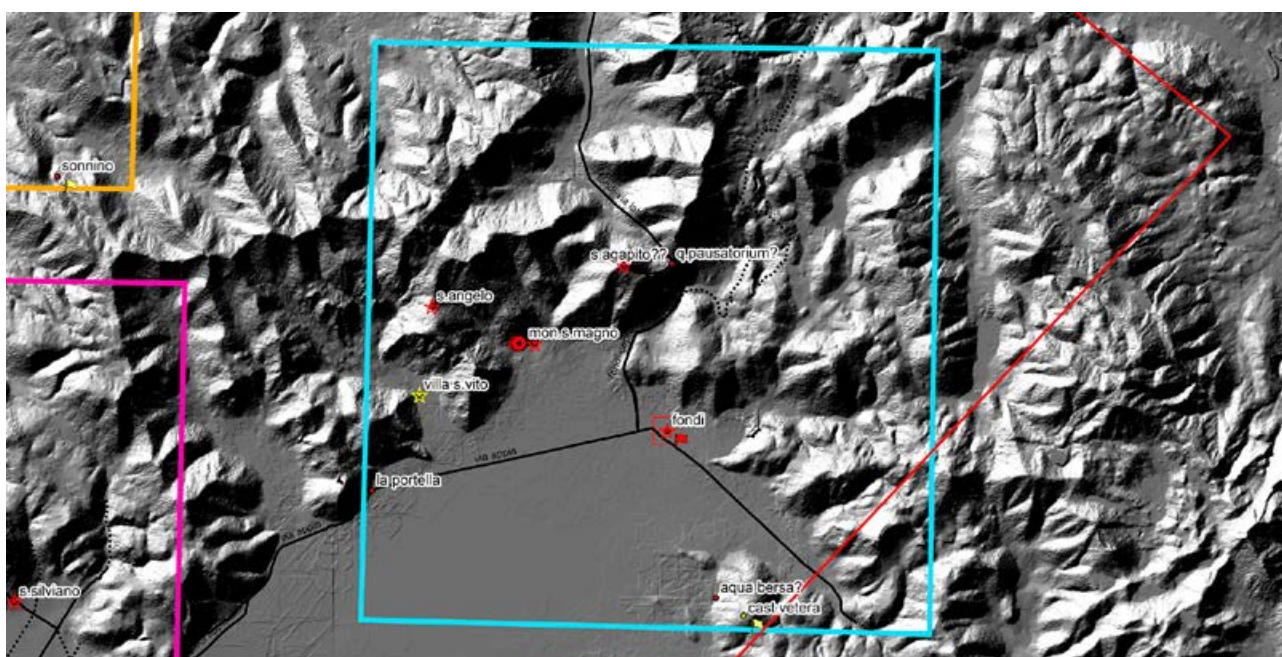


Figure 7.65. The Fondi key area in the 10th century.

Quercum pausatorium (OLIMsite 67) was a resting place, a *statio*. It is described in the Registers of Montecassino in 979 on the northern border of the territory of monastery S. Magno of Fondi, situated between the Monte S. Mauro (now Passignano) and Monte S. Agapito (now Cima del Monte)²⁵⁶.

La Portella (OLIMsite 402) is a Roman arch, which in late-early and high middle ages was considered the border between the dioceses of Terracina and Fondi. In the

year 958, the arch was mentioned for the first time in the Registers of Montecassino, as “Portelle”²⁵⁷.

The church and monastery of S. Angelo (OLIMsite 8) was mentioned for the first time in the *Tabularium Casinense* in 976, as a church²⁵⁸. In the 11th century it was registered as a monastery²⁵⁹. The 976 source lists a *piscaria* (OLIMsite 560) as one of the properties belonging to the church. We do not know where this “piscaria, quae unit cum criptis inferiora et superiore” is situated. A *piscaria*

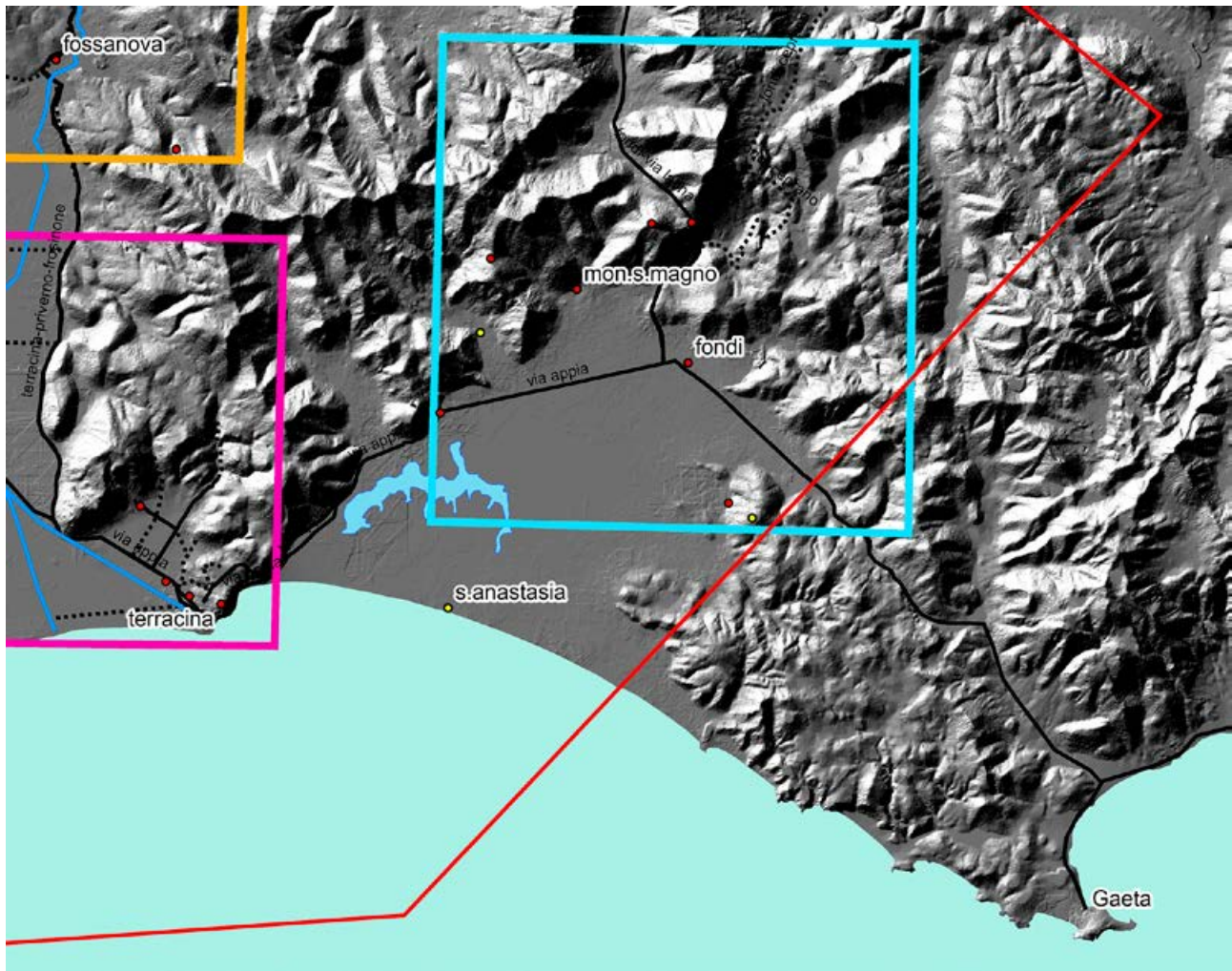


Figure 7.66. Infrastructure in the wider Fondi area in the 7th to 10th century. Compared to the previous study period, no new sections of roads could be added to the infrastructure map.

often translates as (fish) ponds, sometimes also as remnants of Roman basins or *piscinae*; the “criptis” seem to point to ancient vestiges that were still visible. The ruins of the church itself are still visible today. They were studied by a team of the University of Groningen in 2007. Based on the wall-facing techniques, the site seems to have originated in Roman times²⁶⁰. Given the fact that walls are still standing, it is conceivable that the church was in use until sub-recent times.

An entry in the Montecassino register dated to 979 is the only source available on the **church on Montis de Sancto Agapito** (OLIMsite 566)²⁶¹. This source sets the northern boundary of the S.Magno monastery by this point. Del Lungo suggested that this rural church already had fallen in ruins at the time of the document²⁶². He tentatively located the church on the *Cima del Monte*, 4400 m north-north-west of Fondi.

The site of **Aqua bersa** (OLIMsite 559), probably a cistern in or on a river, was used as a border marker in the middle

of the 10th century (958)²⁶³. In a Montecassino entry dating to 958, the boundary of a plot of land in the territory of *Vetera* (“in Vetere”) is set “per cripta de ipsu monte quomodo Aqua de Bersa”. Most likely, this toponym denoted the modern Sorgente [well] di Vetere, located near Monte Calvo, 5 kilometres south-east of Fondi.

7.II.1.5.2 Infrastructure (figure 7.66)

It is clear that in these parts the Via Appia continued to be the main route south, as appears from contemporary historical sources. The most detailed of these sources is the account of Pope John VIII in 877, discussed above in this section (7.II.1.5.1).

7.II.1.5.3 Economy, production and trade

There is no evidence available to comment on a continuation or change of the economic activities in which the Fondi key area was involved in the (Late) Roman period: viticulture and (possibly) pisciculture²⁶⁴.

7.II.1.5.4 Religion and worship

It is not known if the diocese of Fondi continued throughout the middle ages: Fondi is absent on the bishop's lists between 680-853 and 862-939²⁶⁵.

7.II.1.5.5 Geo-politics: power relations, struggle and control strategies; secular activities

The Fondi area was firmly in Byzantine hands in the second half of the 6th century onwards. The Lombard – Byzantine conflicts in the late 6th and first half of the 7th century took place far south of the research area²⁶⁶. In the 8th century the border of Lombard territory may have crept northward until the mountainous areas east of the Fondi area²⁶⁷. The presence of the Byzantine-Lombard border in the 8th century does not yield much material evidence, with the exception of the 7th or 8th century fortification of the settlement of S.Vito, which may have been built in view of Lombard danger. The conflict with the Lombards is witnessed by the occupation in 752 of Ceccano (OLIMsite 253) on the Sacco plain, as can be read in the *Liber Pontificalis*²⁶⁸. From the late 8th century onwards, relations between the Papal States and Lombard gradually eased.

From the time of the Byzantine withdrawal from Lazio in the late 8th century, the border of the Duchy of Rome / Papal States shifted several times, on and off including Fondi²⁶⁹. After the Byzantine departure from Lazio, Fondi became part of the Papal States. In the 9th century however, Byzantine authority was restored to Fondi, with the donation of Fondi to the Byzantine Dukes of Gaeta in 870, a transaction making Fondi *de facto* the first recorded “private” (elite) secular large-scale property in Tyrrhenian southern Lazio since Roman times. This transfer is possibly causally connected to the Saracene attacks of which the devastating results to Terracina and Fondi have been described by Pope John VIII in 877²⁷⁰. It may be assumed that these damages to Fondi are related to a contemporary recorded incursion of the Saracene fleet in the Fondi plain, reported in the Montecassino register. The register states that Saracens passed into the Fondi plain through the water passage at S.Anastasia, probably the canal that connected the Fondi lake with the sea (see figure 7.66 for the location of S.Anastasia and the lake²⁷¹). The Saracene fleet was supposedly guided into the plain by Docibile, the Duke of Gaeta. Although the exact course of the events is difficult to reconstruct, it seems that this support of the Saracens was a political move by the Duke: soon afterwards the Docibile was granted authority over Fondi, as compensation for breaking his agreement with the Saracens²⁷². In the year 945, the border of the Papal States definitively became fixed south of Terracina, with Fondi as part of the realm of the Gaetan Byzantines, and (temporarily) Montecassino, until the 12th century²⁷³.

7.II.1.6 The southern Alban Hills and area to their west, from the 7th to the 10th century

The Alban Hills key area contains mostly entries from written sources between the 7th and 10th century. Outside Castra Albana / Albano Laziale (published) archaeology is scarce for the current study period.

7.II.1.6.1 General site distribution: monitoring of (change in) human activity

8th century and 9th century:

church estates – concentration on Alban Hills, three domuscultae, continuity at Albano.

Continuity of activity at Castra Albana / Albano Laziale (OLIMsite 155) is certain. For every century throughout the middle ages archaeological or historical (episcopal) evidence is available in this town. The catacombs of Albano date between the 6th and the 9th century²⁷⁴. Scholarly tradition tells us that Albano was donated by Charlemagne to the Church, although there is no primary source to confirm this²⁷⁵. A Greek monastic community settled in Albano during the 8th century, at the church of S.Maria della Rotonda²⁷⁶, one of the few early monasteries outside of Rome in the study area (figure 7.67).

The site of Ariccia (OLIMsite 159) lacks concrete proof for activity between the 6th century and the 10th century. Some kind of continuity in these towns has been suggested, primarily based on the tradition / premise that the site was sacked by Saracens, Ariccia in 827²⁷⁷. No primary source or archaeological evidence can corroborate the idea of continuity, nor the hypothesis on the sack by the Saracens of this town. In contrast, at Bovillae (OLIMsite 86) recent studies²⁷⁸ have shown that continuity in some form was likely; for this site too, a tradition exists that it was sacked in 846 AD²⁷⁹.

As attested in the study of the wider Velletri area (7.II.1.4.1), the fact that documented 8th century Church estates are almost all situated near main roads, seems to point to a distribution strategy focussed on Rome. From a retrospective viewpoint (1851 maps), these *massae* and *fundi* seem to focus on intensive viticulture, olive culture and/or more extensive forms of arboriculture. In the southern east corner of the Alban Hills key area three of these estates can be pinpointed (see figure 7.67):

- Massa Neviana (OLIMsite 296)
- Fundus Palmis (OLIMsite 496, OLIMtoponym 306)
- Fundus Canianus / Caninanus (OLIMsite 503, OLIMtoponym 309)

The *massa Ocris / Ocrana* (OLIMsite 611) is located to the north-west of the above three estates²⁸⁰: it is a church

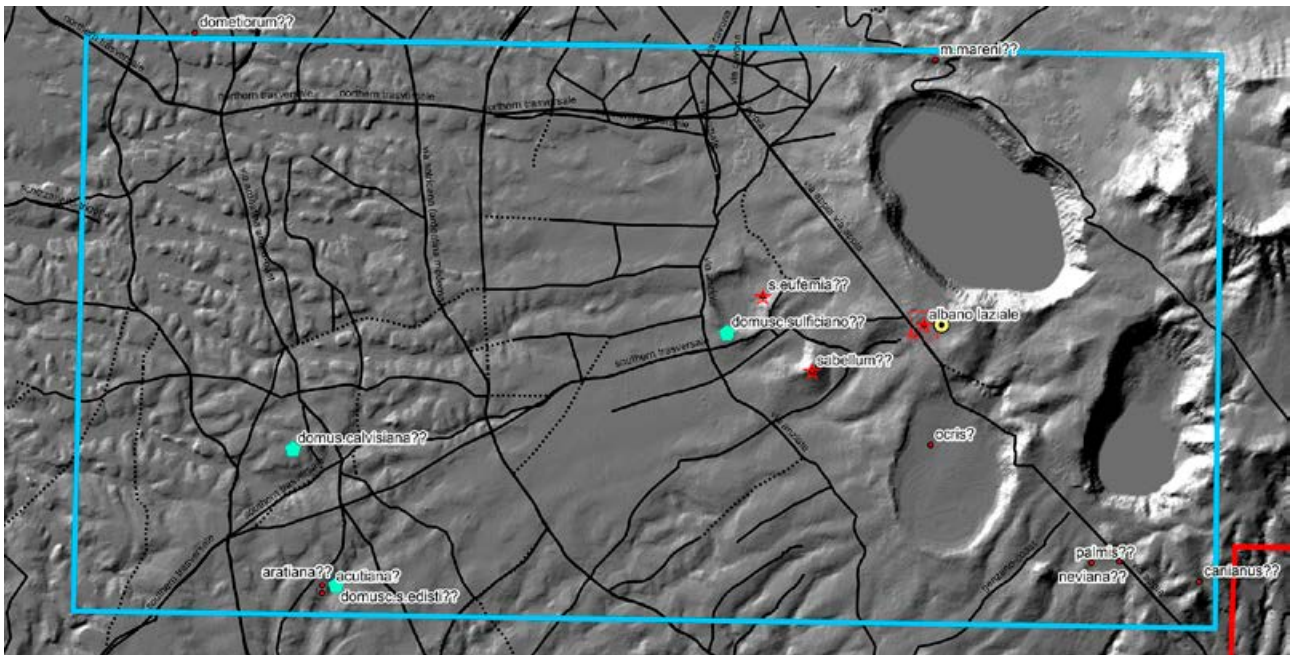


Figure 7.67. The Alban Hills - west key area in the 7th and 8th century. A transparent square denotes a village. S.Eufemia is only documented site in the 7th century, the other sites surface in the 8th century, except for the massa Ocris / Ocrana and Albano Laziale, which are documented in both the 7th and 8th century.

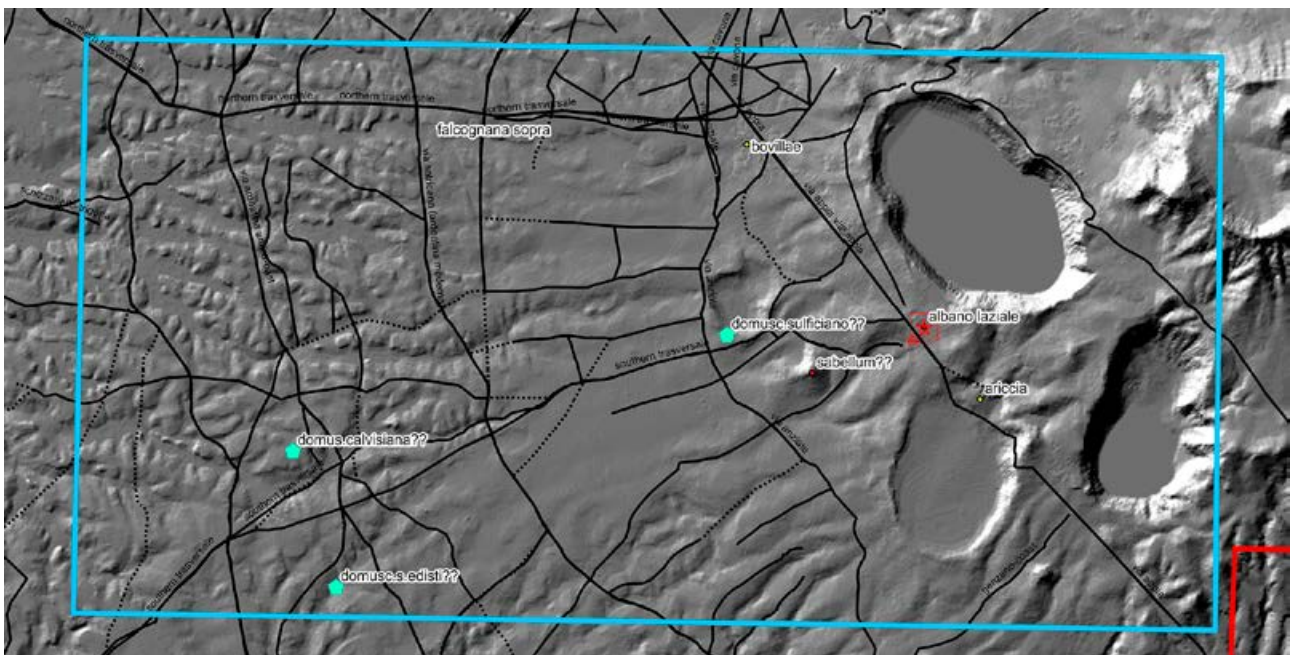


Figure 7.68. The Alban hills - west key area 9th century.

possession which appears in two ecclesiastical sources of the late 7th and early 8th century.

Two other sites in the north-east of the key area refer to the same specification: on a main road to Rome (Via Castrimeniense) and/near the terrains with specialised agricultural production in sub-recent times (figure 7.68):

- the **massa Mareni** (OLIMsite 154), tentatively pinpointed based on its toponym²⁸¹.

- the **massa Pauli** (OLIMsite 584), mentioned in the Episcopal canon 149, dated 715-731²⁸², tentatively located just outside the distribution map to the north of the massa Mareni.

Strikingly, there is only one Church estate in the current key area which is not located near the Alban Hills: the **fundus Domestorium** (OLIMsite 625). This site has been pinpointed to the north of the current key area on account

of the description on Episcopal canon 149. No indications for its size or for the number of *massae* belonging to this *fundus* are given.

On a cautious note we have to remind ourselves to be careful with the interpretation of these observations on the distribution of 8th century estates in the Alban Hills and Velletri key areas. Summing up:

- the site database of the 8th century in the Alban Hills key area relies heavily on two sources only: the commemorative stone of Gregory II (715-731)²⁸³ and episcopal canon 149.
- only a few of the estates mentioned in these sources have been located.
- location of sites through their toponym usually is tentative; two Church estates, however, have been more securely located based on the topographical description in the source.
- we know little about these estates, beside the fact that they were owned by a Church institution, probably the pope.
- a generic bias for the current study is the fact that ecclesiastical sources monopolise the database until the 10th century, and that these all stem from Rome until the late 9th century, when the first entries from the Subiaco register become available. Other endeavours, not initiated by church institutions, for example the Roman nobility, remain obscure²⁸⁴.

Domuscultae S.Edisti, and Calvisiana and Sulficiana

Hadrian 1 (772-795) founded three *domuscultae* in the current key area (figure 7.67): Sulficiana, Calvisiana and S.Edisti.

Domusculta Sulficiana

Although the location, even the actual existence of the estate, is disputed²⁸⁵, most scholars see the **domusculta Sulficiana** (or Sulpiciana²⁸⁶, OLIMsite 415) as a distinct estate, located in the wider area of later **castel Savelli** (OLIMsite 156)²⁸⁷. The main argument for this location is the fact that in the *Liber Pontificalis* the estate is explicitly mentioned separately from the other *domuscultae* founded by Pope Hadrian I, and with a distinct topographical description (“iuxta Sabellum”, “close to Sabellum”) linking it to a diachronically well-documented toponymic root that is unique for the studied part of southern Lazio: [sabel/savel] (OLIMtoponym 32). We do not know what this **Sabellum** (OLIMsite 164) was at that time, possibly an area or a small settlement; it is recorded in both Hadrian’s and Stevens IV’s life²⁸⁸. An additional argument used in the literature for a location of **domusculta Sulficiana** near Castel Savelli, is the fact that nearby Castel Savelli the Church had owned several estates since late Antiquity²⁸⁹, for example the 4th century possessio

lacum Turni (OLIMsite 632), the above treated **massa Ocris / Ocrana** (OLIMsite 611) and **church of S.Eufemia** (OLIMsite 373), built in the late 7th century. As has been discussed, however, this holds also true for much of the Alban hill area. All in all, the argument on the existence and location of this *domusculta* has not been settled, as will come into view again in the paragraph on the nearby *domusculta* Calvisiana below.

It is tempting to hypothesise that the site of the later Castel Savelli was a *domusculta* centre, given its strategic position on a hill dominating the area; the fact however, that the *domusculta* was located “iuxta” and not on “Sabellum” makes this not straightforward. Then again, some of the lower brick layers of Castel Savelli earlier have been described as *opera saracinesca*. Its broad dating between the 9th and 13th century would make it possibly contemporary to the *domusculta* Sulficiana²⁹⁰. However, De Rossi dated these specific walls to the 13th century²⁹¹. In future research²⁹² the brick layers of Castel Savelli should be compared to other examples of *opera saracinesca* in the context of creating a new regional typology of wall-building and wall-facing techniques for the early to high middle ages.

Domusculta Calvisiana

The *Liber Pontificalis* locates this *domusculta* (OLIMsite 400) with some precision on the Via Ardeatina (OLIMinfra 71)²⁹³. The *Liber Pontificalis* continues with the statement that the estate, along with two other *domuscultae* (Galeria and Galeria II), should for ever remain Church property, which shows the perceived importance of these estates for the Church. Many scholars thought that **castrum and casale Zolferata** (OLIMsite 386) constituted the centre of the *domusculta* Calvisiana²⁹⁴. Geographically (15 miles from Rome on the Ardeatina) this seems correct. The position near the Casale Zolferata seems to be confirmed by the *Catasto Alessandrino*²⁹⁵, in which the *casale* of Zolferata is still called “Calvisiano”. There is no archaeological confirmation for this on the site of Zolferata, however.

In a *bolla* by Pope Honorius III (1216-1227) a late reference to this *domusculta* may be found: “ab aliis lateribus rivis circumdatur ubi dicitur curia de calvisavis”, this curia being part of the possessions of the monastery of S.Alessio. De Rossi (1969)²⁹⁶ thought “curia” is a corruption of “domusculta”, although for this hypothesis no other indications have been found.

Domusculta S.Edisti

From the *Liber Pontificalis* it becomes clear that the **domusculta S.Edisti** (OLIMsite 219) consisted of a church dedicated to S.Edisti and several estates, amongst which the **massa Aratiana** (OLIMsite 221). The **massa Acutiana**

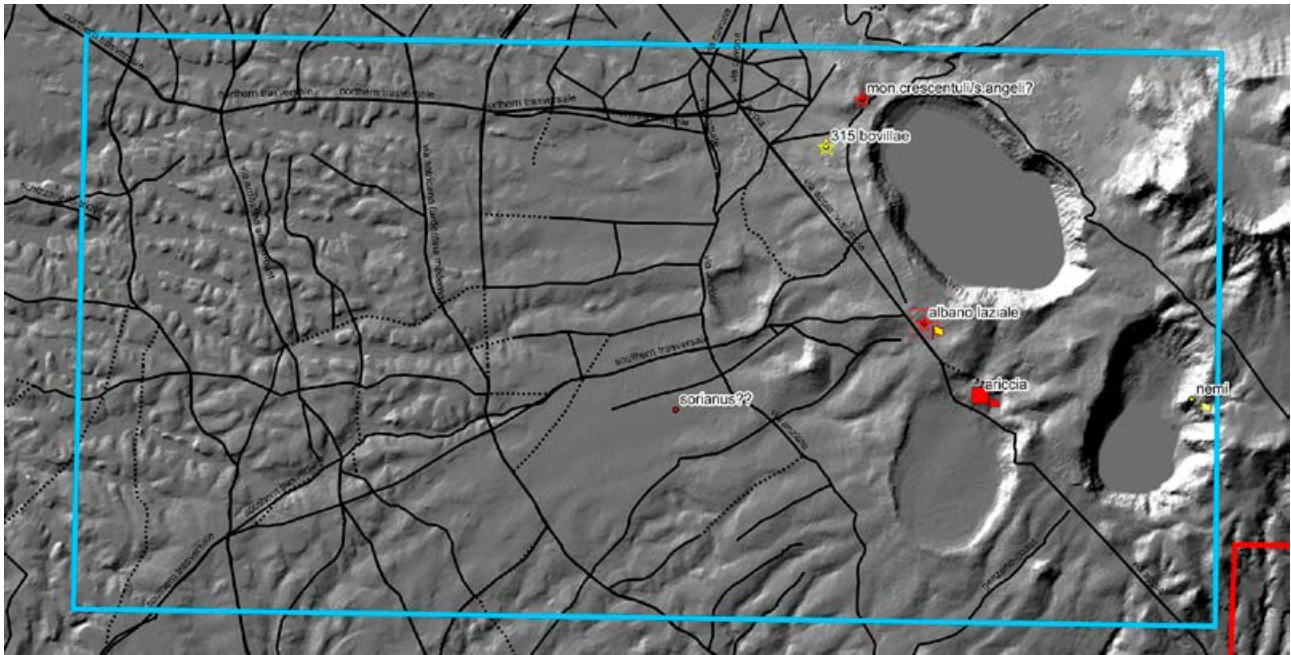


Figure 7.69. The Alban Hills - west key area in the 10th century.

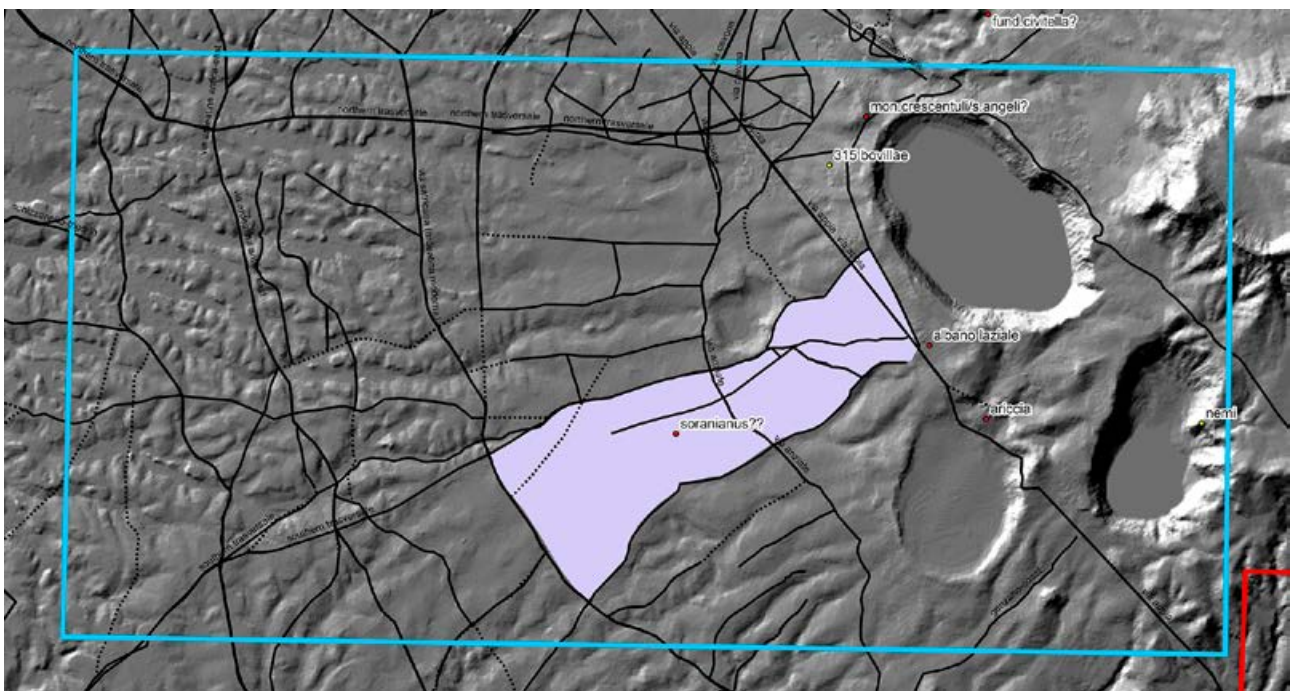


Figure 7.70. The 10th century fundus Sorianianus³⁰⁴.

(OLIMsite 223) was adjacent to it²⁹⁷. The description in the *Liber Pontificalis* locates this *domusculta* close to the *domusculta Calvisiana* (OLIMsite 400), situated on the 16th mile of the Via Ardeatina²⁹⁸. The description in the *Liber Pontificalis* shows how this *domusculta*, like the other ones documented, was compiled from a patchwork of earlier estates. It is unknown where the church to S.Edistus was located. According to De Rossi, the site of (later) **Tor Maggiore** (OLIMsite 379) may be the centre of the *domusculta* S.Edistus²⁹⁹; it is located 2 km

east of the Ardeatina. This is not unimaginable, given the sites' strategic hilltop position. Another candidate in my opinion may be the site of later **Tor and casale Cerqueto** (OLIMsite 380). Future research on this *domusculta* may start on these sites³⁰⁰.

In the 9th century, a piece of land near **Falcognana sopra** (OLIMsite 583), in the north-eastern part of the Alban Hills key area, was listed as part of the possessions of the SS. Cosma e Damiano monastery in Rome. There is no evidence that the site of the later Casale Falcognana

sopra, first documented in the 14th century, was already occupied.

10th century:

castrum Ariccia, fundus Soranianus, elite families acquire towns (figure 7.69)

The **fundus Soranianus** (OLIMsite 15) was an extensive estate, stretching over roughly 7 km from west to east (see figure 7.70), listed as a possession of the monastery of Subiaco in the 10th and 11th century³⁰¹. A *fundus* in this period and of this size likely denoted a “domain”³⁰². The *raison d'être* of this large administrative unit is not known from the sources. It is the largest of several contemporary rural monastic possessions known in Tyrrhenian southern Lazio³⁰³.

In the middle of the 10th century **Albano** (OLIMsite 155) might have become the property of the Savelli family³⁰⁵. This is one of a number of leading elite families that would somewhat later compete with each other, and with the Church, for authority and ownership in the countryside south of Rome.

At **Ariccia** (OLIMsite 159, OLIMtoponym 37) a *castrum* was founded at the end of the 10th century, documented in 978 as “Castrum Aricie”³⁰⁶ and in 981 as “Castello Ariciense”³⁰⁷. Ariccia, too, arises as an early possession of one of the great elite families: “Castrum Ariciensis” is listed in 990 as part of the assets of the Tusculi³⁰⁸. In contrast to the *castrum* Vetus, nothing is known about the dealings of the *castrum* of Ariccia. It has been suggested that after a temporary abandonment in the early 9th century, as a result of Saracene attacks, the inhabitants of Ariccia were

transferred to the ancient acropolis on Monte Gentile³⁰⁹. Here the medieval *castrum* would evolve. The idea cannot be corroborated with concrete proof. A transfer of communities to a higher position in the 7th to 9th century has been suggested as a common demographic phenomenon, in the context of the insecurity of the time, for example in the now enfeebled theory on the “flight into the hills” in the Ager Faliscus³¹⁰.

Other 10th century sites: (see figure 7.69)

- The town of **Nemi** (OLIMsite 176) first appeared in the written sources in the 10th century, owned by the Counts of Tusculi³¹¹.
- **Monte Crescentuli** (OLIMsite 186). Here a “ecclesiam unam in integro que est s.angeli” was located, according to a source dated to 955-962³¹².
- **site 315 Forma Italiae** (OLIMsite 546). This late imperial early Christian chapel is possibly referred to in a *bolla* of Pope Agapito II dated 955, as asset of the church of S. Angelo “in monte qui vocatur Crescenzali”³¹³.

7.II.1.6.2 Infrastructure (figure 7.71)

Compared to the previous study period, three sections of roads could be added to the infrastructure map: Road nr.1 a high medieval shortcut from the **western Ardeatina** (OLIMinfra 73) to the Pratica di Mare area³¹⁴, nr.2 is a northern alternative to the **southern trasversale** (OLIMinfra 85)³¹⁵, nrs. 3 and 4 denote the **road Velletri - Marino - Tusculum - Via Tuscolana** (OLIMinfra 114), still or again in use in the 10th to 12th century³¹⁶.

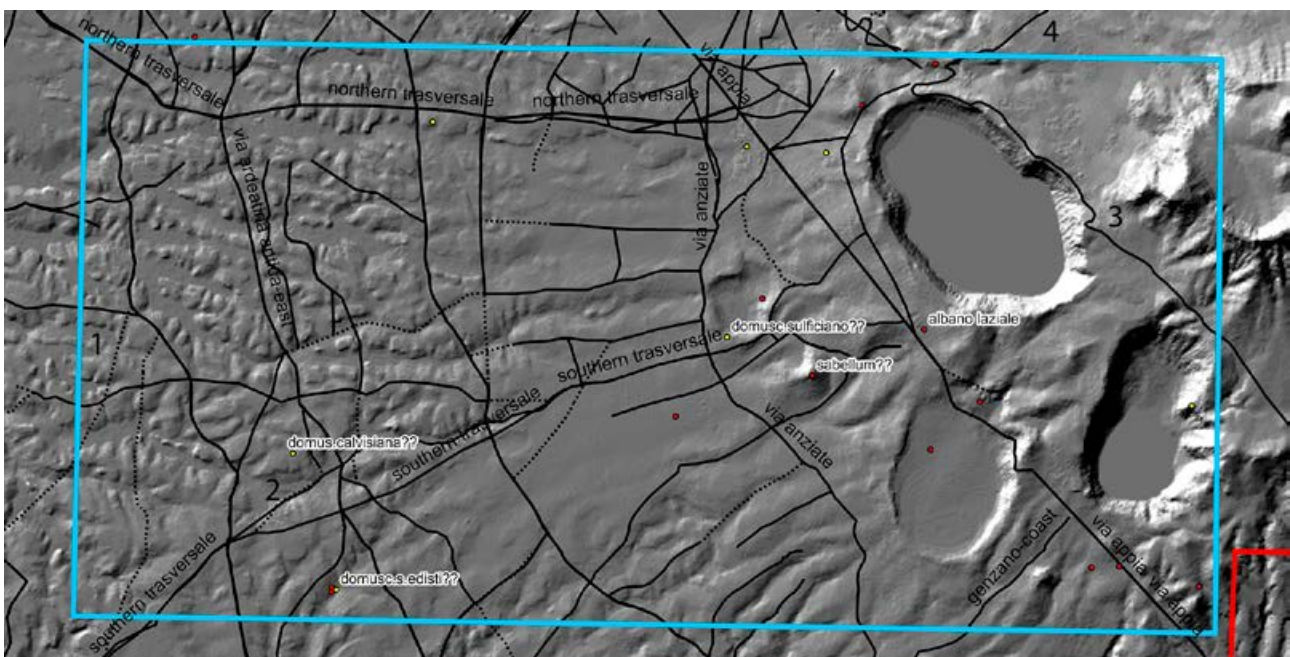


Figure 7.71, Infrastructure in the Alban Hills west key area in the 7th to 10th century.

It may be assumed that many of the north-south running infrastructural arteries west of the Alban Hills continued to be frequented throughout the early and high middle ages, given the well-documented (*Liber Pontificalis*) contemporary interaction between Rome and its hinterland. The presence of functioning sites along their routes is another indication. This certainly applies to the Via Appia. The Via Appia was mentioned for this particular key area in the Subiaco Register of the year 961: “Via appia, miliario ab U.R. XV”³¹⁷. The Via Ardeatina continued to function too, as appears, among others, from the entries on the *domuscultae* in the *Liber Pontificalis*. The same seems to be true for the northern and southern Trasversale, which connected the Alban Hills to the coast (Ostia and Pratica di Mare); along these routes too, functioning sites can be found in the 8th and 9th century.

7.II.1.6.3 Economy, production and trade

Because of its proximity to Rome, continued agricultural production in the current key area can be assumed throughout the early to high middle ages. As touched upon before, the late Antique and early medieval phases of many of the sites in this key area have been denied proper (published) archaeological treatment in the past³¹⁸. It is still unclear therefore how these connections worked on a daily basis and how these may have expanded with the economic revival of Rome. The economic resurgence of Rome’s hinterland, so clearly visible in the archaeological studies to the north of the City and in Ostia, remains hidden for the current key area. No site in the

proposed *domusculta* areas has produced (published) Forum Ware. Nothing is (historically and archaeologically) known about the investments and economic activities in the *incastellamento* enterprise at Ariccia.

For an idea of the economy and trade in the current key area we rely on an analysis of historical sources and retrospective information. As has been earlier attested in the study of the wider Velletri area³¹⁹, the distribution of 8th century Church estates seems to point to a distribution strategy focussed on Rome and an allotment strategy based on soils suitable for the production of wine and olives. This picture is corroborated in the current key area. We have to bear in mind the above stipulated cautious notes on observations in the distribution of the 8th century Church estates.

The focus on specific types of soils and crops which seem to appear from the distribution of the 8th century church estates, may also apply to the *domusculta Sulficiana*, which is located near the Alban Hills. This seems less straightforward for the *domuscultae* of Calvisiana and S.Edisti.

The description of the *domusculta Calvisiana* in the *Liber Pontificalis* clearly shows what was produced on this estate for the papal court, and for the city of Rome³²⁰: wine and olives. Sub-recent land use, as depicted on the Austrian 1851 maps, does not indicate these forms of intensive agricultural production; on the maps viticulture and olive culture generally occur more to the east³²¹ (figure

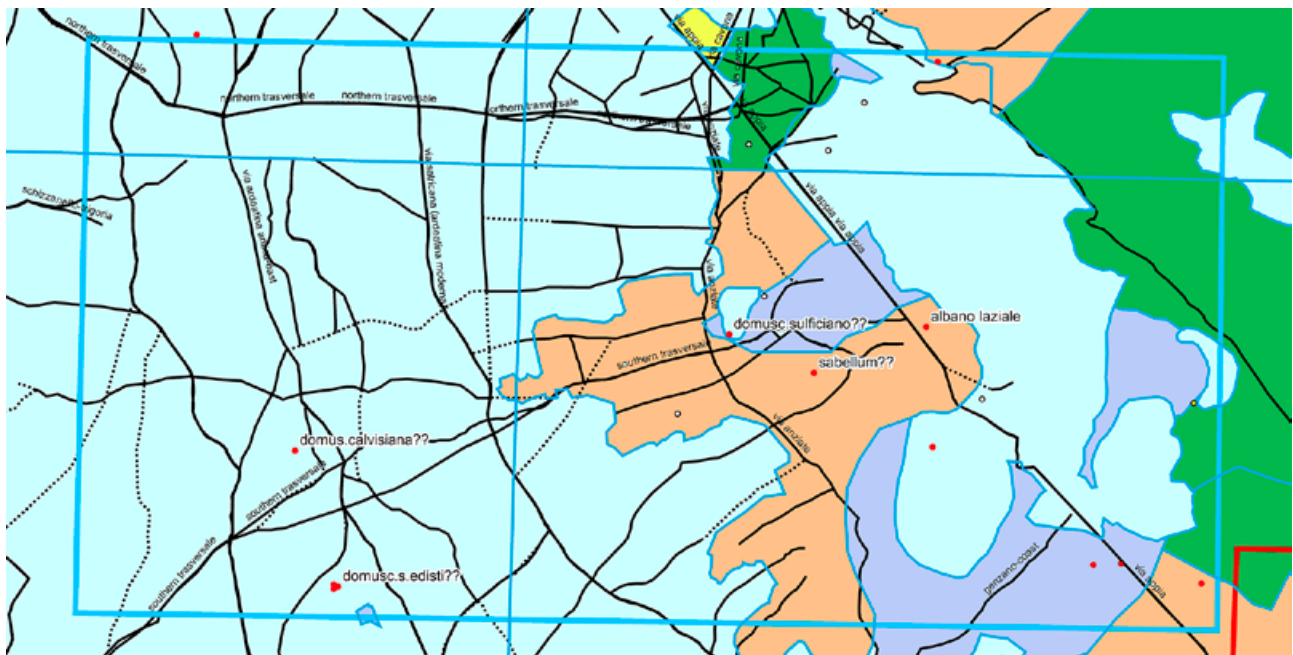


Figure 7.72. Land use on the 1851 maps in the current key area. Plotted in are all sites in the Alban Hills key area between the 7th and 10th century (dots). The red dots are the 8th century sites. Purple areas are involved intensive viticulture and/or olive culture, orange extensive arboriculture / intensive viticulture and/or olive culture, green denotes forests, yellow meadows and grasslands. Light blue denotes no specific or unspecified use or built over areas.

7.72). This may indicate that the retrospective study of the landscape is not flawless as an aid in reconstructing ancient land use. However, one cannot be sure how large the *domusculta* was, nor if the Sulficiana estate (“iuxta Sabellum”) was part of this *domusculta*. One may suggest that the *domusculta* had the same shape as the 10th century fundus Soranianus, stretching west-east over a considerable distance.

The *Liber Pontificalis* does not elude on what was produced on the **domusculta S.Edisti**. In sub-recent times the 16th mile of the Via Ardeatina is the only part west of the Via Satricana where grapes and olives were produced (see map, in purple).

We do not know how the *fructus* of the **fundus Soranianus** was distributed, but it is feasible that a part of its revenues would go to its owner, the monastery of Subiaco, and that a share was intended for the local market and for transport to Rome, given its location near several main routes not far from the city.

7.II.1.6.4 Religion and worship

Castra Albana (OLIMsite 155) played an important role in the dissemination of the Christian faith into the hinterland of Rome, as was discussed in the section on the previous study period (7.I.1.6.4). From the early middle ages onwards, the diocese of Albano was a suburbicarian diocese with close ties to Rome. It would remain a focal point of religious organisation in the Alban Hills throughout the middle ages, with a high concentration of churches and the presence of large catacombs.

Just like the Velletri – Le Castella key area, the current key area holds many 8th century Church properties. As noted earlier, the high number of 8th century Church estates in the database can be attributed to the chance survival of one particular source, the commemorative stone of Gregory II (715-731)³²²; in the current key area, the *Liber Pontificalis* adds the *domuscultae* to the relative high amount of 8th century Church estates. Church possessions are listed in the 9th century (for example **Falcognana sopra**), and 10th century (**fundus Soranianus**) as well, be it in lower numbers than in the 8th century.

What happened to the *domuscultae* is generally not very well documented. This is no different for the three *domuscultae* in the current key area which all three quickly disappear from the radar: they are only referred to once in the *Liber Pontificalis*, life of Hadrian (772-795)³²³. Potter and King wrote that in the later 9th and 10th century the pope lost much of his control of the countryside around Rome to the Roman nobility, and that the decline of the *domuscultae* should be seen in this context³²⁴.

At the same time monasteries maintained or even increased their influence and possessions in the countryside³²⁵. Their number increases rapidly in the 9th and especially the 10th century. While rural monastic properties were relative modest in Tyrrhenian southern Lazio before, their nature changes in the late 9th and 10th century. First of all the nature of ownership changed: not only monasteries in Rome would own lands in the countryside of the research area, rural monasteries of Tyrrhenian southern Lazio (S.Andrea in Silice) and in the wider region (Subiaco and Montecassino) appear as landowners as well. Secondly, the monastic estates seem to have become larger³²⁶.

Maybe the presence of the **fundus Soranianus** (OLIMsite 15) in the 10th century Alban Hills key area should be seen in the context of these developments. It is possible that this monastic *fundus* replaced (some) of the earlier papal possessions, although this remains a premise, as we do know what happened to the *domuscultae*. Maybe the fundus Soranianus originated at the time that the *domuscultae* were still in place, filling a part of the western Alban landscape that was not covered by one of the three *domuscultae*.

7.II.1.6.5 Geo-politics: power relations, struggle and control strategies; secular activities

Despite the fact that the area topographically speaking was vulnerable for intruders from the sea and the south, because of the many roads to this area, there is little archaeological and historical evidence for defensive measures taken. The 10th century *castrum* built at Ariccia is the first proof for such, although no specifics are known about the layout of the castle and its owners, nor on the executors and population involved in this *incastellamento* enterprise. It is feasible that at Albano medieval walls were built; these, however, have not yet been studied.

As noted above, there is no concrete proof for the hypothesis of the sack by the Saracens of Bovillae and Ariccia, nor for a subsequent transfer of the populace of Ariccia to the adjacent ancient acropolis. It is almost certain, however, that the Saracens in 846, after the sack of Rome and on their way to Gaeta³²⁷, passed these former Roman towns. On the other hand, Bovillae and Ariccia are both situated next to the Appia and could be passed without having to forcefully enter the settlement³²⁸. This is in contrast to Terracina and Fondi. The Via Appia runs through the heart of these towns; both were devastated by Saracene troops at some point in the 9th century.

The 10th century acquisition of several towns (Albano, Nemi, Ariccia) in the current key area is exemplary for rise of a new geo-political factor in the study area of

Tyrrhenian southern Lazio: elite families. From the documentary evidence (title-deeds and quarrels on ownership) it appears that from this century³²⁹ onwards nobles started to gain assets on a large scale, towns and their surroundings but also large pieces of farmlands (see the Astura peninsula, 7.II.1.1.5), competing with the Church and each other. This rise of the elite evolved rather late compared to other parts of the Italian peninsula, where from the beginning of Carolingian involvement landed aristocracies were established, particularly in the Lombard-Carolingian kingdom³³⁰.

7.II.1.7 The Priverno-Fossanova key area, from the 7th to 10th century

Compared to most other key areas, the Priverno – Fossanova key area holds a good archaeological research record for the middle ages, primarily because of the long running multi-period excavation on the site of Privernum, and the short but important excavation at Fossanova. The ceramics laboratory of the Privernum research team is a centre of pioneering medieval pottery studies³³¹. Medieval ware studies have been done at the site of Ceriara as well³³².

7.II.1.7.1 Site distribution general: monitoring change in presence and activity (figures 7.73-7.75)

Two sites experienced continued activity from the late Roman period until the high middle ages: the former *municipium* of **Privernum** (OLIMsite 25) and the villa site of **Fossanova** (OLIMsite 9).

Privernum is one of the few sites in Tyrrhenian southern Lazio for which continuity from Roman until the high middle ages has been confirmed by archaeological field

work. The excavations here have revealed an urban area with a certain level of continued activities until at least the 12th century³³³. Continuity has been attested in the church from the 6th until the 12th century. The cemetery, mainly for very small children, was situated in the old theatre (earlier reused as a fortress in the 6th century), south of the modern road, and continued to be used from the 6th century until the high middle ages³³⁴.

At some point between the later-early and high middle ages, (part of) the population of Privernum was resettled on the location of the current town of **Priverno** (OLIMsite 58). Written records do not make clear why this transfer took place, but, as for Ariccia, it has been assumed that the insecurity of the time may have been a major factor involved³³⁵. Some maintain that Privernum was devastated by the Saracens in the year 846, although there is no conclusive evidence for this hypothesis³³⁶. The wet conditions in the plain are a better documented possible factor in this transfer, causing drainage problems and risk of malaria infection³³⁷. The problematical drainage of the site is archaeologically attested. The southern *domus* clearly shows the four raised levels in a relatively short period. In 6th century the ground level in the church was raised, and remained at that level until the 12th: the pavement however, remained at the lower level. From a retrospective point of view, these intrinsic problems in the Amaseno plain are confirmed: Map 40. *Pinata delle Paludi Pontine formata per ordine di Nro Sigre Pio papa VI* by Gaetano Astolfi³³⁸ dated 1785, and the 1851 maps depict the western part of the Amaseno valley as a lake or swampy area. The 1851 overview map of malaria infected areas shows

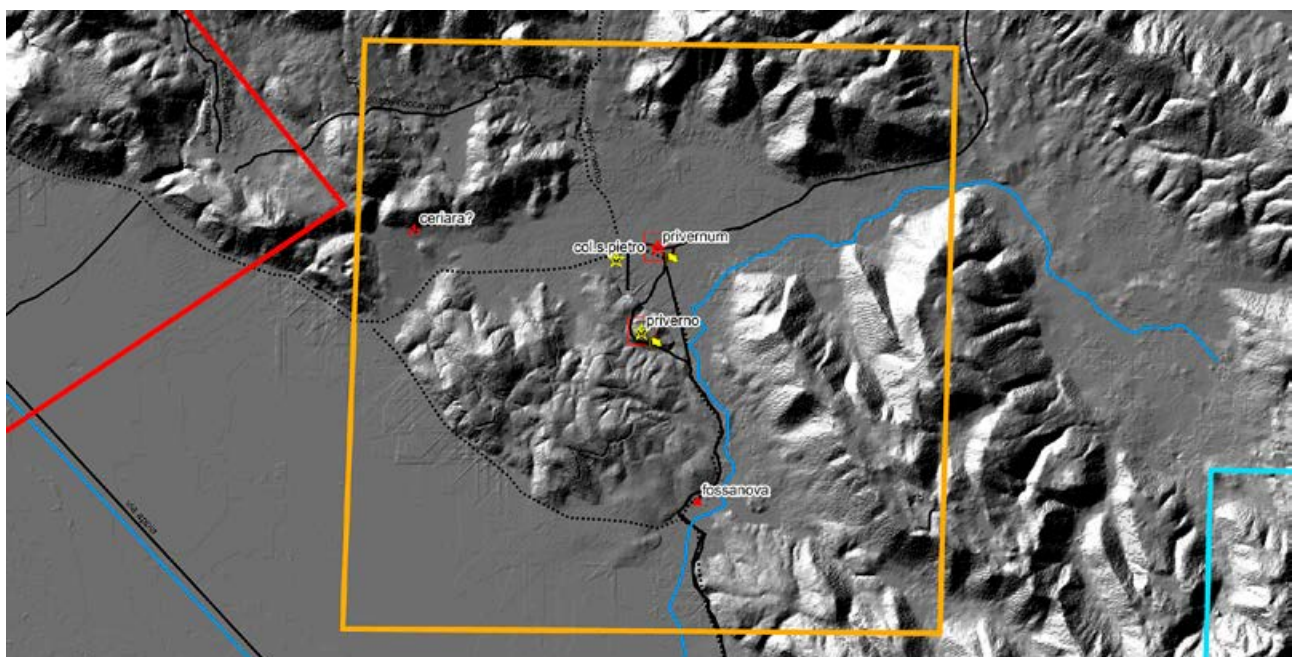


Figure 7.73. The Priverno - Fossanova key area in the 7th and 8th century. A transparent square denotes a village.

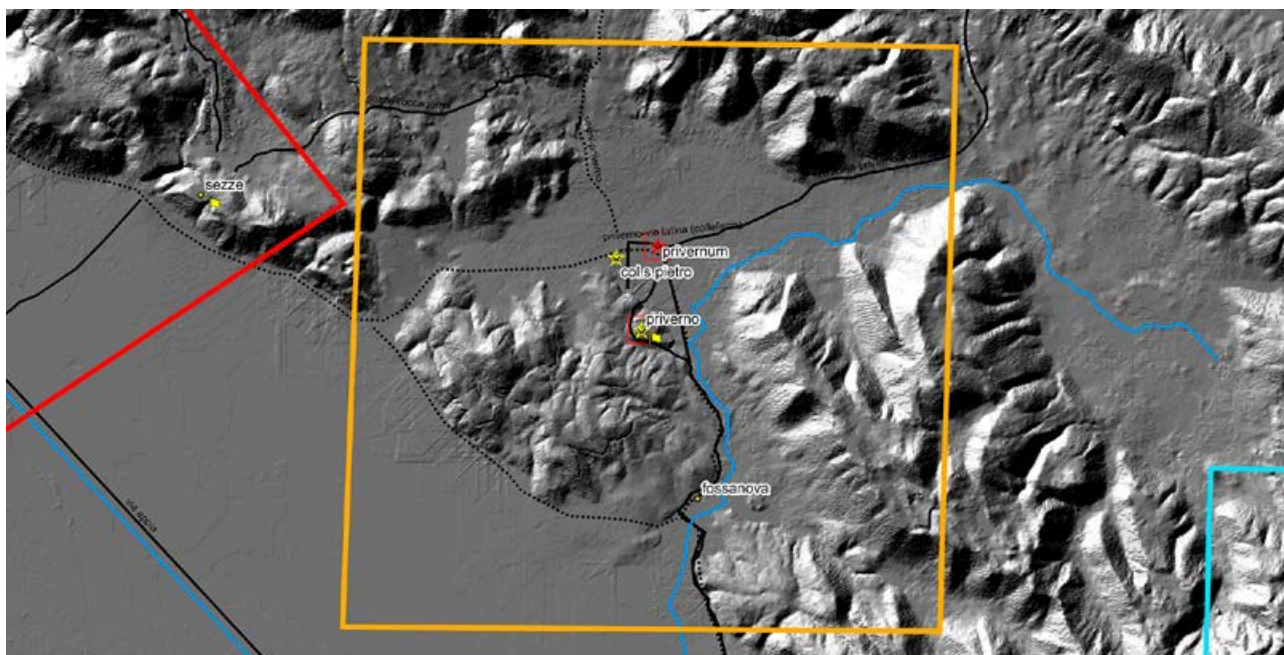


Figure 7.74. The Priverno - Fossanova key area in the 9th century.

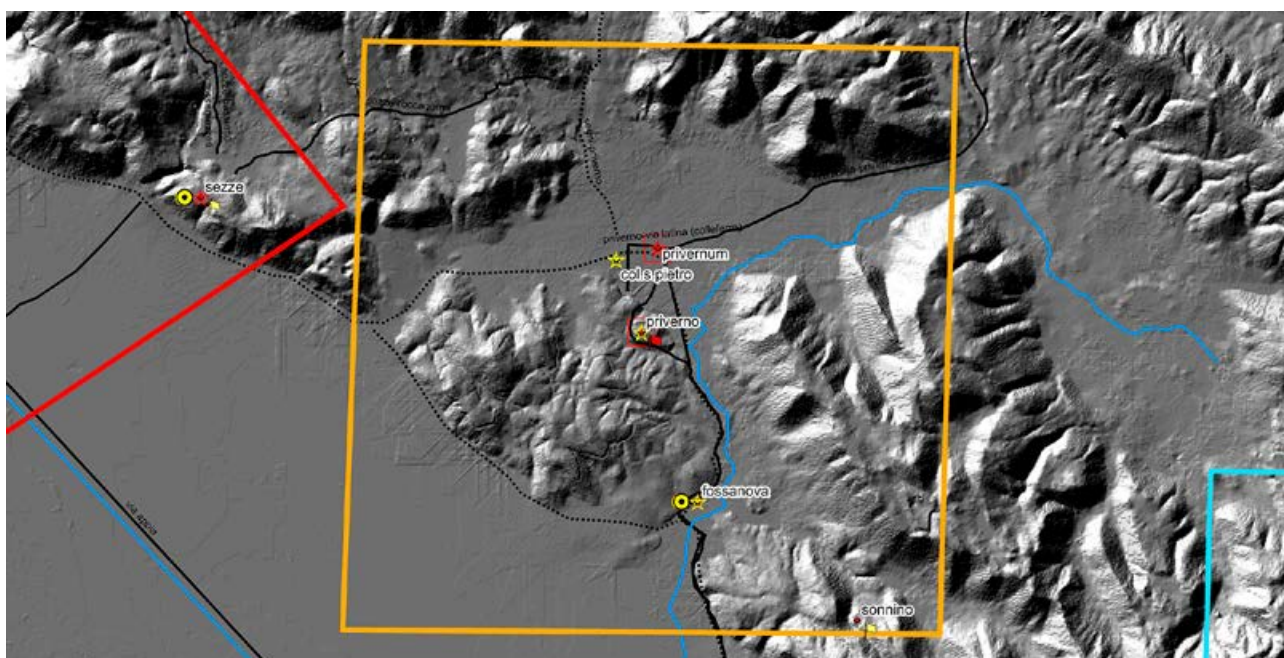


Figure 7.75. The Priverno - Fossanova key area in the 10th century.

that this western part suffered much from infections in the middle of the 19th century. Bianchini proposed yet another theory on the abandonment of the site in the plain, for defensive reasons. He maintained that the transfer took place in the times of feudal battles with the rulers of Roccasecca, Maenza and Roccasecca. The new town was superior in defensive respect, and also close to the *campi* which provided for the town³³⁹.

Privernum-Sezze became a bishopric from the 8th century onwards, which shows the settlements continued importance³⁴⁰. The oldest buildings in the new town may

date to the 9th or 10th century: the church of St. Benedict and St. John³⁴¹.

At Fossanova, the excavations beneath the medieval cloister and refectory have shown that the basis villa with residential function was restructured in the 6th or 7th century AD (into a settlement?)³⁴². Possibly the site saw continued activities from that period onwards, as in room D2, below the refectory, a wall was constructed with reused parts of an older *opera incerta* wall, decorated with frescoes with imitation marble. These paintings date between the 8th

and the first half of the 9th century. De Rossi believed that the refectory area was a centre of activity in the 8th-11th century. If this could be proven, this would make Fossanova one of the few rural sites in southern Lazio with continued activity until the high middle ages, experiencing a transformation from a Roman villa into a monastic settlement. There are other examples of the foundation of a monastery on a (former) villa site, such as the site of San Sebastiano near Alatri, and the site of Grottaferrata³⁴³. As has been treated earlier, at Villamagna (OLIMsite) too, a monastery was founded on the site of a villa complex; here the site was shortly abandoned, however, in the late 5th and first half of the 6th century³⁴⁴. In anticipation of more excavations, Coccia and Fabiani warned not to take the idea of continuity at Fossanova for granted: the evidence does not exclude a temporary discontinuity, as there is a chronological gap between the phase of the 6-7th century restructuring (dated by ARSW Hayes 90) and the 8-9th century wall, and between this wall and the first certain phase of the monastery in the 10-11th century, dated by the oldest standing wall of the monastery (in the refectory)³⁴⁵. It is unknown what the function of the site was from the end of the villa onwards, and when exactly the first Benedictine monks arrived. The first document on the Abbey of Fossanova dates to 1089³⁴⁶.

The rural church of **Colle S.Pietro** (OLIMsite 200) had a 7th or 8th century origin, as marble fragments with plait decorations show³⁴⁷. The site seems to have been frequented throughout the middle ages. In 1159 it first appeared in the written sources.

The town of **Sonnino** (OLIMsite 61) was for the first time referred to as “sumnium” in a bolla dated 999/1000 AD by Pope Sylvester II³⁴⁸. In 1027 it was listed as “Sompnino”³⁴⁹; it is not known what the status (settlement?) and size of the site was in those days.

7.II.1.7.2 Infrastructure

Compared to the previous study period, one road could be added to the infrastructure map: the road connecting the newly built town of Priverno to the Amaseno plain (1 on the map, figure 7.76).

The **pedemontana** (OLIMinfra 1), with the detour along Privernum and along the **road following the river Amaseno** (a part of OLIMinfra 68) southwards, was the main route southwards from the Alban Hills / northern Pontine area from the 6/7th century onwards. The significance of the road along the Amaseno was enhanced by the continued regular traffic between the Sacco – Liri Valley and the Amaseno Valley – Terracina between the 6th and 9th century³⁵⁰. This axis was possibly even more important: According to De Rossi the river Amaseno was (still?) largely navigable in the middle ages³⁵¹. The **Via Transversa** (OLIMinfra 57), keeping to the pedemontana along the base of the mountains south of Sezze, may have been used as an alternative to the detour around Privernum, certainly in the dry season³⁵².

The pedemontana Priverno-reroute would remain the main artery southwards from the northern Pontine throughout the middle ages. Although the Appian road in the plain was partly restored as a route, probably from

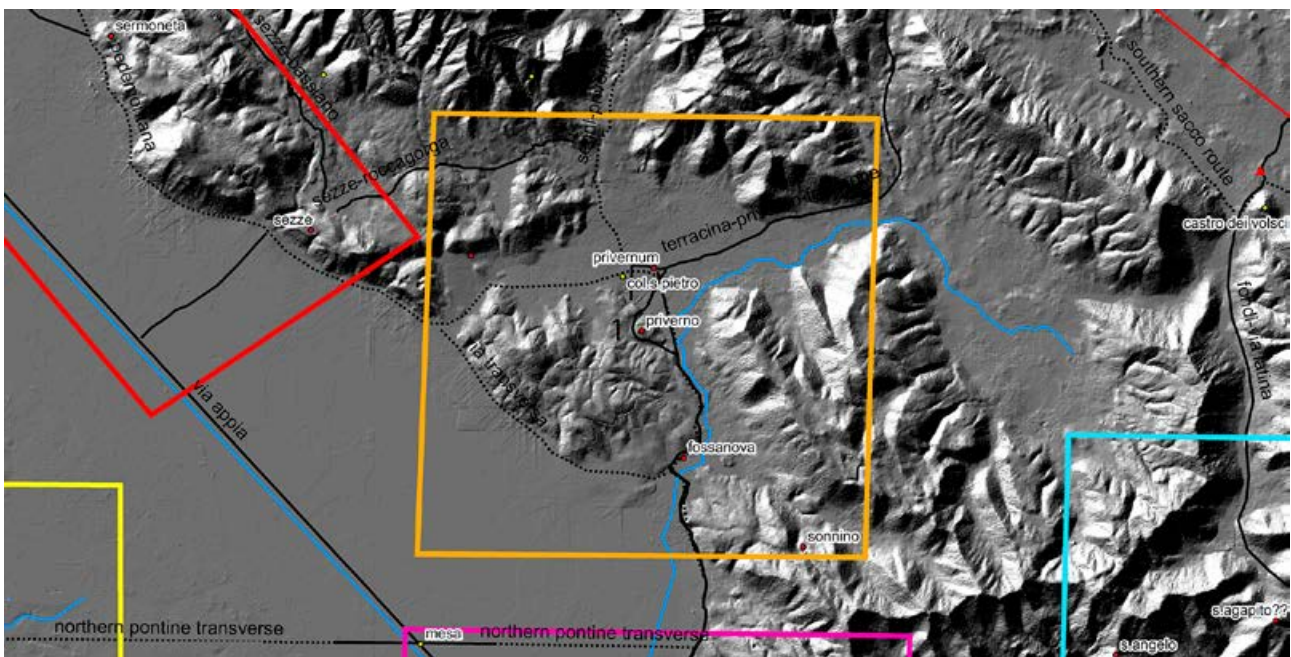


Figure 7.76. Infrastructure in the Priverno - Fossanova key area during the 7th to the 10th century.

the 10th century onwards, it never resumed its position as the main route through the Pontine region³⁵³. It is possible that the Roman transversal roads (OLIMinfra 49 and 50) in the Pontine plain, to the south of the current key area, originally associated to the Roman republican centuriation scheme, continued to function throughout the middle ages (see also Terracina key area, 7.II.1.10.1).

7.II.1.7.3 *Economy, production and trade*

The Amaseno-Sacco valley between the 6th and the 9th-10th century was involved in trade systems originating in south-eastern Lazio³⁵⁴. Archaeological studies at Privernum and Ceriara show continuous regular exchange with inner southern Lazio: the cemetery of Ceriara provides evidence for this until the 7th century with its mixed cultural pallet, typical for the southern Sacco and Liri-Garigliano region³⁵⁵. The pottery assemblages at Privernum clearly show that the sites' economy in the 8th to 10th century was strongly focussed on the south: many pots show characteristics from Campania. Wares originating from Rome, for example Roman Forum Ware, have been found at Privernum too, be it in lower numbers³⁵⁶. From the 10th century onwards the dominance of southern wares is less clear.

The continued importance (or: archaeological visibility) of the sites of Privernum and Fossanova throughout the centuries of economic low ebb (6th to 8th century) may be correlated to the fact that both sites are positioned on this trade system focused on the south³⁵⁷. Moreover, most traffic from Rome and the Alban Hills towards Terracina had to pass through the Amaseno Valley.

From a retrospective viewpoint there is evidence for the intrinsic connection of the Amaseno valley to the inland areas of the Sacco - Liri Valley: in sub-recent times a *tratturo* between the Liri and Amaseno valley has been documented³⁵⁸. However, we do not know if this particular transhumance route already existed in the early middle ages. A *capanna* (a hut made of wood or wattle-and-doub and with a reed covered roof) excavated at the site of Privernum (OLIMsite 25), in use until probably the 12th century, may show that pastoral activity in the Amaseno Valley route already existed in the middle ages³⁵⁹. On the other hand, while the *capanna's* possible pastoral function may be deduced from the fact that sub-recent *lestre* in Lazio contain several of these characteristic huts, it may have also had a different function.

It is unknown if the inhabitants of the site (of the later monastery of) Fossanova played an active role in the trade system that made use of the road along the Amaseno. The commercially strategic location of the site of Fossanova probably was an important factor in the attested continued activity on the site throughout the 8th to 10th

century, and in the economic boom of the monastery from the 11th century onwards. However, trade was not the only favourable aspect of Fossanova's location. If indeed the Amaseno river was navigable, this would have greatly facilitated transport of the agricultural goods produced in the area. The particular richness of the soils of the alluvial valley bottom of the Amaseno and along the Lepine foothills must have been a factor as well³⁶⁰. During the high middle ages the monastery acquired large sections of the Amaseno Valley³⁶¹.

7.II.1.7.4 *Religion and worship*

Privernum is listed as a bishopric from the 8th century onwards³⁶². It is unclear if this see was (initially) located on the site in the valley or in the new town in the hills³⁶³. The creation of the diocese of Priverno may be seen as an act within the papal ambition of establishing the Papal State, from the early 8th century onwards: this way he may have tried to strengthen his authority in the Amaseno valley.

The Priverno - Fossanova area is the only one of the key areas in which Church institutions from Rome itself did not hold possessions in the current study period, at least with the current status of documentary research.

7.II.1.7.5 *Geo-politics: power relations, struggle and control strategies; secular activities*

Two main routes intersected the key area, making it vulnerable to outside intrusion, both from the sea and the Sacco Valley. The threat for invading (Saracene) marauders has been put forward as a factor involved in the transfer of Privernum into the hills. Tradition tells that Privernum was sacked by the Saracens in 846. This cannot be proven by material evidence, for example by proof for contemporary walls built, or by stratigraphical evidence for traces of burning. The current walls of hill site Priverno date to the later middle ages. Earlier walls, however, may have been torn down by the troops of Frederick Barbarossa who destroyed much of the town in the year 1159³⁶⁴.

7.II.1.8 *The pedemontana and plain between Norma and Sezze, from the 7th to the 10th century*

Like in most key areas, written sources dominate the 7th to 10th century. In contrast to many other key areas, however, the pedemontana did see excavations and surveys with regard for medieval contexts (see figures 7.77-7.78): *Forum Appii* (surveyed), *Tres Tabernae* (excavations) and the *Norba plateau* (excavations). The third site, Norba, has provided us of with one of the most intriguing late Antique/early medieval settlements of Lazio, with an established chronology.

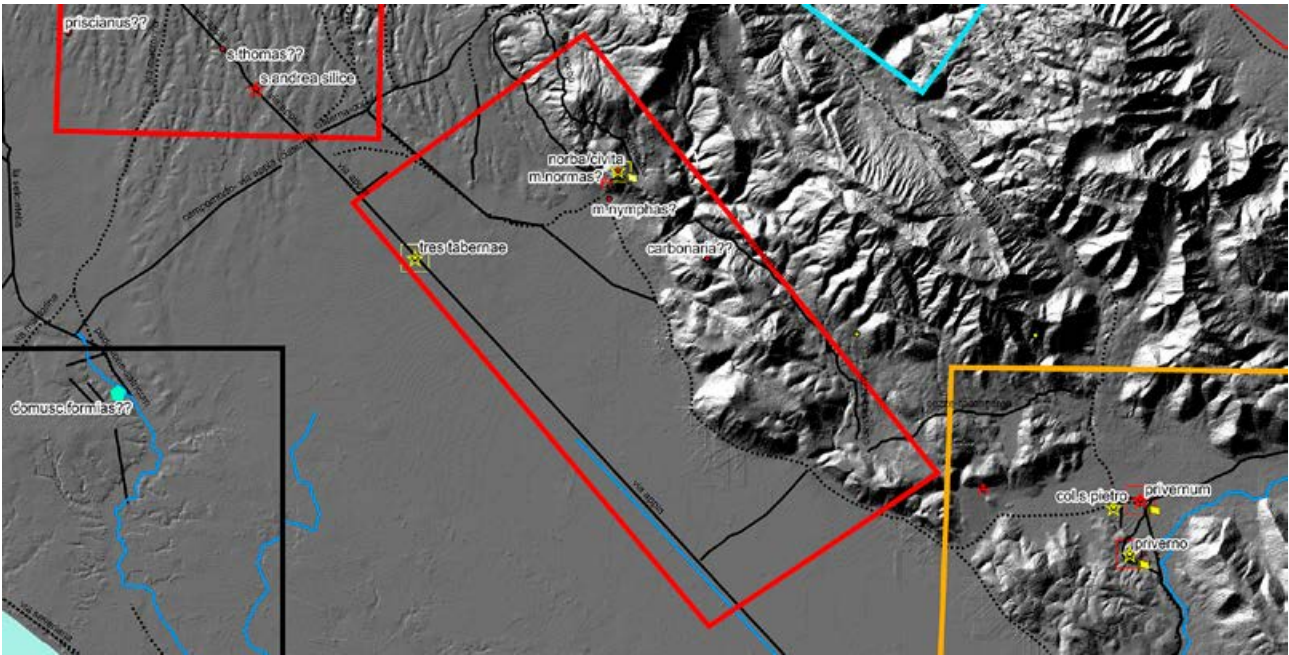


Figure 7.77. The pedemontana key area in the 7th and 8th century.

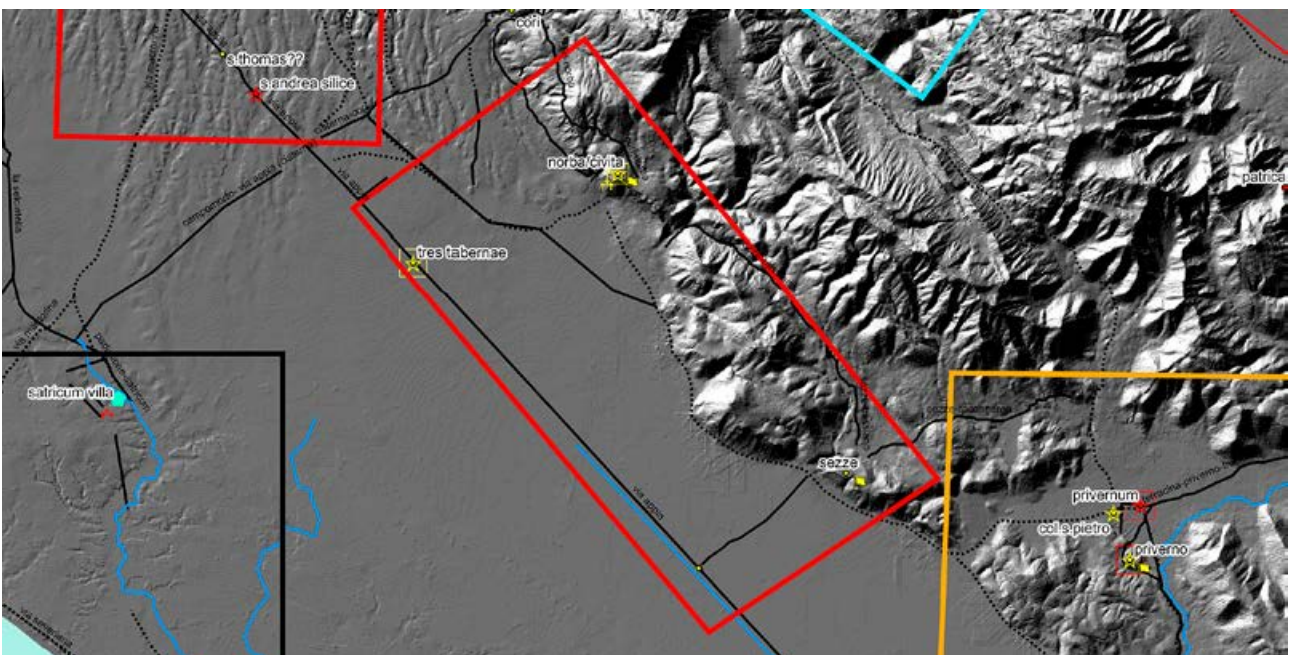


Figure 7.78. The pedemontana key area in the 9th century.

7.II.1.8.1 General site distribution: monitoring of (change in) human activity

7th to 9th century:

settlement at Norba plateau, the massae Normas and Nymphas, (titular) see of Tres Tabernae

The two major settlements in the Pontine plain, **Forum Appii** (OLIMsite 16) and (possibly temporarily) **Tres Tabernae** (OLIMsite 30)³⁶⁵ seem to have been abandoned from the start of the 6th century and in the later 6th or 7th century respectively. The discarding of these road site

settlements seems to be caused by a combination of drainage problems in the plain, the lack of maintenance of the Via Appia, and defensive vulnerability; as a result of the wet conditions in the plain, malaria too may have had its impact on the living conditions. In contrast, the difficulties in the plain may explicate the contemporaneous reoccupation of the **plateau of Norba** (OLIMsite 23): On this defensible, and malaria free position³⁶⁶, 400 meters above the plain, a settlement was founded in the 6th-7th century which would last until possibly the 11th century. Among the vestiges found was a church, located on and inside

the remains of a small temple. A large number of simple graves has been documented, most without grave gifts or clear orientation, underneath or near the church³⁶⁷.

The 8th century *massa normas* (OLIMsite 119, toponym 157) maybe located, partly, on the Norba plateau (figure 7.77). In the year 742, Pope Zachary received from the Byzantine emperor Constantine two *massae*, in return for his efforts to regain a number of cities in Italy from the Lombards: Nimphas and Normas: “Et iuxta quod beatus pontifex, donationem in scriptis de duobus *massis* quae Nimphas et Normas appellantur, iuris existents publici, eidem sanctissimo ac beatissimo papae santaeque Romanae ecclesiae iure perpetuo direxit possidendas”³⁶⁸.

The plateau itself, measuring roughly 500 x 500 m, could probably produce most of the crops needed to feed the population of the settlement. It is not certain, however, if the *massa* was restricted to merely the plateau, which could comprise only a limited number of square meters of farm land: a *massa* in this period denotes a grouping of several lands and/or farms, in all likelihood larger than the (maximum, but probably less than) 25 hectare available on the plateau. It would seem that the plateau and its settlement gave their name to a cluster of farms in the Lepine mountain range. Grazing may have been an important economic activity on these farms in mountain plains, as it is was in Antiquity and as it is today³⁶⁹. As regards the toponym [norma]: it is possible that the name “Norba” was already corrupted before the population was finally transferred to the new location of the current town Norma, roughly 800 m to the south, at some point during the late-early or high middle ages. As the toponymic research shows, name corruption through phonological change, is a well-studied phenomenon, which usually occurs independently of demographic change³⁷⁰.

The *massa Nymphas* (OLIMsite 92) can be located probably on and around the high medieval site of Ninfa, although no explicit topographical clues are provided by the *Liber Pontificalis*. This location is the most likely, not only because of the toponym, but also because of the fact that it is mentioned in combination with *massa Normas* (OLIMsite 199) in the *Liber Pontificalis*; the argumentation for its location is also true the other way around.

While *Tres Tabernae* (OLIMsite 30) may have been temporarily abandoned from the late 6th or 7th century onwards, its name resurfaces in the *Liber Pontificalis* in 769³⁷¹. In that year bishop Pinnis of *Tres Tabernae* was present in Rome. The bishop of *Tres Tabernae* is mentioned again in the years 853 and 868³⁷². It has been suggested that the settlement was revived, and the see was relocated to the site, after a period of abandonment³⁷³; the latest archaeological evidence indeed shows 8th/9th

century presence on the site. In all, the historical and archaeological sing leave open the possibility of a temporary abandonment of the site. Like many sites, *Tres Tabernae* traditionally is recorded as one of the villages that suffered a Saracene attack (in 868), although there is no contemporary source to corroborate this oral tradition³⁷⁴. It is also possible that the historical restoration of the diocese of *Tres Tabernae* in the 8th and 9th century relates to a so-called titular bishop, typically connected to a see without a diocese. Not only is this a common phenomenon in the early middle ages, at present the titular see of *Tres Tabernae* still (again) exists³⁷⁵.

Recent surveys have shown that *Forum Appii* (OLIMsite 16) saw renewed activity somewhere between the 9th and 13th century. On this site, unspecified types of *ceramica a vetrina sparsa* and *a vetrina pesante* (Forum Ware) have been found³⁷⁶.

The *fundus Carbonaria* (OLIMsite 504, OLIMtoponym 310) is one of the many estates listed on the commemorative stone of Gregory II (715-731) treated in the Velletri key area. The *fundus* has been tentatively located by its toponym near Monte Corvino / Monte Carbolino³⁷⁷.

10th century:

new towns at Sermoneta and Sezze, possible continued activity on Norba plateau (a short-lived bishopric?)

The excavators of the settlement on the *Norba plateau* (OLIMsite 23)³⁷⁸, Savignoni and Mengarelli, believed that the site, after being reoccupied in the 6th or 7th century, was only abandoned in the 11th century, when the community was transferred to the nearby new location of the current town of Norma. This continuity, and date of abandonment, has yet to be proven. It is clear that several generations of Christians were buried on the site, adjacent to the church, built in the remains of a small temple for Juno Lucina³⁷⁹. A new pavement was laid here, on top of the ancient temple floor. Limestone plates with decorations of braiding and spirals have been found, in a style that can be dated to the 8th or 9th century³⁸⁰. The description of the many wares salvaged in and around the church, with glazed yellowish-greenish painted with knobs, shows that *ceramica a vetrina pesante* (Forum Ware) has been found here³⁸¹; unfortunately, no photographs of the pottery are available, nor typological descriptions of these wares. The excavators proposed a date in the 9th or 10th century, as is most common for Forum Ware. This would support the theory of a long-lived settlement here, between the 6-7th and 9th-10th century. Recently, some architectural elements have been found in the area adjacent to the Forum that could suggest the presence of another medieval church, as attested by a type of decoration similar to what was found and identified by Savignoni and Mengarelli³⁸².

There is one written source that may shed a new light on the importance of the settlement of Norba: Liutprand, the 10th century bishop of Cremona, described a synod held in Rome in the early 960s, which was attended by a long list of bishops, among whom were Sabbatinus of Terracina, Leo of Velletri, John of Anagni, Sico of Ostia, and also a certain John of Norma. This is the only known reference of a bishopric at Norma. This reference may show that, for a short period, the parish of Norma had grown in importance, so that a separate bishop was created. I have little doubt that the “Norma” listed truly denotes the Norba/Norma plateau, as it is listed among 27 bishops identified as “the Romans” all of which are securely from Lazio. Another group of bishops attending was the “Tuscans”³⁸³.

The Norba plateau and its early to high medieval contexts would be a good subject for further study, as the site may embody the transition from living in the plain to living in hilltop settlements. Such transition has been assumed for many areas in the early middle ages, but is difficult to prove, let alone to study in detail. A good first start would be to restudy the documentation by Savignoni and Mengarelli, and the medieval artefacts salvaged by them. Recently excavations have been carried out on in the area of the medieval church, but the results have not yet been published³⁸⁴.

Like Cori and Privernum, **Sezze** (OLIMsite 17) traditionally is listed as one of the villages/towns that suffered a Saracene attack (in 846), a historical claim that is not backed up by primary historical documentation³⁸⁵. There is no agreement on the date of reoccupation of the site. In the year 956 Sezze was reported as the first free *commune* in Tyrrhenian southern Lazio, under papal authority³⁸⁶.

The oldest medieval building in town is the church of S.Parasceve, built around the year 1000 on the foundations of the Roman enclosing wall of Sezze. It was built by Byzantine monks, followers of S.Nilo who came from Rossano (Calabria)³⁸⁷. In the year 1036 the bishopric of Sezze was first documented³⁸⁸. The reoccupation of the town of Sezze without a doubt is related to the presence of the remains of Roman enclosing walls and its strategic position, which it also held in republican times, and the fertile hinterland of the Contrada Suso (figure 77.9). From its position Sezze controlled the pedemontana road and the entrance of the Amaseno Valley, thus dominating the main route from the northern Pontine area to the south³⁸⁹.

Although contemporary sources lack, **Sermoneta** (OLIMsite 59) was probably already settled in the 10th century: there is documentation that the oldest church to St. Mary was destroyed in 1030 by Count Lando of Ceccano³⁹⁰. Much of the prosperity of Sermoneta was based on the navigable river that reached the bottom of the hill on which the town was situated (see below, 7.II.1.8.2).

Just outside the research area, the town of **Cisterna** (OLIMsite 57) probably developed from the 10th onwards although it has been suggested that it already was a considerable settlement in the 9th century³⁹¹. Cisterna, favourably situated on the Appian road, on a crossroads of important routes, would develop in one of the main centres and distribution hubs of the Pontine region. In the 12th century it was mentioned as a *castrum*. In the high and late middle ages, Cisterna would be the subject of struggles between a number of baronial families³⁹².

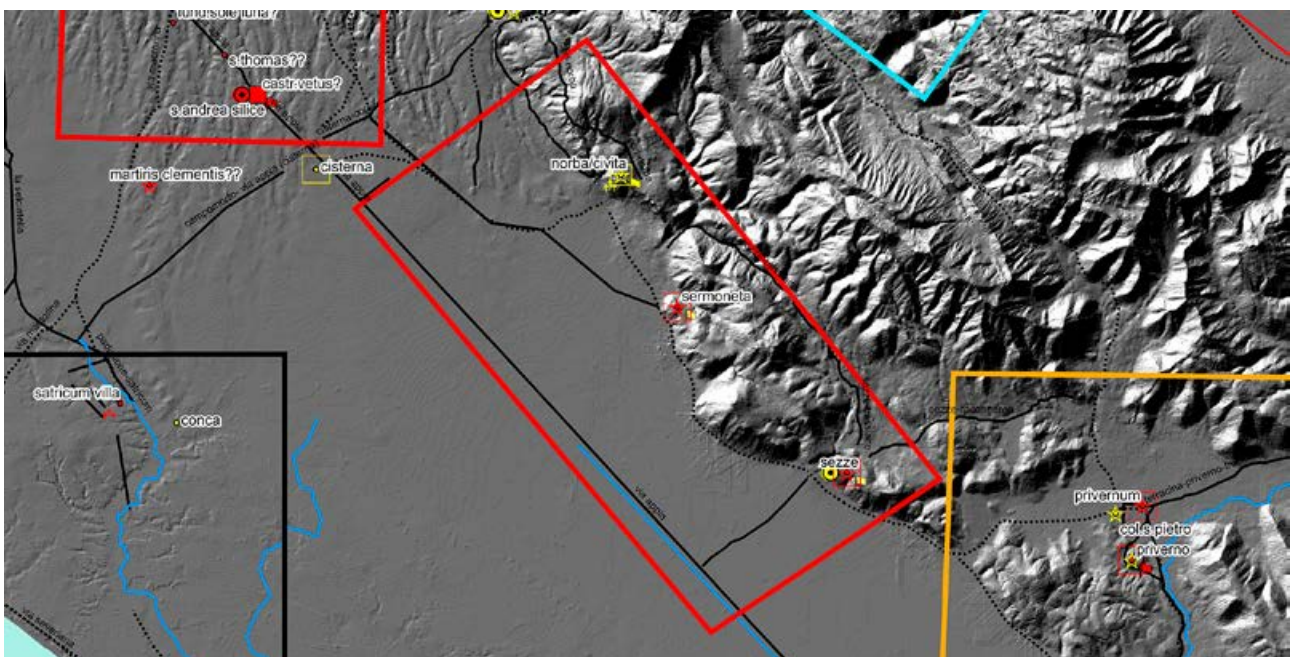


Figure 7.79. The pedemontana key area in the 10th century.

Renewed signs of activity in the Pontine area from the 10th century onwards

The 10th century may be seen as the start of (renewed) interest and investment in the (wider) Pontine plain (figure 7.79). The foundation of a *castrum* in the Fogliano area shows the socio-economic attractiveness of the area, as an *incastellamento* process involved large-scale investments (see 7.II.1.2.1). On the Via Appia a “locus” is recorded at Mesa in the 10th century³⁹³. The 11th century provides evidence for churches along the Appian road, one dedicated to S.Giacomo (OLIMsite 80), the other to S.Leonardo de Silice (OLIMsite 81). From the early 11th century we have a document in which a part of the southern Pontine plain near Mesa is sold, which may show the areas’ economic value³⁹⁴. The site of S.Maria della Sorresca (OLIMsite 128), located on the northern end of Paola lake (12 km south of the Fogliano lake), appeared in the written sources from the second half of the 10th century onwards, the first secure documentation of the site since the late 6th century. The same is true for the Fogliano area, where in the 10th century new historical evidence is available. Conspicuously, the name Rio Martino is first documented in the 11th century, a renaming of the Roman canal, which some scholars believe may point to a contemporary reconstruction³⁹⁵.

We should carefully interpret growth in the Pontine plain based on documentary evidence only, as the 10th century is also the time in which a large bulk of written sources became available in Tyrrhenian southern Lazio (see 3.II.2, the interpretative challenges of the written sources).

7.II.1.8.2 Infrastructure

The major junction of roads to the north of the current key area (figure 7.80) seems the major factor in the growth of Cisterna (OLIMsite 57). This junction must already have existed from the 6th or 7th century onwards, when the pedemontana took over from the Via Appia as the main route southwards³⁹⁶. It is only in the new climate of investment, in which the Italian rural economy of the 10th century began to thrive³⁹⁷, however, that Cisterna developed in a major economic hub. It became an important interchange point, a vital node in traffic between the southern and northern Pontine area, and between the coast and the Lepine Mountains.

Next to dominating the pedemontana – Priverno detour, Sezze (OLIMsite 17) controlled the ancient routes through the Lepine Mountains: the road towards (later) Roccagorga (OLIMinfra 10) and the (transhumant) route towards Caracupa Valvisciolo near Norba (OLIMinfra 9). On this last route, the site PRP 12929 (OLIMsite 643) shows indicators of late/post-Roman activity, although not *in situ*. Solid pottery evidence has been found here, dating between the 4th and 7th century³⁹⁸, which shows that activities in the Lepine valleys continued into late Antiquity and the early middle ages, and possibly beyond. Much of the high medieval prosperity of Sermoneta (OLIMsite 59) was due to the river traffic over the Portatore / Cavata / Puza³⁹⁹. At the base of the Lepine mountain range near Sermoneta, a harbour would develop, the *Porto di Sermoneta*⁴⁰⁰. It may be assumed that during its explosive growth from the 10th century onwards, Sermoneta

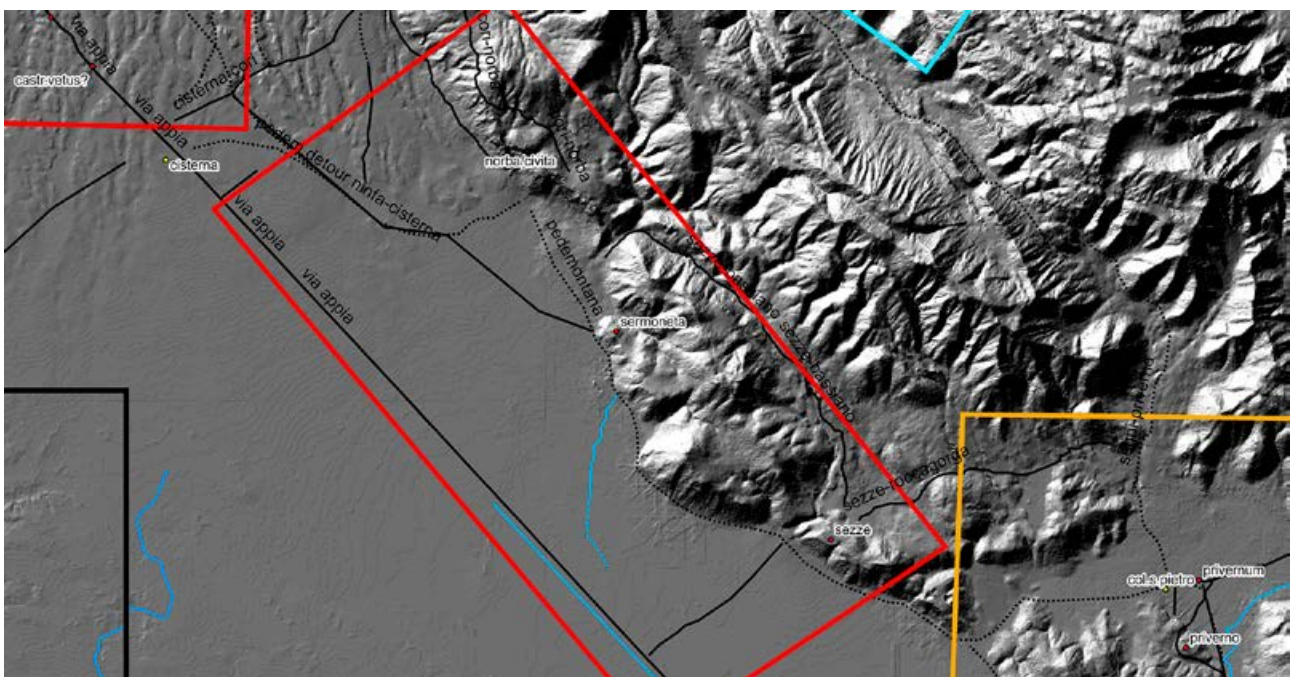


Figure 7.80. Infrastructure in the Pedemontana key area during the 7th to 10th century. Compared to the previous study period, no new sections of roads could be added to the infrastructure map.

was connected directly with the Appian road and Cisterna through the old *Via Setina* (OLIMinfra 86), a Roman road which possibly still / again functioned. Research showed that the *Via Setina* largely follows the modern *Via delle 4 Strade*⁴⁰¹.

It is not known if and when the **Appian road** (OLIMinfra 4) in the plain was restored as a continuous route southwards in the late-early or high middle ages; a reference to *Mesa* in the 10th century⁴⁰² is the first secure indication for renewed activity on this part of the route south of Cisterna. As noted above, it is feasible that after a certain point in the middle ages the canal parallel to the Appian road, the *decennovium* (OLIMinfra 6), became the only way of passing through the marshes, at least during the wet season⁴⁰³. However, there is no evidence on the fate of the canal from the 6th century onwards. Only in the 18th century the canal was restored under Pius VI, as *Linea Pia*.

7.II.1.8.3 *Economy, production and trade*

The rapid growth of the towns on the verges of the Pontine plain shows how the area not only must have profited from the intensification of trade in goods to/from Rome (pottery from Rome is found throughout Lazio in the 9th century and all over the Italian peninsula from the 10th century onwards), but also how the Pontine area itself must have opened up again. A certain level of investment can be inferred from the foundation of the *castrum* at Fogliano, the selling of pieces of the plain around *Mesa*, the pottery finds in the central Plain (*Mesa* and *Forum Appii*), and the renewal of the *Rio Martino*. In that period of time *Sermoneta* started to grow, profiting from its position on a navigable stream towards the Tyrrhenian coast.

In the pedemontana key area, one of the economic activities contributing to the new economic climate may have been pastoralism. Pastoral activities are inherent to the Lepine Mountains, as recorded in Antiquity, in the middle ages, but also in sub-recent times⁴⁰⁴. The pedemontana was known as a passageway for flocks since ancient times.

As has been pointed out in the *Nettuno – Anzio* key area, the expansion of papal possessions in the coastal areas (the *domuscultae* of *Anthius* and *Formias*) and in the current key area (the *massae Normas* and *Nymphas*) may be seen as an active and deliberate economic and strategic move by Pope Zachary. Both the Lepine margins (*massa Nymphas*) and the higher mountain plains (*massa Normas?*) and the higher parts along the river *Astura* (the *domuscultae*) offer excellent grazing grounds⁴⁰⁵. At least two ancient transhumance routes passed by these 8th century papal possessions, as discussed earlier: the *tratturo Liri* valley – *Amaseno* valley – pedemontana – *Astura*

valley marine terraces⁴⁰⁶ and the old Lepine pastoral route which entered the plain at *Caracupa Valvisciolo* near *Norba* (OLIMinfra 9)⁴⁰⁷. Unfortunately there are no contemporary written and archaeological records on transhumant pastoralism.

7.II.1.8.4 *Religion and worship*

Despite the distance from Rome, church institutions from the City held several possessions in the pedemontana key area, although the evidence is not always conclusive:

- In the 8th century the **fundus Carbonaria** (OLIMsite 504), tentatively located in the current key area, was owned by the Church, probably the Pope Gregory II himself.
- The acquisition of the *massae Nymphas* and *Normas* by Pope Zachary (741-752) has been duly noted⁴⁰⁸.
- In 956 the commune of **Sezze** (OLIMsite 17) is said to have become semi-autonomous, under the authority of the papacy (see below on geo-politics).

It is possible that the temporary establishment of a see at *Norma*, which is listed in the middle of the 10th century⁴⁰⁹ met the need of the growing communities in the Lepine mountain range. The settlement of *Norba* was probably the oldest and (initially) the largest of the settlements evolving on the rim of the mountains in the 10th century, and may therefore have been the first candidate for an episcopal seat. Possibly it was superseded by the bishopric of *Sezze*, which is referred to first in 1036⁴¹⁰. In 1217 the diocese of *Sezze* (and *Priverno*) was finally integrated into the one of *Terracina*.

7.II.1.8.5 *Geo-politics: power relations, struggle and control strategies; secular activities*

There are no signs of contemporary defensive measures in the current key area. As has been argued earlier, however, one of the incentives to resettle *Norba* may have been the defensive qualities of the still standing Roman walls. The same may be true for *Sezze*.

The idea that **Sezze** (OLIMsite 17) was already a free commune under papal authority in the year 956 has been recycled over the years by a number of scholars. Primary sources to verify this hypothesis, however, are not available. If genuine, this concession by the pope would make *Sezze* by far the first of the free communes in the current study area. These would develop from the 12th century onwards, in among others *Priverno*, *Velletri*, *Prossedi* and *Amaseno*⁴¹¹.

In the pedemontana key area, elite families seem to have gotten involved slightly later than in the *Alban Hills*, *Terracina* and *Fondi* key areas, from the 11th century onwards.

7.II.1.9 The northern Lepine Mountains and the Sacco Valley between Artena and Villamagna, from the 7th to the 10th century

The excavations on the site of Villamagna, situated 7 km east of Segni, are important to the study of the early middle ages in southern Lazio. In this long-running project all the latest research methods have been used, incorporating *confronti* with contexts from Rome, the Tiber Valley and inland sites of San Sebastiano and San Vincenzo. Equally important are the archives of the monastery of Villamagna itself, which were compiled from the late 10th century onwards⁴¹². The Villamagna register constitutes one of the few examples of monastic written sources originating from the presently studied area of rural southern Lazio itself.

7.II.1.9.1 General site distribution: monitoring of (change in) human activity

7th and 8th century: low tide at Villamagna, continuation at Segni (figure 7.81)

The available (unpublished) archaeological evidence seems to point to continuity throughout the middle ages for the town of Segni (OLIMsite 266) and its bishopric⁴¹³. It has been reported that Segni was placed under the direct control of the papacy in 726⁴¹⁴.

After a period of abandonment between 470 and 550 AD, the site of Villamagna (OLIMsite 52) saw new bustle on site B. Here the earlier ceremonial structure / reception hall was rebuilt from the ground up in the 6th century⁴¹⁵. On site D, structures dating to the 6th or early 7th century

have been tentatively identified as barracks surrounded by defensive structures. Villamagna experienced a low tide in the 7th and 8th century, during which only the church remained in use⁴¹⁶.

At Colleferro (OLIMsite 306) some unspecified 8th century pottery has been found on/around the *castello*, not in situ⁴¹⁷. This is the only early medieval evidence thus far on the site of the later (13th century) *castrum*.

The *fundus Oppianus* (OLIMsite 362, OLIMtoponym 301) is one of the many estates listed on the commemorative stone of Gregory II (715-732)⁴¹⁸. The *fundus* has been tentatively located by its toponym on Colle l'Oppi, 13 km east of Velletri⁴¹⁹. The estate contained 14 *massae* (in this context denoting *lands*).

The *sito* 78 Casa Ripi (OLIMsite 450) has been identified by the Gruppo Archeologico Toleriense as a necropolis with a church, dated to the 6th - 7th century⁴²⁰. The same research group has identified *Sito* 54 (OLIMsite 446) as a tomb and church, dated from the late Roman to high middle ages⁴²¹.

9th and 10th century: resettlement at Villamagna followed by foundation of monastery, continuation at Segni, monastery at Valmontone (figure 7.82-783)

At Villamagna (OLIMsite 52), site A and B were reoccupied in the 9th century:

- On site A Forum Ware has been found during the 2009 excavation, of the type produced in Rome⁴²². This may show that the *villa / casale* (village) here already existed in the 9th century, at least in this part

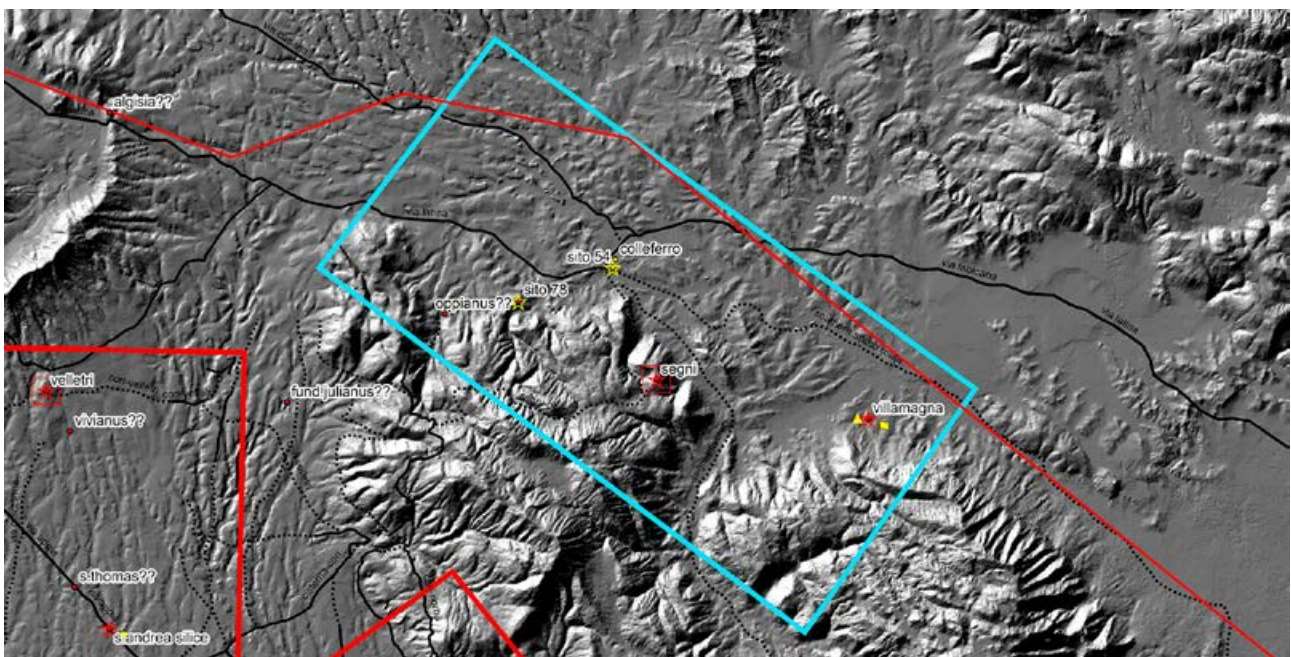


Figure 7.81. The northern Lepine Mountains and Sacco Valley key area in the 7th and 8th century.

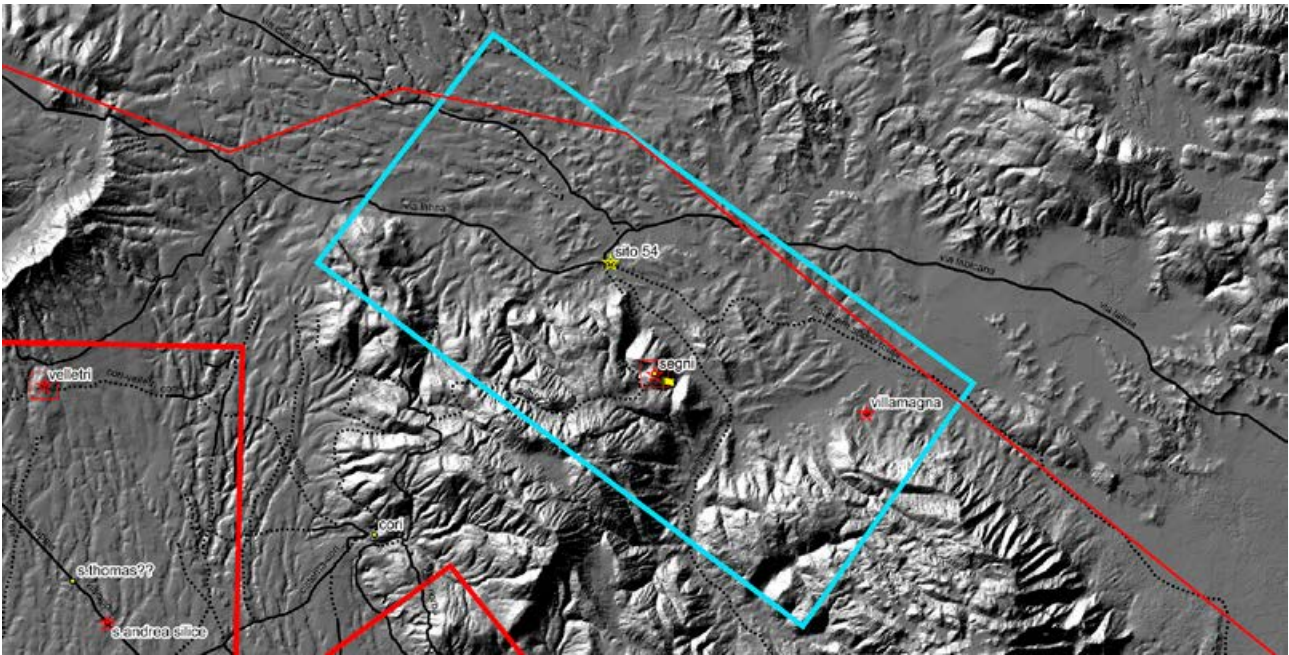


Figure 7.82. The northern Lepine Mountains and Sacco Valley key area in the 9th century.

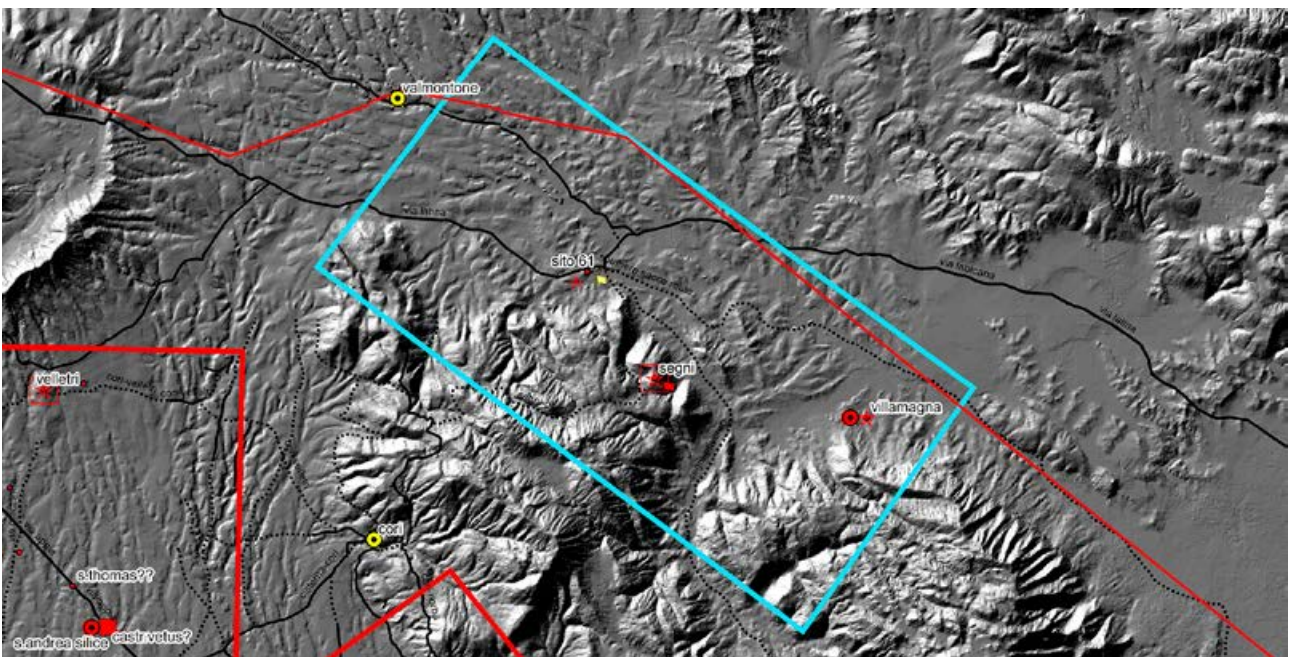


Figure 7.83. The northern Lepine Mountains and Sacco Valley key area in the 10th century.

of the settlement⁴²³. During the 2008 campaign post-holes containing material from the 9th or 10th century were found as well.

- Site B is the location of the church which (occasionally) remained in use during the 7th and 8th century. In the church 8th and 9th century phases have been recognised by the used decoration⁴²⁴. A cemetery to the west of the church has yielded 500 graves⁴²⁵. Burials in the cemetery show that this part

of the site was reoccupied in the 9th century, similar to the village⁴²⁶. On site B the monastery of S. Pietro of Villamagna would evolve from the 10th century onwards. These monasteries' new structures were built on top of the northern part of the villa, on what appears to have been the imperial residence⁴²⁷. In later times additions were made, a cloister (13th century)⁴²⁸ and an enclosing wall (dated to the late middle ages)⁴²⁹.

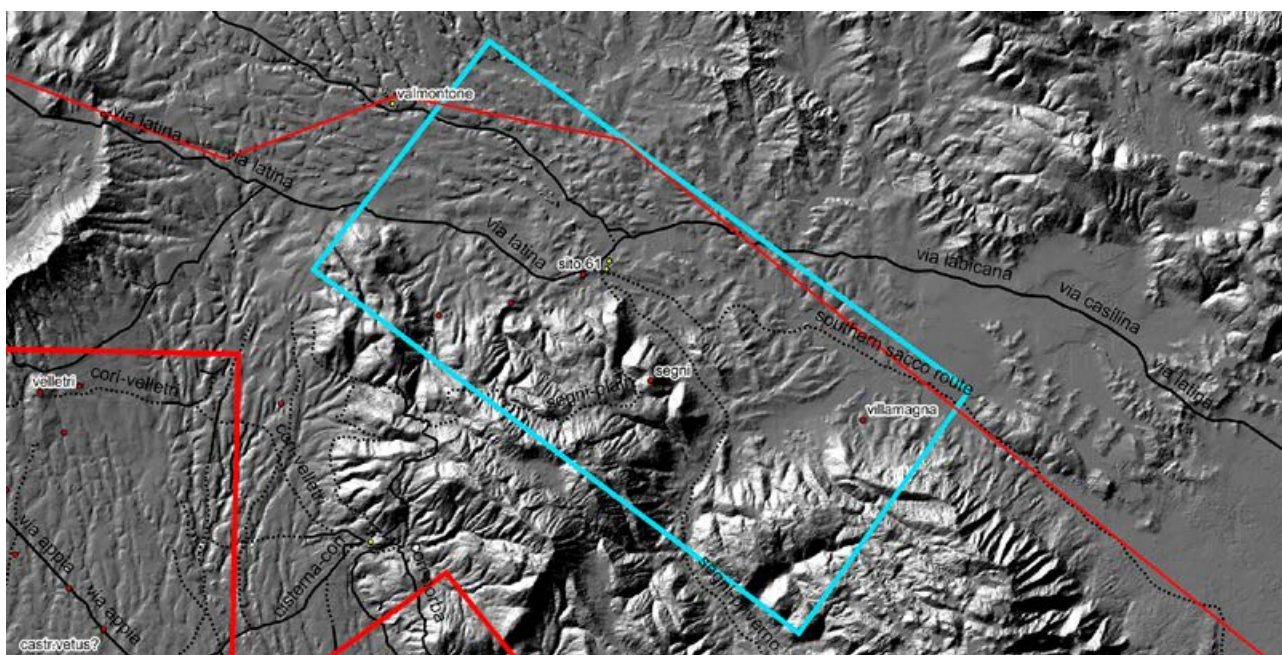


Figure 7.84. Infrastructure in the Northern Lepine Mountains-Sacco Valley key area, 7-10th century.

On **Sito 61 in casale Colleferro** (OLIMsite 447) high medieval tombs have been found dating from the 10th century onwards⁴³⁰.

At **Valmontone** (OLIMsite 269), the monastery S. Angelo was founded possibly around the year 1000⁴³¹, perhaps earlier than the town, which is first documented in the 12th century.

It has been suggested that **Segni** (OLIMsite 266) suffered from Saracene attacks, as may be deduced from the name “Porta Saracena”⁴³² still used for one of the gates in the wall of the republican *colonia*; there is no contemporary source to back up this claim⁴³³. Although rulers of the wider area may have become known as “Conti di Segni” since the 10-11th century⁴³⁴, Segni seems to have remained under direct control of the pope (figure 7.83).

7.II.1.9.2 Infrastructure

Compared to the previous study period, no new sections of roads could be added to the infrastructure map. However, to the west of the current key area the road Velletri – Via Latina (OLIMinfra 115) was again recorded in the 10th to 12th century (figure 7.84)⁴³⁵.

The direct road from the villa to Anagni, attested by Roman epigraphic evidence, may have continued as Anagni remained an important town and a *see*. The route of the **Via Latina** (OLIMinfra 54), which runs from Capua to Rome continued to be used throughout the current study period, as can be read from the historical references to the road and may be deduced from the

activities on a number of sites along its route. Somewhere in the course of the middle ages, however, the Via Latina was damaged on several places, which led to (local) changes in its tract⁴³⁶. Much of the traffic between Rome and Anagni would use the **Via Labicana** (OLIMinfra 66), situated more to the north, although activities on a number of sites along the Latina route show that it was still frequented throughout the high middle ages. The name *Via Latina* was replaced by **Via Casilina** (OLIMinfra 104). “Via Latina” was recorded for the last time in a document found in the Subiaco register, dated to 897 AD⁴³⁷.

7.II.1.9.3 Economy, production and trade

The 9th century pottery evidence of Villamagna shows that “Villamagna was closely linked to commercial networks and the material culture of Rome.” The high-quality Forum Ware and globular amphorae show stand in evidence for the presence of high end consumers “that stands well above a peasant village, and that indicates a clear link between Villamagna and the supply networks that went to Rome”⁴³⁸. However, the evidence shows that much of the more simple types of pottery was produced locally.

7.II.1.9.4 Religion and worship

Pope Vitalian (657-672) was born in Segni. Although its nearness to Rome may have meant a close tie of the diocese of Segni to the Holy Seat, a bond was only officially documented in the 10th or 11th century, when the diocese of Segni became a suburbicarian diocese. The bishop of Segni therefore became one of the cardinal-bishops, who were often consulted and were granted special

privileges⁴³⁹. In the 11th and 12th century Segni acted as a retreat for several popes⁴⁴⁰.

7.II.1.9.5 *Geo-politics: power relations, struggle and control strategies; secular activities*

At Villamagna the vaulted substructures of the monumental Roman winery were re-occupied and transformed into a semi-fortified elite residence⁴⁴¹. The church of this settlement was redecorated, showing the aspirations of the estate-owners and their connections with the Roman Church⁴⁴².

7.II.1.10 Terracina and its surroundings, from the 7th to the 10th century (figure 7.85)

The lack of (published) archaeological studies with a focus on the current study period in the town of Terracina contrasts with the abundant contemporary sources. Terracina is not only well-documented as a *see*, it also played a key role in the geo-politics of the Byzantines, the pope and, from the early 10th century onwards, the local rulers who claimed a stake in the new order, in which secular power and fiefs became central elements.

7.II.1.10.1 *General site distribution: monitoring of (change in) human activity*

Terracina (OLIMsite 31) was documented in the written sources throughout the middle ages⁴⁴³. The town was firmly in the hands of the Byzantines until the late 770s when the Byzantine power began to wear out⁴⁴⁴. The papacy took over control over Terracina and Fondi in 778-779 until the above donation by Pope John X (914-928) to the Dukes of Gaeta. The gift of the town of Fondi to the Byzantine Dukes of Gaeta was confirmed by Pope

John X (914-928)⁴⁴⁵. In this second treaty, the donation was considerably larger: not only Fondi, but the entire coastal area of southern Campania, including Terracina, was given to an alliance affiliated with the Dukes of Gaeta. This transaction likely was brought about by the wish to build a southern power-base that could act against the constant Saracene threat. The Saracene danger was real: from the late 9th century onwards for example, Minturnae and surroundings, just south of Gaeta, was occupied by Saracene forces; only a combined Christian force was able to drive the Saracenes out, in 915, after the battle of Garigliano⁴⁴⁶. Somewhat later in the 10th century, the power of the Dukes of Gaeta was splintered into a branch in Fondi, and one in Terracina, creating a duchy of Terracina (shortly) and Fondi (which would last until the 12th century). In the year 924, Anatolio of Gaeta was named (among others) *dux* of Terracina⁴⁴⁷. Finally, before 963, Terracina was returned to the pope, a transaction that would definitively establish the borders of the Papal States south of Terracina⁴⁴⁸. From the end of the 10th century Terracina became a feudal city under papal ownership, until the 13th century. Two feudal concessions are reported in the 10th century: Crescenzo (of the family of the Crescentii or Crescenzi) was Count of Terracina 988-991⁴⁴⁹. The city was given for some time in feudal concession to Daiferius, Count of Traetto (Minturno) at the end of the 10th century⁴⁵⁰.

The suburban church of S.Maria ad Martyres – later S.Cesario (OLIMsite 505) was continuously in use throughout the middle ages⁴⁵¹. A monastery would evolve next to the church; it is unknown when this happened.

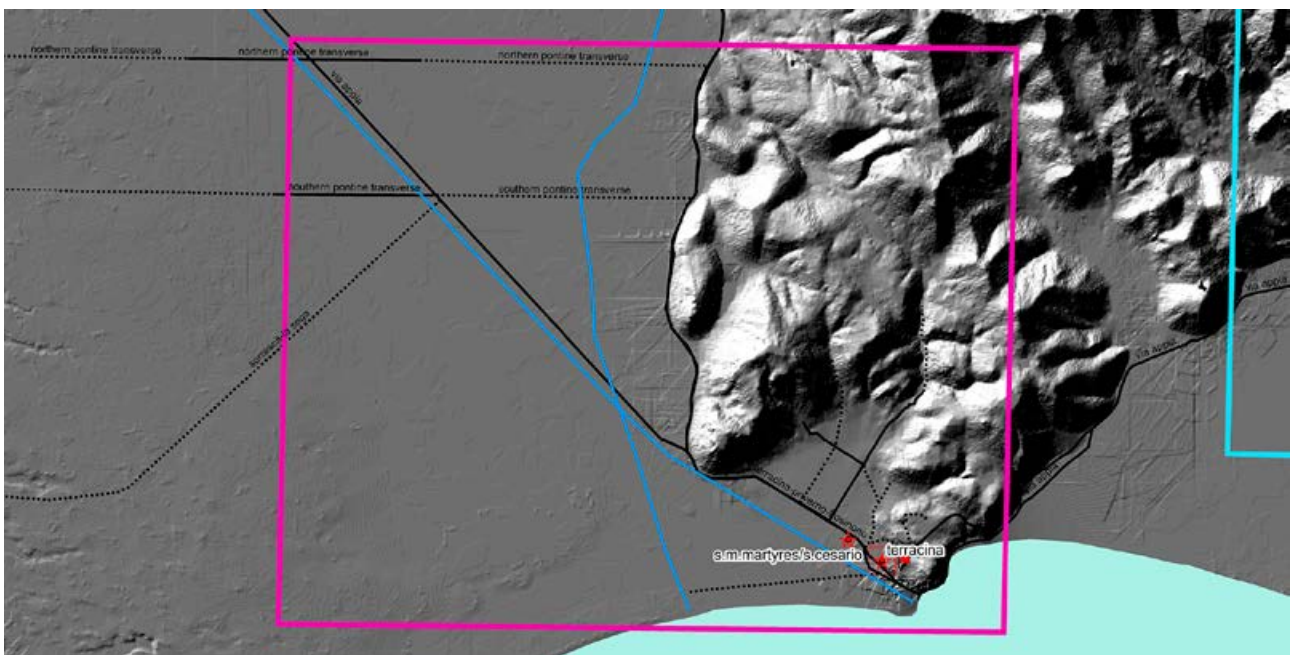


Figure 7.85. The Terracina key area in the 7th and 8th century.

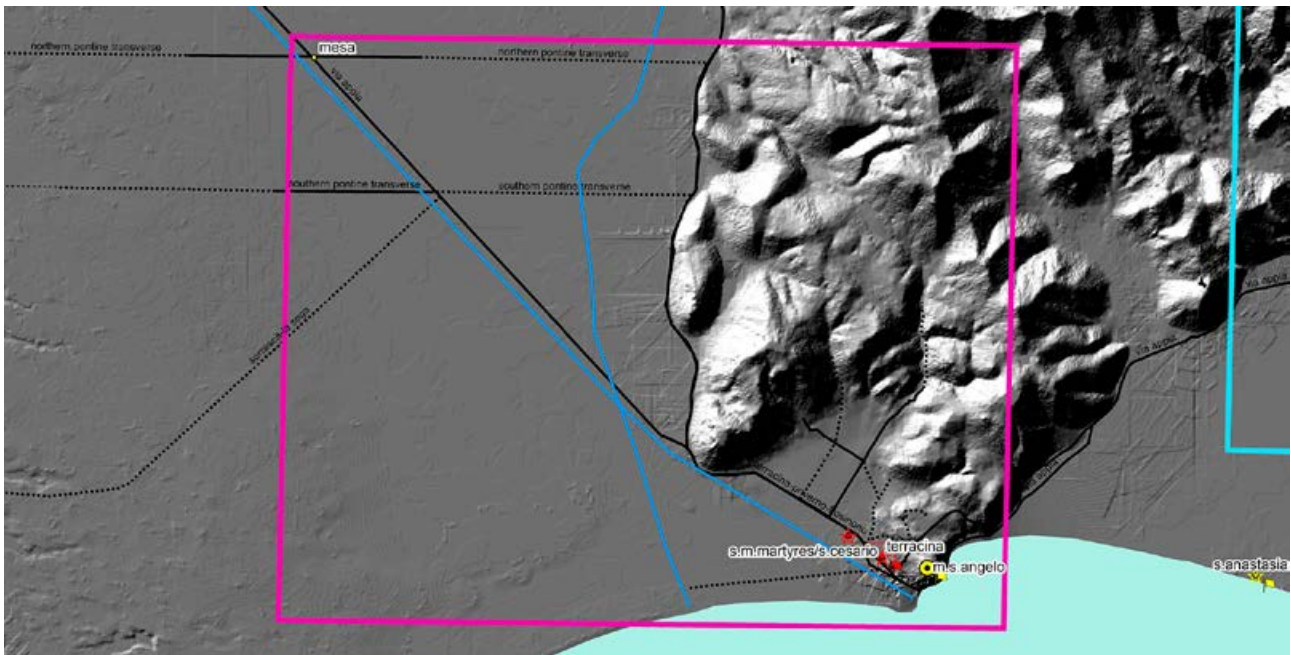


Figure 7.86. The Terracina key area in the 9th century.

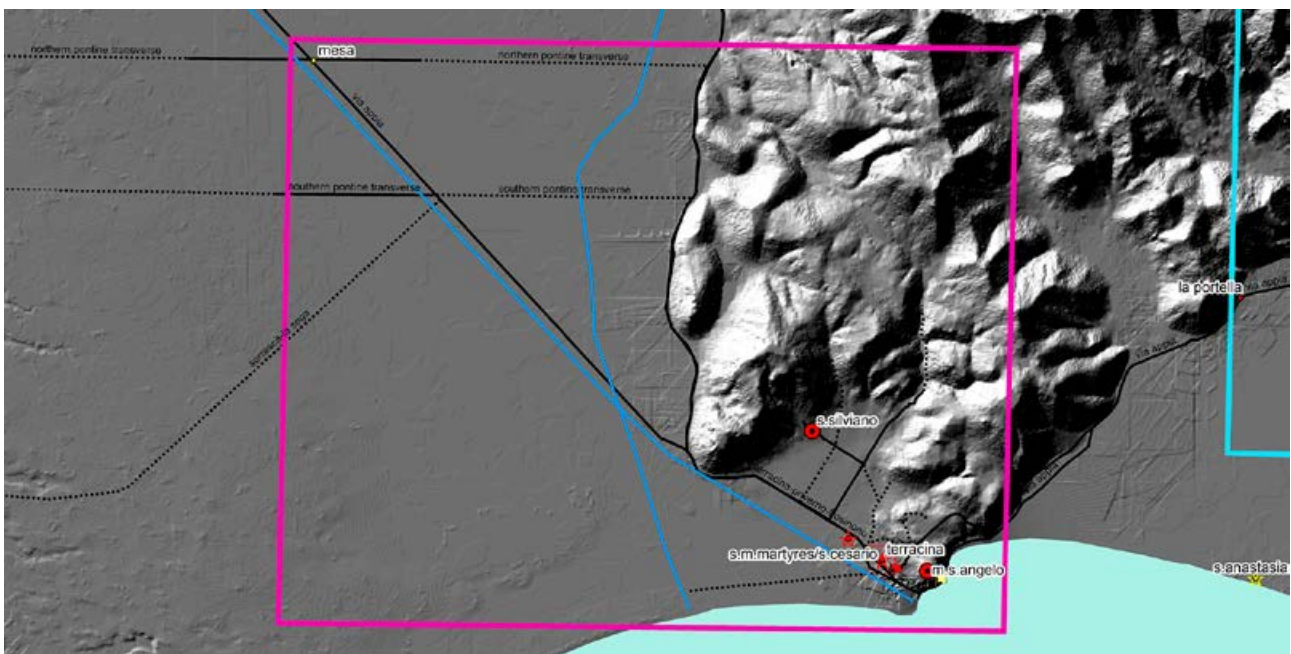


Figure 7.87. The Terracina key area in the 10th century.

The site of S. Anastasia (OLIMsite 94) may have played an important role during the Saracene attacks of the late 9th century (figure 7.86). According to the *Tabularium Casinense* in 880-881 a 'locum, ubi sancta anastasia vocatus' ⁴⁵² was attacked. De Rossi believed that this "locus" was a small fortified settlement built around a church ⁴⁵³. By capturing S. Anastasia, the Saracene fleet was able to invade through the water passage at S. Anastasia into the plain, and continue towards the Fondi lake, and from

there to the town of Fondi. This fleet was led into the plain by Docibile, the Duke of Gaeta ⁴⁵⁴.

On the site of Monte S. Angelo (OLIMtoponym 211), located north east of Terracina on a cliff overlooking the town, a medieval monastery to St. Michael was built on the site of a small Roman temple. The structures of the monastery have been dated to the 9th or 10th century, on the basis of the Byzantine

influenced mosaics in the church of the monastery⁴⁵⁵. The first secure reference to a “S. Angeli” dates to the 10th century, probably referring to the church / monastery⁴⁵⁶. On this site too, a high medieval watchtower can still be seen, part of a larger fortification. The walls of this watchtower are constructed in so-called *opus saracinesca*, the irregular wall-building technique broadly dated 9th to 13th century, as has been attested elsewhere in the study area.

In the 10th century the medieval **monastery to S.Silviano** (OLIMsite 112), located at the foot of Monte Leano in the *Valle di Terracina*, appeared in the written sources (figure 7.87). The church that is still visible on this site may be older⁴⁵⁷.

On the Via Appia, in the Pontine plain, activity has been recorded at Mesa (OLIMsite 28) in the late 10th century. An undisclosed source dated to 989 refers to “loco qui vocatur mese”⁴⁵⁸. It is unclear what this *locus* stand for, possible a “place” or a “settlement”⁴⁵⁹. This is the first secure sign of activity since the 7th century in the central Pontine plain, although the recent pottery finds in the central Pontine plain could date to the 9th century. Slightly later, from the early 11th century, dates a document in which a part of the southern Pontine plain near Mesa is sold⁴⁶⁰. In the 12th century, a church was recorded on that site⁴⁶¹.

7.II.1.10.2 Infrastructure

Terracina is located on a crossroads of infrastructure: it was the site of a large sea harbour, strategically located, which continued to be used throughout the middle ages.

At Terracina too, the main route for traffic southwards reached the Tyrrhenian shore (figure 7.88).

Although parts of the old Appian tract may have been restored and frequented from the 10th century onwards, possibly between Mesa and Terracina, the Via Appia during my research period never regained its position as the main route southwards. Likewise is it unknown if the *decennovium* canal (OLIMinfra 6) remained in use during the current study period; evidence on the canal lacks since the 6th century (Theodoric, see 7.I.1.8.1-3). Only in the 18th century the canal was restored under Pius VI, as *Linea Pia*.

It is unknown what happened to the Roman transversal roads in the Pontine plain, originally connected to the Roman republican centuriation system: sections of these transverse roads, east of the Appian road, were still visible in the 1930s, suggesting continued use (of parts) of these tracts in post-Roman period times⁴⁶². In view of these finds, a continuous inland connection from the Appian road (Mesa) to the mountains seems possible. One could hypothesise that these parallel roads were/ remained extended to the coast, using the presence of a *castrum* in the Fogliano area as an argument (see the Fogliano key area, 7.II.1.2.3).

7.II.1.10.3 Economy, production and trade

The Amaseno Valley was part of an exchange network with connections to inner southern Lazio and Campania from the 6th/7th century until the 9th-10th century⁴⁶³. Corsi (2007) upholds the idea that Terracina (with its harbour) in the early middle ages was the end station of this

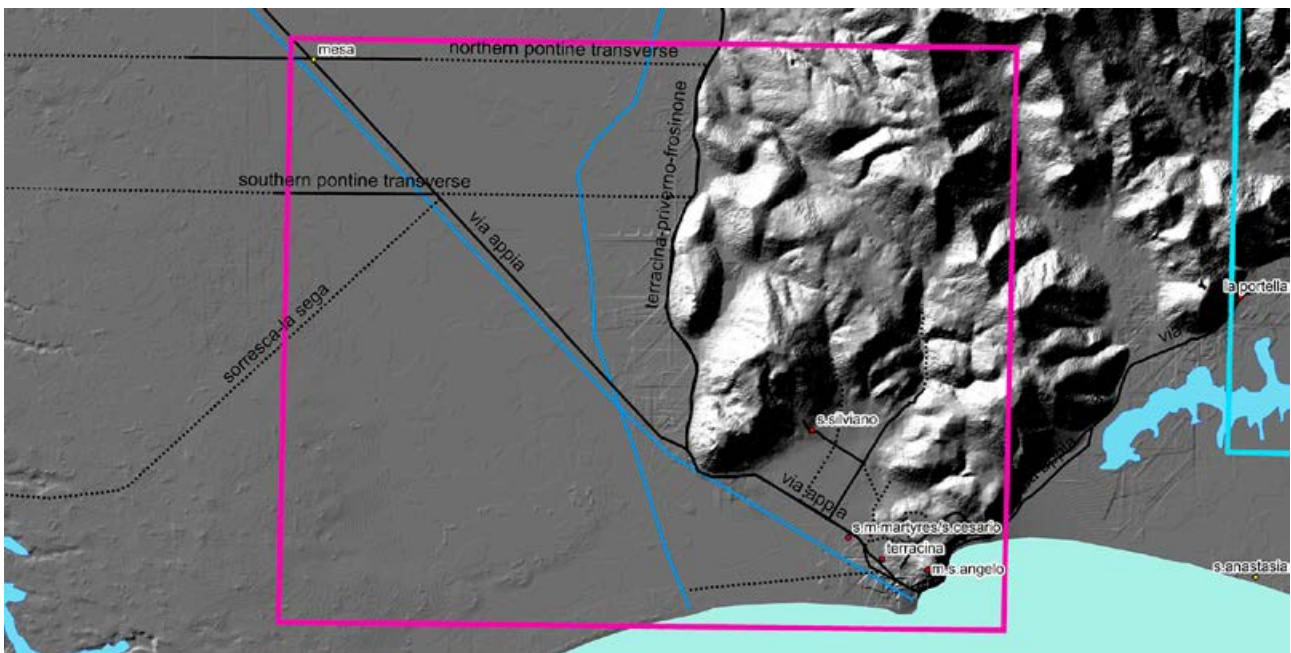


Figure 7.88. Infrastructure in the Terracina key area during the 7th to 10th century. Compared to the previous study period, no new sections of roads could be added to the infrastructure map.

exchange network originating in inner southern Lazio, although the idea has yet to be substantiated by additional pottery studies⁴⁶⁴. If Terracina actually received goods from the south cannot be checked, as published pottery studies on contexts in the town lack. It is clear that Terracina remained an important harbour and trade hub.

7.II.1.10.4 *Religion and worship*

The bishopric of Terracina from the start must have serviced much of Lepine communities⁴⁶⁵; only in 769 Privernum would develop into a see itself. The town and its hinterland appear to have been an attractive location during the boom of monasteries of the 10th century. Three rural monasteries in the wider area were first recorded in the 9th to 11th century: S.Silviano (OLIMsite 112), Monte S.Angelo (OLIMsite 216) and S.Anastasia (OLIMsite 94). The monastery of S.Maria ad Martyres (OLIMsite 505) may have functioned in this study period as well. Its date of foundation is unknown.

7.II.1.10.5 *Geo-politics: power relations, struggle and control strategies; secular activities*

The southern borders of the papal *patrimonium* in the 8th and 9th century were not fixed and difficult to determine. In the 10th century, the borders of the Papal States became definitively established.

The story of the southern papal border is mainly one of control over Terracina. Until the late 8th century the Byzantines controlled Terracina. From the 730s onwards they left the day-to-day rule over Terracina and the area southwards to the Byzantine Duchy of Napoli⁴⁶⁶. The pope resumed control over Terracina and Fondi in 778-779, until the donation by Pope John X (914-928) to the Dukes of Gaeta⁴⁶⁷. After the pope finally regained control over Terracina from the middle of the 10th century, the border of the Papal States became definitely fixed south of Terracina and would remain so until the *Risorgimento*⁴⁶⁸. Fondi would be a part of the realm of the Gaetan Byzantines, and (temporarily) Montecassino, until the 12th century⁴⁶⁹. Terracina remained firmly under control of the pope, who now and then conceded the town to a baronial family.

7.II.2 *Analysis and conclusions for the whole research area regarding the 7th until the 10th century*

7.II.2.1 *An evaluation of results, sources and methods used*

7.II.2.1.a *What does (dis)continuity of sites imply?*

If one looks at the distribution maps of the key areas, many sites, temporarily, drop off the archaeological grid during the 7th or 8th century. Exemplary are the Astura

settlement, Torre Astura, the road side villa sites near Antium, the monastery of S.Magno, the town of Cori and Fossanova, among others. However, other sites in the researched area continue to be present in the database throughout the middle ages. A vital question in studying the 7th to 10th century period arises: what does this (partial) (dis)continuity of sites mean?

As discussed in Chapter 1 and earlier in this chapter, the disappearance of many sites, or their temporary abandonment, often represents the actual absence of contemporary material culture, caused by demographic decline, abandonment or a refocus of activity during the period in focus. However, as I will try to argue, most of the evidence that presents itself, as the (partial) disappearance of sites from the database, may be explained methodologically or heuristically. Generally there are three factors that blur the vision on continuity / discontinuity in the current study period, i.e. a lack of clear markers of change, the (un)recognisability of contemporary material culture, and the inconsistent way archaeological or historical information is available. Although aspects of these factors were discussed in Chapter 4, as were the interpretative challenges, I consider it useful to expand on them a bit more, as several new observations have resulted from the study of the key areas above, which will be helpful in the synthesis of this chapter's study period below:

1. **A lack of markers of change**

The exact moment of abandonment of sites is difficult to pinpoint. Clear archaeological markers of a sudden change, like an episode of destruction indicated by burned layers or the finding of arrow heads (such as the ones recovered in 9th century stratigraphies at Farfa and San Vincenzo al Volturno), are quite rare in Italy, and are even absent in Tyrrhenian southern Lazio. The same holds true for written evidence: in contrast to the foundation of sites, their abandonment is only rarely documented. In the studied area this is limited to the see of Tres Tabernae (6th century; it is not certain if the site itself actually was deserted) and Ostia (9th century). Without markers of change, abandonment is difficult to pinpoint. Can one be sure that Antium was totally abandoned between the last ARSW sherd, dated to the 6/7th century and the reference to the *domusculata* in the 8th century? Were the structures built in *opera saracinesca* contemporary (related?) to these papal estates, or of a much later period?

2. **Medieval archaeology: unrecognisable or absent?**

While the momentary disappearance of a site from the database may often represent the actual absence of then-contemporary material culture in Tyrrhenian southern Lazio, its vanishing, however, might also be explained by the (earlier) difficulties in recognising material culture of that period. Early medieval material culture mostly was,

and often still is, simply not detectable, due to a combination of negative factors. Among these are the suboptimal – but nowadays improving – understanding of ceramics of the post-antique period, the regional breakdown of imports and the less-durable built environment that impedes recognition of any vestiges there might have been in the rural landscape. These factors were generally summarised by Arthur and Patterson in case of the ceramics⁴⁷⁰ and by Barker in more general terms⁴⁷¹. A case in point exemplifying that many contexts were missed out on because of the difficulties in recognising them, was put forward by Paul Arthur. He combined carbon-14 dating of medieval layers in Apulian villages with excavations and historical socio-economic and topographical analysis. This brought about a dramatic breakthrough in the insights of the evolution of medieval villages. Several of the villages which earlier were dated to the 11-13th century based on historical sources, could be dated back to the 8th century based upon carbon-14 dating⁴⁷². It remains to be seen if such an early date holds true for the towns in our study area, given the differences between Apulia and Lazio in geography, geo-political circumstances (e.g. the degree of Byzantine influence) and demography (for instance, *incastellamento* did not develop in Apulia).

Exemplary for the generic problem of recognisability of medieval material culture in general, and the problems in interpreting the database it results in, is the contrast between unrecognisable local utilitarian pottery and recognisable traded pottery.

3. Unrecognisable local utilitarian pottery versus recognisable traded pottery

As has been stipulated for the previous study period also holds true for the currently examined one: traded pots are more easily recognised, because they are often more luxurious than locally produced utilitarian pottery, and because they have more ‘timebound’ or ‘fashion sensitive’ features as fine wares often go through relatively rapid changes in shape and quality. At the same time it can be observed that even in the darkest of archaeological ages, the more expensive wares were traded and distributed beyond the production centres; they were distributed to many parts of Lazio, at least towards the more important centres. An example of such fine wares is Forum Ware, which is assumed to have been produced for the elite⁴⁷³. Largely because of its richness in shape and decoration and its easy recognisability, Forum Ware has been studied for over 50 years, and a detailed typology has been set up. In contrast, medieval common wares are very difficult to recognise and to use as identifiers of archaeological contexts. Luxurious pottery therefore has a double advantage as a means of archaeological diagnosis compared to local simple cookery pottery: it was traded more often,

and it often is more recognisable; . These facts concerning luxurious pottery constitute a bias, i.e. sites outside a trade network of luxurious pottery are often absent on distribution maps, even if unrecognisable cooking wares were locally produced. This fact warns us to always try to correctly assess the prominence of the sites on which traded goods are found; these sites now often stand out in a virtually archaeologically void landscape. The Tiber Valley project (especially the Farfa area) and recent pottery studies at Interamna Lirenas illustrates the reality of overlooked locally oriented contexts⁴⁷⁴.

4. The availability and provenance of historical data

An important factor that should be considered is the way historical data come to us. The origins of historical evidence, and the way it was created and distributed, i.e. its provenance, but also how it survived the centuries, and sheer chance, all influence what is seen on the distribution maps.

Provenance

The Church’s monopoly on written sources in Tyrrhenian southern Lazio until the 10th century is exemplary in addressing the factor of provenance. Until the 10th century the vast majority of (the surviving) texts originated from the clergy of Rome, i.e. a clergy associated with individual churches, monasteries, and most of all the papacy. As will be argued, the ecclesiastical origins of the main bulk of written sources influences the distribution maps considerably in a number of ways:

First of all, as was discussed in Chapter 3, primary ecclesiastical written sources should be meticulously read as to interpreting the information they contain: Scholars should always wonder why sites were mentioned, and if specific site-types were underplayed or overrated regarding their production-output or size.

Secondly, knowledge of the ecclesiastical origins of written sources is vital to understand the distribution of the data (i.e. sites) mentioned in them. Many large centres were continuously documented because of their significance to the Church, for example the bishoprics of Fondi, Segni, Terracina, Ostia, Castra Albana and Velletri. Next to bishoprics, other smaller sites with ecclesiastical importance show up in the written sources throughout the current chapter’s period of interest, be it more sporadically: church properties, rural churches and monasteries. Sites which significance to the papacy appeared more often in the *Liber Pontificalis*, by the way, which should be correctly read, not as chronologically correct historical accounts, but more as a ‘Leistungsnachweis’. One may assume that sites with no direct significance to church

institutions, like small farm estates, were less meticulously recorded in the *Liber Pontificalis*.

And thirdly, because of the well-oiled church administration from the early Christian period onwards and the high medieval foundation of libraries and registers, ecclesiastical sources have had a fairly good chance of enduring the test of time, as many church institutions have continued to function until this day. It is fair to assume that, for example, Terracina and other large towns had maintained their own administration from the early middle onwards as well, but these records may have gone lost.

Availability is affected by chance

As was discussed, 4th and 8th century sources, and the historical data contained within them, are more numerous than those dating between the 5th and 7th century. Overall, this was most certainly influenced by the effect of less human activity in the landscape, caused by the wide-ranging socio-economic decline of late Antiquity. However, to some extent, I argue that this temporary dip of historical data was also influenced by *chance*. Chance commonly affects the availability of historical data:

- The amount of information documents contain differs a lot. Some sources contain only a few data, while others hold a lot of data. This partly explains the overrepresentation of data of the 4th and 8th century (see 3.I.2).
- What sources survived throughout the centuries? Some sites disappeared from the written sources in the 6th and 7th century, while others continue to be mentioned. In some cases it is fair to assume that original records were lost. Sometimes the material evidence proves that a temporary historical omission was not caused by a suspension of human activity. For example, Fondi, is absent in the written sources of the 8th century, while all indirect geo-historical and archaeological indications point to continuation of activity. The same applies to the sites of S.Magno (OLIMsite 238) and S.Vito (OLIMsite 91) in the same key area. In other cases, the sequentiality of records implies that records got lost: The *Sanctae Mariae sita in Fonteiana / fundus Crispinis* (OLIMsite 212, OLIMtoponym 245), part of a cluster of church possessions in the south-eastern corner of the Ostia key area, gets off the grid during the 6th and 7th century but resurfaces with identical names and church patronage in the 8th century⁴⁷⁵.

In conclusion: the diverging availability of historical data and the challenges in their interpretation / identification complicate the diachronic analysis of site distribution maps and the comparison of maps between different key areas. Therefore, the above stated observations and biases

should be integrated in the chronological and regional interpretation of these maps.

5. The availability of archaeological data affected by chance

The constraints of availability being affected by chance also applies to archaeology: scholars are usually dependent on a very limited number of local initiatives with a focus on the middle ages. Medieval archaeology in the study area, especially regarding the current study period, proves to be rather bleak. There are, however, several examples of archaeological excavations that have had due regard for the middle ages: Villamagna, Privernum, Fossanova, Ostia, Pianabella, Tor Paterno, Norba (recently) and Astura settlement. Examining these sites, one is reminded of the changed focus of Italian archaeology of the past decades. Until fairly recently, excavations were mostly focussed on major Roman centres, during which the medieval finds were (initially) merely a by-product (e.g. at Antium, Terracina and Ostia). Nowadays medieval contexts are deemed an integral part of the research focus (e.g. the excavations at Tor Paterno, Pianabella, Privernum and Villamagna). Stating the obvious, many medieval sites with a large archaeological potential are built over nowadays, and medieval buildings are often still in full use, thus complicating the study of (earlier) medieval phases.

The degree of publication of executed research is an additional factor in the availability of archaeological sources: Several key sites that were studied focussing on the middle ages remain without publications of the final results. This applies to, for example, Terracina, Antium, Castra Albana and Tor Paterno. This course of events is especially poignant for the town of Terracina, where the lack of (published) archaeological studies with a focus on the late Antique and early medieval period contrasts greatly with the available contemporary written sources. This lack of publishing of excavations proves to be a specific disadvantage for this period, which from experience is archaeologically very difficult to detect and for which every shred of evidence is as valuable as could be. Future research strategies should therefore also focus on unlocking or restudying these hidden archaeological data, which can be found in museums and communal collections.

To end this paragraph on a positive note: there is one key area located in this study's area of interest of which the archaeological and historical sources complement each other, seemingly bridging the gap between the early and high middle ages: the Ostia key area. This area surfaced in written sources throughout the entire middle ages, because of its proximity and continuing close ties to Rome and the Church. At the same time, the published medieval archaeological record of this key area is abundant as well.

Nevertheless, while painstakingly archeologically documented, the research performed in the key area also shows the common deficiency of studies with an late Antique and early medieval focus in Tyrrhenian southern Lazio: The archaeological studies were almost all focussed on the well-known large sites, situated along the coast. The functional relationship between these medieval centres and their immediate hinterland, including their contributory sites, has yet to be fully explored.

6. Excavations in Rome dominate pottery studies

Excavations performed in Rome (in particular the Crypta Balbi assemblages) dominate the study of wares of the 7th to 10th century. As a result, Roman assemblages have always been the starting point of research, and could even be said to hold a virtual monopoly, at least until recently, regarding the reconstruction of trade networks⁴⁷⁶. Although it is fairly safe to assume that Rome dominated regional trade throughout late Antiquity and the early middle ages, being the market centre for many production areas in its wider hinterland, even in the region's darkest economic days (the early 7th until the late 8th century), local distribution networks must have existed as well, certainly regarding utilitarian goods. All the same, local production of luxury goods can be assumed as well. In northern Lazio, archaeologists were able to create ware-typologies of local variants of Forum Ware. Because of the lack of a variety of local pottery typologies in the currently studied part of southern Lazio, the reconstruction of intraregional trade is out of reach. The exceptions to this rule are the assemblages of Ostia, Privernum and Villamagna. The pottery found at Pianabella demonstrates a close exchange relation with Rome until the 10th century; the same holds true for Villamagna. At Privernum, the pottery evidence found shows that trade from the Amaseno valley with the Sacco Valley and southern regions at least continued until the 9th century.

7. The use of *spolia*

As was discussed above, the 7th and early 8th century are the least documented periods. Many rural sites had their lowest ebb of recorded activity during this period⁴⁷⁷. Possible, for some of these sites there is an additional archaeological explanation as a result of a phenomenon that was attested in Rome: there the use of *spolia* during the period of socio-economic revival of the late 8th and 9th century seems one of the reasons for the little evidence of material culture of the 7th and early 8th century⁴⁷⁸. Maybe this also holds true for some of the rural sites dealt with in the current study.

To conclude:

the absence of evidence is not evidence of absence

This study's database shows that in many key areas the evidence of activity runs dry after the 6th and 7th century. Overall, the historical and archaeological data are flimsy at most regarding the 8th century, with the exception of the wider Ostia and (in terms of historical data) the Velletri area, resulting in large lacunae on the distribution maps. Only during the 9th and 10th century, the database again shows a landscape that begins to fill up. To a large extent the lacuna of signs of human agency may paint a correct picture of changing habitation and land use, and/or alterations in local trade/exchange and a changed infrastructure, even abandonment, in many parts of the research area. However, the abovementioned arguments illustrate the difficulties of proving (dis)continuity. The aphorism "absence of evidence is not evidence of absence" is one of the classics in philosophical logic and certainly applies to the current study area. This aphorism only becomes a form of a logical fallacy if considerable efforts to find evidence finally come to nothing. This is clearly not the case in Tyrrhenian southern Lazio, certainly in comparison with the status quo of research north of Rome. If one sets the (lack of) results and challenges of the current study against the British studies of Lazio north of Rome, it is clear that research efforts in the research area are in need of large-scale and intensive projects involving landscape archaeology in combination with historical studies, specifically targeted on early to high medieval contexts. Only in this way one might overcome the three factors that distort a clear vision on what actually happened in the past as were presented in the introduction of this section, and were subsequently discussed in detail: i.e. a lack of clear markers of change, the (un)recognisability of contemporary archaeology, and the inconsistent way archaeological or historical information is available.

As the Farfa and Tiber projects showed, the potential of such specific studies in identifying and explaining both change and continuity can be vast, not only in context of understanding individual sites, but also in appreciating transformations in a regional context, i.e. in trade/exchange, in networks of interest and in *connectivity*⁴⁷⁹. As medieval phases are generally difficult to detect, certainly in rural contexts where local coarse wares were the only pots produced, monitoring change and continuity can only be achieved through excavations of key-sites. This helps overcoming the monopoly of Rome-based data, through intensive surveys, thus setting up new (local) pottery typologies. And through a synchronous full exploration of all relevant written sources, whether originating from Rome or from local (rural) registers.

Such studies have not yet been published in the current study area. Despite the excellent work done in the Ostia and Privernum areas and at Villamagna, and the

first efforts made by Tol and in the present study, medieval phases and transformations, in regional, local and on site level, remain difficult to be identified.

What in my opinion is needed for a study of the continuity and discontinuity of human activity in Tyrrhenian southern Lazio to be successful will be summarised in the Recommendations section of this study's final chapter (8.II.2). Among the prerequisites should be continued excavations and pottery studies, and the publication thereof, especially on the key centres of the studied period, such as Antium, Terracina, Velletri, Castra Albana and Astura (settlement). At Astura settlement, for example, continued excavations may shed some more light on a possible Byzantine phase and the reasons for the possible abandonment of the site. Could the village/town have been gradually marginalized, or was it destroyed perhaps? Maybe there was some kind of contracted habitation around the church *ecclesia Sanctae Marie Seu Salvatoris*. And perhaps more could be said about the renewal of the site, and about the significance of baronial families (i.e. the Crescentii, Frangipane) in its revival (see 7.III.1.1.5).

While the aforementioned remarks mostly consider blurred visions and biases to overcome, also some positive observations regarding the status quo of current studies and their methodology should be made:

7.II.2.1.b *Results of small-scale pottery studies*

In contrast to what cannot be seen or may be biased, this current study showcases the potential of local studies. The study of pottery executed in the context of this thesis and the recent field work on medieval Astura settlement serve to demonstrate that relatively limited (pottery) studies can greatly contribute to knowledge of the period. Such studies may help in specifying the chronology of a site, its position in exchange systems and possibly tell more about production and consumption. Analogies with studies in other areas of Italy, especially Rome, help interpret these first sketches and show what is required to optimize future regional (field) projects. Again, the pottery studies done in the Ostia area and at Privernum and Villamagna, and outside the study area, in the Tiber Valley, have shown the large potential of building new local pottery typologies.

7.II.2.1.c *The potential of a study of connectivity*

The current study gets past the more common small scope of research in these parts of Italy. Because of its wide scope (i.e. the size of study area, the combination of disciplines, and study of the *longue durée*) new ways of interpreting the developments in the landscape were found, especially relating to the study of connectivity. An example of connectivity found in the current study was the recurring political (i.e. the 6th century Byzantine control, the 10th

century possessions) and topographical (e.g. 10th century road) interconnection between Velletri and the Astura harbour⁴⁸⁰. Astura may have gained in importance as a harbour for the Velletrian basin after the environmental situation of the Pontine plain deteriorated and the route towards Terracina was cut off. Other examples of finding patterns in the regional landscape are the clearly strategic regional distribution of Crescentii possessions in the late 10th century (dealt with in detail in 7.II.2.2.3.b) and the possible correlation between the acquisition of the papal estates of Norma and Ninfa and the foundation of the *domuscultae* Anthius and Formias on the coast. The latter may be partly related to transhumance routes that connected both areas (see 7.II.1.1.3). The aspect of connectivity will be treated in more detail in the final chapter.

7.II.2.2 Analysis and conclusions

Having previously discussed the key areas in isolation, I shall now present a general analysis of the study area. All evidence, on site distribution, infrastructure, economy/trade, religion and geo-politics, biases and the unbalanced data-distribution between key areas from the 7th up to and including the 10th century will be assessed. Simultaneously, I will try to evaluate and/or extrapolate the data that are missing or could not be located. Developments throughout this era and of relevance to this study that occurred in other regions of Italy will be used as an *abat-voix*. First of all a review of three themes is given:

- Theme: The expansion of the papal *patrimonium* and the creation of the Papal States
- Theme: The Saracene threat
- Theme: The expansion of secular (elite) activities

All three themes will deal with the fundamental aspects of the period under scrutiny. Additionally the short Theme on Trade and Economy will provide an additional background against which the synthesis is to be viewed. Finally, a synthesis is given of the main transformations that took place in the landscape and society of Tyrrhenian southern Lazio; these are treated chronologically.

7.II.2.2.1 *Theme: The expansion of the papal patrimonium and the creation of the Papal States*

The expansion of the papal assets in the countryside of southern Lazio, culminating into the Papal States, was duly studied before⁴⁸¹. The question that still remains and therefore should be addressed here is: Could the current database shed more light on this process of expansion regarding the current study area?

In order to answer this question, I listed all the ecclesiastical "interests" between the 4th and 14th century found in the consulted sources. "Interest" is a collective noun for

all documented acts/events of ownership (e.g. bequeathing, donation, infeudation), investments (e.g. embellishment or reconstruction of a church, building of a castle), taxation, or other markings that imply significance to any church institute (such as the presence of a papal residence, or the engagement of troops, e.g. the liberation of Genzano in the year of 1399 by papal forces)⁴⁸². These interests are listed in Appendix 6.2 and on figure 7.89-7.97 (4th to 11th century)⁴⁸³. By studying all these interests in such a broad chronological scope, it should be possible to monitor growth and shifts in ecclesiastical (most of all: papal) interests, starting where the study of the 3rd to 7th century ended. Whereas the earlier treated Theme on the Expanding Christian Church analysed the expanding early Christian Church in general and as a whole, the focus here will lie on the changes of the papal patrimony⁴⁸⁴. A limitation to this study is the fact that it proved not to be possible to analyse the different types of interests, as in many primary and secondary sources the differentiation among different interest could not or was not made⁴⁸⁵. The mapping of interests, however, does allow me to observe the development of spheres of influence.

7.II.2.2.1.a An overview of developments

On a number of maps I plotted the ecclesiastical interests originating from the 4th to 11th century (figures 7.89-7.97). The papal interests have been labelled green; *domuscultae* are portrayed by blue pentacles. The monasteries (i.e., when possibly functioning: yellow, when certain: red) and the bishoprics are shown per century as well. Of course, only those interests that could be located are depicted on the maps. The maps allow for the plotting of simultaneous (i.e. within the same century) interests of more than one party regarding one specific site. Possibly superfluously, two remarks should be made: one should always be aware that the 8th century is overrepresented in the primary sources, as noted earlier⁴⁸⁶. And secondly, one should constantly be reminded that many of the sites (and interests) mentioned in the sources could not be located, neither through topographical description in the sources nor by analysis of its toponym. I.e., one is never able to capture the entire picture, but only the outlines of the development of spheres of interests.

At first the picture of the distribution of documented interests in the countryside is fragmented. When investigating the 4th century records, several titular churches and monasteries from within the city of Rome compose the lion's share of the documented interests in the immediate hinterland of Rome (figure 7.89). The papacy has only one listed interest. This was during the period in which the papacy had not yet been arisen as the ecclesiastical "super power" it would become. This would change throughout the next centuries. From the 7th century onwards (figure 7.92), the papal interest-network dominates the

maps, with the network at first being restricted to an area between Rome and the Alban Hills and the coastal area until Pratica di Mare. Gradually, other ecclesiastical interests (than those of the papacy) were forced out throughout the course of the centuries.

From the 8th century onwards the papal interests (i.e. mostly consisting of possessions) stretched out over the Pontine plain towards Terracina and the coast at Fogliano (figures 7.93-7.94). The papal network virtually monopolised the area, especially south of the line Velletri – Pratica di Mare. This is the full-fledged *Patrimonium Appiae*, of which the exact extent was never officially determined⁴⁸⁷. At this point in time, the papal court displayed a widespread agricultural entrepreneurship throughout the countryside of Tyrrhenian southern Lazio⁴⁸⁸.

Like elsewhere in Italy, new assets were bequeathed or given in life by private owners to the papacy. In some cases, the donation of landed properties to the pope should be seen as a political reward: In the year of 742 the Byzantine Emperor Constantine V donated to Pope Zachary a string of properties in return for the pope's efforts to help negotiate between the Lombards and the Byzantines. Among these properties were listed a number of cities on the Italian peninsula, such as Ravenna. In the study area the pope was bestowed with the *massae* of Ninfa and Norma and their large territories, as was stated in the *Liber Pontificalis*⁴⁸⁹.

Large parts of the new *domuscultae* consisted of newly acquired assets⁴⁹⁰. The *Liber Pontificalis* explicitly states that the pope would have had to pay a compensation to the previous owners of the lands that would constitute the *domusculta* S.Edisti. However, the territorial foundation of the *domuscultae* in the study area seemed to have consisted of earlier papal estates. The reorganisation of the old papal coastal *massae* of Anthius and Formiae into *domuscultae* is a case in point. Such foundations of new manorial enterprises on old estates were a sign of those times: this was the period of the rationalisation of management of existing properties, of the scaling up of landed properties⁴⁹¹, and of the tightening of direct control on the ground by the papacy, by the larger monasteries. These processes were demonstrated by studies performed elsewhere in central Italy⁴⁹².

It is also possible that the papacy obtained some possessions by means of confiscation or political pressure, given an anecdote of 816 in which landowners from the city of Rome planned and executed the burning of *domuscultae* farms to the north of Rome⁴⁹³.

Documented interests by any other ecclesiastical party than the papacy are rarely found in Tyrrhenian southern Lazio in the 8th and the 9th century. This contrasts



Figure 7.89. 4th century ecclesiastical interests.

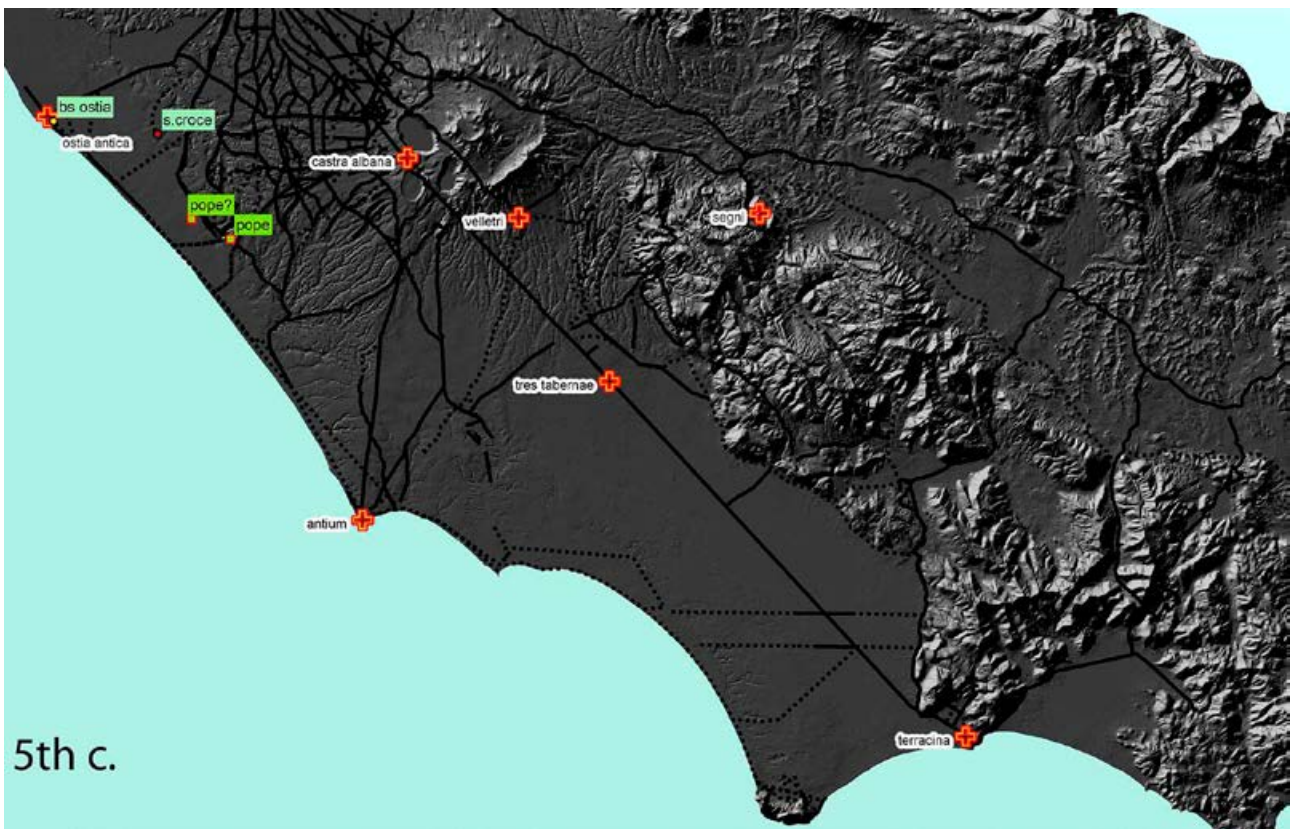


Figure 7.90. 5th century ecclesiastical interests.

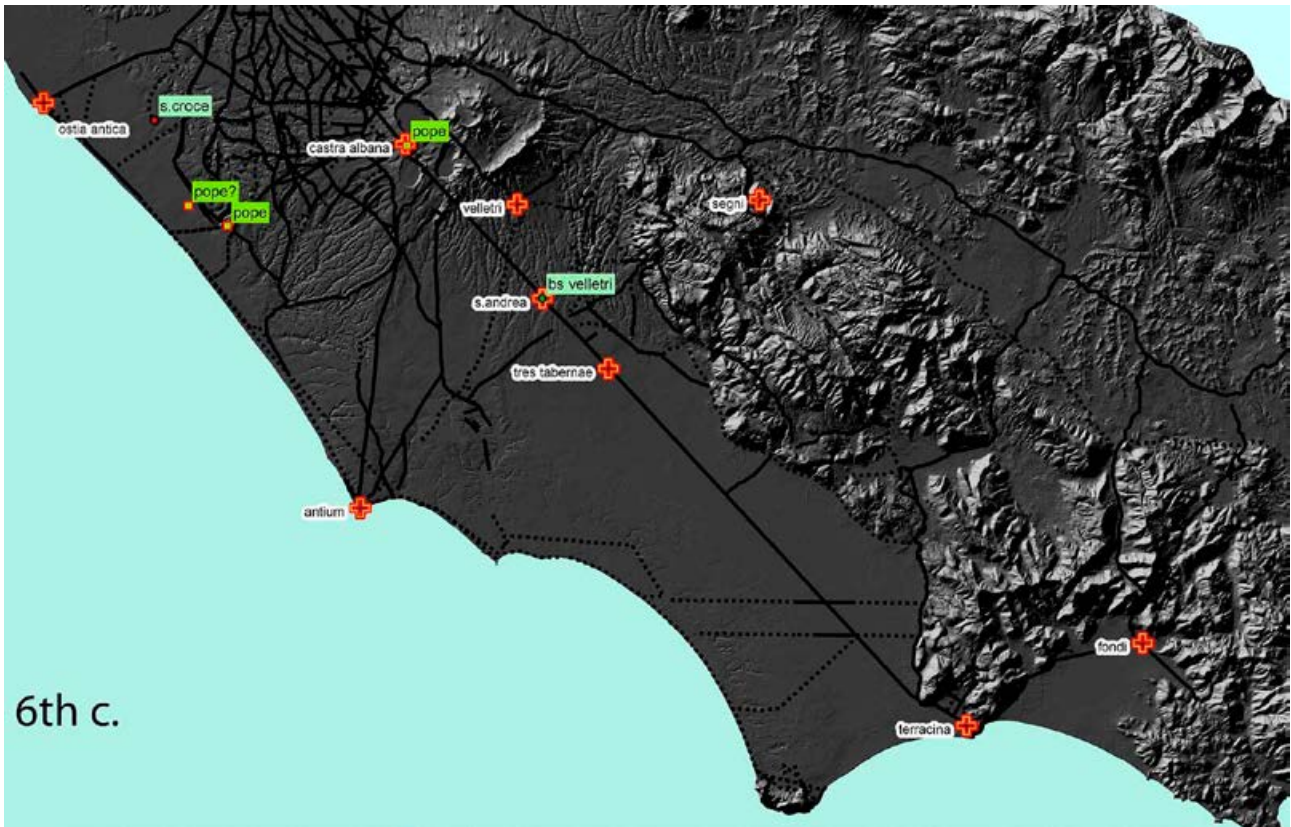


Figure 7.91. 6th century ecclesiastical interests.

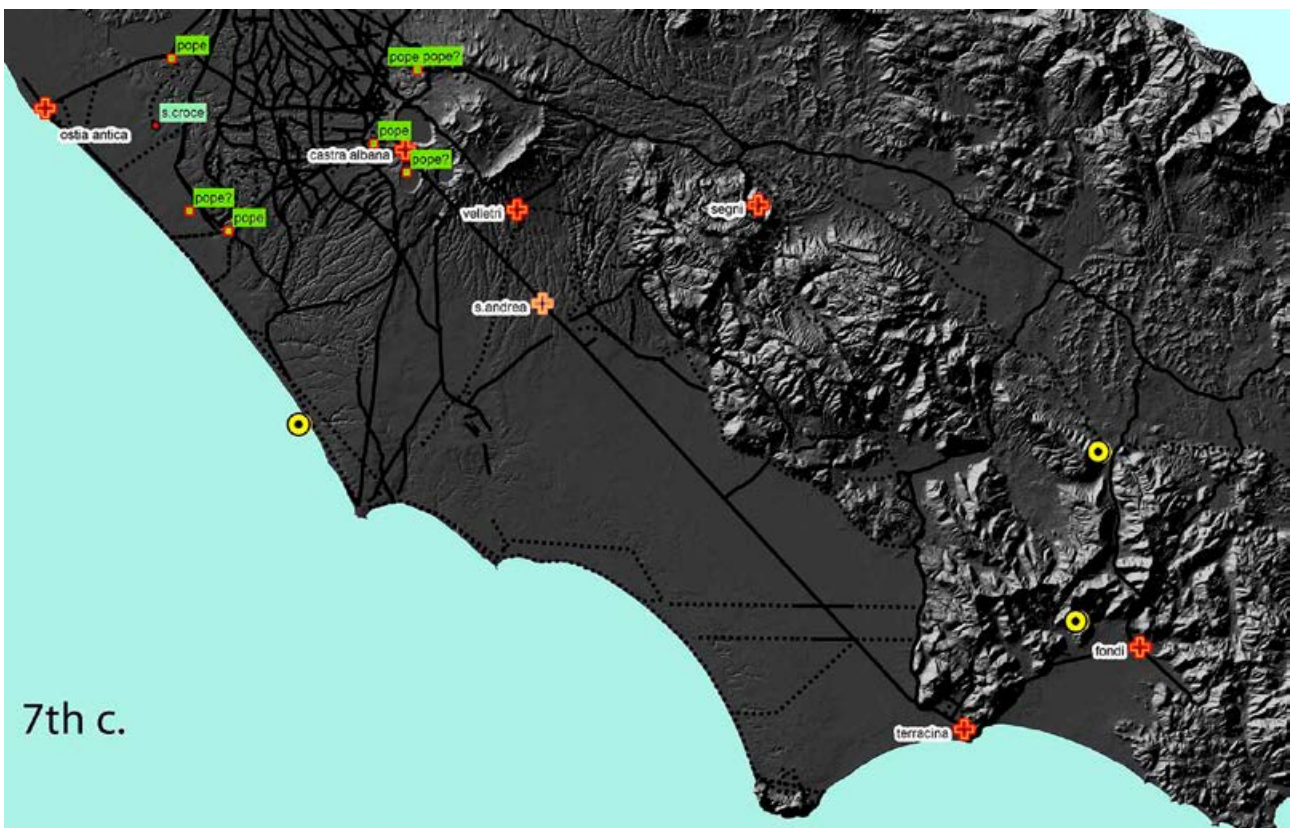


Figure 7.92. 7th century ecclesiastical interests.

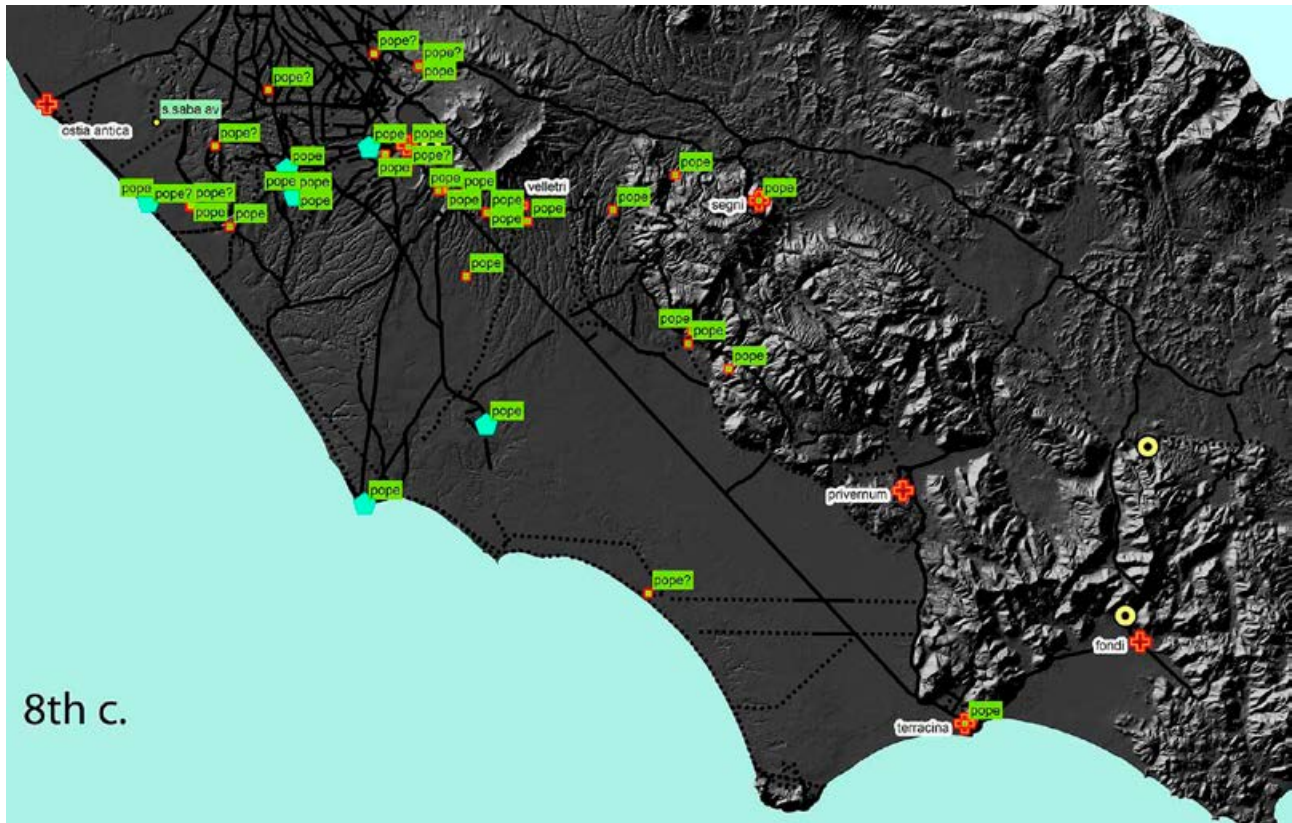


Figure 7.93. 8th century ecclesiastical interests.

significantly with other parts of central Italy, where during the Carolingian period individual churches as well as monasteries acquired huge marginal territories, by donation and bequest⁴⁹⁴.

All in all, the progress of the papal network of interests is clearly visible, starting with the first modest donations of the 4th century to the period of dominance during the 8th century. The political setting by which to explain the enormous extent of the 8th century papal acquisitions involved an intricate set of developments, that took place from the start of that century and onwards, and was thoroughly studied before:

- First of all, jurisdictionally and liturgically, the papacy was able to get more grip on the Church's apparatus as a whole throughout this period of time, as the structure of Church hierarchy had started to be more thoroughly organized from the top down⁴⁹⁵. As from the early 8th century, the popes were able to extend their political weight. More and more, the papal court was establishing political emancipation from the Byzantine authority. From around 727 the popes attempted to set up an autonomous state, secularly ruled by the pope⁴⁹⁶. The external Lombard threat of the first half of the 8th century speeded up

this process of the increasing autonomy of the Papal States.

- Much of these developments leading up to the development of the Papal States correlated to the arrival of the Franks (see 2.I.6). First of all, as a result of Carolingian influence on Church affairs and the resulting ecclesiastical centralisation, the papacy had been able to strengthen its role as head of the Church. This occurred in sync with the economic upsurge of Rome, so clearly archaeologically documented in recent years⁴⁹⁷. This upsurge to a large extent was also caused by Carolingian investments. The relative peace of the Charlemagne period, and the financial support and political protection the popes received from the Frankish kings, most likely created the stable circumstances in which the popes (i.e., Zachary and Hadrian most of all) could develop a large range of activities in a wider regional context, as appears from the *Liber Pontificalis*⁴⁹⁸.
- The loss of the traditional papal possessions located in Calabria, Campania and Sicily, and the simultaneous, ever-growing need for supplies of booming Rome, triggered the papal court's desire to acquire new landed properties nearby.
- At the same time, there arose a need to revitalise and rationalise rural economic production around

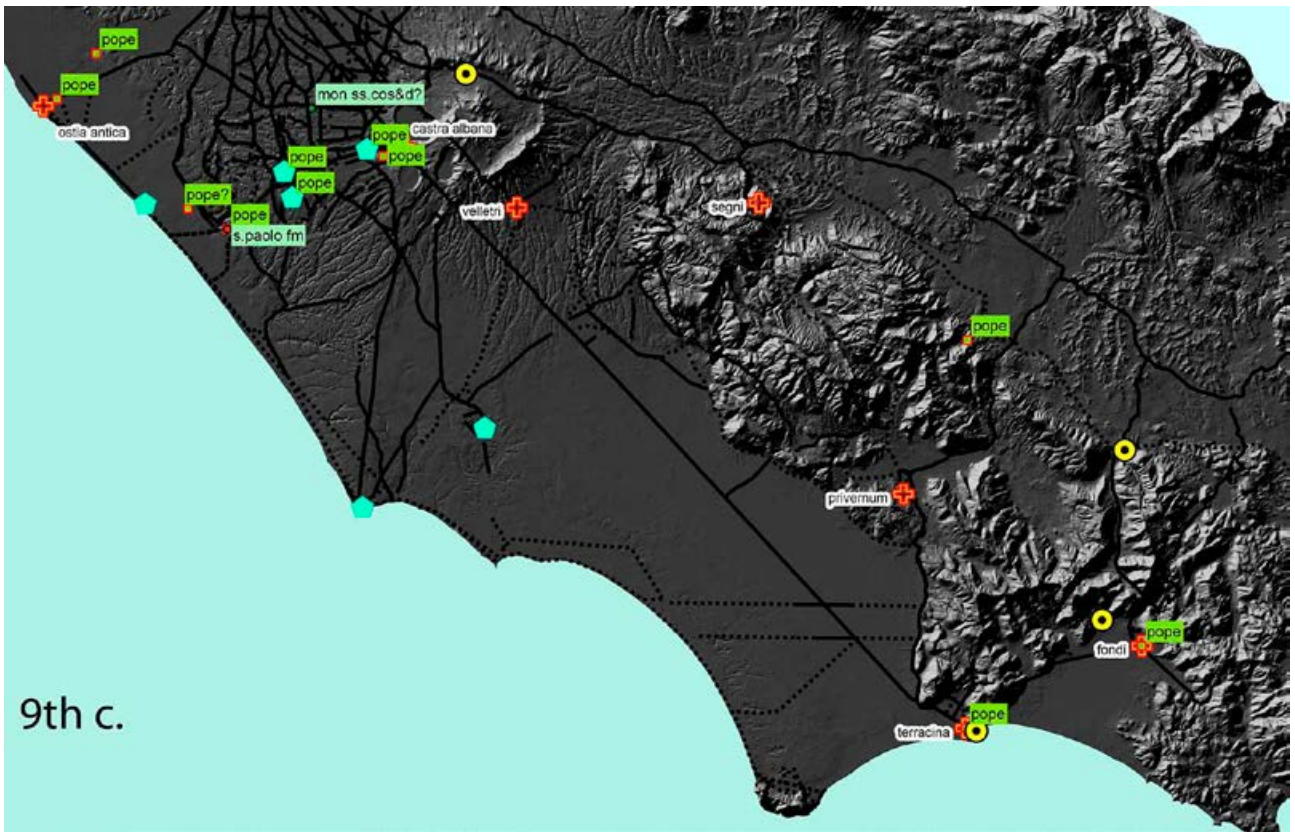


Figure 7.94. 9th century ecclesiastical interests.

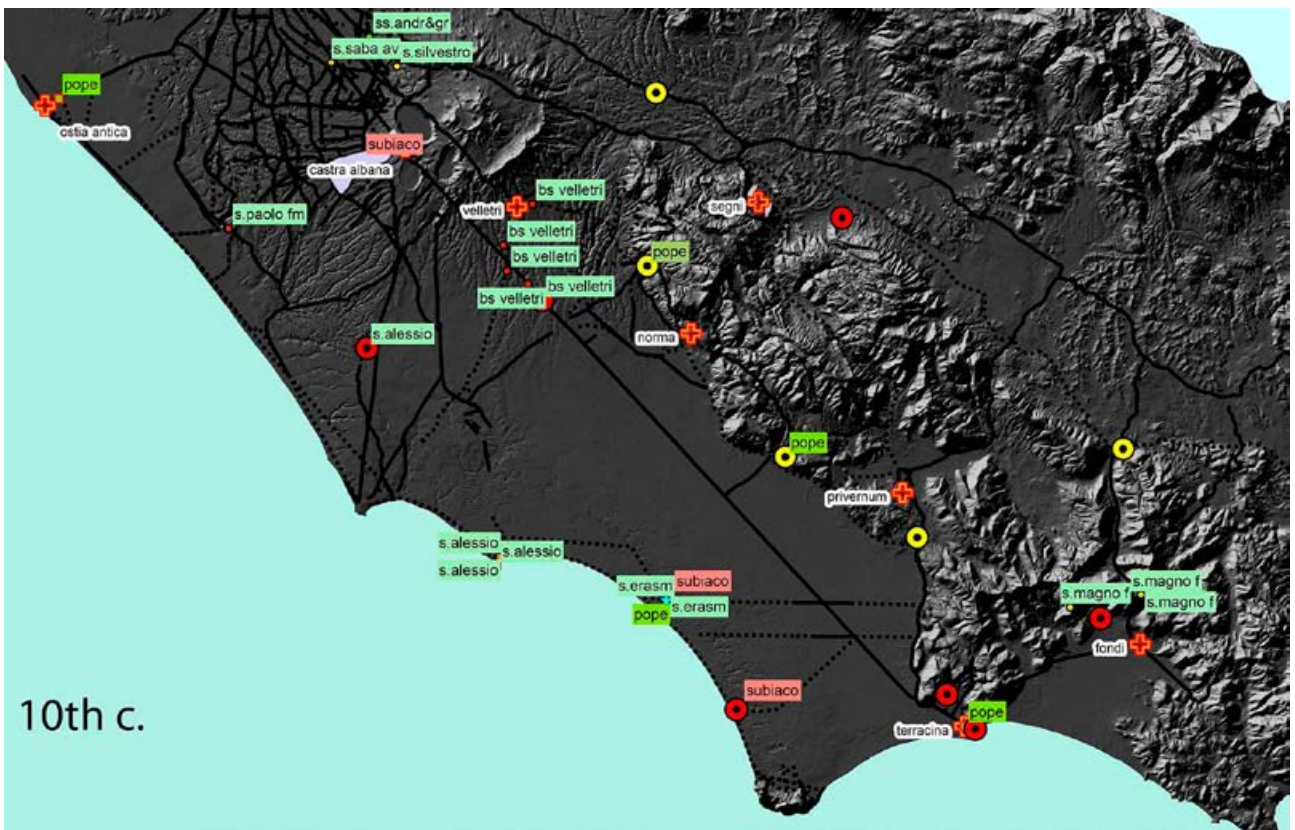


Figure 7.95. 10th century ecclesiastical interests.

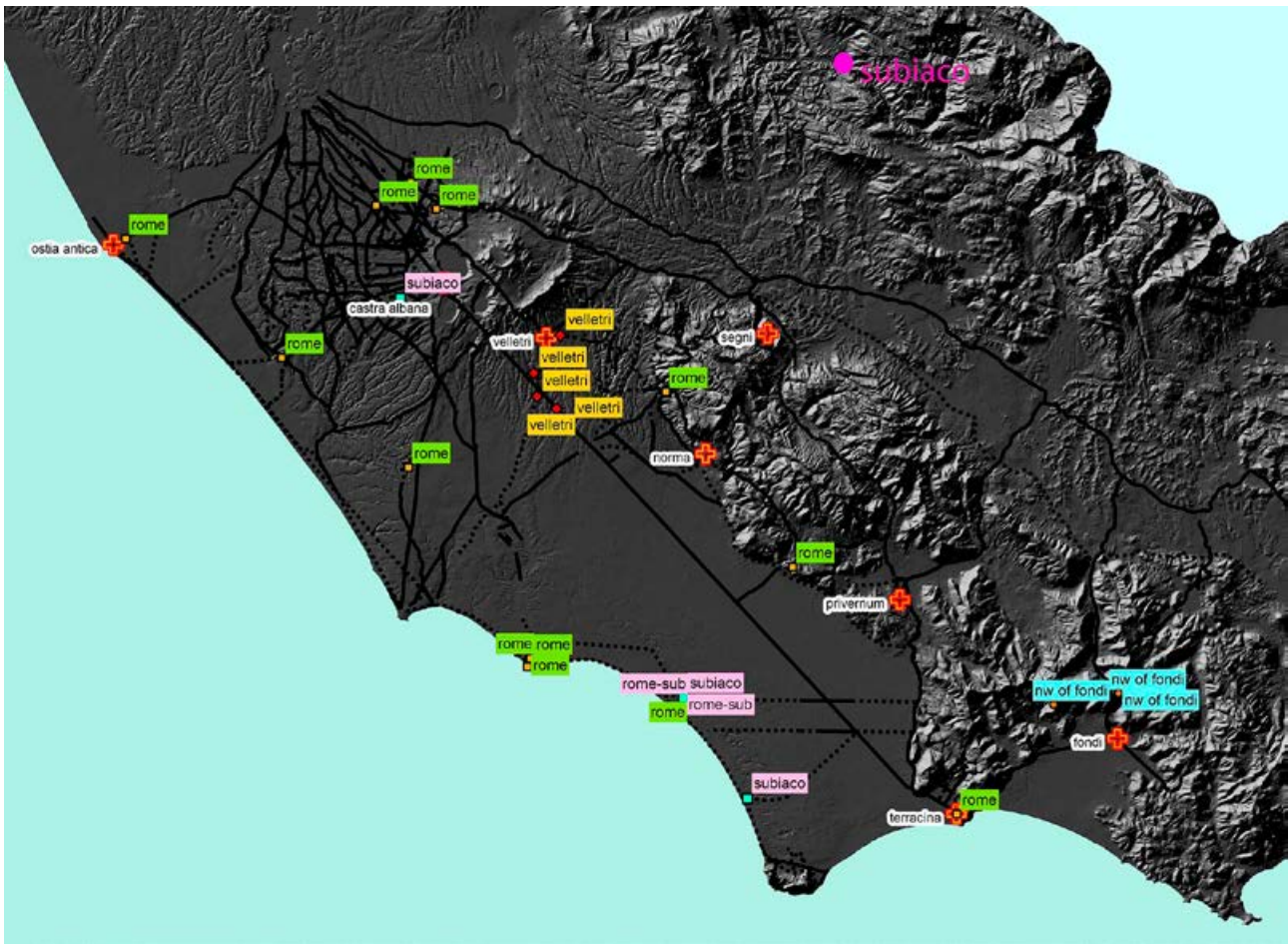


Figure 7.96. 10th century ecclesiastical interests with base/origin of interest.

Rome, necessary after the loss of papal possessions in the south; *domuscultae* became the centres of efficient production, storage and distribution.

- As a result of the accumulation of new properties, the papacy filled the political and military lacuna that had arisen by the waning of Byzantine influence in the area; the donation of Norma and Nympha to the Church may imply that the Byzantine emperor saw the Church as a suitable territorial heir.
- Connected to the withdrawal of the Byzantines was a issue of control and defence of the countryside. As touched upon before, despite the relative peace in the Duchy itself, these were still dangerous times on a macro-regional scale, with the Lombards lurking in the backyard, south and east of the Ausoni Mountains. In this context, the *domuscultae* may have been ascribed an additional purpose, as bridge-heads for papal authority within the countryside.

All things considered, with all the newly acquired lands of the *patrimonium appiae*, the papacy consolidated papal authority in the former Duchy into the new Papal States⁴⁹⁹. These acquisitions are clearly visible in the current study's database.

The final act of the development of the Papal States revolved around the establishment of its southern borders. Crucial in this was total control over Terracina, the most important and strategically situated town of the wider Pontine plain. The Byzantines were in command of the town until the late 770s. Thereafter Byzantine power in Tyrrhenian southern Lazio started to wear out⁵⁰⁰. The papacy took over direct control of Terracina and Fondi in 778-779⁵⁰¹. Worth mentioning is that in the early 10th century the whole coast between Terracina and Fondi was donated by Pope John X (914-928) to the Dukes of Gaeta. From the year 963 onwards however, Terracina was definitively in papal hands. In that year Pope John XII gave it in concession to Crescenzo (of the family of the Crescenzi or Crescentii), thereby installing him as Count of Terracina (he ruled from 988 to 991) and to the Dukes of Traetto around 1000 AD. From that time onwards, the southern border of the Papal States became fixed to the south of Terracina.

While the Papal States were definitively shaped in the 10th century, the current study's database shows that the papacy seems to have left the day-to-day control of much of the Papal States' territories to other parties. This

is made visible on the map of 10th century ecclesiastical interests (figure 7.95).

Figures 7.94 and 7.95 show that sometime in the 9th and early 10th century the domination of the papal network of interests was broken. The exact time is difficult to pinpoint. First of all, information concerning the 9th century is underrepresented compared to that of the 8th century, making it hard to see what changed in the distribution of ecclesiastical possessions. Likewise, it is unknown what actually happened to the *domuscultae*. It is generally assumed that these were dismantled in the 9th century; the current study does not offer additional data to help elucidate the issue.

In the 10th century local papal interests had dwindled and other church institutions, especially monasteries, be it individually, extended their presence within the rural landscape. This involved monasteries from Rome (such as S.Alessio, S.Paolo and S.Erasmo) and local rural monasteries (e.g. S.Magno). During this century, for the first time a large rural monastery outside the current study area got locally involved, i.e. Subiaco. This monastery was, among other things, owner of the large fundus Soranianus (depicted in purple on the map of 10th century interests), figure 7.95, a large estate stretching over roughly 7 km west of the Alban lakes. Many of the interests of monasteries from Rome and of local monasteries (e.g. S.Magno) constitute landed possessions. In all likelihood these estates were primarily exploited to produce crops.

For the first time as well, a local rural monastery had documented its interests in its hinterland: The site of S.Angelo was an annex of the monastery of S.Magno. It might be suggested that S. Angelo acted just like the settlements of Cavallaria and Bezanum for Farfa, be it a century later, as a means of intensifying control over the peasants and production (i.e. *surveillance*)⁵⁰².

It was historically well established that alongside the growth of influence of monasteries, the role of local bishoprics grew, attracting a lot of worldly power. In the study area, the involvement of the Bishop of Velletri in the *incastellamento* process at castrum Vetus is an evident case in point.

At the same time, the civic elite got involved as a formidable participant in economic and political affairs in the countryside of Tyrrhenian southern Lazio⁵⁰³. This was late in comparison to other parts of Italy, where from the start of Carolingian involvement, in the late 8th century, competing local land-owning aristocracies were established, particularly in the Lombard-Carolingian kingdom⁵⁰⁴. One of the two main reasons for this late involvement

of the landed elite seems to be the elsewhere well-documented fact that in the city of Rome (like in the cities Naples and Benevento) the elite continued to be more narrowly linked to the city. Likewise, until the 9th century, the Church, i.e. the papacy and some influential Roman churches, held a strong sway in the countryside of the Papal States. The large numbers of ecclesiastical *fundi* and *massae*, and especially the *domuscultae* can be held as evidence for this. Until the early 9th century, elite families very likely were still relatively small landowners.

This changed as of the middle of the 9th century, when elite families got involved in the clergy by the active participation of individual family members, by bequeathing to the Church and by providing military assistance. Over the centuries to come, many relatives of elite families ended up in the entourage of certain popes or bishops. Many of them occupied bishop seats and some even sat on the Holy Seat. Their influence on Church affairs and in individual ecclesiastical institutions was large, and therefore the interests of the elite and the clergy often intertwined. Nobles did not merely influence Church affairs, there were periods in history in which they actually imposed their will on the papal court. In the middle of the 9th century, the papal court for some time was rendered powerless regarding city politics by a 'party of nobles'⁵⁰⁵. In the second half of the 10th and first quarter of the 11th century the Crescentii and Tusculi families respectively determined who was to be elected to sit on the Holy Seat.

The data retrieved in the study area confirm the results of earlier studies, which conclude that the pope lost much of his control of Rome and its surrounding countryside to nobility in the later parts of the 9th and 10th century⁵⁰⁶. The donation, and the subsequent concession, of Terracina and Fondi to the Byzantines of Gaeta might appear to be an act of strategic geo-politics, building a southern front against the Saracene threat. In fact, it should rather be seen as indicative for the decline of papal power from the late 9th century onwards⁵⁰⁷. Conspicuously, while the surviving 10th century feudal concessions in the current study area all involved church institutions and nobles (see below 7.II.2.2.5.k), these concessions only once included the papacy. This surely means that the papacy had lost much of its grip on daily political affairs. Whereas the papacy before acted as a worldly administrator, the pope had now lost much of his executing power.

In the 11th century, the interests of the large "external" monasteries of Subiaco, Grottaferrata and Montecassino would be extended even more (see figure 7.97). The number of regional monasteries, i.e. in Tyrrhenian southern Lazio itself, continued to grow. At the same time other bishoprics (e.g. Anagni, Veroli) showed their direct interest in the areas which belonged to their individual dioceses⁵⁰⁸.

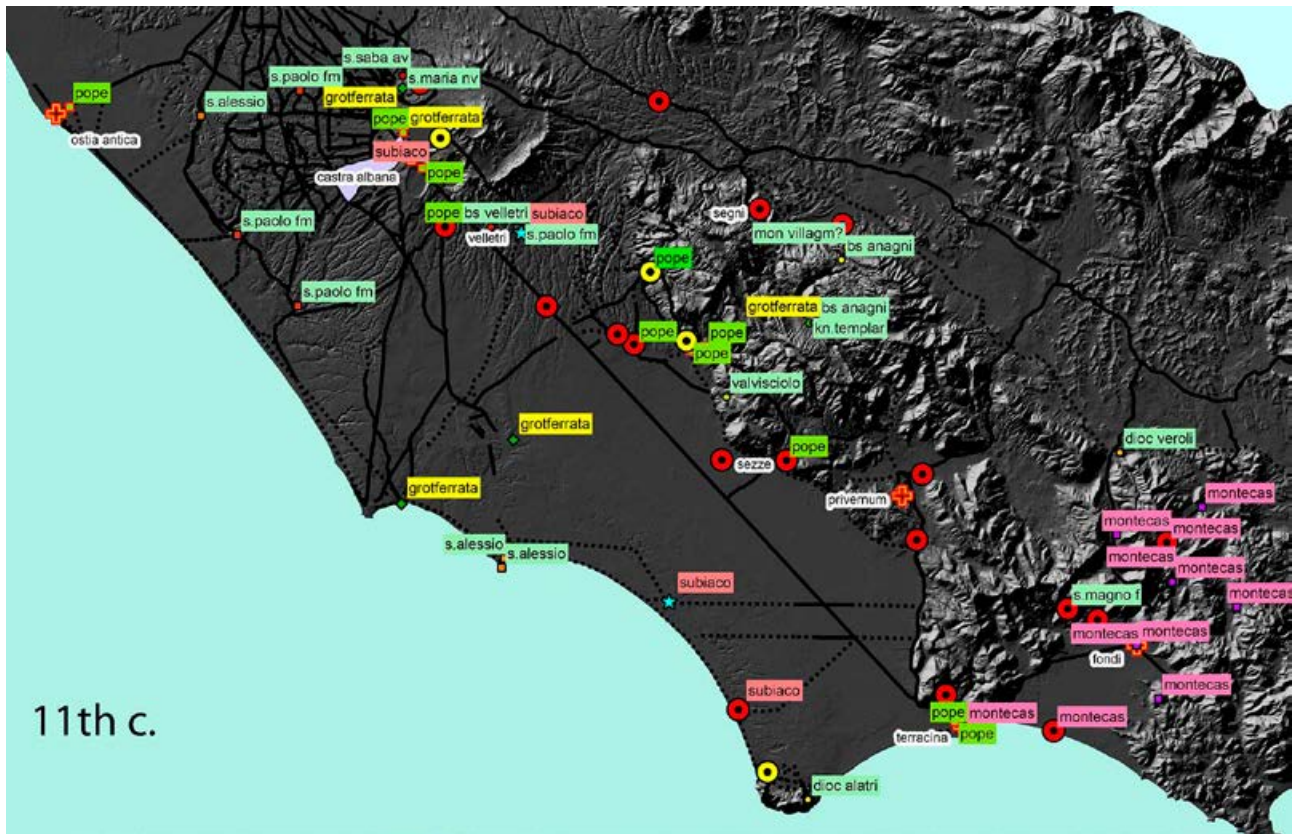


Figure 7.97. 11th century ecclesiastical interests.

It is altogether clear that the papacy showed less participation in the southern countryside, where other ecclesiastical institutions raised their stakes. At the same time, elite families found their role as lordly executors. The maps show how in the 10th and 11th century papal involvement seems to be restricted to the sites along the direct routes towards Rome, and mostly along the Appian route and the pedemontana.

The decline in the number of papal interest and their limited spatial distribution in the current database, corroborates the historical fact of a temporary wane in papal power from the end of the 9th century until the middle of the 11th century⁵⁰⁹. This slump was initially caused by the dwindling Carolingian power, and thus of Carolingian investments, and later on enhanced by internal moral and political conflicts within the papacy. During this age of decline of authority, centralisation of the church had temporarily come to a halt. To the north of Rome, in earlier studies the picture has been drawn that many papal lands had fallen into the hands of elite families by the 10th century. The splitting up of the Capracorum *domusculta* estate into separate landed elite properties should be considered a case in point⁵¹⁰. The data in this study confirm the historically documented temporary nature of the papal decline:

the amount and coverage of papal interests, especially in the Lepine mountain area, increased again throughout the 12th and 13th century, as will be seen as the next study period is analysed (specifically 7.III.2.2.1.b). However, the papacy never regained its dominance in the more low-lying parts of the study area between Rome and Terracina, roughly westwards from the old Appian road. There elite families dominated all through the 12th and 13th century, together with Roman monasteries (i.e. in the areas close to Rome) and several large monasteries situated outside the study area: Subiaco, Farfa, and Grottaferrata (located on the rim of the studied area).

All in all, the temporary lull of papal authority seems to have been confirmed by evidence “on the ground” in this study’s area of interest. It could be concluded that the papacy could only keep direct control over the vital parts of the landscape, focussing on the main routes, while the remote parts had to be left to other parties. However it proves to be difficult to comment on the way the new constellation of papal interests in the 9th and 10th century had grown, i.e. whether the constellation of remaining interests was the result of clear-cut ad hoc choices made by the papacy itself, or whether this was a case of hanging on to the leftovers of former power structures.

7.II.2.2.1.b Lines of communication and mobility based on ecclesiastical interests (4th to 10th century)

In order to shed more light on lines of communication and mobility of people within the studied landscape of southern Lazio between the 4th and the 10th century, the distribution and origin (i.e. the base or the headquarters) of ecclesiastical interests was analysed (see for example figure 7.96). Such an analysis enables me to comment on specific axes of communication aside from the well-known routes, like the Via Appia or the pedemontana, and between other sites or areas than the well-documented continuous sites, like Albano, Terracina and Priverno. In the final synthesis (Part III, Chapter 8), these specific lines of communication and mobility will be looked at in a long-term perspective as part of an analysis concerning *connectivity*.

The following observation could be made regarding the topics of “communication” and “mobility” resulting from the previous inventory of ecclesiastical interests:

- Several main routes remained in use as of Roman times until the high middle ages: i.e., the Via Laurentina⁵¹¹ and Ostiense running from Rome to the coast, the Via Appia⁵¹²/pedemontana to the south, and the Via Latina. Although the latter route in time lost its name and ended up being merely a secondary route from Rome through the Sacco Valley southwards.
- The road running from the Alban Hills to the coast near Anzio, anachronistically known as the Via Anziata or the Via Nettunense (OLIMinfra 88), in all likelihood remained wholly in use during the study period, given the sustained importance of the Antium-Astura area (based on the presence of the *domuscultae* and a harbour). It constituted the quickest route from Rome and the Via Appia towards these coastal areas. On this route too, one of the first 10th century *incastellamento* endeavours would be started, i.e. the *castrum* Nave, by S.Alessio and probably also the Crescentii family, parties that both had interests on the nearby coast as well. It is certainly unlikely that a road had to be reconstructed at first to support a new *castrum*. More obvious would be the opposite: i.e., a functioning route that would have to be controlled by the foundation of a castle⁵¹³.
- In the 8th century the papal *domuscultae* of Antium and Formias in all likelihood were interconnected with the papal estates at Norma and Ninfa on an administrative and a military level. One could speculate on the probable strong economic ties between both papal areas. Two ancient transhumance routes passing by these *massae* and *domuscultae* might still have functioned⁵¹⁴.
- A road ran along the Astura, running from the Campomorto area to the mouth of the Astura, as was mentioned in the 10th century source on the donation of Astura by Benedictus and Stefania to S.Alessio. Due to the continuous importance of the harbour, this road might have been functioning continuously since Roman times.
- Possibly the abovementioned road along the Astura was part of an inland route between Velletri, the Via Appia and the Fogliano area, a tract that seems to have been frequented at least during the 10th century. The possessions of the Duke of Velletri at Fogliano were the first indications of evidence of this (the *castrum* Fogliano). As an additional argument could be considered the 10th century involvement of Subiaco in the Fogliano area: the fastest inland route from Subiaco to Fogliano seems to run through Campomorto and via the Astura area⁵¹⁵.
- The harbours of Ostia, Antium, Astura, Terracina and Gaeta probably continued to stay in function to some extent; it seems most possible that the Fogliano area was connected seawards as well, as the papacy owned properties there in the 8th and 10th century, as did the monastery of S.Alessio during the 10th century. This area was also the location of a 10th century *castrum*.
- The 10th and 11th century maps of networks of interests (figures 7.95 and 7.97) illustrate how some external monasteries each focussed on a specific sector of Tyrrhenian southern Lazio: i.e., Montecassino on the Ausoni Mountains and the Fondi area, Grottaferrata on the Alban Hills and the Pontine area towards the Astura peninsula and Subiaco on the area west and south of the Alban Hills and the southern Pontine coast.

7.II.2.2.1.c The *domuscultae*

In the study area six *domuscultae* were identified in historical sources (see figure 7.98): Pope Zachary (741-752) founded three *domuscultae* on the coast, two near Antium, called *Ant(h)ius* and *Formias*, and one closer to Rome, called *Lauretum*. Hadrian 1 (772-795) later on founded three *domuscultae* in the Alban Hills key area: i.e. *Sulficana*, *Calvisiana* and *S.Edisti*. To the north of Rome five other *domuscultae* were identified, based on the descriptions in the *Liber Pontificalis*.

7.II.2.2.1.c1 An overview: the historical facts on *domuscultae*

The *communis opinio* is that papal *domuscultae* consisted of several farms and possibly some had more than one larger administrative centre. These estates stretched over large areas. Not much is known of the internal productive structures or of their social coherence. The prime function

of *domuscultae* supposedly was agricultural production. A secondary purpose was the protection of the geo-political interests of the pope in the countryside. Their operational focus was the papal court and city of Rome in general. The *domuscultae* were probably short-lived in existence. They were all founded in the 8th century and they seem to have lasted only until somewhere in the next century.

Pope Zachary apparently had been in haste in establishing the *domusculata* estates, as might be derived from the fact that he simultaneously acquired the necessary lands for the establishment of the two *domuscultae* of Anthius and Formias. This acuteness may be connected to the papacy's loss of Sicily, probably in the year of 732⁵¹⁶, a region of major importance to the supply of goods for Rome. Possibly, as could be concluded from the pottery studies, these estates had also been founded because in general pan-Mediterranean or for that matter interregional trade had become more difficult at that time. As a result, the pope might have wanted to realise the production of resources closer to home. The importance of these *domuscultae* to the Church was explicitly stressed in the *Liber Pontificalis*: i.e., Pope Zachary decreed the *domuscultae* to be bound for eternity to the church⁵¹⁷.

By the introduction of large *domuscultae*, the administrative composition in these parts of Lazio, north and south of Rome, most likely changed significantly. Although large sections of the *domuscultae* probably consisted of newly acquired assets⁵¹⁸, it seems quite likely that several of the early 8th century church estates described in the *Liber Pontificalis* on or near the later *domuscultae* grounds (e.g. the *massae* near Antium), and several estates which remained unidentified⁵¹⁹, were incorporated into these new administrative entities. The idea that *domuscultae* were grafted upon earlier foundations was archaeologically corroborated on sites linked to the *domusculata* of Capracorum, north of Rome⁵²⁰.

Regarding the *domusculata* S.Edisti, the *Liber Pontificalis* explicitly stated that the pope made compensatory payments to the previous owners of the lands. "He also brought the boundaries together on every side: by paying fair compensation, with no compulsion but rather as befits a father, he brought in an amicable contract all the estates alongside the place, and laid down that the place should remain to St Peter's in perpetual ownership as a *domusculata*."⁵²¹ That compensation did not always suffice, as became clear from lay aristocrats' attacks on the *domuscultae* in 816 north of Rome⁵²². The reason for the attacks might not have had so much of a political impetus in the first place, but might have been related to the frustration of lost ownership, or of missed revenues. The way in which some of the lands needed for the realisation of

the *domuscultae* were acquired and their proclaimed inalienability must have spurred the nobles to action. "The Church was moving from a bureaucratic system to... landed lordship, on at least some of its property. The rural nobility, long accustomed to holding vast tracts of Church land, cannot have liked this diminution of the pool available land in central Italy" (Noble 1984)⁵²³.

Unlike the events that were documented occurring to the north of Rome, there are no records to be found of conflicts with local landowners to the south of Rome. The reasons for this notable absence of conflicts might be that enough compensation was provided, or possibly the fact that the pope, churches and Roman monasteries already had owned much of the lands in this southern area.

Conspicuously after the foundation of the *domuscultae*, records of individual *fundi* and *massae* almost disappear from the record regarding the key areas involved: i.e. the Nettuno – Anzio and the Alban Hills key areas. On the other hand, the sudden disappearance of nearly all small Church estates earlier located in the Alban Hills West key area may also have been the effect of the relative meagre historical record in the 9th century as compared to the extensive historical records of the 8th century⁵²⁴.

7.II.2.2.1.c2 Identification of *domuscultae* and parallels with northern Lazio

What *domuscultae* looked like, and the fact that some of their centres were built on pre-existing sites, can be experienced at the site of Mola di Monte Gelato⁵²⁵: The *domusculata* phase there is attested by evidence of the renovation and rich adornment of the church in the early 9th century and the building of an accompanying baptistery. Furthermore, an earlier abandoned mausoleum of the 2nd century was reused as some kind of dwelling.

Unfortunately, material evidence underpinning these papal centres is almost nowhere to be found in the study area. Their suggested identification is almost purely based on the descriptions in the written evidence, their toponyms and the local topographical circumstances. Evidence of storage and habitation, main features of the three *domusculata* sites north of Rome, is not to be found at any of the surmised *domusculata* sites south of Rome. Overall, these sites lack well studied medieval stratigraphies. The only possible archaeological evidence available consists of Forum Ware (found at Satricum – a few fragments- and at Tor Paterno), the luxury pottery that can be an indicator for *domusculata* activity.

What was produced exactly on the *domusculata* estates was not stated explicitly in the written sources, with the exception of a reference in the *Liber Pontificalis* to olive production on the *domusculata* Calvisiana. The research done

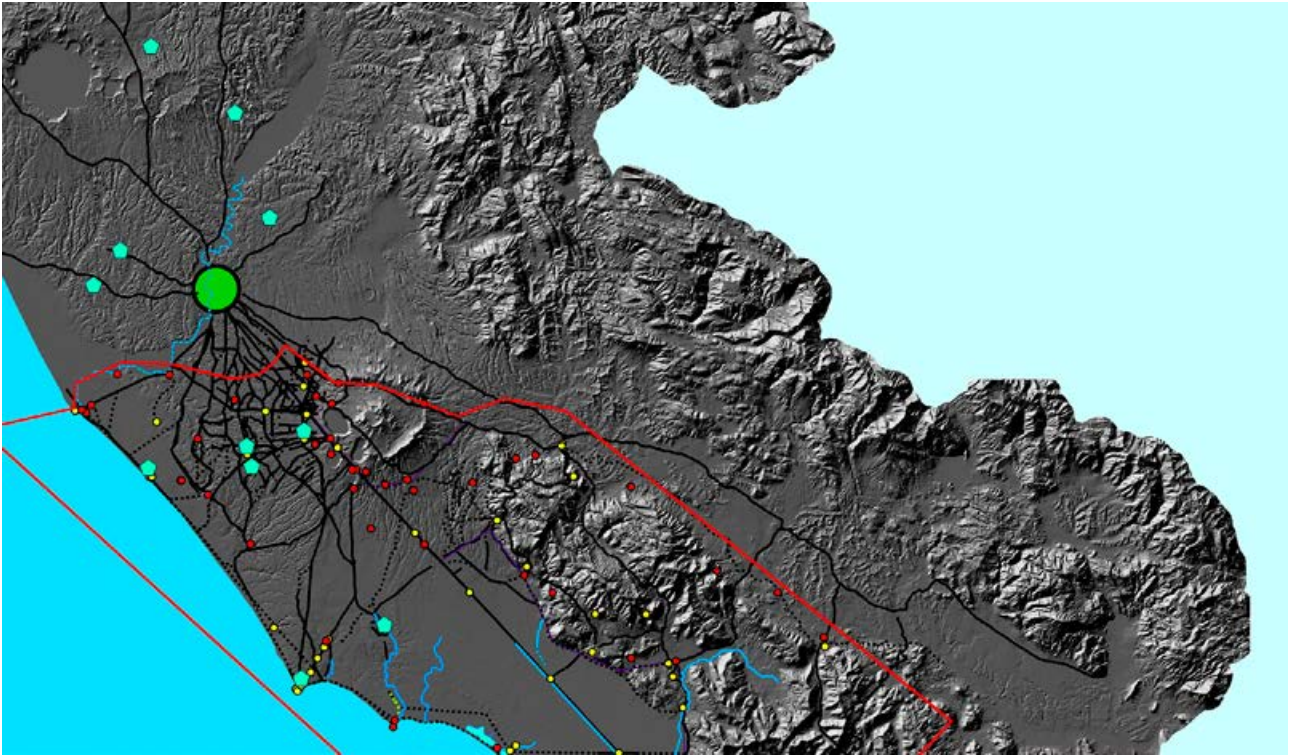


Figure 7.98. The assumed locations of *domuscultae* (blue pentacles). The dots represent possible (yellow) and affirmed (coloured red) sites in the 8th and 9th century⁵³⁷.

on *domuscultae* north of Rome revealed that the estates produced a diverse range of agricultural crops in general (a specification of the exact agricultural output proved to be difficult to make)⁵²⁶. These estates probably focussed on growing grain and vines, and raising pigs⁵²⁷. Pottery was produced as well, in large quantities⁵²⁸. In Tyrrhenian southern Lazio, evidence for pottery production on the suggested *domusculta* sites proved (yet) to be absent. What sort of agricultural production actually occurred can only be hypothesised from a reconstruction of soil potential and land use⁵²⁹.

If one tries to reconstruct the tillage or production of the assumed *domusculta* locations in Tyrrhenian southern Lazio, the picture one gets is not a consistent one. There are two different landscape types involved, i.e. the coastal area and the footslopes of the Alban Hills. On the coastal estates, specialised olive culture might be surmised. Especially the Astura Valley seems suited for this⁵³⁰. In the coastal *domuscultae* pisciculture might have been practiced as well. Activities related to transhumance might have been conducted on the coastal *domuscultae* as well, coinciding with some local types of animal husbandry, for the coastal areas provided for excellent (winter) grazing fields.

As was discussed in the section dealing with the Alban Hills key area, the retrospective viewpoint (based on the 1851 maps) seems to show that the soils of the *domusculta* Sulficiana might have been inherently suitable for the intensive production of wine and olives, possibly

alternated with different forms of extensive arboriculture. Regarding the other *domuscultae* located west of the Alban Hills, i.e. Calvisiana and S.Edisti, a tentative retrospective reconstruction proved not possible, as the current collection of maps does not offer data on pre-industrial land use in these parts.

Besides their agricultural function, *domuscultae* may have served a political purpose as well. Founded on newly acquired grounds in a circle around the City, these estates had to ensure papal authority in the countryside around the city of Rome⁵³¹. Some scholars believe that they were founded or positioned according to a defensive strategy. Although a defensive strategy is conceivable, it is nevertheless unlikely that large amounts of troops were stationed at these rural locations⁵³². In order to investigate this theory, two aspects of defensive strategies should be considered: i.e., the regional geostrategic position and the defensive qualities of the *domusculta* centres. By the regional geostrategic position, the possibility of guarding and monitoring the surrounding area, serving as an extended arm of papal power is meant⁵³³. The strategic nature of the location of the sites associated with *domuscultae* north of Rome (i.e. S.Rufina, S.Cornelia and Monte Gelato) is not a straightforward one. If one measures strategic capacity in terms of accessibility, positional height and defensive qualities, the following picture arises regarding the sites north of Rome: the sites' accessibility was not always that great: e.g., S.Cornelia and

Monte Gelato were positioned near secondary roads, and slightly off the main route towards Rome⁵³⁴. Contrary to these sites, however, S.Rufina was located directly on the Via Cornelia. All three sites had the potential to dominate or to monitor the area: S.Rufina and S.Cornelia lay on top of low hilltops, while Monte Gelato was flanked by several hilltops. Additionally, S.Rufina and Monte Gelato were situated on or near a river crossing. As to defensive qualities: the Capracorum sites were not very well defensible. The open settings of these sites remind of the Roman villas in the area⁵³⁵. Only the site of Monte Gelato lay in proximity of a well defensible *acropolis*⁵³⁶.

If one compares the probable *domuscultae* sites of southern Lazio, the previously outlined picture is not always confirmed. Satricum and Antium were located on strategic but hardly defensible locations, like the northern *domuscultae* centres. The site of Satricum, like S.Cornelia, was situated on a low acropolis in an “open” setting. On the other hand, at Satricum the *agger* of the 5-4th century BC may still have had some defensive benefits. Like Satricum, Antium was located in an open setting. The poor defensive qualities of Antium were analysed in detail above (7.II.1.1.5). Then again, both Satricum and Antium were located on strategic positions, on or near a number of roads or seaways. Moreover, Satricum was geo-strategically favourably located, near one of the few locations where the Astura river could be crossed. And a confluence of streams rendered it suitable location for a military station⁵³⁸.

The identification of centres connected to the other four *domuscultae* in the study area is even more of a fragile exercise than is the case at Satricum and Antium. The examination of their strategic locations must therefore be tentative. According to De Rossi, the site of (later on) Tor Maggiore (OLIMsite 379) might have been the centre of the *domusculta* S.Edistus⁵³⁹. This site is located on a strategic hilltop position next to one of the major roads leading to Rome. Physiographically, the site of Tor Paterno does not stand out in the *ager Laurens*. Its position is comparable to that of San Donato, in an “open” setting and located only slightly higher than the surrounding (wet) area, between the estuaries of two small streams.

By and large, *domuscultae* sites in southern Lazio are located on locations along large roads, and nearby known maritime ports. Their strategic positions enabled the bulk transport of goods. It may be hypothesised that the presence of two functioning harbours of Antium and Torre Astura was the rationale behind the foundation of the *domuscultae* of Antium and Formias, at a position that far from Rome⁵⁴⁰. At the time of the foundation of the *domuscultae*, Saracene danger had not yet begun. The

domuscultae's position near to roads may be related to their function as assembly point of *militia* as well, as it enabled the rapid deployment of troops in the nearby area.

S. Cornelia, and possibly Monte Gelato⁵⁴¹ were equipped with boundary walls in the first half of the 9th century, although obvious defensive elements like towers and ditches were absent⁵⁴². The same was suggested for S.Rufina⁵⁴³ as well, although the interpretation of the related structure (and its date) remains uncertain. The modest walls on these three sites should be seen in the light of the ongoing volatile relations with the Roman noble families, and from the 9th century onwards, the threat of Saracene incursions⁵⁴⁴. Such walls are indeed absent near the presumed *domusculta* centres in the current study area. However, intriguing is the presence of *opera saracinesca* at two locations in Antium and at one at Savellum (i.e., nearby the *domusculta* Sulficiana). However, the construction-date range of these walls, is too wide to make any clear-cut statements regarding their origin and purpose⁵⁴⁵.

To conclude: a comparison of *domuscultae* (centres) in this study's area of interest and the far more well-studied ones north of Rome is, obviously, hindered by a lack of clear identification of sites in the current study areas. It proves to be all but possible to make unambiguous observations on how these estates functioned and to what extent they lived up to their assumed strategic and agricultural operation. The only cautious observation to be made is that all possibly identified *domusculta* sites were located on strategic locations on or in proximity of major infrastructural arteries.

7.II.2.2.1.c3 *Domuscultae*: Forum Ware as a fossil guide
Two of the presumed *domusculta* centres in southern Lazio, Tor Paterno and Satricum yielded a specifically interesting class of pottery: Forum Ware (*ceramica a vetrina pesante*). Forum Ware was found on the site of Villamagna as well, in contexts associated to elite presence with a link to supply networks focussed on Rome⁵⁴⁶.

Forum Ware is a fossil guide for the late-early to high medieval socio-economic developments in Rome and its surrounding countryside⁵⁴⁷. This “earliest medieval glazed pottery of Italian production” (Christie) was produced in Rome from the late 8th century onwards. Its production peaked in the middle to late 9th century and continued until the 13th century⁵⁴⁸. Although a generic typology for this class of glazed pottery has not yet been developed, it has proven to be a very useful dating tool in the well-studied contexts of Rome and its hinterland. The most important characteristic of its evolution was the slow

development from being heavily glazed (i.e. *a vetrina pesante*) to being sparsely glazed (i.e. *a vetrina sparsa*)⁵⁴⁹. In Rome, Forum Ware was found in large numbers at the Crypta Balbi, and among other places at S.Sisto Vecchio and S.Clemente⁵⁵⁰.

In the direct hinterland of Rome, Forum Ware was recovered at several sites⁵⁵¹. Large quantities have been found at Pianabella⁵⁵², and on three sites associated with the *domuscultae*, i.e., Santa Cornelia, Monte Gelato (*domusculda Capracorum*) and Santa Rufina (*domusculda Galeria*). Although fabric studies showed that some of the Forum Ware fragments on the latter three sites in the Campagna must have been produced locally, Santa Rufina is the only site with indisputable evidence for this kind of production in this region⁵⁵³. Still, the main bulk of the 8th and 9th century Forum Ware found in the Campagna was produced in Rome⁵⁵⁴. Outside Lazio, fragments of the *ceramica a vetrina pesante* produced in Rome were found along the Tyrrhenian coast, as far as the Provence, and on Corsica and Sardinia. In southern Italy *ceramica a vetrina pesante* is also found, but in forms and with decorations that experienced a different development⁵⁵⁵.

The *ceramica a vetrina pesante* found at the three sites associated with the *domusculda Capracorum* forms a distinct group that has to be included with the Forum Ware found in Rome⁵⁵⁶. This fact and the large amount of Forum Ware finds on these sites show the *domusculda* sites' close socio-economic relations with Rome. These finds chronologically correspond with the historically recorded active *domusculda* reorganisation of Rome's hinterland by the papacy. "Prior to the foundation of the *domusculdae* there is little or no evidence for pottery in the Campagna and clearly this revival is directly linked to the reorganization of the area by the papacy. The foundation of the *domusculdae* may have created the conditions necessary for the emergence of independent professional potters who could also have exploited an existing system of transport and distribution, however it is also possible that in this initial phase the Church had a role in the production and distribution of pottery, perhaps with the presence of "attached specialists"" (Arthur & Patterson 1994)⁵⁵⁷.

All in all, Forum Ware offers a better understanding of the newly established connections of Rome with its direct northern hinterland from the late 8th century and onwards. It offers archaeological verification of the written evidence, as offered in the *Liber Pontificalis*, regarding the active papal redevelopment of the hinterland of Rome. This holds true for the archaeologically thoroughly researched west bank of the Tiber, i.e. the territory of the *domusculda Capracorum*, where large amounts of Forum

Ware were found. Strikingly, the equally well-studied other side of the Tiber, i.e. the Sabina, seems to have continued to function within a more marginal socio-economic system. This is reflected by the all but absence of findings of recognisable pottery of the 8th and 9th century. It seems no coincidence that this territory, that was not chosen to be redeveloped, was not incorporated into the new "economic and cultural ambit of Rome" (Patterson) so narrowly connected to the *domusculdae*⁵⁵⁸. However, it is a known fact that the Sabina had fallen under papal control in the late 8th or early 9th century, like the territory west of the Tiber⁵⁵⁹.

In sum, *domusculda* centres situated in northern Lazio showed that with their foundation new networks of production and trade were set up in the countryside. *Domusculdae* did seem to have a direct distribution link with Rome, as the ceramic finds on Santa Cornelia and Monte Gelato showed, and for which findings of Forum Ware provided the best confirmation⁵⁶⁰.

The question that should be asked is: "what could be said about the perceived direct distribution link of Rome and the *domusculdae*, or other (elite) sites, in the current study area?" Can Forum Ware be used as evidence to reconstruct networks of distribution? The answer (so far) should be: "No, it cannot yet". Satricum, Tor Paterno and the vicus Laurentum Augustanorum are the only possible *domusculda* centres where Forum Ware was found, and for these finds no pottery typology has been set up yet. Contrary, at Villamagna, not a *domusculda* centre but definitively an estate with close links to (papal) Rome, such a typology was set up⁵⁶¹.

The conclusion should be that in future research a typology of the Forum Ware found in Tyrrhenian southern Lazio needs to be set up. In northern Lazio such typological study showed that *ceramica a vetrina pesante* was not only produced in Rome but also locally), mostly on *domusculda* centres (i.e. at Santa Rufina). In future research, the Forum Ware specimen found in Tyrrhenean southern Lazio, especially the large assemblages of Privernum, Pianabella and Tor Paterno, and the finds at Norba and Satricum, and Villamagna (already well-studied), and in the plain at Mesa and near and at Forum Appii, should be cross-referenced with each other and with the Forum Ware found in Rome. In this way one might be able to distinguish between possible local and Roman production and/or distribution. One also might be able to analyse in what way production and distribution of these wares were organised, what local markets functioned, and who were the main (elite) consumers.

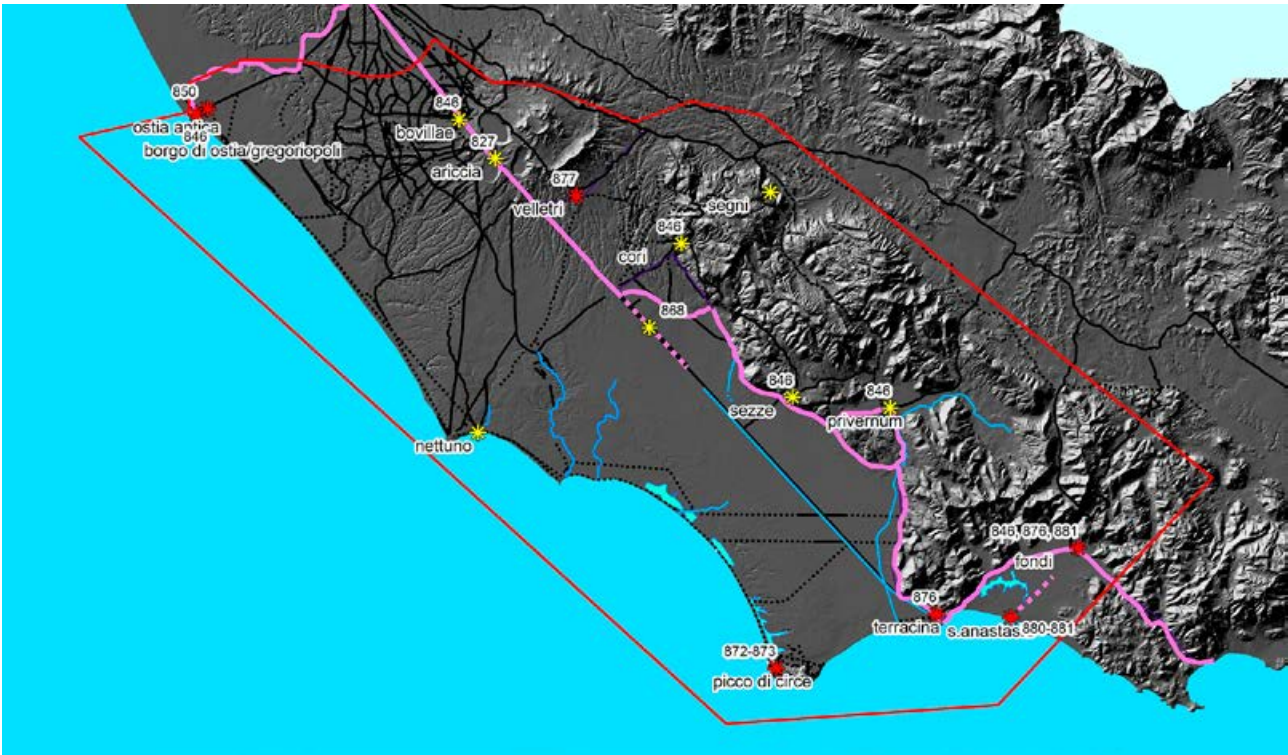


Figure 7.99. Saracene attacks and traditions in Tyrrhenian southern Lazio.

7.II.2.2.2 Theme: The Saracene threat

The 9th century saw the first indications for large scale economic recovery in Tyrrhenian southern Lazio. This age of growth, however, also was one of danger. Saracens from the coast of North Africa began to regularly stage raids on the coast of Italy. At first the Saracens focussed on southern Italy, Calabria and Sicily in the early 9th century. The number of attacks increased after 830, reaching ever further north. From 846 onwards, our study area was effected by the attacks as well. The attacks of the Saracens on the Italian coasts have been seen as a symbol of the disintegrated central authority on the Italian peninsula⁵⁶².

The objectives of the raiders are not clear from the sources, but mainly must have been quick gain. Some scholars proposed that population centres were aimed for as *Fundgrube* of slaves⁵⁶³. For the current study nothing concretely can be said about the reasons behind the attacks. On figure 7.99, the recorded attacks (red star) and presumed (but unproven) attacks (yellow) are plotted, as is the land route used by the Saracens in 846 (pink). As appears from the map, the southern parts of our research area suffered most from Saracene attacks.

Saracens appear in local legends and traditions in many parts of Italy. In our study area examples of such local traditional stories are the forced abandonment of Antium, the foundation of Nettuno as a result of Saracene influence (see 7.II.1.1.3) and the destruction of Privernum in

846 (7.II.1.7.1). Many of these local legends and scholarly traditions have no solid historical or archaeological basis. In several instances, it has the appearance that the Saracens have been adopted to give meaning to change in local histories.

Several raids in southern Lazio, however, have been documented in contemporary sources:

846

The Saracens took from Rome to Gaeta, via the Via Appia southwards, where the land troops re-embarked the ships of the Saracene fleet, as can be read in the *Liber Pontificalis*⁵⁶⁴. On this route they had to pass through the centre of the towns of Terracina and Fondi. Tucciarone assumed that during this raid Privernum, Fondi and Terracina were set ablaze by the Saracens⁵⁶⁵.

872-3

In 872-873 part of the promontory of Monte Circeo is reported to have been occupied by Saracens who fled after a sea battle on the coast of Lazio. This can be read in a letter by John VIII⁵⁶⁶.

877

Pope John VIII (877) describes the devastation in Fondi and Terracina which he saw during his trip along the Via Appia⁵⁶⁷. It is likely that these damages to Fondi are related to a contemporary (undated, but somewhere in the 870s)

recorded incursion of the Saracene fleet in the Fondi plain, as kept in the Montecassino register. The register states that Saracens passed into the Fondi plain through the water passage at S.Anastasia, probably the canal that connected the Fondi lake with the sea (see above map⁵⁶⁸). The Saracene fleet was supposedly guided into the plain by Docibile, the Duke of Gaeta.⁵⁶⁹ It is likely that Fondi, like Terracina, was occupied by the Saracens for some time (months rather than years) as seems to be implied by the letter of Pope John VII.

The proven attacks are all but one (Monte Circeo in 872) directed at the main roads and important centres on them. The 846 rampage seems to have been planned with knowledge of the available road network, with a rendezvous with their fleet (which followed the troops) at Gaeta as final objective. One can only guess what motive was most pressing for this particular routing: the availability of roads, and thus quick advancement, or the presence of the main centres. The speed of their attack seems to indicate that slaves were not the objective, as these are relatively difficult to transport. It is clear that in this particular instance the Saracen ambition was not conquest, like the Monte Circeo raid in 872-3, or the one focussed on Minturnae and surroundings in the late 9th century. In the latter case, the Saracens held on for a number of years. They were driven out of Minturnae in 915, after the battle of Garigliano, by a combined Christian force⁵⁷⁰. In the 10th century the Saracene raids stopped in central Italy, but continued in southern Italy until the 11th century.

All in all, the Saracene threat was real. In our study area there are several direct historical sources (846, 872-3, 877) and archaeological / architectural indications (Gregoriopolis, Torre Boacciana, fortifications of Ardea and Lanuvio) demonstrating their impact. Demographic dislocation caused by the Saracen danger is documented at Ostia. Its community was resettled at nearby Gregoriopolis.

What actions were taken in Tyrrhenian southern Lazio against the Saracene threat?

Measures: alliances

The pope forged political measures in order to cope with the Saracene threat: In the early 10th century Pope John X (914-928) donated a large part of southern Lazio to the Dukes of Gaeta⁵⁷¹. By combining the strength of the Byzantine Dukes with the strategic and defensive qualities of the strongholds of Terracina and Fondi, the pope built a southern power-base that could act against the constant Saracene threat.

Measures: *stationes et excubias*

The *Monumenta Germaniae Historica* refers to a Carolingian defensive system on strategic locations, ports and river mouths, for the whole Italian coast as far south as Rome⁵⁷², initiated by Charlemagne. It consisted of “stationes et excubias” (stations and sentinels) built along the coast, “toto etiam Italiae littore usque Romam” (along the whole Italian coast until Rome). It is unclear if Tyrrhenian southern Lazio was incorporated into this series of posts, although it seems likely that the whole Papal State of Lazio was included and not only the part north of the Tiber. None of these *stationes et excubias* has been securely identified. The reference in the *Monumenta* is not specific enough to pinpoint even one of these posts along the Italian coast. It has been suggested, but remains unproven, that the high medieval towers of S.Anastasia, Anzio, Nettuno and Torre Astura initially started as posts in Charlemagne’s plan⁵⁷³. The raids on Italy started in the early 9th century and increased after 830⁵⁷⁴, so it is more likely that these initial fortifications, during Charlemagne, were not as largescale as later, for example at Gregoriopolis, Lanuvio and Ardea (see here below). It may be concluded that although these posts have not been identified, their (intended) establishment shows the perils of the age.

Measures: reinforcements

Concrete archaeological evidence for devastations caused by the Saracens can be found outside the current research area, at Farfa (traces of burning) and S.Vincenzo al Volturno (arrow heads)⁵⁷⁵. Such evidence for devastation is absent in the present research area. There are however several material indications for contra-measures related to the Saracens, which are not related to specific attacks: The 9th century walls of Lanuvio and Ardea are thought to have been built to cope with the Saracene threat⁵⁷⁶. The fortifications at Lanuvio conspicuously lack clear defensive elements, like towers and ditches. These “sec” walls are typical for Lazio in the 9th century, and are found on the *domusculta* sites north of Rome as well⁵⁷⁷. The original walls of Gregoriopolis and tower of Boacciana and possibly the tower of Tor Paterno may date to the period of Saracene attacks, but these phases have not yet been found or studied.

It is feasible that several of the old fortified towns and fortresses (Norba plateau, Sezze, Segni, Fondi, Velletri) in the research area still were in use in these times of insecurity. Some of these walls may have seen *ad hoc* repairs. The walls built in *opera saracinesca* (a sub-recent anachronism) may be examples of such improvised repairs. There is no evidence that *opera saracinesca* actually was influenced by Muslim builders, as the name suggests.

The historically documented foundation of the *castrum* at Fogliano may be a response to the Saracene threat as

Table 7.8. Secular (non-ecclesiastical) and civic activities, 8-10th century.

OLIMsite	name	secular party with interest	base secular party	date and specifics secular interest in text	8th c.	9th c.	10th c.
15	fundus soranianus	crescentii (<subiaco)?	rome				Y
31	town of terracina	byzantines	??		Y		
31	town of terracina	dukes of gaeta	gaeta	mid 10th	Y	Y	Y
31	town of terracina	cresecntii	rome	988-991			Y
31	town of terracina	daiferius, count of traetto (minturno)	traetto	end 10th			Y
33	astura settlement	count benedictus (I campaninus?) & stefania	rome?	pre-987			Y
50	fondi	dukes of Gaeta	gaeta	9-12th century dukes of gaeta		Y	Y
64	torre astura	count benedictus (I campaninus?) & stefania	rome?	pre-987			Y
90	castrum nave	crescentii (<s.alessio)?	rome				Y
92	massa nymphas	emperor	constantinople	pre-742 (emperor)	Y		
113	s. donato	duke demetrius de melioso	velletri	977 infeudated by s.erasmo al celio			Y
119	massa normas	emperor	constantinople	pre-742 (emperor)	Y		
127	fogliano	duke demetrius de melioso	velletri	and son giovanni			Y
133	castrum vetus	duke demetrius de melioso	velletri	infeudator 1			Y
133	castrum vetus	crescentius de theodora	rome	infeudator 2			Y
147	velletri	duke demetrius de melioso	local	after 946			Y
155	castra albana, albano laziale	savelli	??	10-11th century			Y
159	ariccia	tusculi	tusculum	10th century (until 11th century infeudation)			Y
176	nemi	tusculi	tusculum	10th? 11th century frangipane			P
186	monte crescentuli	crescenzi	??	10th century			Y
218	fundus s.thomas	duke demetrius de melioso	velletri	after 946			Y
238	monastery of s.magno	dukes of fondi	fondi	10th century influence			Y
238	monastery of s.magno	dukes of gaeta	gaeta	10th century influence			Y
579	fundus sole luna	duke demetrius de melioso	velletri	after 946			Y
597	fundus paganicum	duke demetrius de melioso	velletri	after 946			Y
599	fundus papazano	duke demetrius de melioso	velletri	after 946			Y

well. Some have suggested a Church defence system along the coast, of which S.Maria della Sorresca (OLIMsite), La Casarina (OLIMsite 129) and the *castrum* were a part, among others⁵⁷⁸. For this there is no contemporary archaeological or written proof.

7.II.2.2.3 Theme: The expansion of secular (elite) activities

7.II.2.2.3.a An overview of the evidence

The first largescale secular (non-ecclesiastical) and civic activities in Tyrrhenian southern Lazio since the end of

the Roman state structures are recorded in the 10th century. Table 7.8 lists the recorded secular “interests” in the research area between the 8th and 10th century, i.e. the documented ownership (bequation, donation, infeudation), administrative or military control, investments (building of a castle), taxation, or other signs of significance pointing to a secular party without the involvement of an ecclesiastical institution⁵⁷⁹.

This theme focuses on non-ecclesiastical activities because in the current study period, all secular activity is elite.

Only in the 11th century and later, other types of secular/civic activity are found in Tyrrhenian southern Lazio, specifically those related to the communes⁵⁸⁰.

In the analysis a distinction is made between ecclesiastical and secular/civic “interests”. This distinction is to some extent artificial and may appear too rigid, as many of the “civic” parties involved (e.g. the Byzantines, the elite families) also were involved in Church affairs⁵⁸¹. It is, however, valid and useful to separately study non-ecclesiastical activity in order to contextualise the particularly strong grip the Church (i.e. the papacy) had on the countryside of Tyrrhenian southern Lazio, compared to other regions, and also to monitor how this grip was loosened. This approach also enables to get a grip on the origins and development of activities of the large families that would have a profound impact on the political, military and economic developments in Italy from the end of the first millennium onwards. The dichotomy ecclesiastical – civic (elite) sometimes was also concrete and real: there is much documented evidence, for example, that the pope in the 13th century actively tried to stop the growth of local baronage, as will be treated below⁵⁸². Because of the time limitations of this thesis, no extensive study is made of the backgrounds of the mentioned elite families, whether these ranked among the traditional aristocracy, or were part of a new political, mercantile or religious elite. Only

where necessary, for example in order to explain the distribution of interests, or to disentangle ecclesiastical and secular interest, this background is touched upon.

Returning to our study, evidence on secular/civic activity since the end of Roman Empire and before the 10th century is limited to Byzantine involvement between the 6th to 9th century⁵⁸³:

- the Byzantine supervision of Velletri in the 6th century
- the Byzantine emperor who bequeathed the massae Normas and Nymphas to the pope in 742
- the Byzantines forces who controlled Terracina between the 5th and the 8th century
- the Byzantine Gaetan Dukes who owned Terracina in the 8th and 9th century.

We can be sure that the Byzantines controlled more locations, especially along the coast; but there is no surviving written record of this.

The limited record on secular activities until the 9th century, contrasts greatly with the 10th century. The 10th century documented interests all relate to rising aristocratic families. The maps (figures 7.100-102) show the sudden rise of recorded secular interests in the research area of the 10th century⁵⁸⁴.

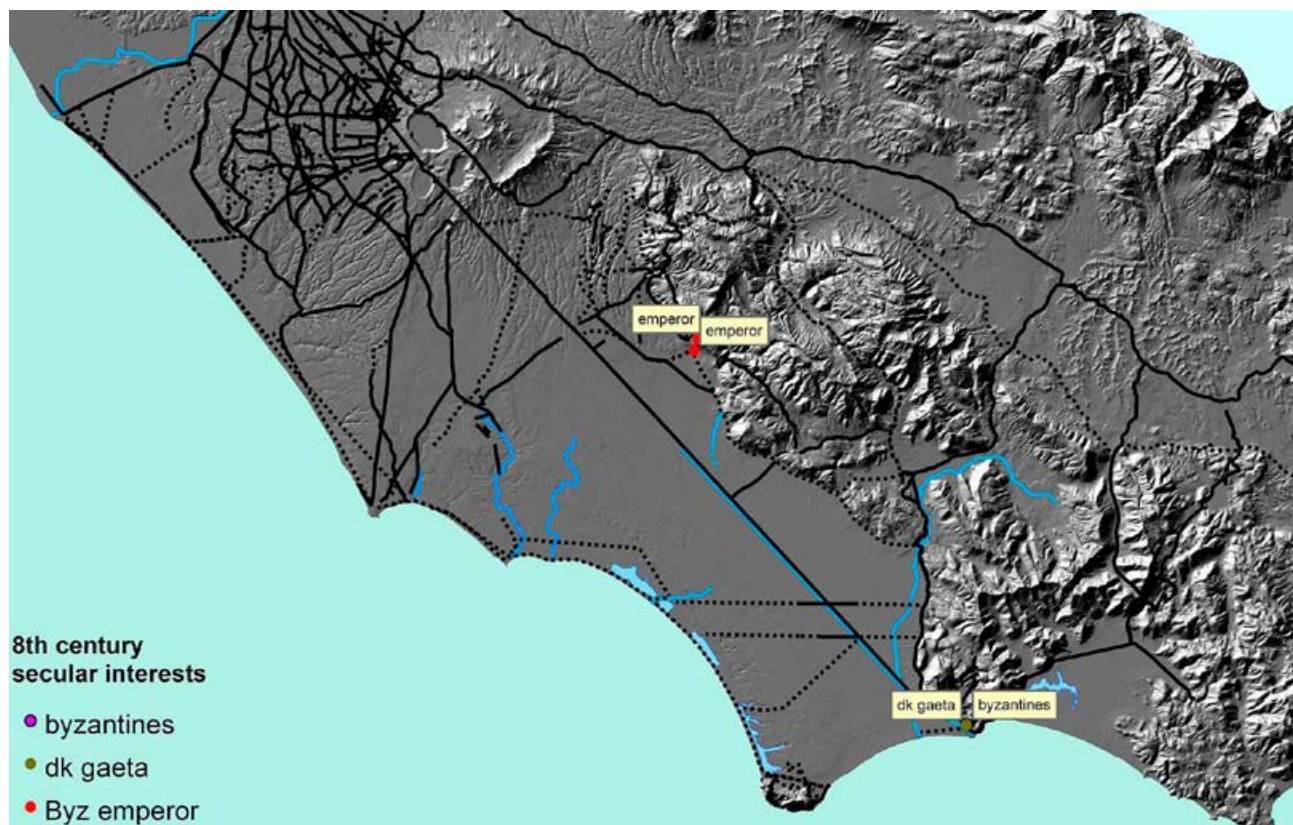


Figure 7.100. 8th century secular interests.

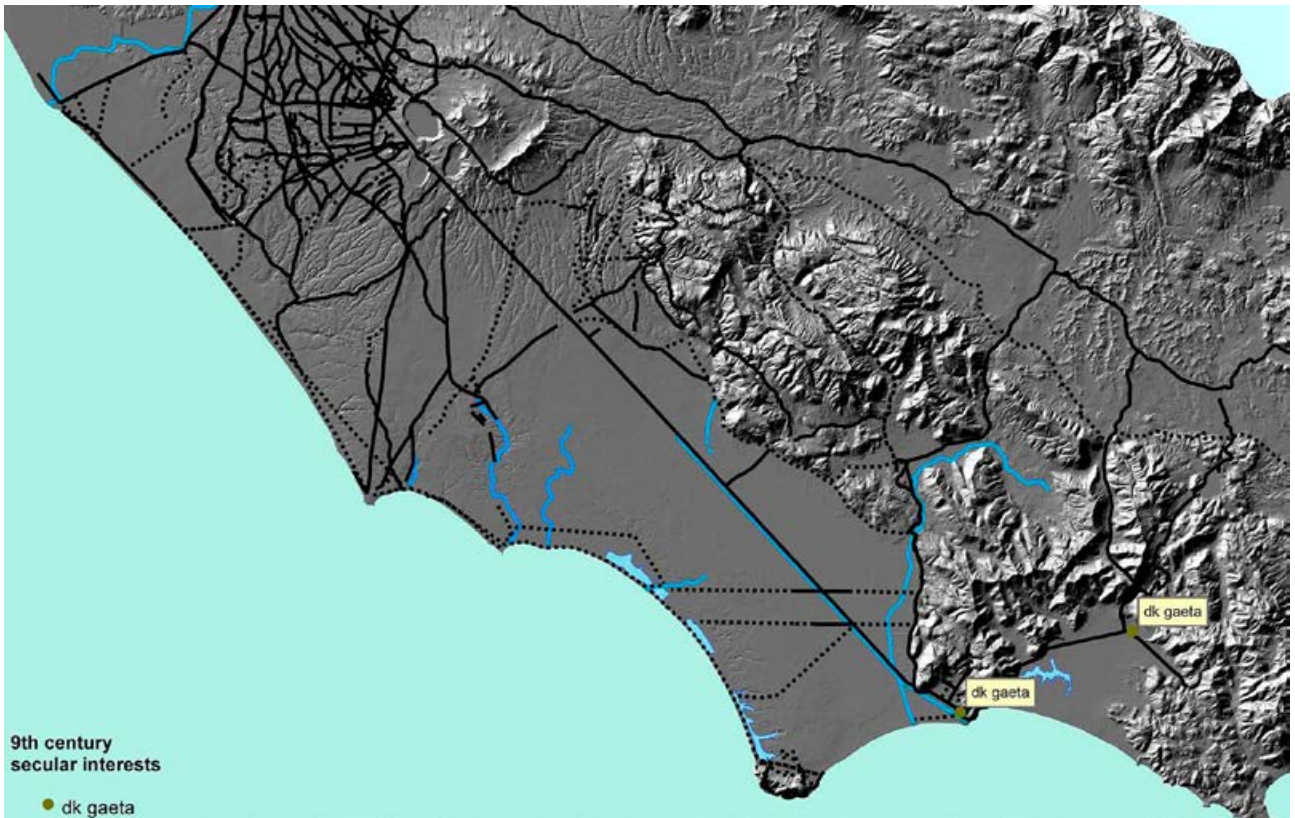


Figure 7.101. 9th century secular interests.

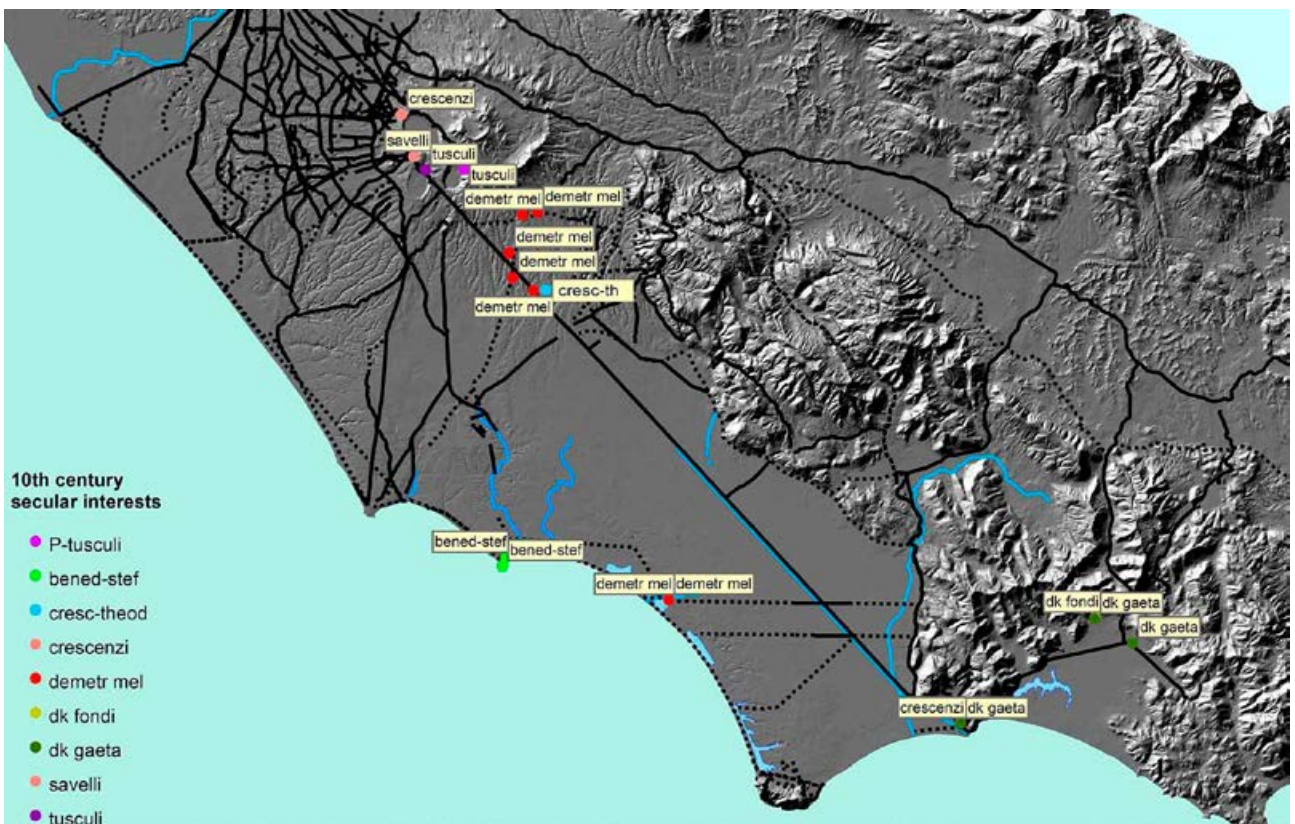


Figure 7.102. 10th century secular interests⁵⁸⁵.

The 9th century saw an influx of elite families from north of the Alps, constituting a new rural elite. These families mainly invested in rural settlements, the *curtis*. While in many parts of Italy this rural elite clearly is documented in written sources and archaeology of the 9th century, it is almost absent in our study area. The main reason for this late elite involvement in the countryside is the well-documented fact that these families focussed first of all on the city of Rome (the same can be seen in Naples and Benevento, see 2.I.9); the Dukes of Gaeta in the south are the exception to the rule, but they played a different role, independent from the Carolingian elite, being relics of a waning Byzantine power. And secondly, the papal court had an exceptionally strong grip on worldly dealings such as the administration and exploitation of rural estates. In the 10th century this changes, and elite involvement pops up in many parts of Tyrrhenian southern Lazio. The centre piece of elite entrepreneurial zeal are the early *castra*. Like elsewhere, but slightly later, the power of the reigning families would become invested in their *castelli* in the countryside (more on *incastellamento* below in 7.II.2.2.5.k and 7.III.2.2.2 Theme: *incastellamento*).

Since the downfall of the Roman senatorial elite in the 5th century, the role of noble families was played out in Rome and in the countryside of Tyrrhenian southern Lazio. Elite families again appear in the sources on the countryside from the 10th century onwards. In this century fierce struggles between elite families in and around Rome are recorded, struggles that would rage until the 14th century. The historically well-documented first large family dispute was the struggle between the Crescentii and Tusculi around the year 1000⁵⁸⁶. Indeed, their names show up in the above table 7.8 of recorded secular interests in the research area.

The fights between family clans would go along the line of the clergy as well, as touched upon earlier in this Theme. Many elite family members became involved in the organisation of monasteries or ended up in the entourages of popes and bishops; many of them over the centuries occupied bishop seats and even the holy seat. Elite interference in Church affairs cannot be played down. Aristocratic families filled the lacuna of the fading of papal powers in the 9th and 10th century, exemplified first in the middle of the 9th century by the tight control of the ‘party of nobles’ over the papal court. In the late 10th and first half of the 11th century, at first the Crescentii and later the Tusculi controlled the papacy, by instating family members or puppet (anti)popes.

The current database records several 10th century examples of the workings of intertwined interest of the elite and the clergy. The dealing of Duke Demetrius in the Fogliano area for example: Demetrius worked as a lord executor for the monastery of S.Erasmo in the *incastellamento*

process here, while S.Erasmo was part of the *patrimonium* of Subiaco, a monastery of which Demetrius himself was an important beneficiary⁵⁸⁷. The feudal grant of Terracina to the Crescentii in 988 is an early exemplary of the vassal arrangements of the papal court (in this case a puppet pope, installed by the Crescentii) with befriended families, which would become customary in the next centuries. The involvement of Leo the bishop of Velletri in the *incastellamento* “project” at castrum Vetus in 946 is an early example of the rise of bishops as powerful worldly players, often connected to local aristocracy⁵⁸⁸, in the later 10th and 11th century, as seen in many parts of Italy. Moreover, the late 10th century foundation of the monastery of Villamagna on private grounds serves as an example of the desire of some of the elite families to promote their status⁵⁸⁹.

7.II.2.2.3.b The networks of the Tusculi and Crescentii
From the database one gets a good idea of the networks of the Tusculi and Crescentii in the late 10th century (see figure 7.103). The Tusculi show their initial stakes on the western side of the Alban Hills in the early *castrum* of Ariccia, and at Nemi. Their interests would grow in the next two centuries, stretching towards the coast, as will be discussed in the next study period.

The Crescentii, however, are the most active family in our study area in the second half of the 10th century⁵⁹⁰. In this period their clan controlled politics in Rome (965-1012), and the papacy (“Crescentii era” 974-1012), while in constant conflict with the Holy Roman emperor. The castle S.Angelo was their home base, and was called in these years the “Castellum Crescentii”. The accumulated data in this research show that they had stakes in almost all recorded activities west of the Alban and Lepine hills, until Terracina, including three of the four early *incastellamento* enterprises. In many of their activities they cooperated with monasteries in which their family was involved, S.Alessio all’Aventino and S.Erasmo al Celio and the important Apennine convent of Subiaco⁵⁹¹. Other documented Crescentii activities are the infeudation of Terracina 988-991⁵⁹² (concession by a their “puppet” pope John XV), and the ownership of Monte Crescentuli. All in all, the Crescentii controlled a network of strategic positions, by direct control, or through befriended ecclesiastical institutions⁵⁹³, as figure 7.103 shows.

It is easy to see the strategic, perhaps calculated distribution of the nodes within this array: all Crescentii sites are situated on well connected (see also next paragraph) and strategic locations. The Crescentii dominated the main routes southwards and towards the coast, and the southern Pontine coastline. They seem to have kept the coast in check, and traffic towards and along it; the strategic importance for control of sea traffic of the *castrum*

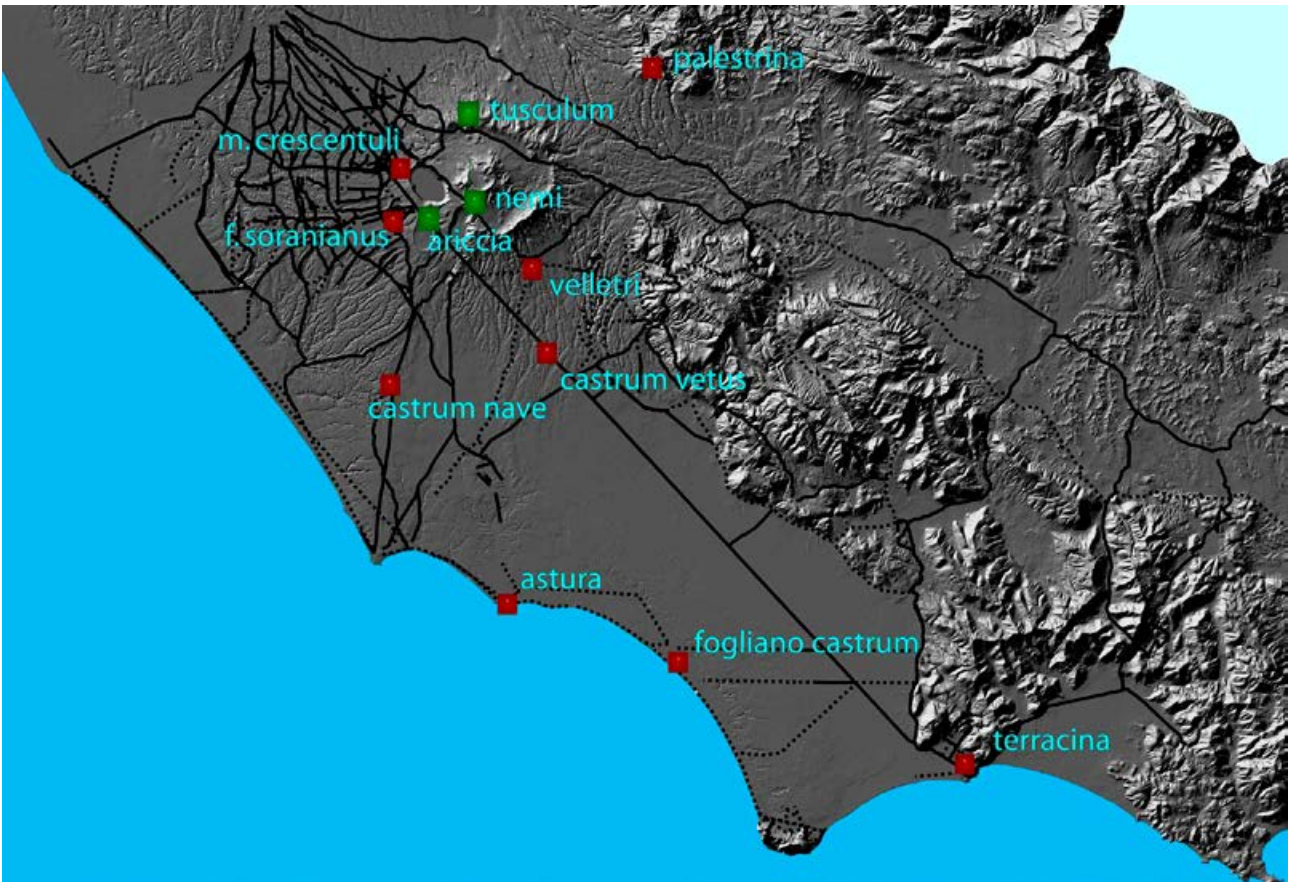


Figure 7.103. Networks of interest of the Crescentii and the Tuscii in the second half of the 10th century. A red symbol denotes an interest of the Crescentii, a green one an interest of the Tuscii.

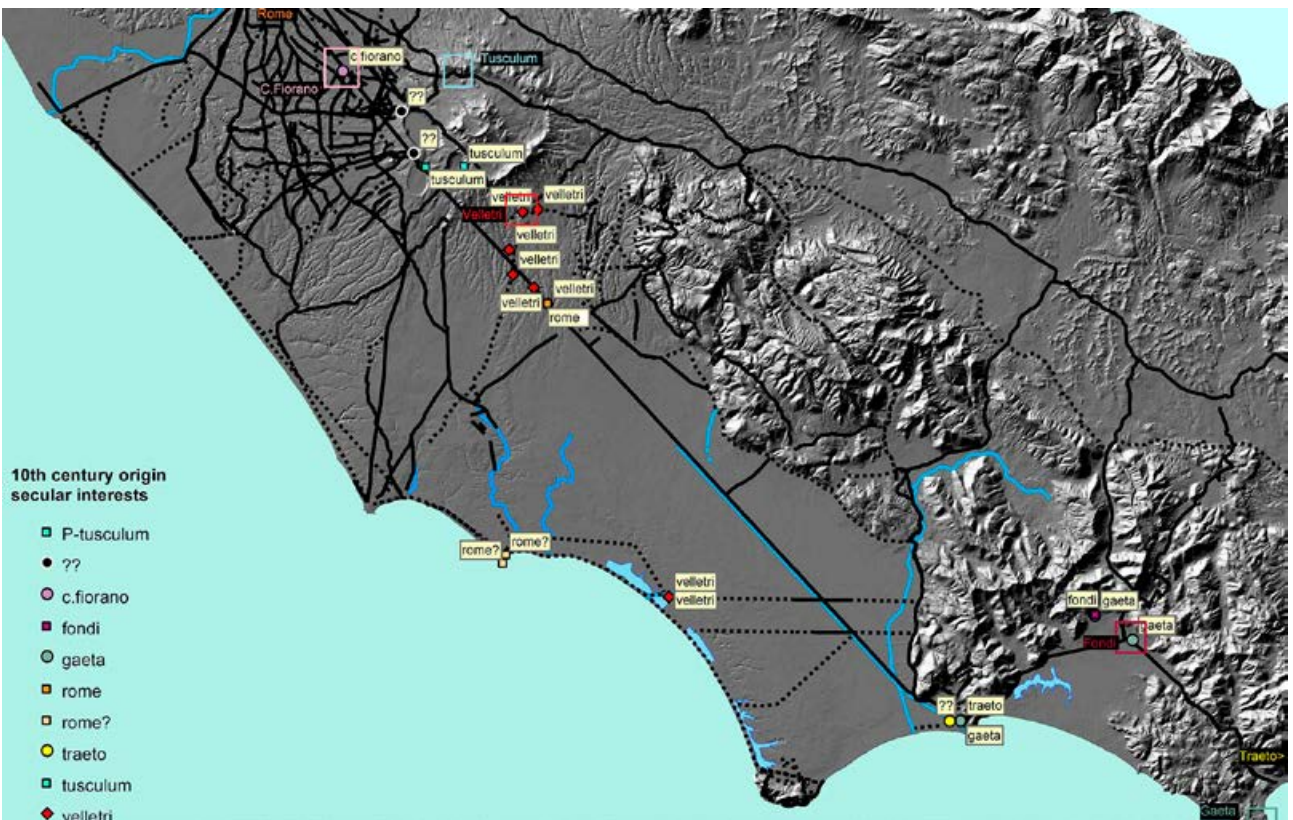


Figure 7.104. 10th century origins of secular interests.

at Fogliano is clear, situated along the long stretch from Astura to Terracina. The position of the Tusculi-built castrum Ariccia on the Appia must have been an obstruction in the Crescentii scheme. Generally this part of the Appian route was a crossroads of elite interest: in this period, the Savelli family had its first possession at Castra Albana.

In conclusion: the Crescentii not only controlled politics in Rome, this power also meant direct involvement in the countryside, controlling all important sea and land routes southwards. With the waning of Crescentii power in the early 11th century, their role as landowners and fiefs within the countryside was taken over by their rivals, the Tusculi. In the next study period I will further go into details on the struggles between elite families, their rise and fall, and their networks of interest and spheres of influence.

7.II.2.2.3.c Lines of communication and mobility based on secular interests (10th century)

As discussed earlier in the study of ecclesiastical interests, an analysis of the origin of interests can help identify specific lines of communication and mobility of people within the landscape. This study only yields results from the 10th century onwards, as widespread secular elite activities are only documented from that period onwards⁵⁹⁴. Figure 7.104 shows the origin (base or headquarter) of the above mapped secular interests.

As has been pointed out, the documented interests of the Crescentii and associated monasteries (S.Alessio, Subiaco) show that there was a coastal network of interrelated sites, in all likelihood connected and serviced by both sea and land traffic. As we may deduce from the 987 Astura donation of Benedictus and Stefania, from the Crescentii family, to the S.Alessio monastery, Rome had a direct link with the Astura coastal area, probably across the sea, passing through the still functioning Astura harbour, and over land, through the Via Anziante. On this route the castrum Nave was founded, probably by the same monastery of S.Alessio, a monastery itself closely connected to the Crescentii family.

Velletri had a coastal connection as well in the 10th century, to the Fogliano area, given the fact that Velletrian Duke Demetrius de Melioso invested in the *castrum* here. How exactly this route between Velletri and Fogliani ran is unknown, though it is likely, given the waterlogged condition of the central plain, that it ran through the Campomorto area to Astura via either the Mactorina or the Selciatella and onwards over land along the coast to Fogliano. A direct route Velletri – Astura was suggested for the previous study period century as well (7.I.1.1.2). An additional argument for a 10th century axis of

communication from the Velletrian basin to the coast at Fogliano is the contemporary engagement of Subiaco in the Fogliano area⁵⁹⁵. The likely fastest inland route from Subiaco to Fogliano is through the Velletrian basin - Campomorto – Astura.

7.II.2.2.4 Theme: The economy and systems of redistribution

The last section of this chapter on the 7th to 10th century will merge the observations in the key areas and in the above themes into a synthesis in chronological order. First, however, a short paragraph on aspects of economy and systems of trade and exchange should be made as a background against which to paint the chronological overview.

This theme expands on the one on economy of the previous study period, and is intentionally kept short on aspects of the local and regional economy that do not change, or for which the available evidence is the same. The focus lies on what is different in this study period. The same headers are used for clarity.

7.II.2.2.4.a Local economic activity, 7-10th century

It is out of the scope of this study of the 7th to 10th century to comment on economic activity on subsistence level, or on the micro-economy of monasteries and *castra* as socio-economic units, and the functional relationship of these centres with subsidiary farms; an exception is the historically well-documented set up and exploitation of the castrum Vetus. Production and consumption within a local network is not visible: as stated before, the crux in understanding the economy of post-Roman landscapes lies in the pottery typologies. In our study area, a (local) typology of 7th to 10th century pottery is only available in the context of a few local excavations (Villamagna, Ostia/Pianabella, Tor Paterno, the current Astura study). For economic insights on this micro-regional level a more intense level of micro-regional field studies is necessary. Such research should include surveys over large areas, a study of local wares and production facilities, and of regional infrastructure and building techniques.

7.II.2.2.4.b Economy on a regional scale, 7-10th century

Like in the section on the previous study period, the available evidence does not allow clear-cut observations on a regional level regarding economic systems and changes in them. The database offers only glimpses on the development of a regional economy and on networks of regional and local supply/trade, set against the outlines of trade and economy from studies in other areas: in Rome and northern Lazio. It proved difficult to make a sharp distinction between directional or market led exchange and trade, and clearly recognize local markets. The (pottery)

evidence is not well developed enough. Again, the “empty landscape” as visible on early medieval maps should be valued with care: while production and exchange may have stopped in several parts of the landscape, it may have continued within a network that may not be visible (see the previous study period 7.I.2.2.3.b). There are however a few bright spots in this dim picture on trade and economy of the current study period, on the archaeological areas and historical subjects best documented: the Ostia, Privernum and Villamagna key areas, the Alban Hills of the 8th century, and the papal acquisitions of the 8th and monastic properties of the 10th century.

There are two phases of new investment and economic revival in the late 8th to 10th century, as attested north of Rome and in the City itself:

1. **The second half of the 8th century.** Rome saw an economic revival from the second half of the 8th century onwards, to some extent triggered by Carolingian involvement and reflected in new building activities and new artistic expressions. In the 9th century the City became the major regional production centre of pottery (among others Forum Ware), of which the produce can be found in southern Lazio, in southern Italy and even across the Mediterranean⁵⁹⁶. This restored vitality in Rome is also visible in other towns on the Italian peninsula⁵⁹⁷. The late 8th and 9th century economic revival also applies to Rome’s hinterland; census figures of the properties of the Farfa monastery provide a picture of a sharp increase in rural population⁵⁹⁸. In the late 9th and 10th century, Mediterranean maritime economy would emerge from the depression it had been in since the 6/7th century⁵⁹⁹. The economic revival of the 9th century north of Rome and in the Molise seems related to the rise of the *curtes*⁶⁰⁰. How exactly the *curtes* contributed to this revival has not been fully explored yet, but one may assume that with the new specialization of labour, storage and administration, more efficient production was achieved⁶⁰¹. The current study area lacks widespread evidence for a *curtis*.
2. **The 10th century.** A new climate of investment accompanied the first phase of *incastellamento*, in which the Italian rural economy of the 10th century took off. In this phase the power of the reigning families would become invested in their *castelli*, which became the focal point of seigniorial lordship. There are no archaeological or historical indications that the Nettuno - Anzio key area was involved in this first phase of *incastellamento*.

7.II.2.2.4.b1 Imports

As noted in the study of the 2nd to 7th century, it is clear from the available archaeological data that pan-Mediterranean trade ceased in the 7th century, with the ARSW

imports showing a coastal continuation until the 7th century, while inland imports came to a halt earlier. The current study period shows that the exception in Tyrrhenian southern Lazio, apart from Rome, is the Ostia – Pianabella area. This coastal area would receive overseas goods until at least the 8th century. The absence of 8th and 9th century overseas imports in the research area is corroborated by studies elsewhere in central Italy. Pottery finds from other parts of the Mediterranean are rare, on other parts of the coast, in inland contexts, even in Rome⁶⁰². The assemblages of Crypta Balbi yield almost exclusively local and southern pottery in the 8th and first part of the 9th century. Privernum seems to have been oriented on the southern Italy (especially Campania) from the 8th century onwards (see 7.II.1.7.3).

Generically, one should consider however that in the past many archaeological projects lacked of knowledge of imported ware-typologies, and that many of these studied have not yet been published (Terracina and Albano for example).

As Horden and Purcell convincingly point out, the lack of found pottery does not mean that movement of goods across the Mediterranean ceased: Like before, during the heydays of Roman high commerce, a wide variety of goods was transferred over the sea through a myriad of small scale, often short distance exchange contacts. These however, are often more difficult to see in the archaeological and historical record⁶⁰³. “Even in periods when overall demand was at its slackest, and the movements of luxuries least in evidence, the requirements of the relatively poor could remain very large in total and generate an interregional trade in cloth, foodstuffs and perhaps other commodities too”⁶⁰⁴.

As we learn from several parts of the Byzantine world in the 6th and 7th century (among other Corsica) that inexpensive goods (amphorae) were traded to remote inland parts through local trade networks. If this is true for Lazio is not known, but we should allow for such trade in Byzantine Lazio as well, until the middle of the 8th century at least⁶⁰⁵.

7.II.2.2.4.b2 The hinterland of Rome: continued economic ties with the City. An 8th and 9th century economic revival?

Parts of northern Lazio were cut off from direct exchange relations with Rome from the 6-7th century onwards⁶⁰⁶. If this also happened in our study area is difficult to examine, because of the lack of published local pottery typologies. What is clear is that this is not the case in the best studied sites of Ostia–Pianabella and at Privernum: the archaeological (ceramic) but also the historical

(bishopric, church possessions) evidence shows that these areas must have had an unbroken direct exchange relation with Rome throughout the early and early-high middle ages⁶⁰⁷. Although Privernum was focused on southern Italy in the 7th to 9th century, imports from Rome, however, never ceased.

The enduring close economic ties of the Ostia region and Privernum with Rome must have meant that these parts of the landscape, specifically the Laurentine coast being situated close to the city, saw a late 8th and 9th century economic revival, like in other parts of Rome's hinterland north of the city (Farfa), as discussed above. Except for the occurrence of Forum Ware, a clear sign of the new economic vigour of Rome, the current database however cannot paint a clear picture of revival. Possible economic and demographic growth cannot be quantified: clear census figures lack in the current study area. Tyrrhenian southern Lazio lacks a large monastic archive like the Farfa and San Vincenzo regions. The database does not offer enough archaeological detail (for example pottery quantities). There are a few possible concrete building activities which hint at the renewed energy in this period: the 9th century foundation of Gregoriopolis and Tor Boacciana, the restoration of the church at Pianabella and the fortifications at Lanuvio and Ardea.

7.II.2.2.4.b3 Specific systems of redistribution

The Amaseno-Sacco valley between the 6th and the 9th-10th century was involved in trade systems originating in south-eastern Lazio⁶⁰⁸. The cemetery of Ceriara provides evidence for this until the 7th century with its mixed cultural pallet, typical for the southern Sacco and Liri-Garigliano region⁶⁰⁹. The pottery assemblages at Privernum clearly show that the sites' economy in the 8th to 10th century was strongly focussed on the south: many pots show characteristics from Campania. Wares originating from Rome, for example Roman Forum Ware, have been found at Privernum too, but in lower numbers⁶¹⁰. From the 10th century onwards the dominance of southern wares is less clear.

As discussed earlier, Corsi (2007) upholds the idea that Terracina (with its harbour) may have been the end station of this branch in an exchange network originating in inner southern Lazio as it controlled the old route from the Amaseno Valley to Privernum from the 6th century onwards, and possibly throughout the early middle ages⁶¹¹. If Terracina actually received goods from the south cannot be checked, like in the previous study period, as published pottery studies on early medieval contexts in the town lack.

7.II.2.2.4.c Transhumance and animal husbandry

Although there are no direct sources on pastoral activities until the high middle ages, it may be presumed that these continued during the current study period. Some kind of transhumance interchange with the inland mountain ranges must have continued during the middle ages, given the particular suitability of the coastal area for winter pasture⁶¹². In this interchange the pedemontana and Lepine mountain ranges adjacent to the plain likely were involved; in these areas several sub-recent *tratturi* have been recorded. A generic argument for the assumption of continued transhumance activities, is that these are among the most resilient forms of economic activity in tough economic and environmental circumstances. Horden and Purcell see transhumance as "low-risk form of capital investment – far less susceptible to annual variation than is dry farming; mobile enough to escape disastrous changes in the local ecology; mobile enough, also, to facilitate tax evasion. That is why the largest concentrations of sheep and goats have been found in what are, in agricultural terms, the poorest, the most risk-laden environments"⁶¹³. In sum, it may be assumed that several kinds of local and regional (long-distance or short-distance) strategies coexisted, like in Roman and sub-recent times⁶¹⁴.

It is not likely, however, that these activities were executed on a large scale during the current study period. As Hodges and Wickham⁶¹⁵ point out, referring to the Biferno Valley, "it is easy to exaggerate the importance of long-distance transhumance in the medieval period: there was no rationale for producing wool on a large scale before the 12th century, when bulk cargoes could be shipped to the burgeoning cities of northern Italy". Indeed, there are almost no historical records on transhumance activity before the 13th century in central Italy⁶¹⁶. In Tuscany, however, transhumant activity has been proposed in the 8th century, although evidence for large scale transhumance exists only from the 12th century onwards⁶¹⁷. In the current study area, the first signs of transhumant pastoralism also date to the 12th century (see next study period, 7.III.2.2.3.c Transhumance).

As touched upon earlier (7.II.1.8.3 and 7.II.2.2.3a), there is one geo-political event in the current study period that may be related to pastoralism: one may hypothesise the sudden expansion of papal possessions in the middle of the 8th century (the *domuscultae* Anthius and Formias, the *massae* Normas and Nymphas) as an active and deliberate economic strategic move. Both the Lepine margins (*massa* Nymphas) and the higher mountain plains (*massa* Normas?) and the higher parts along the river Astura (the *domuscultae*) are excellent grazing grounds⁶¹⁸. At least

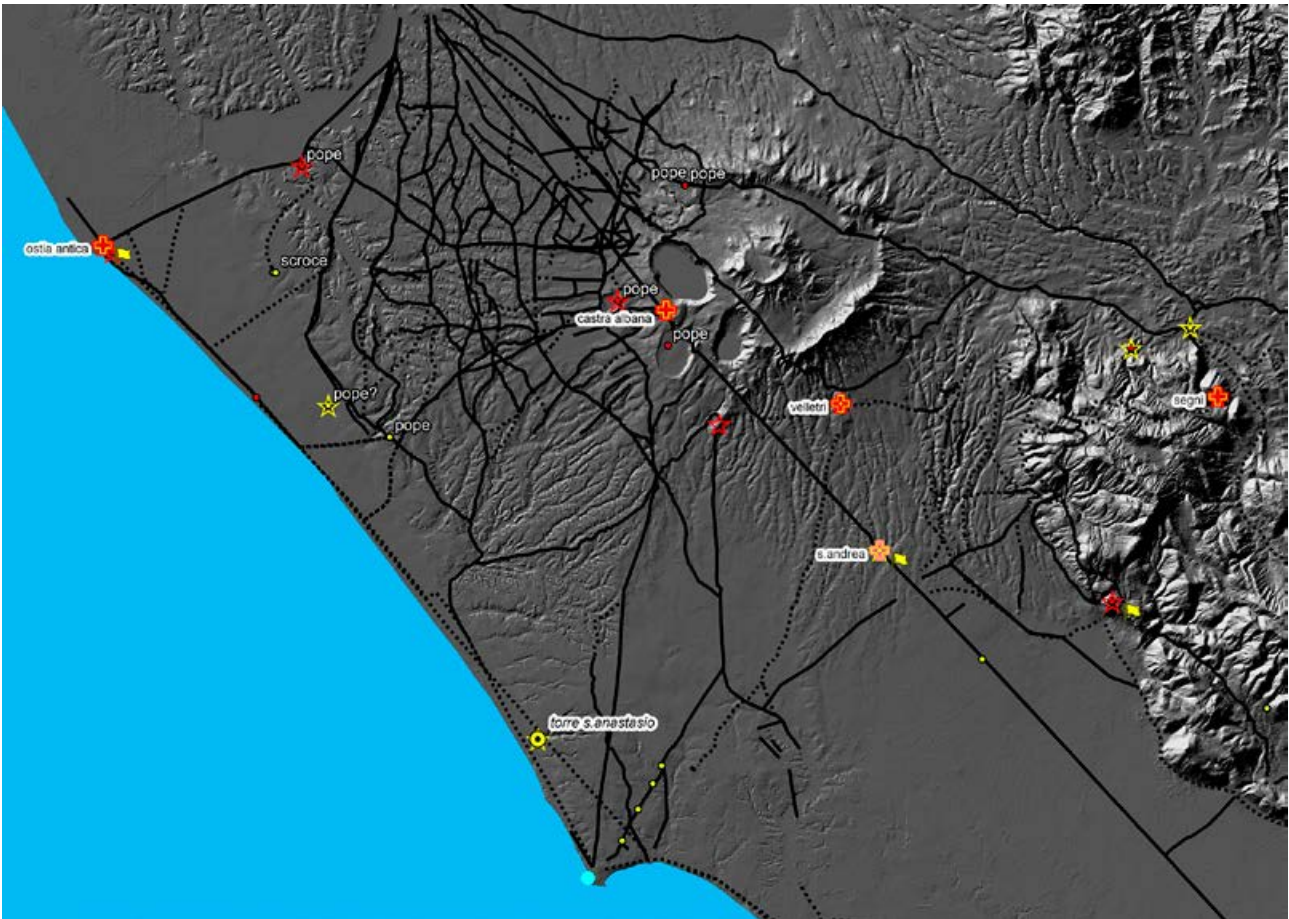


Figure 7.105. The 7th century: all activity (north). A combined map of activity (dots), churches (stars), interest (names), bishoprics (crosses and names) and monasteries (circles with a black dot and names in *italic*), fortification (flags).

two ancient transhumance routes passed by these *massae* and *domuscultae*. Possibly Pope Zachary attempted to get control of pastoral routes and fields, and the connected extra economic activity in these areas especially suitable for pastoralism.

7.II.2.2.5 Synthesis: observations on Tyrrhenian southern Lazio between the 7th and 10th century

While in the study of the 3rd to 7th century the synthesis was made from the perspective of change (transformations), this is not done here: the available evidence points to both continuation and change. At the same time, actual changes and continuities are hard to pinpoint (see also Evaluation). The neutral key word used in this synthesis is therefore “observation”. The observations on the dynamics in the landscape and society of the research area between the 7th and 10th century are aided by the background of earlier studies elsewhere in Italy, and, arbitrarily but necessarily, set in a few chronological episodes. For a better understanding of the described episodes I added a number of overview maps showing all recorded activity per century (figures 7.105-7.112).

7.II.2.2.5.a The 7-8th century: churches as hubs for continuity

In the evaluation, a gap in the 7th and 8th century data has been stipulated: evidence for many sites dries up in these centuries, and it is uncertain if this is a question of availability of evidence or actual absence of human agency. As the current database shows, however, churches prove to be markers of continuity. Most of the sites which were rekindled in the 9th century continued to function in the 7th and 8th century, with activities concentrated around the church, for example Pianabella and S.Andrea in Silice, Lanuvio, S.Vito, and Villamagna; Gregoriopolis too was also an earlier Christian shrine. At Norba as well, the 6/7th century settlement seems to have been strongly focused on the church built in the old temple for Juno Lucina. Possibly activity at S.Maria della Sorresca was continued at a church, before the 10th century foundation of a monastic community. The same may be true for Cori, where an early Christian church likely continued to function into the high middle ages, given the excellent state of conservation of the temple on which it was built⁶¹⁹. Like at S.Andrea and Villamagna, at Cori a monastery seems to have developed from the 10th century onwards. At villa in località Casale (OLIMsite 249) a church was built in

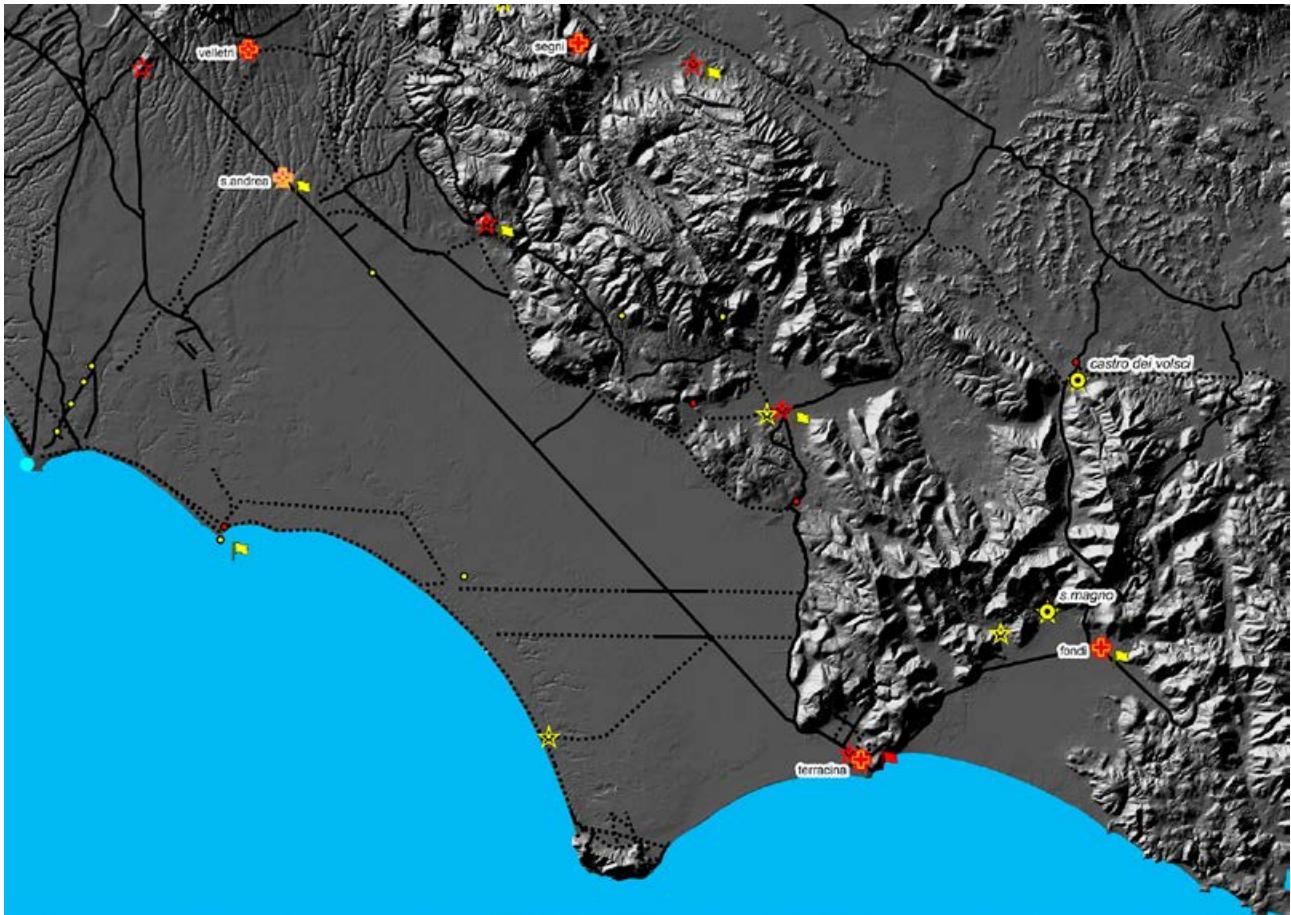


Figure 7.106. The 7th century: all activity (south).

the 8th century, around which continued activity has been found until an unspecified date in the high middle ages. Another example of continued activity around a church is found at Ostia: the village seems to have finally shrivelled into a small area around the Constantinian Basilica in the southwest part of the urban area, somewhere in the 7th or 8th century⁶²⁰. This church, only recently discovered by a geophysical survey by the DAI, was probably the location of the bishop's seat and Ostia's basilica⁶²¹. In contrast to the above examples, the site of Ostia was abandoned in the 10th century, with the resettlement of the population at Gregoriopolis.

It may be argued that the churches that survive during the economic, historical and archaeological low tide of the 7th and 8th century, often show themselves as a strong basis for later population growth. In several cases, a monastery would develop here from the 10th century onwards. In some cases, the phase of building the church was contemporaneous to a new (short-lived) flourish of the site, like at Norba and Villamagna.

What happened in the period of low tide on these church sites is mostly unknown. In a few cases the church

during that period was part of a small community, for example at Norba, Ostia, Villamagna and Pianabella. As discussed, we should not always interpret standing churches as population centres in the 7th and 8th century: The building of many of these churches was initiated by rich and elite members of society on their properties, not always by a community⁶²². However, privately owned churches only seldom show up in the primary sources available for this study area.

Generally the observation of churches as centres/markers for continuity seem consistent with earlier studies in other parts of Italy: Francovich and Hodges see churches firstly as hubs for the ecclesiastical organisation of the rural area⁶²³. Brogiolo suggested that they served as centres of regrouping the scattered inhabitants of the countryside, actively allocated by an urban aristocracy⁶²⁴. To what extent these earlier observations in other parts of Italy hold true for Tyrrhenian southern Lazio cannot be assessed. The fact remains that churches are strong indications for a continued activity in the countryside during the 7th and 8th century.

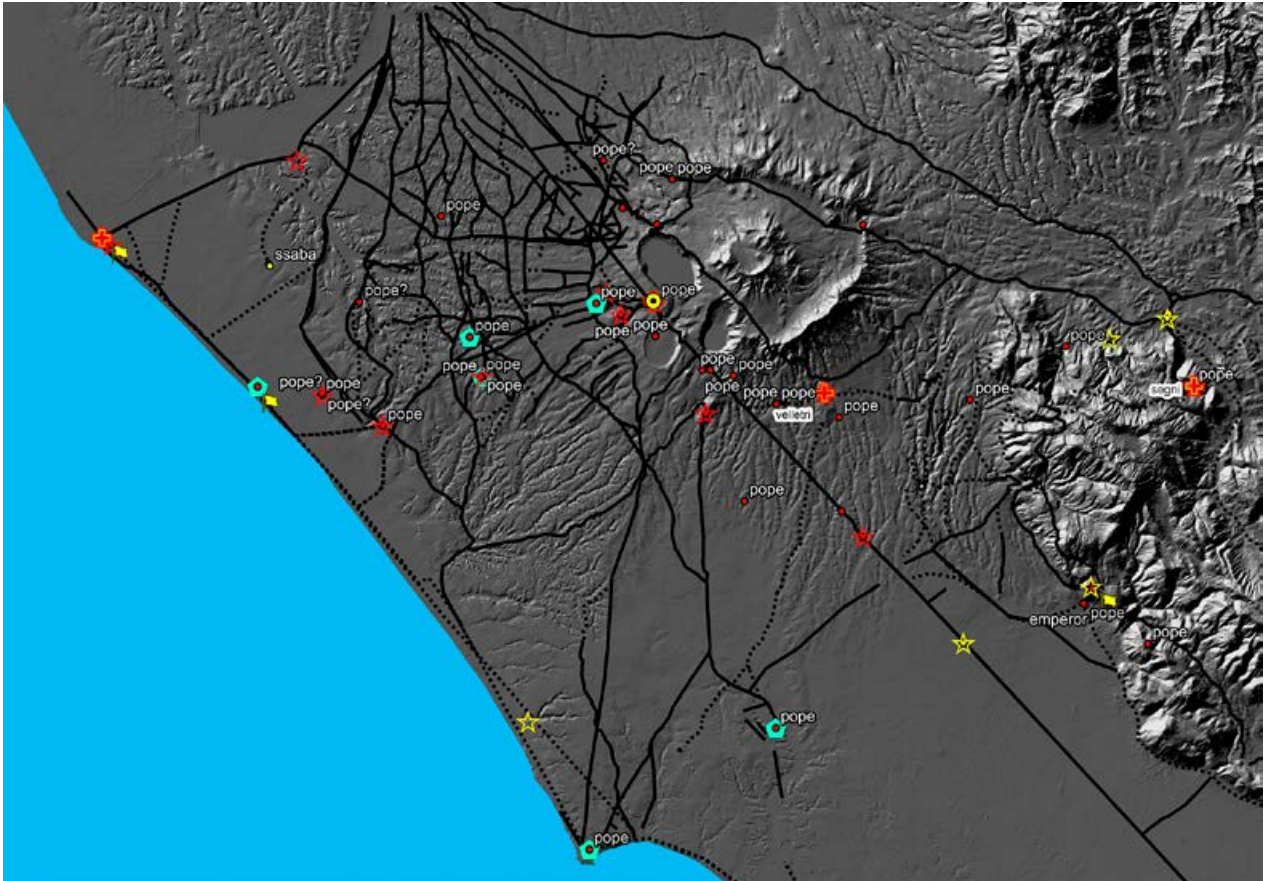


Figure 7.107. The 8th century: all activity (north). Domuscultae are depicted as blue pentacles.

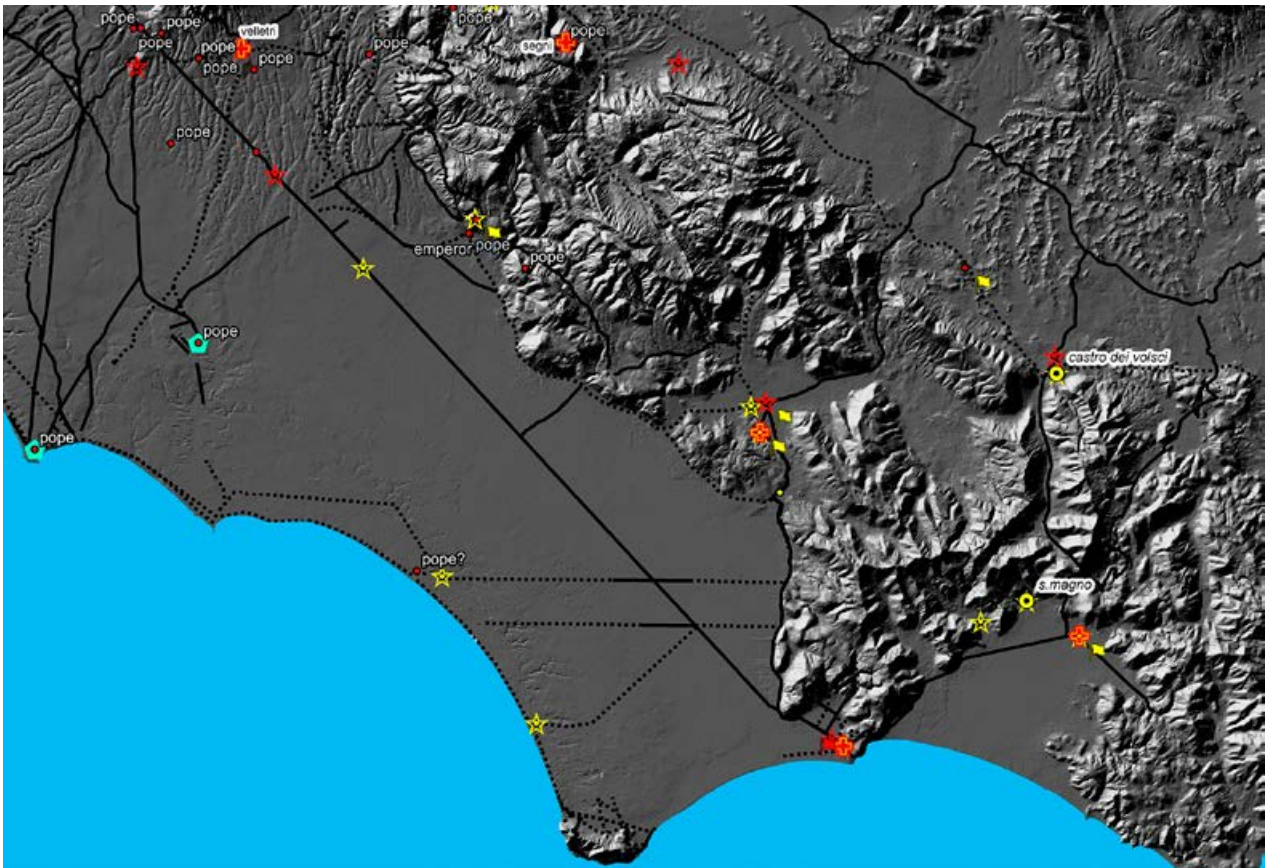


Figure 7.108. The 8th century: all activity (south).

7.II.2.2.5.b The 8th century: growing papal possessions and establishment of the Papal States

As has been discussed, earlier studies show how the papacy started to acquire worldly goods on a large scale in the 8th century, and certainly after the establishment of the close alliance with the Franks from 754 onwards (see 2.I.6). After acquisition, landlordly property ties with these independents were tightened, through the imposition of a stricter regime of subjection. On many ecclesiastical properties, from the 8th century onwards the collection of tithe was introduced. This measure considerably increased the wealth of church institutions.

These historical observations are matched by the current database, first of all by the large numbers of Church estates (*fundi*) attested in the wider Velletri area, dated 715-732. Their distribution seems to point to a distribution strategy focussed on Rome, as these are almost all situated near main roads. Compared to the number of 7th century estates, it may be that these *fundi* are early signs of the growth of Rome in the late 8th century. We have to bear in mind the bias of overrepresentation of the 8th century in the database. If not an early sign of growth, these estates show the lasting economic dependence and impact of Rome on the countryside and, specifically, the close contacts of the Velletri area with Rome.

The second clear sign of papal worldly involvement are the *domuscultae*, as treated in detail above (7.II.2.2.1.c The *domuscultae*). The *domuscultae* must have contributed to economic revival through their efficient production, and the direct connection to their market, Rome.

The foundation of the *domuscultae* is a pointer to the loss of Byzantine authority, as they represent the upcoming new power player in Lazio of the late 8th century and onwards: the papacy. The diminishing of Byzantine power in the 8th century is not visible in the current database, except for the donation of Norba and Ninfa by the Byzantine emperor to the papacy.

The acquisition of these two estates and the simultaneous existence of the *domuscultae* Anthius and Formias on the coast, seems part of a deliberate geo-political and economic strategy by the papal court. With this strategy the pope gained control over the Pontine plain, specifically over the winter pasture grounds on the higher parts of the coastal area and the routes towards them.

As treated below, although the *fundi* and *domuscultae* could be seen as markers for more strictly managed agricultural production and fish farming and extraction of raw materials (wood, possibly locally salt at Ostia and Fogliano), and as boosters of economic growth in the countryside, it is only in the 9th century that the

economic revival in Rome can be seen in the countryside of Tyrrhenian southern Lazio (see below here).

7.II.2.2.5.c The 8th – 10th century: scaling up

The Carolingian century saw a weakening of free men throughout the (northern) Italian peninsula⁶²⁵ and the growth of landed properties; in this process the smaller landowners lost their lands to nearby larger players, which could be lay or ecclesiastical. The *domuscultae* are early examples of this development. The presence of the *fundus* Soranianus, owned by the distant monastery of Subiaco, in the Alban Hills in the 10th century may be exemplary as well. This monastic *fundus* may have replaced several of the many earlier papal possessions (*domuscultae*?). The properties of the monasteries in Rome seem to grow as well, and are located further away from Rome than previously: in the 10th century S.Alessio owned a big piece of the Astura peninsula and S.Erasmo al Celio parts of the Fogliano area. Such very large estates, with several estate centres and tenants spread over wide areas, are found all over of the peninsula⁶²⁶.

Of the social complication involved in the scaling up of landed properties, not much is known. Possibly the burning of a *domusculta* estate to the north of Rome in 816 by Roman nobles is an example of the frustration of old (non-Carolingian) elite, of smaller landowners, losing their lands to nearby larger player, in this case the pope⁶²⁷.

In conclusion: The current database does not allow a study of when and under whose authority landed estates were scaled up. It seems that initially both the papacy (*domuscultae*) and large monasteries (Subiaco > Soranianus, S.Alessio > Astura estate) had part in this scaling up of landed properties between the 8th and 10th century.

7.II.2.2.5.d The 9th century: renewed activity in the landscape

In the 9th century (figures 7.109 and 7.110), the economic revival of Rome, which started in the late 8th century, began to show itself in the northern hinterland of Rome, as becomes clear from the 9th century census figures of the properties of the Farfa monastery. These provide a picture of a sharp increase in rural population. As was discussed, this economic revival seems connected to rise of the new agrarian structures, the *curtes*, and their efficient and economical production. In the current study concrete figures on growth, like at Farfa, cannot be given. Although it may be assumed that the *domuscultae* added to economic growth, the written sources do not provide enough details to assess their economic impact.

While the written sources are silent, a number of archaeological indications in the countryside of Tyrrhenian southern Lazio confirm an economic upheaval in the 9th,

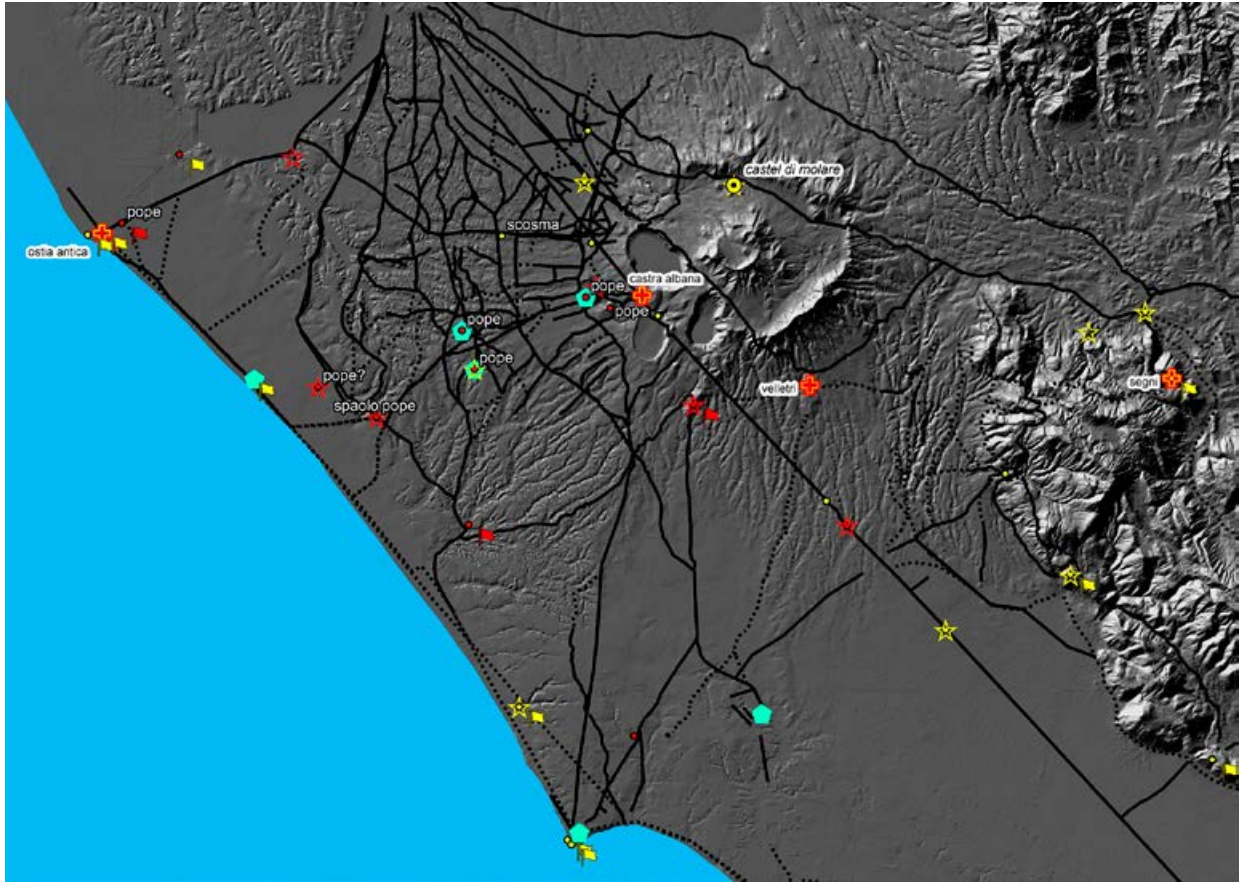


Figure 7.109. The 9th century (north): all activity.

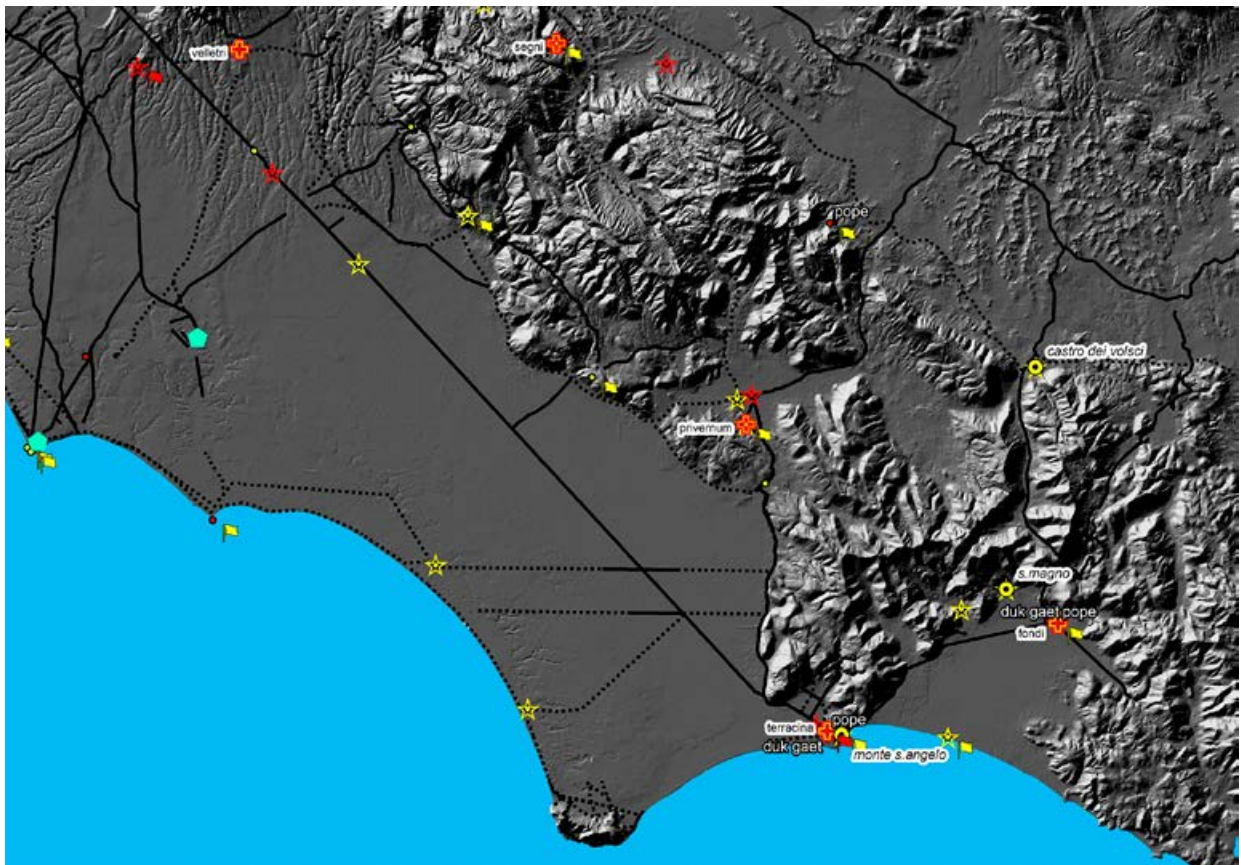


Figure 7.110. The 9th century (south): all activity.

and certainly in the 10th century. Building activities of the 9th century pay testimony to new economic zeal: the fortifications of Gregoriopolis and probably Tor Boacciana were erected, and at Lanuvio and Ardea new walls were built. Moreover, Villamagna was reoccupied permanently, and at Villa S.Vito a fortification might have evolved. Furthermore, at Pianabella the church was restored in the 9th century, like at S.Andrea in Selci in the late 8th century; some scholars maintain that Cisterna may already have been a large settlement in the 9th century. The structures of Monte S.Angelo may also date to the 9th century. The transfer of inhabitants to an upper town at Privernum and Ariccia may also have taken place in the 9th century (see below here).

It is unknown however, how large the surroundings centre and the economic action radius around these sites was. Did the inhabitants cultivate the lands from the towns itself, and what was the religious service area of villages and sees? What area did the fortifications defend? Roads must have stretched the sites' action radius. It remains difficult to say something about scale.

7.II.2.2.5.e The 9-10th century: defensive locations and Saracene threat

In the 9th century several defensive activities are recorded. A number of these may be related to the Saracene threat: The 9th century walls of Lanuvio and Ardea, and fortifications of Gregoriopolis and possibly Boacciana and Tor Paterno. Possible other new defensive locations of the period are S.Vito and S.Anastasia. The Saracene threat diminished in the course of the 10th century.

There is another process which has been linked to external threat: relocations of communities to a higher position.

7.II.2.2.5.f The 9th-11th century: relocations?

The transfer of communities to higher positions has been suggested as a common demographic phenomenon of the late-early and high middle ages. The insecurity of the time has been proposed as one the main causes of these relocations (e.g. the idea of the 7th to 9th century "flight into the hills" in the Ager Faliscus, see 2.II.3.1). The abandonment or change of infrastructural arteries is another theory⁶²⁸. *Incastellamento* too involved the transfer of people, as Toubert has shown, from the middle of the 10th century onwards.

In the research area there are three transfers for which there is incontrovertible evidence: First of all, the transfer of the town of Privernum to the upper town of Piperno and that of the inhabitants of Ostia to Gregoriopolis. A date for the first transfer cannot be given; the latter transfer seems to have taken place in the 10th century. Another,

less well documented but certain, relocation is the transfer of the inhabitants of Norba to nearby Norma, possibly in the 11th century. Other suggested, but unconfirmed, relocations in these centuries may have taken place at Ariccia⁶²⁹, Cisterna⁶³⁰, and outside the research area at Ceprano (ancient Fregellae) and Valmontone⁶³¹.

The relocation to Gregoriopolis is the only with a historically known clear cause: the external threat of the Saracens. As said, the transfer of Norba to Norma has been dated to the 11th century⁶³². The reasons behind this transfer are not known; possibly the new site has better defensive qualities. Possibly the transfer was a case of *incastellamento*. If so, the relocation may have taken place later, as a *castrum* has been recorded in Norma in 1179. This remains speculative.

The abandonment of Privernum for Piperno for defensive reasons has been suggested. It has been correlated to the presumed devastation by the Saracens in 846⁶³³ or to the feudal battles with the rulers of Roccagorga, Maenza and Roccasecca of the 10-11th century⁶³⁴. Indeed, the new town was superior in defensive respect, but also close to the *campi* which provided for the town. There is no conclusive evidence for this military-defensive hypothesis. There is, however, concrete evidence for a (secondary) cause: the wet conditions in the plain, causing drainage problems and the risk of malaria infection. The problematic drainage of the site is attested by the stratigraphy of the Privernum site, and the difficulties in keeping it dry in recent times. On 19th century maps, these intrinsic drainage problems of the Amaseno plain are shown as well⁶³⁵.

7.II.2.2.5.g The 10th century: an eruption of activity

The 9th century new activities in Tyrrhenian southern Lazio are followed by a sharp increase in (recorded) activity in the whole study area in the 10th century. In total there are 93 records of 10th century activity in the landscape versus 61 in the 9th century⁶³⁶; in the 11th century this number is 131. Settlements were founded or rekindled, new investments were made, monasteries were founded. Again, one has to stress that the availability of sources may cause a bias. The developments, however, are not only quantitative: in the 10th century several major socio-economic transformations took place: the development of widespread rural monasticism, the start of extensive feudal arrangements and of secular elite activities, and the start of *incastellamento*. Although some of these developments may have had their origin in the 9th century or earlier, as research in other parts of central Italy has shown (early monasticism, pre-*incastellamento* phase?⁶³⁷), the current database shows little early signs. In Tyrrhenian southern Lazio, clearly the 10th century is the period of great transformations. Below I will treat aspects of these

new developments with a focus on the developments in and around the Pontine plain

10-11th century: new activity around the Pontine plain and in the mountains

The 10th century may be seen as the start of (renewed) interest and investment in the Pontine plain. In the wider Pontine area from the 10-11th century onwards signs of activity can be seen. The inhabitants of the area and the *lord entrepreneurs* seem to have developed new or reinvented ways to exploit the area, not only along the main arteries from Rome to the south, but also in the central plain, in the Lepine Mountains and on the coast. Early examples are the foundation of a *castrum* in the Fogliano area which involved substantial investments and the “locus” at Mesa in the 10th century. In the late 10th century, Fossanova, Sezze (a free commune?)⁶³⁸ and Sermoneta saw new activity. The mentioning of a bishopric at Norma in the 10th century, may point to demographic growth and growing importance of the Lepine settlements. This diocese was replaced by the diocese of Sezze in the 11th century. At S.Maria della Sorresca the second half of the 10th century provides us with the first secure documents on the site since the late 6th century. There is 11th century evidence for the Appian road-side churches of S.Giacomo and S.Leonardo de Silice. From the early 11th century we have a document in which a part of the southern Pontine plain near Mesa is sold, which shows the areas’ economic value. And lastly, the name Rio Martino is first documented in the 11th century.

Favourable geographical locations thrive

The pedemontana key area shows the importance of a favourable geographical location for the newly developing towns from roughly the 10th century onwards: Cisterna, Sermoneta and Sezze have clear advantages from the position on a crossroads (Cisterna), a strategic position dominating the main infrastructural artery southwards and the entrance of a Valley (Sezze) and on a river allowing transportation (Sermoneta).

Archaeology still slacks

We should however carefully interpret the growth in documentary evidence on the Pontine plain: Because of our dependence on written sources, which abound in the 10th century, we cannot be sure if renewed activity started in the 10th century or earlier, or even continued in and around the plain from the late Roman period onwards; it may simply not be visible in the records. Archaeology cannot corroborate the date of new bustle in the Pontine plain as little specific study has been done or published on the medieval phases of Pontine sites (with the exception of the excavation of Fossanova⁶³⁹, and the Minor Centres Study). This bias in the availability of written sources is

an ongoing issue for the 7th to 10th century; as long as archaeology has not been fully exploited, clear-cut statements on a possible low ebb of activities in the 7th to 9th century and a revival in the 10th century do not hold much value. As research north of Rome shows, only after wide scale archaeological study adding to the historical record can we make clear statements confirming or refuting the picture of (in)activity in these centuries.

Improved environmental circumstances

The foundation of the *castrum* by the end of the 10th century, and the other notes on activity in and around the Pontine plain, may also be seen as a sign of improved environmental circumstances in the Pontine area⁶⁴⁰; it seems possible that from the end of the first millennium the flooding became (seasonally) less large-scale. Chronologically the foundation of the Fogliano *castrum* may match Van Joolen’s geomorphological study which shows that, at least in the lagoonal parts of the eastern Pontine plain, the phase of rapid colluviation came to a hold from 800 AD onwards⁶⁴¹. Such a coring-based chronology of landscape change, however, is not yet available for other parts of the Pontine area, like the coast. We can therefore not securely date a possible decrease in lacustrine and fluvial sedimentation in the Fogliano, Terracina and Fondi key area at the end of the first millennium. All in all, a correlation between environmental improvement and new investments in the Fogliano area, and the Pontine plain at large, cannot be made, as both processes lack a firmly fixed chronology⁶⁴².

Start of the full exploitation of the landscape

As we will see in the next study period, the new 10th century activities are only the start of the exploitation of the landscape of Tyrrhenian southern Lazio as a whole, including the marginal parts. Activities in the Pontine plain are still restricted to the main routes and the coast, more or less according to the same spatial pattern since the end of Roman times, the 3rd or 4th century AD. It is only in the 11th century that the more marginal locations in the Plain (on the Appia), and locations in the central parts of the Lepine and Ausoni mountain ranges appear to have activity.

7.II.2.2.5.h The late 9th and 10th century: waning papal authority and growing monastic influence

As discussed in the Theme on the papal *patrimonium*, papal involvement had dwindled in the 10th century, and other church institutions extended their networks, especially monasteries (figures 7.11 and 7.12). This involved monasteries from Rome and local rural monasteries and large rural monasteries from outside the current study area.

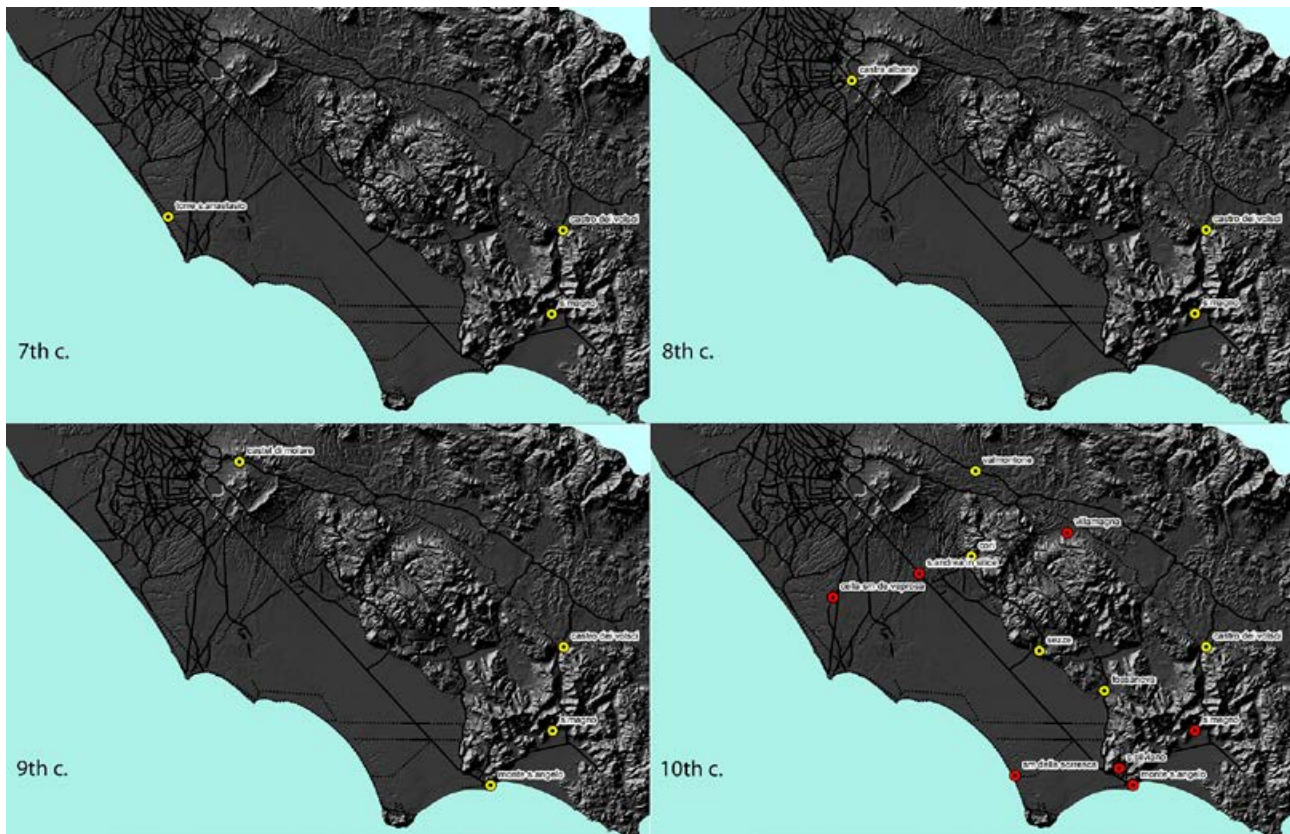


Figure 7.113. Monasteries in Tyrrhenian southern Lazio between the 7th and 10th century

7.II.2.2.5.i The 10th century: the rise of rural monasteries

The number of (rural) monasteries in Tyrrhenian southern Lazio grows rapidly in the 10th century, as can be read from table Monasteries in Appendix 6.2. This contrasts with some of the Lombard and Carolingian ruled areas in other parts of the Italian peninsula, where the political role of the monasteries and other ecclesiastical institutions grew already from the 8th century onwards, as monastic communities developed into centres around which the Franks built and maintained their power in Italy⁶⁴³.

The relative small number of written sources on rural Tyrrhenian southern Lazio compared to these areas may be explained by the early absence of rural monasteries. In other parts of central Italy, for example Sabina, the archives of the large Farfa monastery hold written records on local subjects since the middle of the 8th century.

The reason for the late development of rural monastic life in the research area lies in a combination of factors: It is possible that the direct control of the papacy on the ground (papal possessions, *domuscultae*) was too strong to build a sound monastic presence. One could argue that in the power vacuum that grew in the later 9th century however, after the Carolingian influence dwindled, and in which the pope lost much of its authority, the

monasteries were able to grow. The contemporary growing influence of the elite may offer additional explanation to the timing of monastic growth: “The proliferation of monasteries on private lands in ninth- and tenth-century Italy corresponds to the desire of certain families to mark out their territories, consolidate ownership over lands and promote the status of the families”⁶⁴⁴. Villamagna was one of the monasteries founded (in the late 10th century) on private lands. There are also other factors to bear in mind for the fact that rural monasteries close to Rome were not developing: the many churches and monasteries in Rome, and the presence of strong suburbicarian bishops (Ostia, Velletri) for example. What is more, the elite was focused on the city and its papal court. The large investments that the Carolingians and connected elite families made in several monasteries in central Italy, therefore, may not have found their way southwards from Rome.

The sudden rise of the rural⁶⁴⁵ monastery can be seen on on figure 7.113.

The southern part of the area is in the hands of the Benedictine order: Fossanova (until the 11th century), S.Magno, Castro dei Volsci and S.Maria della Sorresca; the other communities are local, without a clear order. Indeed, Lazio became the cradle of Benedictine monasticism from the 6th century onwards⁶⁴⁶.

The town of Terracina and its hinterland appear to have been an attractive location for monasteries of the 10th century. Three rural monasteries in the wider area provide their first evidence in the 9th to 11th century: monastery to S.Silviano (OLIMsite 112), Monte S.Angelo (OLIMsite 216) and S.Anastasia (OLIMsite 94). It is not known when the monastery of S.Maria ad Martyres was founded (OLIMsite 505).

As earlier research in other parts of Italy has shown, the existence of ancient vestiges in the vicinity, such as a villa, frequently seems to have been an important selection criterion for the building site of a Lombard monastery; villas were a vital source of building materials for the new foundations⁶⁴⁷. This seems to hold true, and this is no surprise, for the monasteries founded in Tyrrhenian southern Lazio as well: as the evidence shows, all are founded on ancient vestiges. The major sites of Grottaferrata, Fossanova, Villamagna, San Sebastiano (Alatri), and church and monastery of S.Angelo are cases in point.

In the 11th century this growth in monasteries and monastic communities is continued, as will be treated in the next study period.

7.II.2.2.5.j The 10th century: fast growing (secular) elite activities

The 10th century saw an explosion of activities of the elite families that would control much of the ecclesiastical, political, military and economic developments in Italy from the end of the first millennium onwards. Until the 10th century those activities and interests seem confined to the main routes of the Appia and pedemontana, and the Pontine coast. In the 11th elite interests spread over almost the whole research area.

7.II.2.2.5.k The 10th century: the first fiefs and start of *incastellamento*

From the 10th century the first documented cases of feudal arrangements, i.e. within the traditional definition of feudalism, are known: legal/military relationships of noblemen (and the clergy), in which an owner (overlord) conceded daily management and defence of a fief (a town or an estate) to a feudal party (vassal)⁶⁴⁸. All 10th century recorded feudal arrangements or vassalages in our study area involved elite families who acted as fiefs or lord executors for an ecclesiastical institution. Table 7.9 lists the cases of vassalages of the 10th century, including the owner of the land and the managing party involved.

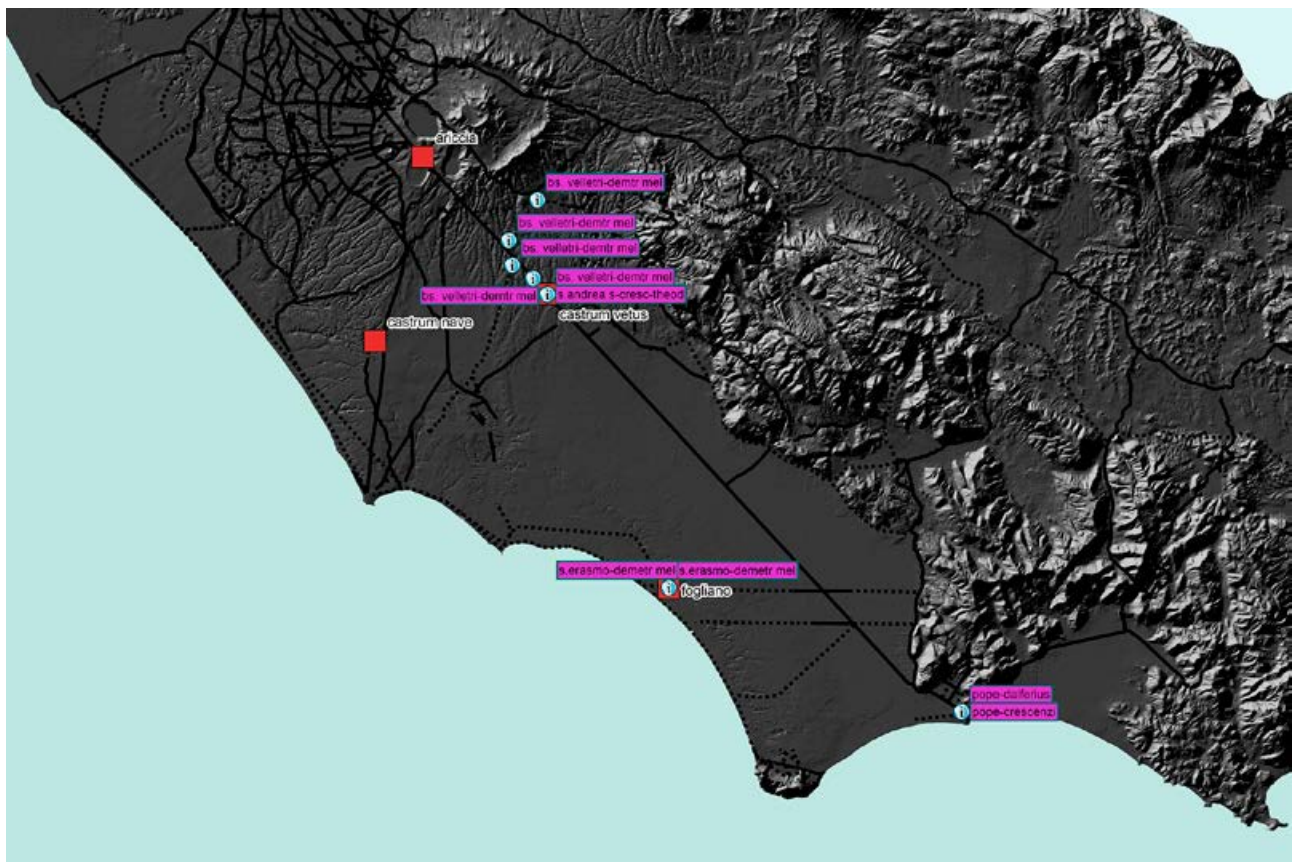


Figure 7.114. 10th century feudal arrangements (icon with an i) and castra (red squares). The icons with an i around the castrum Vetus denote the (production) satellites involved in the *incastellamento* enterprise, which (re)started in 978.

Table 7.9. 10th century feudal arrangements and examples of *incastellamento* processes in the research area.

* The involvement of Gaeta in Fondi and Terracina, from the late 8th century onwards, initially was not a case of infeudation but of direct ownership through donation, by the papacy.

** For *castrum Nave* and *Ariccia* it is not explicitly recorded which parties were involved, but these may be deduced from the ownership of the lands it was built on: respectively the monastery of S.Alessio and the Tusculi.

OLIMsite	name	owner site - lord entrepreneur	base lord entrepreneur	incastellamento
31	terraccina*	pope - crescentii	rome	
31	terraccina	pope - daiferius	traeto	
90	castrum nave	s.alessio - crescentii?*	rome	Y
113/127	fogliano	s.erasmo - demetrius mel.	velletri	Y
133	c.vetus	s.andrea s - crescentius theod.	rome	Y
133	c.vetus	bs. velletri - demetrius mel.	velletri	Y
159	ariccia	tusculi – tusculi?	tusculum	Y
218	s.thomas	bs. velletri - demetrius mel.	velletri	Y-satellite
579	sole luna	bs. velletri - demetrius mel.	velletri	Y-satellite
597	paganicum	bs. velletri - demetrius mel.	velletri	Y-satellite
599	papazano	bs. velletri - demetrius mel.	velletri	Y-satellite

The 10th century was also the period in which the *incastellamento* process was started in our study area, during which *castra* were founded, from which the surrounding area was exploited. It should be iterated that feudalism is not the same as *incastellamento*, as was discussed in Chapter 2 (2.I.9.1). Although in most feudal and *incastellamento* agreements there is an owner and a feudal party asked or conceded to execute daily management and defence of cities and estates, *incastellamento* processes are of a more intricate nature. They often involve the occupation of new sites and the resettlement of rural population. In several cases there is not even a secular elite party involved in a *castrum*; sometimes the rural populace resettled itself, as is the case in Tuscia Romana⁶⁴⁹. This, however, is not the case yet in the presently studied part of southern Lazio of the 10th century.

What has becomes clear is that *incastellamento* in Tyrrhenian southern Lazio started relatively late. North of Rome, in the Sabina, the first signs of this social process in which the rural population resettled, or was resettled, in newly founded fortified settlements, are visible in the early 10th century; the process was in full flight at the end of that century⁶⁵⁰. In our study area, the 10th century saw four examples, dated to the second half of the 10th century. In all early *incastellamento* enterprises, a church institution was involved. Some of these first *castra* had problems starting up: in the two best documented cases, *castrum Vetus* and *castrum Fogliano*, the enterprise had to be restarted shortly after the first initiative.

On figure 7.114 the feudal constructions and *castra* of the 10th century are plotted, including the names of the parties involved.

From the documentation it is clear that the early *incastellamento* took shape along the lines of the famous struggle between the Crescentii and the Tusculi. In all four early securely documented *castra* these two families were involved; in the case of the Crescentii they were cooperating with monasteries in which their clan was involved: S.Alessio, S.Erasmo and Subiaco. Duke Demetrius de Melioso, of the Crescenzi⁶⁵¹ family branch based in Velletri, for example invested in two of the early *incastellamento* enterprises, the *castrum Vetus* and *Fogliano*. And it seems no coincidence that S.Alessio owned the lands on which another early *castrum* was built at the end of the 10th century (996), *castrum Nave*: in this Roman monastery Crescentius de Theodora, of the Crescenzi family, died as a monk in 984. The same Crescentius de Theodora was involved in the second *incastellamento* “project” at *castrum Vetus* of 978⁶⁵². The interests of the Crescentii seem to have incorporated the whole coastal area: the donation of Astura area to S.Alessio (again) was done by a certain Benedictus I Campaninus⁶⁵³, who married Stephania Senatrix of Rome and member of the Crescentii family. What has become clear is that Velletri was an important centre of early investment in *castra* – as the local Duke and the bishop were involved in both the *castrum Vetus* and *castrum Fogliano* projects. Next to the bishop of Velletri, and the monastery of S.Alessio, another Church institution seems, at least indirectly, to have been involved in the early *castra* through its connection with the Crescentii family: Subiaco (see 7.II.2.2.3.a.).

The Tusculi in the late 10th century had a more limited range of *incastellamento* activities in the Alban Hills; these activities are restricted to the castrum Ariciensis, mentioned in 990 as part of the Tusculi possessions. Possibly already in the late 10th century too, the *castrum* of Nemi was established, managed by the Tusculi, although concrete primary information lacks. As will become clear in the next study period, the Tusculi would expand their dominion in the 11th century.

Endnotes

- 1 Because of its wide date range of the pottery. See also 7.I.1.1.1.
- 2 See also 7.I.1.1.1. As discussed, it is possible that the Roman lighthouse (turned into a fortified tower in the 6-7th century) continued to be used.
- 3 The very large artificial fish pond was in place during the whole middle ages. In the late Roman period, restorations were done (in *opus vittatum*) on the fish pond here, Piccarreta 1977, 24 and 55. Historical records suggest that from the 12th century onwards Torre Astura still or again was the site of fish farming. For more on the sites' potential for pisciculture, see 7.III.1.1.1.
- 4 Byzantine presence in central Italy was volatile and was focussed on a limited number of strategic locations, on the coast and inland, see 2.I.4 and 7.I.2.2.2 Theme: defensive measures and strategies. The research done on Torre Astura shows two kinds of material evidence for 6th or 7th century Byzantine influence on this site: two pottery fragments with Byzantine style decorations, and the wall-facing technique of the late Antique tower (fortress?), see 7.I.1.1.1. On the discussion what is "Byzantine", 2.II.2.1.
The Astura settlement yields also a few fragments of eastern pottery (from Cyprus/Cilicia, the Argolid and Asia Minor) dated until the 7th century, with one fragment positively dating to the 7th century. Contemporary Byzantine impact on the coast elsewhere in Tyrrhenian southern Lazio becomes clear for example from the 7th century Byzantine influenced pottery at Pianabella, in the Ostia key area, cf. Paroli 1993, 164.
- 5 Byzantine authority in central Italy and Rome waned in the 8th century. The story of anti-Pope John XVI, however, may illustrate a lasting association of the Torre Astura site with the Byzantines, possibly a variant of the above discussed 'sense of place', see 7.I.2.2.4.b. The accuracy of this story, however, set in the late 10th century, cannot be verified, see below in this section 7.II.1.1.1.
- 6 See 7.III.1.1.1
- 7 *Liber Pontificalis* Life 93.26: "Hic massas quae vocantur Antius et Formias suo studio iure beati Petri adquisivit, quas et domos cultas statuit", Duchesne 1892, 435; Translation by Davis 2007, 49.
- 8 Marazzi 1998a, 249 and 2003, Brandizzi Vittucci 1998 and 2000, Cecere 1989; Davis 2007, 46.
- 9 See also 7.I.1.1.1.
- 10 Brandizzi Vittucci 2000, 138 suggested that the massa Ant(h)ius may have been located on the deserted location of the *civitas* Antium, near Nettuno. With the new acquisition of Pope Zachary, she maintained, the Church spread its wings into the hinterland of Antium as well.
- 11 Fundus Antinianus is listed in episcopal canon 149, dated 715-731, *ColCan.* Lib III.149. According to the canon seven *massae* belonged to this *fundus*. No topographical information is given; Marazzi wrote that is not explicitly mentioned as part of the possessions of the *Patrimonium Appiae*, but still certainly belonging to it, Marazzi 1990, 125. More on the *Patrimonium Appiae*, see below 7.II.2.2.1.a Theme: The expansion of the papal patrimonium and the creation of the Papal States.
- 12 The unfulfilled potential of the research already done, seems to have most consequences for the reconstruction of the developments in Antium in the least documented periods, such as the early and high middle ages; De Haas stressed its consequences for the Archaic and post-Archaic periods (De Haas 2011, 174). The reconstruction of the settlement history for the late republican and imperial periods suffers less from this fragmentary state of research, as these periods have written sources and (standing) architecture as testimony.
- 13 The piers were still visible in the 18th century, Miller 1916, 346.
- 14 Marta 1989, 45 and Esposito 1997, 50 ff. The term *opera saracinesca* was thought up by 19th century scholars such as Nibby 1841, 281. **This term has also been used for structures outside the Nettuno – Anzio key area, at Torre S.Anastasio (OLIMsite 75), but also castel Savelli (OLIMsite 156), and at Monte S.Angelo, Terracina (OLIMsite 216).**
- 15 This coarse ware fragment, Net 05 4065/02/04, has been earlier tentatively dated in 9th century AD by the RPC team on basis of decoration, Tol 2005, p 111-113. Cf. Crypta Balbi II 2001, 290. This date, however, remains disputed. From the decoration nothing can be said about the origin of the shard. Future survey research on this site is needed to see if there are more indicators for activity in the 8th or 9th century. The potential of the site has certainly not been fully exploited, as the survey visibility was poor during the RPC field work.
- 16 Most scholars placed it east or north of Antium. Marazzi 1998a; Brandizzi Vittucci 1998, 990, n. 258; Cecere 1989, 115
- 17 The church of S.Pietro de Forma was first mentioned as property of the **castrum of Conca** (OLIMsite 277) in a papal manuscript dated to 1116, *Studi e documenti di Storia e Diritto* VII, 1886, 107. In 1300, a letter by Silvestre, *scrittore pontificio*, records a church "S.Pietro in Formis". In 1224 and 1304 a "tenimentum castrum sancti petri in Formis" was referred to, *Regesta chartarum* I, 235, n.1379. In 1826 Pope Leo XII still mentioned the "latifundio nuncupato Castrum S.Petri Formis" while referring to the tenure of Conca, Le Ferriere and Campomorto, Del Lungo 2001, 89, n. 19. On maps (see Chapter 5) there are several clues on the location of the toponym *St.Pietro*: On map 36 *Il Lazio con le sue più cospicue strade antiche, e moderne e' principale Casali, e Tenute di esso* by Giacomo Filippo Ameti of 1693 the toponym "campo morto del capitolo di s. Pietro" is jotted down. Interesting is the *Carta d'Italia*, map 11, by an anonymous map-maker, dated to the end of the 15th century. This map shows a lake, representing one of the stagnant waters of the Pontine Region with the name "laco di s.pie(t)[ro]". It is possible that this lake denotes the waterlogged state of the Campomorto area (cf. the marshy depression of 650 by 300 m visible on the 1933 map) and/or the much smaller lake here which was later known as the Laghetto del Monsignore, as discussed in Van Loon 2009, 22. In this lake a large votive depot has been found dating from the Early Iron Age until the post-Archaic period. The geographical position of the toponym S.Pietro on the map seems incorrect, but this complies to the general crooked view of the map, in which the name of towns are jumbled and the creators seem to focus on a detailed representation of the coastal areas; Frutaz 1973, 14 observed a strong influence of nautical maps. A lake in this area is also visible, now near Conca, on the map by Magini,

- dated 1604 (Map 22), also a map which overall seems accurate on the depiction of hydrography.
- 18 Davis 2007, 49, n. 97 and Delogu 1988b, 193-194. They recalled a document from Gaeta dated to 944, *Tab.Cas.I*, 75, 12, which refers to a “locus qui dicitur domus culta”. This reference to a *domus culta*, however, seems too late to relate to one of the papal estates: all other sources of the papal *domuscultae* date until the middle of the 9th century, cf. Marazzi 1990, 120. De Rossi 2002, 55 suggested that this *domus culta* stems from “dominicus”, a toponym referring to seigniorial ownership.
 - 19 Brandizzi Vittucci 2000, 138, n. 649
 - 20 The toponym [Campomorto] likely was derived from the wet conditions in the area, which enhanced the danger of malaria, see van Loon 2009, 19 ff. On the location of domusculta Formias in the wider Campomorto see also Brandizzi Vittucci 2000, 138, Cecere 1989, 27 and 31.
 - 21 As opposed to tombs in catacombs, hollowed out into rock or in sarcophagi, Testini 1958, 77.
 - 22 Brandizzi Vittucci 2000, 138, n. 649 for the references on these graves in the wider Campomorto area.
 - 23 Pre-Roman graves have been found in abundance at Satricum, possibly identifiable within the Latin term ‘forma’; More general on the pre-Roman south-western necropolis at Satricum see M. Gnade 1992. *La necropolis sud-ovest di Satricum*, *Archeologia Laziale* XI, 1, QuadAEI 20, Rome, 65-74. Becker 1998 focuses on the medieval graves near the villa. Although the archaeological context of the skeletal material and dating of the graves is not treated in the article, Becker wrote that these graves post-date the villa, which was in use until the 4th century AD; possibly the ruins were an appealing location for burials.
 - 24 Found during the excavation by the UvA in 2002, Reno Raaijmakers pers. comm. See also Raaijmakers 2007, 90. The pottery fragments can be dated in the 9th century: greenish hard ware with nodes regularly over the body; see Patterson 1993, fig. 4b and 4c, respectively early and late 9th century. During excavations on the villa site of Satricum during the summer of 2019 inhumations have been found which seem to date to the early middle ages; C14 dating of the contexts is under way, Marijke Gnade pers. comm.
 - 25 See 7.II.2.2.1.c Theme: The expansion of the papal patrimony and the creation of the Papal States, Domuscultae for a discussion of *Forum Ware* as a fossil guide.
 - 26 S.Cornelia is the suggested logistic and administrative centre of the domusculta Capracorum, Christie 1991, introduction and 355-358.
 - 27 Next to Liboni 36, there are several other sites found by the GIA in the area with sign of possible medieval use. The evidence on these sites, however, is inconclusive or very broadly dated: rpc 15072 (OLIMsite 42), located on the coastal road Anzio – Nettuno: possible medieval glazed wares found); rpc 15069 (OLIMsite 421), located inland in the Cerreto Regina Margherita: here unspecified medieval finds have been found; rpc 11339 (OLIMsite 404), located in the Astura valley: a possible late Antique or medieval wall has been identified; rpc 11269 (OLIMsite 406), located in the Astura valley: iron slags, medieval or later, have been found; rpc 11270 (OLIMsite 405), located in the Astura valley: iron slags dating to medieval period or later.
 - 28 The last written account on these papal estates dates to the middle of the 9th century, Marazzi 1990, 122; Potter & King 1997, 6 and 79. Several of the *domusculta* centres north of Rome, however, were occupied until the 10th or 11th century as settlements proper. See also 6.I.2.
 - 29 With the exception of the villa of Nero (OLIMsite 13), where no medieval tower was built.
 - 30 Rasi 1832, 9; Lombardi 1847, 134. Cf. on the arguments Brandizzi Vittucci 2000, 9
 - 31 See below in this section 7.II.1.1.1, the paragraph *Theories on the end of Antium and the origin of Nettuno*.
 - 32 See also 7.I.2.2.2.a2 Theme: defensive measures and strategies.
 - 33 Nibby 1841
 - 34 Not in the least, because of the fact that earlier excavations have not been published and the (medieval) pottery finds around the cape have not been collected consistently. The Liboni collection, for example, is primarily focussed on the hinterland of Nettuno and Torre Astura, not on the town of Antium, see 3.I.1.
 - 35 On Gregoriopolis: Paroli 1993, 279 and *Liber Pontificalis* Life 103, Davis 1996, 40. See also Ostia key area below, 7.II.1.3.1. Farfa: Azzara 2002, 98 and Stroll 1997, 24-25. S.Vincenzo: Moreland 1985, 37 ff.
 - 36 The Torre Astura pottery study has yielded a handle and part of the body of a (possible) jar that can be dated to the 9th century: inv.nr. med.vit.bureau.02.
 - 37 See 2.I.6. The primary source is Einhard, *VK*, c.17. The stations were built on “toto etiam Italiae littore usque Romam”. It is unclear if Tyrrhenian southern Lazio was incorporated into this series of posts.
 - 38 *Registro di S.Alesio all’Aventino*, Monaci 1904, 368, dated 987 AD
 - 39 The middle section of this fragment reads, translation by me: “Fields [...], in the place called Astura, with ruins, [...] in which once lay the church of S.M.S.S [...]; and located within the following borders: on one side the sea or the pine tree forest and on the other side the public road along the river, running from the island of your abovementioned monastery...”
 - 40 Brook 2003, 15. The identification with Benedictus I Campaninus is likely, given the date and combination Benedictus – Stefania, but is not definite, given the fragmented documentation and the complex family relations with recurring Christian names titles and aliases.
 - 41 Tol 2012, 2018; the settlement site has evidence for activity until the 7th century. Later pottery evidence dates to the 11 or 12th century.
 - 42 Sicardi 1980, 363 on the connotation “settlement” for the term *locus*, see 6.I.2.
 - 43 The pinewood forest may have been situated near the sea around Torre Astura; here we still find the largest pine forest in the area, named *Pineta di Torre Astura*. The public road seems to have run from the island in the Astura towards the river delta. The “island” was probably shaped by the course of the river, see below on infrastructure. See also Brandizzi Vittucci 1998, 659
 - 44 “Isola di S.Maria” on Frutaz 1972 II, tav. 177 (not in the list of maps of this study), see also below 7.II.1.1.2.
 - 45 On churches as focal points for continuity between the 7th and 10th century, see 7.II.2.2.5.a The 7-8th century: churches as hubs for continuity.
 - 46 The flight of Pope John XVI, he himself was born in Rossano, part of the Byzantine Empire, remains a hypothesis as the medieval sources are not clear on the exact order of events, and the date on which these took place, see Gatto 1999, who dates the events in 985, Canneti 2001 in 998.
 - 47 7.I.1.1.1.

- 48 From later centuries one possibly 11th century fragment and several secure 12th century fragments have been distinguished. The results of my pottery study of the late Antique to high medieval pottery of Torre Astura will be published separately in due course.
- 49 In this source the ‘heredes’ (“heirs”) of Domenico di Conca were mentioned. Primary source paraphrased in Pagliaro 1990, 14, n. 4.
- 50 The Neptune temple has been linked to the well-documented *oppidum* of Caenon, known from the ancient sources and destroyed in 338 BC: Livy *History* 2. 63 and 65; Strabo *Geography* 5.3.5; Dionysios, *RA* VII, 37. Cf. also Brandizzi Vittucci 2000, 140-143. De Haas 2011, 173 located Caenon at the mouth of the Loricina stream.
- 51 Among others Lombardi 1847, 136 and Nibby 1848, 405.
- 52 Nibby 1848, 405
- 53 Davis 1995, 94
- 54 For an overview of these Saracene traditions in study area of Tyrrhenian southern Lazio see 7.II.2.2.2 Theme: The Saracene threat.
- 55 Lombardi 1847, 89. These finds have gone lost.
- 56 The toponym *Nettuno* does not present conclusive etymological evidence. Brandizzi Vittucci 2000, 149 ff. (cf. also Di Mario and Ceccarelli 2004, 95) noted the three possible origins for the toponym: denomination from:
1. a temple to Neptune.
 2. pieces of water in the vicinity, referred to in antiquity, *neptuniae lacunae*. Coastal lagoons are well known between Anzio and Circeo. What is more, a small *stagno* or *pantano* is known to have been situated south of the *castrum*, as is visible on several maps, Brandizzi Vittucci 2000, fig. 66.
 3. a bird of prey, *noctua* [Lat], which often lives in deserted places (ancient Antium?). Deserted places along this coast are plentiful: villa’s (e.g. *rpc* site 11215, *Le Grottaacce*, OLIMsite 551), the vestiges of Antium, or, possibly the deserted *civitas Antium*, tentatively located near Nettuno as discussed earlier, see 7.I.1.1.1. The different early variants of the toponym are [Ne(p)tun] (recorded since 10th or 11th century), [Lettun] (1190) and [Noctun] (recorded since 14th century). See Chapter 4 for more on the toponymic research in this study.
- 57 Brandizzi Vittucci 2000
- 58 Cf. Howard 1981, 79 ff. on the Doge’s Palace.
- 59 Although the earliest document mentioning Nettuno has been reported to date to the 10th century, the reliability of this source may be questioned. It has gone lost and can therefore not be submitted in evidence. Brandizzi Vittucci 2000, 145, n. 696 for a summary of the discussion on this source.
- 60 *Rerum Italicarum Scriptores*, IV, 488, nota 1.
- 61 An undisclosed primary source dated to 996 mentions “S.Maria de Veprosa [...] cum castro Nave”, Del Lungo 2001, 15 and Tomassetti 1979, II, 538-539. The modern Casale di Buonriposo is likely the location of the former *castrum*.
- 62 See also Brandizzi Vittucci 1998, 659
- 63 “Isola di S.Maria” on Frutaz 1972 II, tav. 177, see above in this section 7.II.1.1.1.
- 64 On the 1851 maps (map 50) the parallel course of the Astura and a western branch are clearly visible; the Isola del’Oro was situated about 1500 m from the mouth of the Astura river.
- 65 De Rossi 1981, fig. 2. I believe it is unlikely that more sections of riverside roads will be recovered, because of the past erosion and deposition of the Astura river.
- 66 De Haas 2011, 41, fig. 3.3. ONC maps (map 51) F-H 1 and 2. Cf. also the overview map in Piccarreta, 1977 and De Rossi 1981, fig. 2.
- 67 Sevink 2009. As touched upon earlier, the environmental deterioration in late Antiquity however, may have constituted a growing disadvantage for transport over the river. See also 7.I.1.1.2.
- 68 On the arguments for continued activities on this harbour, see above in this section 7.I.1.1.1.
- 69 Piccarreta 1977, overview map. De Rossi 1981, fig. 2
- 70 Cicero, *Atticus* XIII, 47 and XIV, 2. Also Antium was a mentioned as an objective in travelling to and from Velletri – Tusculum, for example Livy *History* 6.27.7.
- 71 See 7.I.1.1.3, on the hypothesis that the success of Astura settlement may be explained to some extent by the growing difficulties for these inland areas to reach southern Lazio; Torre Astura may have acted as an alternative harbour for Terracina.
- 72 Velletri and Lanuvio were connected to the sea through the Via Mactorina (OLIMinfra 36) and La Selciatella (OLIMinfra 56), and indirectly through the Via Anziata (OLIMinfra 88).
- 73 This transhumance route may have been the origin of La Selciatella, De Rossi 1981, 89 ff.
- 74 See 7.I.1.1.2.
- 75 The pedemontana reached the Appian road near the (later) site of Cisterna, and thus connected to this road heading southwards to the Campomorto area. The drainage problems in the Pontine plain make other transverse crossings from the pedemontana towards the coast unlikely. A second infrastructural axis may have continued to be connected to the road Campomorto area - Via Appia (Cisterna area): the old Roman roads *Appia (Cisterna) - Cori (OLIMinfra 46)* and *Segni - Rocca Massima - Cori (OLIMinfra 59)*. For traffic from Segni this is the easiest route towards the pedemontana near Cori, and from there via the Cisterna area to the coast. According to Carbonara & Messineo 1998, 18, the road running from Cori to the Via Appia near Cisterna was a Roman tract reused in the middle ages (no specific date given).
- 76 See 7.I.1.1.3, paragraph *transhumance* and below 7.II.1.1.3 on economy; *La Selciatella (OLIMinfra 56)* may have been built following old transhumance routes as well, De Rossi 1981, 89 ff.
- 77 Cf. Carbonara & Messineo 1998, 9; also Fantini 1953, 6; Cecere 1989, 25. These *massae* were donated by the Byzantine emperor Constantine V in 742 AD, *Liber Pontificalis* Life 93.20, Davis 2007, 44. See also the Pedemontana key area, 7.II.1.8 and the 7.II.2.2.1 Theme *The expansion of the papal patrimony and the creation of the Papal States*.
- 78 See 7.II.1.4.1.
- 79 See above 7.II.1.1.1.
- 80 The Via Anziata – Nettunense was unnamed in Roman times; the Anziata / Antiatina is a “romanised” anachronism used by some scholars.
- 81 With this detour, the unnamed Anziata / Nettunense road (OLIMinfra 88) in post-Roman times would become known as the Via Nettunense from Bovillae southwards; it is unknown since when exactly.
- 82 De Rossi 1981, 102
- 83 7.I.1.1.2.
- 84 Not in the work done by De Rossi, nor by the GIA, cf. De Haas 2011 and Tol 2012. Despite this, a part of the detour Via Anziata

- Nettuno north of the crossing with La Selciatella is called Via Romana Antica. This seems a modern interpretation in which this part is considered an extension of the clearly Roman part of the tract to the south. This denomination shows the perceived (still visible) anciencey of the road in sub-recent times when the current street names were designated.
- 85 Remains of this southern branch have been reported by Lanciani 1870; see also Caneva & Travaglini 2003, 342.
- 86 De Rossi 1981, fig. 2
- 87 For these reasons I have omitted this detour on the infrastructure map of the 3rd to 7th century, to be exact the route northwards of the crossing with La Selciatella.
- 88 De Rossi 1981, 102
- 89 Its route is also still visible on Castelnuovo 188, Frutaz 1972: LXXV. 7 (not in the catalogue of maps of Chapter 5).
- 90 Likely, this road is also depicted on Cingolani (1692, Map XXXV), unnamed, and on the *Catasto Alessandrino* as “*Strada di parte S. Sebastiano et Latina sino al Mare a Nettuno*” (1661, Map XXXI, by Antonio del Grande). Its route is also still visible on a map by Castelnuovo dated to 1884, Frutaz 1972: LXXV. 7 (not in the catalogue of maps of Chapter 5).
- 91 Coste 1990, 133.
- 92 The areas along the road have not been surveyed by the PRP.
- 93 De Rossi 1981 and Fischetti 2004 reconstructed a linear tract going towards Antium. South of modern-day Campoleone no evidence (blocks, aerial photographs, ancient maps) is available in this reconstruction.
- 94 Brandizzi Vittucci 2000, 126 has an opposing view, as the good state of conservation of the road may point to an early abandonment of the road, possibly already in the 4th century; this is doubtful, at least until the most northern road site villa with 6th or 7th century contexts. What is more, (parts of) the road, from Nettuno to Lanuvio, were (re)used in the 12th century, see also 7.III.1.1.2.
- 95 On the coastal route activities have been attested at Torre S. Anastasio (9th – 13th century *opera saracinesca*), northwards on the Ardeatina Vecchia (east and west) at Ardea (9th century walls found). Along the Via eastern Ardeatina the domuscul-tae Calvisiana and S. Edisti have been tentatively located. On the Via Laurentina / “Laviniate” contemporary evidence among others at Pratica di Mare / Lavinium, Santa Petronella and Castel Romano Vecchio.
- 96 One of the rare examples of 8th century imports in central Italy are the Gaulic pots found in Ostia.
- 97 On Rome: In the 8th and first part of the 9th century, most Crypta Balbi imports originate from Lazio itself and from southern Italy, see among others Arena *et al.* 2001, Vendittelli & Paroli 2004. Privernum seems to have been oriented on the south (especially Campania) from the 8th century onwards, see 7.II.1.73.
- 98 The study executed by me and Cristina Leotta of the late Antique and medieval pottery of Torre Astura yielded two sherds that may have been Byzantine (influenced).
- 99 7.I.1.1.3.
- 100 Lumbering likely continued as a consistent activity given the native large forests in the area which, despite evidence for deforestation in Roman times, may have continued to cover parts of the Nettuno – Anzio key area. The 987 source makes clear that a pine tree forest covered parts of the Astura peninsula.
- 101 See 7.I.1.1.3 *Inland activities*.
- 102 See 2.I.6. and 6.I.2. Bauer 1999, 519, Davis 2007 and Arthur & Patterson 1994, Marazzi 1990
- 103 7.I.1.1.3; Van Joolen 2003, 142-146
- 104 See 7.I.1.1.3; Veenman 2002, 139; 113
- 105 Kamermans *et al.* 1985; Veenman 2002
- 106 Veenman, who has studied pastoralism in southern Lazio (2002), showed that it is generally difficult to distinguish between such strategies and to concretely say something about the groups involved, and about their way of life (2002, 37 ff.). What is clear, however, is that short-distance pastoralism is a consistent element of the Pontine region. It existed since proto-historic times, long before long-distance pastoralism. A type of short-distance transhumance has been recorded in sub-recent times (18-19th century), in which transhumance routes led from villages in the Sacco and Latina valleys to the winter pasture fields in the southern Pontine area (Veenman 2002, 112 ff. and 120-121). One has to be aware, however, that these movements existed within socio-economic circumstance that must have been very different from antiquity; these sub-recent strategies, on the other hand, show the intrinsic suitability of the Pontine coast for winter pasture in regional (short-distance) transhumant pastoral strategies. On the criteria for long-distance transhumance and its possible continuation in the middle ages, see 7.III.2.2.3.c2 Different strategies.
- 107 *Regesto di S. Alessio all'Aventino*, Monaci 1904 and 1905. The monastery of S. Alessio is nowadays called SS. Santi Bonifacio e Alessio.
- 108 See 2.I.4.
- 109 Cf. Carbonara & Messineo 1998, 9; Fantini 1953, 6; Cecere 1989, 25; these *massae* were donated by the Byzantine emperor Constantine V in 742 AD: *Liber Pontificalis* Life 93, 20, Duchesne 1886 I, 433 and Davis 2007, 44. Although the *massae* were a gift, the pope may have had a say in which estates he most wanted: Zachary seems to have played an active role as negotiator between the Lombards and the Byzantines, and was rewarded with donations for his efforts by both parties; Haderman 1986, 28. See also Pedemontana key area, 7.II.1.8 and 7.II.2.2.1.c The domuscul-tae.
- 110 See 6.I.2.
- 111 Van Leusen *et al.* 2003/2004, 311
- 112 See also Chapter 3.II.2.
- 113 See the Fondi key area, 7.II.1.5.5 and the Terracina key area, 7.II.1.10.5
- 114 Toubert 1973, 322, nr. 1.
- 115 Marazzi 1990, 122; see also 6.I.2. and 2.I.6.
- 116 Christie 1991, 358, Potter & King 1997, 187
- 117 De Haas 2011, 189, n. 722 suggested that Satricum may have been used as a military outpost in the middle republican period.
- 118 See 2.I.6. The *stationes et excubias* are mentioned in Einhard, VK, c.17; the posts were built on “*toto etiam Italiae littore usque Romam*” (along the whole Italian coast until Rome). There is discussion if “*usque Romam*” includes the papal possessions south of Rome.
- 119 (Only) one 9th century pottery sherd was identified during my pottery study of the late Antique to high medieval pottery of Torre Astura, to be published separately in due course.
- 120 De Paolis & Tetro 1986, 29
- 121 Attema, de Haas & La Rosa 2005, 131 referring to Elter 1884.
- 122 Brandizzi Vittucci 1998, 960, n.129. See also 7.III.1.2.1.

- 123 Two additional sites may have had a medieval phase, but yielded no conclusive (dated) evidence:
- rpc site 10592, FOG227** (OLIMsite 403), located 500 meters north of **rpc 10571** (see map, OLIMsite 347): a pin (fibula) has been identified as possibly medieval.
- rpc site 10570, FOG205** (OLIMsite 196), located 1000 meters west of the red square on the map, i.e. the tentative location of (**re**) **settlement / castrum southside Fogliano / S.Donato** (OLIMsite 127, see below): here (post antique?) combed ware has been found.
- 124 Attema & De Haas 2005, 10
- 125 I have tentatively positioned the 10th century (**re**)settlement / castrum (OLIMsite 127, on the map “castrum fogliano – s.donato”) on the site of a large cluster of unidentified structures, i.e. OLIMsite 359 and OLIMsite 354. These structures may be tentatively related to the “parietinis destructis” in the 977 source, see 7.I.1.2.1. On the *castrum* see below here.
- 126 Dated 715-731, *ColCan*. Lib III.149
- 127 See Marazzi 1998a, 112-137, also 2.I.2.
- 128 It is not certain, however, if this *fundus* should be located in this coastal area. In the source, the *fundus* is described as part of the *Patrimonium Appiae*. The exact extent of the *Patrimonium Appiae* is unknown, as it was never officially documented, but is usually reconstructed as stretching from Rome southwards along the Via Appia. This would mean that the toponym Folianus should be located more inland. The toponym [folian] however, is very distinctive and has no morphological or homophonic match elsewhere in Lazio. This source is an argument to hypothesise an extension of the (8th century) boundaries of *Patrimonium Appiae* up to the coast.
- 129 *ASRSP*.28, 265-300
- 130 *RS* 963, nr.93. See also Toubert 1973, 323
- 131 Beolchini 2006, 51
- 132 Directly, by acquiring possessions, and indirectly, through the acquisition of the Roman monastery of S.Erasmo al Celio – that also had recorded assets in the Fogliano area.
- 133 *RS* 977, nr.51, Allodi & Levi 1885, 89-91. See also Cecere, 31, n.46 and Toubert 1973, 323. The relevant part of the text is: “... idest locus integris qui appellatur fuliano et castre ubi turrem edificatam abere videtur – sive quibus aliis vocabulis nunccupatur – cum fluminibus et lacis qui vocatur foliano atque castris et pantanis – seu caput lacis in integris cum ecclesia sancti donati seu aliis ecclesiis et criptis cum parietinis destructis”.
- 134 The toponym *Fogliano*, located between Anzio or Nettuno, has also been suggested as its location, by for example Nibby 1837, 275-276. The reference to a lake however, and the diachronic use of the toponym [foliano] in the current key area, to me settles the case in favour of the Fogliano lake.
- 135 See 6.I.2.
- 136 On the definitions of *locus* and *castrum* see 6.I.2.
- 137 Toubert 1973, 323, n. 1.
- 138 Cecere 1989, 31, n. 46. Cecere suggested this was “una torre giurisdizionale abbadiale e pertanto campanaria, annessa molto probabilmente alla chiesa di S.Donato”.
- 139 Allodi & Levi 1885, 253, doc 216.
- 140 The name Archi di San Donato was used in post-Renaissance maps, intending remains near the Fogliano lake. It is not clear on all maps however, to which site these remains refer. In my view, there are two possible sites for which this name was used: The Roman villa site **rpc site 10571** (OLIMsite 347), possibly the same as identified by Elter. And the large villa site **rpc site 10583** (OLIMsite 359) with many clearly visible remains, tentatively identified in this study as the location of Clostra Romana, see 7.I.1.2.1.
- 141 A *privilegio* of Pope Gregory the Great dated to 594 found in the *Regesto Sublacense*, *RS* 253, nr.216; see also 7.I.1.2.1.
- 142 See 2.I.9.1.
- 143 As touched upon in the study of the 2nd to 7th century, the large cluster has not been studied yet to its full potential. Unfortunately, much of the terrain is not available for field work anymore, because of the fact that much recent levelling has taken place.
- 144 Brandizzi Vittucci 1998, 960, n. 129
- 145 Van Leusen 2002, 10
- 146 Cecere 1989, 31, n. 46 believed that the “criptis and parietinis destructis” (ruins) most probably refer to the ancient Roman villa of Camenius, which he pinpointed on this site.
- 147 It is not known if the original Rio Martino ran all the way to the sea. More on the Rio Martino, see also the section on infrastructure below.
- 148 Horden & Purcell 2000, 189, see also 8.I.1.3.
- 149 The state of this canal is unknown in the middle ages, see 7.II.1.8.2.
- 150 Cecere 1989, 31, n. 47 believed the explicit mentioning of the sea as part of the domain in the 977 concession may be given in evidence of the continuing importance of fish culture in this area. Generally, pisciculture seems an intrinsic part of the economic pull of this coast: from the late middle ages several concessions to monasteries on fish breeding are known from the Fogliano area, see 7.III.1.2.3.
- 151 See 7.I.1.2.3.
- 152 The lagoonal areas of Fogliano and Caprolace were among the areas most suitable for winter pasture in Tyrrhenian southern Lazio, Veenman 2002, 139; 113. See also 7.I.1.1.3.
- 153 See above, 7.II.1.2.1.
- 154 *RS* 977, nr.51 en *RS* 963, nr.93, see above 7.II.1.2.1.
- 155 See 7.III.1.2.5.
- 156 As can be read from a letter by Pope John VIII, MGH, *Epistolae* VII, 5.
- 157 Paolis & Tetto 1985, 38
- 158 Martin 2006, cf. also Torres 1998, 39 and Heinzelmann & Martin 2000, 277-283.
- 159 Bauer & Heinzelmann 1999, 278-282
- 160 As can be deduced from the graves found here Torres 1998, 252, see also 7.I.1.3.1.
- 161 Lauro 1998, 99, see also 7.I.1.3.1.
- 162 Although only a small selection of the large number of finds is available for study, the pottery on display in the museum leaves no doubt about continuity on the site. Among the wares shown are large quantities of ARSW until the 7th century and several pottery types dating from the 8th onwards. In the museum of Castelporziano, the material for the whole area of the *Tentua di Caccia* is put on show, including material from the vicus Augustanus, Castelporziano itself and Tor Paterno. Some of the local research is published by Viella publishers, among others Lauro 1988a and 1998.
- 163 Register of Gregory II, the quoted text in *Jaffe*, 255, n.2206.
- 164 *Liber Pontificalis* Life 93.19, Davis 2007, 44. Paunaria is OLIMtoponym 387.
- 165 Marazzi 1998a, 112-137, see also 2.I.2.

- 166 OLIMtoponym 199
- 167 Del Lungo 1996, 125-126 and De Rossi 1969, 64 for the primary source.
- 168 Del Lungo 1996, 146 and Brandizzi Vittucci 1998, 947, n. 73. Although it has been suggested that the fundus Casaromaniana was located in the Velletri area (Tomassetti 1979, I, 354), there are stronger arguments to connect the estate to Castel Romano (Vecchio) (OLIMsite 2). The two toponymic roots, [casa] and [roman] (text editions Marazzi "Casa Romaniana", Tomassetti "Casaromaniana"), are both homophonic and homogeneous. Additionally, the root [casa] is used only seldom in the 8th to 10th century; this makes another occurrence of the same combination [casa] and [roman] in Tyrrhenian southern Lazio not very likely.
- 169 *Liber Pontificalis* Life 93.19: "domum cultam Lauretum noviter ordinavit". Translation by Davis 2007, 43
- 170 Marazzi 2003, 167. Marazzi 1998b, 34 referred to Duchesne 1886, I, 432 and 435; Marazzi 1990 and 1993, Claridge 1993.
- 171 See 2.II.3.3.
- 172 Also Marazzi 1990 and 1993, and Claridge 1993 refer to the specific toponymic connection of the ager Laurens with Lauretum.
- 173 Marazzi 1990, 117 ff, Claridge 1993, 287. The idea of Tor Paterno as the location of Laurentum is older, see for example Map 35. *Topografia geometrica dell'Agro Romano* by Cingolani 1692: "torre di paterno olim lauretum", and other maps from the 17th to 19th century.
- 174 Brandizzi Vittucci 1998, 990, n. 260 located the domusculta Lauretum near Pratica di mare through the toponym [paunari] (OLIMtoponym 387): "Paunaria" may be linked to the ancient name "campus veneris", a toponym still in use in the 18th century for the area near Tor Vaianica.
- 175 As can be seen in the permanent exhibition in the museum of Castelporziano. The British studies in northern Lazio show this ware may be an indicator for (nearby) *domusculta* centres, see 7.II.2.2.1.c Theme: The expansion of the papal patrimonium and the creation of the Papal States, Domuscultae for a discussion of *Forum Ware* as a fossil guide.
- 176 See Claridge 1993, 287 for the references.
- 177 For continued settlement until the 9th century abundant archaeological evidence was found, like fireplaces and pottery. On the pottery evidence Paroli 1993. Cf. also Martin 2006. Until the 12th century, the inhabitants of Gregoriopolis would frequent a shrine near the theatre, Bakker & Heres, Ostia Antica website [Accessed April 2011].
- 178 *Liber Pontificalis* Life 103. 40; Davis 1995, 68; Paroli 1993, 279; Bakker & Heres, Ostia Antica website [Accessed April 2011]. On the date of the building of Gregoriopolis see Davis 1995, 68 and Geertman 1975.
- 179 *Liber Pontificalis* Life 107.67. Davis 1995, 239: "Furthermore the city of Ostia [Gregoriopolis], which the blessed Pope Gregory of godly memory had constructed for the safety of many in case the wicked race of the Saracens should capture or kill the Lord's people around it, was lying in ruins. Touched by inspiration from on high, this holy prelate ordered it to be rebuilt with stronger and more solid building, and he restored and improved it, fortifying it also with very strong gates and towers. In it he stationed men ready for battle, so that in no way could the incursion of a foreign race in future gain mastery of it or cause it fellow-citizens losses anyhow, except, forbid the idea, through idleness."
- 180 A second connotation for medieval *civitas* has been noted: "bishopric", see Toubert 1973, 795 and Del Lungo 2001, 26.
- While this may be a valid connotation for Gregoriopolis, to which the see of Ostia was transferred, this meaning does not always hold: Lanuvio and Pratica di Mare (see below here) are both contemporary *civitates* and have never been listed as see. On the changing meaning of the term *civitas*, see 6.I.2.
- 181 De Rossi 1969, 71, nr. 115 and De Rossi 1971, 58-59, nr 20. Del Lungo 1996, II, 216.
- 182 Torres 1998, 6, Paroli 1993, 163
- 183 See 7.III.1.3.1.
- 184 The latter connotation has been put forward by Mauri (2007). On the changing meaning of the term *civitas*, see 6.I.2.
- 185 De Rossi 1971, 59 ff. on the medieval phase and specifically the tower, which saw its last restoration in 1567.
- 186 Del Lungo 1996, II, 207
- 187 Del Lungo II, 1996, 146, the primary source is not specified; Brandizzi Vittucci, 1998, 946, n. 73
- 188 *Liber Pontificalis* Life 51.5, Davis 2000, 44
- 189 De Rossi 1970, 131. By some scholars this road has been named "via Laviniate".
- 190 See also the Alban Hills key area, 7.II.1.6.3.
- 191 Procopius *Wars*, I.27.187-189
- 192 Martin 2006 records imports from Gaul in the 8th century.
- 193 Bakker 2009 website Ostia: introduction [Accessed June 2016]
- 194 The studies done north of Rome show that this took place from the end of the 6th century, see 2.II.3.
- 195 Hodges 1990, Paroli 1993
- 196 The pottery assemblages are very similar, see Patterson 1993b.
- 197 *Ceramica acroma depurate* comparable to V.1.3 Venditelli & Paroli 2004, 561 from the Forum Romanum, dated in the 9th century. Forum Ware comparable to a little stove (?), "Crypta Balbi" 2005, 87, in the middle; jar nr V.4.2. Venditelli & Paroli 2004, 578, found at the domus del Foro di Nerva;
- jar Manacorda 2005, 93, in the middle.
- 198 Claridge 1993, Patterson 1993b, Paroli 1993. Pianabella: Forum Ware dated from the late 8th century onwards Patterson 1993b, 220 ff. and Patterson 1992, 422
- 199 Patterson, Di Giuseppe & Witcher 2004, 11 ff; Fentress, Goodson & Maiuro 2016, 278 ff. See also 7.II.2.2.1.c Theme: The expansion of the papal patrimonium and the creation of the Papal States, Domuscultae.
- 200 See for example Chapter 5, map 25. *Patrimonium Sancti Petri, Latium et Sabina by Holstenius*, dated 1636 which depicted a "laurentina silva / filva" and Map 33. *Tavola Esata dell'Antico Latio e Nova Campagna di Roma* by Mattei, dated 1666, which annotates "laurentiana selva". These maps combine an illustration of the contemporary topography with a reconstruction of the ancient landscape of Lazio. Holstenius probably conducted field reconnaissance himself, Almagià 1960, 40. His reconstruction of an ancient *selva* seems a solid indication for a 17th century forest in the current key area. On the 1851 maps the area is covered with woodland as well, as it is today.
- 201 Veenman 2002, 124; see also 7.I.1.1.3 and 7.I.1.3.3.
- 202 Duchesne 1892
- 203 De Rossi 1971
- 204 Marini and Mai, 1831, see also 3.II.2.
- 205 The inscription does not explicitly say which church institute exactly owned these properties. The fact however that it is

- inscribed on a commemorative stone for a pope, makes it most likely that the papacy was their landowner. See also 3.II.2.
- 206 In total 11 of the 38 estates mentioned on the inscription have been (tentatively) located in the study area by the toponymic study, as treated in Chapter 5. Eight of these have been pinpointed in the Velletri – Le Castella key area. Cf. also Tomassetti 1979, I, 354 who upheld that all the estates on the inscription can be located in the Velletri area.
- 207 Dated 9th of January, 945-946 this is the first document of a bishop outside Rome in the research area. *ASRSP*.12, 73-80. See also Toubert 1973: 322 and Tomassetti 1979, I, 355. See also 3.II.2.
- 208 See also 7.I.1.4, Discussion: the 7th century lacuna, a lack of activity or a question of availability of sources?
- 209 This church of S.Mary was repaired in the 8th century, Mauri 2007
- 210 See the section on geo-politics below, 7.II.1.4.5.
- 211 *Liber Pontificalis* Life 97.76, Davis 2007, 32
- 212 For specifics (references and toponymic analysis) on these sites, and the sites on the document which cannot be located, see the site database (Appendix 6.1) and toponymic database (Appendix 4.1). The study of toponyms within the current thesis is explained in detail in Chapter 4.
- 213 Tomassetti 1979, I, 354
- 214 IGM, 2006, Database IGM Toponimi 25000 (tutta italia) and CTR 2007 maps for the Regione Lazio produced by the *Carta Tecnica Regionale*.
- 215 Mauri 2007, 47
- 216 Christie 1991, 358, Potter & King 1997, 187
- 217 See also 7.I.1.4.1.
- 218 RI II,5 n. 556, in: Regesta Imperii Online [Accessed 18 May 2017]; Toubert 1973, 322, n. 1, 4, also 435.
- 219 Del Lungo 2001, 19; Toubert 1973, 322; Coste 1990, 132 alternatively dates the 946 source to 965.
- 220 Nibby 1868, 420-423
- 221 See toponymic database (Appendix 4.1), OLIMtoponym 187 [andrea]: in the middle of the 14th century a “Castrum Vecclum and Castra Sancti Andree” are recorded in concordance, Del Lungo 2001, 19; see also Toubert 1973, 435, n. 1. The site of S.Andrea is nowadays known as Le Castella, referring to the castles that stood here in the course of time.
- 222 RI II,5 n. 556, in: Regesta Imperii Online [Accessed 18 May 2017]: “Crescentius illustrissimus vir qui appellatur de Theodora”. This aristocrat withdrew from public life in 981 to the monastery of S.Alessio al Aventino, Brook 2003, 11.
- 223 The area of San Andrea has been poorly studied; in the early 20th century an excavation took place in the monastic complex of San Andrea which yielded no evidence of the *castra* built here, Severini 2001, 133. Given the fact that the area is largely built over in our time, future archaeological study could involve a survey of the surrounding countryside. Such study, including the creation of a basic pottery typology, may yield insights on activity connected to the *castrum* in the direct surroundings, possibly the way the agricultural production and habitation was organised, and what exchange contacts the *castrum* upheld. See the recommendations for future study, 8.II.2.
- 224 For specifics on the location of the **fundus Paganicum** (OLIMsite 597, OLIMtoponym 337) and **fundus Papazano** (OLIMsite 599, OLIMtoponym 340), and the sites on the document which cannot be located see the site database (Appendix 6.1) and toponymic database (Appendix 4.1).
- 225 The fundus Sole Luna in all likelihood can be located on or in wider area surrounding **the republican and imperial village** on the crossing of the Via Appia with the “Via Mactorina” **near Sole Luna** (OLIMsite 172). See also 7.I.1.4.1.
- 226 The fundus **S.Thomas** was referred to in the above discussed concession as “fundus Sancti Thome apostoli”. Later, it resurfaced in a privilege of 1201 of Innocentius III, Regesta Honorii Pape III, I, CXXII. The site probably saw continuity, or the memory of its existence resonated until sub-recent times, as it was still depicted, probably in ruins, on map 40. *Pinata delle Paludi Pontine formata per ordine di Nro Sigre Pio papa VI* by Gaetano Astolfi, dated 1785. On this map the toponym “s.tomaso r” is depicted west of the Via Appia, north of Le Castella. The “r” may denote “ruderii”, ruins. Frutaz, 1972: XLII.2b-c, tavola 203-204, discussion on pages 94-95.
- 227 Del Lungo 2001, 19
- 228 Carbonara & Messineo 1998, 19
- 229 Cf. Zaccheo 1985, 178; on the sack of Rome see Azzara 2002, 98; Kleinhenz 2004, 976
- 230 Toubert 1973, 900, n.3
- 231 RS 850, nr. 31; RS 961, nr 124
- 232 De Rossi 1981, 92
- 233 See also 7.I.1.8.2.
- 234 See also 7.I.1.8.2 and 7.II.1.1.2
- 235 See above; Mauri 2007, 47
- 236 See above 7.II.1.4.1.
- 237 More on the Austrian maps of 1851 as evidence for land use before the industrialisation, see 5.IV.
- 238 See 7.I.1.6.3.
- 239 On the *castra* as foci in religious topographies see Toubert 1973 and 2.I.9.1.
- 240 Mauri 2007
- 241 See also 7.II.2.2.2 Theme: the Saracene threat.
- 242 Christie 1991, 358; see also 7.II.2.2.2 Theme: the Saracene threat.
- 243 Panetta 1998, 118
- 244 See 3.II.
- 245 See 2.II.3.2. for more on the documentary evidence in the Farfa area.
- 246 Carbonara & Messineo 1998, 132
- 247 See Davis 1995, 96, Kreutz 1996, 27 and Ployer Mione 1995, 67 on the route the Saracens took from Rome to Gaeta, mainly along the Via Appia. At Gaeta, the land troops finally embarked the ships of the Saracene fleet. On their way to Gaeta they had to pass through the centre of the towns of Terracina and Fondi; inside the walls of Fondi, the Via Appia continued, with a small detour, as *decumanus*. Tucciarone 1991, 29 ff. believed that Priverno, Fondi and Terracina were set on fire by the Saracens.
- 248 Jaffe, n. 2581. See Panetta 1998, 118 for a translation of the letter.
- 249 Toubert 1973, 949; confirmed in 915 by Pope John X., Fedele 1891, 182-183; Wolf 2014, 43, 45.
- 250 Ployer Mione 1995, 67; Toubert 1973, 949
- 251 *Liber Censuum* I, 257-258, n. XXIV
- 252 See 7.I.5.5.1.
- 253 Fiocchi Nicolai 2013, 34
- 254 Cassieri & Quadrino 2015, 17; additional research is in progress.
- 255 Del Lungo 2001, 99. The bishop of Fondi is said to have been the most important of these seasonal dwellers. It is not clear from Del Lungo what part of the settlement was excavated in 1912.

- 256 *Tab.Cas.* I, 137-140, n. LXXIV; Del Lungo 2001, 45
- 257 *Tab.Cas.* I, 108-110, n. LVIII; Del Lungo 2001, 11, 12, 117
- 258 *Tab.Cas.* I, 127-131, n. LXX
- 259 *Tab.Cas.* II, 114, n. CCXLVII (1072 AD)
- 260 Van Leusen pers. comm.
- 261 *Tab.Cas.* I, 137-138, n. LXXIV
- 262 Del Lungo 2001, 90, n. 24.
- 263 Interpretation by Del Lungo 2001, *Tab.Cas.* I, 108-110
- 264 See 7.I.1.5.3.
- 265 Moroni 1844, 149
- 266 Cf. Corsi 2007, p 251 ff. on the troubles caused by the Lombards in the region of Aquino and Montecassino, attacking the borders of the Duchy of Rome. These attacks also appear in Gregory's *Dialogues* (in the 590s).
- 267 Priester 2004, 63 map and 159 ff. In the 8th century, the area around Montecassino was controlled by the Lombards.
- 268 *Liber Pontificalis* Life 94. 17: "Ciccanense castellum"; Davis 2007, 59; Duchesne 1884, 444, l.17 and note 21.
- 269 See also the Terracina key area, 7.II.1.10.5.
- 270 See in detail 7.II.2.2.2 Theme: The Saracene threat.
- 271 *Tab.Cas.* I, p.282, n. CCCXLV. S.Anastasia (OLIMsite 94) at that time was a small settlement (a "locus") or fortification. For more on the site of S.Anastasia see below in the section on the Terracina key area.
- 272 Skinner 2002, 28
- 273 See also 7.III.1.5.5 Geo-politics: power relations, struggle and control strategies; secular activities.
- 274 Severini 2001, 31, 48.
- 275 Severini 2001, 31
- 276 Severini 2001, 39
- 277 Severini 2001, 52
- 278 On Bovillae and its territory in late Antiquity and beyond see Fiocchi Nicolai & Spera 2018
- 279 De Rossi 1979, 298 ff
- 280 Topographical indication on the inscription in the S.Susanna, dated 687-701, De Rossi 1870, 89-112: "in Clivo Aricino", almost certainly current Valle Ariccia, and in the Episcopal canon 149, dated 715-731, *ColCan.* Lib III.149: "in Aricia". Cf. also Marazzi 1990, 124.
- 281 Severini 2001, 90, who did not provide the primary source.
- 282 *ColCan* III.149, dated 715-731.
- 283 Marini & Mai 1831, 209
- 284 The fact that Roman nobility was also active in landed property already in the early 9th century is attested to the north of Rome, where tensions between Roman landowners and the new *domuscultae* led to *domusculata* farms be burned in 816, Astronomer, *Vita Hludovici*, 363, c.25. This eruption might also be the result of the introduction by the papacy of a stricter regime of subjection or the introduction of tithing, see also 2.I.6.
- 285 The discussion in synopsis: it is possible that the **domusculata Sulficiana** (OLIMsite 415) and the **domusculata Calvisiana** (OLIMsite 400, see below) are the same entity: the toponymic root [sulp(h)ician] may be related to Casale Zolferata (OLIMsite 386, OLIMtoponym 366), which is the probable location of the domusculata Calvisiana (see below). According to the *Liber Pontificalis* Life 97.76, however, the toponym Sabellum is located nearby the domusculata Sulficiana: "*Seu et basilicam sancti Theodori, sitam in Sabellum, iuxta domoculta*

Sulficiano...", to be translated as "[He renewed from the ground up] St Theodore's basilica in Sabellum, close to the domusculata Sulpiciana" (Davis 2007, 159). What this "Sabellum" exactly denotes, a settlement or possibly a locality, is unclear. The uniqueness of the toponymic root [sabel] (OLIMtoponym 32) for Tyrrhenian southern Lazio is the main argument for locating the domusculata Sulficiana west of the Via Appia near Albano Laziale, as [sabel] in all likelihood is related to the later **castel Savelli** (OLIMsite 156). A contrary argument for a location near castel Savelli is the fact that known sulphur springs are absent in this vicinity, while these are known near Casale Zolferata; on the other hand, sulphur springs can be very small so they do not show up on the geological map of Lazio, Rik Feiken pers. comm. Besides the [sulpherat] root does not have to be connected to Zolferata, as it is a rather common toponym of which several are known in Tyrrhenian southern Lazio, cf. **fundus sulpicianus** (OLIMtoponym 381, OLIMsite 123 – location unknown) and **fundus Solificianus** (OLIMtoponym 305, OLIMsite 431 – location unknown). And lastly: The domusculata Sulficiana is mentioned in both Hadrian's and Stevens IV's life in combination with the **church of S.Theodore** (OLIMsite 222): *Liber Pontificalis* Life 97.76 (Hadrian), Davis 2007, 162 and Life 99.4 (Stephen IV), Davis 2007, 236. The toponymic root [theodor] (OLIMtoponym 201) of the *sancti Theodori* church in the *Liber Pontificalis* does not yield any extra clues to the location of Sabellum.

- It is also unclear what "iuxta" (nearby) may denote; maybe in terms of the large territories of the *domuscultae*, the distance of the border of the *domusculata* to the castel Savelli is short. Some scholars maintained that the "iuxta" is based on a direct road leading from Zolferata to Sabellum near the Appian road; this may have been the **southern trasversale road** (OLIMinfra 85) which has been reconstructed running between these areas in Roman and/or medieval times, De Rossi 1969 and 1970.
- 286 Different text editions: "Domusculata Sulpiciana" in Davis 2007, "Sulficiana" in Duchesne 1886 I, edition 1952, 508
- 287 Marazzi 1990, 2002; Davis 2007; 159, Severini 2001, 35
- 288 *Liber Pontificalis* Life 97.76 (Hadrian I, 772-795), Davis 2007, 162 and Life 99.4 (Stephen IV, 816-817), Davis 2007, 236
- 289 Cf. Davis 2007, 159
- 290 Cf. Esposito 1997, 50 ff. and Marta 1989, 45
- 291 De Rossi 1969, 35-37
- 292 See the recommendations for future study in the final Chapter, 8.II.2.
- 293 "...domuscultam qui vocatur Calvisianum, cum fundis et casaliibus, vineis [...] posita via Ardeatina miliaria ab urbe plus minus xv", which can be translated as "The other domusculata is called Calvisianum, with farms and homesteads, vineyards, olivegroves, watermills and everything pertaining to it, on the Via Ardeatina about 15 miles from Rome", Davis 2007, 146.
- 294 De Rossi 1969, 57 and Marazzi 2002, 168 ff.
- 295 Maps 29-32 of this study. See also De Rossi 1969, 57
- 296 De Rossi 1969, 57; primary source not made explicit.
- 297 *Liber Pontificalis* Life 97.63 (Hadrian); Davis 2007, 151
- 298 The relevant text in the *Liber Pontificalis* reads: "In this time died Leoninus, consul and Duke and later a monk. To gain the pardon of his sins [he bequeathed] three twelfth of the estate Aratiana, which he enjoyed from his parents' legacy; it is at the 16th mile from Rome on the Via Ardeatina and St.Hedistus' church is reckoned to it. The blessed pope adorned it with large buildings he constructed; he enlarged these three twelfths of this estate Aratiana with a further six twelfths [...]. He also brought

the boundaries together on every side: by paying fair compensation, with no compulsion but rather as befits a father, he brought in an amicable contract all the estates alongside the place, and laid down that the place should remain to St Peter's in perpetual ownership as a *domusculta*; and even to the present day it is called St.Hedistus *domusculta*. The same Leoninus also granted to St.Peter the estate Acutiana, close to that *domusculta*." *Liber Pontificalis* Life 97.63. Translation by Davis 2007, 151. In Latin the section on the Edisti toponym reads "Quae et domocultam sancti Edisti vocatur usque in odiernum diem" ("and even to the present day it is called St.Hedistus *domusculta*"), Duchesne 1886 I, 1952 edition, 505.

- 299 De Rossi 1969, 45
- 300 See the recommendations for future study, 8.II.2.
- 301 De Rossi 1969, 62 ff. The oldest reference to this *fundus* dates to 963, the last reference to 1050. The text, in an undisclosed primary source, dated to 936 reads: "in territorio albanense [...] appendices qui vocatur surano in integro. In qua est ecclesia sanctorum quattuor coronatorum cum vineis...una cum criptis et parietinis in integris vel cum omnibus ad suprascripta appendices generaliter et in integro pertinentibus, et inter affines ad uno latere terre de theodora nobilissima femina et a secundo latere terra de sergia nobilissima femina. Et a tertio latere lacum Albanense. Et a quarto latere scilice publica."
- 302 See 6.I.2 on the changing meaning of the term "fundus" in this period.
- 303 For other examples of large-scale monastic rural possessions in 10th century, see 7.II.2.2.5.c The 8th – 10th century: scaling up,
- 304 De Rossi 1969, 62 ff, figure 112
- 305 Severini 2001, 37, primary source not specified
- 306 Coste 1990, 132 n.42, primary source not specified
- 307 Nibby 1819, capo xxviii, primary source not clearly specified
- 308 Nibby 1819, capo xxviii, primary source not clearly specified
- 309 Severini 2001, 51
- 310 See 2.II.3.1. More on the possible transfers of local populations, see 7.II.2.2.5.f The 9th-11th century: relocations?
- 311 Severini 2001, 110, primary source not specified
- 312 Del Lungo 1996, I, 211, primary source not specified
- 313 De Rossi 1979, 339, site 315
- 314 De Rossi 1969, map. This shortcut has no separate infrastructure number in the current study.
- 315 De Rossi 1969, map. This alternative has no separate infrastructure number in the current study.
- 316 Toubert 1973, 629, nr. 1, see also 7.II.1.4.2. The Roman Via Tuscolana, that ran outside, to the north of the current key area, is not referred to in medieval documents and seems to have lost its ancient name early on.
- 317 RS 961 nr.124
- 318 However, the recent book *Alle pendici dei Colli Albani* (Fischetti & Attema 2019) shows that a number of recent studies in the area do have a broad chronological perspective, including late Antiquity and the middle ages.
- 319 See 7.II.1.4.3.
- 320 Cf. Bauer 1999, 519, Davis 2007, Arthur & Patterson 1994, Potter & King 1997.
- 321 East of the Via Satricana. Generally, the location of olive and vineyards on the 1851 maps largely matches the present-day boundaries of wine and olive production, as can be seen on the Corine Land Cover 1990 raster data. This confirms the specific suitability of the Alban Hills for these kinds of crops, see also 7.I.1.6.3. For more on the Austrian maps of 1851 as evidence for pre-industrial land use and a comparison with current land use, see 5.IV.
- 322 Marini & Mai, 1831, 209
- 323 As discussed earlier, in 2.I.6 and 6.I.2, most scholars believed the *domuscultae* continued at least into the 9th century; for this reason, I have plotted the three *domuscultae* on the 9th century map. The above early 13th century reference to a "curia de calvisavis" (OLIMsite 224) however, may be a later reference to the *domusculta* Calvisiana.
- 324 Potter & King 1997, 187; see also 2.I.8.
- 325 See 2.I.13 A short introduction: The Christian organisation of the late Antique to high medieval Italian landscape, on the strengthening of the authority and possessions of monasteries in the power vacuum that developed in the later 9th century, after the Carolingian influenced dwindled.
- 326 See 7.II.2.2.1.c The *domuscultae* and 7.II.2.2.5.c The 8th – 10th century: scaling up.
- 327 See 7.II.2.2.2 Theme: The Saracene threat.
- 328 On the layout of Bovillae, see map Forma Italiae Bovillae, De Rossi 1979. At Ariccia, the *statio Osteriaccia* (OLIMsite 140), situated directly on the Appian road, 300 m south of the town, more likely suffered from the passing troops, if still in function of course.
- 329 With the exception of Fondi, which was acquired by the Dukes of Gaeta in the 9th century, see 7.II.1.5.5.
- 330 See 2.I.6..
- 331 Publications on Privernum include Bosi and Minicis 1991, Mazzucato 1993, Pannuzzi 1994 and 1998, Cancellieri & Ceci 2003, and most recently Leotta & Rinnaudo 2015 and Amici 2016.
- 332 Mazzucato 1987
- 333 Cancellieri & Ceci 2003; the church may have continued until the 12/13th century, Amici 2016, 164.
- 334 Cristina Leotta pers. comm.
- 335 Cf. Carbonara & Messineo 1998, 9, 76
- 336 Tucciarone 1991, 29-30 assumed that Priverno, Fondi and Terracina suffered from fires. On the route of the Saracens southwards see Kreutz 1996, 27.
- 337 Severini 2001, 76 believed that the relocation of the populace was caused by a combination of Saracene threat and regular flooding of the Amaseno.
- 338 Frutaz, 1972: XLII.2b-c, tavola 203-204, discussion on pages 94-95
- 339 Bianchini 1939,194
- 340 Carbonara & Messineo 1998, 84; Duchesne 1892.
- 341 Severini 2001, 81.
- 342 De Rossi 2002, 25,79 and Coccia and Fabiani 1997.
- 343 On Alatri: Fentress, E., C.J. Goodson and M.L.Laird 2005 (eds.). *Wall and Memory: The Abbey of San Sebastiano at Alatri (Lazio), from Late Roman Monastery to Renaissance Villa and Beyond (Disciplina Monastica)*. On Grottaferrata: Ambrogi 2013, 7 ff.and Zagari 2014, 20 ff.
- 344 Fentress, Goodson & Maiuro 2016
- 345 Coccia and Fabiani 1997; De Rossi 2002, 79; the 10-11th century wall is dated by its paintings.
- 346 De Rossi 2002, 23, primary source not mentioned.
- 347 Del Lungo 2001, 98

- 348 Carbonara & Messineo 2001, 90, Zaccheo 1985, 222, primary source not mentioned.
- 349 Ployer Mione 1995, 66, primary source not mentioned.
- 350 The route from Terracina along the Ausoni Mountains towards Priverno and further to the Via Casilina and Ferentino is an ancient route, in Roman times one of the *strada silicata*, Toubert 1973, 629, Corsi 2007, 250. See also in the section on economy below, 7.II.1.7.3 and the Terracina key area, 7.II.1.10.1.
- 351 De Rossi 2002, 23
- 352 See 7.I.1.7.2; Coste 1990, 131
- 353 See below also the Pedemontana key area, 7.II.1.8.2; on the Pontine Appian road between the 9th and 17th century see Coste 1990.
- 354 Corsi 2007, 250; see also 7.I.1.10.3 and 7.I.1.7.5.
- 355 See 7.I.1.7.5.
- 356 Cristina Leotta pers. comm. Near the church of Privernum, a small quantity Forum Ware was found. See also Pannuzzi 1994, 148 ff. and Mazzucato 1993.
- 357 See also 7.I.1.7.2 on the ancient road system towards the Sacco valley. Privernum was connected with the Sacco Valley by the above noted road Terracina-Priverno - Via Casilina (OLIMinfra 68) and by the only route through the Lepine Mountains directly connecting the Segni area with the Pontine plain (OLIMinfra 60)
- 358 See 7.I.1.1.2
- 359 Pannuzzi 1994, 143
- 360 Van Joolen 2003, cd-rom. On the 1851 maps the foothills near Fossanova are shown as suitable for intensive viticulture and/or olive culture and extensive arboriculture.
- 361 Carbonara & Messineo 1998, 84.
- 362 Carbonara & Messineo 1998, 76; Duchesne 1892 maintained that the combined see Priverno – Sezze was founded in 769. The *Liber Pontificalis* records that bishop Bonfina of Priverno was present in Rome in 769, Life 96.17, Davis 2007, 97
- 363 De Rossi 2002, 21 suggested that the Episcopal seat remained on the site in the plain.
- 364 Carbonara & Messineo 1998, 76, primary source in the archives of Fossanova is not specified.
- 365 See 7.I.1.8.1.
- 366 Sallares 2002, 57
- 367 Savignoni & Mengarelli 1901, 541-545 and 1903, 236-237; For a bibliography of recent research on the site of Norba see Quilici Gigli 2009, 443; see also Gizzi 2008.
- 368 Text quoted from Duchesne 1886 I, 433, *Liber Pontificalis* Life 93.20, Davis 2007, 44; see also Fantini 1953, 6; Cecere 1989, 25 and n. 29. Among the cities recovered by Zachary was Ravenna, which the pope returned to the Byzantine emperor Constantine.
- 369 Van Joolen 2003, 84
- 370 See 4.I.
- 371 *Liber Pontificalis* Life 96.17, Davis 2007, 97.
- 372 Duchesne 1892
- 373 Bertolini 1952
- 374 Cf. Carbonara & Messineo 2001, 17
- 375 *Annuario Pontificio* 2013. There are a number of titular sees that were abandoned already in late Antiquity but that kept their title; the bishop would be stationed elsewhere, acting as a bishop in exile, in fact as an auxiliary bishop without diocese. As for example the Arabs started to conquer parts of the Byzantine Empire and northern Africa from the 7th century onwards, many bishops retained their post as titular bishop.
- 376 De Haas, Tol, Armstrong and Attema 2017
- 377 The *fundus Corbianus* (OLIMsite 124, toponym 378), listed in the *Liber Pontificalis* during the life of Sylvester (314-335), may be linked to the Monte Corvino / Monte Carbolino as well.
- 378 For an overview of more recent research on the site of Norba see Quilici Gigli 2009, 443; recent excavations have been carried out on in the area around the medieval church, but the results have not yet been published.
- 379 Savignoni & Mengarelli 1901, 541 ff; Gizzi 2018
- 380 Savignoni & Mengarelli 1903, 237
- 381 Savignoni & Mengarelli 1901, 541-545 and 1903, 236-237. See also Del Lungo 2001, 27
- 382 Gizzi 2018, 8; these finds have yet to be published.
- 383 Geary 2010, 557. Liutprand: A chronicle of Otto's reign
- 384 Gizzi 2008; Quilici Gigli 2009, 443
- 385 Carbonara & Messineo 2001, 64
- 386 Zaccheo 1985, 216, primary source not mentioned. See below on geo-politics, 7.II.1.8.5.
- 387 Zaccheo 1985, 216, Ployer Mione 1995, 51
- 388 Carbonara & Messineo 2001, 64
- 389 Cf. also Bianchini 1939, 197
- 390 Carbonara & Messineo 2001, 55 and Zaccheo 1985, 128. No primary source is mentioned.
- 391 Severini 2001, 134. At Cisterna, too, a transfer of (a part of) the population has been suggested, connected to Saracene attacks and the healthier conditions of living in the higher situated parts of the wider Cisterna area.
- 392 See next study period, 7.III.1.8.1.
- 393 Del Lungo 2001, 116 referring to Nicolai 1800, 42-42, 109. An undisclosed source dated to 989 refers to “loco qui vocatur mese”. On the locus at Mesa see also Terracina key area, 7.II.1.10.1. The unspecified types of ceramica a vetrina sparsa and a vetrina pesante (Forum Ware) found on the site, generally dated between the 9th and 13th century, may indicate that the site was already frequented in the 9th century; on the pottery see De Haas, Tol, Armstrong and Attema 2017.
- 394 Documents dating to 1011 and 1042 describe the selling of a part of the southern Pontine plain: “de suptus Silice et super Silice posta a (sic) territorio Terracinense in pantano de Mese, longe a predica civitate plus minus miliaria quidecim” (1042). *Documenti Terracinesi*, 55-92, 80-82, n. III (1011) and 82-84, n. IV (1042). See also Del Lungo 2001, 112, n. 40.
- 395 See 7.II.1.2.2.
- 396 See 7.I.1.8.2.
- 397 See 2.I.9.
- 398 Van Leusen 2010.
- 399 The denomination of the river towards Sermoneta is difficult to pinpoint because of the constant changing courses of the rivers. In many 14th century-plus sources it is called “Portatore”. On Map XII. Carta delle Paludi Pontine by Leonardo da Vinci however the river coming from Sermoneta is called “Puza”. On the ONC maps (D7-G7) the stream from the Porto southwards is called both Portatore and Cavata and has many small branches.
- 400 See 7.III.1.8.
- 401 De Haas 2011, 239
- 402 See also 7.II.1.1.10.

- 403 See 7.II.1.8.2. Coste 1990 suggested that the Appian road south of Sezze, parallel to the canal, may have remained in use, be it not as main route.
- 404 Generally Veenman 2002 on pastoralism in antiquity and the sub-recent documentary evidence.
- 405 See 7.II.1.1.3. As noted above in 7.I.1.8.3, the fields in the Lepine margins, situated slightly above the plain, probably did not suffer as much from the environmental deterioration as the ones in the plain. See Van Joolen 2003, 84.
- 406 See 7.II.1.1.2.
- 407 Van Leusen *et al.* 2003/2004, 311
- 408 See 7.II.1.1.5.
- 409 See 7.II.1.8.1.
- 410 Duchesne 1892
- 411 In other parts of the peninsula, the commune as an independent political force would develop from the 11th century onwards, see 2.I.10.
- 412 *Le pergamene del monastero di S.Pietro di Villamagna (976-1237)*
- 413 This becomes clear from the (unpublished) archaeological evidence: pers. comm. Federica Colaiacomo, scholar connected to the museum of Segni; Duchesne 1892 on the continued diocese of Segni.
- 414 Monti 1985, 209. Primary source is not mentioned.
- 415 Villamagna Excavation report 2010; Fentress, Goodson & Maiuro 2016, 193
- 416 Villamagna Excavation report 2010 ; Fentress, Goodson & Maiuro 2016, 271
- 417 Monti 1995, 64
- 418 See 7.II.1.4.
- 419 CTR 1990: “Colle l’Oppi”
- 420 Carpino, Giuliani and Luttazi 1999, sito 78
- 421 Carpino, Giuliani and Luttazi 1999, sito 54
- 422 Marco Maiuro pers. comm.; Fentress, Goodson & Maiuro 2016, 278 ff.
- 423 Villamagna Excavation report 2009 and 2010; Fentress, Goodson & Maiuro 2016, 401. This village would last until the 13th century.
- 424 Villamagna Excavation report 2010; Fentress, Goodson & Maiuro 2016, 271 ff.
- 425 Villamagna Excavation report 2010; Fentress, Goodson & Maiuro 2016, 351
- 426 Villamagna Excavation report 2009; Fentress, Goodson & Maiuro 2016, 351 ff
- 427 Villamagna Excavation report 2010 ; Fentress, Goodson & Maiuro 2016, 188
- 428 Villamagna Excavation report 2009; Fentress, Goodson & Maiuro 2016, 284 ff
- 429 Villamagna Excavation report 2008; Fentress, Goodson & Maiuro 2016, 335 ff.
- 430 Carpino, Giuliani and Luttazi 1999, sito 61
- 431 Toubert 1973, 310, 629
- 432 Monti 1995, 66
- 433 An explanation for the term may be the fact that the denomination as “Saracene” in sub-recent times has been linked to other irregularly built walls (“opera saracinesca”).
- 434 Monti 1985, 208
- 435 See 7.I.1.9.2.
- 436 Monti 1995, 14
- 437 *RS* n.166
- 438 Both quotes: Fentress, Goodson & Maiuro 2016, 283
- 439 The bishop of Segni however, is not always present on the list of cardinal-bishops.
- 440 Benigni 1912 [Catholic encyclopedia online, accessed April 23 2010]
- 441 Fentress, Goodson & Maiuro 2016, 265 ff
- 442 Fentress, Goodson & Maiuro 2016, 277
- 443 For an overview of the late Antique to high medieval historical record on Terracina, see Bonanni 2000. The see is recorded in every century since at least the 5th century, Lanzoni 1927, 154 ff; Other references include the mentioning of the S.Caesarius church in the *Liber Pontificalis* in the Life of Leo IV (847-855): Life 105.65-66
- 444 See 2.I.4 and 2.II.2.
- 445 Fedele 1891, 182-183; Toubert 1973, 949; Wolf 2014, 43, 45
- 446 Kleinhenz 2004, 813
- 447 *CDC* I.31, p.53; see also Marazzi 1998b, 36
- 448 Toubert 1973, 949
- 449 Falco 1919, 543. The consulted primary source is not specified.
- 450 Toubert 1973, 1102; Skinner 2002, 176; Kehr II, 120-121: Terracina was given into concession for three generations to Daiferius by Sylvestre II, around the year 1000.
- 451 Bianchini 1972, 23; Lugli 1926, 6
- 452 *Tab.Cas.* I, 282, n. CCCXLV.
- 453 According to De Rossi 1971, 104, the “locus” here should be interpreted as “settlement”; on the changing meaning of “locus” see 6.I.2. His idea of a fortification on the site is based on the retrospective notion that in the 13th century a tower was located there. Although a fortification on this clearly strategic point makes sense, there is no contemporary proof for it.
- 454 See 7.II.1.5.5.
- 455 Lugli 1926, 153 ff. Lugli’s observation on the 9th or 10th century Byzantine frescos is confirmed by Broccoli 1980. See also the website of the community of Terracina 2007. Several production areas in monastery have been discovered during restoration works in 1988, with remains of presses or millstones, and water basins.
- 456 Del Lungo 2001, 105, primary source not mentioned.
- 457 Bianchini 1972, 38
- 458 Del Lungo 2001, 116 referring to Nicolai 1800, 42-42, 109.
- 459 See 6.I.2.
- 460 Del Lungo 2001, 112, n. 40; Cecere 1989, 29
- 461 BAV *Vat.Lat.* 12632, f.386.
- 462 Cancellieri 1987, 67; see also 7.I.1.7.2.
- 463 See 7.I.1.10.3 and 7.I.1.7.5.
- 464 Corsi 2007, 250
- 465 Bianchini 1972, 11
- 466 Marazzi 1998b, 34;
- 467 Fedele 1891, 182-183; Toubert 1973, 949; Wolf 2014, 43, 45
- 468 Rech 1989, 17-18
- 469 See 7.III.1.5.5.
- 470 Arthur & Patterson 1994, 410
- 471 Barker 1995a, 3; see also Arthur 1991b, 157 and Moreland 1992, 104 for overviews of the factors involved.
- 472 Arthur 2006, 105
- 473 Fentress, Goodson & Maiuro 2016, 283; see also 7.II.1.9.3 and 7.II.2.2.1.c Theme: The expansion of the papal patrimonium

and the creation of the Papal States, Domuscultae for a discussion of *Forum Ware* as a fossil guide.

- 474 For the Tiber Valley see among others Patterson & Roberts 1998; Moreland 2005. For Interamna Lirenas see Hay et al. 2012, 608, Bellini *et al.* 2015, 590 and Launaro forthcoming.
- 475 For the discussion on the location and date of these papal estates see 7.II.1.3.1.
- 476 See earlier Hodges 1993, 155 on the meaning of the fossil guides excavated at Crypta Balbi for study of the middle ages.
- 477 See for example 7.I.1.4, Discussion: the 7th century lacuna, a lack of activity or a question of availability of sources?
- 478 Hodges 1993, 359
- 479 See also 8.I.1.3.
- 480 See 7.I.1.1.1 and 7.I.1.1.3.
- 481 Among others Wickham 1978a, Noble 1984, Marazzi 1988, 1990, 1998a, 1998b, 1998c, 2003, and Azzara 2002.
- 482 The list of interests (ecclesiastical or civic / secular) of course cannot be complete; regarding recorded interests the database relies mostly on what the secondary literature allows for. What is more, many interests could not be dated and/or located.
- 483 It should be emphasised that interests outside the research area of parties based within it are left out of this study. One therefore cannot get a complete view of the total patrimonium or sphere of influence (for example to the north of Rome) of an ecclesiastical institute or, treated below, of an elite family. The study area, however, is large enough to get a grip on the way these parties were economically, politically or militarily active in the landscape, and to get an idea on how changes in *patrimonia* or spheres of influence took place.
- 484 On the difference between the 'ecclesiastical interests' and *ecclesiastical possessions, authority and interests* records, see 7.I.2.2.1 Theme: expanding Christian activity throughout the landscape.
- 485 Based on the secondary literature, for example, it frequently proved difficult to establish if the involvement of an ecclesiastical institution, like the papacy, on a site involved ownership of an entire site (e.g. a village), or merely investment in property on that site (such as a church or a castle within that village). Another example: it is not known what the recorded involvement of the see of Velletri in castrum Vetus consisted of. See 7.III.2.2.1 Theme: a dynamic geo-political landscape, 7.III.2.2.1.a Introduction.
- 486 See 3.II.2.
- 487 It is usually reconstructed as stretching from Rome southwards along the Via Appia, see Marazzi 1998a, 112-137 and 2.I.2.
- 488 On the early 8th century church estates, their function, production and distribution see 7.II.1.4.1-3 and 7.II.1.6.1-3.
- 489 Fantini 1953, 6; *Liber Pontificalis* Life 93.20, Duchesne 1886 I, 433 and Davis 2007, 44. Haderman 1986, 28 on the donation as a compensation; see also 2.I.4.
- 490 Marazzi 1990, 121
- 491 For more regarding the scaling up of landed properties see 7.II.2.2.5.c The 8th – 10th century: scaling up.
- 492 See 2.I.6.
- 493 Einhard, VK, c.17, cf. Potter & King 1997, 98. This eruption might also be the result of the introduction by the papacy of a stricter regime of subjection or the introduction of tithing, see also 2.I.6.
- 494 See 2.I.6.
- 495 See 2.I.13 A short introduction: The Christian organisation of the late Antique to high medieval Italian landscape. This was in effect in the 8th century. Some primary sources, however, seem to imply a continued hierarchical jurisdictional irregularity and liturgical quarrels. The influence of the Byzantine clerical institutions in Byzantine-occupied areas might just have complicated matters. As was discussed in Chapter 2, it is hard to imagine to what extent this probable state of affairs confused the situation in the Duchy of Rome. There were several monasteries of Greek origin located in Tyrrhenian southern Lazio: i.e., S.Anastasio (existing possibly during the 7th century), and a monastery at Castra Albana (during the 8th century?), and at Sezze (during the 10th century?).
- 496 Pohl 2002, 27; Hodges 1997, 59
- 497 See 2.I.6.
- 498 *Liber Pontificalis* Life 97, Davis 2007, 120; see also Krautheimer 1980 109-111. After the Carolingian interference, the most imminent threat, i.e., that of the Lombards, was diverted away from the countryside of Tyrrhenian southern Lazio.
- 499 It should be stressed, however, that during the Carolingian age the exact status of the Papal States, their degree of autonomy and (in)dependence from the Frankish Kingdom is difficult to assess. At the time, their position was never explicitly and officially defined. See also 2.I.6.
- 500 See 2.I.4 and 2.II.2.
- 501 Fedele 1891, 182-183; Wolf 2014, 43, 45
- 502 See also 2.II.3.4. A study: 8th and 9th century satellites around monasteries; Moreland 1992, 121-123; Arthur 1991a, 93 reports the same for San Vincenzo al Volturno for the 8th century, be it that monastic properties do not necessarily involve significant agricultural exploitation.
- 503 Elite interests will be discussed in detail in 7.II.2.2.3 Theme: The expansion of secular (elite) activities.
- 504 See 2.I.6.
- 505 Gasparri 2002, 77 ff. As a result, the elite had a strong influence in the papal election and directly dictated politics within Rome during the middle of the 9th century.
- 506 Potter & King 1997, 187; see 2.I.8.
- 507 See 7.II.2.2.2 Theme: The Saracene threat.
- 508 For the extent of the dioceses in the high middle ages see the Battelli map (Map 3).
- 509 See 2.I.8.-2.I.10.
- 510 Christie 1991, 358
- 511 Although the name **Via Laurentina** (OLIMinfra 75) was last documented in 5th century sources (see *Liber Pontificalis* Life 51.5, Davis 2000, 44), to me there is little doubt that the road was continued to be used from the 6th century onwards given the sustained activities on the coast and the fact that this route was the quickest trajectory towards Rome. Sustained activities here are exemplified by Church estates like **Fonteiana / fundus Crispinis** (OLIMsite 212), the **domusculata Laurentum** (OLIMsite 105), **Tor Paterno** (OLIMsite 229) and **Pratica di Mare** (OLIMsite 47). The northern part of the route was named the *Via di Decima* in sub-recent times.
- 512 The northern Via Appia continued to appear in the sources until 961 AD, RS 961, nr. 124, see also 7.II.1.4.2.
- 513 On the obvious strategic distribution of Crescentii interests in the research area in the late 10th century see below, 7.II.2.2.3.b The networks of the Tusculi and Crescentii.
- 514 See 7.I.1.1.3; De Haas 2011, 210; Bruckner 2003, 75 ff; Cassieri 2004

- 515 It is possible that the route Velletri – Astura was used throughout the middle ages, as was suggested regarding the 6th century as well, see 7.I.1.1.1-2.
- 516 Sicily and Calabria were confiscated by the Byzantine emperor Leo III, probably in the year of 732. On the discussion 2.I.4.
- 517 *Liber Pontificalis* Life 93.26
- 518 Marazzi 1990, 121
- 519 *Liber Pontificalis* Life 97.63 (Hadrian), Davis 2007, 155 described how for the composition of the *domusculta* S.Edisti several (unnamed) earlier estates were added to the new *domusculta*.
- 520 See 2.II.3.3.
- 521 Translation by Davis 2007, 152
- 522 See 7.II.2.2.1.a An overview of developments; primary source Einhard, *VK*, c.17; cf. Potter & King 1997, 98.
- 523 Noble 1984, 247-248. See also Potter & King 1997, 98
- 524 The 8th century overrepresentation to a large extent, as noted earlier, in 3.II.2, seems to have been caused by the coincidental availability of two substantial sources only.
- 525 Potter & King 1997; Francovich & Hodges 2003, 90; King 2015. See also 2.II.3.3. A sizeable Augustan courtyard villa, enlarged in the 2nd century with thermal baths, was situated on the site. The villa was abandoned before a second phase of occupation with a new set of buildings dated around 350 and a small church around 400. This complex lasted until the middle or late 6th century. Because of the church, the excavators tentatively proposed that the Mola di Monte Gelato was a papal complex in this period, but this seems uncertain: a church *ipse* does not equal papal involvement or ownership, and around this period many churches were founded in the countryside around Rome, many of them were only indirectly linked to the Holy See through the hierarchical ladder of dioceses and local *pievi*.
- 526 Christie 1991, 356
- 527 Christie 1995b, 652; Fentress, Goodson & Maiuro 2016, 411
- 528 See 7.II.2.2.1.c Theme: The expansion of the papal patrimonium and the creation of the Papal States, *Domuscultae* for a discussion of *Forum Ware* as a fossil guide.
- 529 See for example 7.I.1.6.3 and 7.I.1.4.3.
- 530 See 7.II.1.1.3; Van Joolen 2003, 142-146
- 531 Christie 1991, 357; Potter & King 1997, 4 ff.
- 532 Christie 1991, 7, 357; Marazzi 1998a, pp. 35 ff.
- 533 *Domuscultae* as a means to control the area should not to be confused with the contemporary concept of *surveillance* as was touched upon in 2.II.3.4. This concept was adopted by Moreland as the rationale for the foundation of small hilltop settlements around monasteries north of Rome in the later 8th century. Surveillance around monasteries is primarily a concept based on administration: i.e., the collection and registration of information in order to control one's surroundings. There were two monasteries of which *surveillance* similar to northern Lazio could be suggested, be it later on (i.e. in the 10th century): the site of S.Angelo near the large monastery of S.Magno in the Fondi area (7.II.1.5.1), and the satellite estates around castrum Vetus (7.II.1.6.1).
- 534 Potter & King 1997, fig. 3
- 535 Potter 1979, 154; Arthur & Patterson 1994, 414
- 536 Potter 1997, 10 ff.
- 537 The location of *domuscultae* north of Rome is plotted after Marazzi 2003
- 538 See 7.II.1.1.5
- 539 De Rossi 1969, 45
- 540 See 7.II.1.1.2 Infrastructure, the paragraph *Infrastructure and the domuscultae Anthius and Formias*.
- 541 Potter & King 1997, 98; the enclosing wall at Santa Cornelia has been dated to 815-850
- 542 Christie 1991, 357, Potter & King 1997, 98
- 543 Potter & King 1997, 98, 425
- 544 Christie 1991, 358; Potter & King 1997, 6
- 545 The building of two fortified locations in *opera saracinesca*, at the villa of Nero (OLIMsite 13) and Torre di Capo d'Anzio (OLIMsite 35) does seem to confirm the continued importance of the harbour of Antium throughout the early and high middle ages.
- 546 Fentress, Goodson & Maiuro 2016, 283
- 547 See 7.II.2.2.1.c3 *Domuscultae: Forum Ware* as a fossil guide
- 548 Christie 1991, 131
- 549 Christie 1991, 131
- 550 Sagui & Coletti 2004 specifically on the Crypta Balbi; General: Christie 1991, 131; Annis 1992a; several articles in Paroli 1992, among others Annis 1992b
- 551 See for example Christie 1991, 135, Patterson 1992 and Patterson, Di Giuseppe & Witcher 2004, 11 ff. for an overview of these sites.
- 552 Patterson 1992, 422 and Patterson 1993b, 220 ff. *Forum Ware* is one of the pottery types showing the continuous direct connection of Rome and the Ostia area.
- 553 Patterson 2003, 13.
- 554 Arthur & Patterson 1994, 414 note 55 and Patterson 1993a.
- 555 Christie 1991, 131 for references
- 556 Christie 1991, 131 ff; See also Patterson 1992, 420 ff.
- 557 Arthur & Patterson 1994, 415
- 558 Patterson 2003, 13.
- 559 Patterson 2003, 13; Arthur & Patterson 1993, 23. A straightforward explanation for the lack of *Forum Ware* in the Sabina was that the area was not chosen for redevelopment. After its re-orientation away from the Tiber (and Rome) in the 6th and 7th century, the Sabina became directed towards the monastery of Farfa in the 8th century, see 2.II.3.2 and Moreland 2005, 932, Patterson & Roberts 1998. The monastery of Farfa, founded in the 8th century, is the only Sabine site with evidence of pottery dating from the late 8th and 9th century. Among other things, a small amount of 9th century *Forum Ware* was found, Patterson 1993, 23. These fragments showed renewed contacts with Rome, but the low quantity of *Forum Ware* seems indicative for the different nature of these new contacts compared to contacts with the *domusculta* area.
- 560 *Forum Ware* is not the only pottery evidence of the new close economic relation of the *domusculta* sites with Rome: on these sites, Santa Cornelia, Monte Gelato and Santa Rufina, a small pottery kiln produced 8th or 9th century domestic pottery that is identical to what was found in Rome; Potter & King 1997; Arthur & Patterson 1994, 414 note 55; Patterson 1993a, 322-333
- 561 Fentress, Goodson & Maiuro 2016, 278 ff.
- 562 Toubert 1973, 312-313; Moreland 1992, 124
- 563 Arthur 2010, 556 and 2006, 105 on Apulia.
- 564 *Liber Pontificalis* Life 104.44-47; Davis 1995, 93-96; see also Panetta 1973, 69; Gabrieli & Scerrato 1979, 110 ff, Ployer Mione 1995, 67; Kreutz 1996, 27.
- 565 Tucciarone 1991, 29 ff. The use of major roads in their raiding is a common trait of Arab strategy, as is visible in the Biferno valley for example, Barker 1995b, 256.

- 566 MGH, *Epistolae* VII, 5
- 567 Jaffe, n. 2581
- 568 *Tab.Cas.* I, p.282, n. CCCXLV. S.Anastasia (OLIMsite 94) at that time was a small settlement (a “locus”), see 7.II.1.5.1.
- 569 Although the exact course of the events is difficult to reconstruct, it seems that this support of the Saracens was a political move by the Duke: soon afterwards the Docibile was granted authority over Fondi, as compensation for breaking his agreement with the Saracens, cf. Skinner 2002, 28; see also Wolf 2014, 33 ff.; This donation of Fondi to the Byzantine Dukes of Gaeta in the 870s makes Fondi the first secular property in Tyrrhenian southern Lazio since Roman times.
- 570 Fedele 1899; Kleinhenz 2004, 813
- 571 Confirmed in 915 by Pope John X., Fedele 1891, 182-183; Wolf 2014, 43, 45
- 572 *Monumenta Germaniae Historica*, SS, II, 452, see also 2.I.6.
- 573 Brandizzi Vittucci 2000, 146, n. 707
- 574 Hodges & Whitehouse 1983, 168. In the *Liber Pontificalis* the raids on Italian coast are described since Gregory IV (life 103, 828-844 nr 308), see Davis 1996, 67. Most references to the Saracens stem from Life 104 (Sergius II, 844-847) to 108 (Hadrian II, 867-872).
- 575 On Gregoriopolis: Paroli 1993, 279 and *Liber Pontificalis* Life 103, Davis 1996, 40. See also Ostia key area below. Farfa: Azzara 2002, 98. Stroll 1997, 24-25. S.Vincenzo: Moreland 1985, 37 ff.
- 576 Mauri 2007
- 577 Christie 1991, 358; Potter & King 1997, 187
- 578 De Paolis & Tetro 1985, 38
- 579 For a full list of secular elite activities see Appendix 6.2. For more detailed on the data comprised in this record, see 6.II.
- 580 See also 7.III.2.2.1.c Secular elite activity, introduction.
- 581 To complicate matters, elite families also display religious ecclesiastical activity: As discussed above, earlier studies have shown that local elite families owned private churches until the end of the first millennium. This locally orientated elite only seldom show up in the primary sources available for this study area.
- 582 See 7.III.2.2.1.c Secular elite activity.
- 583 As has been discussed in the Evaluation, one has to be aware that many historical sites cannot be identified. Early civic activities in the landscape that may be missed out on, are the *stationes et excubias* created by Charlemagne, although we do not know if they existed at all in our study area.
- 584 The maps allow the plotting of simultaneous (i.e. within the same century) interests of more than one party on one specific site. The parties involved are named and each given a different icon. If there is doubt about the party involved this is made clear by a question mark after the name of that party (for example “ceccani?”).
- 585 On the maps depicting interests per century in the final analysis of the current and the next study period, the parties involved are named and each given a different icon; where necessary the labels have been given separate colours. If there is doubt about the party involved this is indicated by a question mark after the name of that party (for example “Ceccani?”). On a few occasions the date of the interest is not certain, because of an uncertain secondary interpretation of a primary source, or because the interest cannot be dated more precisely than with a date range stretching over two centuries. This nuance is not depicted on the maps. On the maps of secular interest, only the parties that show more than one contemporaneous interest over one or more centuries are depicted for the clarity of the maps – for a full list of all the interests see Appendix 6.2.
- 586 Among others Ployer Mione 1995, 60
- 587 Beolchini 2006, 51
- 588 Gasparri 2002, 83.
- 589 Fentress, Goodson & Maiuro 2016, 284
- 590 Wickham 2015, 199 on the Crescenzi/Crescentii family and its branches.
- 591 See also above 7.II.2.2.3.a.
- 592 Falco 1919, 543. The consulted primary source is not specified.
- 593 Fundus Soranianus (OLIMsite 15) was owned by the Subiaco monastery in the second half of the 10th and 11th century. Palestrina was given in concession to Stefania, sister of Crescentius de Theodora, by Pope John XIII in 970, see Wickham 2015, 200.
- 594 In the final Chapter the here discussed lines of communication and mobility are put in a long-term perspective as part of the study of *connectivity*.
- 595 See 7.II.1.2.4, 7.II.2.2.3.b and 7.II.2.2.1.b Lines of communication and mobility based on ecclesiastical interests.
- 596 Hodges 1993, 357, Arena 2001, Vendittelli & Paroli 2004, and Manacorda 2005.
- 597 Hodges 1993, 360
- 598 Toubert 1973, Hodges 1993: 9th century census figures.
- 599 Horden & Purcell 2000, 153
- 600 Contemporary economic revival is well documented in the hinterland of the monasteries of Farfa and San Vincenzo al Volturno (the Molise), see 2.I.6, the paragraph *Economic revival and Carolingian investment*. For an overview of research of Farfa and San Vincenzo al Volturno and their hinterlands see Moreland 1991, 480 and 1992, 122-123; specifically on Farfa: Carloni 2015; specifically on San Vincenzo: Lucanio 2008, 14 and Hodges, Leppard and Mitchell 2011, and Marazzi 2012.
- 601 Cf. Moreland 1992, 122. See 2.I.6, the paragraph *Economic revival and Carolingian investment* and 2.II.3.4. A study: 8th and 9th century satellites around monasteries.
- 602 The assemblages of Crypta Balbi yield almost exclusively local and southern pottery in the 8th and first part of the 9th century. See Arena *et al.* 2001 and Vendittelli & Paroli 2004
- 603 Horden & Purcell 2000, 139 ff, 150
- 604 Horden & Purcell 2000, 152
- 605 Horden & Purcell 2000, 170
- 606 From the end of the 6th century, see 2.II.3.2.
- 607 See 7.II.1.3.3.
- 608 Corsi 2007, 250; see also 7.I.1.10.3 and 7.I.1.7.5. This southern connection is not found at Villamagna; there are no indications of southern influence. The site was strongly tied to supply networks focussed on Rome until the 11th century. From that century onwards the site also opened up to the centre-south of the peninsula, Fentress, Goodson & Maiuro 2016, 324.
- 609 See 7.I.1.7.5.
- 610 Cristina Leotta pers. comm. See also Pannuzzi 1994, 148 ff. and Mazzucato 1993. Near the church a small quantity Forum Ware was found, Cristina Leotta pers. comm.
- 611 Corsi 2007
- 612 See 7.I.2.2.3.c
- 613 Horden & Purcell 2000, 57
- 614 See 7.II.1.1.3.
- 615 Hodges & Wickham 1995, 282

- 616 Toubert 1973, 272
- 617 Wickham 1988, 24-25
- 618 7.II.1.8.3. As noted above, the fields in the Lepine margins, situated slightly above the plain, probably did not suffer as much from the environmental deterioration as the ones in the plain proper. This certainly applies to the higher grazing plateaus (like Norba) and plains of the Lepine mountains.
- 619 At Cori there is a lacuna in the historical and archaeological evidence in the 7th and 8th century. The first certain historical source mentioning a church connected to Cori is an entry on Pope Sergius II in the *Liber Pontificalis* (844-847): “basilicam sancti teodori martyris in coranis”. However, it is uncertain which church this is, and if it was actually situated inside the former Roman town.
- 620 Martin 2006, cf. also Heinzlmann & Martin 2000, 277-283; Torres 1998, 39
- 621 Bauer & Heinzlmann 1999, 278-282
- 622 See also 7.II.2.2.3 Theme: The expansion of secular (elite) activities
- 623 Francovich & Hodges 2003, 57
- 624 Brogiolo 2001, 200
- 625 Wickham 1981, 107 ff; see 2.I.6.
- 626 Barker 1995b, 270; Wickham 1985, 19 ff.
- 627 See 7.II.2.2.1.a An overview of developments and 2.I.6.
- 628 Coste 1990, Toubert 1973
- 629 Severini 2001, 52 suggested that after a temporary abandonment in the early 9th century, as a result of Saracene attacks, the inhabitants of Ariccia were transferred to the ancient acropolis on Monte Gentile, where a *castrum* would evolve. In that case the transfer of the population may be a case of *incastellamento*. A *castrum* has been recorded at Ariccia in 978. The abandonment of the lower town, the reoccupation of the acropolis nor the date cannot be proven.
- 630 See 7.II.1.8.1; Severini 2001, 134.
- 631 Toubert 1973, 312 suggested that these relocations may have been caused by *incastellamento*, but also by the abandonment or change of infrastructural arteries.
- 632 The site of Norba itself earlier, in the 6th or 7th century, may have been the scene of an early population transfer of the populace of the plain settlements (Forum Appii; Tres Tabernae?). See 7.II.1.8.1.
- 633 See 7.II.1.7.1.
- 634 Bianchini 1939, 194
- 635 For example, Map 49 and 50.
- 636 The 8th century shows 115 activities, but this century is over-represented as discussed in 3.I.2..
- 637 On possible proto-*incastellamento* phase see 2.I.9.1
- 638 In the year 956 Sezze reportedly was a free commune under papal authority. This claim remains unsubstantiated, see 7.II.1.8.1.
- 639 De Rossi 2002
- 640 The environmental circumstances in the coastal lake area likely had deteriorated from the late Roman period onwards. This may have resulted in more and more marshy conditions, like in many low-lying areas on the Peninsula. See 3.III.
- 641 Van Joolen 2003, 81-84.
- 642 At the moment, a detailed study is being executed on sedimentation in the Astura valley, Sevink, Attema & Witmer forthcoming.
- 643 Azzara 2002, 95 ff.
- 644 Fentress, Goodson & Maiuro 2016, 284
- 645 “Rural” should read “outside Rome”. The list of rural monasteries holds those that functioned alone or are located inside a settlement or town/village within the landscape.
- 646 Cf. Toubert 1973, 790
- 647 Azzara 2002, 97. At Farfa and San Vincenzo al Volturno, a villa probably preceded the monastery, Christie 1996, 275.
- 648 See 2.I.9.2.
- 649 Wickham 1985, 72-73
- 650 Toubert 1973; Moreland 1992, 121
- 651 Falco 1919, 544 on the two variants of the family name: Crescentii and Crescenzi.
- 652 See 7.II.1.4.
- 653 Brook 2003, 15

7.III The 10th to the 14th century

The descriptions of the main developments of the current study period in the 10 defined key areas are numbered 7.III.1.1 to 7.III.1.10. In 7.III.2 the analysis and conclusions for the whole research area regarding this study period will be treated.

7.III.1 The key areas throughout the 10th to 14th century

Like in the previous sections 7.I and 7.II, the analysis of the current study period starts off with the best documented key area: the Nettuno-Anzio key area.

7.III.1.1 The Nettuno-Anzio key area, from the 10th to the 14th century

7.III.1.1.1 General site distribution: monitoring of (change in) human activity

For the 10th and 11th century, the historical and archaeological record of the Nettuno-Anzio key area is rather bleak (figure 7.115); only **Satricum** (villa, OLIMsite 34) provides us with securely dated evidence¹. Although some authors hypothesise that **Nettuno** (OLIMsite 51, OLIMtoponym 23) was founded in the 10th century, the first secure documents referring to the toponym Nettuno date to the first half of the 12th century: A letter dated to 1126 AD by Tolomeus of Tusculum is the first to mention the *castrum Neptuni*². Another source of 1140 AD describes the complaint of the monastery of Grottaferrata, claiming the possession of “castrum neptuni”, then under

control of the same Tolomeus of Tusculum³. In 1190 King Richard Lionheart passed the castle of *Lettun* on his way to Palestine⁴. After the fall of the Tusculi in 1191, Nettuno became part of the Orsini possessions⁵. In 1210, the first church in Nettuno, S.Nicolao de' Neptuni is described as belonging to the monastery of Grottaferrata⁶. The current *borgo medievale* of Nettuno dates to the 14th century⁷.

On the basis of the current evidence therefore, Nettuno is founded in the 12th century, as a *castrum*, as part of *incastellamento*. Nettuno is documented as *castrum* until the 14th century.

A second *castrum* in this key area, **Conca** (Borgo Montello, OLIMsite 277), was founded in the 12th century. The toponym, Conca, however was already mentioned in the 10th century and 11th century⁸; it is unclear what the nature of activity on the site was at that time⁹. The *castrum* here was mentioned first in a letter by Pope Pasquale II in 1115 or 1116, describing the surrounding area as property of the same monastery of Grottaferrata¹⁰. In 1250 the ownership of Conca by Grottaferrata was confirmed. The walls of Conca, which are not visible anymore nowadays, have been described by De la Blanchère in 1885 as resembling those of Ardea. These Ardean walls can be dated between the 12th and 14th century¹¹.

Both 12th century *castra* may have been founded by the Basilian monastery of Grottaferrata, as each is

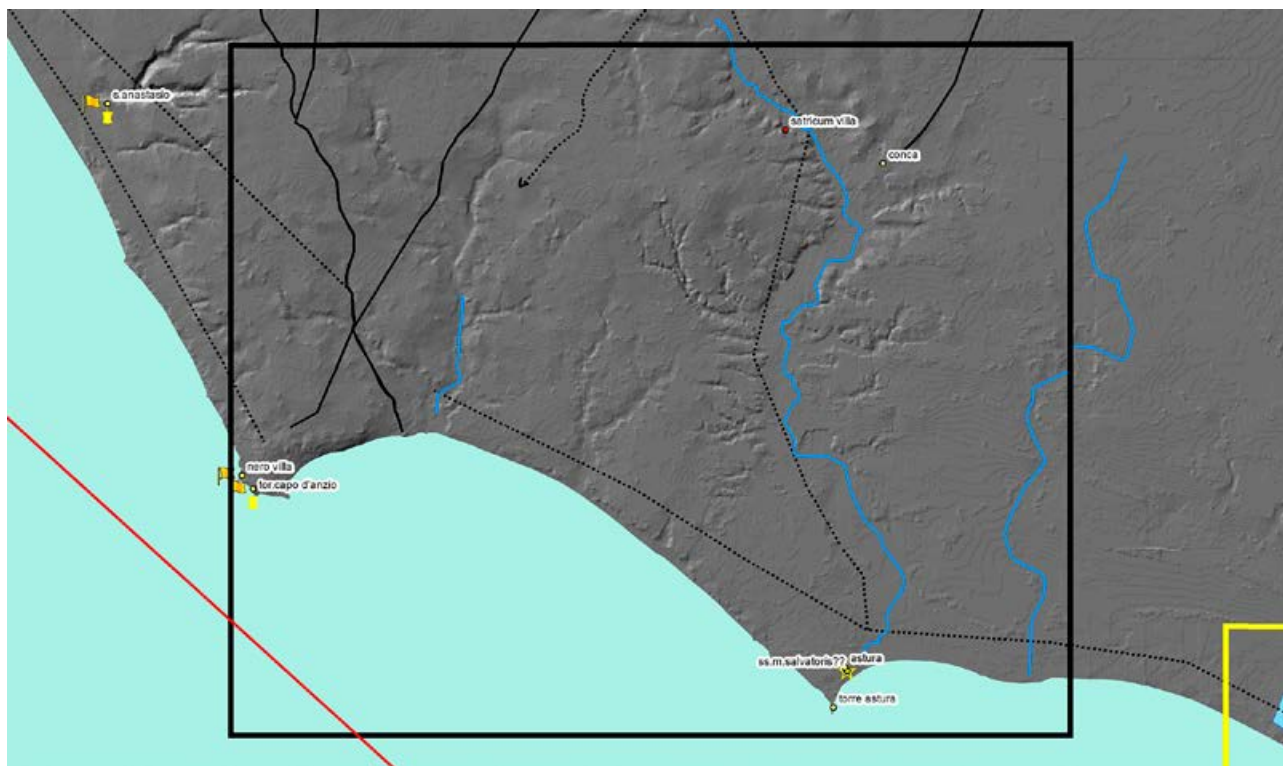


Figure 7.115. The Nettuno-Anzio key area in the 10-11th century. A dot represents a site with activity in this period. A flag is used for every fortified location (walls, towers, ditches etc.); if this fortified location is an isolated tower, an additional upside-down pushpin is depicted.

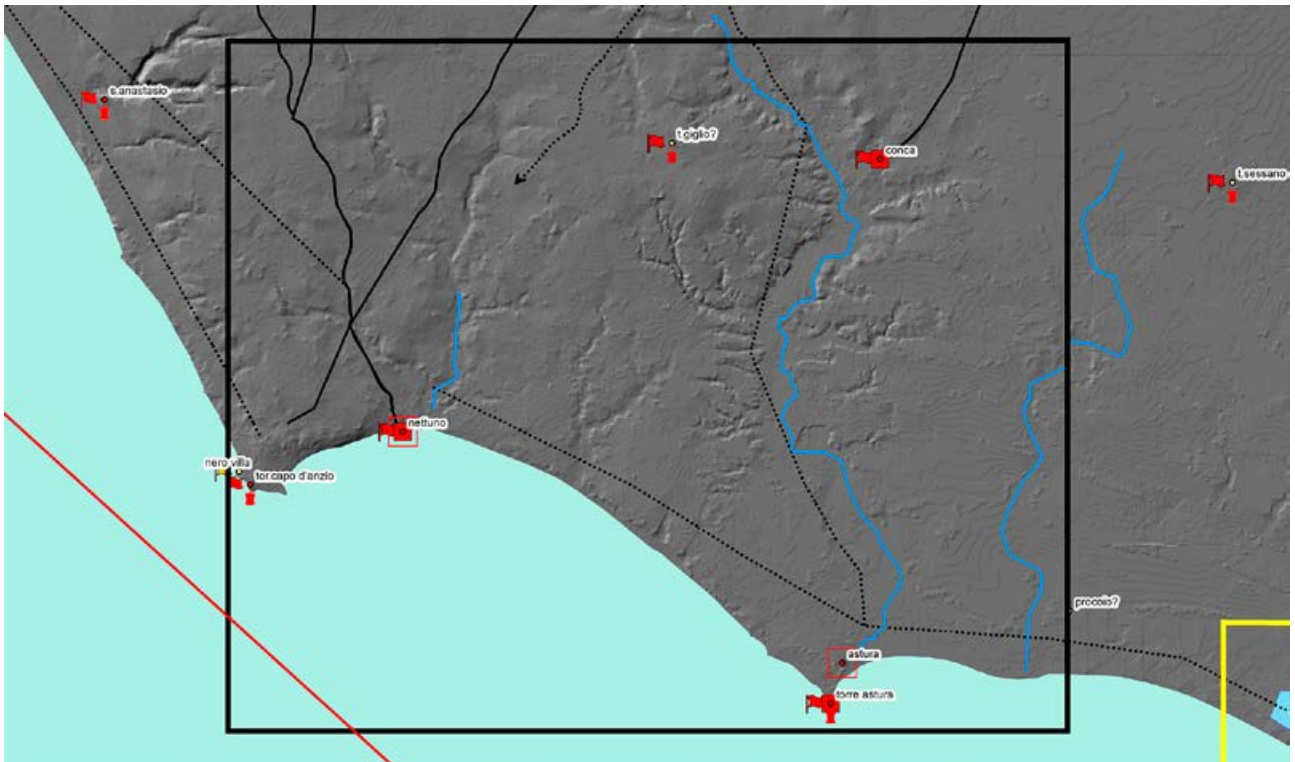


Figure 7.116. The Nettuno-Anzio key area in the 12-14th century. A square is a castrum, a transparent large square denotes a village, a star a church.



Figure 7.117. Torre Astura with the outlines of the piers of the ancient harbour in yellow and of the fish basins in red. Source: Ortofoto digitali 2000.

documented as part of its *patrimonium*. It is unknown if lord executors were involved in the *incastellamento* process. For castrum Nettuno, the only candidates for elite management are the Tusculi, but the evidence is only indirect¹². At Conca maybe the Malabranca family owned the *castrum* in the 13th century³⁰¹³.

The written evidence therefore seems to show that the Nettuno – Anzio key coastal area was not involved in the first (10th century) wave of *castra* of the *incastellamento* process. The *castrum Nave* (OLIMsite 90) at Casale Buonriposo, outside the key area, is the earliest *castrum* nearby, recorded in the late 10th century. A second *castrum* situated outside, just to the north of the key area, in the Campomorto area, is *castrum Sancti Petri in Formis* (OLIMsite 3), referred to in 1224 and 1304¹⁴.

Astura is also listed as a *castrum*, in 1268 and 1303¹⁵. From the documents it does not become clear to which site the toponym “Astura” relates: the harbour site of **Torre Astura** (OLIMsite 64) or **Astura settlement** (OLIMsite 33). At Torre Astura continued activity can be assumed from Roman times until the high middle ages: The large harbour was continuous accessible, with its protecting piers still present¹⁶, and the basins remained well suited for pisciculture (see figure 7.117)¹⁷. Concrete evidence on this activity is provided by the current study of the Torre Astura pottery, yielding one possibly 11th century fragment and several secure 12th century fragments. The current tower was built in the 12th century, a dating based on the building technique used. In the 12th century, the Astura peninsula was documented in several written sources: it was reported in 1166 on a navigation act concerning the coast between Genoa and Rome and surroundings¹⁸. Other sources describe the involvement of the Tusculi here: Tusculum occupied Torre Astura in 1140¹⁹. And in 1163 Torre Astura was still leased to the lords of Tusculum by abbot Pietro of the monastery of S. Alessio all’Aventino. In view of its reference in the 987 source it is feasible that this monastery continuously owned the Astura area between the 10th and 12th century²⁰.

After the abandonment of the village in the 7th or 8th century²¹, **Astura settlement** (OLIMsite 33) knew a second phase of occupation in the 12th and 13th century and possibly the 14th century. Ceramic evidence for this has been uncovered by Tol and his team²². Tol’s study shows that the *ceramica dipinta a bande rosse* from this period was probably produced locally. It can be well dated in the 12th and 13th century because of the morphological similarities with pottery found at Campoverde and Conca (both in the Astura basin) and at Privernum, Ostia, Civitavecchia and Minturno. Tol sees these similarities as evidence for a regional pottery ‘industry’. It is as of yet unclear what

the place of origin and distribution range of the pots produced in Astura was²³.

Lime-kills have been found on the site as well. Radiocarbon analysis of charcoal samples dates the kilns to the 12th century²⁴. Although the evidence unearthed thus far (only a fraction of the site has been excavated) runs dry in the 13th century, there is historical evidence that the site was occupied into the 14th century: “Astura” is listed on an *elenco del sale* as having more than 1800 inhabitants²⁵.

A symbiotic arrangement may be suggested for Astura settlement and Torre Astura in the high middle ages²⁶: While Astura settlement may have become the demographic (it may have had 1800 inhabitants in the 14th century) and economic²⁷ focal point, Torre Astura may have constituted the logistical hub and defensive stronghold of the area (cf. the 12th century tower). Tol expects both sites to have been part of the same administrative unit and the same productive system²⁸. Maybe the references to a *castrum* at “Astura” (1268 and 1303) relate to the Astura – Torre Astura conglomerate. Indeed, the date of reoccupation of Astura settlement fits the wave of new *castra* during the 12th and 13th century across Tyrrhenian southern Lazio. Concrete historical proof for an *incastellamento* project at Astura (like a chart of agreement) has however not been found.

After the dismantlement of the Tusculan dynasty, at the end of the 12th century, Torre Astura shortly became possession of the Frangipane family²⁹. In 1193 the Frangipane sold their property on the coast to the papal court³⁰. Their descendants however remained involved as a kind of lordly supervisors at Torre Astura in the next century.

Next to the 12th century tower of Torre Astura, several other new fortified positions were constructed in the Nettuno-Anzio key area during the high middle ages. None of these constructions can be dated precisely. Somewhere in the 12th and 13th century, the **Torre del Giglio** (OLIMsite 572) and the **Torre Sessano** (OLIMsite 118) were built. It is unknown when the **Torre Capo d’Anzio** (OLIMsite 35) was built, but it must have functioned in the 13th century. As has been treated extensively before, the surrounding wall of the tower has been broadly dated between the 9th and the 13th century (*opera saracinesca*, with cut up basalt blocks). The first historical reference to this tower dates to the 16th century. The *opera saracinesca* found here, as well on the **villa of Nero** (OLIMsite 13), provides evidence for activity in parts of the town of Antium and its harbour in the high middle ages. It remains unknown if and when the town and harbour of Antium were abandoned³¹. Antium only reappears in the historical sources during the 17th century,

when Pope Innocentius XIV ordered a harbour to be built³². *Opera saracinesca* was also used in the **Torre di S.Anastasia** (OLIMsite 75) to the north.

To conclude: like in most other key areas, the site distribution maps gradually fill up during the study period. Sites with uncertain activity in the 10th century from the 12th century onwards were securely documented, and villages (*castra*) were built, or reoccupied (Astura). In the 12th century, several strongholds were built. Fortified locations and fortified settlements dominate the 12th-14th century maps.

7.III.1.1.2 Infrastructure³³

It is feasible that a number of roads from inland areas towards the Antium – Nettuno coast area were frequented during the high middle ages. The castrum Nave, situated relatively close to the coast, likely had seaward connections, but likely also needed a connection with the Appian road in the Alban Hills area, which was the cradle of early incastellamento in Tyrrhenian southern Lazio. Traffic in the wider current study area, for example for heading for the new castrum of Nettuno and the continuous harbour of Antium, may have used either the old Roman road **Anziate – Nettunense** (OLIMinfra) and/or the **Nettuno alternative** (OLIMinfra); the latter road was probably created to connect the new castrum of Nettuno with inland southern Lazio and the Appian road. The construction date of this road is unknown, but must lie somewhere in the 10th to 12th century³⁴. The use of the originally Roman “**Via Mactorina**” likely was continuous throughout the middle ages, given the probability that Velletri and the wider Alban Hills stayed connected with the coast. The Via Mactorina is still visible on post-Renaissance historical maps³⁵. The fate of the documented 10th century road from Astura northwards along the Astura river is unknown, but it seems likely that a tract along the Astura remained in use, as the revived settlement (castrum?) of Astura (12/13th century) would have needed a regular connection with inland areas like the castrum of Conca. It is unknown if the river was used for transport or traffic during the high middle ages.

A part of the Roman road nowadays known as La Selciatella (OLIMinfra 56) was used in the high middle ages, possibly all the way up to Lanuvio. This may be deduced from the proposed dating of the tower on the crossing of this road with the Nettuno alternative of the Anziate – Nettunense, as well as from the 12/13th century phase of the **Torre del Monumento** (OLIMsite 576), and from the medieval bridge and tower that was built at Torre Spaccasassi³⁶.

7.III.1.1.3 Economy, production and trade

Astura settlement probably was a production site of high medieval *dipinta in rosso* wares, a vessel type originating from the southern Italian peninsula. Tol proposed that Astura settlement traded the *dipinta in rosso* wares with sites along the river Astura (e.g. Campoverde area and at Conca)³⁷. The range of trade of the pottery from Astura settlement is unclear. It is possible that trade took place along the coast to the south and north (e.g. with Civitavecchia, at Montegiove east of Benevento, and the area around Minturno) and to Rome and surroundings as well. In these areas and on these sites comparable fragments have been found. However, Privernum was also a production centre of this pottery. The actual trade connections of the time may only be clarified by the future comparative study of the fabrics of the above sites³⁸.

7.III.1.1.4 Religion and worship

The written evidence shows that the Basilian monastery of Grottaferrata had a number of interests in the current key area in the 11/12th to 13th century. Exemplary is the 1140 reference, in which it claimed the *castrum neptuni*; this claim of Grottaferrata seems to point to an earlier interest in Nettuno. Another indicative source is the first reference to the main church of Nettuno, S.Nicolao de' Neptuni, in 1210, which is described as belonging to the monastery of Grottaferrata³⁹. In view of the important role this monastery played in the area in this period, it is the first candidate for having been the founding institution of the *castrum* of Nettuno. Concrete evidence on the *incastellamento* process here, like a foundation chart, is absent.

The coastal area of Nettuno is not the only focal point of this monastery: in the 13th century the monastery of Grottaferrata had interests all over southern Lazio as can be read from a bull dated to 1233. In this document Gregory IX conferred to the monastery of Grottaferrata possessions and privileges in Velletri, Guiliano, Ninfa, S.Pietro in Formis, Conca, Nettuno and the right to collect/breed fish in the Fogliano lake and the use of the *stagno* near Ostia and a *piscaria* of a river near Terracina⁴⁰.

The other large monastic player in the Nettuno-Astura area was the monastery of S.Alessio e Bonifacio all'Aventino, who owned the territory of Astura between the 10th and 12th century⁴¹. The letter mentioned above of 987 bears testimony to this, as does an official letter of complaint concerning Astura dated to 1140. In this document Riccardo, abbot of S.Alessio all'Aventino, complains against the Count of Tusculum for seizing Astura⁴². This monastery had more interests on the coast: they owned castrum Fusugnanum near Ardea from 1224 onwards.

7.III.1.1.5 *Geo-politics: power relations, struggle and control strategies; secular activities*

There are a number of indications for the existence of military of geo-political control system in the current study area.

Warning system along the axis Nettuno-Velletri?

Del Lungo⁴³ suggested that in the 12th or 13th century a control system functioned along an axis between Nettuno and Velletri, in analogy with the many chains of beacons as were used by the Greeks and Romans as part of the communication networks⁴⁴. This chain of signal stations would have involved among others the strongholds of Torre del Monumento (OLIMsite 576)⁴⁵, Torre del Giglio (OLIMsite 572), Civitana (OLIMsite 573), castle Presciano (OLIMsite 169), Torre di Lazzaria (OLIMsite 575), Torre di Spaccasassi (OLIMsite 570) and Torre del Padiglione (OLIMsite 571)⁴⁶. In this hypothetical system the control points were situated 4-6 km apart, possibly intended as a warning or message system between the Alban Hills and the coast. The idea on a coordinated foundation of an array of forts cannot be verified, as there is no concrete written source describing such a project, and the builders and construction date of much of these strongholds are not known. The inter-distances between the fortresses are not regular enough to be able to speak of a gauged array⁴⁷.

Tusculan corridor along La Selciatella?

While the idea of a warning system cannot be confirmed, the historical records do provide clues for a control system along one specific axis of infrastructure, La Selciatella. For some time, the Tusculi controlled several strongholds along its trajectory, which formed a straight line from the coast to their power-base in the Alban Hills⁴⁸. For the Counts of Tusculum this road may have acted as a “corridor” to the sea, in which the harbours of Nettuno/Astura were focal points. Indeed, high medieval use of the road has been affirmed⁴⁹. The strongholds that were held by the Counts are castrum Nettuno, possibly Torre di Spaccasassi (OLIMsite 570)⁵⁰, castle and Torre di Presciano (OLIMsite 169 and 574)⁵¹, Lanuvio (OLIMsite 84)⁵² and castle Fajola (OLIMsite 146)⁵³. In the 12th century, the Tusculi might have controlled traffic along/on the river Astura as well⁵⁴. The idea of such a corridor is hypothetical, as there is only circumstantial evidence. The written sources do not refer to such an axis. Obviously, it is unknown how the Tusculi wielded authority on the sites along this road. It is a safe assumption, however, that the Tusculi controlled communications between the coastal area at Nettuno – Anzio and Alban Hills, at least during the 12th century. The accounts of involvement of the Tusculi in sea traffic (see below here) is an additional indication for that. In order to get a sharper picture, a further step would be to (re)study the remains of the strongholds which were reported as part of

the realm of the Tusculi, such as Torre di Spaccasassi, castle and Torre di Presciano and castle Fajola⁵⁵. Wall-facing research of these sites has been limited as of yet.

In a long-term perspective, a close relation and direct connection of the wider Alban Hills area (Tusculum/Velletri/Lanuvio) with the coastal area of Antium-Astura is not unique: In Roman times such a connection has been described by Pliny and Cicero⁵⁶. In Byzantine times the same connection may be observed, when the Byzantine seem to have controlled both Astura and Velletri⁵⁷.

Nettuno and Astura as sea port for the Tusculi?

The above discussed “corridor” may have been set up by the Tusculi for a specific goal: Nettuno (and/or Astura) may have acted as sea harbour for them⁵⁸. Although there is no explicit written record stating this, the idea is supported by strong indirect evidence. Firstly, there are contemporary records that the Tusculi were engaged in (sea) trade. Secondly, in the second half of the 12th century the Tusculi were involved in a power struggle with the Roman Commune⁵⁹. In that struggle, the use of an alternative sea port may have been indispensable: The Tiber as route to the sea probably was not an option, as it could only be reached via Rome or its *suburbium*, and Terracina was situated remotely, at the end of a difficult route via the pedemontana, mostly controlled by other secular and ecclesiastical parties⁶⁰.

The first document that relates to the connection of the Tusculi with the sea is a document of Otto III dated in 999 in which the Counts are dubbed *praefecto navili* (commander of ships)⁶¹. Brandizzi Vittucci suggested that this title might refer to the protection of the coastal area by the Counts⁶²; for this there is no concrete historical evidence. Another record shows that the Tusculi owned a ship in 1105, leased to the monastery of Montecassino⁶³. Furthermore, there is evidence that in the early 12th century the Counts of Tusculum had interregional trade relations, which become clear from a source which refers to commercial contacts with a ship-owner in Gaeta⁶⁴. Brandizzi Vittucci proposed that the Counts used the port of Nettuno to export *spolia* from the large imperial complexes of Antium⁶⁵.

Defensive system around Nettuno?

It has been suggested that the high medieval towers of Anzio (Torre di Capo d'Anzio, OLIMsite 35) and S.Anastasio (OLIMsite 75) did not evolve into *castra* because of a lack of population in the surrounding areas. As an alternative, they might have been incorporated into a (hypothetical) defensive system around the *castrum* of Nettuno⁶⁶.

This idea on a direct link between a lack of population and the evolvement of *castra* cannot be checked. From Toubert's study in northern and eastern Lazio and the Sabina, it becomes clear that *incastellamento* did not always evolve in existing populated areas. Often, lords involved in incastellisations tried to attract colonists from far to populate new sites⁶⁷. In *incastellamento* it is not always clear what constitutes the largest stimulus for the colonisation process: a population at hand, or the initial establishment of a fortified settlement which subsequently attracted people.

If we accept the hypothesis of a high medieval coastal defensive system around a *castrum*, it is not difficult to see Torre Astura and a (suggested but as of yet unsubstantiated) medieval tower at Foce Verde⁶⁸ as seaward protectors of the coast. They may have protected the *castrum* of Astura (Astura settlement?) and/or the *castrum* Conca. The Tusculan strongholds along the La Selciatella undoubtedly protected the hinterland of the *castrum* of Nettuno. The current database, however, does not provide new evidence to evaluate this idea of a defensive system around coastal *castra* in the Anzio – Nettuno key area.

7.III.1.2 The Fogliano key area, from the 10th to the 14th century

7.III.1.2.1 General site distribution: monitoring of (change in) human activity

The only 11-13th century evidence relates to the 10/11th walls (OLIMsite 645), located on the Fogliano lake (see figure 7.118).

The 10th century *castrum* (OLIMsite 127) and the possible motives for an *incastellamento* process here have been discussed above (7.II.1.2.1). From 977 onwards, the sources are silent on the incastellised settlement in the Fogliano lake area. Likely, the *castrum* here fits the picture of the many failed *incastellamento* projects as described by Toubert. What may have caused the *castrum* to fail is not certain. The areas' relative remote position, from Rome, from long-distance infrastructure and from continuous vital parts of Tyrrhenian southern Lazio (Ostia, Terracina and Velletri) may be an explanation for the non-sustainability of a *castrum* here. However, other *castra* situated closer to these central parts of the research area also seem to have "failed": *castrum* Vetus (OLIMsite 133), *castrum* Monte Gabum (OLIMsite 301), *castrum* Algido (OLIMsite 287), *castrum* Ariccia (OLIMsite 159).

In the late middle ages, however, we may have a reference to the *castrum*, possibly (re)named after the church of S.Donato (OLIMsite 113): An act dated to 1478 refers to a "castrum diruti sancti donate"⁶⁹. On the other hand, it is not certain if this "castrum diruti" actually refers to the former fortified settlement, nor if this *castrum* is the same as mentioned in the 963 and 977 documents of the Register of Subiaco. First of all, the 15th century source does not hold topographical information on the location of this "castrum diruti". Secondly, it is not certain if this derelict castle relates to a fortified village, as discussed in Chapter 6: while strictly used for a fortified village in the 10th to 13th century, the term "castrum" from



Figure 7.118. The Fogliano key area in the 10-11th century. For the castrum only 10th century written evidence exists.



Figure 7.119. The Fogliano key area in the 14th century. For the 12th and 13th century there are no sites in the database.

the 14th century onwards became more generically used. In the 15th century context a “castrum (dirutum)” can stand for any kind of abandoned fortress, with or without settlement.

The monastery of Farfa acquired lands in the Fogliano area in the 12th century⁷⁰. In the 13th century, the area became property of the Caetani⁷¹. In the year 1368 Giovanni Caetani sold a *piscaria* (fish basin or lake⁷²) bordering an “*alia piscaria que dicitur lo Grescesco monasterii Sancte Marie Gripte Ferrate*”⁷³. In 1383 the same *piscaria* was called “Lu Gricischa”⁷⁴. In all likelihood, this toponym relates to the Monaci lake; we know that the rights for this lake were kept by Grottaferrata in the 16th century⁷⁵.

7.III.1.2.2 Infrastructure

It may be assumed that during the high middle ages, certainly for the duration of the *incastellamento* project regarding the Fogliano lake (OLIMsite 127), a coastal extension of the northern transverse road (OLIMinfra 49) Fogliano – Mesa- Pedemontana) in the central plain continued to be used⁷⁶. The basalt blocks of its tract were still present in situ until recently, near the site of Mesa. At Mesa (OLIMsite 28) there are indicators of activity from the 10th (possibly 9th⁷⁷) century onwards.

The Rio Martino, a canal which likely originated, unnamed, in Roman times, is first mentioned in the sources in 1045 AD, as “*Rigus Martinus*”⁷⁸. Some scholars believe a new

name for this canal must have been introduced after a late medieval reconstruction of the canal⁷⁹. Such a restoration project would have meant huge investments in the area. A correlation between the 11th century introduction of the new name and the possible reconstruction cannot be proven, however. The first securely documented works done on the Rio Martino date to the 16th century⁸⁰. The prime function of the canal is still discussed, but it was most likely the drainage of the Pontine plain.

7.III.1.2.3 Economy, production and trade

The possible economic activities connected to the *castrum* of Fogliano have been discussed above: salt extraction and lumbering, pisciculture, olive production and transhumance – the latter having been observed in many parts of the Pontine coast in sub-recent times⁸¹. The ideas on the economic activities in the area, however, cannot be verified. There is, however, 13th to 15th century evidence for fish breeding in the area, as several monasteries acquired concessions to breed fish in the Fogliano area in the 13th to 15th century⁸². The above treated 1368 source is an example. These fish breeding activities fit into the area’s long history of pisciculture activities, for which we have epigraphic and historical references from the 1st century BC onwards⁸³.

7.III.1.2.4 Religion and worship

The interests of church institutions in the Fogliano area from the 8th century onwards have been described earlier.

The Fogliano area was acquired by the Subiaco monastery in 917, as part of the possessions of the monastery of S.Erasmo al Celio. Subiaco maintained its possessions in the area until the 12th century, until the monastery of Farfa extended its possessions here. As treated above, throughout the late middle ages several monasteries made use of the favourable fishing conditions of the area⁸⁴.

7.III.1.2.5 Geo-politics: power relations, struggle and control strategies; secular activities

Cecere maintained that in the 11th century the area became subject of a struggle on authority between Subiaco and the worldly “leaseholders” of the area and the *castrum*. Although it is unknown who these leaseholders (lord entrepreneurs) were, it is indeed striking that the possessions of the area had to be reconfirmed now and then in favour of the monastery of Subiaco by Popes John XVIII (1004-1009), Benedict VIII (1012-1024) and Leo IX (1049-1054)⁸⁵. Cecere wrote that the existence of these acts proves how important this area was, for which economic reasons might have been key⁸⁶. I would argue that, whether or not such conflicts existed, the fact that these confirmations are not repeated after the 11th century, possibly point to an end of the conflict and/or large-scale activities (*castrum*) in the area. Cecere maintained that the fact that between 1201 and 1475 the rights to cultivate fish on the Fogliano lake had to be confirmed to ecclesiastical institutions, is a clear sign that the jurisdiction over the *fundus* here (S. Donato or Fogliano) was still in the hands of the Church. This cannot be confirmed

however, for the lack of sources on the *fundus / castrum*, or any other actual confirmed presence (settlement) for that matter between the 11th and 14th century.

The Caetani family seems to have expanded its grip on the area between the 14th and 18th century. In the 15th century this family controlled the fish breeding activities on the Lago di Fogliano⁸⁷.

7.III.1.3 Ostia and the coastal area to the south, from the 10th to the 14th century

7.III.1.3.1 General site distribution: monitoring of (change in) human activity

The archaeological and historical evidence indicates that the area of Ostia – Gregoriopolis remained a centre of regional significance in the early to high middle ages (see figure 7.120-7.121). Central in its continued importance must have been its ongoing strong and direct relation with Rome. It continued to be a major gateway to the City, being situated on the economic lifeline of the Tiber river. Moreover, Ostia - Gregoriopolis acted as a bridgehead in Rome’s defence against invading troops over that river. The **borgo of Gregoriopolis** (OLIMsite 393) was built to withstand such invading troops, possibly in conjunction with the tower of **Boacciana** (OLIMsite 399). Originally Gregoriopolis must have been small. After Nicola I (858-867) had expanded the *borgo*, it ceased to be called a *castello* and became known as *civitas*⁸⁸, generally meaning “fortified town”⁸⁹. In the 13th century it was equipped with new fortifications.



Figure 7.120. The Ostia key area in the 10th century. C denotes a casale.

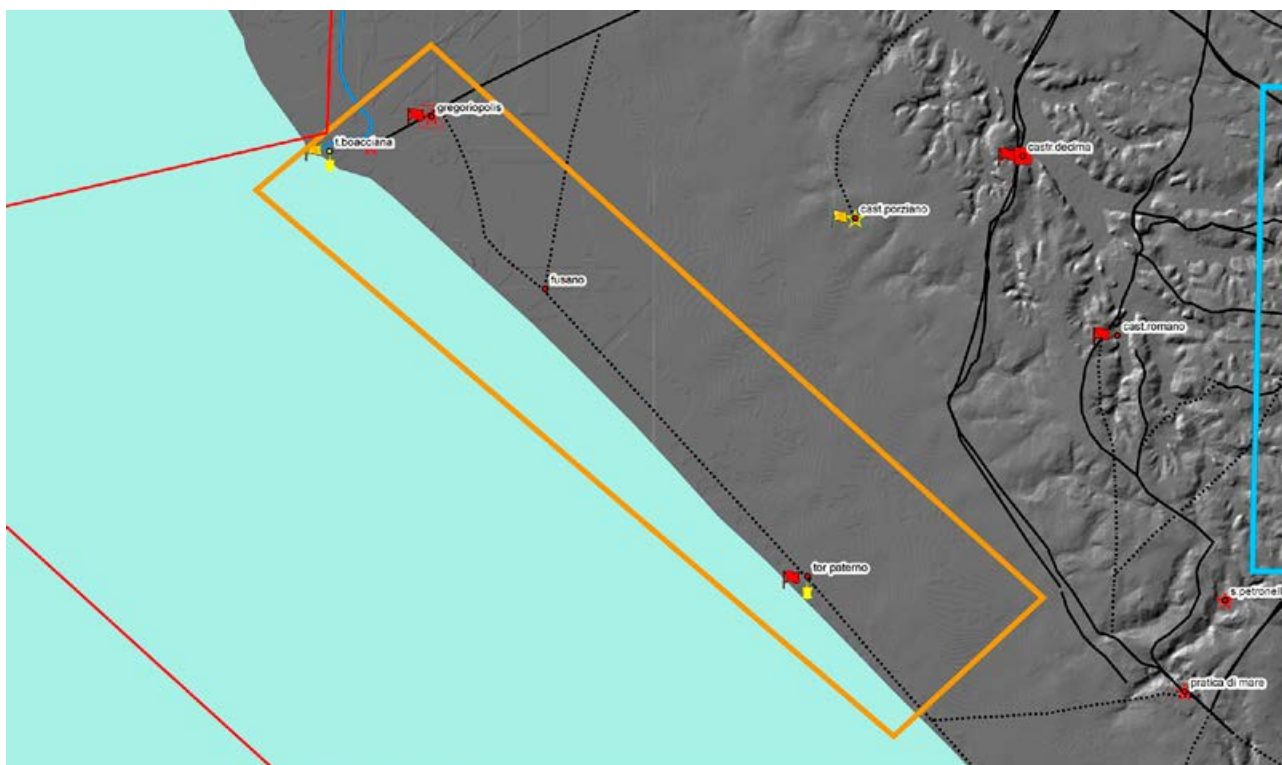


Figure 7.121. The Ostia key area in the 11th century.

Although in the 9th century the ancient town of **Ostia Antica** (OLIMsite 392) was officially abandoned for Gregoriopolis (OLIMsite 393), 700 meters to the north east (figure 7.120), and the sea was transported with it, the inhabitants of Gregoriopolis would frequent a shrine near the theatre of Ostia Antica until the 12th century⁹⁰. The early Christian **Basilica di Pianabella** (site 392), located about 500 meters from the old centre of Ostia, must have remained a centre of activity until the 10th century⁹¹.

As earlier discussed, the site complex / settlement of **Tor Paterno** (OLIMsite 229) is a location of continued occupation (7.II.1.3.1). The thermal complex was continuously settled during the middle ages, after a short period of abandonment in late Antiquity⁹². The medieval tower of Tor Paterno was built on top of one of the Roman villas of the site, possibly in the 10th century⁹³. The first historical reference to Paterno dates from the 12th century⁹⁴. The tower was last restored in 1567 and ultimately destroyed by the English in 1809⁹⁵.

The 10th century *casale* on the large and strategically located site of **Castel Romano** (Vecchio) (OLIMsite 2) may have been preceded by the 8th century **fundus Casaromaniana / Casa Romaniana** (OLIMsite 6). This *casale* disappeared from the records in the 16th century.

The Ostia key area lacks evidence for an early (10th century) *castrum*. The foundation of Gregoriopolis should

not be seen as an act of *incastellamento* as this fortress was built for defensive purposes in the first place, and not for a new process of reorganising the surrounding area. The fact that *castra* appear relatively late on this stretch of coast confirms the picture outlined for the Anzio-Nettuno key area; the only coastal exception in Tyrrhenian southern Lazio is the 10th century *castrum* Fogliano. **Fusano** (OLIMsite 394) is the first *castrum* in the key area itself, dated to the 13th century (figure 7.122). Outside the key area, **Decima** (OLIMsite 387) is documented as a *castrum* in the 11th century. **Pratica di Mare** (OLIMsite 47) was a *castrum* in the 12th century. **Castrum S. Petronella** (OLIMsite 389) dates to the same century. **Castel Porziano** (OLIMsite 388) is listed as a *castrum* in the 14th century⁹⁶; *castrum* in this century translates as “fortified settlement” in general⁹⁷. In other parts of Tyrrhenian southern Lazio, former *castra* became known as *casali* in the 14th century; in this key area this is true for Fusano and Pratica di Mare⁹⁸.

Pratica di mare (OLIMsite 47) is listed between the 9th and 11th century as *civitas*⁹⁹, in the 12th century as *castrum*¹⁰⁰. In the 14th century the *castrum* was reduced to a *casale*.

Like in most other key areas, the 12th and 13th century saw a growth in defensive measures, by establishing new fortified locations and refurbishing existing ones (figure 7.122). The site of the former **Vicus Augustanus Laurentium**

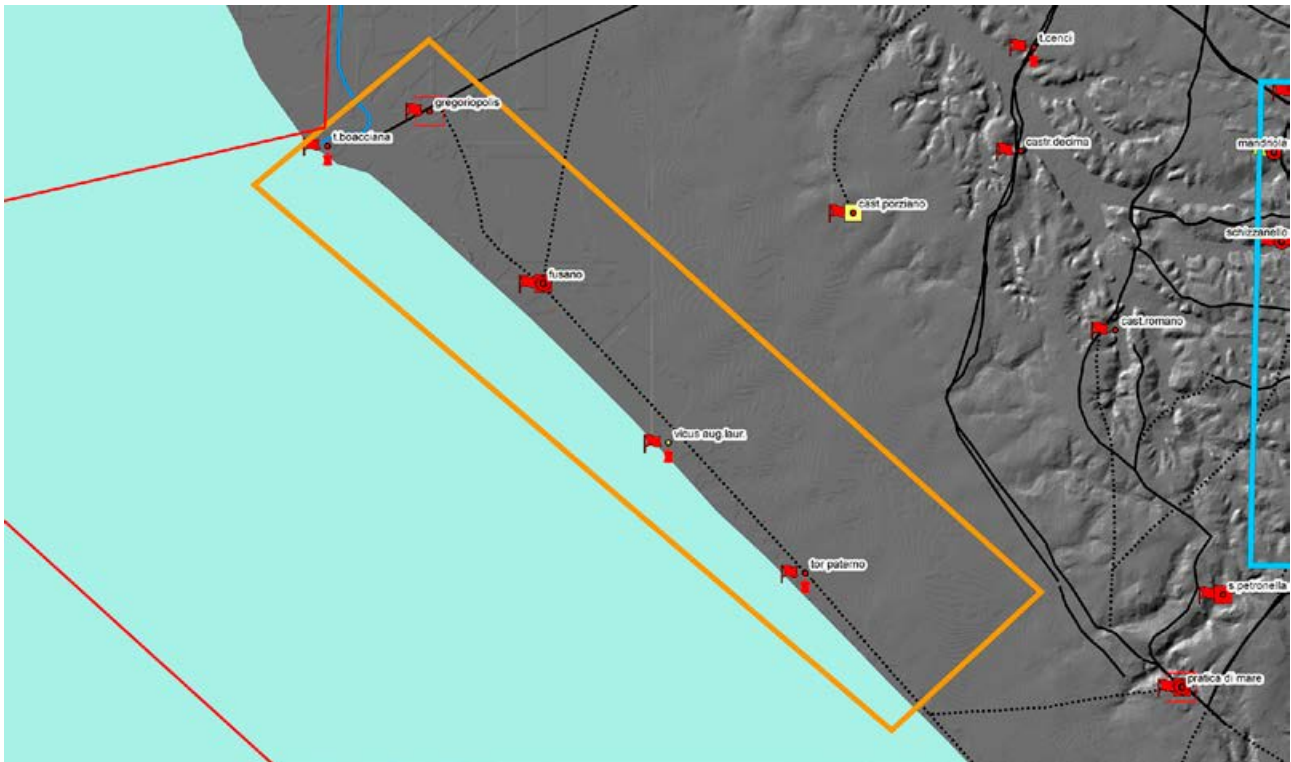


Figure 7.122. The Ostia key area in the 12-14th century. All sites on the map show activity throughout the 12th, 13th and 14th century, except for the Vicus Augustanus Laurentium (12-13th century evidence only) and the Torre Cenci (built in the 14th century).

(OLIMsite 139), abandoned in the 5th century, was reoccupied in the 12th and 13th century as watch post / fortified settlement¹⁰¹. It must have guarded the adjacent coastal road, which in Roman times was called the *Via Severiana*¹⁰². *Castra* are part of this picture of increased focus on defendability. The 12th century *castra* of Pratica di Mare and S. Petronella are situated just outside the current key area. The *castrum* of Fusano (OLIMsite 394) dates to the 13th century. The fortress of Gregoriopolis was reinforced in the 13th century, as was Torre Boacciana (OLIMsite 399) - the 13th century phase is visible in the exterior of the tower¹⁰³. Torre Boacciana became subject of struggle between Roman families from the 13th century onwards¹⁰⁴.

To conclude: like in most other key areas, the site distribution maps gradually fill up between the 10th and 14th century. In this period, strongholds, fortified settlements and *casali* are the most current site types; these sites are concentrated in the coastal area and on the roads going from Rome southwards, although this picture may be biased by the fact that the *Tenuta di Caccia* for the larger part has not been available for intensive archaeological studies. Ostia - Gregoriopolis is the dominant political and religious centre of the key area.

7.III.1.3.2 Infrastructure

The late Roman *Via Severiana* (OLIMinfra 3), or an unnamed alternative coastal road from Ostia - Gregoriopolis southwards, must have remained in operation during the current study period. This can be deduced from the presence of several large sites (Pianabella, Tor Paterno, domusculata Laurentum, the Vicus from the 12th century onwards) which provide evidence for constant activity along the coast.

The *Via Ostiensis* (OLIMinfra 100) or an alternative road from Rome to the Ostian area must have continued to be used throughout the middle ages, in view of the continued suburbicarian bishopric and recorded activity in the settlement of Ostia - Gregoriopolis.

7.III.1.3.3 Economy, production and trade

Between the 11th and 14th century the ruins of Ostia Antica (OLIMsite 392) were used as a quarry for marble which found its way to among others the cathedrals of Pisa, Florence and Orvieto. Marble was also processed on the spot into a mortar base material by burning in limekilns¹⁰⁵. The salt pans of Ostia were important to a number of Roman monasteries in the high middle ages, but also to the monastery of Subiaco and Farfa¹⁰⁶.

7.III.1.3.4 Religion and worship

The suburbicarian bishopric remained influential in Church affairs, not just in this key area, but also in Rome itself. In 1150, the diocese of Ostia was united with that of Velletri.

Striking is the fact that only ecclesiastical parties have documented interests in the wider key area until the 12th century¹⁰⁷. The following parties were involved: the pope (at Gregoriopolis), monastery of Tre Fontane (at Fusano), S.Andrea and Alessio (Castel Porziano), S.Alessio (Decima) and S.Paolo fuori Le Mura and Grottaferrata (both at Pratica di Mare). This is consistent with the picture drawn in the section on the previous study period, the Ostian hinterland being a place of specific interest for the church institutions of Rome (7.II.1.3.1 and 7.II.1.3.4).

7.III.1.3.5 Geo-politics: power relations, struggle and control strategies; secular activities

Several events of the 12th to 14th century show how **Gregoriopolis'** (OLIMsite 393) strategic location also constituted a risk: it was damaged several times by troops on their way to or coming from Rome. In 1167 the *borgo* was damaged by the fleet of Frederick Barbarossa and anti-Pope Pasqual III, and in 1264 it was occupied by Riccardo Annibaldi who was quarrelling with the pope. In 1327 it was destroyed by fire, caused by Genovese troops¹⁰⁸. In the 15th century the castle of Gregoriopolis was rebuilt by cardinal Giuliano della Rovere. It had to protect the city of Rome¹⁰⁹.

7.III.1.4 The Velletri – Le castella key area, from the 10th to the 14th century

7.III.1.4.1 General site distribution: monitoring of (change in) human activity

The locality with the sub-recent name Le Castella is named after the castles that have been historically linked to this location. This favourably defensible position became the site of the first *castrum* in Tyrrhenian southern Lazio (946 AD), and one of the few for which a foundation chart has survived, the **Castrum Vetus** (OLIMsite 133).

Conspicuously, between 978 and 1201 the *castrum* Vetus does not appear in the written sources. In 1201 this *castrum* reappears in a *bolla* by Pope Innocentius III; he granted (among others) the *castrum* Vetus to San Giovanni in Laterano¹¹⁰. Whether this early 13th century reference relates to a fully operating *castrum* Vetus, or perhaps to its ruins or its memory, is uncertain¹¹¹. The concept of donation of derelict vestiges is not impossible, as the same source describes how the pope donated among others a *Crypta Rubea* (OLIMsite 111) – a toponym that is to be interpreted as an ancient vestige. It is also possible, however, that the silence on the *castrum* Vetus between the late 10th century and 1201 is a result of the lack of surviving written sources.

The same *bolla* of 1201 by Pope Innocentius III refers to a second *castrum* on the site of Le Castella: **castrum Novum** (OLIMsite 137, see figure 7.126). Le Castella was the site of yet another 13th century *castrum*: **castrum**

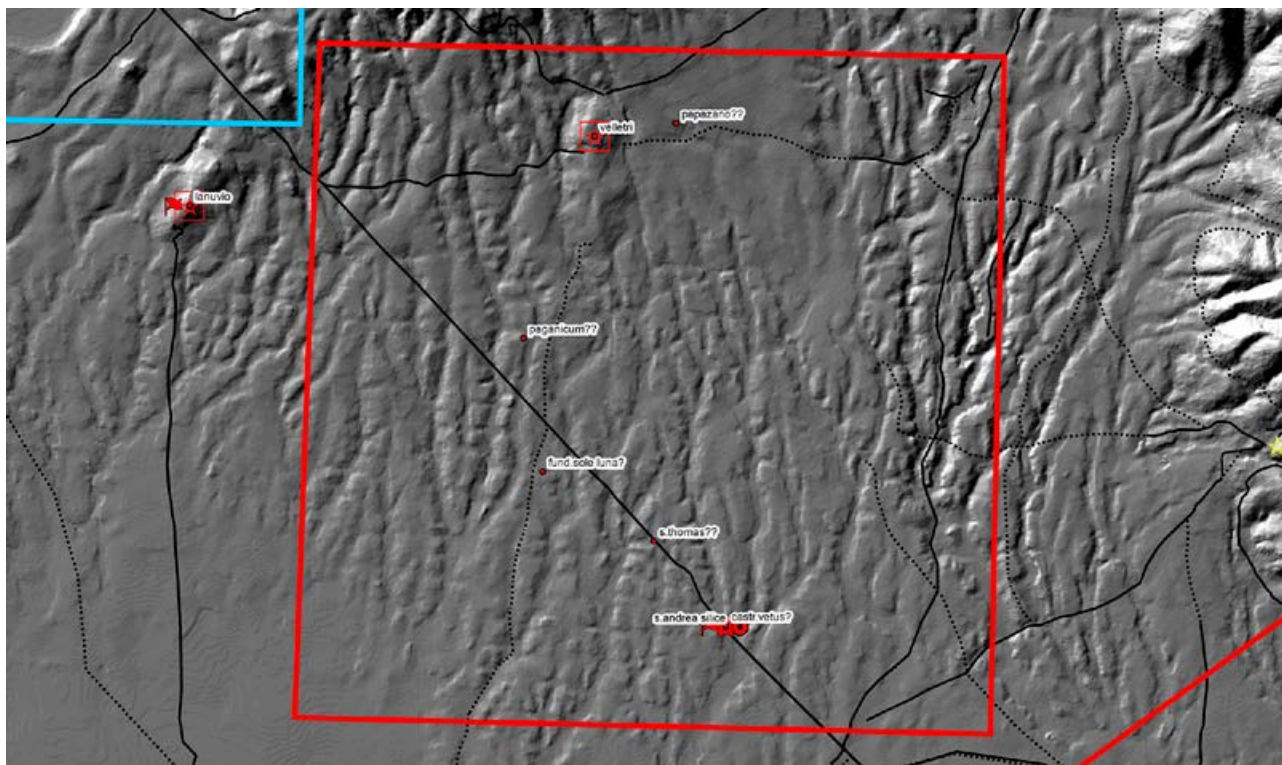


Figure 7.123. The Velletri-Le Castella key area in the 10th century.

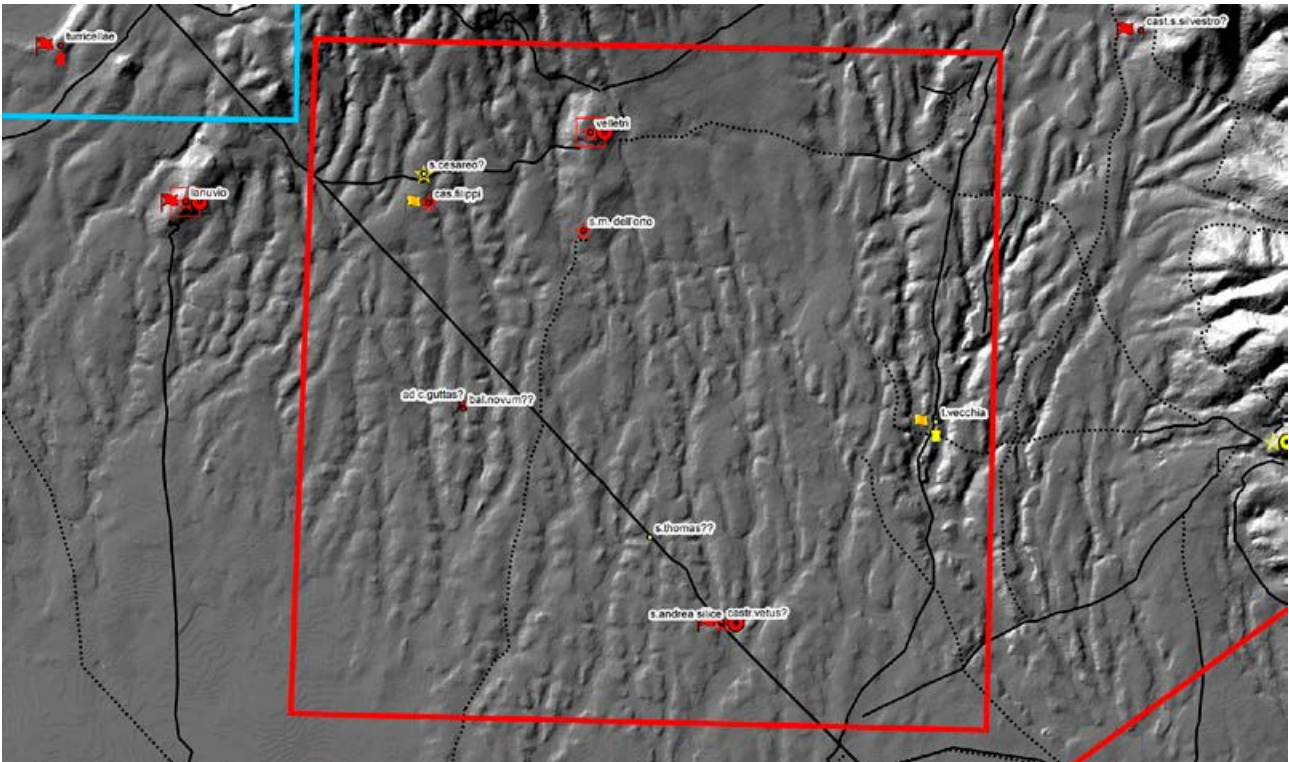


Figure 7.124. The Velletri-Le Castella key area in the 11th century.

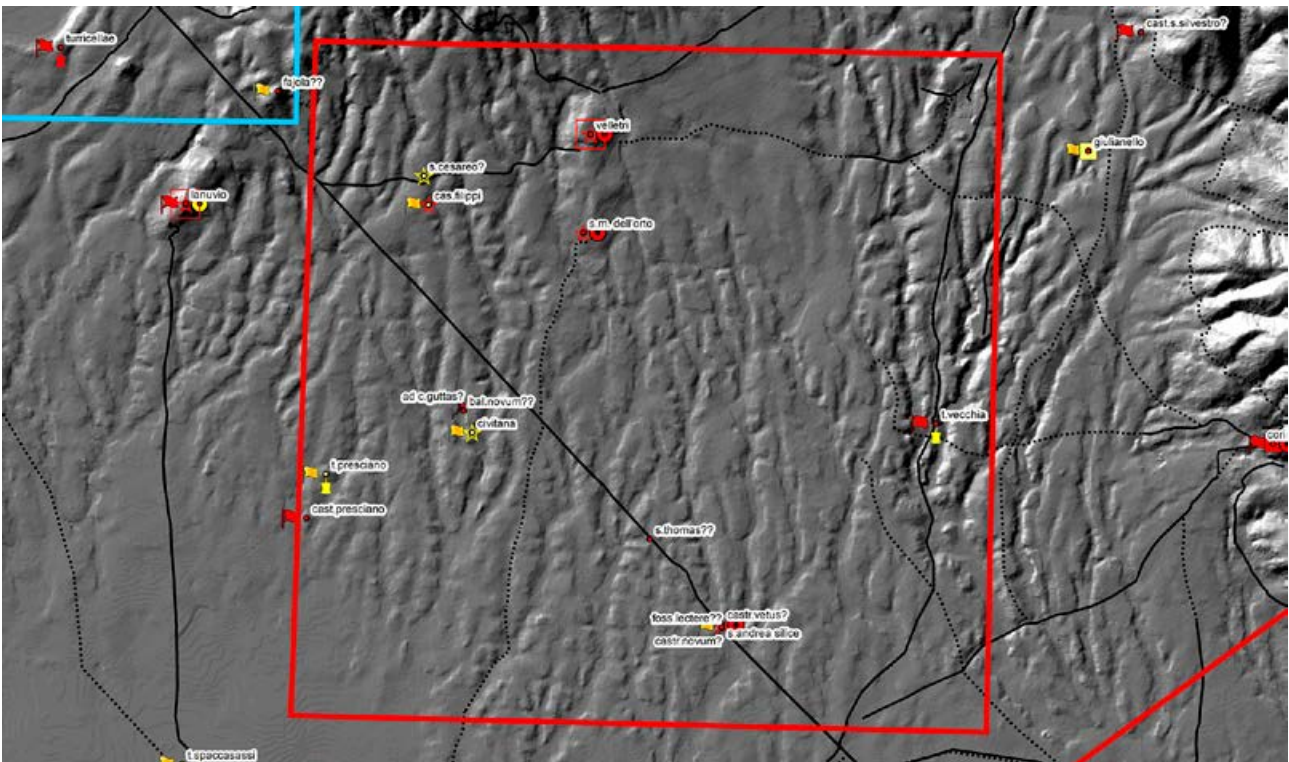


Figure 7.125. The Velletri-Le Castella key area in the 12th century.

S. Andrea (OLIMsite 138)¹¹². It could be that Novum and S. Andrea are one and the same *castrum*. The best-known toponym of the Le Castella site at the time was S. Andrea (in Silice, OLIMtoponym 187). Not much is known about

these *castra*, we only have their names listed in written sources. In contrast to the *castrum* Vetus, of which the connected *fundi* have been well documented, nothing is known about the estates connected to the later *castra*.

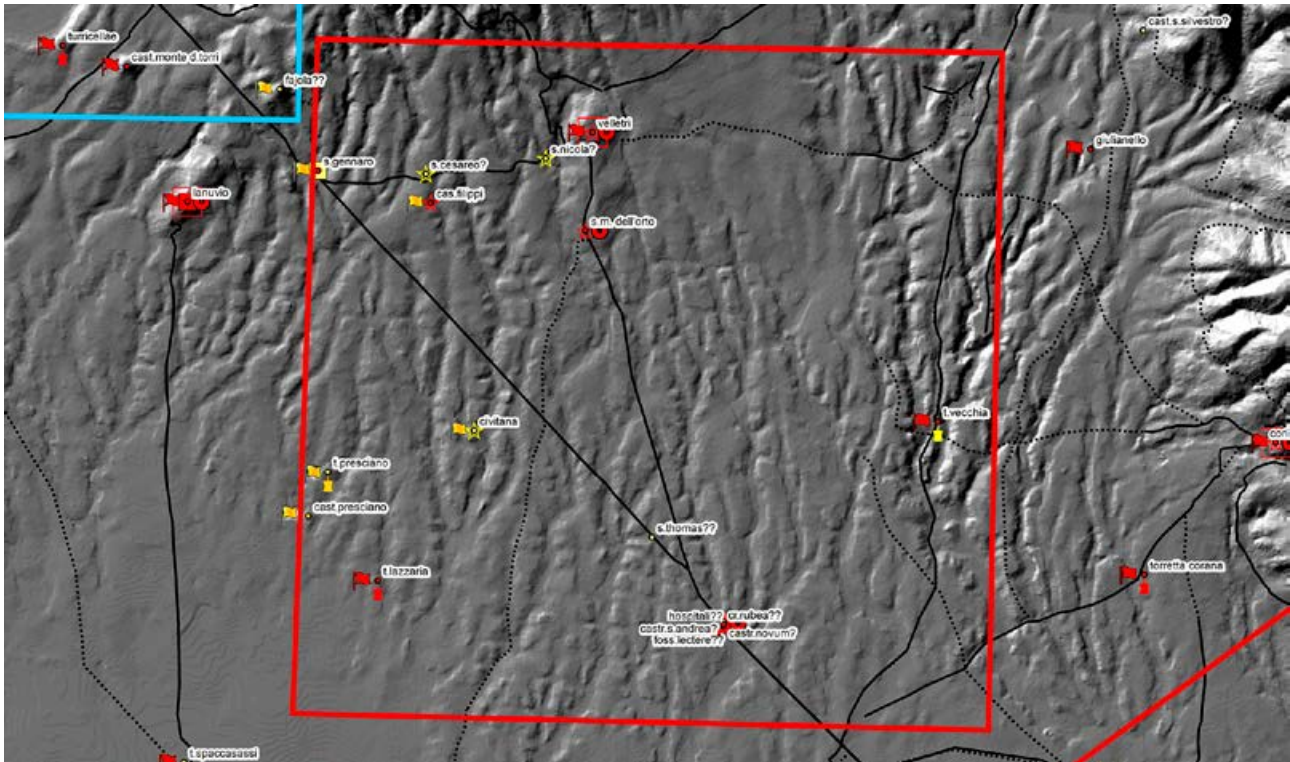


Figure 7.126. The Velletri-Le Castella key area in the 13th-14th century. All sites and icons have records in both the 13th and 14th century, with the exception of S. Cesareo (OLIMsite 293) and castle S. Silvestro (OLIMsite 289): these sites have no records for the 14th century.

We do know that at Le Castella a *hospitalis* (resting place) existed in the 12th and 13th century¹¹³.

The site of **S. Thomas** (OLIMsite 218, OLIMtoponym 188), one of the 10th century *fundi* related to castrum Vetus, likely saw continued occupation until at least the late middle ages, and possibly longer. It is documented in the 13th century and was still noted on an 18th century map.

At **Lanuvio** (OLIMsite 84) a town grew within the new fortified perimeter of the 9th century¹¹⁴. Lanuvio was documented for the first time as a *castrum* in the 13th century. This teaches us that the *castrum* phase can be preceded by a phase in which already a castle or fortification is built on the site. The same is also true for Ardea, located outside the current key area¹¹⁵.

Unlike most other key areas, the number of *castra* did not grow steadily in the wider Velletri area between the 10th and the 13th century. *Castra* pop up and disappear on the distribution map, in different parts of its landscape (figures 7.123-126). After castrum Vetus in the 10th century, the 11th century shows no record of a *castrum*. In the 12th century, **Cori** (OLIMsite 27) and possibly **Giulianello** (OLIMsite 290) were listed as *castra*, both located to the east of the key area. In the 13th century, Lanuvio to the west, and castrum Novum and castrum S. Andrea at Le Castella in its centre are documented *castra*. In the 14th

century a *castrum* was recorded at **S. Gennaro** (OLIMsite 132), in the north-west of the key area. In short, there is an inconsistent picture of *incastellamento* in this key area. At first it may have been the cradle of *castra* in our study area, certainly if we keep in mind that the castrum Fogliano was initiated from within Velletri (see 7.II.1.4.1). Subsequently, however, the 11th century shows no record of *castra*. This may be the result of a lack of surviving records, specifically on the site of Le Castella. Possibly the castrum Vetus is one of the many failed *incastellamento* efforts, as have been described by Toubert (1973) for the Sabina. Toubert however also concludes that *incastellamento* took place in several waves. It could be that this specific area was involved in the first but not in the next wave(s). All in all, it is unclear what causes the inconsistent picture of *incastellamento* in the wider Velletri key area. In the Theme on *Incassellamento* (7.III.2.2.2) the development of *incastellamento* in this area and its phasing is discussed in the context of Tyrrhenian southern Lazio.

In the 11th to 13th century, **Velletri** (OLIMsite 147) developed into an important town, as can be deduced from many new public buildings and fortifications, among which the still existing massive walls. The many privileges given to the town by the Roman commune and the papacy must have played a role in this boom¹¹⁶. A papal *breve* dated to 1101 shows the town's extensive

territory¹¹⁷. In 1183 a kind of semi-autonomous *commune* was founded, be it under strong influence of Rome. In the 13th century the town was governed in the form of a republic. The influence of the Roman commune would last until the late 14th century¹¹⁸.

To conclude: like in most other key areas, the site distribution maps gradually fill up between the 10th and 14th century, a process in which new sites with rural churches, isolated strongholds and monasteries dominate. Two sites were the dominant political and economic factors in the key area in this study period: Le Castella and Velletri.

7.III.1.4.2 Infrastructure

The Velletri – Le Castella key area remained an important crossroads in the research area, not only because of the many vital continuous roads that converged here (figure 7.127); also, the area historically had many (inter)regional connections: with Rome (the commune, papacy), with the Fogliano area (castrum Fogliano), Subiaco (S.Maria del'Orto). The main roads studied in the section on the previous study period likely remained in use: The Via Appia, the route from the Appian road to Velletri, and the Via Mactorina¹¹⁹.

One new route grew in importance from the 13th century onwards: The road from Rome to Marino, and southwards over Velletri to Cisterna (nr 1 on the infrastructure map, figure 7.127). The development of this route is related to the growing economic and political significance of the towns

of Marino and Velletri. The road is the only addition on the infrastructure map with respect to the previous study period¹²⁰. In the 14th century the success of this new road caused the section of the Via Appia between S.Gennaro and Le Castella to be abandoned for long-distance travel (nr 2 on the map). All traffic going southwards over the Appia towards Sezze-Priverno-Terracina would make a detour at S.Gennaro and over Velletri¹²¹. On the 1851 maps the abandoned part of the Via Appia is depicted as a secondary or dirt road, which it still is nowadays.

7.III.1.4.3 Economy, production and trade

For the previous study period it was postulated that the northern parts of the Velletrian key area were an agricultural production area for Rome, characterised by intensive viticulture and/or olive culture (7.II.1.4.3). Although it is feasible that agricultural production did not change much, given the intrinsic potential of the soils of the area, there is little evidence to make any statements on economic production for the current study period. With the exception of what is written in the *castrum* concession of 946, nothing concrete is known about land ownership and agricultural production in the current study period. There is some 11th and 12th evidence for Church possessions in the area (pope, S.Paolo fuori le Mura), be it not so widespread as in the 8th century. Agricultural production may have been managed from within Velletri, as the town had a massive territory in the early 13th century (see below). It may be postulated that the commune of Rome, which had much influence in Velletri, owned or leased

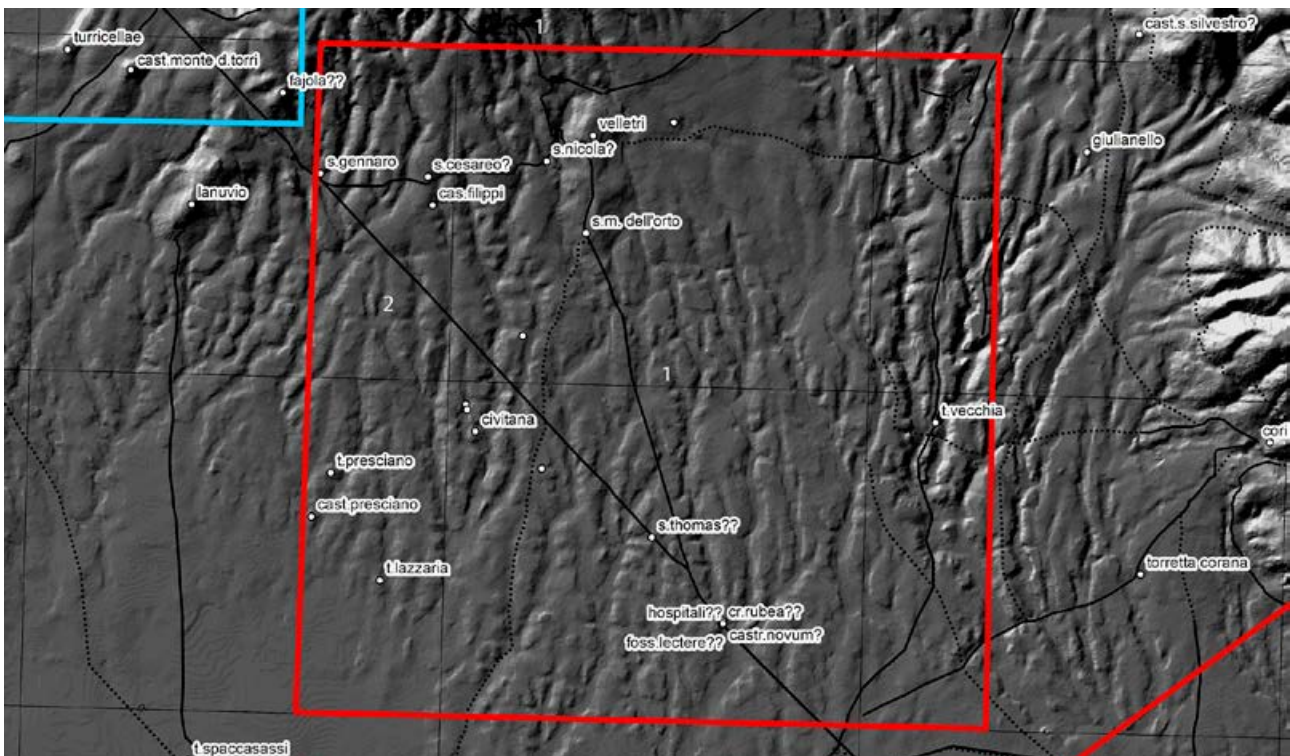


Figure 7.127. Infrastructure in the Velletri key area in the 10th to 14th century.

lands for agricultural production in the area during the high middle ages.

Besides Rome, there may have been a second focus of distribution of products from the Velletrian key area: the Tusculan realm during its heydays, the 11th and 12th centuries. In these centuries, Tusculan interests are recorded across the Alban Hills, stretching all the way to the coast (see 7.III.2.2.1.c1 The Tusculi).

7.III.1.4.4 Religion and worship

The suburbicarian diocese of Velletri continued to have close ties with the papacy¹²²; between 1058 and 1303 as many as five Velletrian bishops rose to the papacy¹²³. In 1150 the bishopric of Velletri was united with that of Ostia¹²⁴.

In the 11th century the newly founded church and Benedictine monastery of S.Maria del'Orto (OLIMsite 182) seems to have been of regional importance as the written sources record that both the Benedictine monasteries of S.Paolo fuori le Mura and Subiaco had interests here.

7.III.1.4.5 Geo-politics: power relations, struggle and control strategies; secular activities

The development of the new main route southwards Rome – Marino – Velletri from the 13th century correlates with the growing significance of the towns of (especially) Marino and Velletri. The geopolitical impact of this change in centre of gravity is shown in the success of the detour of the Via Appia at S.Gennaro. The fact that this road prevailed at the expense of the Appian route is a good example of causality in changing *connectivity*, an aspect that will be studied in Chapter 8.

With this new detour of the Appia the strategic stronghold of S.Gennaro (OLIMsite 132) gained in importance, and became a focal point in fierce local struggles. Built by the Savelli family in the 13th century, this fortress was later that century conquered by the Annibaldi. It was destroyed in 1303 by the inhabitants of Velletri, and again in 1370¹²⁵, which shows the importance of control over the site to the Velletrians.

In the 11th and 12th century several interests of the Tusculi have been recorded to the west of the current key area. As has been treated above (7.III.1.1.5), these interests, focussed on a number of strongholds, constitute an axis which may be interpreted as a “corridor” from the coast to the north. Among these are Lanuvio and Torre Spaccasassi, just to the west of the key area. To the south of the key area, Cisterna was owned by the Tusculi. Overall, the wider Alban Hills constituted the Tusculan

power-base during the 11th and 12th century. There is no proof that the Tusculi ever controlled Velletri.

Generically, the number of elite interests in the current key area is low in comparison to other parts of the study area. This may be due to the weight of Velletri, a town that was administered semi-autonomously and had a considerable territory (see 7.III.1.4.1). The recorded history of the town and the current study of secular interests make clear that elite families did not gain much foothold in this town, at least until the 15th century. This may be related to the towns’ long-lasting support from the commune of Rome and the papacy.

Like in most other key areas, the number of fortified positions steadily increases between the 11th and 13/14th century¹²⁶.

7.III.1.5 Fondi and its inland mountain range, from the 10th to the 14th century

7.III.1.5.1 General site distribution: monitoring of (change in) human activity

In the Fondi key area the number of available written sources increases sharply from the 10th century onwards, like in many other parts of the research area. For this key area, the availability of these sources causes the number of sites in the database to increase rapidly (see figures 7.128-7.130), because of the richness of the main source: the registers of the monasteries of Montecassino¹²⁷.

From the middle of the 10th century until the middle of the 12th century the duchy of Fondi was controlled by the Dukes of Gaeta. There is a lacuna in this Gaetan dominance: In 1072 Duchess Littefrida of Fondi donated a number of settlements in this key area to the monastery of Montecassino, as recorded in the *Tabularium Casinense*¹²⁸. This is the only reference to a large number of interests of this monastery in the area, and must be seen as a one-off incident, constituting a diachronic bias in the distribution maps of the current research area (cf. figures 7.128-7.130). In the 12th to 14th century Montecassino held only one of two settlements in the area north of Fondi.

The early **monastery of S.Magno (and S.Angelo)** (OLIMsite 238) continued to function and from the 11th century onwards acted as a monastic outpost for the large monastery of Montecassino¹²⁹.

The **church and monastery of S.Angelo** (OLIMsite 8) is mentioned for the first time in the *Tabularium Casinense* in 976, as a church¹³⁰. In the 11th century it is registered first as a monastery¹³¹. Given the fact that its walls are still standing it is conceivable that the church was in use until sub-recent times.

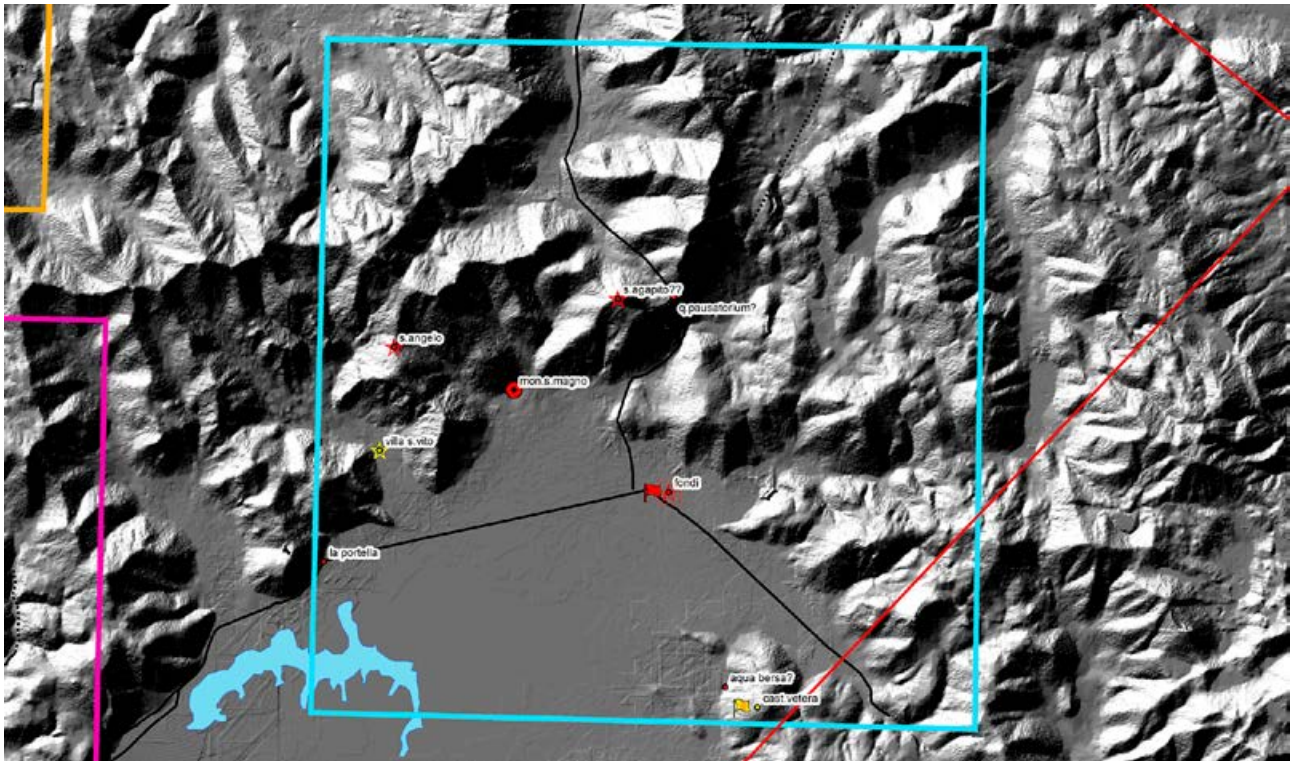


Figure 7.128. The Fondi key area in the 10th century.

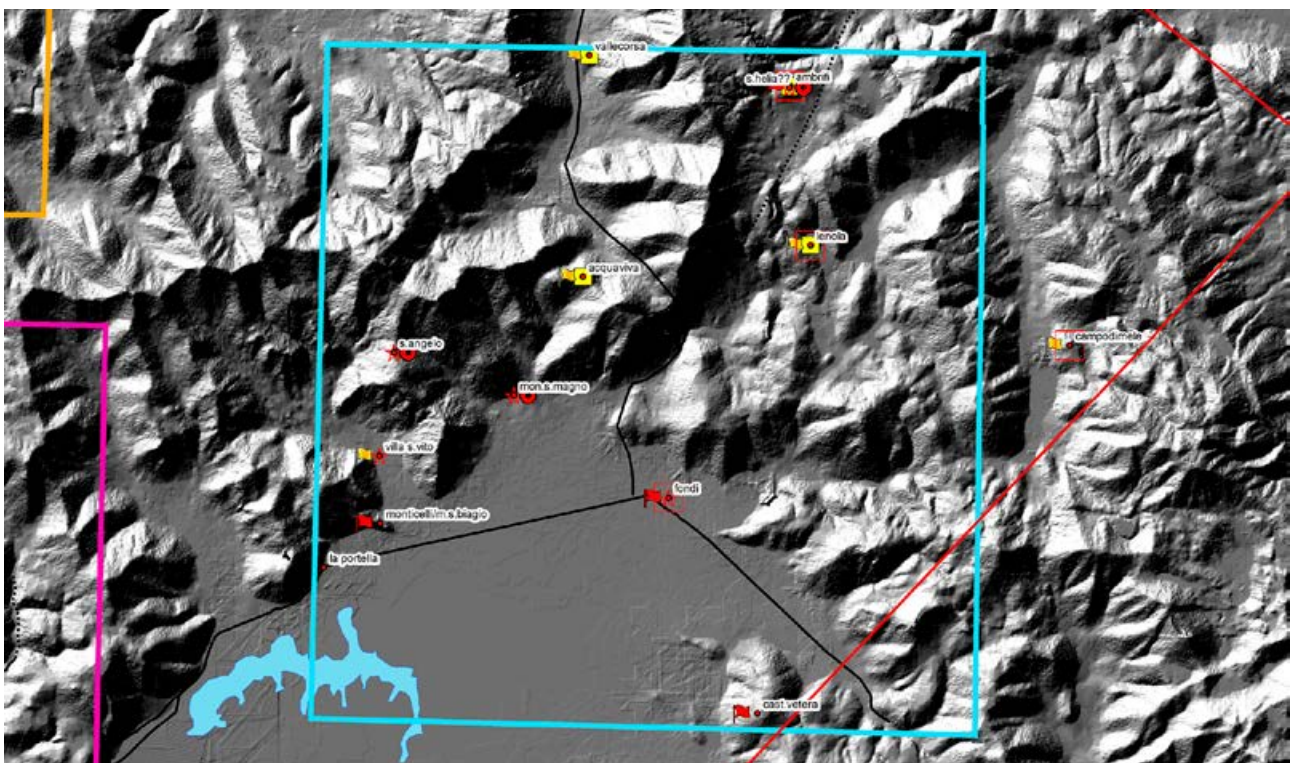


Figure 7.129. The Fondi key area in the 11th century.

Not much is known of what happened on the site of Villa S.Vito (OLIMsite 91) after the 8th century, but it may have been continuously used, possibly as seasonal dwelling, used in the summer against the malaria threat in the

lower Fondi plain¹³². In 1014 AD it is listed as “sancti viti”. In the high middle ages it developed into a fortified settlement. The site of S.Vito was possibly destroyed in 1535. In 1803 it was called Villa di Sancito.

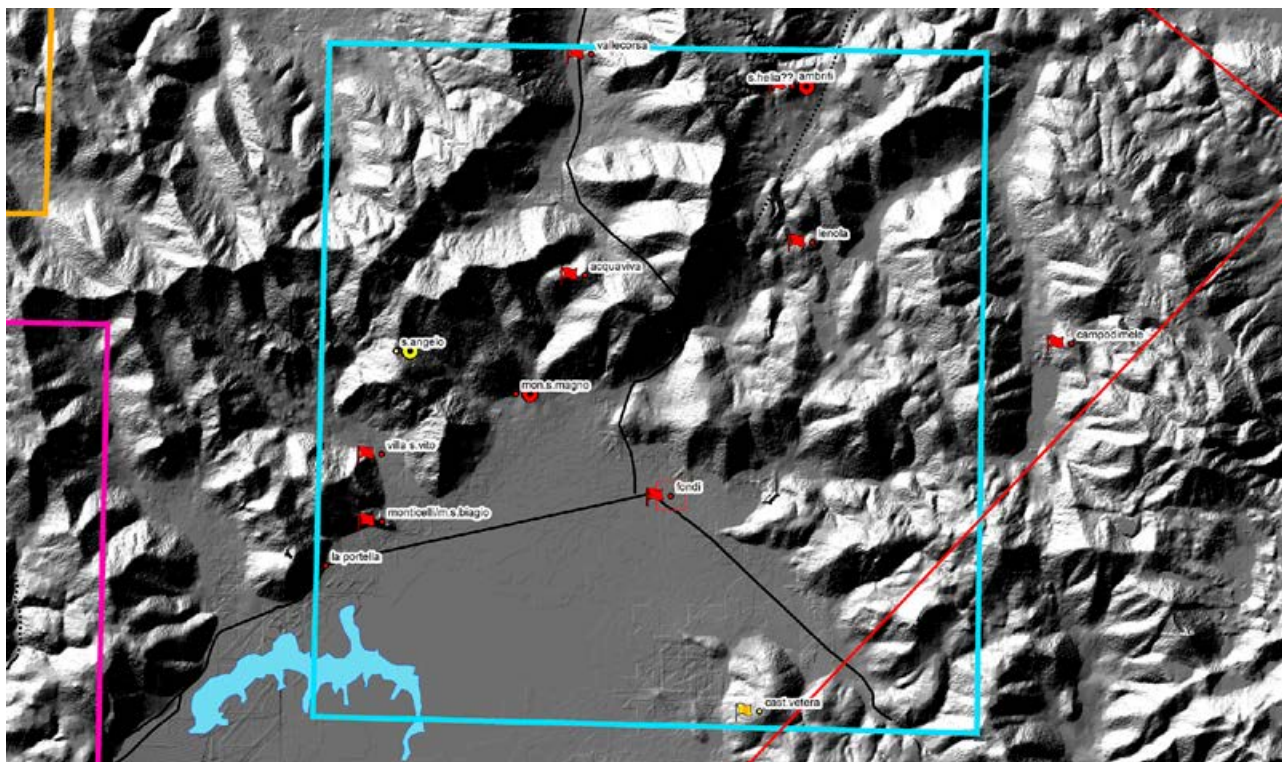


Figure 7.130. The Fondi key area in the 12-14th century. All sites and icons are valid between the 12th and 14th century.

Although the name Vetere (“in vetere”) is mentioned in the year 954¹³³, the first secure reference to **Castello Vetera** (OLIMsite 89) is the above 1072 donation. In 1158 Pope Hadrian IV granted to the bishop of Gaeta the “Ecclesiam Sancti Innocentii in vetera”, placing the western boundary of the Gaetan diocese at this castle. This act is repeated in 1170 by Alessandro III¹³⁴.

The Roman arch **La Portella** (OLIMsite 402) in the 13th century became a border marker between the Papal State of Lazio and the Kingdom of Naples¹³⁵.

To conclude on the Fondi key area between the 10th and 14th century: like in most other key areas, the site distribution maps show a gradual growth in sites. These sites are focussed mainly on the Fondi plain, its ridges and the Ausoni/Lepine valleys. The Fondi key area shows no secure records of *incastellamento*; only in the 11th century the sites of Vallecorsa, Acquaviva, Lenola and Ambrifi are listed as “castello”. Because of the ambivalent meaning of the word “castello” it is not certain if this concerns incastellisation, to a fortified settlement without colonisation of the populace, or a to castle proper¹³⁶. There is only one clear population centre in this key area: Fondi. The rest of the sites are *castelli*, with the exception of the seasonal dwelling at S.Vito. In contrast to most other parts of Tyrrhenian southern Lazio freestanding towers lack – like in the Northern Lepine Mountains key area¹³⁷. In this

period the Fondi key area can be characterised as a region of monasteries and castles.

7.III.1.5.2 Infrastructure

No historical specifics are known on the development of infrastructure in this period, although undoubtedly the Via Appia continued to be the most frequented route.

7.III.1.5.3 Economy, production and trade

There is no evidence available to comment on the economic activities in the Fondi key area; in all likelihood viticulture and pisciculture were important activities such as in the (late) Roman period.

7.III.1.5.4 Religion and worship

The diocese of Fondi continued as an independent bishopric, unlike several other dioceses in Tyrrhenian southern Lazio that were merged during the high middle ages (Velletri - Ostia, Sezze – Priverno – Terracina). In contrast to the Duchy of Terracina, the Dukes of Fondi focussed on the south, and their relationship to the papacy was much looser.

7.III.1.5.5 Geo-politics: power relations, struggle and control strategies; secular activities

The Duchy of Fondi became part of the realm of the Gaetan Byzantine Dukes in the middle of the 10th century, and would remain in their hands until the first half

of the 12th century¹³⁸. The earlier discussed donation of 1072 by Duchess Littefrida of Fondi to Montecassino is a short intermezzo in the Gaetan dominance. This document shows the enormous extent of the Duchy of Fondi at that point in time¹³⁹. The Duchy of Fondi changed hands several times in the following centuries: it was transferred to the Dell'Aquila family in 1140, which was of Norman heritage. It again became part of the Papal States at the start of the 13th century¹⁴⁰, and of the Kingdom of Naples in 1266. Later, in 1299, it passed to Roffredo Caetani, nephew of the powerful Pope Boniface VIII¹⁴¹. The Caetani reinforced the defences of the town by adding a second enclosing wall (1319-1329). The Duchy would remain in the hands of the Caetani until the end of the 15th century. The Duchy of Fondi controlled Sonnino in the 14th and 15th century¹⁴².

7.III.1.6 The southern Alban Hills and area to their west, from the 10th to the 14th century

7.III.1.6.1 General site distribution: monitoring of (change in) human activity

Albano Laziale (OLIMsite 155) remained an important population and religious centre, with strong ties to Rome as suburbicarian see. Several (anti)popes saw the town as an important asset in their struggle for power within the Church¹⁴³. The Savelli family owned parts of the town at intervals since the 10th century. In 1279 cardinal Iacopo Savelli described it as part of his possessions, calling it “castel Savello Albano”¹⁴⁴. In the 13th century the *palazzo*

Savelli was built inside the town. The *hospitales* of Cantaro was founded near Albano in the 12th century (OLIMsite 364)¹⁴⁵; a *hospitales* is a resting place for travellers, specifically for pilgrims¹⁴⁶.

Ariccia (OLIMsite 159) was the second large population centre on the Via Appia in this key area. The “Castrum Ariciensis” is mentioned as part of the Tusculi possessions in 990 AD. According to Toubert, Ariccia was a *castrum routier ou péager* (toll)¹⁴⁷; the idea of taking toll on this location is not unsound, given Ariccia’s strategic position on a ravine passage – the concrete evidence for this hypothesis lacks, however. Like Albano, Ariccia has strong historical links with Rome: in the 11th century the papacy owned the town. In the later part of that century it was owned by the S.Clemente of Rome¹⁴⁸. In the 12th century, Pope Alexander III entrusted the town to the Malabranca family. In the early 13th century, it was acquired by Honorius III of the Savelli family¹⁴⁹.

As was discussed above (7.II.1.6.1), the very large **fundus Soranianus** (OLIMsite 15) is listed as a domain of the monastery of Subiaco in the 10th and 11th century. Why the monastery of Subiaco owned such a large administrative unit in these parts is not known, nor why it was finally dissolved, after the 11th century.

Castel Gandolfo (OLIMsite 135) functioned as a settlement in the 11th century, owned by the monastery of



Figure 7.131. The Alban Hills - west key area in the 10th century.

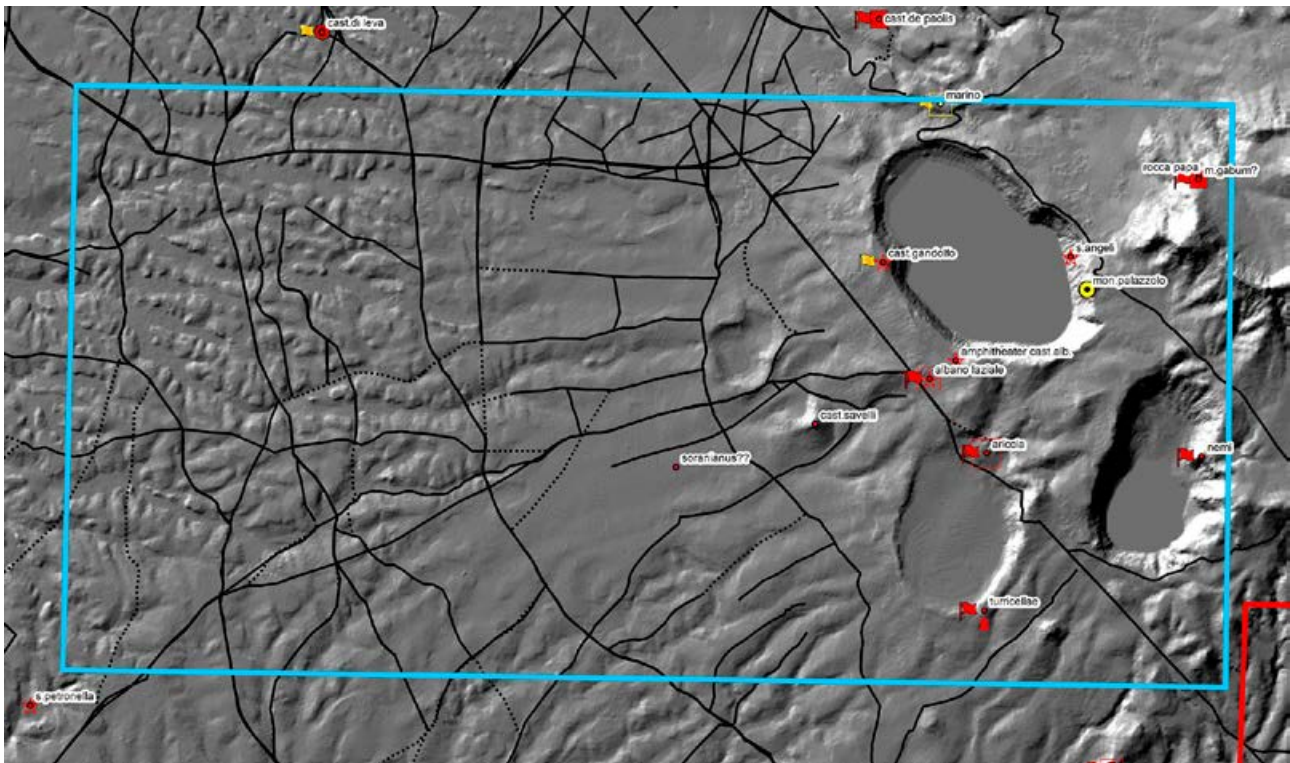


Figure 7.132. The Alban Hills - west key area in the 11th century.

Grottaferrata (see figure 7.132). However, an earlier origin has been suggested¹⁵⁰. In the 12th century the Gandulphi family constructed the fortress here. It was part of the Savelli *patrimonium* in 1279¹⁵¹. In the year 1389 it became the possession of the Capizzucchi family.

At Castel Savelli (OLIMsite 156) the former Roman residence had been re-occupied by the early 11th century: in 1017 and 1024 a *fundus* and *locus Savello* were recorded. Castel Savelli is listed securely as a castle first in 1279¹⁵². It became the home base of the powerful Savelli family¹⁵³. It may be suggested but cannot be proven that the Castel Savelli earlier was a *domusculta* centre, given the toponym “Sabellum” associated with the *domusculta*, and given its strategic position on a hill dominating the area, which may provide a parallel with *domusculta* centres in northern Lazio (see 7.II.1.6.1). The *opera saracinesca* walls found on the site may be contemporary with the *domusculta*; the broad dating of these walls, however, between the 9th and 13th century¹⁵⁴, makes the association of these walls with the *domusculta* uncertain. De Rossi dated these walls more precisely to the 13th century¹⁵⁵. At the start of the 13th century Monte Savello became a large agrarian centre for which farmworkers were recruited from Ariccio¹⁵⁶.

Situated to the north of the current key area (figure 7.132), the site of Castel di Leva (OLIMsite 374) was first documented as “casale castellione”, belonging to S. Paolo fuori

Le Mura, in a *bolla* dated to 1081¹⁵⁷. Like Castel Romano (OLIMsite 2) it is unknown what this *casale* looked like, as the contemporary meaning of *casale* can be a “village” or “agricultural centre” (cf. 6.I.2). In 1279 the site is listed as “castrum leonis”, owned by the Savelli (of Castel Savelli – Albano Laziale) (see above here).

In the 12th century, the western part of the key area begins to show activity again (see figure 7.133). At Schizzanello (OLIMsite 384) a first reference was made to a *casale* “quod vocatur Squezanellum”¹⁵⁸. At Mandriola (OLIMsite 383) activity seems to have started in the 12th century, although the first secure reference to a “casale mandra cum ecclesia et aliis suis pertinentis” was made in a *bolla* by Innocentius III, dated to 1203¹⁵⁹. Both at Schizzanello and Mandriola, it is not known what the *casale* looked like.

Until the 13th century, activity in this key area is restricted to the Appian route and the Alban Hills (cf. figures 7.131-7.134). There large towns/villages, *castra*, rural churches and monasteries are found. In general, the number of villages increases in the 12th century. In the 13th century, there seems to have been a sharp increase in activity, in which the western part of the key area is filled in (figure 7.134). The historical evidence shows that several *casali* developed in that part of the key area. Overall, defensive positions dominate from the 12/13th century onwards: i.e. *castra*, isolated roadside watchtowers and other types of

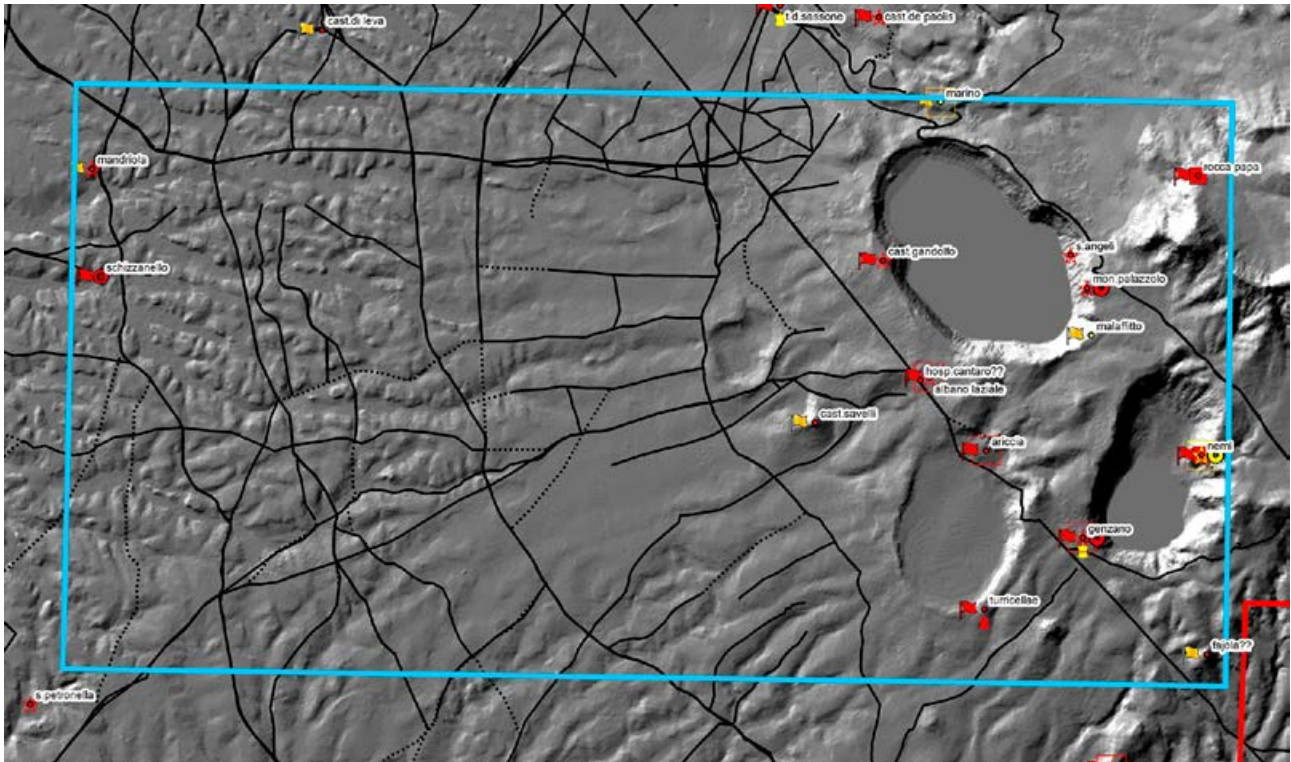


Figure 7.133. The Alban Hills - west key area in the 12th century.

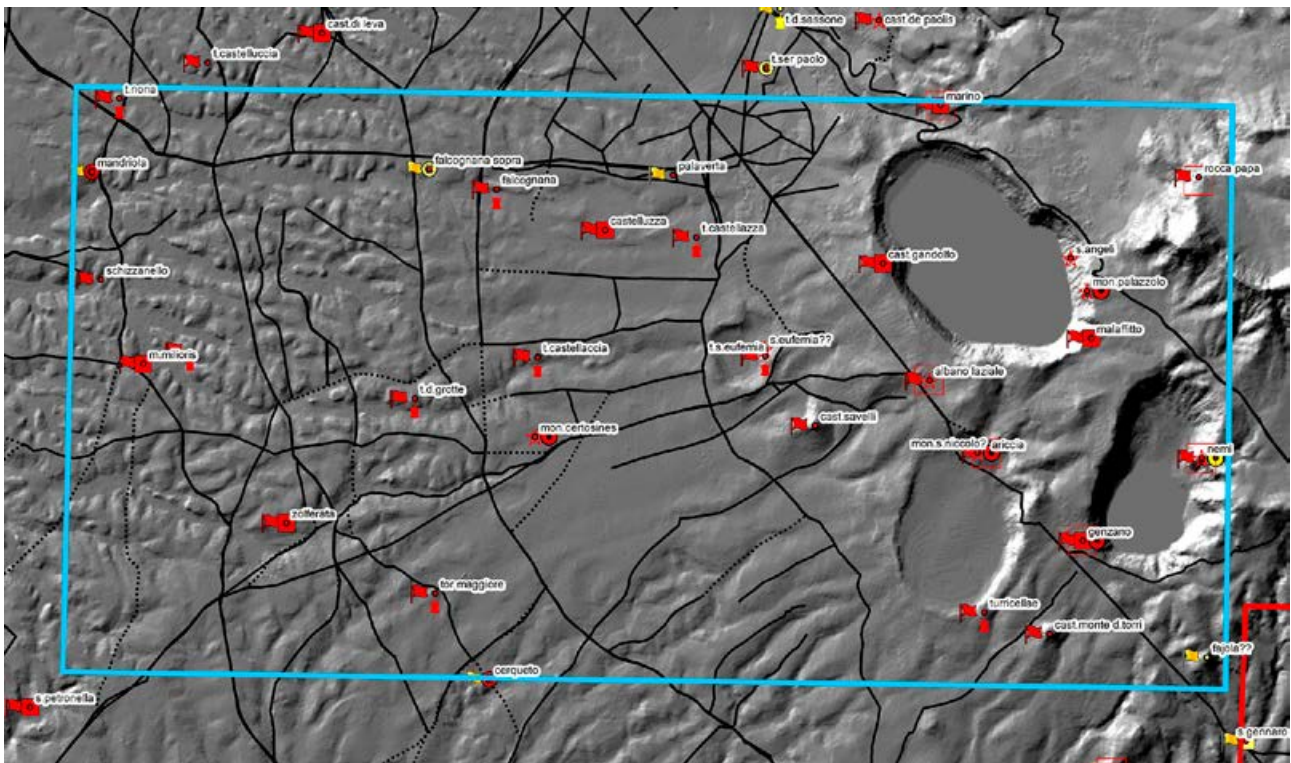


Figure 7.134. The Alban Hills - west key area in the 13-14th century. All 13th century sites remained occupied in the 14th century, with the exception of Falcognana di Sopra, which is added in the 14th century, and S.Eufemia, which was no longer occupied in that century. Except for Castelluzza and Zolferata, the castra icons relate to the 13th century only.

fortified locations. Many of the watchtowers were built on top of Roman villas, for example the **Torre delle Grotte** (OLIMsite 376), **Torretta di Schizzanello** (OLIMsite 384),

the tower on **Site 62 forma italiae** (OLIMsite 11)¹⁶⁰, the **Torre della Castelluccia** (OLIMsite 382) and **castrum Santa Petronella** (OLIMsite 389). Three new monasteries

developed in the 13th century: one inside the town of Ariccia, the **monastery of Palazzolo** (OLIMsite 272) and the **monastery of the Certosines** (OLIMsite 378).

Incastellamento developed all over the key area, after being initially focussed on the Alban Hills (figure 7.134). After the foundation of the *castrum* at Ariccia in the 10th century, and at Nemi and Monte Gabum / Rocca di Papa (OLIMsite 175) in the 11th and 12th century, *incastellamento* in this key area was at its peak in the 13th century. In that century, *castra* are recorded at Castelluzza (OLIMsite 366), M.Milioris (OLIMsite 385), Zolferata (OLIMsite 386), Genzano (OLIMsite 136), Malaffito (OLIMsite 145), Castel Gandolfo (OLIMsite 135), and just outside the key area at Castel di Leva (to the north, OLIMsite 374) and S.Petronella (OLIMsite 389) to the south. In the 14th century, Castelluzza and Zolferata are the only recorded *castra* left¹⁶¹. There is not one party that can be singled out as most active in the *incastellamento*. The Annibaldi, Frangipane, Orsini as well as the Savelli all controlled at least one *castrum* in the 12th or 13th century.

From the 13th century onwards Marino (OLIMsite 144) became an important town, and a stake in the struggles between competing families and within the Church. Scholars do not agree on its foundation: the town was either founded by the Tusculi in the 11th century or by the Frangipane in the 13th century¹⁶². In the year 1230 it is listed as a *castrum* managed by the Frangipane. In 1266 it fell to the Orsini. The medieval town centre holds two fortresses, built by the Frangipane and the Orsini. In the year 1379 the town was a battleground in the struggle between Pope Urban VI and anti-Pope Clemens VII. It has been suggested that Marino had a defence system of its own, of which among others Castel Palaverta (OLIMsite 365, on the other side of the Via Appia) was part¹⁶³. The rise of Marino, together with the continuous importance of Velletri, likely was the main reason for the diversion of the main artery from Rome southwards from the Appian route to the road over Marino – Velletri – Cisterna¹⁶⁴.

7.III.1.6.2 Infrastructure

Because of the unremitting (economic) interaction of Rome with its hinterland it is likely that many of the north-south running veins west of the Alban Hills continued to be frequented during the high middle ages. That being said, the evidence is not abundant between the 9th (the end of the *domuscultae*) and the 11th century. Functioning sites along these routes only come into sight from the 12th century onwards. The Via Appia, however, remained the most important route, although from the 13th century onwards it shared this position with the new route from Rome to Marino, and southwards over Velletri to Cisterna (OLIMinfra), as was discussed (7.III.1.4.3).

7.III.1.6.3 Economy, production and trade

In the 8th and 9th century, the *domuscultae* and ecclesiastical *fundi* of this key area were involved in agricultural production for Rome, as was discussed (7.II.1.6.3). In the current study period, Rome must have remained the area's main market, and it is feasible that agricultural production did not change much. However, the historical evidence on what was produced, and how is meagre. It may be assumed that much of the agricultural activities were deployed from within the *casali*, as there are several references to these rural villages or small agricultural centres (see 6.I.2). From within *castelli* agricultural production took place as well, as can be seen at Castel Savello.

7.III.1.6.4 Religion and worship

Castra Albana (OLIMsite 155) remained an important ecclesiastical centre, as suburbicarian diocese with close ties to Rome. With a high concentration of churches and the presence of large catacombs it attracted many pilgrims.

In the late 10th century the archpriest of Ariccia is mentioned, apparently a person with some worldly possessions, as he donated a vineyard to the monastery of S.Ciriaco at Rome¹⁶⁵.

7.III.1.6.5 Geo-politics: power relations, struggle and control strategies; secular activities

This key area was one of the grounds, outside Rome, on which the early struggles between elite families took place, from middle of the 10th century onwards (see 7.III.2.2.1.c Secular elite activity⁷). This part of the Appian route developed into a crossroads of elite interest: *Castra Albana / Albano Laziale* (OLIMsite 155) may have become property of the Savelli at that time¹⁶⁶. “*Castrum Ariciensis*” (Ariccia, OLIMsite 159) and Nemi (OLIMsite 176) are documented as part of the assets of the Tusculi¹⁶⁷. The Crescentii had interests in *fundus Soranianus* (OLIMsite 15), at nearby *castrum Vetus* (OLIMsite 133) and its satellite sites (see 7.III.2.2.1.c1 The Tusculi), and Velletri (OLIMsite 147), and owned Monte Crescentuli (OLIMsite 186), where a church has been recorded¹⁶⁸.

In the next centuries several families would get involved or extend their interests in the area, or disappear from the radar. In the 11th century the Crescentii are wiped off the table, while their rivals, the Tusculi, had newly recorded interests at Rocca di Papa (OLIMsite 175), Marino (OLIMsite 144) and Castel Paolis (OLIMsite 285). To the south of the current key area, the Tusculi seem to have started to control the area between the coast and the Alban Hills with interests at Lanuvio (OLIMsite 84) and possibly Torre di Spaccasassi (OLIMsite 570). The Tusculi developed into the most important player in these parts, owning or controlling much of the Alban Hills and areas to their west all the way to the coast until the late

12th century. Notable among other elite parties are the Frangipane, who are listed as owners of Nemi during the 11th century. The Frangipane had interests along the future main new route at Marino and Nemi in the 12th century. The Savelli had interests along the Appia (Castel Savelli, Albano Laziale, Ariccia and Castel Gandolfo) and the northern Transversale (Castel di Leva) in the 13th century. The Annibaldi seem to have uphold a less clustered / geographically broader interest area in that century, being involved at Monte Milioris (OLIMsite 385) in the west of the key area, at Malaffitto (OLIMsite 145) to the east, and at San Gennaro (OLIMsite 132). In the 14th century, the Orsini had interests on several positions along the Appian and Rome-Marino-Velletri route.

The Alban Hills west key area intrinsically was vulnerable for intruders from the sea and the south because of the many roads to this area. There is little archaeological and historical evidence for defensive measures taken in the previous study period. In contrast, the current study period is full of it, specifically from the 13th century onwards, when a large number of strongholds were built, especially on the north-south roads in the western part of the key area, and a grand total of 8 *castra*. The causes of this eruption of building activities are difficult to identify¹⁶⁹.

7.III.1.7 The Priverno-Fossanova key area, from the 10th to the 14th century

7.III.1.7.1 *General site distribution: monitoring of (change in) human activity*

Probably because of the wet conditions in the plain, the inhabitants of **Privernum** (OLIMsite 25) left for the new uphill town of **Priverno** (OLIMsite 58). The exact date of this transfer is not known. The oldest buildings in Priverno may date to the 9th or 10th century¹⁷⁰.

In 1159 troops of Frederick Barbarossa devastated the town¹⁷¹. The current walls of the town date to the 13th century¹⁷². Priverno for a long time was a papal possession, but its inhabitants are reported to have strived for an independent commune, and now and then (successfully) rebelled against papal control, in particular in 1307 and at the end of the 14th century – when the Caetani had much influence in the town¹⁷³. During the 13th and 14th century, parts of the town were given in concession by the pope to the Counts of Ceccano and to the Frangipane.

The site of Privernum in the plain continued as a settlement until at least the 12th century; the medieval church remained in use until the 12/13th century¹⁷⁴. It is unknown if and until when the see was continued here, as was suggested by De Rossi¹⁷⁵.

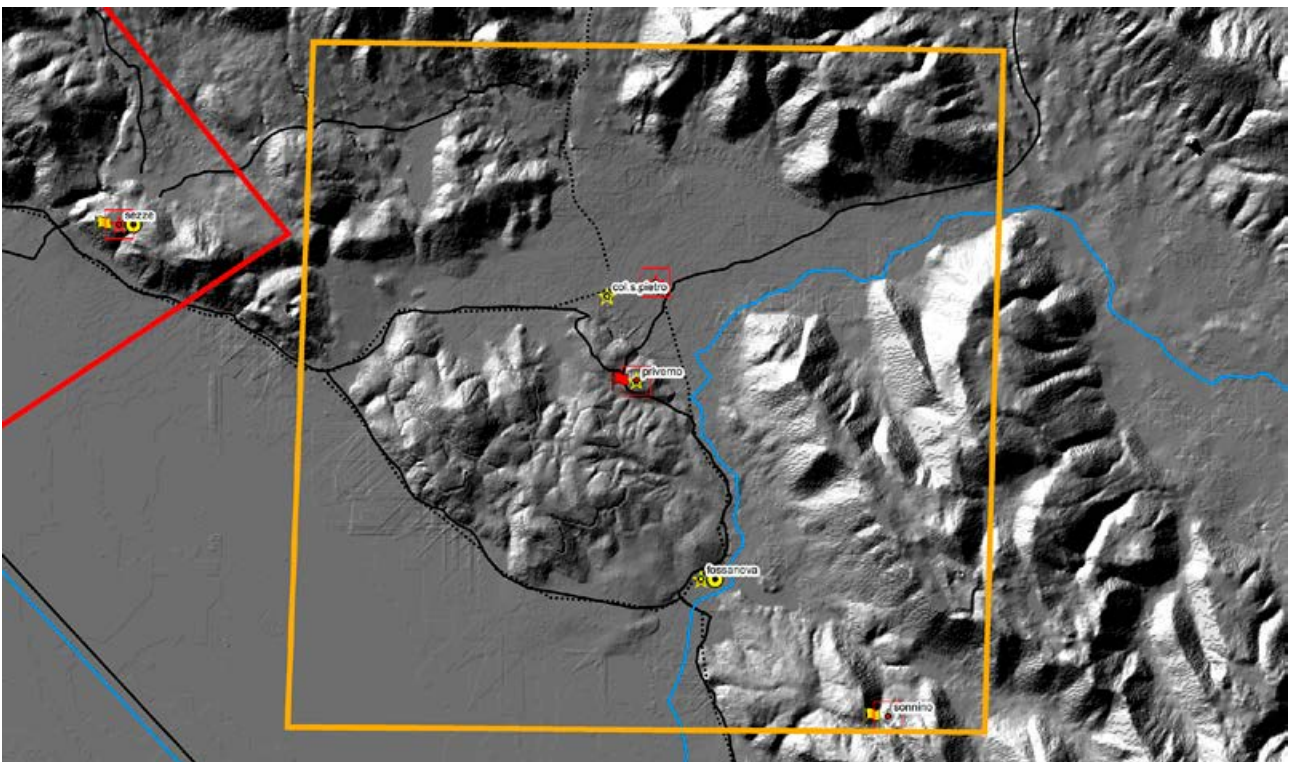


Figure 7.135. The Priverno-Fossanova key area in the 10th century.

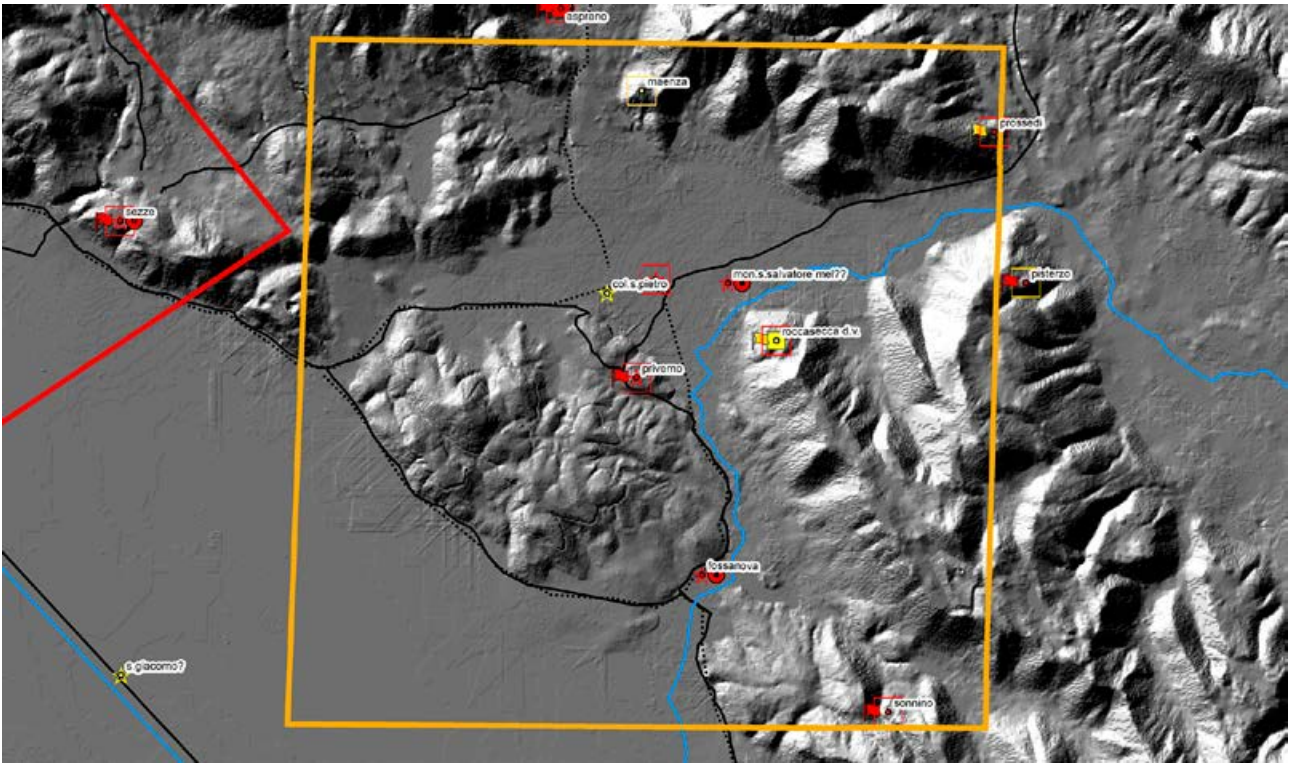


Figure 7.136. The Priverno-Fossanova key area in the 11th century.

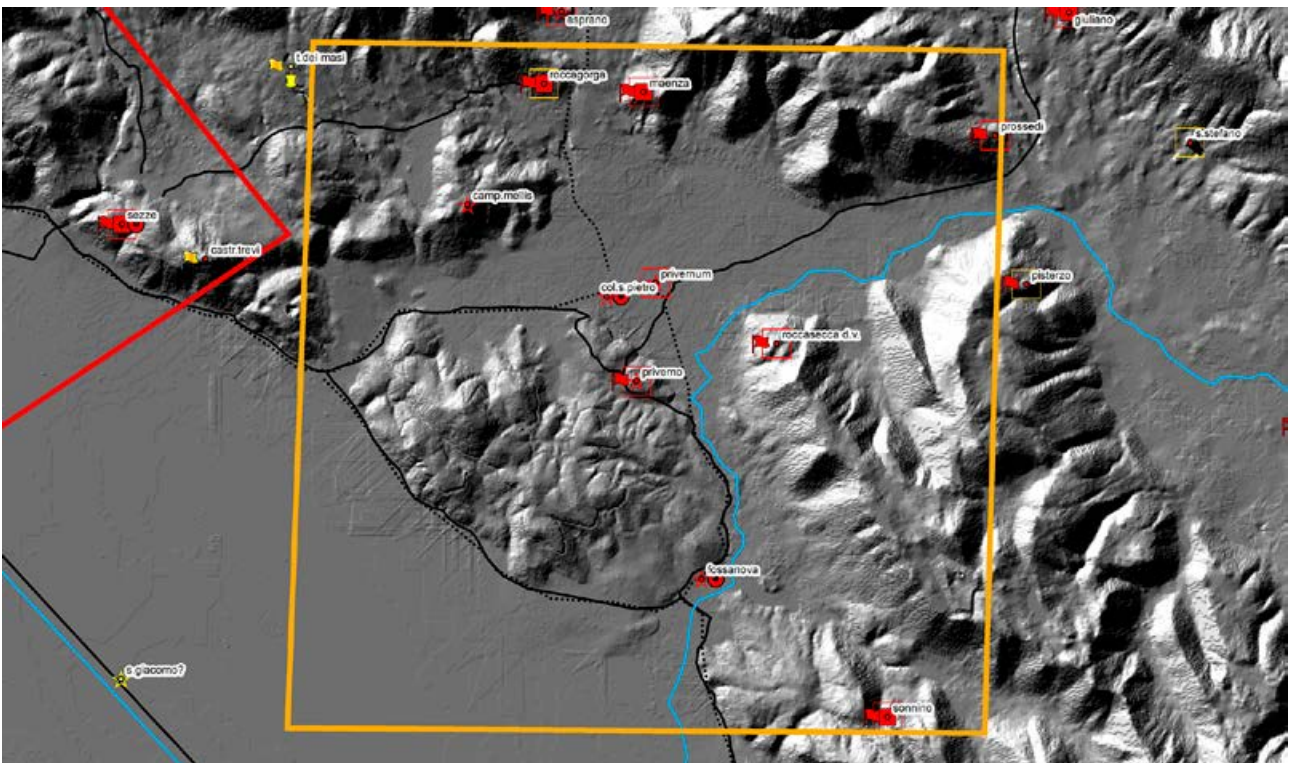


Figure 7.137. The Priverno-Fossanova key area in the 12th century.

It is possible that the **monastery of Fossanova** (OLIMsite 9) is one of the few sites in Tyrrhenian southern Lazio that saw continued activity from a Roman villa into a monastic settlement in the high middle ages. The fragments of paintings in the refectory provide us with the

date of earliest monastic activity here, in the 10-11th century¹⁷⁶. The monastery appears first in the written sources at the end of the 11th century. It became a powerful player in the wider region, not only as religious centre, but also as economic force. The monastery acquired much of the

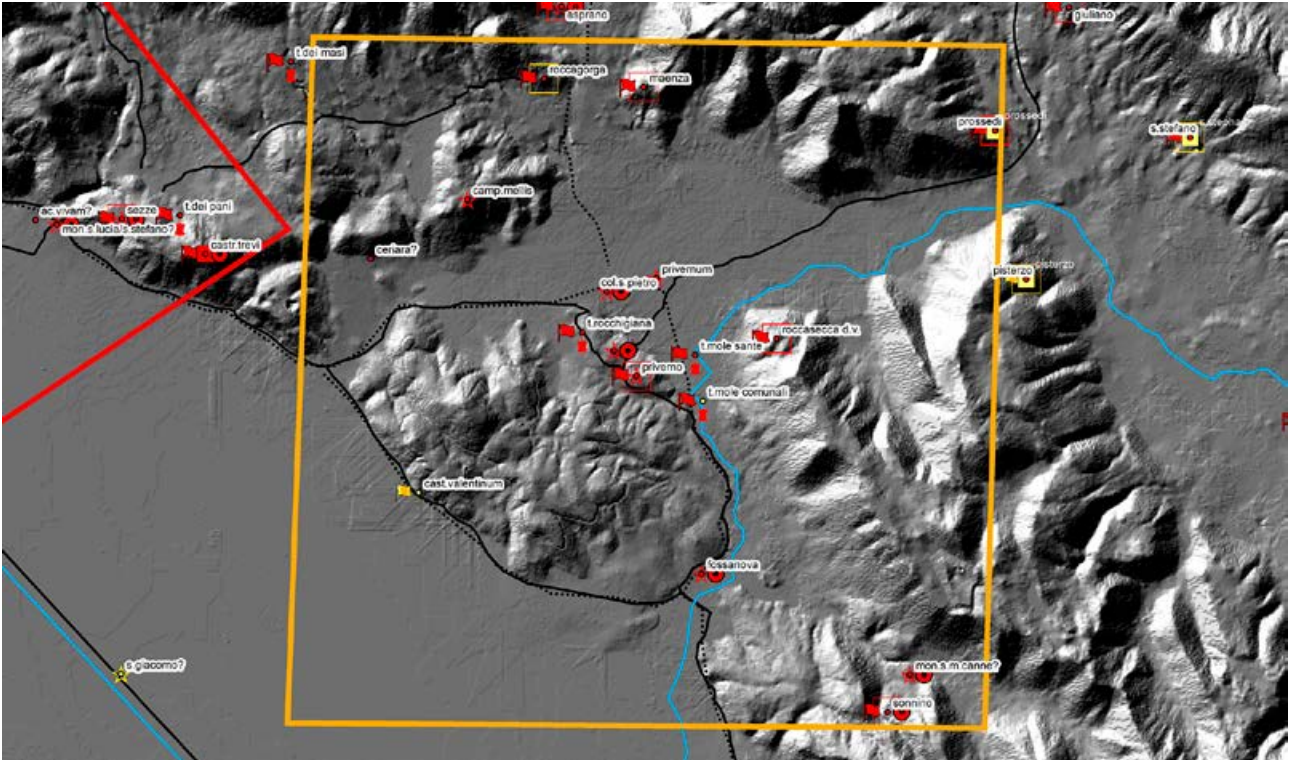


Figure 7.138. The Priverno-Fossanova key area in the 13-14th century.

grounds in the Sacco Valley and along the Amaseno for agricultural production, and seems to have exploited the forests of the mountains (see below 7.III.1.7.3).

The site of **Sonnino** (OLIMsite 61) around the change of the millennium is referred to as “sumnium” and “Sompnino”. In 1175 Sonnino is listed as a *castrum*¹⁷⁷, as part of the territory of Priverno. The *Signori* of Sonnino displayed a competitive attitude towards their neighbouring villages, and waged war against among others Priverno, Sezze and Veroli in the 13th century¹⁷⁸. Inside the town a monastery evolved, S.Maria de Cannis; it is mentioned for the first time in 1333¹⁷⁹.

Like in most key areas, the number of fortified positions steadily increases between the 11th and 13/14th century (figures 7.136-138). Around Priverno three towers were erected in the 13th or 14th century: **Torre Mole Sante** (OLIMsite 286), **Torre Mole Comunali** (OLIMsite 207) and **Torre Rocchigliana** (OLIMsite 284). Although the building technique of the Torre Mole Sante and Torre Rocchigliana seems to date to the 14th century¹⁸⁰, some scholars believe these towers were part of the reconstruction phase of Priverno, after the destruction by Frederick Barbarossa in 1159¹⁸¹.

Like in the pedemontana key area, the *castrum* phase was at its peak in the 12th century with documented *castra* at **Rocagorga** (OLIMsite 54), **Maenza** (OLIMsite

56), **Giuliano** (OLIMsite 297), **Sonnino** (OLIMsite 61) and **Sezze** (OLIMsite 17). In the 13th century, no *castra* are documented, with the exception of Sezze. In the 14th century, three *castra* are mentioned in the *Rationes Decimarum* (1328-1329)¹⁸²: **Prossedi** (OLIMsite 201), **S.Stefano** (OLIMsite 256) and **Pisterzo** (OLIMsite 202). However, as was learned from the study of Toubert (1973), the status of 14th century *castra* is ambiguous: a documented “castrum” may denote a classical *incastellamento castrum* or fortified settlement in general¹⁸³. Therefore, the 14th century “castra” are depicted as possible *castra* on the maps (by the use of a yellow symbol, see figure 7.138).

In the 13th century, the site of **Ceriara** (OLIMsite 65) again saw (unknown) activity, as is proven by the pottery wares found¹⁸⁴.

The site of a republican villa with large polygonal walls at the foot of the Lepine Mountains south of Priverno appears in the written sources as “*castellum Valentinum*” (OLIMsite 210) in the 13th century (see figure 7.138)¹⁸⁵. There is no proof that there actually was a medieval phase with fortifications, which may be implied by the word “castellum”. Several authors explained the toponym by suggesting that the local population saw the polygonal walls of the villa as an ancient fortification, and maintained that there was no actual medieval occupation phase¹⁸⁶. In future research a survey of the vestiges and a study of the site’s pottery could elucidate the case¹⁸⁷.

To conclude: like in most other key areas, the site distribution maps show a gradual growth in sites, in which – more than elsewhere – (fortified) villages are present, most relatively small, but also many monasteries, and around Priverno several isolated towers appear. The dominant forces in the area are the town of Priverno and the monastery of Fossanova.

7.III.1.7.2 Infrastructure

The main artery from Rome southwards ran along the pedemontana and through Priverno and then south again along the Amaseno towards Terracina¹⁸⁸. Although sites along the Appian road in the Pontine plain again show evidence for activity from the 10th century onwards, this road never resumed its position as the main route southwards; most traffic still passed along the Amaseno valley, as was still visible on post-Renaissance maps¹⁸⁹. The 13th century document on the “castellum Valentinum” (OLIMsite 210, see above 7.III.1.7.1) confirms the use of a “via trasversa” (OLIMinfra 57), which kept to the pedemontana along the base of the mountains south of Sezze. This route in all likelihood was used for local traffic only, and mainly in the dry season, as the low-lying terrain may have been seasonally flooded, making it difficult to maintain a permanent road for intensive use¹⁹⁰.

7.III.1.7.3 Economy, production and trade

The Priverno – Fossanova key area has an extensive archaeological research record for the high middle ages, most of all as a result of the long running excavations and medieval ware studies on the sites of Privernum, Fossanova and Ceriara.

The pottery assemblages at Privernum clearly show that the sites' economy in the 8th to 10th century was focussed on the southern-most Lazio and Campania (see 7.II.1.7.3). From the 10th century onwards, the dominance of southern wares is less strong.

A *capanna* found at Privernum, in use until probably the 12th century, has been given in evidence for pastoral activity in the Amaseno Valley in the middle ages, although it may also have had a different function¹⁹¹. It is imaginable that the Cistercian monastery of Fossanova was involved in the transhumance activities between the (sub)Apennines and the Pontine plain that have been attributed to the Cistercian monastery of Casamari, situated in the Ernici mountains¹⁹².

Privernum and Astura settlement are the only secure production sites of *ceramica dipinta in rosso* of the second period (11th to 13th century) in Tyrrhenian southern Lazio. *Dipinta in rosso* wares from Privernum found

their way across many parts of (inner) southern Lazio and beyond¹⁹³.

The monastery of Fossanova acquired large sections of the Amaseno Valley during the high middle ages. The Amaseno Valley is an area with very rich soils, especially on the alluvial deposits of the Amaseno. The exploitation of these soils must have contributed to the monasteries growing wealth. There is evidence for contemporary conflicts between the community of Priverno and the Fossanova monastery on the division of rights on the lands¹⁹⁴.

The fact that the Lepine forests were of economic value in these centuries appears from the records in the early 13th century concerning a conflict, and a later agreement between the town of Priverno and monastery of Fossanova, on the rights of using the forests¹⁹⁵. In Terracina too, a late 12th century source records the exploitation of the forest¹⁹⁶.

7.III.1.7.4 Religion and worship

Between the 10th and 14th century, the number of monastic communities in the Priverno - Fossanova key area grew steadily. The current key area, together with the Pedemontana key area (i.e. the wider Pontine pedemontana area between Cori and Sonnino and the adjacent Lepine Mountains), was the most important region for monasticism in the high middle ages in Tyrrhenian southern Lazio (see also 7.III.2.2.4.b The 10-14th century: a continued rise of rural monasteries). Fossanova was the principal monastery of the current key area. It was home to a Benedictine and, from 1130 onwards, a Cistercian community. Fossanova was the place of death of the philosopher and theologian Thomas d'Aquino in 1274.

In the beginning of the 11th century, the dioceses of Priverno (including the parishes of Sonnino, Roccasecca dei Volsci, Maenza and Roccaporga) and Terracina (including San Felice Circeo) were fused, the seat staying in Terracina¹⁹⁷. According to Bianchini, the fusion of the dioceses was related to the abandonment of the site of Privernum in the plain.

7.III.1.7.5 Geo-politics: power relations, struggle and control strategies; secular activities

The inhabitants of Priverno were able to take well care of their own geo-political and economic interests, as appears from the documentation: a record of a conflict with unknown cause between the town of Priverno and Terracina in 1175¹⁹⁸, and the above mentioned records of the conflict and agreement between Priverno and Fossanova on the rights over the use of the lands/forests.

7.III.1.8 The pedemontana and plain between Norma and Sezze, from the 10th to the 14th century

7.III.1.8.1 General site distribution: monitoring of (change in) human activity

The pedemontana area in the current period became dominated by a string of towns along the pedemontana and on the Lepine ridges (see figures 7.39-7.141). The 10th century saw the development of two such towns: Sezze and Sermoneta.

There is no *communis opinio* on the date of reoccupation of the Roman town of **Sezze** (OLIMsite 17). The first reference to the town may date to 956, when a document seems to imply that Sezze was an early free *commune*¹⁹⁹. The interpretation of this source should be questioned, as most communes on the Italian peninsula developed much later – it would make it the oldest commune, with Tivoli, in Lazio. The oldest medieval building in Sezze is the church of S.Parasceve, built before the year 1000²⁰⁰. The resettlement of the former Roman site must be related to the presence of the old enclosing walls and its strategic position. The town dominates the pedemontana road and the entrance of the Amaseno Valley. The medieval town has the same plan as its republican predecessor. In 1116 Sezze is listed as “castrum quodam, setium nomine”²⁰¹. In 1150 one-third of the town was destroyed by fire.

Probably because of its strategic position, control of Sezze was much sought after. The many changes in lordly feudal rule under papal ownership may be given in evidence for this. Between the late 11th and the early 13th

century the town was in the hands of, among others, the Ceccani (in the late 11th and start of the 12th century), the Tusculi (from the start of the 12th century until 1145); the Frangipane (1145-1201), and again the Ceccani (1201-1228). From 1228 onwards the town formed its own magistracy – a sort of commune- under the patronage of the Holy Chair²⁰².

The town’s value to the papacy is demonstrated by the fact that it acted as a lieu de séjour for several popes, among other for Gregory VII (1073) and Paschal II (1116)²⁰³. The town of Sezze held its own Communal Archive, which largely was destroyed during the Second World War²⁰⁴.

Sezze had a border conflict with Sermoneta, as was documented in the *Liber Pontificalis*, in the Life of Alexander III (1159-81)²⁰⁵. The papal chaplain Gregorius was sent to settle things. At the end of the 13th century, it was in conflict with Sermoneta again, a dispute which evolved around the drainage works executed in the plain near Sermoneta. In 1299 the Torre Petrara / Torre di Sezze (OLIMsite 283), located on the road running from Sezze to the Via Appia (see figure 7.142), is recorded as a marker of Sermoneta’s border with Sezze, Ninfa and S.Donato²⁰⁶.

Like Sezze, **Sermoneta** (OLIMsite 59) is positioned strategically, on a navigable river, the Portatore / Cavata / Puza which made transport and travel possible across the Pontine plain from the base of the hill on which the town was situated. The oldest church of the town, dedicated to S.Maria, was destroyed in 1030 by Count Lando

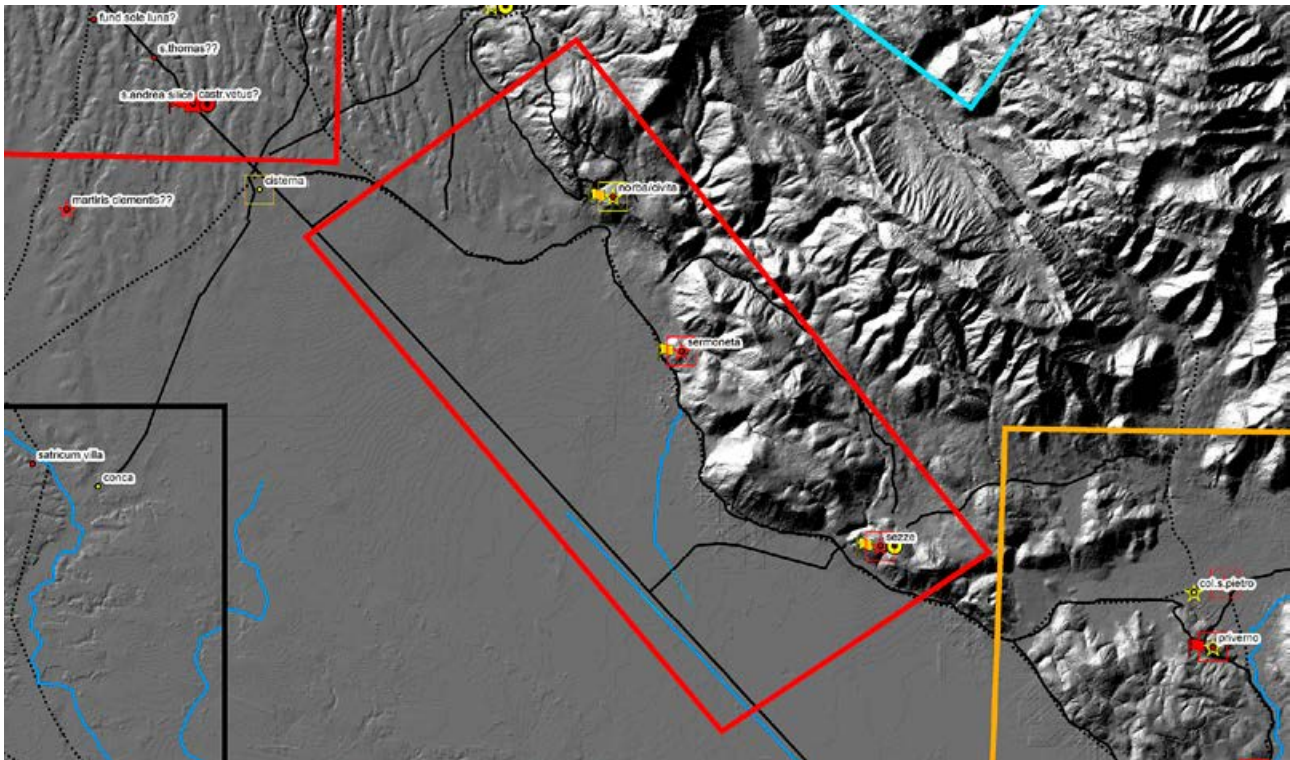


Figure 7.139. The Pedemontana key area in the 10th century.

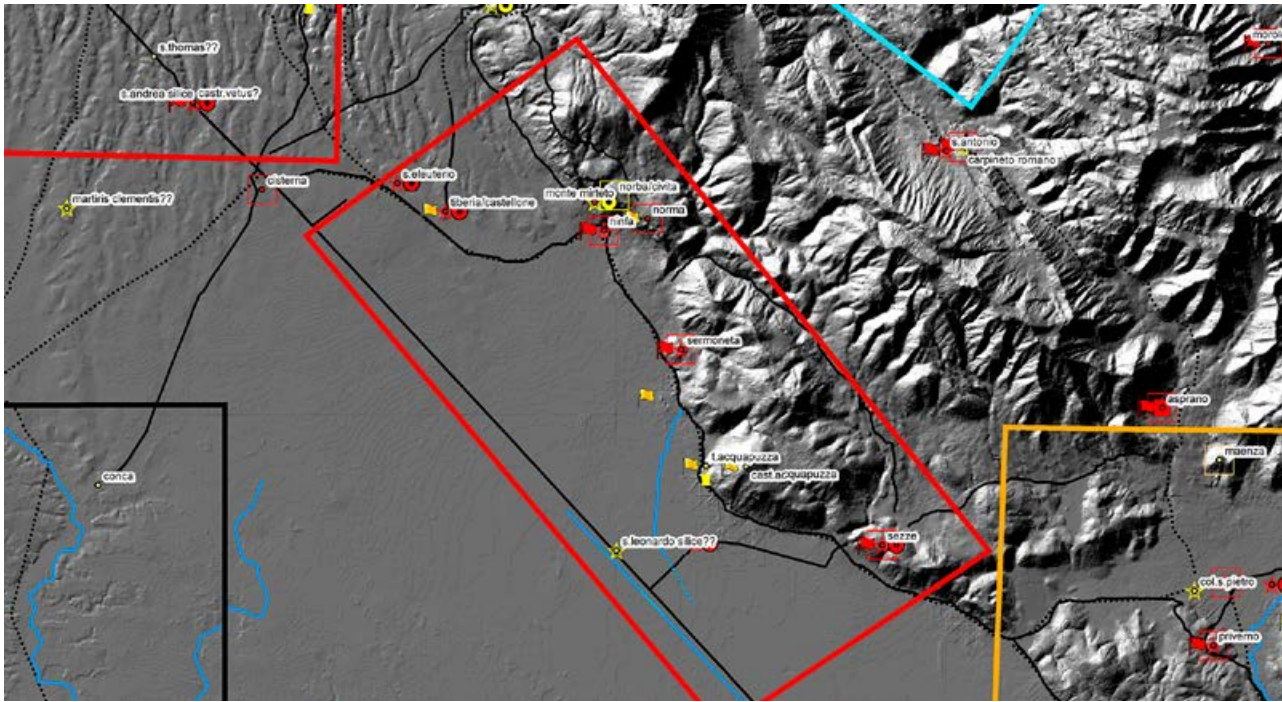


Figure 7.140. The Pedemontana key area in the 11th century.

of Ceccano²⁰⁷. Pope Paschal II (1099-1118) acquired Sermoneta and, among others, Ninfa, as can be read in the *Liber Pontificalis*²⁰⁸. The town was donated by the Church to the Tusculi in the 12th century. The Annibaldi became lords of Sermoneta in the early 13th century²⁰⁹. The castle as visible today, built by Annibaldi, dates to the first half of the 13th century. A Jewish synagogue was built in the 13th century²¹⁰. In 1297 Pietro Caetani acquired the *castrum* of Sermoneta²¹¹. In this period, Sermoneta was a Dukedom²¹². Like Sezze, a valuable archive on the town's dealings would be kept within its walls, the archives of S. Maria de Sermoneta, from the 13th century onwards²¹³.

Norba (OLIMsite 23) was founded in the 6th-7th century and would last until possibly the 11th century²¹⁴. The importance of Norba is epitomised by the fact that it temporarily held a bishops seat in the 10th century (See 7.II.1.8.1 and 7.II.1.8.4). Ultimately its community was relocated to the nearby current location of **Norma** (OLIMsite 5), approximately 800 m to the south (figure 7.140). The exact date of the transfer is yet to be established, as is the stimulus behind it. In 1179 Norma is listed as a "castrum in arce" (*castrum* in a citadel)²¹⁵ when it was given in fief to Rainone of Tusculum by Pope Alexander III, in exchange for Lariano (OLIMsite 288)²¹⁶. Authority in the village changed several times in the course of the next century. After the period of Tusculan authority Norma was in the hands of the Frangipane, the Colonna and the Orsini until the end of the 13th century²¹⁷. At that time the village became a possession of the Caetani, which would last until the end of the 15th century.

The town of **Ninfa** (OLIMsite 4) developed from the 11th century onwards. It was the only town²¹⁸ along the pedemontana that was not situated on a Lepine foothill, but in the plain (see figure 7.140). The name Ninfa already appeared in the *Liber Pontificalis* in 743 AD as **massa Nymphas** (OLIMsite 92) and can most likely be located in the area of the high medieval site of Ninfa, even though the *Liber Pontificalis* does not provide explicit topographical clues. Nothing is historically known about Ninfa from 743 until 1110, when the written sources report its acquisition by Paschal II²¹⁹. Ninfa became a stake in the struggle of this Pope Paschal II (1099-1118) with the rebellious Count of Tusculum, Tolomeo. In that struggle Count Tolomeo sized the properties of which the pope had entrusted him with the administration, among others Ninfa²²⁰. The *Liber Censuum* lists the punitive actions that the pope took against Ninfa after he had recaptured the village, the most severe being the taking down of the walls. These were not to be rebuilt without authorisation of the Curia²²¹. This way Pascal II wanted to break Ninfa's military potential, which opposed papal interests, the town being situated on such a strategic spot between the Via Appia and the pedemontana²²². Ninfa remained in papal hands in the next century and a half. In 1146 Pope Eugène III conceded it to the Frangipane family. Like Cisterna in 1159, emperor Frederick Barbarossa sacked and burned the village in 1171, after the pope had taken refuge in the town. In 1230 Ninfa was conceded by the pope to the Annibaldi. From the 13th century onwards it was a property of the Caetani²²³. The tower, as visible today, was built under Pietro Caetani at the end of the 13th century. Ninfa is said

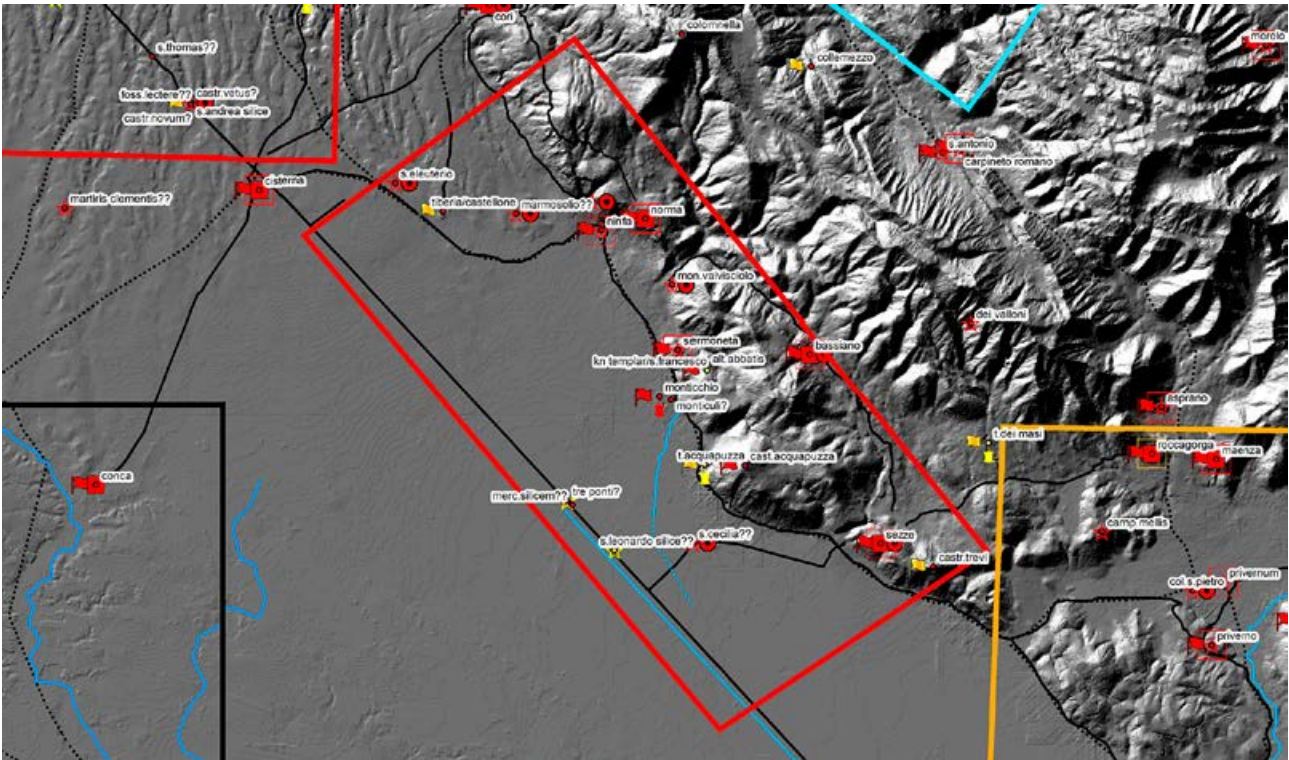


Figure 7.141. The Pedemontana key area in the 12th century.

to have been finally abandoned because of malaria; in 1475 it is described as “castrum dirutum”²²⁴.

Cisterna (OLIMsite 57), situated to the north of the key area, probably developed from the 10th century onwards. Because of its position on a crossroads of the Appia and the route from coast to pedemontana (see figure 7.141), the settlement would develop into one of the main towns of the Pontine region. Cisterna is documented as *castrum* in the 12th century²²⁵. The current castle dates to the 13th century²²⁶. Cisterna would be the subject of struggles between baronial families in the next centuries, as is shown by the written documents describing transfers of power and several destructions. Cisterna became fief of the Tusculi in the 11th century, in 1146 of the Frangipane, who reinforced the walls²²⁷. In 1159 Cisterna was destroyed in the struggle between the pope, supported by the Frangipane, and emperor Frederick Barbarossa; the same fate awaited Ninfa in 1171. The Frangipane rebuilt the town, which was again heavily damaged by Louis IV, Holy Roman Emperor, in 1328. In 1447 Cisterna is listed as a “castrum dirutum”, as part of the Caetani estate²²⁸.

The *castra* on the Lepine ridges confer to the archetypical picture of *incastellamento*, on well defensible positions and visually dominating the area. In contrast to the Velletri and Alban Hills key areas, *incastellamento* started relatively late, in the 12th century. In that century, several *castra* in the (wider) key area have been recorded

(figure 7.142): Bassiano, Norma, Sezze and Cisterna. *Incastellamento* appears to have had a short momentum, as in the 13th century there are less references to *castra*: only castellum Unolcti and castrum Trevi are documented. This contrasts with the Alban Hills key area, where the foundation of *castra* would peak in the 13th century²²⁹. In the 14th century there are no references to *castra*.

No less than 12 monasteries were documented between the 11th and 14th century, the most eminent of which was Valvisciolo. A range of monastic orders found its way to this key area, among which were the Franciscan, Benedictine, Cistercian, Joachmite and Clarisses orders²³⁰.

Possibly from the 11th century, but certainly from the 12th century onwards, there is activity in the Pontine plain (see figures 7.141-7.142), at Torre Annibaldi (OLIMsite 281), Tre Ponti (OLIMsite 19) and S.Leonardo Silice (OLIMsite 81), and on the road from Sezze to the Appian tract in the middle of the plain, where in the 12th century and later the monastery of S.Cecilia (OLIMsite 282) and Tor Petrara / di Sezze (OLIMsite 283) would evolve. This activity shows that the Appian road again was regularly used, at least in this part of the plain (see below on infrastructure). It is clear, however, that no large settlements would develop here. As touched upon, next to the drainage problems the danger of malaria may have been instrumental in this (see 7.II.1.8.1).

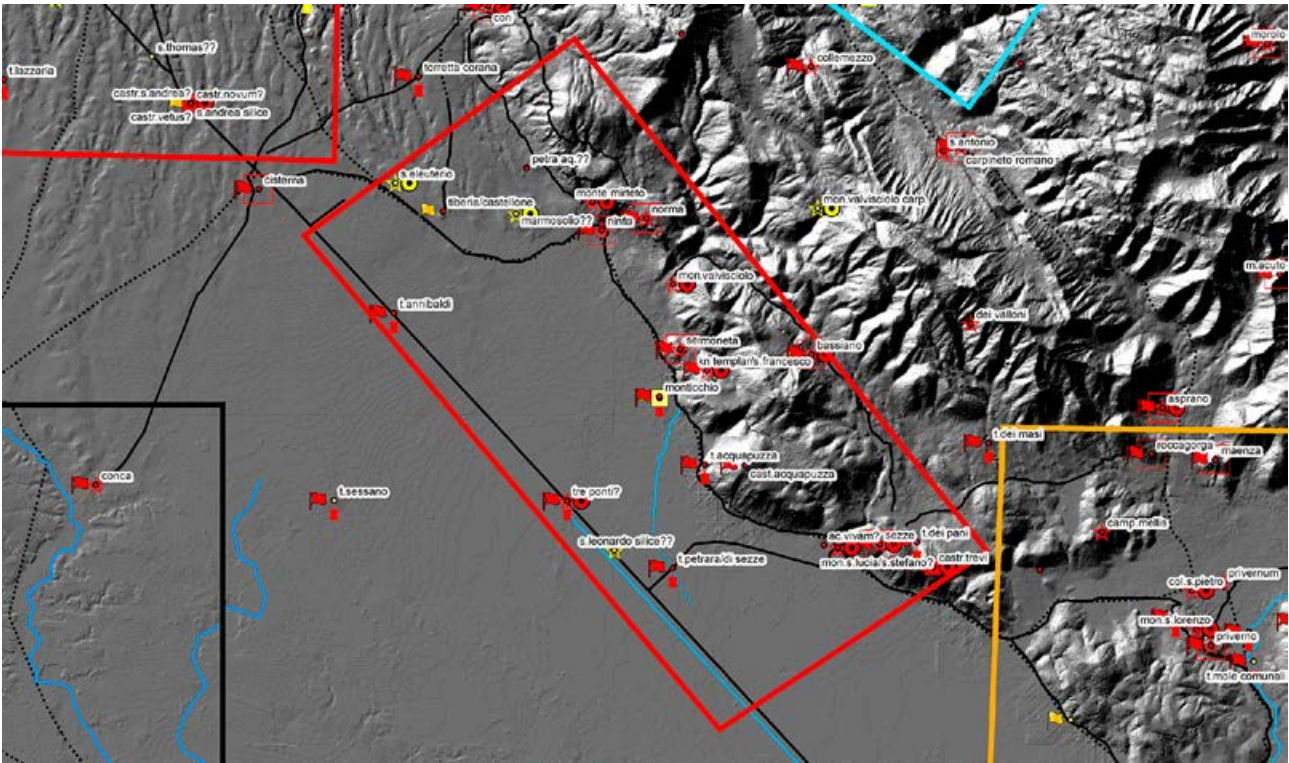


Figure 7.142. The Pedemontana key area in the 13-14th century.

In the triangle Sermoneta – Sezze – Tor Petrara a concentration of fortified locations shows the strategic importance of the area (see figure 7.142), in which the pedemontana and the Appian road almost converged and were connected by a road, and in which the probable navigable river Portatore (Cavata) ran: In the 11th or 12th century two towers were built on the pedemontana, at Monticchio and Acquapuzza. In addition the 13th century saw the foundation of strongholds on the Via Appia and on the road from Sezze to the Appia at Tre Ponti / Tor Petrara. The tower of Monticchio (OLIMsite 193) was strategically located 1500 m south east of Sermoneta on a hill which controlled a narrow passage of the pedemontana and the Portatore, the river which was vital for the economy of Sermoneta, and the mill of Monticule (OLIMsite 225) on that river²³¹. Nowadays the tower is located on an isolated rock, which is a leftover of the mining activities which have dug away the rest of the original hill²³². The tower can be dated first half of the 12th century on the basis of the building technique used²³³. The tower of Acquapuzza protected a road station, a *posta*, on which also a garrison was stationed²³⁴. It is unknown exactly when the location of the current tower became fortified; the current tower dates to the 13th century. The towers of Tre Ponti and Petrara were built in the 13th century to control the Via Appia and the road from Sezze to the Appia²³⁵; to the north, Torre Annibaldi may already have been built.

To conclude on the pedemontana key area: like in most other key areas, the site distribution maps show a gradual growth in sites. The 11th and 12th century saw a rapid growth in both the numbers of villages/towns (some *castra*) and monasteries, both concentrated on the pedemontana and Lepine mountain ridges. In the 11th century, the first isolated strongholds were built, the number of which would grow rapidly. By the 13th century all roads and all mountain ridges would be controlled by fortified settlements or isolated strongholds. Whereas activities were first concentrated on the Lepine ridges, in the 11th century these reached into the plain again, along the old Appian route and the roads towards it. This activity in the plain would increase in the next centuries. In the Lepine Mountains the expansion in activities has the same chronology: in the 11th century Carpineto Romano shows the first evidence within a Lepine inland valley. Activity is expanded to other valleys in the 12th century (Bassiano) and finally to remote Lepine hilltop locations in the 13th and 14th century.

7.III.1.8.2 Infrastructure

Compared to the previous study period, the infrastructure map differs on two points: In the current study period there are no indications for the use of the ancient route of the Via Setina (OLIMinfra 86), which largely follows the modern Via delle 4 Strade. The road from Sezze to the Via Appia, passing the Tor Petrara, is added to the map from

the 11th century onwards²³⁶. This road follows more or less the same route as the Roman road, but with a detour.

The developments in three towns are particularly closely connected to the surrounding infrastructure:

- Sermoneta dominated and controlled the pedemontana, and was connected to the Tyrrhenian sea through a navigable river, the Portatore / Cavata / Puza. This river, a stream from the base of Sermoneta that reached the sea at Torre di Badino, near Terracina, was mentioned in the 14th century as an alternative for the bumpy pedemontana route. This stream was used as a means of transport until the end of the 18th century²³⁷. Ship traffic contributed to the success of Sermoneta, possibly since its foundation in the 10th century. On the base of this hill, the *Porto di Sermoneta* would develop, which was documented for the first time in the 14th century, but had possibly developed already earlier²³⁸.
- Sezze not only dominated the pedemontana road and the entrance of the Amaseno Valley, it also controlled ancient routes through the Lepine Mountains, the **road towards (later) Roccagorga** (OLIMinfra 10) and the (transhumant) **route towards Caracupa Valvisciolo near Norba** (OLIMinfra 9) (see 7.II.1.8.2).
- Cisterna developed on a crossroad of vital roads, just north of the particularly narrow passage through the Pontine plain: the area to the south of the town continuously found itself in a swamped state. At Cisterna too, the pedemontana met the Via Appia, and continued to the sea.

The Appian road was broken off somewhere in late Antiquity or the early middle ages, and the main axis of infrastructure was repositioned to the pedemontana (see 7.I.1.8.2). Although it has been suggested that parts of the route remained in use for local traffic²³⁹, only in the 11th century there are indications for its use through road site activities on sites like Torre Annibaldi, Tre Ponti and Tor Petrara, on the road from Sezze to the Via Appia. To the south of the current key area, there are also several sites with renewed activity, the first being Mesa in the 9/10th century²⁴⁰. Others are S.Giacomo (OLIMsite 80) and Caposelce (OLIMsite 78). Additionally, in the 12-13th century an area named ‘Silex’ in the plain south of Sezze (“pavement stones” [Latin]²⁴¹) has been documented; its use was disputed between Terracina and Sezze²⁴².

However, there are indications that to the north of Sezze the Via Appia again became difficult to use in the 12th and 13th century: In 1169, a trading place in the Pontine territory of Sermoneta seems to have been abandoned, “mercatum vetulum supra silicem”²⁴³. Furthermore, S.Maria di

Tre Ponti appears to have been in ruins around the middle of the 13th century (‘extra hominum habitationem’)²⁴⁴.

All in all, despite the evidence for new activity in the plain, the Via Appia never regained its position as the principal route southwards. Indeed, the written sources documented a variety of obstructions on the Appian route during the high middle ages, and beyond²⁴⁵. In the 16th century the Via Postale Rome-Napels would still run along the pedemontana (Priverno) route, not only avoiding the plain, but also servicing the Lepine and Amaseno villages.

7.III.1.8.3 *Economy, production and trade*

The rapid growth of the towns on the eastern edges of the Pontine plain from the 10th century onwards shows that the Pontine area must have opened up again economically, and began to show demographic growth. Considerable investments are made at the *castrum* at Fogliano, in the plain around Mesa, and on the Rio Martino. Churches were built on ancient sites along the Appian road. Moreover, the renewed activity in the plain is shown by the pottery evidence found on several locations investigated by the Minor Centres Projects²⁴⁶.

The renewal of the Rio Martino probably is the earliest known high medieval intervention in the Pontine marshes, intended to do something about the regular flooding. A second intervention was the canal dug between the Ninfa river and the Cavata. This undertaking was ordered by Pope Boniface VIII, a member of the Caetani family, in 1298²⁴⁷. The objective of its construction was to regulate drainage of the part of the plain belonging to the Dukedom of Sermoneta, which the pope’s nephews had just seized. Although this intervention was relatively small, it caused large damage because it led to the congestion of the Cavata river, which brought about severe flooding in the plain near Sezze. This again caused a worsening of the ongoing border conflict between Sezze and Sermoneta (see above 7.III.1.8.1).

Grazing and transhumance may have been an important economic activity for the population of hilltop sites along the pedemontana and in the mountain plains, as it is was in Antiquity and as it is today²⁴⁸. Unfortunately there are no contemporary written and archaeological records on transhumant pastoralism in the current key area.

After being introduced in Lazio in the early middle ages²⁴⁹, the buffalo seems to have played an important role in the livestock of the monastic domains in and around the Pontine plain in the 12th and 13th century. This is visible from the privilege of the abbey of S.Maria de Monte Mirteto (OLIMsite 63), located 1800 west of Norma

halfway up the Monte Mirteto. This privilege allowed the use of the whole Marittima for pasture *pro bubalis per totam Maritimam in pastinis communibus...absque herbatico et glandatico...*The privilege was given by Pope Gregory IX in 1235²⁵⁰, and confirmed by Pope Alexandre IV in 1258²⁵¹.

Specific observations on the economy of this key area in this study period:

- The area around Norma was known for its chestnut forests²⁵².
- Sermoneta profited from its position on a navigable stream towards the Tyrrhenian coast; here a river harbour near town is recorded in the 14th century, but traffic on this river must have started earlier and contributed to the boom of the town.

7.III.1.8.4 Religion and worship

The pedemontana key area was important to the Church, as appears not only from the fact that, despite the distance from Rome, the papacy displayed a growing number of interests in the key area until the 13th century. Moreover, this region, together with the Privernum – Fossanova key area, was the most important zone for high medieval monasticism in Tyrrhenian southern Lazio (see also 7.III.2.2.4.b The 10-14th century: a continued rise of rural monasteries): the number of monasteries in the key area grows between the 10th and 13th century, i.e. 1 (10th) – 5 (11th) – 7 (12th) – 8 (13th) – 8 (14th).

Striking is the fact that in the 14th century, the number of documented interests of the papacy abruptly drops to zero. Maybe this has to do with the dominance of the Caetani in this area, who in the second half of the 14th century were involved in a number of disturbances and acts of war in Rome and the Campagna, among others several times with the pope, and with their rival elite family, the Colonna²⁵³. Exemplary, Onorato I Caetani (1336-1400, lord of Bassiano, Marino and Sermoneta, and senator of Rome) was a specifically powerful baron in the countryside of Tyrrhenian southern Lazio, who helped the cause of two anti-popes of the Avignon papacy, Clement VII (1378-1394) and Benedict XIII (1394-1404).

As was discussed in section on the previous study period, a separate bishop's seat was created at Norma²⁵⁴. It is not known how long this bishopric functioned as the see was only referred to once in the written sources.

In 1036 the bishopric of Sezze was first documented²⁵⁵. The diocese of Sezze probably consisted of the territories of the settlements of Sermoneta, Acquapuzza and Bassiano²⁵⁶. It functioned until 12th century, when it was joined with Priverno into the diocese of Terracina.

The reasons for this merger are not clear from the *bolla* by Honorius III in which the union was announced, but according to Bianchini it can be attributed to budgetary reasons: there were too few people in this area to uphold more than one diocese²⁵⁷. This idea cannot be verified. The diocese was called Terracina, Sezze e Priverno, and seated in Terracina because of its seniority²⁵⁸.

7.III.1.8.5 Geo-politics: power relations, struggle and control strategies; secular activities

Elite families seem to have gotten involved slightly later in this key area than in the Alban Hills, Terracina and Fondi key areas, namely from the 11th century onwards. From that century onwards it would become one of the most contested areas of Tyrrhenian southern Lazio. It was the southernmost part of the Tusculan realm in the 11th and 12th centuries. The Tusculans controlled, at least for some time, Sermoneta, Cisterna, Ninfa, Tiberia, Norma and Sezze. The Counts of Ceccano, who had their home base on the other side of the Lepine Mountains, had stakes in the area in the 12th century as well. They for some time controlled Sezze and Sermoneta – which they sacked. In the 12th century, Frangipane power reached its zenith. In no less than four occasions the Frangipane took over the authority of the Tusculi over a town, at Sezze (in the year of 1145), Norma (in the late 12th century), Ninfa (in 1110), and Cisterna (in 1146). They seem to have stepped into the power vacuum that developed when the Tusculi withdrew from these parts. The Ceccani and Frangipane from their part lost much of their influence in the area to the Caetani, in the 13th century. A second new powerful family in that century are the Annibaldi. In the 14th century, the Caetani became the dominant elite family in the current key area.

In contrast to the previous study period, contemporary defensive measures were abundantly present. Like in most areas, the number of fortified positions (i.e. fortresses, stand-alone towers and *castra*) steadily increased between the 11th and 13/14th century. One fortress stands out, the Knights Templar fortress, situated southwest of Sermoneta. Originally founded in the 12/13th century, this fortress over time seems to have been converted into a monastery dedicated to S.Francesco (OLIMsite 192).

The reason for these measures may be found in the recurrent animosities between elite families. The papacy, with its constantly shifting alliances, played its part in the struggles. A complicating factor in this volatile constellation of powers was the fact that Church and elite interests were often interwoven, because of the influence noble families had in Church matters²⁵⁹. Only in the 14th century the number of interests of the papacy abruptly dropped to zero in the key area, which may be correlated

to the dominance of the Caetani (see also 7.III.2.2.1.c10 The Caetani). Moreover, the fortifications may have been erected to deal with the inherent danger of bandits roaming about in the plain, which, because of its inhospitable nature, had many marginal parts that would have been difficult to control. The diversity of different parties that were present in the plain may not have helped the combat against banditism. Although there is no contemporary documentation on bandits, there are records of their presence in the 15th and 16th century²⁶⁰. Another factor, at a local level in the construction of fortresses may have been the facilitation of tolling, like at Pisco Montano (OLIMsite 71) near Terracina, and at castrum Ariccia in the 10th century at least.

7.III.1.9 The northern Lepine Mountains and the Sacco Valley between Artena and Villamagna, from the 10th to the 14th century

7.III.1.9.1 *General site distribution: monitoring of (change in) human activity*

Under direct papal control since 726²⁶¹, the town of Segni (OLIMsite 266) saw continued activity throughout the middle ages, mostly connected to its bishopric. Although rulers of the Segni area had become known as “Conti di Segni” since the 10-11th century²⁶², the town remained under direct control of the papacy. Popes would regularly visit the town. Before 1150, Eugene III built a summer palace in Segni. In Segni, Alexander III proclaimed the canonisation of Thomas Becket in 1173²⁶³. Pope Innocentius III in 1190 was member of the family of the Counts of Segni.

The number of *castra* is low in this study area (see figures 7.143 - 7.146). Striking is the early *incastellamento* at M. Julianu (OLIMsite 298) which is documented in one of the 10 early *incastellamento* charts of Lazio²⁶⁴. This chart, dated to 1003-1029, registered the settlement of a population at a “castellum quod est in monte julianu in repenice montis subtus pesclu maiore” by Jean, abbot of the monastery of S.Pietro de Villamagna. Remains of the site have been found, although it is not clear if these constitute part of the *castrum*²⁶⁵.

In this key area, the number of recorded monasteries steadily grows between the 10th and the 13th century. The best studied of these is the **monastery of Villamagna** (OLIMsite 52). The site has been thoroughly excavated²⁶⁶. At Villamagna a monastic archive was upheld from the late 10th century onwards²⁶⁷. This register is one of the few examples of monastic sources originating from the study area of rural southern Lazio itself – not from a Rome or any monastery outside of the study area. To summarise the results on the site regarding the high middle ages: On

site A of the complex 200 postholes were found, dating to 12th century²⁶⁸. These remains can be identified as a village; possibly this village was one of the *casalia*, rural open settlements, in which the lay villagers lived in unfortified groups of dwellings, mentioned in the contemporary sources from the monastery’s register²⁶⁹. Forum Ware found during the 2009 excavation may show that the *casale* here already existed in the 9th century. This village, or at least parts of it, lasted until the 13th century²⁷⁰.

The 10th century saw the construction of the monastery, on site B, on what appears to have been the imperial residence²⁷¹. A cemetery to the west of the church has yielded 500 graves²⁷². Burials in the cemetery show that this part of the site was already reoccupied in the 9th century, like at the *casale*²⁷³. In the 13th century a cloister was added to the monastic complex²⁷⁴. In the late 14th century a fortification was built at the monastic site of Villamagna²⁷⁵; in 1478 this *borgo* is listed as “castrum dirutum”. Nowadays, the walls of a Romanesque church here still stand upright, as are the remains of 15th century fortifications²⁷⁶.

The castle of **Carpineto Romano** (OLIMsite 258), located just to the south of the key area, was given by a Rainerio di Anagni to the monastery of Villamagna in the year 1077²⁷⁷. The donation of a castle says much about the regional prominence of the monastery and is exemplary of the secular role monastic communities had taken upon themselves in the 10th century. Carpineto Romano in the 13th century would become one of the few examples of a (semi) autonomous commune in the study area: the semi-autonomous commune was led by a “miles”, appointed by the Ceccani rulers²⁷⁸.

In the 11th and especially 12th century onwards several villages developed on high positions along the Lepine mountain ridges (see figures 7.144-7.145):

- **Gorga** (OLIMsite 261), located in a valley in the Lepine mountain not far from the Sacco valley, was founded in the 11th century. It was owned by the Counts of Ceccano until the 13th century, and afterwards by the Pamphili family.
- **Sgurgola** (OLIMsite 260) was founded in the 12th century. It was listed as a *castrum* in the 12th century²⁷⁹. Pope Hadrian IV acquired this village in 1157-59²⁸⁰. In the 13th century it was property/fief of the Counts of Ceccano, in the 14th century of the Torelli and the Caetani.
- **Artena** or **Montefortino** (OLIMsite 270), founded in the 12th century, was documented as a *castrum* during the high middle ages²⁸¹. In the year of 1151, the pope acquired Artena from the Count of Tusculum in return for landed properties elsewhere and money²⁸². It was held in fealty by the Counts of Segni, and later

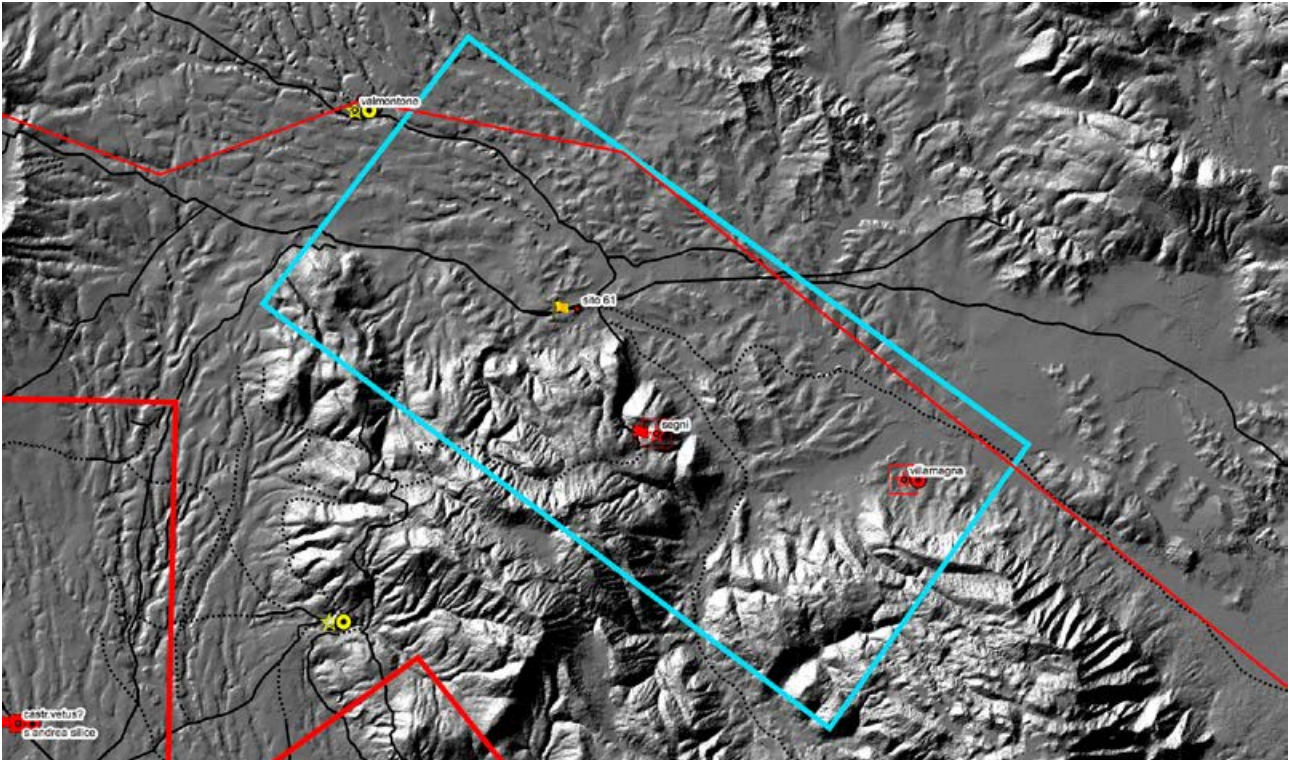


Figure 7.143. The Northern Lepine Mountains and the Sacco Valley key area in the 10th century.

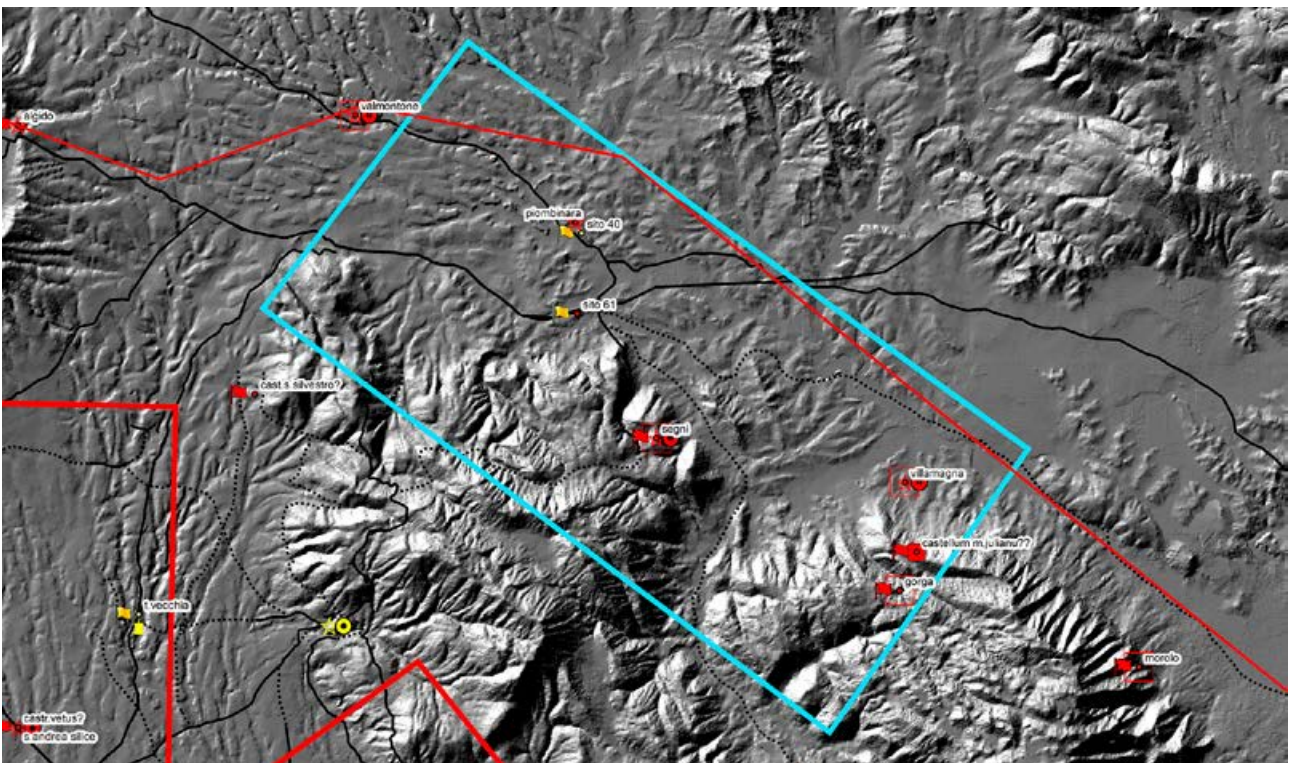


Figure 7.144. The Northern Lepine Mountains and the Sacco Valley key area in the 11th century.

the Colonna. The village was ravished by the forces of Frederick II, Holy Roman Emperor, in 1241. In the 13th century the Malabranca family owned properties in the village.²⁸³

- **Morolo** (OLIMsite 307) is first mentioned in a *bolla* by Pope Urban II in 1088. The village was captured and damaged in 1216 by Giovanni da Ceccano. Until 1227 it remained a possession of the Ceccano family, when it became a papal possession for several

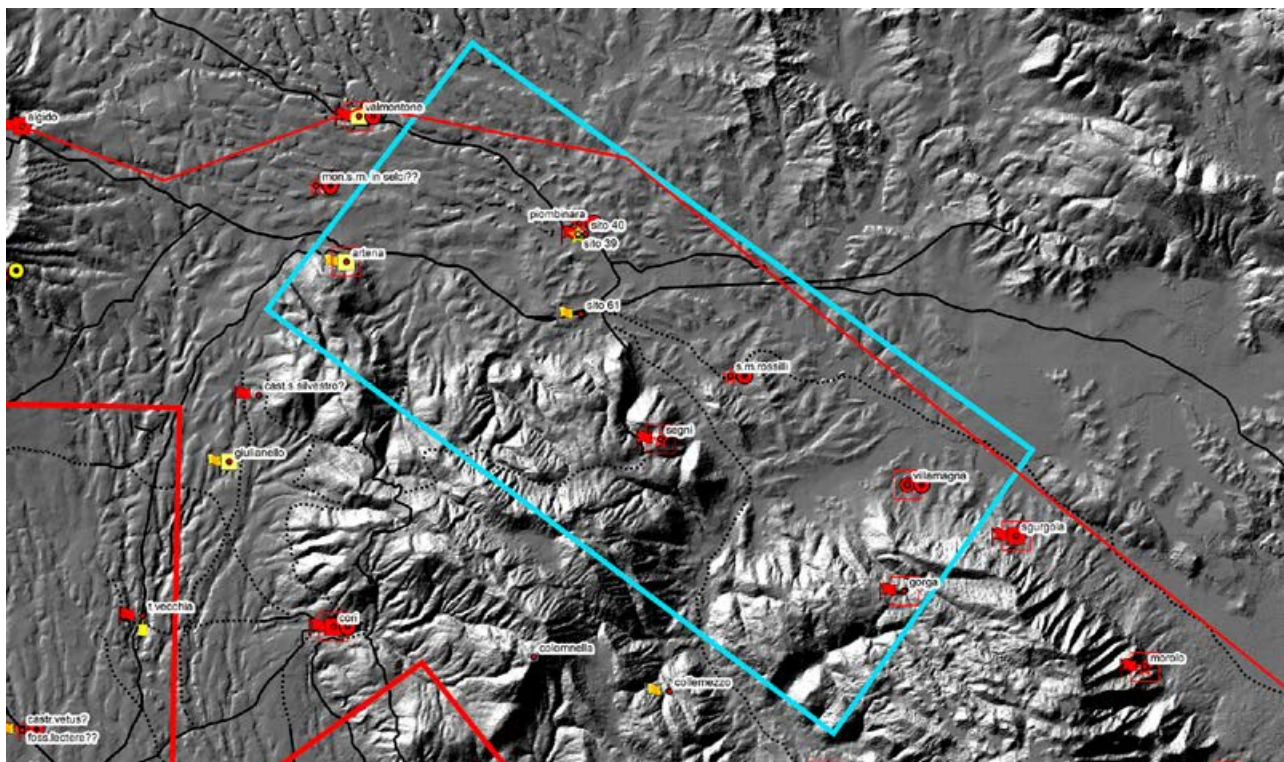


Figure 7.145. The Northern Lepine Mountains and the Sacco Valley key area in the 12th century.

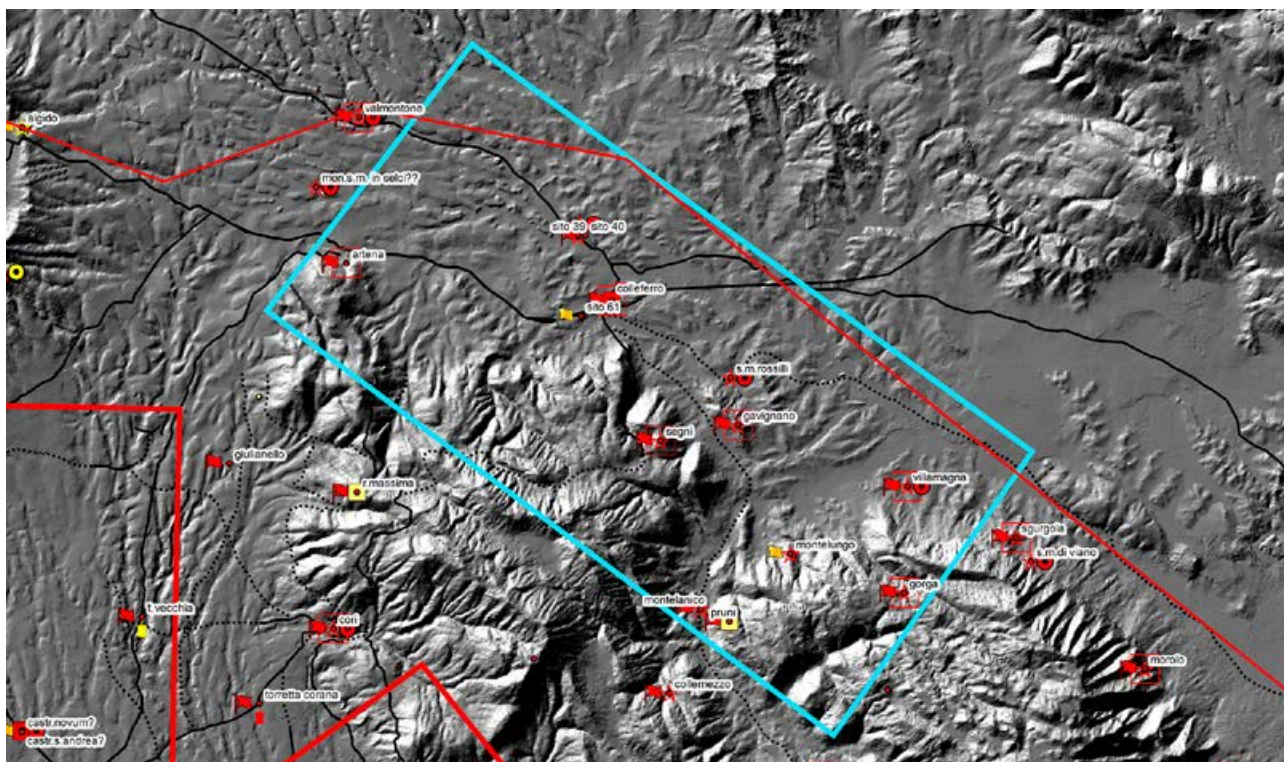


Figure 7.146. The Northern Lepine Mountains and the Sacco Valley key area in the 13-14th century. All sites on the map show activity throughout the 13th and 14th century, except for Gavignano, Montelanico and Pruni which are first recorded in the 14th century.

decades. Later it became a possession of the Colonna family.

On Sito 61 in casale Colleferro (OLIMsite 447) the Gruppo Archeologico Toleriense has found high medieval tombs. Based on the ceramics, the tombs have been

dated from the 10th century onwards. In the 13th century a castle was built on the site, which lasted until the 18th century²⁸⁴.

At **Valmontone** (OLIMsite 269), the town, first documented in the 12th century, was preceded by the monastery S. Angelo, which was founded possibly around the year 1000²⁸⁵. The town developed into a “castrum speciale”, first documented in the 12th century²⁸⁶. The “homines castri” of Valmontone pledged their allegiance to Pope Innocentius III in 1208²⁸⁷.

In 1220 the castle of **Colleferro** (OLIMsite 306) was probably founded. In 1262 it is listed as “castrum Colisferi”²⁸⁸.

To conclude on the Segni key area: like in most other key areas, the site distribution map gradual fills up between the 10th and the 14th century. The number of villages (*castra*) grows rapidly in the 11th century. In the Lepine Mountains expanding activities have the same chronology as concluded for the pedemontana key area: in the 11th century Gorga is the first settlement in a Lepine inland valley; activity is expanded to other valleys in the 12th century including the remote hilltop location of Collemezzo (OLIMsite 262), gradually covering much of the Lepine valley system, in the 13th and 14th century. Although almost all sites from the 11th century onwards have signs of fortifications, there are no signs for single towers sites in the current study period, as have been attested in most other key areas. The reasons behind this omission can be hypothesised: a lower number of parties involved, a less volatile geo-political situation and/or a more marginal status of these parts, causing less territories, infrastructure of settlements to be defended. The same maybe true for the Fondi key area, which also lacks single strongholds. Ideas on this have yet to be fully explored and are out of reach for this study.

7.III.1.9.2 Infrastructure

There are no significant changes compared to the previous study period regarding the recorded infrastructure. In the course of the middle ages the Via Latina was damaged on several places which led to (local) changes in its tract (see 7.II.1.9.2). Most of the traffic between Rome and Anagni would use the northern alternative, the **Via Labicana** (OLIMinfra 66). All the same, the many occupied sites along the Latina route in the high middle ages show that it was still frequented; by then it had become known as **Via Casilina** (OLIMinfra 104).

The road from **Segni through the Lepine Mountains to Privernum** (OLIMinfra 60) continued to function as an important axis through the mountains; along this route

several new sites evolved in the current study period, such as Montelanico and Pruni.

As has been remarked by Toubert, Valmontone, with Ceprano and Frosinone (the latter two outside the current key area) constituted the “portes du regno”²⁸⁹. These settlements acted as important stages for traffic on the route from Rome southwards. There may be truth in Toubert’s idea on Valmontone as an important station on the routes through the Sacco Valley. This idea was based on the fact that in a *bolla* by Pope Anastasius IV (1153), the distance between S. Cesareo near Anagni and Valmontone was explicitly described, as a “dieta”, a day’s travel²⁹⁰.

7.III.1.9.3 Economy, production and trade

In the high middle ages the mountains surrounding Segni were known for their chestnut forest²⁹¹.

7.III.1.9.4 Religion and worship

In the 10th or 11th century the diocese of Segni became a suburbicarian diocese. Thereby, the bishop of Segni was one of the cardinal-bishops, who were often consulted and often were granted special privileges (see 2.I.13). Several times during the 11th and 12th century, Segni acted as a refuge for popes; Pope Eugene III (1145-1153) built a palace here²⁹².

7.III.1.9.5 Geo-politics: power relations, struggle and control strategies; secular activities

Like in most other key areas, the number of fortified locations steadily grows between the 11th and 14th century. These are almost all located on the Lepine foothills, or above the passage through it. The Segni key area had relatively few isolated fortifications, i.e. without a settlement; most fortified locations were small walled settlements (see above here, 7.III.1.9.1).

7.III.1.10 Terracina and its surroundings, from the 10th to the 14th century

7.III.1.10.1 General site distribution: monitoring of (change in) human activity

In the year 963 the duchy of **Terracina** (OLIMsite 31) came to an end, when it was returned to the pope. This transaction would definitively establish the borders of the Papal State south of Terracina (see 7.II.1.10.1). The town of Terracina became a fief under papal ownership until the 13th century. In 988-991 Crescenzo (of the family of the Crescenzi/Crescentii) was Count of Terracina. Shortly later, the town was given in feudal concession to the Counts of Traetto (Minturno). An infamous concession of Terracina was done by Celestino II to the Frangipane in 1143²⁹³. The town would develop into a collective vasaal to the Frangipane from 1154 onwards. With this, Terracina is the only town known in the 12th century to be a collective

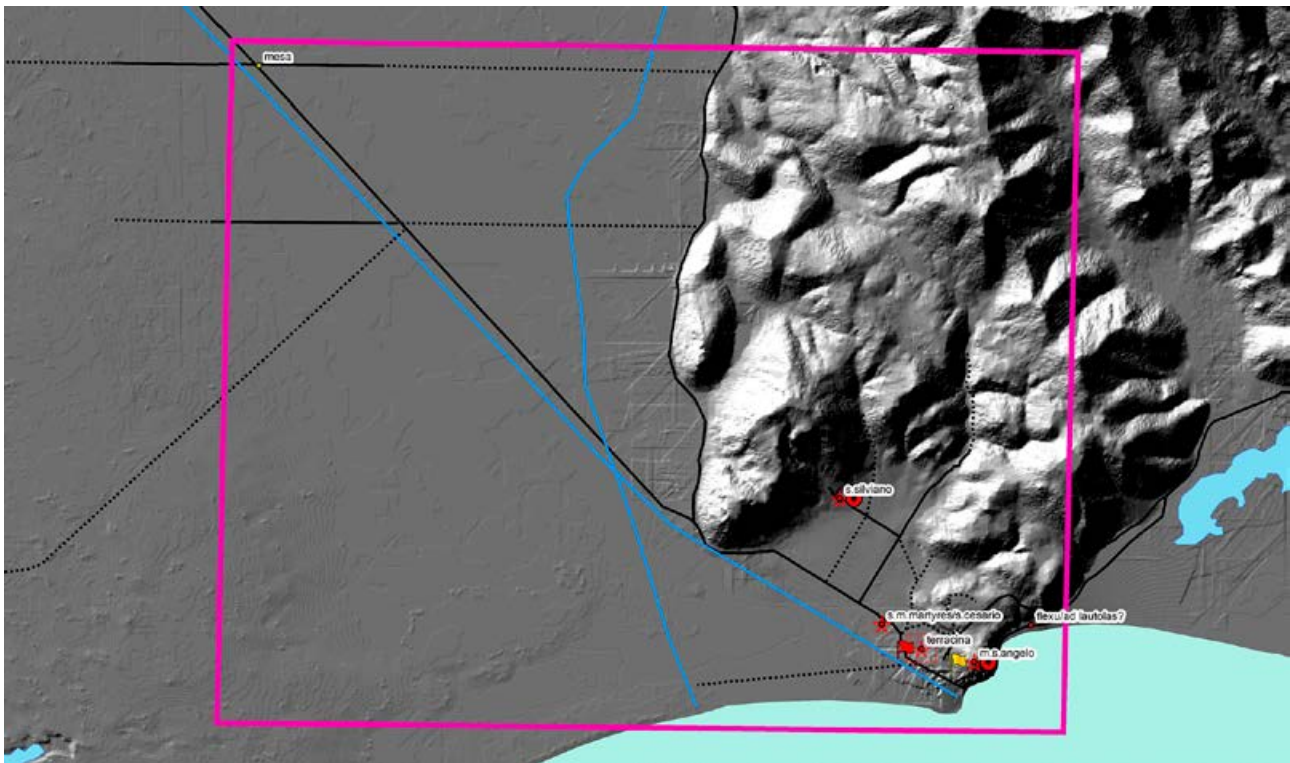


Figure 7.147. The Terracina key area in the 10-11th century. All sites on the map show activity throughout the 10th and 11th century, except for Casale de Flexu, which appears in the sources of the 11th century only.

vasal to a feudal lord in Lazio²⁹⁴. As the *libellum querimoniae* to Lucius III (1184-1185) shows, however, the community of Terracina did not put up with this wholeheartedly (7.III.1.10.3). Terracina remained in Frangipane hands until 1207, when a free commune evolved in the town which would last, with several interruptions, throughout the middle ages²⁹⁵. One such interruption was the donation of the town as a fief to the Caetani, in the late 13th century²⁹⁶.

The “locus” Mesa (OLIMsite 28, see figure 7.147), a former Roman *statio* situated in the Pontine plain, would see activities again in the 9/10th century (see 7.II.1.10.1). Mesa is recorded again in the 11th century, in a document which describes the selling of nearby pieces of waterlogged lands. In 1126 the church della Trinita is recorded at Mesa²⁹⁷ and in 1233 the site is documented as having a *hospitalis*²⁹⁸. In 1272 reference is made to a *palazzo* inside the settlement²⁹⁹. A Roman mausoleum may have been used as a watchtower from the high middle ages onwards³⁰⁰.

Mesa is not the only Pontine site in the current key area with indications for activity during the current research period: at Caposelce (OLIMsite 78) a church was founded, probably in the 12th century³⁰¹. This church was probably situated next to the Roman bridge (*ponte Caposelce* or *Traiano*), as the retrospective view of Mesa on Parasacchi’s map (Map 26, 1637) seems to demonstrate³⁰². No remains have been found yet however. The

only secure written source that records the site dates to 1337³⁰³. Del Lungo believed that people came here on special occasions only, or for mass³⁰⁴.

In the 11th century a *casale* and *locus de Flexu* (OLIMsite 165) was documented in the sources. How this *casale* looked like is unknown. The site is probably short-lived, as it disappears from the sources³⁰⁵. In the Roman period this *casale* was located on the narrow passage called Ad Lautolas³⁰⁶.

As has been observed in the section on the previous study period, the *suburbium* of Terracina was home of several high medieval monasteries (see figures 7.148-7.149). At the (former) fortress of S.Anastasia (OLIMsite 94, outside the key area) a monastery has been recorded first in 1072. Next to the early Christian suburban church of S.Maria ad Martyres – later S.Cesario (OLIMsite 505), somewhere in the middle ages a monastery would evolve; it is unknown when this happened³⁰⁷. The 9th or 10th century monastery on Monte S.Angelo (OLIMsite 216), and the adjacent 9th to 13th century fortress³⁰⁸, located northeast of Terracina, were owned by the Caetani family in the 14th century³⁰⁹. The monastery to S.Silviano (OLIMsite 112), located in the *Valle di Terracina*, was documented for the first time in the 10th century, and continued to function throughout the high middle ages³¹⁰.

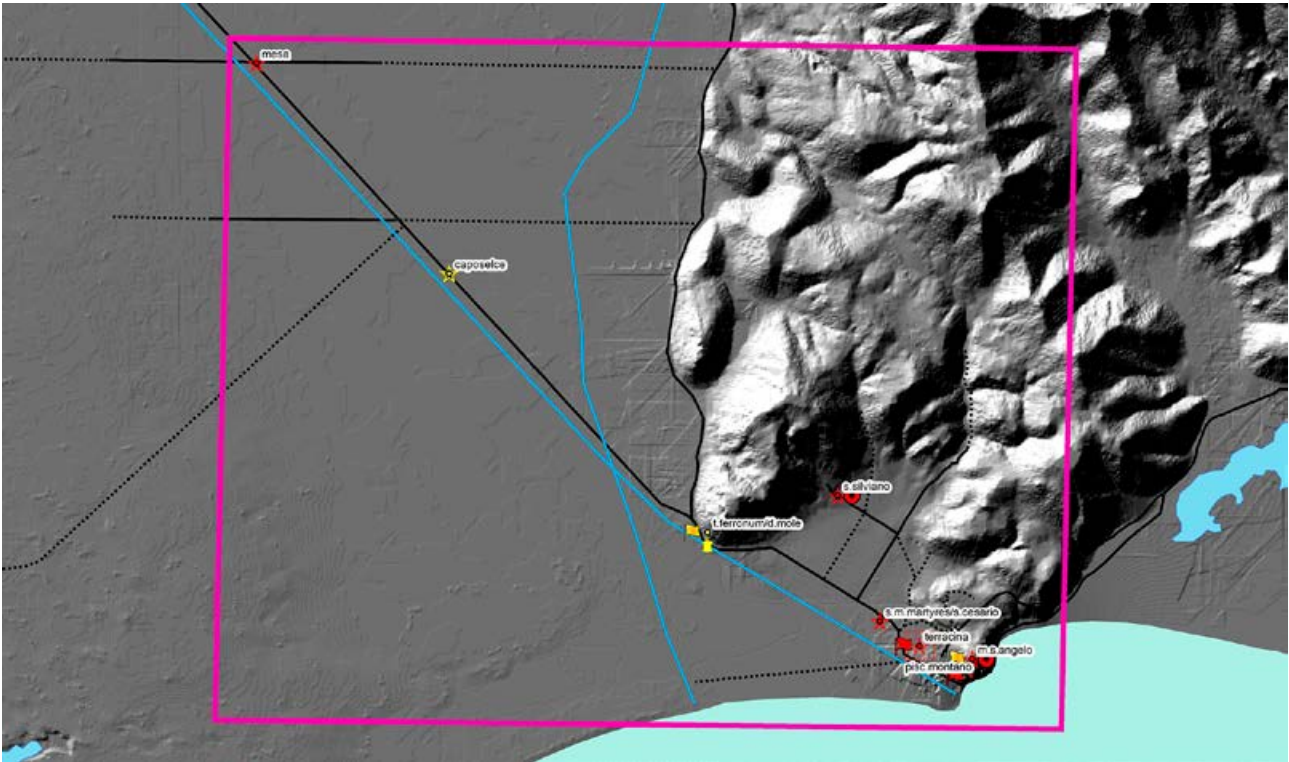


Figure 7.148. The Terracina key area in the 12th century.

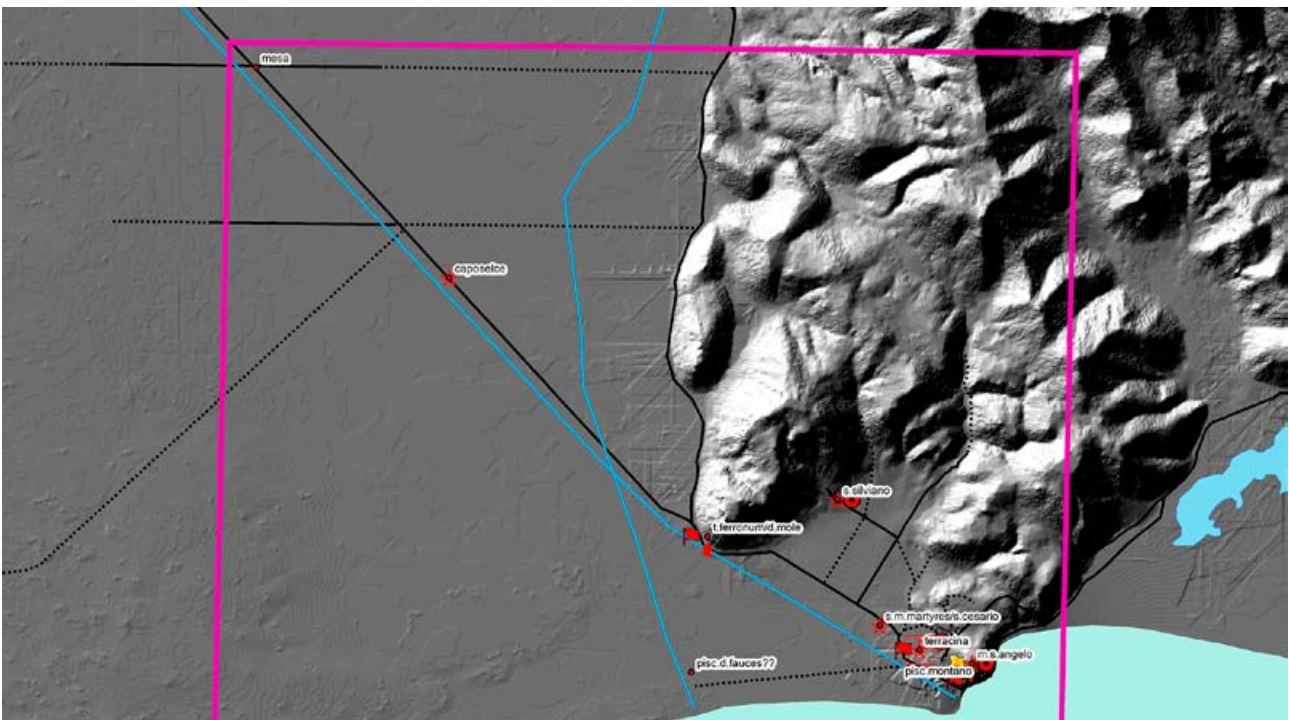


Figure 7.149. The Terracina key area in the 13-14th century. All sites on the map show activity throughout the 13th and 14th century.

In the narrow passageway from the lower Pontine to the Fondi plain near Terracina called **Pisco Montano** (OLIMsite 71), a fortress was built, probably in the 12th century (see figure 7.148). This fortress controlled a tollgate on the passage below the rock³¹¹. In 1204 the

stronghold was referred to as “munito [stronghold] Pesclum Montanum”.

Another stronghold was built on the edges of a mountain ridge and on the Appian route: **Tor Ferronum** (OLIMsite

211), later also known as Torre delle Mole. Probably built in the 12th century on the slopes of Monte di Leano, this fortress controlled the streams below, the Amaseno and *decennovium*, and the roads at the entrance to the *Valle di Terracina*.

To conclude on the Terracina key area: Terracina is the dominant power in this key area. In this key area too, the site distribution maps show a gradual filling in between the 10th and 14th century, that is, on the roads outside Terracina, in the town itself and its *suburbium*. While in the 9/10th and 11th century Mesa was the only site in the southern Pontine plain with recorded activity, the 12th century records other functioning sites along the Appian route: a rural church at Caposelce and a watchtower (Torre delle Mole). This adds to the picture drawn in the pedemontana area, that the 11th/12th century is the period of renewed zeal along the old Appian route.

7.III.1.10.2 Infrastructure

There are two waterways in the current study area which were (again) used in the high middle ages: the *decennovium*, which possibly had remained in use throughout the middle ages, and the Amaseno river.

It has been suggested that the Appian road south of Sezze, parallel to the *decennovium* canal, may have remained in use throughout the middle ages, be it not as main route. For this there is no solid evidence. As discussed above, activity has been recorded on road sites in the southern part of the Pontine plain, first at Mesa in the 9/10th century, possibly in the 11th century at Caposelce (OLIMsite 78) and in the 12th century at S.Giacomo (OLIMsite 80), the latter being situated just outside the current key area. This activity demonstrates the renewed vigour of this part of the Appian-*decennovium* route, maybe because of improved environmental circumstance, although it has been suggested that the *decennovium* had remained in use throughout the middle ages³¹².

7.III.1.10.3 Economy, production and trade

The selling of pieces of waterlogged lands near Mesa in the early 11th century may be seen as a sign of the areas' economic value. The Forum Ware finds here (dated between the 9th and 12th century) point to renewed economic exploitation of the central Pontine area. The exact nature of contemporary production and trade in these parts has yet to be specified. Possibly people were fishing here: on the ONC maps several small ponds called *piscina* are depicted south of Mesa.

A document of the 12th century seems to point out the economic value of the forest of the area. The town Terracina complains to Pope Lucius III (1184-1185) in a

libellum querimoniae (letter of complaint) about the fact that the Frangipane neglected or damaged the forests of the community³¹³; This document also makes mention of the right to peel oaks for tan (*jux excoriationis*)³¹⁴; probably this had to be settled too.

A document dated to the late 12th century seems to indicate that Terracina was an important salt marketplace in the high middle ages³¹⁵.

7.III.1.10.4 Religion and worship

The bishopric of Terracina continued to be a powerful Church institute in Tyrrhenian southern Lazio, servicing many of the Lepine communities in the early middle ages (see 7.II.1.10.4). In the beginning of the 11th century the diocese of Priverno was fused with that of Terracina, the episcopal seat staying in Terracina³¹⁶. In 1217 the diocese of Sezze was integrated into the one of Terracina, for reasons not clear from the *bolla* by Honorius III, but which according to Bianchini can be attributed to budgetary reasons: there were too few people in this area for two dioceses³¹⁷. The diocese was called *Terracina, Sezze e Priverno* and seated in Terracina because of its seniority³¹⁸.

7.III.1.10.5 Geo-politics: power relations, struggle and control strategies; secular activities

The two fortresses of Pisco Montano (OLIMsite 71) and Ferronum (OLIMsite 211) may (originally) have been founded simultaneously as part of a strategic plan to control the wider Terracina area³¹⁹. The two strongholds seem to have been built roughly at the same time, and both are mentioned in combination in several sources of the 13th and 14th century. In 1204 Terracina returned to Pope Innocentius III the Monte Circeo and pawned “munitiones quoque, quas circa civitatem habemus scilicet Pesclum Montanum, et Ferronum” to the same pope, with the commitment to not attack or annoy the people send by the pope to control it³²⁰. A letter by Pope Boniface IX of 1400 AD ordered the people of Terracina to recapture the Torre delle Mole [Ferronum] and Pisco Montano, which earlier had been illegally taken by Onorato Caetani³²¹. It is unknown however, who ordered the building of these fortresses.

7.III.2 An analysis and resulting conclusions for the whole research area regarding the 10th until the 14th century

7.III.2.1 An evaluation of results, sources and methods used

Many of the aspects in the ways the sources come to us and in what way they should be interpreted in respect of the previous study period also apply to the current study period. Actual markers of change are still limited. Local utilitarian pottery will often have gone unnoticed

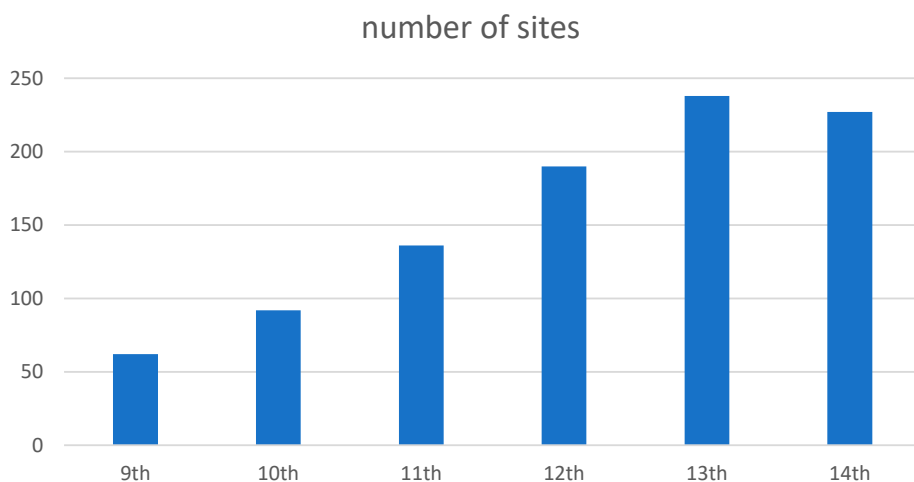


Figure 7.150. Chart showing the grand total of recorded sites in the research area between the 9th and 14th century.

in archaeological research, thus impeding knowledge of local production and trade systems. As for the previous periods, the excavators' level of familiarity with current period's material culture determined to what degree well-interpretable contexts were produced. The main difference with the previous study period is twofold: there is a lot more material culture available to be studied, chiefly because a lot of buildings dating to this sub-chapter's era are still standing nowadays. And above all, a far larger amount of written sources are available for the studied period.

7.III.2.1.a *Increasing activity vs. available written sources*

The site distribution maps show that human activity gradually spread out over the entire landscape of Tyrrhenian southern Lazio during the studied period. The grand total of recorded activities in the research area increases from 62 for the 9th century, to 96 for the 10th century, to 136 for the 11th century, 190 for the 12th century and to 238 for the 13th century. For the 14th century this number is 227 (see figure 7.150).

Once again, it is important to stress that the increase in the number of sites from the 10th century onwards does not only reflect the increased exploitation of the landscape, or a rise of building, settlement, land ownership and trade. To a degree this finding was a reflection of the growing number of available written sources as well. The main bulk of historical sources for the studied part of southern Lazio dates from the late 10th century onwards (see 3.II.1). It is nearly impossible to determine which percentage of the sites documented in the post-10th century sources did already function before the 10th century, i.e. to what extent the new availability of sources shaped the image of growth.

From the 12th century onwards, cartography provides clues on the contemporary landscape as well, although detailed maps did not become available until the 15th century³²².

7.III.2.1.b *Historical data dominate this study's database. The (church) elite is more visible than the "common man"*

Historical data dominate the current study period. Just as for the previous study period, the number of published archaeological reports and monographs is limited. Merely a small amount of the archaeological excavations and survey projects in Tyrrhenian southern Lazio were focussed on the high middle ages, with a few exceptions, such as the research executed at Fossanova, at Villamagna and at the Vicus Augustanus. At the same time the number of written sources is considerably higher compared to the previous study period. Because most of the data in the database stem from written sources, the analysis of the current study period is dominated by the clergy and the elite. These closely entangled groups at the high end of society had almost exclusive access to written sources, until the advent of communal archives in the 11-12th centuries³²³. As a result, the historically attested *castra* and the secular elite and ecclesiastical interests are represented significantly in my analysis.

There is little direct information to be found related to the people that largely remained outside the realm of texts: the peasants, shepherds and transhumant people, lumberers and fishermen, and (traded) slaves³²⁴. Archaeology does not contribute to a solution of this lacuna. Local excavations and thoroughly surveyed areas with a distinct medieval focus will be needed to start to tell the story of these groups within the context of local production, redistribution and demography effectively, as was done in the Farfa and Biferno projects. Thus far, such archaeological studies are rarely published in the studied part of southern

Lazio (the Ostia key area and the site of Villamagna are among the exceptions).

Although the common man is almost never actually present in the data, he can often be traced in the background of well-documented elite and ecclesiastical activities, such as *incastellamento* projects. He would have been drawn to the locations of elite interests, directly (due to being involved in these elite activities) or indirectly (being part of economic or demographic growth of which the recorded elite activities function as markers). His movements can be inferred from the available evidence of elite interchange and communications (which can be deduced from the distribution of elite interests); he would travel the same routes to reach locations of primary production and redistribution (markets) as well (although it proved difficult to say something concrete regarding directions and distances to markets based on the recorded elite/ecclesiastical activities). There are a few written sources that directly refer to activities of the “people on the ground”. An example of this is the attraction of farmworkers from Ariccia to the castle of Savello. Some pilgrimages have been documented as well.

The underrepresentation of groups at the low end of society is a clear disadvantage for the analysis, yet an inevitable consequence of the state research (and publication) regarding the high middle ages in Tyrrhenian southern Lazio. In contrast, the available data provide some clear and detailed evidence about the power-structures present, and the geo-political processes taking place in the landscape during the current research period, such as *incastellamento*, the decline and rise of papal authority and the advent of the commune.

The fact that archaeological assemblages and stratigraphies are limited for the study area is partly compensated for by the fact the available archaeological studies provide better pottery typologies than for the previous study period. These studies occasionally provide insight into production and distribution within regional, and even local (e.g. the *dipinta in rosso* of Astura settlement) exchange networks³²⁵. Some additional compensation is offered by the historical architectural research tradition of the high middle ages in the research area. Many of the buildings that stem from the current study period are still standing upright, and have been the subject of a variety of studies. Overall they provide sound dating by means of typologies of construction techniques, and by the documents that recorded on their creation.

7.III.2.2 Analysis and conclusions for the 10-14th century

This section provides a holistic analysis of the study area between the 10th and 14th century. In this analysis, all data and its biases related to the key areas are assessed, whereas at the same time data that might be missing or could not be located are taken into account as well. Developments of this era that occurred in other parts of the Italian peninsula are used as a sounding board. This section will start off with a short chronological overview of the recorded changes taking place in Tyrrhenian southern Lazio as a whole, as such summarising the observations for each key area for the current study period.

Using this overview as a context, a review of three themes shall be given, which deal with fundamental aspects of the period under scrutiny. The first theme covers the development of a dynamic geo-political landscape after the 10th century. In this Theme I will analyse the distribution of the ecclesiastical and elite (civic) activity in the countryside. The second theme explores the process of *incastellamento*. The short and final theme, regarding the economic aspects of the period, is followed by a (partial) synthesis, in which the main developments across the landscape and in society of the 10th to 14th century are treated chronologically.

A landscape gradually filled up

This study’s database clearly indicates that from the 10th century onwards there occurred a steep increase in the number of sites with recorded activity³²⁶. During the 10th century activities were still largely restricted to the main routes. As of the 11th century the more marginal parts of the landscape, such as the central Pontine plain, the Lepine inland areas and Monte Circeo, begin to show some activity as well.

The surge in activity across the landscape is, among others, reflected in the growing numbers of villages/towns (often: *castra*) and monasteries in most parts of the research area. In the 11th and 12th centuries there was a tremendous growth in the number of recorded villages/towns. The number of monasteries increased steadily between the 10th and 13th century. Most newly founded monasteries were to be found in the wider Pontine pedemontana area between Cori and Sonnino, and in the adjacent Lepine Mountains. *Incastellamento* peaked in the 12th and 13th centuries in most areas. From the 11th century onwards, aside from fortified settlements (i.e. *castra*, *castelli*, or *civitates* such as Gregoriopolis) isolated strongholds, without attached population centres, were built on strategic locations in most parts of the landscape as well. Such strongholds mostly consisted of a single tower, or sometimes were merely small walled fortresses.

From the 11th century onwards, the more marginal parts of the landscape, such as the coast, the central Pontine plain (Via Appia) and the central parts of the Lepine and Ausoni mountain ranges once again began to show evidence of building, settlement, agricultural exploitation, land ownership and trade. In the 13th century, all marginal parts of the post-Roman landscape of Tyrrhenian southern Lazio showed such activities; and lastly the remote Lepine hilltop locations did so during the 13th and 14th centuries. However, within this by then intensively exploited landscape, there were zones that remained relatively marginal throughout the entire study period: the southern Pontine Plain and coast, including the southern Appian route, and some parts of the central Lepine and Ausoni mountain ranges. In these areas, the larger site types that were typical of the new age of growth, i.e. large (incastellised) settlements and monasteries, were absent. In the 14th century the momentum of growth seemed to have come to a halt. The rise of the number of fortified locations, monasteries, individual churches and villages came to an end. In the 14th century nothing much changes, except for the considerable drop in the number of listed *castra* which resonated the end of the era of active *incastellamento*, i.e. the decline of castles inextricable being part of the socio-economic and political processes of feudal arrangements. After the period of *incastellamento* most castle buildings continued to exist.

To conclude: after a substantial growth of activity in the 10th century, from the 11th century onwards Tyrrhenian southern Lazio evolved into a fully exploited landscape. That is to say, by then these wide-scale activities for the first time become apparent in the available sources. With the development of defendable hilltop settlements (mostly: *castra*) and control towers and of new monasteries, and with the establishment of new high medieval road networks (often on existing routes, such as the new main passage over Marino and the reused La Selciatella), and the intensive use of inland shipping networks (e.g. of the Rio Martino and the Cavata river), a landscape emerged that would last until the industrialised age.

This changing landscape filled with activity was influenced by several forces which simultaneously interacted and competed in a dynamic as well as volatile geo-political arena.

7.III.2.2.1 Theme: a dynamic geo-political landscape

7.III.2.2.1.a Introduction

On a macro-regional level, the geo-political situation in Lazio was settled in the middle of the 10th century, when the border of the Papal States became definitely fixed south of Terracina. Within the Papal States, the research area would eventually be divided into two administrative

provinces in the middle years of the 12th century, the Campagna (the Lepine and Ernici Mountains) and the Marittima (i.e. the area between the Alban Hills, the Lepine Mountains and the sea)³²⁷.

However, within the Papal States things were all but settled. Since their foundation the papacy had never exercised full sovereignty over the Papal States. Local and international forces were striving constantly for their shares of power, economic benefits and territory. Politics in Rome were overall too complex, and the Papal States were far too extensive, and their geography too rugged to be controlled effectively by the papacy. In high medieval Rome, several powerful actors acted on a complicated political stage, i.e. the papacy, elite families, the Holy Roman emperor, and the local commune.

Added to this, in the countryside surrounding Rome a complicated geo-political playing field would develop. The rural areas of Tyrrhenian southern Lazio experienced a boost in activities from the 10th century onwards and a simultaneous economic bloom. *Incastellamento* flared up. A large number of fortified settlements (e.g. *castra*, *civitates*) and monasteries were established. The landscape was literally littered with fortifications between the 11th century and the 13/14th century. With the exception of the Fogliano area and the area west of the Alban Hills, the pinnacle of this phase of “fortification” of the landscape lay in the 11th and 12th century. Next to fortified settlements and monasteries, all across Tyrrhenian southern Lazio stand-alone fortifications were erected or refurbished. By the 13th century virtually all roads and all mountain ridges in the central part of the research area were controlled by (fortified) settlements or isolated strongholds³²⁸. Because of the fragmented literature and the limited knowledge of the physical development of these sites and their administrations, this study’s database did not allow a further typological study of these fortifications³²⁹.

The eastern and central Lepine and the Ausoni Mountains were the only areas of the region with relatively few stand-alone strongholds: i.e. here fortified settlements dominated. The reasons for this are not that clear, but a tentative explanation may be found in these area’s less volatile geo-political circumstances (e.g. fewer competing parties involved; the absence of major routes; relatively distant from Rome; less acute danger of bandits roaming about) and/or a rather more marginal socio-economic status of these areas. However, toll points may have existed; I did not find any historical evidence for their existence in the consulted sources.

All things considered, an erratic constellation of powers and a new built environment developed in the countryside from the 10th century onwards. The development of

these constellations of powers is the object of the current Theme; its core is comprised by an analysis of the distribution of historically recorded interests. The mapping of interests allows the development of spheres of influence of the parties present in the landscape to be identified. I fabricated this particular overview along an artificial dividing line deliberately separating ecclesiastical interests from elite secular interests³³⁰.

With the aid of this study's database I will analyse the recorded changing interests of the above mentioned parties in the landscape of Tyrrhenian southern Lazio. Questions that may be answered will be: Who was involved where, and when, and, whenever possible, why? Are there clusters or lines of interests to be found within the landscape, and can their presence be explained? Recorded interests will be set against the background of the distribution of specific sites types, *castra*, individual fortresses, monasteries and bishoprics, and against the reconstructed infrastructure. The historical evidence of alliances and rivalries, feudal relations, economic and property related conflicts and deals, will be incorporated in this analysis as well.

This study of interests allows to mark out sites where many parties were simultaneously active; Sites that I therefore dub "focal points of interests". This theme then continues with the further study of these nodes of interests in the landscape. Their positions, locations or authorities and site type may articulate which parts of the landscape were most dynamic in a geo-political sense, and even explain why so.

Over the years, various scholars suggested the presence of lines of control towers or defensive arrays across the countryside. I will combine my analysis of interests with this study's site database to determine if any additional proof for these linear schemes might be recovered and in order to comment on parties that were likely to have been involved.

The study of the distribution and origin of secular and ecclesiastical interests could reveal lines of communication and mobility of people throughout the landscape (see 7.III.2.2.1.c14). An analysis of such lines of communication and mobility shall conclude this Theme.

7.III.2.2.1.b Ecclesiastical activity

At some point in the course of the 9th and early 10th century the dominance of papal authority in the research area came to an end; a process related to a major crisis in the papacy (see 2.I.8). This course of events was made tangible by a decline in the number and distribution of papal interests. Meanwhile, two other types of ecclesiastical

institutions expanded their networks of interests in the landscape: monasteries and bishoprics. Aristocratic families were the third party of stakeholders that enlarged their spheres of influence (see 7.III.2.2.1.c Secular elite activity³³¹). These three parties seemed, to some extent, to have stepped into the vacuum that was created as a result of the withdrawal of direct papal authority in many parts of the landscape.

The database shows that monastic life rapidly expanded from the 10th century onwards. There did not seem to occur merely a sharp growth of the number of monasteries; of all of the church institutions, monasteries were the most active ones in extending their network of interests. The total number of rural monasteries rose from five in the 9th century, to twelve in the 10th century and to 24 in the 11th century. And the total amount of monasteries would keep on rising³³¹. The recorded monastic interests across the countryside concerned monasteries from three diverse backgrounds:

- Monasteries based in Rome, as S.Alessio, Spool and Erasmo;
- Local rural monasteries, as S.Magno and Valvisciolo;
- Four large rural monasteries, three of which situated outside the current study area, i.e. Subiaco, Montecassino and Farfa, and one found on the border of the current research area, Grottaferrata

Monasteries began to play a significant part in worldly affairs in high medieval Lazio, as can be concluded by the reading of the gift of the castle of Carpineto Romano to the monastery of Villamagna in 1077, for instance. And from the involvement of the same monastery in the *castrum* of Julianu as well³³². A lot of the interests of monasteries consisted of landed properties. These estates most probably served for the production of agricultural crops and raw materials³³³.

From the 11th century onwards, the interests of the large monasteries, situated outside the research area or at its border, i.e. Subiaco, Grottaferrata, Montecassino and Farfa were found all over Tyrrhenian southern Lazio (see figure 7.151-7.154). Simultaneously, the studied area records interests of bishoprics with episcopal seats situated at the other side of the Sacco Valley, i.e. Anagni and Veroli (figure 7.152). Their dioceses stretched as far as the Lepine and the Ausoni Mountains overlapping the current study area³³⁴.

Each of the large "external" monasteries focussed on a specific sector of interest of Tyrrhenian southern Lazio (see figures 7.152-7.154)³³⁵: i.e. Montecassino on the Ausoni Mountains and the Fondi area, and Subiaco on the area west and south of the Alban Hills and on the southern



Figure 7.153. The locations of the large “external” monasteries with documented interests in the research area during the 10th to 14th centuries. The research area is demarcated with a red line. Source: Geoportale Nazionale - Ministero dell’Ambiente e della Tutela del Territorio e del Mare.

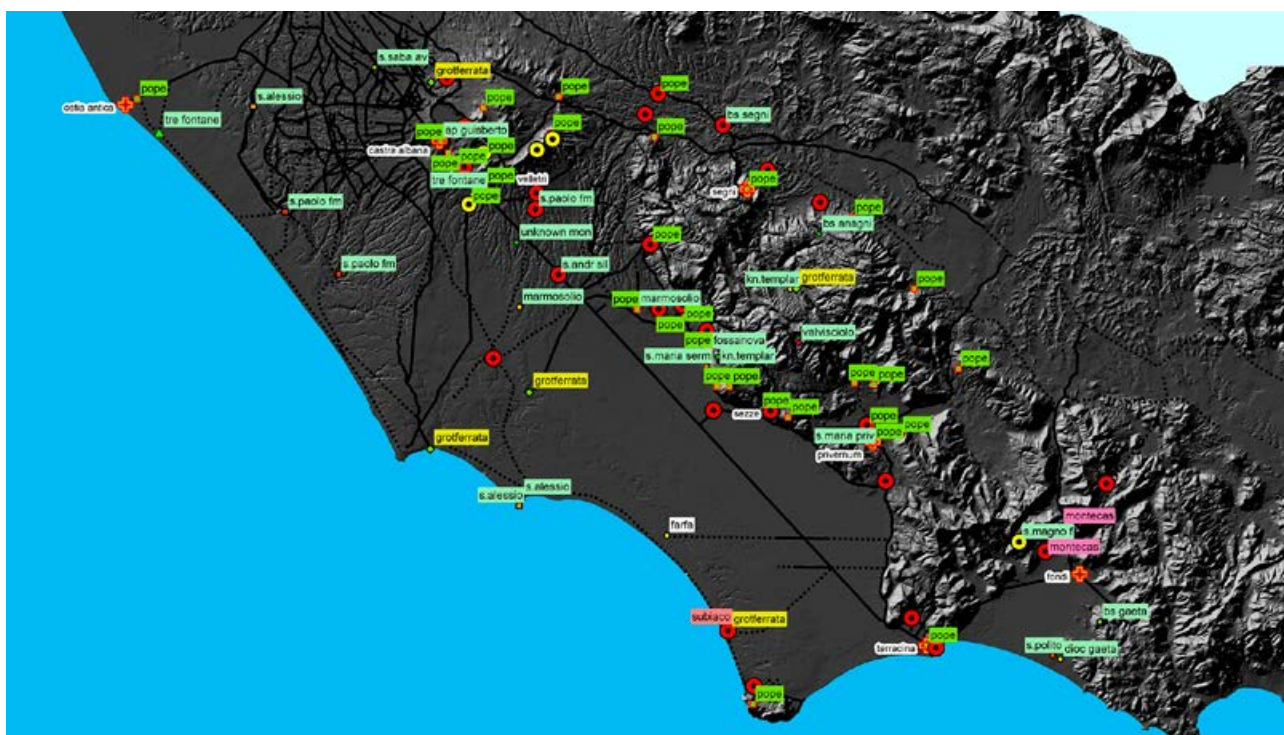


Figure 7.154. 12th century ecclesiastical interests.

recorded in the Alban Hills and on the southern Pontine coast. It is fairly feasible that this overlap was not primarily based on competition, as the relations between

the monasteries were deemed friendly³³⁷. After the 12th century no interests of Subiaco are listed anymore. Grottaferrata might have taken over some of Subiaco’s

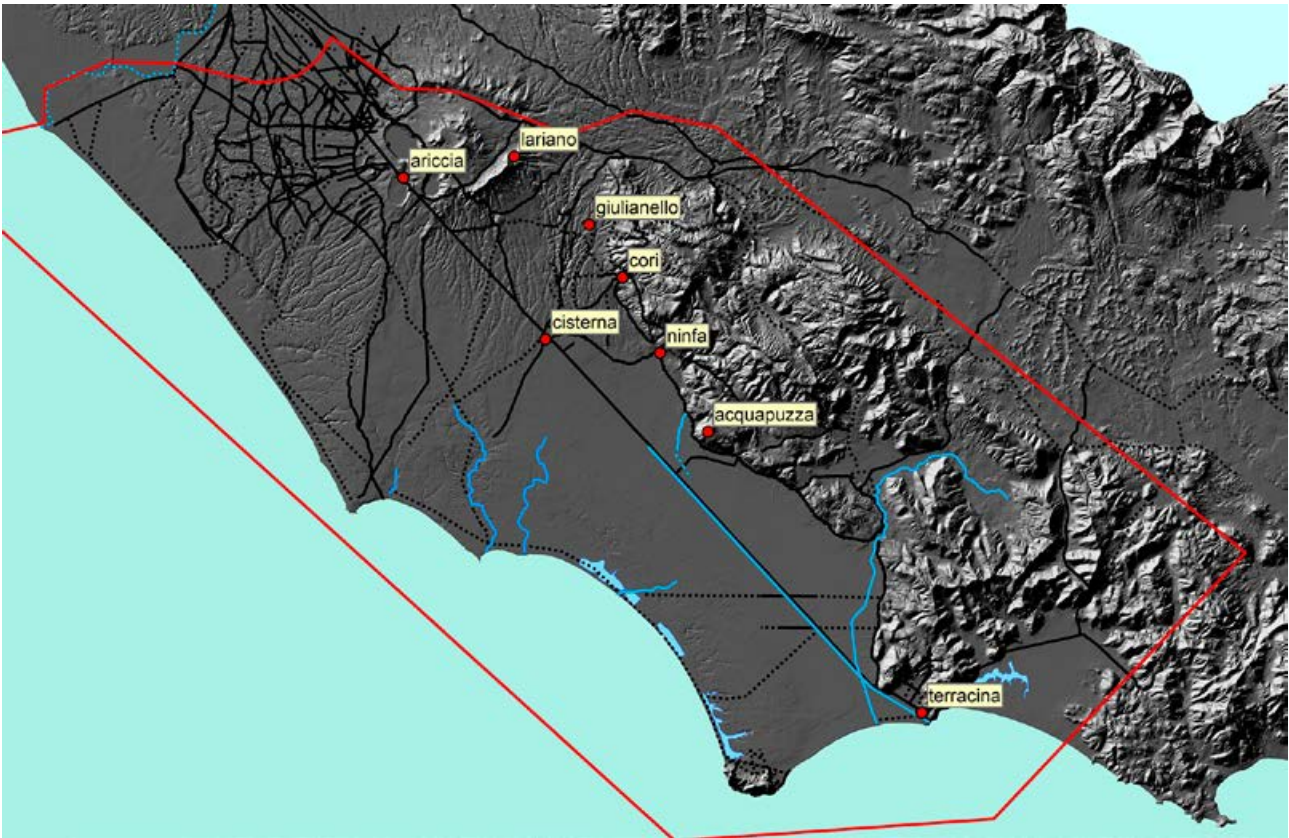


Figure 7.155. The locations of the papal castra specialia (1234 AD).

activities in the southern Pontine plain (see figure 7.154). Such a changeover occurred at the Fogliano lake and on the site of S.M. della Sorresca.

Notable is the 11th century distribution of the interests of Montecassino in the southern part of the research area. This picture of widespread involvement of Montecassino seems to be due to a singular event/source, as recorded in the *Tabularium Casinense*³³⁸. In the year of 1072, the Duchess Littefrida of Fondi bequeathed eight settlements to this Benedictine monastery, among which were castrum Ambrifi (OLIMsite 60), Vallecorsa (OLIMsite 273), Pastena (OLIMsite 274) and Lenola (OLIMsite 299). The thus created vast *patrimonium* of Montecassino in the Fondi hinterland did not hold out in the next century (see also 7.III.1.5.1). During the 12th to 14th centuries, Montecassino only would keep control over just two settlements, in the mountainous area north of Fondi (S.Magno and S.Helia).

Simultaneously to the expansion of monastic life, the role of local bishoprics grew, attracting a great deal of worldly power. Exemplary of this process was the involvement of the bishop of Velletri in the castrum Vetus in the midst of the 10th century (see 7.III.1.4.1 and 7.II.1.4.1). During the 11th and 12th centuries the bishoprics were gradually scaled up by merger, which effectively meant a further accumulation of power³³⁹. At the start of the 11th century

the dioceses of Priverno and Terracina were fused, with the Episcopal Seat remaining in Terracina. In the 12th century Sezze was included in this union³⁴⁰. In the year of 1150, the dioceses of Ostia and Velletri were united, for reasons thus far unknown.

In the 10th and 11th centuries papal interests were mostly restricted to the sites along the direct routes towards Rome, i.e. the Appian route and the pedemontana (see figures 7.151-7.152). From the 12th century onwards, the number and coverage of papal interests steadily increased (figures 7.154-7.157-7.158). Papal interests started to be documented once again in the Alban Hills, in the Lepine Mountains and across the Ausoni Mountains. This confirms the historically documented temporary nature of the decline of papal authority, between the late 9th until middle of the 11th century. From the 12th century, and certainly from the start of the 13th century, the popes would begin to accumulate worldly political power on a wide scale once more³⁴¹. The papacy rebuilt robust Papal States by acquiring a multitude of landed property thus progressively gaining control over local aristocracies. In the early 12th century there were recorded papal successes in the research area at the expense of the local baronage, by means of the seizure of lands and castles near Velletri and Subiaco, with the aid of Norman troops, and by the recapture of Ninfa. In the first half of the 12th

century, with the assistance of the Frangipane family, the papacy would reacquire its rights over several *castra*, e.g. at Maenza, Roccasecca, Giuliano and Acquapuzza. The papacy assumed control over a number of a number of towns in 1234 as well, as such establishing so-called *castra specialia* at Ariccia, Cisterna, Cori, Lariano, Giulianello, Ninfa, Acquapuzza and Terracina (see figure 7.155)³⁴². These *castra* should not be seen as *incastellamento* (*castra*) projects but as strategic fortified settlements without *lord entrepreneurs*³⁴³. The fact that the pope set about acquiring many properties with the explicit intention not to create fiefs might have added to the decline of the *incastellamento* process. This papal standpoint left the other elite parties less potential locations to create their own incastellated settlements (which usually would involve an owner and a lord entrepreneur who leased the site). The primary objective of the creation of the *castra specialia* probably was to control the main routes out of Rome to the south³⁴⁴.

Strikingly, the papal network of interests in the *suburbium* between the Alban Hills and the coast never fully recovered. There Roman monasteries dominated between the 10th and the 14th century. Until the 14th century, the extensive coastal area between Anzio and Terracina, with the exception of Monte Circeo, would largely remain in the hands of large monasteries situated outside of the study area, i.e. Grottaferrata (located on the border of the studied area), Farfa and Subiaco.

The fact that the “external” monasteries were active in the coastal area, shows the apparent need of inland organisations to be connected to the coast, even over great distances (e.g. Farfa is situated at 94 km from Fogliano as the crow flies; Subiaco at 61 km, see figure 7.153). Pisciculture likely was an important aspect of monastic activities there. Between 1201 and 1475 the right to cultivate fish on the Fogliano lake was granted to several ecclesiastical institutions³⁴⁵. Another incentive for inland monasteries to own coastal possessions might have been the ability to control the winter grazing grounds. In Roman times the Pontine coastal area was typically used as winter pasture grounds of transhumance routes coming from the inland mountain ranges. This practice might have continued throughout the early and high middle ages. There is a significant possibility that the monasteries kept herds of buffalos in the coastal areas. Written documents show that the buffalo played an important part in the livestock of the monastic domains during the 12th and 13th centuries. Buffaloes had no need for transhumant movement, and could be kept on the same pasture grounds throughout the year³⁴⁶.

An additional ecclesiastical party would emerge in the 12th and 13th centuries: the Order of the Knights Templar. This Christian military order, being strongly allegiant to the papacy, was founded in the year of 1192. The Order owned quite a lot of land and it built strongholds across Europe and the Middle East until the start of the 14th century. By some the Order was dubbed the “first multinational corporation”, as it controlled a vast financial and military network all over Europe, with its activities ranging from the management of landed properties for agricultural production, to manufacturing, to the building of castles and churches, to banking, and to trade³⁴⁷.

The Knights Templar controlled several rural locations in the research area, being mostly monasteries and churches, which the Order walled or equipped with strongholds or towers (see figure 7.156): e.g. Carpineto Romano (OLIMsite 258) in the late 12th century, the church of S. Antonio (OLIMsite 556, located close to Carpineto Romano) in the late 12th century, the monastery of Valvisciolo (OLIMsite 20)³⁴⁸, a tower at S. Felice Circeo (OLIMsite 95) dated around 1200 AD, and a 12th or 13th century fortress on the exact same site of the subsequently built monastery of S. Francesco (OLIMsite 192, situated southwest of Sermoneta). Between the years of 1213 and 1259 the Order controlled the monastery of S.M. della Sorresca (OLIMsite 128). The distribution of the Knights Templar-controlled sites has the appearance of a planned line-up, running north-south and as such monitoring the whole southern Pontine and Lepine region.

In the 13th century two ecclesiastical institutions from Terracina, i.e. the diocese and the cathedral, had documented interests in the Lepine Mountains, at Asprano and at castrum Trevi, and on Monte Circeo (figure 7.157). The distribution of these interests showcases the importance Terracina had as a regional religious centre. These conditions fit the above drawn then-contemporary image of strong bishoprics with authority in their hinterland as well. However, at that time, Terracina was the only Episcopal town in the research area that had documented records of interests outside its walls. Its interests at Asprano and castrum Trevi seem to affirm the earlier discussed picture of a long-lasting direct historical connection of Terracina and the Amaseno Valley / Sacco valley. Corsi assumed that Terracina, equipped with a large harbour of pan-regional importance, may have controlled the (pre-)Roman route from the Amaseno Valley to the coast throughout the early middle ages, and possibly continued to do so during the high middle ages³⁴⁹.

The Roman monastery of S. Alessio seems to have focussed on the Pontine coast and the roads to the south of Rome between the 10th and 12th centuries (figures 7.151-2 and 7.154). In the 13th century, its focus seems to have shifted

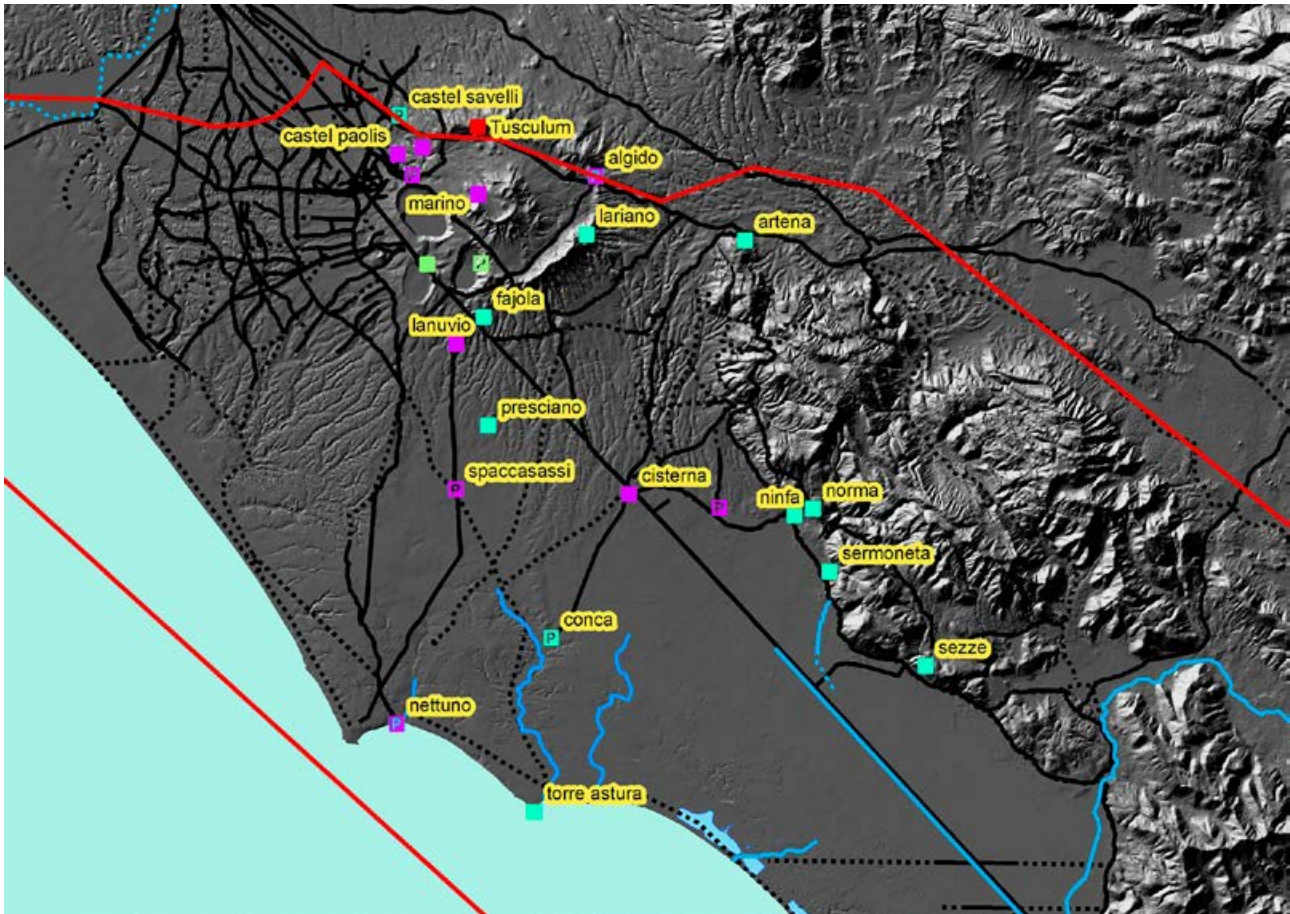


Figure 7.159. Tusculan interests during the 10-12th centuries. Pale green denotes a new interest in the 10th century, purple in the 11th, blue in the 12th century. Tusculan interests can be depicted on one single map as these expanded continuously from the 10th to 12th century, whilst existing interests were always (re)confirmed in the next century. P denotes an uncertainty as to the attribution to the Tusculi, an uncertain date or wide date range (i.e. spanning two centuries).

Alban hill. There the Tusculi founded the *castra* of Ariccia and Nemi, and there the Savelli held possessions at Castra Albana. As the Crescentii's power weakened in the course of the early 11th century, the Tusculi actively took over their role as the dominant force in Rome as well as in its countryside.

Once the resort of Roman aristocrats, and home to Cicero, the medieval city of Tusculum wielded power over large parts over Lazio and in Rome between the middle of the 10th and the late 12th century, ruled by the Counts of Tusculum. Initially these Counts were pro-Byzantine and opposed the influence of the German Emperor. This pro-Byzantine attitude is evident from their involvement in the foundation of the Greek-Byzantine monastery of Grottaferrata. Count Gregorius of Tusculum offered the land on which S.Nilo, of Greek descent³⁵⁴, founded the monastery. As the Crescentii had done before them, the Tusculi laid the foundation of their authority in the city of Rome. Between 914 and 1049 (and from 1012 to 1049 continuously) various descendants from the Tusculi family would hold the papal office. After this period of

“Tusculan papacy” no single family would dominate the Church in the same way as the Crescentii and Tusculi had done. Their influence in Roman politics and in the papal curia remained significant after the age of exclusive Tusculan papacy. The Tusculan clan turned out to be very competitive, and fought several political as well as military battles with other elite families. As from the middle of the 11th century their stature would change. From 1062 the family became openly pro-Emperor and developed a strong antagonism towards the growing power block of the Commune of Rome.³⁵⁵

The expansion of Tusculan power is clearly perceptible through the distribution of Tusculan interests, consisting mainly of landed ownerships and fiefs. Their patrimony would grow in the subsequent two centuries, stretching towards the coast (see figure 7.159).

On the whole, the wider Alban Hills were the Tusculan power-base during the 11th and 12th centuries. During these centuries they maintained a corridor of strongholds from the coast at Astura to the Alban Hills as well.

In this period the pedemontana key area constituted the southernmost part of Tusculan interests. The Tusculi controlled, at least for a brief time, Sermoneta, Cisterna, Ninfa, Tiberia, Norma and Sezze. Because of their large territory, and the strategic positions of their possessions, the Tusculi controlled much of the traffic passing to and from Rome. The tolls raised on the rights of passage might have proved a lucrative business. Ariccia, for example, was a *castrum routier* or *péager*³⁵⁶ during the high middle ages; much of the long-distance traffic to and from Rome southward should have crossed this village, which must certainly have ensured a steady revenue for the Counts³⁵⁷.

In the 12th century, the Tusculan authority in and around Rome was famously challenged by the Commune of Rome, finally leading to the dismantlement of the Tusculan dynasty at the end of that century, in the year of 1191³⁵⁸. During the 12th century Tusculan authority had met some local resistance in the research area as well: in the year of 1140 both Grottaferrata and S.Alessio rebelled against the power of the Tusculi by writing an official letter of complaint denouncing the authority of the Tusculi in Nettuno and Astura respectively³⁵⁹.

It is interesting to monitor what happened to the landed properties of the Tusculi after their power began to decline

from the early 12th century onwards. The Frangipane benefitted most of all by the withdrawal from Tusculan positions throughout the countryside. As early as the middle of the 12th century, in the pedemontana key area the Frangipane took over the local authority from the Tusculi in the villages of Sezze, Norma, Ninfa and Cisterna. In the year of 1146 Cisterna, so far an Tusculan title, became an asset of the Frangipane family, as did Torre Astura, and possibly Marino did so in the second half of the 12th century as well³⁶⁰.

7.III.2.2.1.c2 The Savelli

The Savelli family, the lords of Albano, rolled out their authority over the Campagna Romana in the 12 and 13th century (figure 7.160), subduing all nearby settlements and gaining control of the roads nearby, and especially the Via Appia, by destroying the defences of their rivals and building fortresses on various strategic locations³⁶¹. The watchtower just north of the Via Appia, called “Berreta di Prete” was probably one of these newly constructed strategically located fortifications. During the 13th century, in the Alban Hills the Savelli encountered the toughest opposition by the Annibaldi, who governed several villages across the eastern parts of the mountain range.

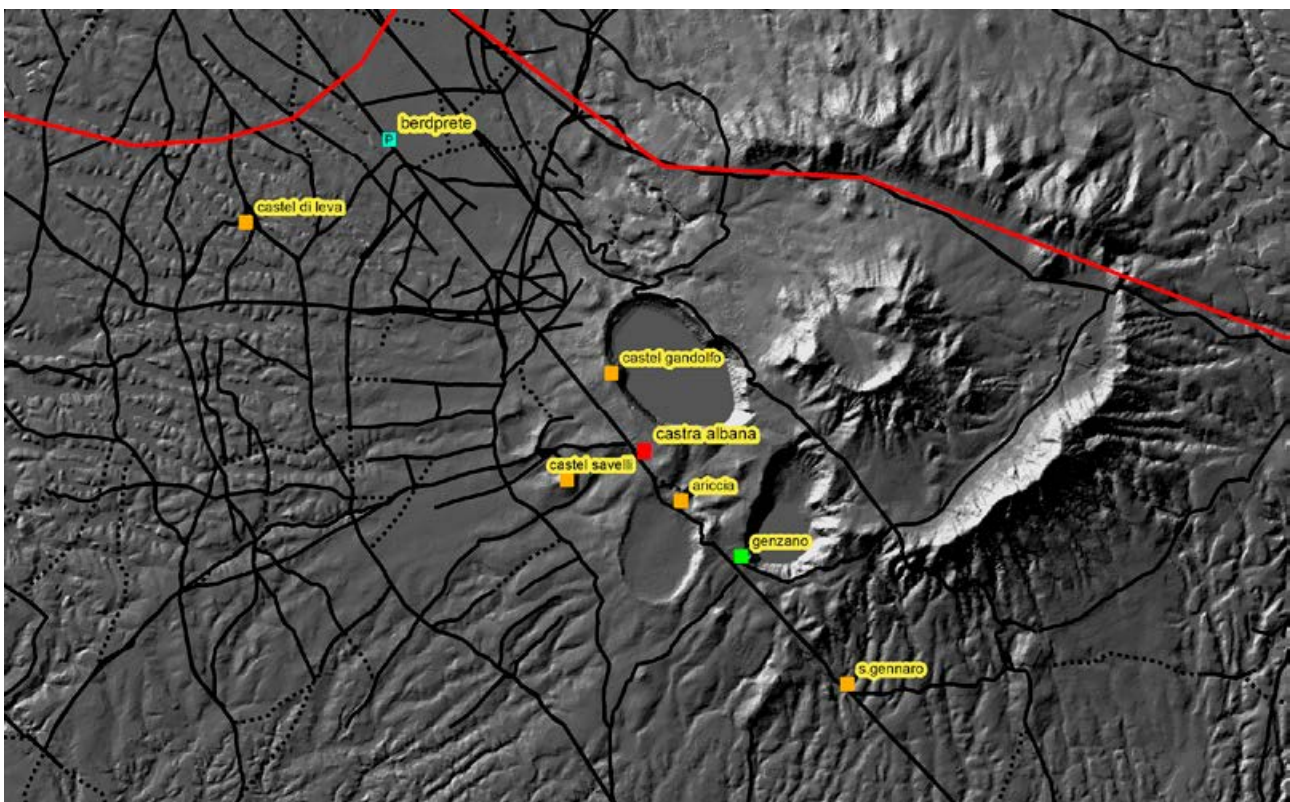


Figure 7.160. The Savelli's interests of the 10th to 14th century. Castra Albana had been a Savelli possession since the 10th century. In the 12th century (the blue dot) Berrete de Prete was perhaps used as an outpost by the family. In the 13th century the number of interests grew quickly (the orange dots). In the 14th century Genzano was the only site on which a new interest was recorded (the green dot); in that century Castel di Leva, Castra Albana, Castel Savelli and Genzano provided evidence of Savelli's interests.

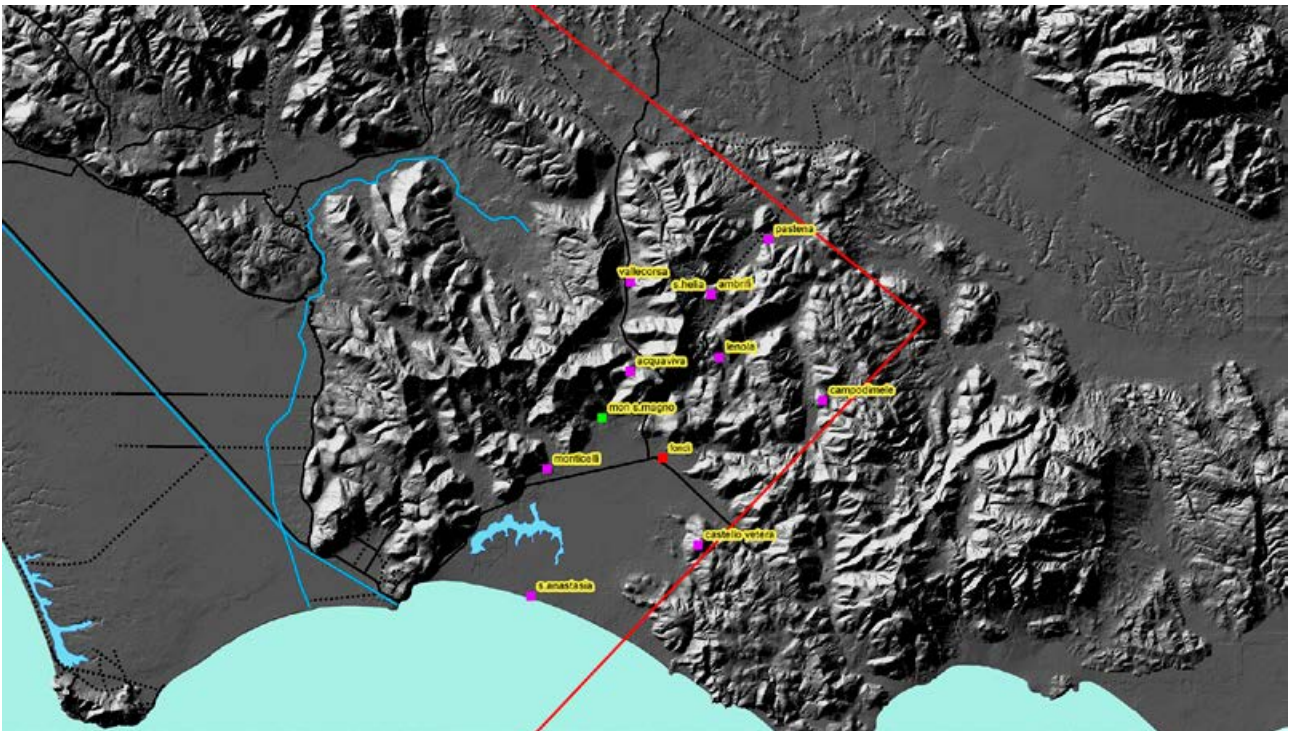


Figure 7.161. The interests of the Dukes of Fondi in the 10-11th centuries. Light green denotes a new interest in the 10th century, purple displays an interest of the 11th century.

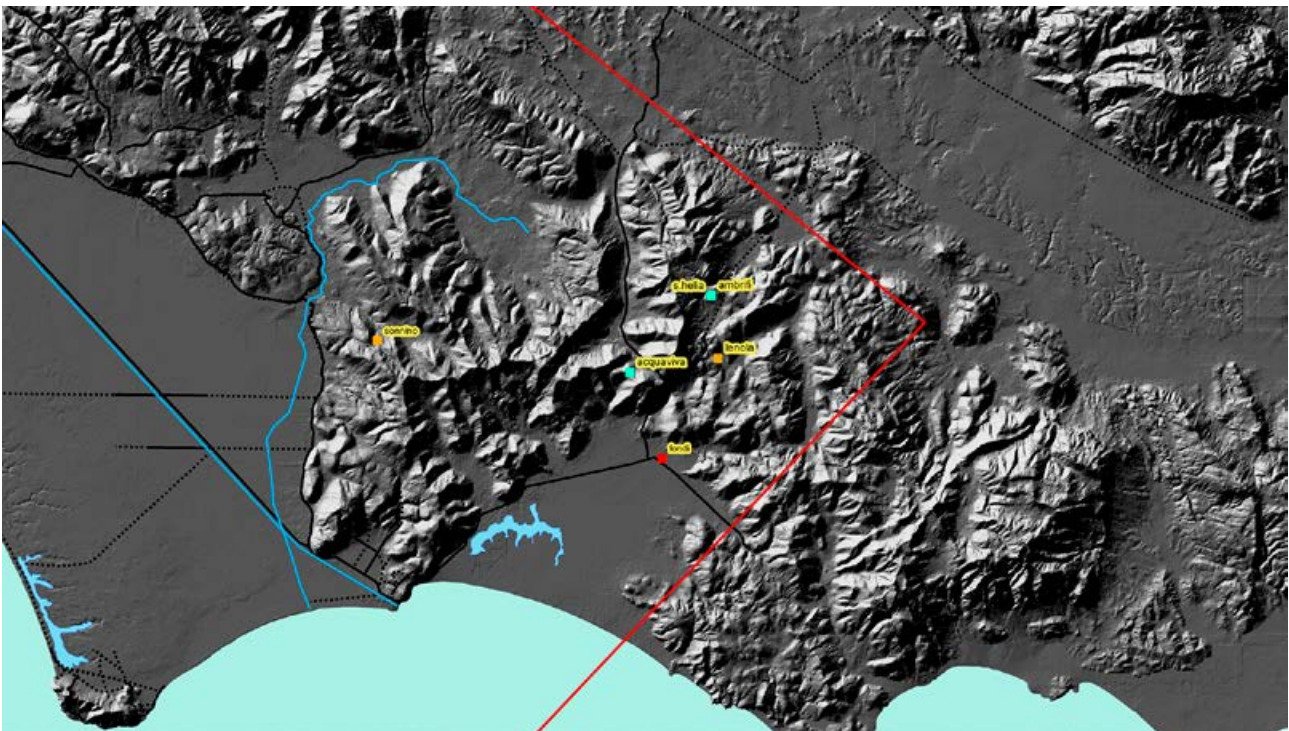


Figure 7.162. The interests of the Dukes of Fondi in 12-13th centuries. Light blue denotes a new interest in the 12th century, orange one of the 13th century. Only at Lenola interests were recorded in both centuries.

7.III.2.2.1.c3 The Dukes of Fondi

The Dukes of Fondi had had interests in the direct hinterland of their town from the 10th century onwards (7.161-2). During the 11th century the interests of the Dukes on the

mountain tops grew explosively as well as in the valleys of the eastern Ausoni and western Aurunci Mountains. In the 13th century the number of recorded interests of the Dukes of Fondi dwindled. For the 14th century there is

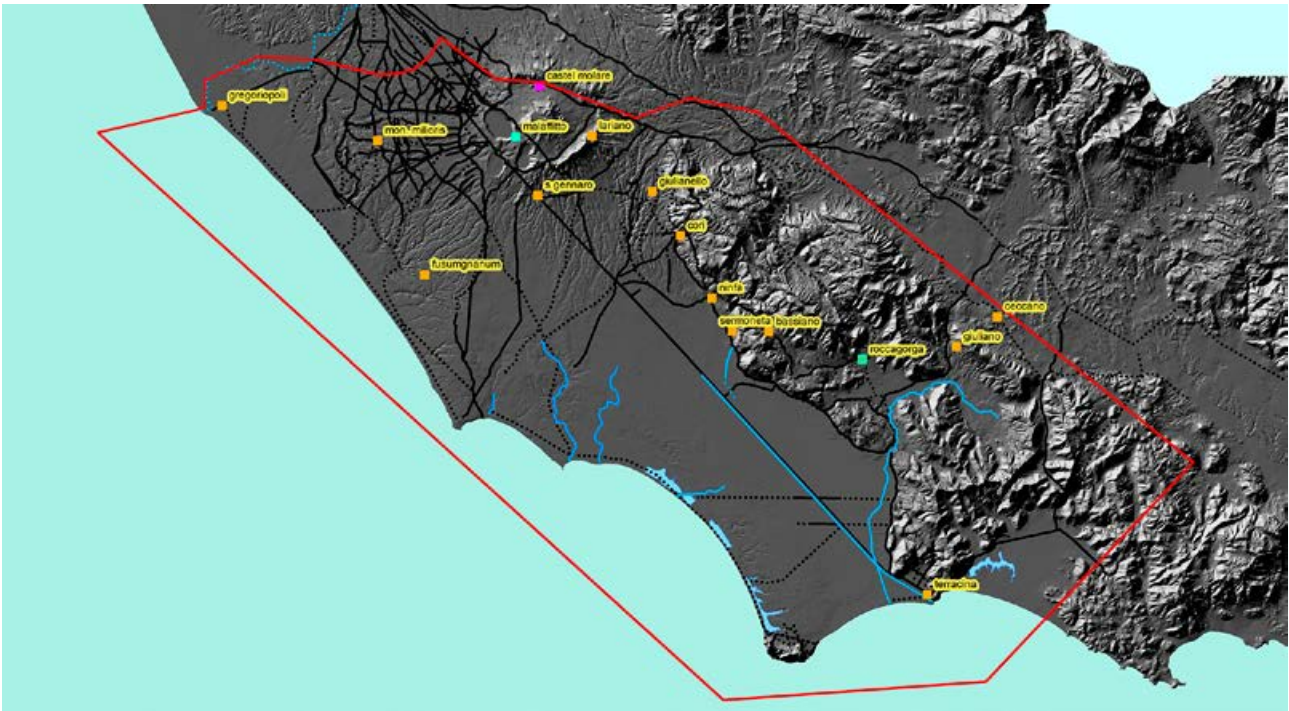


Figure 7.163. The Annibaldi's interests of the 11th to 13th century. A purple square denotes a new interest in the 11th century, a blue square on of the 12th century, and an orange one represents a 13th century interest. Annibaldi interests may be depicted on one single map as these expanded continuously from the 11th to the 13th century, whilst existing interests were always confirmed in the next century.

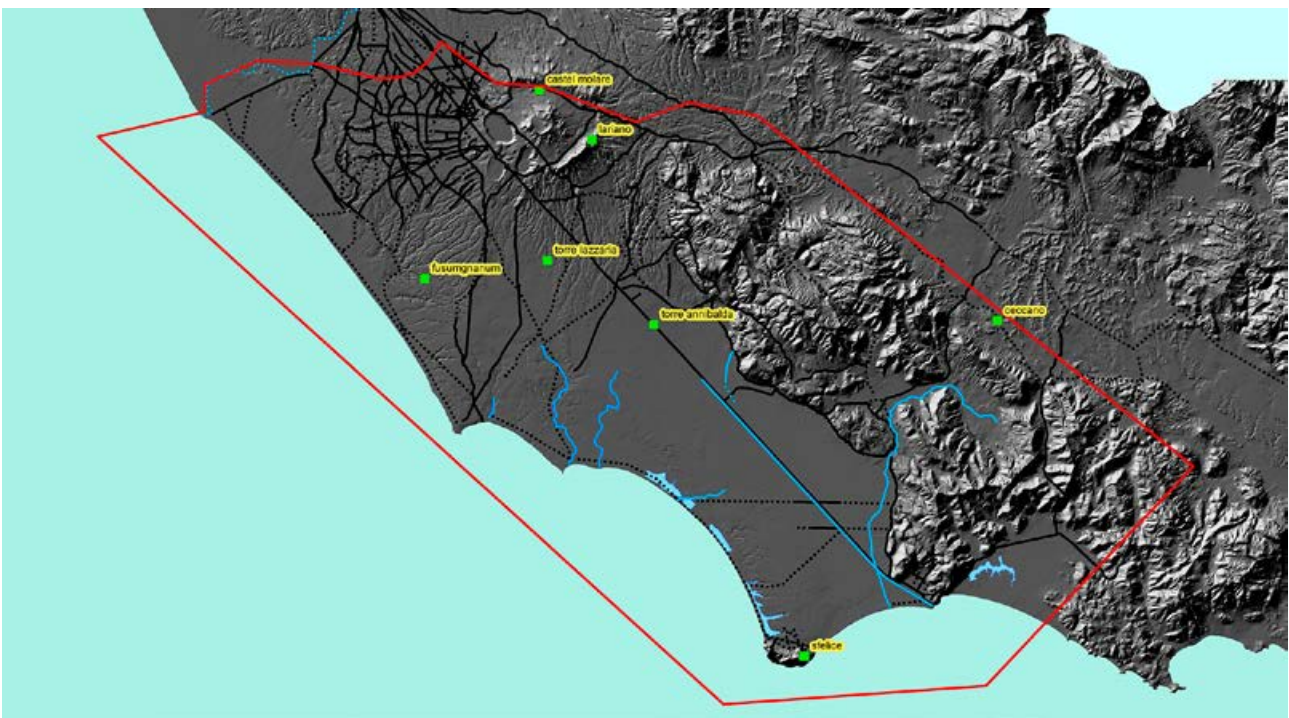


Figure 7.164. The Annibaldi interests in the 14th century.

no record of their interests. This is probably caused by the strong influence of the Caetani, who dominated politics in the wider Fondi area during the 13th and 14th centuries³⁶².

7.III.2.2.1.c4 The Annibaldi

Outside of Rome the Roman family of the Annibaldi considered Castel Molare their home base³⁶³. Under the protection of Pope Innocentius III (1198-1216) the Annibaldi were able to expand and unite their previously

fragmented patrimony (figure 7.163-4)³⁶⁴. The Annibaldi became a leading family during the 13th century, just as the Frangipane filling the (political) vacuum the downfall of the Tusculi had created. One of the family's leading figures was Riccardo Annibaldi, whom in 1240 was given the title of *Signore di Sermoneta e Bassiano* by Pope Gregory IX. The rapid expansion of the Annibaldi interests is illustrated in figure 7.163.

In the late 13th and 14th century the Annibaldi seem to have had to endure a strong competition from the Caetani: in some areas that the Annibaldi had dominated in the 13th century, the Caetani held all recorded interests in the subsequent century. This held true especially for the western Lepine Mountains and the pedemontana area³⁶⁵. This rivalry did not always involve force: e.g., in the year of 1297 Ninfa, Bassiano and Sermoneta were willingly sold to the Caetani³⁶⁶.

It seems that the Annibaldi (constrainedly?; forcibly/compulsorily?) chose other parts of the landscape for their activities in the 14th century, as new interests of the family were recorded at S.Felice in the south, and at Torre Lazzaria and Torre Annibaldi in the northern Pontine plain, strikingly outside of the conventional sphere of

interests of the Caetani. In the year of 1400 the Annibaldi would acquire Nemi.

7.III.2.2.1.c5 The Ceccani

From the 11th to the 15th century the Counts of Ceccano dominated their section of the Lepine Mountains out of their home base of Ceccano (see figures 7.165-7.167). In the 11th and 12th centuries the family was an important beneficiary of the monastery of Montecassino. From the 12th century onwards they acquired or created a chain of settlements in the Lepine and in the Ernici Mountains, in the parts looking out on the Amaseno and Sacco valleys (e.g. at Arnara)³⁶⁷. The Ceccani's authority was extended to the other side of the Lepine Mountains. At the end of the 11th and the start of the 12th century and in the early 13th century they held Sezze in fealty. It has been documented that in the 12th century they sacked both Sezze and Sermoneta. In the 13th century they held castrum Trevi in fealty.

In the 13th century the dominance of the Ceccani in the Lepine Mountains started to decline as was illustrated by the selling of the nearby village of Giuliano to the Annibaldi in 1268 and the transfer of the fief of Priverno to the Frangipane by the pope in the late 13th century. In the 14th century the Ceccani seem to have fully withdrawn

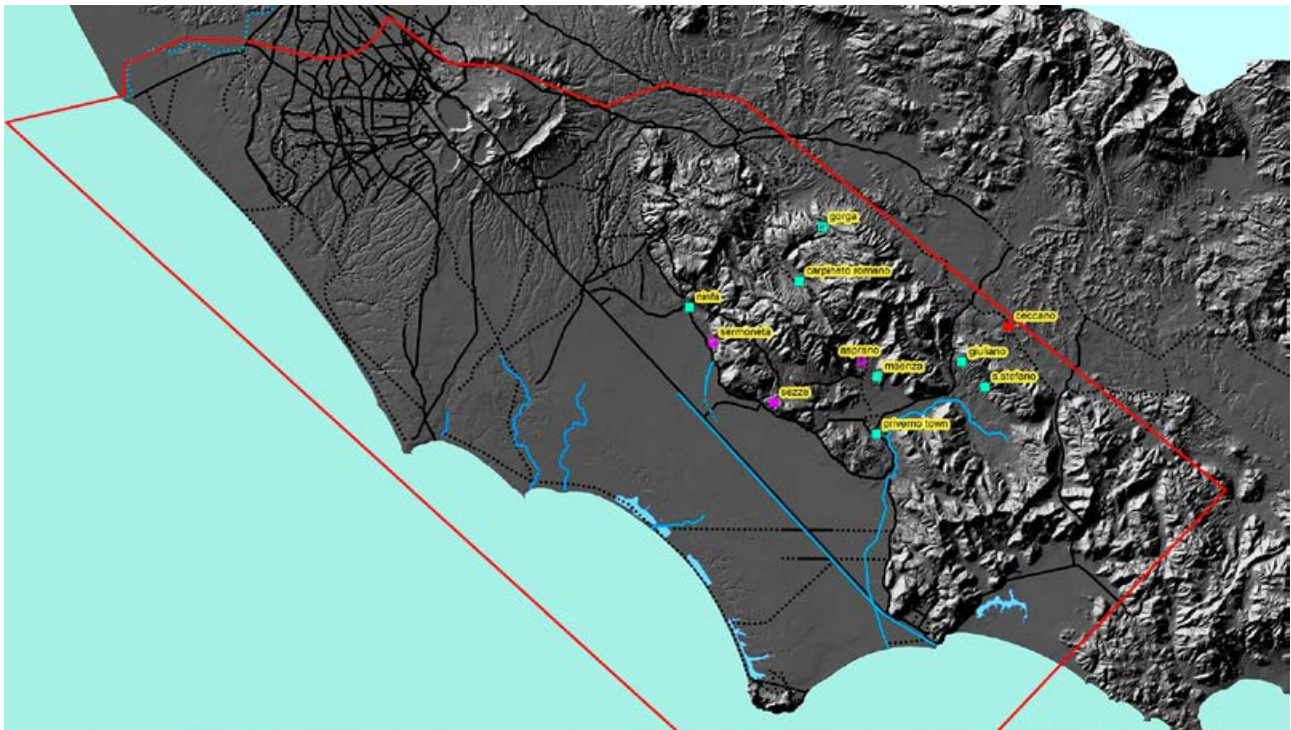


Figure 7.165. The Ceccani's interests of the 11th and 12th centuries. A purple dot denotes a new interest in the 11th century, a blue one concerns the 12th century. The Ceccani's interests in the 11th and 12th centuries can be depicted on one single map as these expanded continuously – whilst existing interests were always confirmed in the next century (that is, with one exception: i.e., Sermoneta).

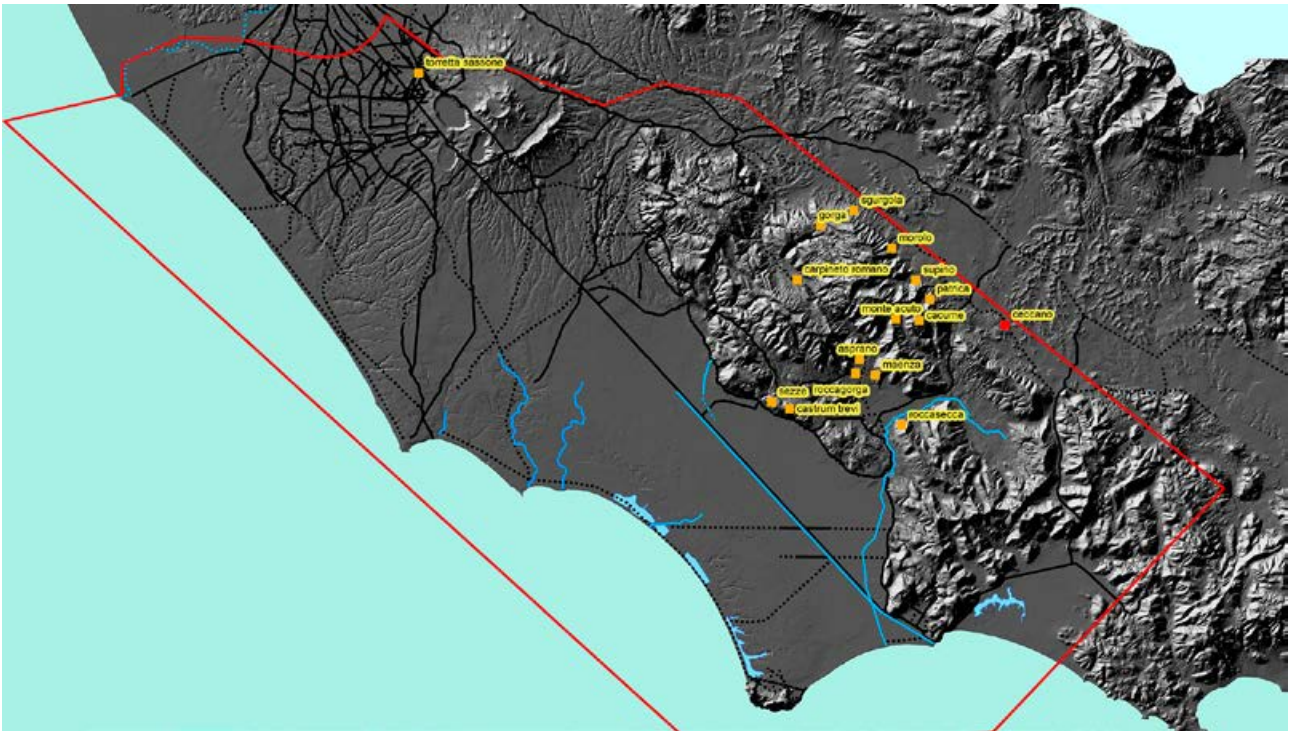


Figure 7.166. The Ceccani's interests in the 13th century.

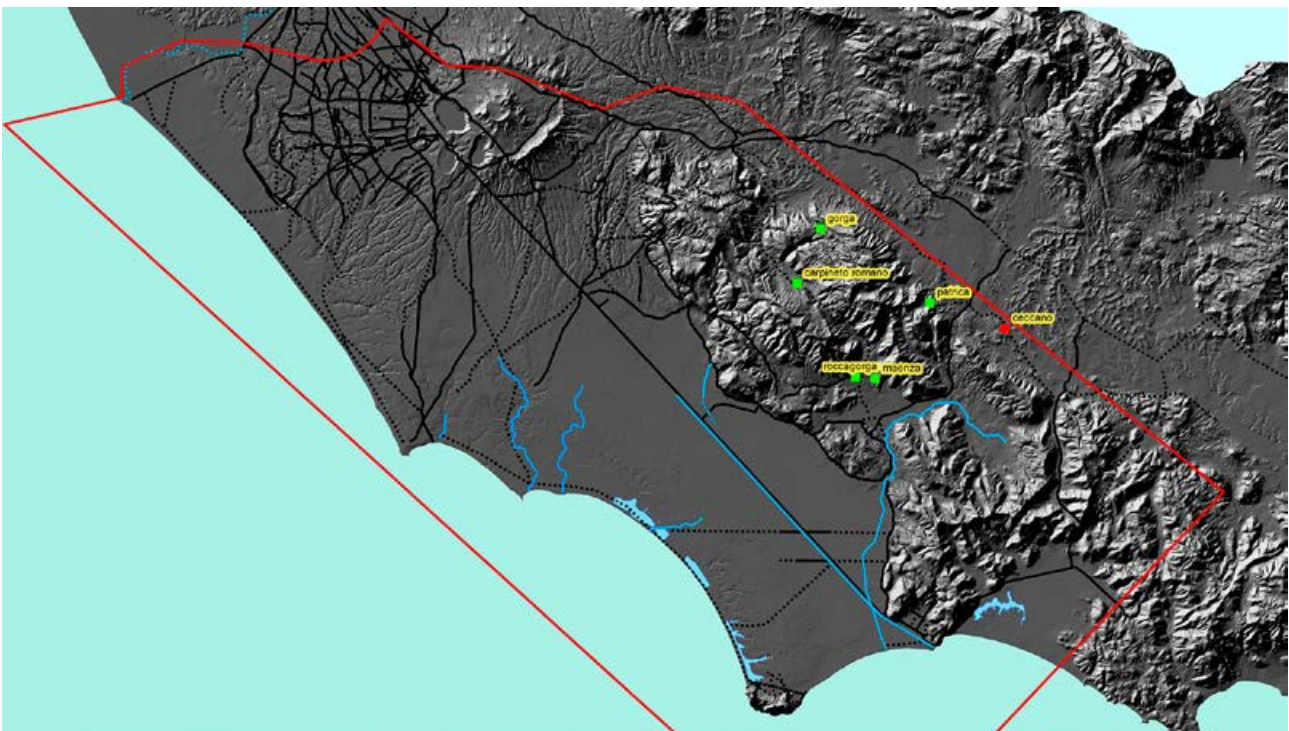


Figure 7.167. The Ceccani's interests in the 14th century.

from the Pontine ridges; this could have had to do with the dominance of the Caetani. In the late 15th century the dynasty of Ceccani came to a definite end; Ceccano became the property of the Colonna family.

7.III.2.2.1.c6 The Frangipane

Around the year of 1100, the baronial family of the Frangipane had become one of the most dominant families in Rome, repeatedly changing political sides during the ongoing struggles between papal and imperial parties³⁶⁸. In the 12th and 13th centuries the family were Guelphs

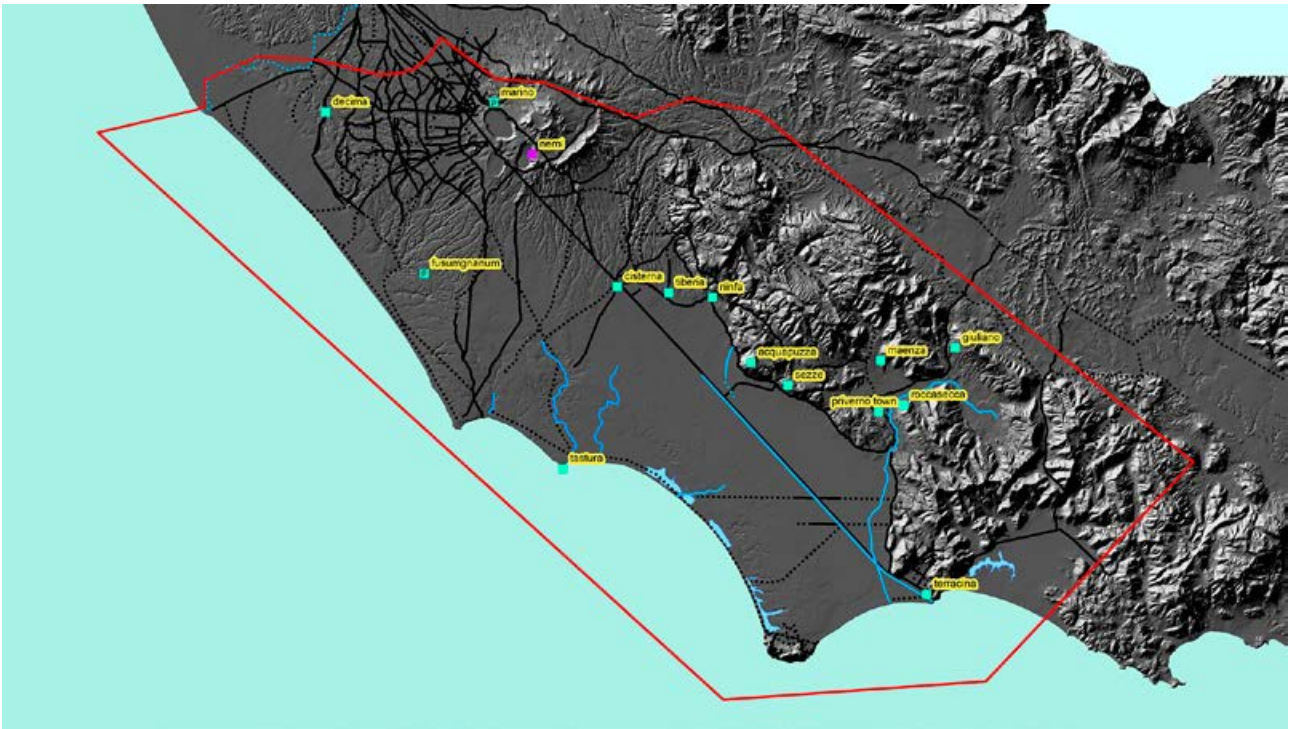


Figure 7.168. The Frangipane interests in the 11th and 12th centuries. A purple dot denotes a new interest in the 11th century, blue a 12th century one.

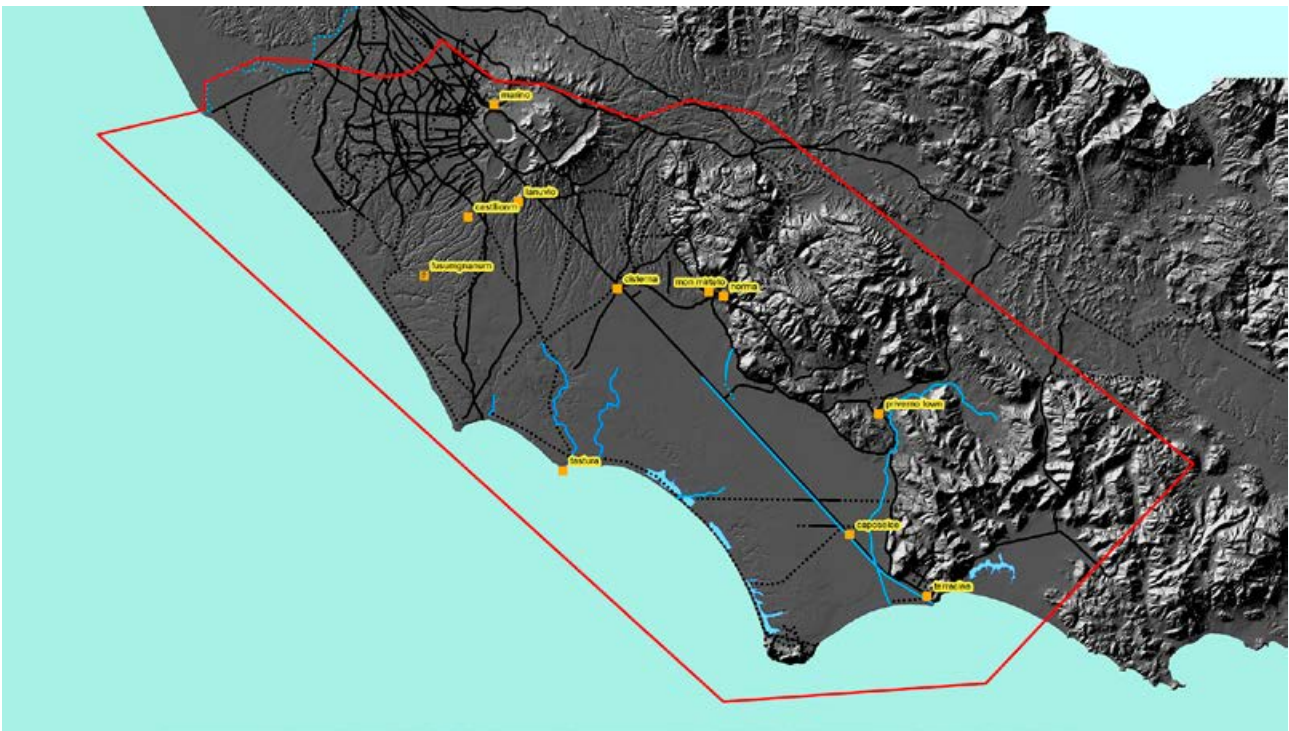


Figure 7.169. The Frangipane interests in the 13th century.

(i.e. in sympathy of the pope). The Frangipane seem to have stepped into the power vacuum that developed as the Tusculi withdrew from the Pedemontana key area in the 12th century, as they took over the local authority of the Tusculi in the villages of Sezze, Norma, Ninfia

and Cisterna. Torre Astura became the property of the Frangipane family in the second half of the 12th century.

In 1193 the Frangipane sold their Asturan property to the papal court, although their descendants were kept involved as some kind of lordly supervisors at Torre Astura throughout the next century. The prompt expansion of

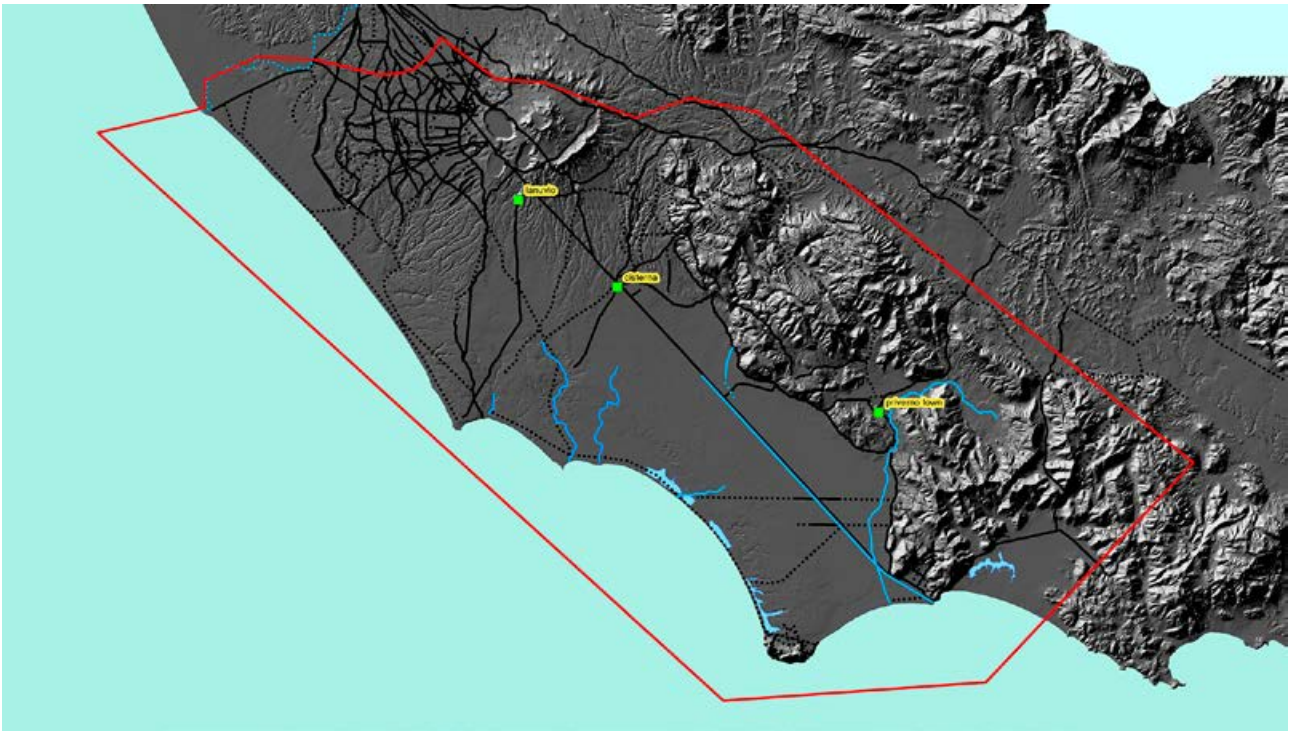


Figure 7.170. The Frangipane interests in the 14th century.

Frangipane power in Tyrrhenian southern Lazio is made visible by figure 7.168.

The Frangipane held several interests along the main new route Rome-Marino-Cisterna in the 12th and 13th centuries, along the pedemontana road, in the Amaseno valley and in Terracina. As a result, they, to a certain extent, controlled traffic on the main route as of Rome southwards, as did the Tusculi had done prior to them. They also developed interests along the Via Laurentina and on the coast as well.

During the 13th century the Frangipane still owned castles in the proximity of Rome, yet their relevance was on the wane. At that time, they were no longer considered a baronial family. Although families often changed classes, a degradation was not very common³⁶⁹. Their eventual disgrace could have been related to the tragic story of the treason of Conradin of Swabia in the year of 1268; an event after which Torre Astura was attacked and destroyed by imperial forces³⁷⁰. During the 14th century the number of recorded interests of the family in the countryside swiftly dropped (see figure 7.170). It could be concluded that the Caetani's success hindered the continuation of the Frangipane domain in the eastern and southern Pontine areas.

7.III.2.2.1.c7 The Colonna

Originally, the Colonna family was a branch of the Tusculan dynasty. They accumulated much political weight in medieval and renaissance Rome. Outside

of Rome, the Colonna family focussed on the Lepine Mountains and the strategic fortresses of Fajola and Genzano on the route to Rome (see figure 7.171). This family seems to have had difficulties to hold on to their properties, as these, based on the available historical evidence, were never reconfirmed in the next century/-ies. The Colonna had two famous long-standing feuds with two other noble families, the Caetani and the Orsini.

It is said that the Caetani had hindered the expansion of the Colonna's possessions since the Colonna opposition of Boniface VIII³⁷¹. The assumed struggle amongst these families does not appear all that irrefutably from the analysis of interests. First of all, the amount of interests of the Colonna family recorded in the research area is low, which makes any conclusion based on chronology and spatial distribution feeble. However, one can see the Colonna had interests at Norma and Ninfa in the 13th century, places that would be firmly held by the Caetani in the 14th century. During the 14th century the Colonna family would have only one interest (i.e. a property) left in the Lepine Mountains, being at Supino. This village would remain in their hands until the 18th century.

7.III.2.2.1.c8 The Orsini

From the 13th century, the Orsini developed a large domain in Lazio (see figure 7.172) and in the Kingdom of Naples. While the family had always held a great number of fiefs and lordships in northern Lazio, this number was lower in Tyrrhenian southern Lazio. Nettuno was

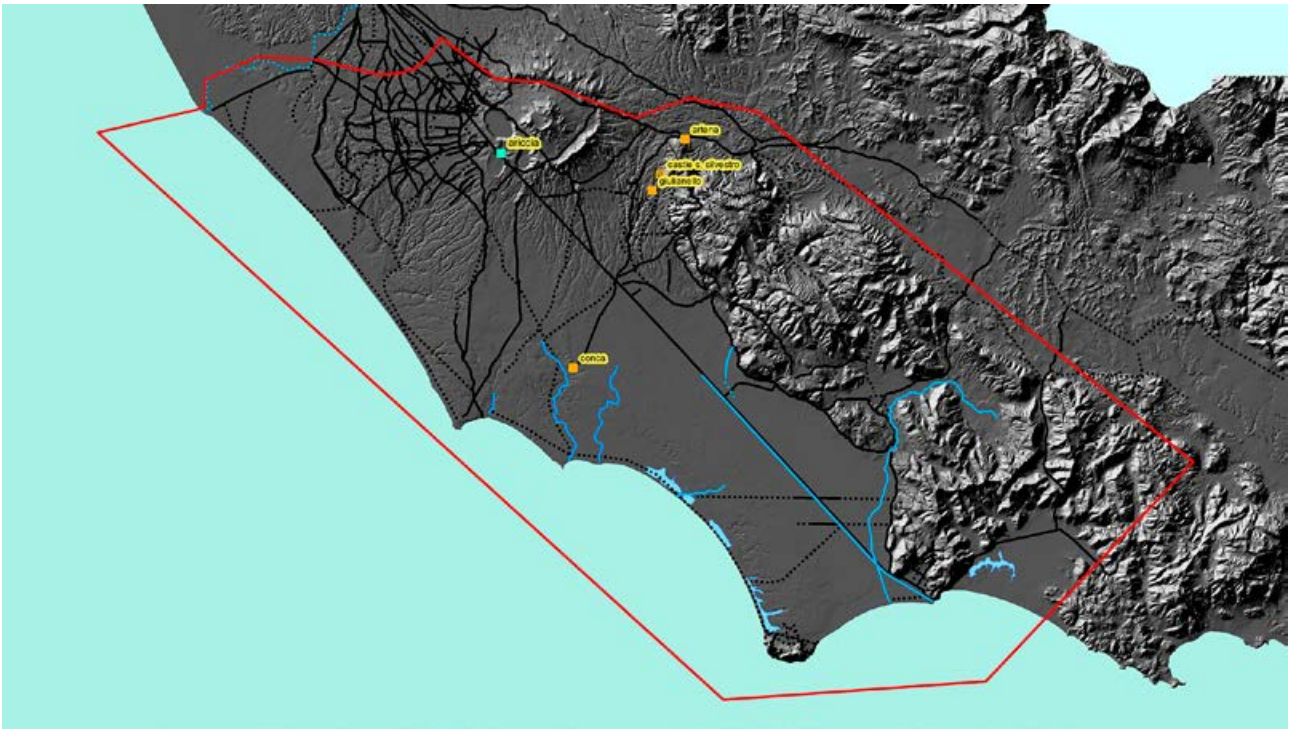


Figure 7.173. Interests of the Malabranca family in 12th and 13th centuries. Light blue denotes a new interest in the 12th; orange one of the 13th century.

The overlapping distribution of interests across the Alban Hills and the pedemontana zone seems to fit the picture of the two competing families, which clashed both in the City of Rome and in the countryside. In the Alban Hills the Orsini collided with the Savelli as well.

7.III.2.2.1.c9 The Malabranca

Historically not a lot was reported related to the Malabranca family. In the 13th century the family seems to have controlled (see figure 7.173) the important axis which until sub-recent times was known as the *Via Doganale* (OLIMinfra 70), running from the Via Latina along the Lepine base to the Appian road (i.e. at Cisterna) and from there to the coast (i.e. at Conca)³⁷⁵. There are no recorded interests of the Malabranca family to be found regarding the 14th century.

7.III.2.2.1.c10 The Caetani

The documented genealogy of the Caetani family started in the 12th century³⁷⁶. This family would develop branches in Naples, Pisa, Rome and in Anagni. In the 15th century a new branch developed at Sermoneta. Under the protection of Boniface III (1294-1303) the Caetani were able to expand their patrimony, leading to a hegemony in the southern parts of Tyrrhenian southern Lazio during the 14th and 15th centuries. This expansion is made visible on the ensuing distribution map of their recorded interests (figure 7.174).

From their initial base in the pedemontana area, the Caetani succeeded in acquiring several important Lepine villages and some strategic positions in the area around Terracina between the 13th and 14th century. They controlled the southern Pontine coast from the 13th century onwards as well, with properties at Il Procoio, at S. Donato, and at Monte Circeo. In the 14th century the Caetani seem to have filled the lacuna in their vast sphere of interests, with acquisitions and fiefs in the area roughly between Sezze-Amaseno-Sonnino. On their peak (i.e. between 1350 and the end of 15th century), the Caetani family owned about 200 castles in an area stretching over the Alban Hills up to Garigliano³⁷⁷. The Caetani succeeded effectively in hindering the expansion of the interests of several other elite families as those of the Annibaldi, the Frangipane, and especially of the Colonna, who had become their rivals ever since their opposition of the Caetani Pope Boniface VIII.

7.III.2.2.1.c11 Overall conclusions

The number of recorded secular elite interests rises from the 10th to the 13th century, from 23, to 35, to 77, and to 98 respectively. In the 14th century this number drops to 68. Although the decrease of the numbers of elite interests is less prominent than those of ecclesiastical interests, it too might be a sign that times were changing. This era became a period of relative tranquillity on the geo-political stage of Tyrrhenian southern Lazio. Part of the explanation for

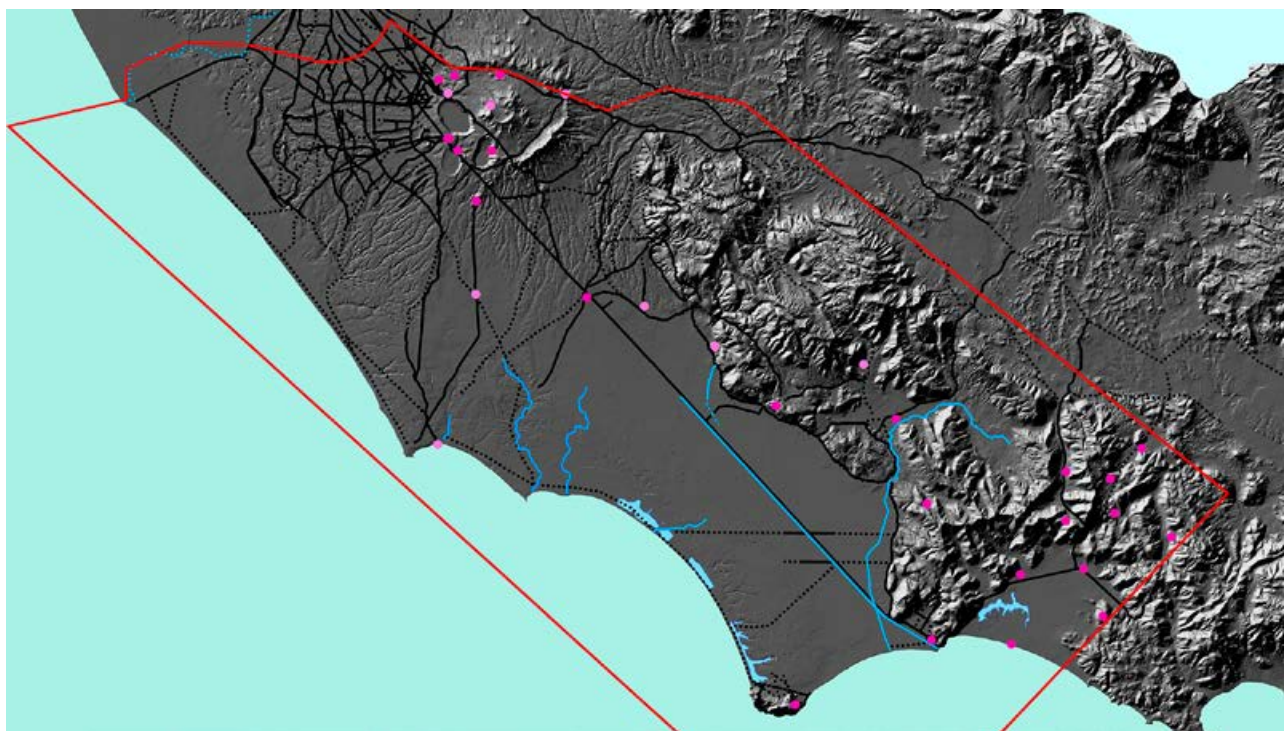


Figure 7.176. 11th century (secular) elite interests in the research area.

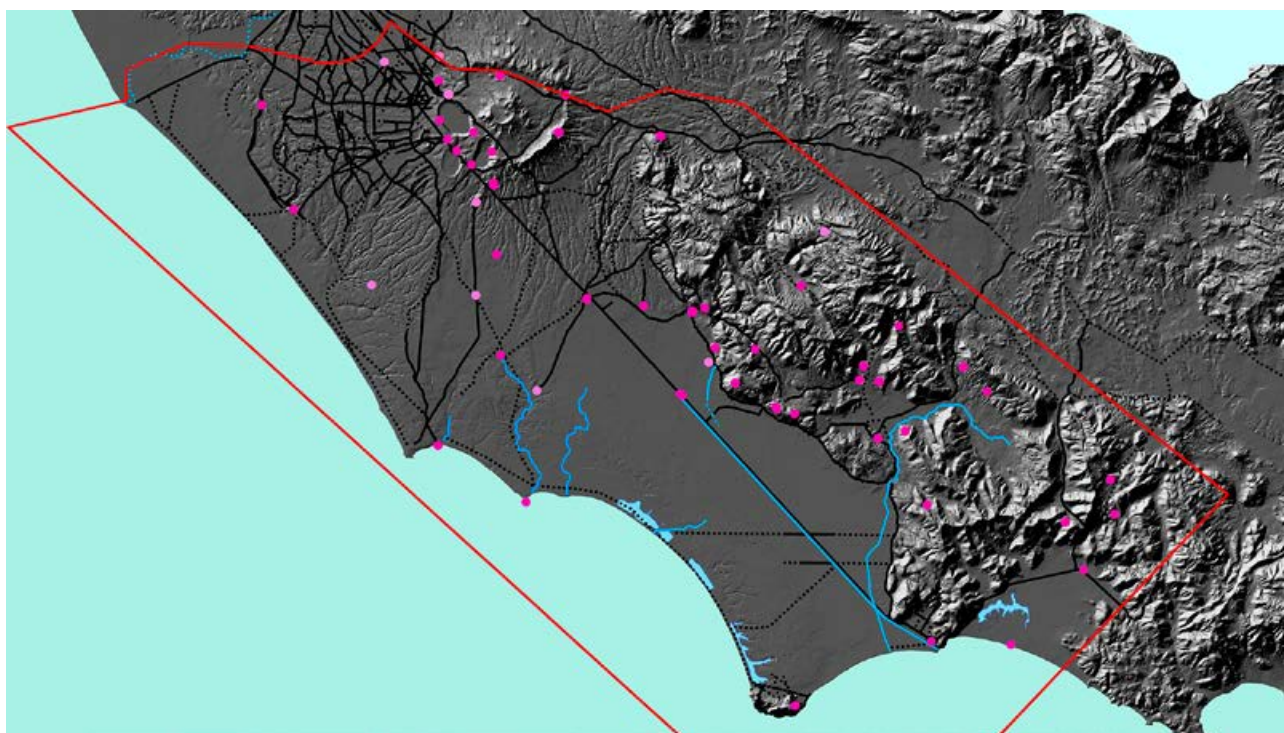


Figure 7.177. 12th century (secular) elite interests in the research area.

Secular elite interests firstly concentrated along the main routes and the coast

Up until the 10th century secular civic interests were principally restricted to the Via Appia and the Velletrian area, and to the Pontine coast. Initially civic parties (such as the Crescentii, the Tusculi and the Counts of Fondi / Gaeta) without a doubt restricted their initiatives to the

main routes because of the fast connections and communications to their home bases of Rome and Fondi / Gaeta. This is made visible on the map on which the 10th century (secular) elite interests are plotted (figure 7.175).

In the 11th and 12th centuries this picture changes when a far greater number of elite families sought expansion of their spheres of influence (figures 7.176-7.177).

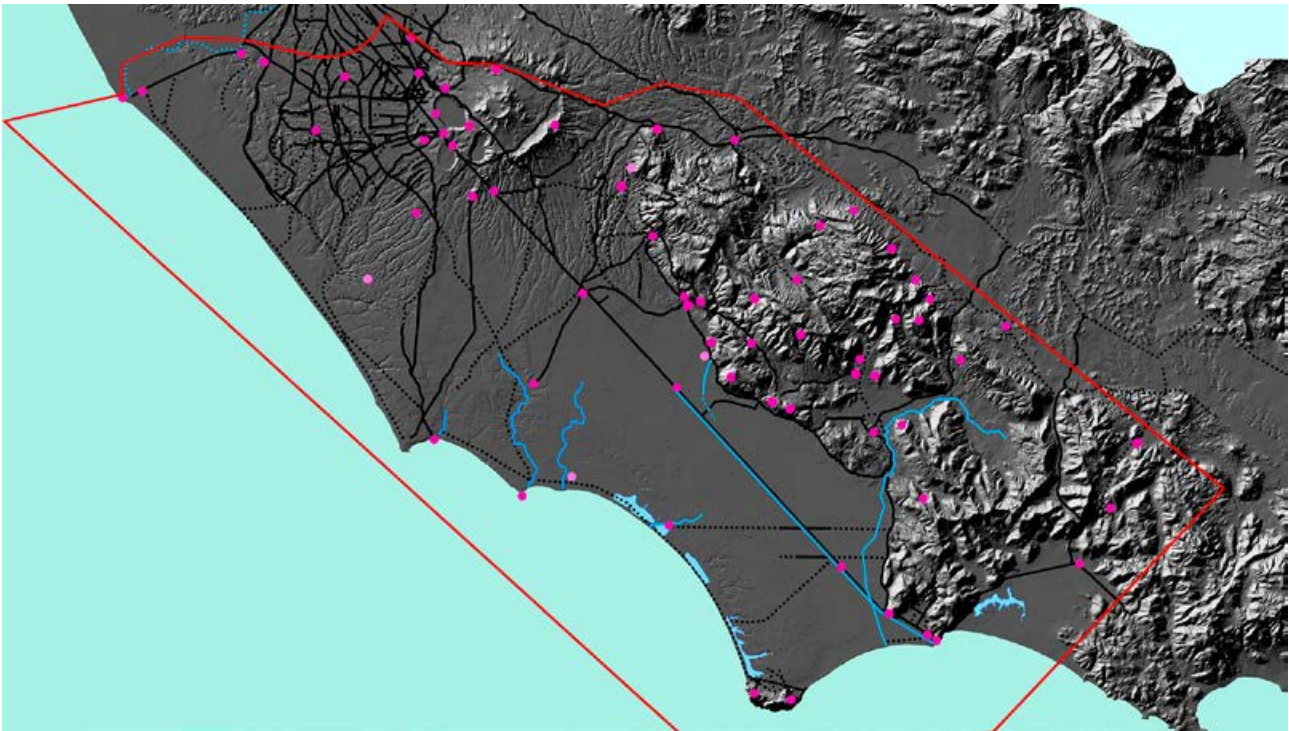


Figure 7.178. 13th century (secular) elite interests in the research area.

Elite (secular) interests were found more and more dispersed throughout the landscape. In the 11th century, elite interests were still mainly restricted to the main routes, as of then including the pedemontana route as well. Additionally, the Counts of Tusculum and the Dukes of Fondi contributed to the dispersal of elite secular interests away from the main routes, south of the Alban Hills and around the Fondi plain. In the 12th century and beyond, civic interests were more and more found away from the main roads. There are two key areas which (initially) provide only a few elite interests: Firstly, the Ostian hinterland seems to have been monopolised by church institutions until the 12th century. And secondly, the town of Velletri and its surrounding countryside show little evidence of elite interests at least until the 15th century. The low number of elite interests in the surrounding areas might have been due to the considerable territory of the semi-autonomous town of Velletri, that experienced much influence from the Commune of Rome.

Two types of spheres of interests

The study of elite interests shows that there are two main categories of elite spheres of interests across the countryside of Tyrrhenian southern Lazio, i.e. local and regional oriented elite spheres of interest. The Ceccani, the Dukes of Fondi, the Savelli and to some extent the town of Priverno had local *patrimonia* that focused predominantly on a specific part of the landscape. These elite clans exerted their influence out of their home bases.

By contrast, the Crescentii, the Tusculi, the Frangipane, the Annibaldi, the Orsini, the Colonna and the Caetani operated primarily on a regional level. Their interests do not seem to have evolved or to have been controlled out of one specific settlement. These families had their seat of power in Rome (that is, except for the Caetani). They controlled large parts of the countryside, by owning settlements or administering fiefs at strategic locations along main routes and at other key (i.e. defensible) points across the landscape.

7.III.2.2.1.c12 Focal points of interests

From the inventory of elite interests across the research area the following sites emerged as appearing to be focal points of elite interests: i.e., sites that over a short time drew the attention (or the interests) of multiple elite parties³⁷⁹:

- Genzano in the 14th century (3 parties involved)
- Giulianello in the 13th century (3 parties)
- Maenza between the 12th and 14th century (5 parties)
- Ninfa in the 12-13th century (6 parties)
- Norma in the 14th century (4 parties)
- S.Gennaro in the 13th century (3 parties).
- Sezze in the 12-13th century (6 parties)
- Terracina in the 13th century (4 parties)
- Valvisciolo in the 13th century (3 parties)

If one combines (i.e. accumulates) the documented church and elite interests, the following sites would qualify as such focal points³⁸⁰:

- Artena in the 12-13th century (5 parties)
- Castrum Trevi in the 12-13th century (5 parties)
- Fusugnanum in the 13th century (4 parties)
- Genzano in the 13-14th century (6 parties)
- Giulianello in the 13th century (4 parties)
- Maenza in the 12-13th century (5 parties)
- Ninfa in the 12-13th century (7 parties)
- Norma in the 12-13th century (6 parties)
- Sermoneta in the 12-13th century (5 parties)
- Sezze in the 12-13th century (5 parties)
- Terracina in the 12-13th century (5 parties)
- Valvisciolo in the 12-13th century (5 parties)

Thus, the combined number of contemporary interests seems to demonstrate that influence on and/or control over, at least, 13 distinctive sites was sought-after during the high middle ages (see figure 7.179)³⁸¹. If one takes a closer look at the individual histories of these specific sites during the high middle ages, the competitiveness surrounding them is easily identified: Often, more so than in other parts of the research area, interests on these sites involved a change in lordship, the building or destruction of fortresses, or a siege³⁸². There are two other rather striking common denominators shared by these sites. Firstly, at most sites papal and elite authority regularly alternated³⁸³. Indeed, many of these sites were stakes in the struggle of the papacy with local lords throughout the 12th and 13th century. A second common denominator is their location: all these sites were located at key strategic positions along or near main routes, i.e. the Appian road, the

pedemontana route and the Via Doganale, with the notable exception of Fusugnanum (see figure 7.179).

Prominent on the map of attested focal points of interests during the high middle ages (figure 7.179) is the concentration of focal points of interests along the Lepine pedemontana, from Ninfa southwards. This concentration suggests that this area was perhaps the most volatile area in Tyrrhenian southern Lazio during the high middle ages. Other, secondary, evidence for this assumption exists: the western Lepine foothills and adjacent plain hold the highest concentration of contemporary historical references (e.g. explicit descriptions, toponyms) to border markers (see figure 7.180)³⁸⁴. This concentration fits the picture of the contested nature and/or fragmented territorial authority of these parts, as it is rather likely that the borders of the territories all along the foothills were often disputed, which necessitated their written registration. However, in this respect too one has to take into account the factor of chance in the availability of sources which may have distorted the (weight of) evidence.

The study of recorded interests, however, does not account for the whole story of focal points within the dynamic geopolitical arena of Tyrrhenian southern Lazio. There are other sites known, by means of primary historical sources and secondary studies, that were politically or economically coveted by multiple parties or were often in the frontline of battles, that did not surface from the somewhat tentative study of the number of accounted interests.

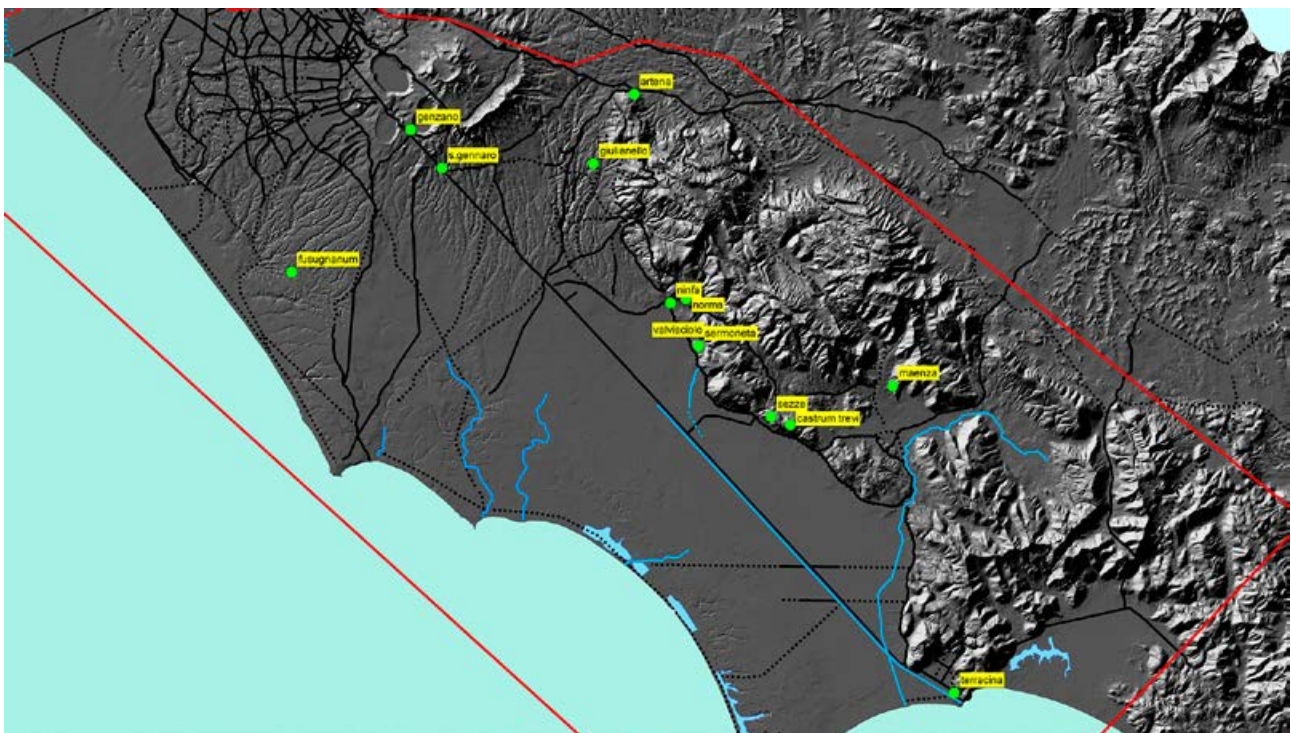


Figure 7.179. The attested focal points of interests during the high middle ages in the research area.

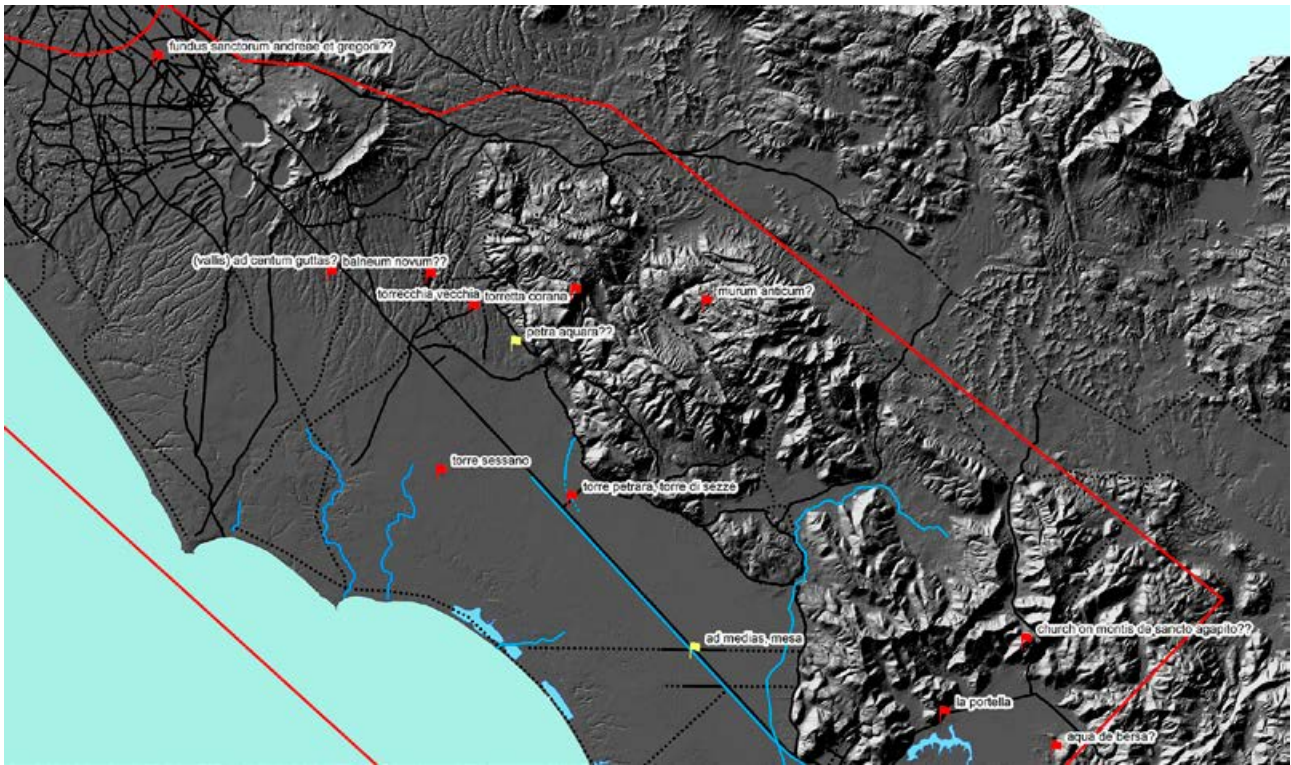


Figure 7.180. The documented border markers of the high middle ages.

The most important of these sites are Torre Boacciana, Cisterna, Albano Laziale, Marino and Gregoriopolis³⁸⁵.

All the same, to me there is little doubt that the western Lepine Mountains and its foothills, in geo-political terms, was the zone of the most fierce territorial competition of the research area during the high middle ages. With the south-western Alban Hills and the Tiber river valley coming in secondly and thirdly. Several factors may have contributed to the volatile geo-political nature of the area, with its archetypical well-defendable hill-top villages, in which elite involvement would develop slightly later (i.e. from the 11th century onwards) than in the Alban Hills, Terracina and Fondi key areas. First of all, the pedemontana route was the most frequented route southwards. At the base of the mountains this road constituted a very narrow passageway. Holding one or several positions there ensured control over much of the traffic and communications with the southern parts of Lazio and beyond³⁸⁶ – where the pope and several elite parties held other interests/possessions. And although the Pontine plain itself largely was raw and unmanageable wetland, the economic value of the central plain area should by no means be underestimated. Fishing, lumbering and extensive grazing (i.e. by buffaloes) are documented contemporary activities of the area; transhumance might have been continued into or, at least, restarted in this period. Not only elite parties and the papacy were involved in the area. The pedemontana was an area with much monastic

activity as well, and the route was regularly frequented by pilgrims³⁸⁷. There is an abundance of evidence that many parties, were active in the area. The fragmented territorial constellation must have meant that passage along this route was neither always straightforward nor without cost. Written sources show that rights of passage had to be granted and reconfirmed to specific parties and for certain parts of the way³⁸⁸. Tolling might have played a role in the area as well, although explicit sources that document tollage are absent³⁸⁹. Geo-politically, the Lepine Mountains constituted the main battleground for the struggle among the recovering papacy and the local baronage in the 12th and 13th centuries. The thus volatile situation must have triggered the visible “militarisation” of parts of the area. Especially in the triangle Sermoneta – Sezze – Torre Petrara there was a concentration of fortified locations, which underlines the area’s strategic importance. The convergence of several infrastructural artery must have contributed to this area’s importance: here the pedemontana route and the Appian road almost converged and were connected by a road, and here ran the important river Portatore (Cavata) as well, which connected Sermoneta with the southern Pontine plain and the sea.

7.III.2.2.1.c13 Control schemes / lines of control

In earlier scholarship medieval (defensive) control systems were reconstructed. Several scholars (e.g. De Rossi 1969, Paolis and Tetro 1985, Coste 1990, Del Lungo 2001) used the lining up of several defensive locations (i.e.

mostly watch towers) in specific parts of the landscape as plausible arguments for the existence of such control systems. As the theory goes, such, mostly linear positioned, systems protected roads, parts of the coast or specific sites, or may have acted as defensive warning systems. Coste, however, advised not to overzealously interpret the presence of aligned fortresses as planned defensive systems. To me the man has a point: there are no explicit medieval written references of such systems. Moreover, sometimes the fortresses in the acclaimed systems seem to have belonged to individual settlements, and could not, as a combined line of elements, be attributed to one specific party³⁹⁰.

However, the current database (i.e. the found interests) shows that in several cases the combination of the positions, dates and ownership or administrations³⁹¹ of the fortresses, furnish solid evidence for a strategic and calculated distribution of nodes, without a single explicit historical reference to a control system. The earlier discussed array of Tusculan fortresses between the Alban Hills and the sea is to be considered a case in point (7.III.2.2.1.c1 The Tusculi). This “corridor” along La Selciatella might have evolved in the context of the political and military battle of the Tusculi with the Commune of Rome. It was the quickest way for the Tusculi to reach the sea at Nettuno and Astura, whilst avoiding Rome and the Tiber river as the seaward passage.

Next to the Tusculan array the following possibly deliberately set-up control lines may be delineated:

- **The Crescentii sites, in the 10th century**³⁹². The 10th century distribution of Crescentii controlled or influenced sites, has the appearance of a strategic and calculated set-up. The clan dominated the main routes southwards and towards the southern Pontine coast, and along the coast itself.
- **The Dukes of Fondi, in the 11th century**. In the 11th century the Dukes of Fondi for some time controlled all fortified settlements and fortresses along the two roads from Fondi leading north to the Sacco Valley: i.e., Fondi – Ceprano (OLIMinfra 106) and Fondi – Latina (OLIMinfra 107)³⁹³.
- **The Tusculi, the pedemontana route, in the 12th century**. Simultaneously with the “corridor” to the coast, the Tusculi for some time also controlled almost all fortresses and settlements on the Lepine pedemontana during in the 12th century. Most of these sites were given in fiefdom by the papacy³⁹⁴. Their authority was only challenged at Monticchio which was held by the Caetani, and possibly by the Knights Templar of Valvisciolo and S.Francesco as well³⁹⁵.
- **The Frangipane, the pedemontana route, in the 12th century**. In the course of the 12th century, the Frangipane took control over all of the papal³⁹⁶ fiefs previously held by the Tusculi in the pedemontana zone (see figure 7.159). Their authority over this route was only challenged by the Caetani of Monticchio, i.e. at castrum Trevi, where the Colonna would take over control from the Tusculi in 1151, and by the Knights Templar’s presence. Simultaneously the Frangipane ruled over Marino and Nemi, along the (future) main route Rome - Marino – Velletri – Cisterna (OLIMinfra 37), over parts of the Amaseno Valley (Maenza, Roccasecca) and over Terracina as well. The distribution of all these lordships shows that the Frangipane controlled traffic and communications between Rome and Terracina.
- **The Knights Templar, the Lepine Mountains – Monte Circeo, in the 12th-13th century**. The 12-13th centuries’ distribution of the Knights Templar sites has the appearance of a planned line-up, headed in a straight line north-southward over the Lepine Mountains and the Pontine plain towards the Circeo peninsula (see figure 7.156). This conceivable control line was not fixed on a specific road. Perhaps it was a signalling system, intended to protect the interests of the Templars at Valvisciolo? This remains in limbo. One thing is certain though: the Order had been able to closely monitor what was happening in the southern Pontine plain and along the coast, knew who travelled there and what was transported. Maybe this was vital intelligence, used to benefit this “first multinational corporation”, which would have a vast financial and military network all over Europe.
- **The Malabranca: the Via Doganale, in the 13th century**. In the 13th century, the Malabranca family had properties in S.Silvestro, near Artena, and owned Conca and Giulianello (see 7.173)³⁹⁷. Coste was right in saying that this was no coincidence at all. With their array of lordships, the Malabranca family wielded control over this important axis, until sub-recent times known as the Via Doganale (OLIMinfra 70), running from the Via Latina along the Lepine base to the Appian road (at Cisterna) and from there to the coast (at Conca). It may be assumed that the coastal *castrum* of Conca was not a stand-alone enterprise, but was located on the edge of a specific line of communications. However, the evidence shows that this control of the Via Doganale was not an exclusive one, as the Frangipane ruled over Cisterna at that same time.
- **The papal *castra specialia*, in 1234 AD**. In the year 1234 the papacy established a number of *castra specialia* at Ariccia, Cisterna, Cori, Lariano, Giulianello, Ninfa, Acquapuzza and at Terracina (see figure 7.155). This constellation of sites controlled the main routes between Rome and southern Lazio, with the exception of the route through the Sacco Valley: the Appian route, the Marino – Velletri route and the pedemontana.

These *castra specialia* seem to have been intended as a way to monitor these parts, yet not to wield total control: several other ecclesiastical and elite parties owned or administered sites along these roads. From written sources it is known that their acquisition was considered a major step in the battle of the papacy with the elite families for control of the countryside. However ambitious the plan regarding the *castra specialia* might have been (i.e., they were to be “eternal possessions” of the papacy), this scheme functioned only briefly; soon after several of these settlements were lost to direct papal control.

- **The Ceccani, the Lepine Mountains, in the 13th century.** The Ceccani ruled over virtually all settlements of the Central Lepine Mountains in the 13th century (see figure 7.165-67). These sites combined were controlling the whole mountain range, with the exception of the Lepine pedemontana, where other parties were involved as well. Ceccani authority over the Lepine Mountains was only challenged by the Colonna at Morolo from the late 13th century onwards. Because the Ceccani dominance was all-encompassing, there is no specific line of control that can be designated. The Ceccani at least controlled the road Segni-Carpineto-Maenza-Priverno (OLIMinfra 60) and Sezze-Rocagorga (OLIMinfra 10), and the southern road in the Sacco Valley (OLIMinfra 108).
- **The Savelli, the wider area of Albano Laziale, in the 13th century.** In the 13th century the Savelli had muscled out all competition (i.e. the Gandulphi, and the Malabranca) around their home base, Albano Laziale (see figure 7.160). By then, they owned Castel Savelli, Castel Gandolfo, Ariccia, S.Gennaro and Castel di Leva, thus controlling the Via Appia and direct hinterland of Albano Laziale. This dominance in the area did not last: in the 14th century the Orsini acquired much of the hinterland of Albano.
- **The Orsini, the Via Appia close to Rome, the route Rome - Marino – Velletri, in the 14th century.** In the 14th century, the Orsini ruled over several positions along the Appian road and the route Rome-Marino-Velletri (see figure 7.172).

In the subsequent cases, a control scheme may be or has been suggested, but the evidence proved feeble, because of indeterminate building dates of the fortresses involved and the lack of historical sources that documented the ownership of the fortifications concerned:

- It has been suggested that in the 12th or 13th century a control system functioned along an axis between Nettuno and Velletri, with control points located 4 to 6 km apart³⁹⁸.
- A planned system of defence has been reconstructed from the existence of several towers along the coast,

i.e. at Torre Boacciana, Tor Paterno, S.Anastasio, Capo d’Anzio, and at Fogliano³⁹⁹. For these towers a 9th or 10th century construction date has been proposed but so far this assumption has not been proven.

- Several defensive schemes have been suggested along the several north-south and east-westward transverse roads to the south of Rome, on which many strongholds developed from the 12th century onwards⁴⁰⁰.
- The 12th century fortresses of Pisco Montano and Ferronum may have been founded simultaneously as part of a strategic plan to control the wider Terracina area.
- Around Priverno three towers were erected in the 13th or 14th century which may have acted as a defensive system around the town.
- A high medieval line of defence has been suggested along the Via Cavona (OLIMinfra 80)⁴⁰¹.
- The towers of Anzio and S.Anastasio, Torre Astura and (tentatively) Foce Verde have been suggested as having functioned as seaward protectors of the *castrum* of Nettuno⁴⁰².

Discussion

It is not that easy to say anything definitive about suspected planned control schemes / lines of control. With the exception of the papal *castra specialia* (1234), their existence could only be deduced from secondary evidence: i.e., by the dating, location and ownership of sites. In most cases, the control schemes imply a monopolisation of the landscape, as other fiefs/ownerships were absent in the schemes. There are a few exceptions: the Crescentii controlled sites, the Tusculan and Frangipane pedemontana “system” in the 12th century, the Knights Templar’s possessions, and the array of *castra specialia*.

However conclusive the combined secondary evidence regarding the control of specific parts of the landscape might be, it proves hard to dig any deeper into the evolution, operation and purpose of such schemes. There are no clear common denominators to be found. Firstly, scholars do not exactly know how these schemes evolved. Most likely, most of them were acquired all at once, like the *castra specialia*, in order to effectuate some kind of strategic plan. In one case the whole array seems to have been taken over by another party: the Tusculan fiefs were replaced by Frangipane fiefs along the pedemontana during the 12th century. However, one cannot be sure if this happened simultaneously. Undoubtedly however, this transfer was first approved by the pope, being the owner of the sites.

As to their operation, the tentative schemes come in diverse forms. Most schemes seem to follow specific

lines of infrastructure, but this is not always the case. The Knights Templar's possessions, for example, seem to follow a cross-section of the landscape. Moreover, the 13th century possessions of the Ceccani were spread out over a vast mountainous area, which cannot be linked to the road system alone. In all conceivable cases of control schemes, it is unknown in what ways the strings of fortified sites functioned as a union: was there a functioning signalling system? Was the array administered from one specific headquarter or was it not? Was there any form of movement of troops between the sites involved?

It should be clear that I have had a hard time drawing conclusions on the development and operation of the conceivable control schemes. The central question that remains: what may have been their purpose? The purpose of the individual systems may often be surmised from the positions of the nodes in the systems and historical knowledge of the ruling parties. The common denominator seems to have been the effective control of traffic and communications along the roads involved. The underlying reasons behind effectuating control prove difficult to grasp; these may range from aggressive geo-political tactics (e.g., see the *castra specialia* in the battle of the papacy with the local elites) to economic zeal. In the Biferno valley, a line of isolated fortresses seems related to medieval transhumance; these sites might have monitored and protected the transhumance drive roads. Perhaps tolls were charged by the owners of the fortresses⁴⁰³. Rights of passage, well-documented in the high middle ages, might have been controlled by means of such a scheme.

In conclusion: the evolution and day-to-day operation of these hypothetical control schemes mostly escapes scholars. Only in a few cases one can make tentative statements regarding their purpose (e.g. the Tusculi's "corridor", and the *castra specialia*). However, more in general these lines do tell which roads and parts of the landscape were deemed geopolitically or economically important for some specific parties. In most cases, they point out which parts of the landscape functionally were perceived as a unity, for a brief or longer period of time. Finally they may say something about lines of communication extended over the landscape. With these plausible shapes of lines of control, a tentative indication is given regarding the coherence of the region, at least for a certain period of time.

7.III.2.2.1.c14 Lines of communication and mobility based on ecclesiastical and elite / secular interests (10-14th century)

As was shown above, the analysis of the distribution and origin (i.e. being a base or a headquarter) of interests should in some cases allow to identify specific lines

of communication and mobility of people throughout the examined landscape. Hereunder I shall discuss such lines as part of interconnected regional and local networks during the current studied period. In the final chapter these specific lines of communication and mobility will be put into a long-term perspective as a part of the study of *connectivity*.

Based on the analysis of ecclesiastical interests

The following can be said related to communication and mobility based on the inventory of ecclesiastical interests:

- The pedemontana route clearly was a regularly frequented line of communication connecting Rome to the south, considering the recurrently positioned papal interests flanking it (until Terracina).
- The wider Ostia area stayed directly connected to Rome.
- External monasteries focussed each on specific parts of the landscape related to their individual interests, and must have upheld direct lines of communication with these parts: Montecassino focussed on the Ausoni Mountains and the Fondi area, Grottaferrata on the Alban Hills and the Pontine area towards the Astura peninsula and Subiaco on the area west and south of the Alban Hills and the southern Pontine coast. Some overlap between the network of interests of the befriended monasteries of Grottaferrata and Subiaco can be identified, especially in the 11th century. Likely both monasteries had to make use of shared infrastructural arteries when it came to traffic and communication from the Alban Hills / Velletrian plain to the coast, possibly passing through the Campomorto area.
- Between the 11th and 13th century, the monastery of Grottaferrata steadily expanded its involvement in an area stretching from the Alban Hills to the cape of Anzio, and southwards to the southern Pontine coast. This strip running north-southward roughly matched the Tusculan network of interests of the 10th century. Both (initially closely related) parties must have shared lines of communication. In the 12th century, the Tusculan possessions formed some kind of corridor from the Alban Hills to the sea near Nettuno (see 7.III.1.1.1).
- Throughout the high middle ages the Via Laurentina remained in use as an important line of communication between Rome and its southern hinterland, given the constant interests of Roman monasteries alongside of it between the 10th and 14th century. This may also be implied by the (elite) fortresses positioned along this line, as were others along other north-southward lines, certainly from the 13th century onwards.

- The distribution of the Knights Templar's interests has the appearance of a planned line up, in being a (virtual) straight line north-southwards through the southern Pontine and Lepine region. However, as of yet it is unclear how these sites might have interacted. Perhaps interaction from the Circeo peninsula took place via the transverse roads across the Pontine plain, or via Terracina. A direct line of communication between Monte Circeo and Terracina is almost certain, given the interests of the see of Terracina on the peninsula in the 13th century.
- The papal *castra specialia* of Ariccia, Cisterna, Cori, Lariano, Giulianello, Ninfa, Acquapuzza and of Terracina might have been picked for their strategic location on intensively frequented routes from Rome southwards: the northern Via Appia, the road over Marino – Velletri – Cisterna and the pedemontana route, and the road of Genzano to Algido (OLIMinfra 55).
- The 13th century interests of church institutions from Terracina at Asprano and at castrum Trevi fit into the picture of a direct historical connection between Terracina and the Amaseno Valley / Sacco valley, which likely continued throughout the high middle ages.
- At a given point in time the southern end of the Fogliano lake became the focal point of several lines of communication. There, the papacy, S.Erasmo, Subiaco and Farfa would have more or less contemporaneous interests, between the 10th and 12th centuries. The fact that many Church institutions were involved in these parts during the high middle ages is confirmed in later times as well: between the start of the 13th century and the late 15th century the rights to cultivate fish in the Fogliano lake were confirmed to several rural monasteries and Roman *basilicae*.
- In the 10th century Velletri had a coastal connection as well, i.e. to Astura and Fogliano (7.II.1.4.1).
- Day-to-day communication took place between Rome and Velletri throughout the high middle ages (bishopric, Crescentii, Commune).
- The pedemontana route was always partly or totally controlled by one to three significantly strong secular parties holding several possessions alongside it. It seems that control over this vital line of communication and traffic was reserved for a few powerful families that were capable of securing multiple positions along the route. It was controlled by the Tusculi in the 11-12th centuries (i.e. the northern part), by the Frangipane in the 12th century, the Frangipane, Annibaldi and the Caetani in the 13th century, whereas in the 14th century the Caetani dominated the route.
- The distribution of all their lordships shows that the Frangipane controlled traffic and communications between Rome and Terracina in the 12th century; in the north via the Rome - Marino – Velletri route.
- In the 11th and 12th centuries the Tusculi had direct lines of communication with the coast in the Nettuno – Anzio area (i.e. the “corridor”).
- In the 11th century the Dukes of Fondi for some time had direct lines of communications with the Sacco Valley, as they controlled all fortified settlements and fortresses along the two roads northwards of Fondi.
- In the 11th and 12th century Terracina was directly connected with the Circeo peninsula.
- Throughout the 9th to 12th century Fondi had direct lines of communication with Gaeta⁴⁰⁵, and with the Sacco Valley through both reconstructed roads going northwards.
- The distribution of the Ceccani's interests in the 12th century shows that all the reconstructed internal Lepine routes must have been frequented regularly. In the 13th century virtually the whole mountain range was the political backyard of the Ceccani. The Ceccani patrimony shows that the Lepine Mountains at the time acted as one singular geo-political unit. Within this unit day-to-day communications must have taken place. How communications in these parts took shape is as of yet unclear. Quite likely the valleys constituted fixed lines of communication and traffic, but cross-mountain routes must have been common as well (i.e. over the mountain planes and along transhumance routes). Signalling points across mountaintops might have existed. The interconnectability of mountainous areas was well described by Horden and Purcell: “Mountains can seem hostile and marginal areas; yet they are actually closely integrated into the patterns of production and communication that abut them. That explains why mountain

Based on the analysis of (secular) elite interests⁴⁰⁴

- The following can be said on communication and mobility of people within the landscape based on the inventory of (secular) elite interests:
- Coastal sea traffic? A tentative planned system of defence was reconstructed from the existence of several towers possibly originating in 9th or 10th century along the coast at Torre Boacciana, Tor Paterno, S.Anastasio, Capo d'Anzio, and at Fogliano (see 7.III.2.2.1.c13 Control schemes / lines of control).
- The Via Appia remained the main route, be it with a detour at S.Gennaro, Cisterna – pedemontana and through the Amaseno valley.
- The 10th century interests of the Crescentii and the monastery of S.Alessio show that Rome had a direct link with the Astura coastal area, probably through marine traffic and via a land route (7.II.1.1.5).

zones unexpectedly, and even paradoxically, become regions with wide internal coherence and close contact and interchange across what appear, to the outsider, to be formidable physical obstacles.”⁴⁰⁶

- The distribution of the interests of the Dukes of Fondi shows that the mountain tops and the valleys of the eastern Ausoni and the western Aurunci Mountains during the 11th to 13th century were perceived as one singular geo-political unit, with Fondi being its centre.
- Probably since the 11th and certainly in the 13th century, regular communications must have taken place across the southern Pontine plain between Terracina and Caposeice.
- In the 13th century, the Malabranca family controlled communications and traffic along the via Doganale, running from the Via Latina to the coast (Conca) .

7.III.2.2.1.d Conclusions

All in all, the development of the geo-political landscape of Tyrrhenian southern Lazio can be summarised as follows:

It is a historically well-known fact that between the late 9th century and the middle of the 11th century the papal authority went through a slump. This decline in papal power is confirmed by the current evidence. It seems that the papacy kept direct control over the vital parts of the landscape along the direct routes towards Rome only, i.e., the Appian route and the pedemontana. The elite families, that had often interwoven interests within the ecclesiastical institutions, had been at each other's throats since the 10th century, and would still be doing so in the centuries that were to come, using their *castra* and fortresses as means to control the countryside and its produce, and to monitor the infrastructural arteries. The analysis of elite interests shows that at first the elite families concentrated their sphere of interests on the main routes. Bishops and monasteries were forces to be reckoned with as well, be it not only in religious affairs but certainly as economic powers and as political forces as well. The merger of several bishoprics throughout the 11th and 12th centuries contributed to the growing impact of bishoprics. Exemplary for the monastic influence in more worldly affairs was the involvement of the monastery of Villamagna in the foundation of *castrum Julianu* in the early 11th century. In addition, this monastery owned Carpineto Romano at the end of that century. Roman and local rural monasteries were not the only stakeholders that played a part in the socio-economic and political arena of Tyrrhenian southern Lazio: several large monasteries from outside the current study area had interests in these parts as well; and had so since the 10th century. After the slump of papal authority, the pontificate gradually regained political

influence, and as a result once again began to accumulate landed property from the late 11th century onwards. Within the process of re-establishing itself as an important worldly player in the 12th and 13th centuries, the papacy had increasingly been able to restrain the power of local aristocracies. The commune developed into a new force within the landscape from the 12th century onwards. The communal age proved not to be that abundantly visible from the database, as there are only a few examples of free communes in the study area to be found, with little recorded interests in their hinterlands as well.

Within the regional unstable geo-political situation of the 11th to 13/14th century, there had been a gradual built up of a “fortified” landscape, dominated by small fortresses (mostly: towers) and fortified settlements (including monasteries). A study of causality of the building of a large number of fortifications across the landscape is not that straightforward. The growing number of fortified positions could first of all be explained as being caused by the recurrent struggles for power between elite families in parts of the landscape. Ecclesiastical institutions, whose interests were often interwoven with elite families, were involved in the build-up of a fortified landscape as well. The papacy constantly strived to create alliances and actively opposed elite landed influence in Tyrrhenian southern Lazio from the 12th century onwards. Monasteries (such as Villamagna, S.M. della Sorresca, Knights Templar fortresses) played their part in the building of fortresses and walls, and the bishoprics (e.g. *castrum Vetus*) as well. Monasteries and bishoprics were involved in *incastellamento* projects, which were examples of militarised control systems *pur sang*. Within the newly built militarised landscape several lines of control of specific parties could be detected. The common goal of these systems seems to have been the control of traffic and communications. The underlying reasons might range from geo-political to economic zeal. The Tusculan “corridor” to the sea was an example of such a system. Moreover, it seems a case in point of the effects the needs and ambitions of elite clans had on the built environment in the landscape.

It should be stressed that the struggles between these elitist, ecclesiastical parties and the papacy were not merely of a political nature, but economically induced as well. There was a competitive spirit, although it is very difficult to grasp the effects of economic zeal (7.III.2.2.3). An additional reason for erecting fortifications all over the landscape might have been to deal with the continuous danger of bandits roaming about. The wide range of parties present in the Pontine plain was not helpful in the combat of banditism. Bandits may have constituted an especially hard problem to solve in the plain, which because of its inhospitable nature was difficult to effectively control from without the Lepine settlements.

Although there are no contemporary records to be found regarding bandits, there are records dating to the 15th and 16th century that mention their presence⁴⁰⁷. Another factor that might explain the local construction of fortresses may have been the facilitation of tolling, such as at Pisco Montano near Terracina, and at castrum Ariccia.

Within this intricate geo-political landscape there are several sites and areas that arise as focal points of interests. The western Lepine Mountains and its foothills was the zone of the most fierce territorial competition of the research area during the high middle ages, followed by the south-western Alban Hills and the Tiber river valley.

During the 14th century things seem to have changed. In that century the number of recorded ecclesiastical and elite interests declined considerably. Almost no new fortresses were built in the landscape of Tyrrhenian southern Lazio. Although the causes of this change of direction proved difficult to pinpoint, the decline of the number of ecclesiastical interests may be correlated to the decrease of Church revenues caused by the relocation of the papal court to Avignon in 1309. Other factors adding to the relative inactivity across the landscape might have been the decline of *incastellamento* and of feudal arrangements (e.g. fiefs, leases) in general.

7.III.2.2.2 Theme: *incastellamento*

Toubert's concept of *incastellamento*, developed during his study of northern Lazio, is generally accepted as the paradigm for the study of the socio-economic changes that took place in high medieval central Italy. The *castra* of northern Lazio were fortified settlements or settled fortresses which (mainly) seem to have been built in order to reorganise the local rural economy. With incastellation "projects"⁴⁰⁸ more rigid control was made possible of agricultural endeavours and other economic activities from within the communities. In this process, those parts of the countryside that had been deserted since late Roman times were actively cleared and colonised by landlords, and concurrently new rural markets were created. Assembled in castle villages, the farming communities were burdened with an increasing number of measures of control. The general idea of *incastellamento* seems to have been to *control*: i.e., to control all economic means, the peasantry, strategic locations and infrastructure.

The question I would like to answer: What does the evidence retrieved in the research area reveal of the process of *incastellamento*?

7.III.2.2.2.a Limitations to the study of *incastellamento*

Before expatiating on *incastellamento* in my study area, it seems a good idea to recapitulate in what way this study's

database was compiled. There proved to be only three surviving incastellation charts available for Tyrrhenian southern Lazio, i.e. for castrum M. Julianu (OLIMsite 298), castrum Fogliano (OLIMsite 127) and for castrum Vetus (OLIMsite 133), all dated to the second half of the 10th century. Therefore, in order to establish the existence of *incastellamento* projects, I rely mostly on the terminology found in the written sources I consulted. From Toubert (1973) I know that when used in the 10th to 13th century the term "castrum" almost invariably denoted "incastellation"⁴⁰⁹. Therefore, the dataset drawn up of *incastellamento* settlements was compiled largely from the explicit references to "castra" in the written sources⁴¹⁰.

Incastellamento implies control. Before scrutinising *incastellamento* in my study area, I should make clear that the way control was effectuated (from) within the *castra* is out of this study's reach. There proved to be not nearly enough detailed information available to fruitfully analyse the way peasants and lords interacted and in what way, through the control of economic means, the castles contributed to the upsurge of the rural economies from the 10th century onwards. The analysis of possible satellite settlements to the *castra*, as attested in the survey projects in the Biferno valley⁴¹¹, and as have been historically attested in the only well-documented *incastellamento* foundation in this study's area of interest, i.e. the castrum Vetus, proved archaeologically out of reach. The same applies for *castra* as being the foci in a new religious topography⁴¹². I needed to restrict myself to a study of the chronology and spatial distribution of incastellated centres, and to whoever was involved. In that sense this paragraph's Theme complements the above Theme dealing with the dynamic geo-political landscape.

7.III.2.2.2.b A chronological overview

Compared to northern Lazio, *incastellamento* in Tyrrhenian southern Lazio started relatively late. Whilst to the north of Rome the first *castra* were documented to originate in the early 10th century, and the process was in full flight at the end of that century, across my studied area *incastellamento* does not seem to have started until the second half of the 10th century.

The cradle of *incastellamento* in the research area were the southern Alban Hills and the area to the south of those. There, four 10th century *castra* were documented (see figure 7.181). Velletri proved to be an important centre of early investment in *castra*, as the local Duke and bishop were involved in both the castrum Vetus and castrum Fogliano projects.

In the 11th and 12th centuries the number of incastellated settlements increased rapidly (see table 7.10 and figure 7.182).

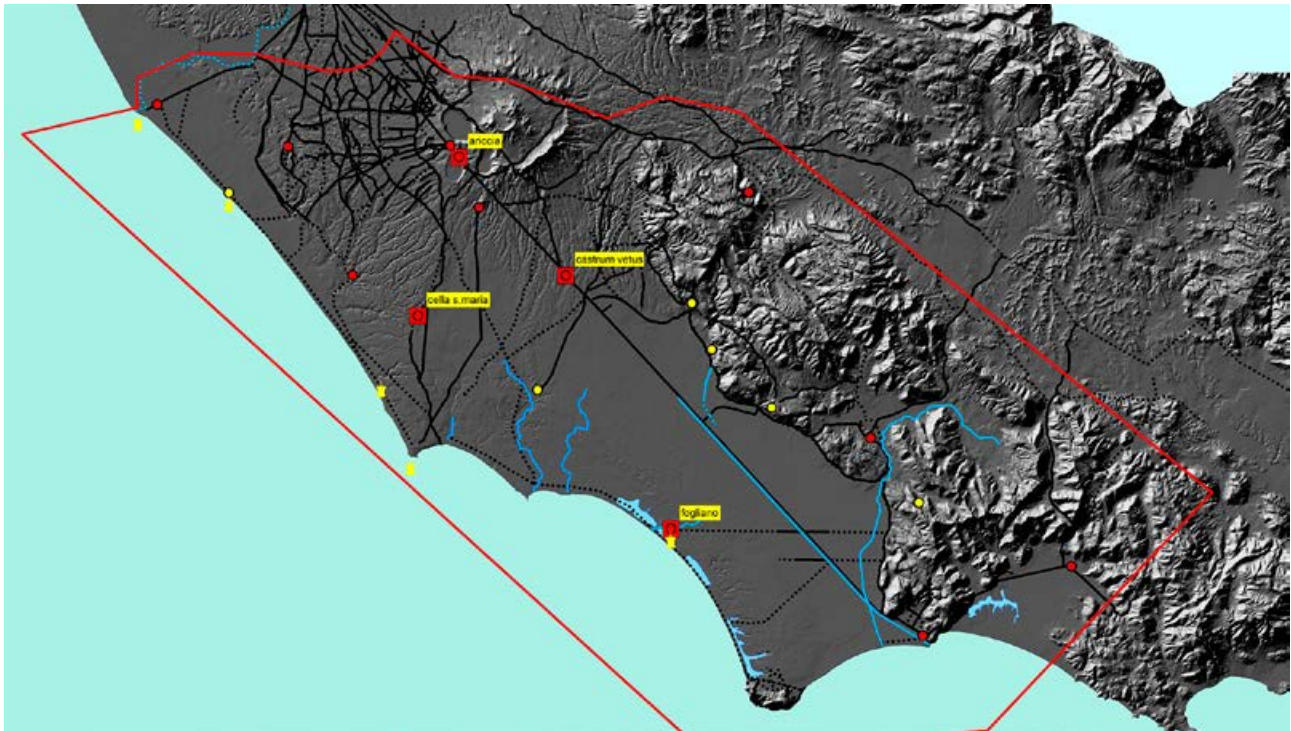


Figure 7.181. 10th century's castra (squares), other fortified settlements (dots) and isolated fortresses.

Table 7.10. The number of (possible) incastellised settlements per century.

century	Total of (possible) incastellised settlements	attested incastellisation: "castrum" 10th-13th century	uncertain: "castel(lum)" 10th-14th century or "castrum" in the 14th century
10th	4	4	0
11th	13	6	7
12th	23	19	4
13th	33	27	6
14th	18	0	18

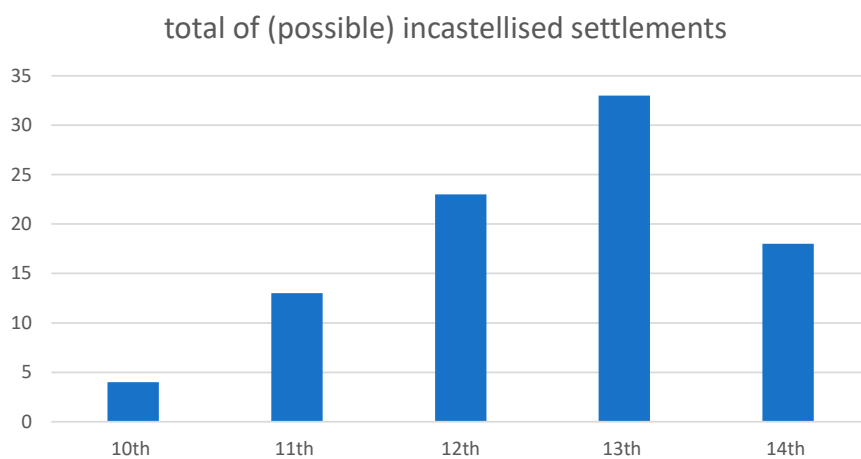


Figure 7.182. Chart showing the number of (possible) incastellised settlements per century.

In the 11th and 12th century *castra* were found throughout all mountainous parts of Tyrrhenian southern Lazio, especially at their outer ridges, mostly at high positions overseeing the plains and valleys (figures 7.183-7.184). In

the Lepine Mountains *incastellamento* seems to have been started a bit later, yet eventually was to be in full flight in the 12th century. At first the low-lying parts west of the mountainous areas and the coast seem to have been far

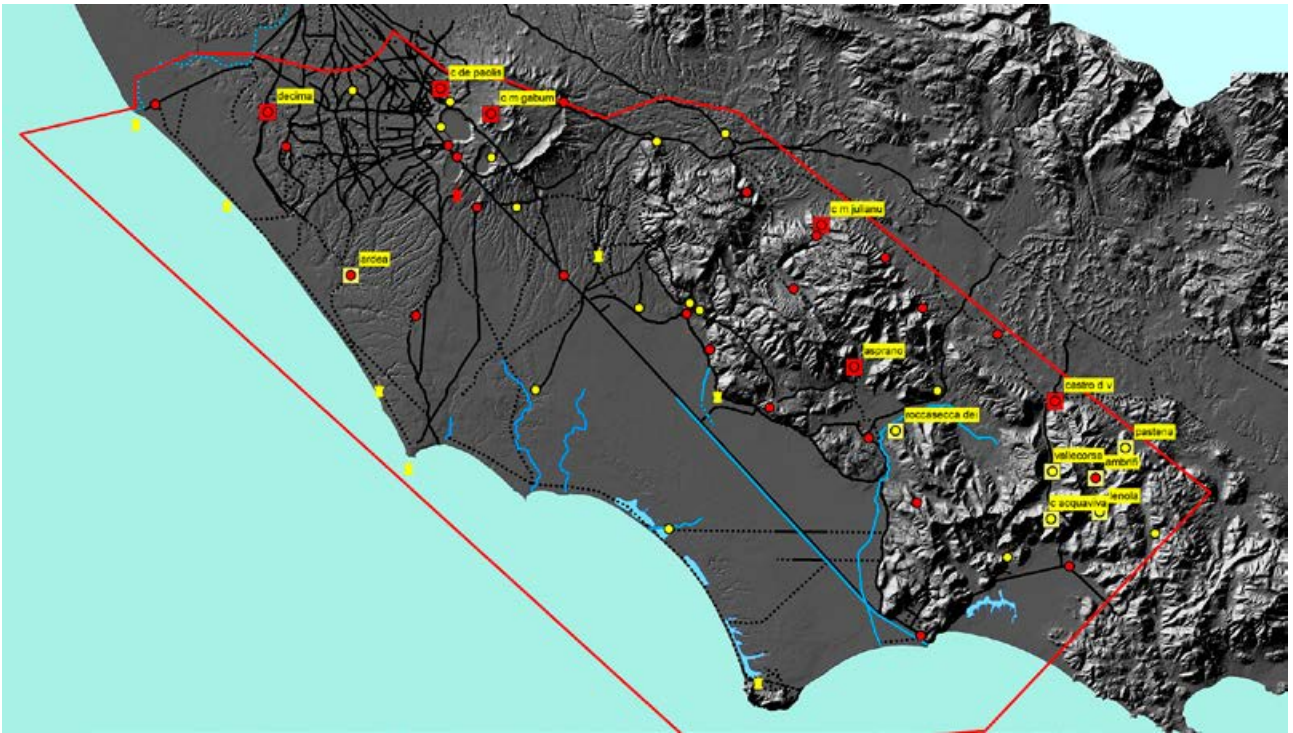


Figure 7.183. 11th century's castra, other fortified settlements and isolated fortresses.

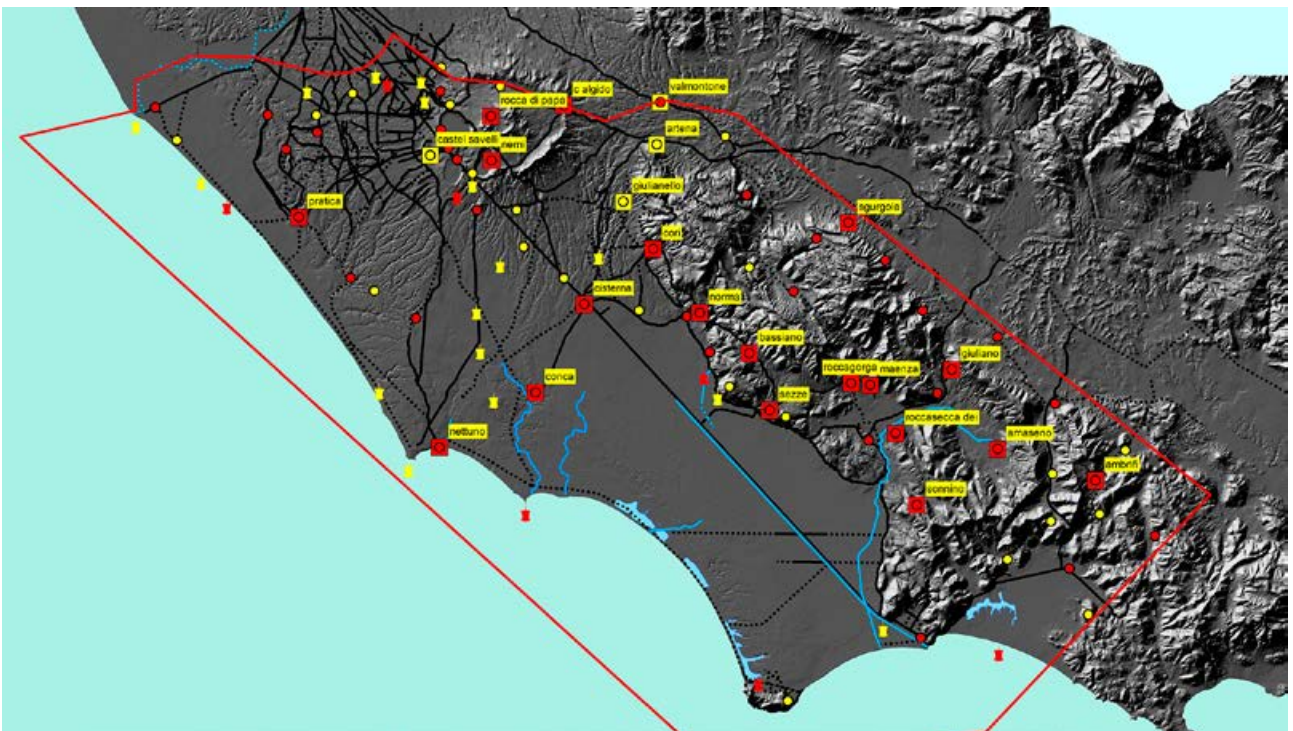


Figure 7.184. 12th century's castra, other fortified settlements and isolated fortresses.

less affected by the *incastellamento* process, with just a few *castra* found at some distance from the coast (i.e. at Cisterna, Pratica di Mare, Conca, and at Ardea), and only one on the coast (i.e. at Nettuno).

The 13th century should be considered the *floruit* of *incastellamento*, when many more *castra* are found in the low-lying parts between the Alban Hills and the coast (figure 7.185).

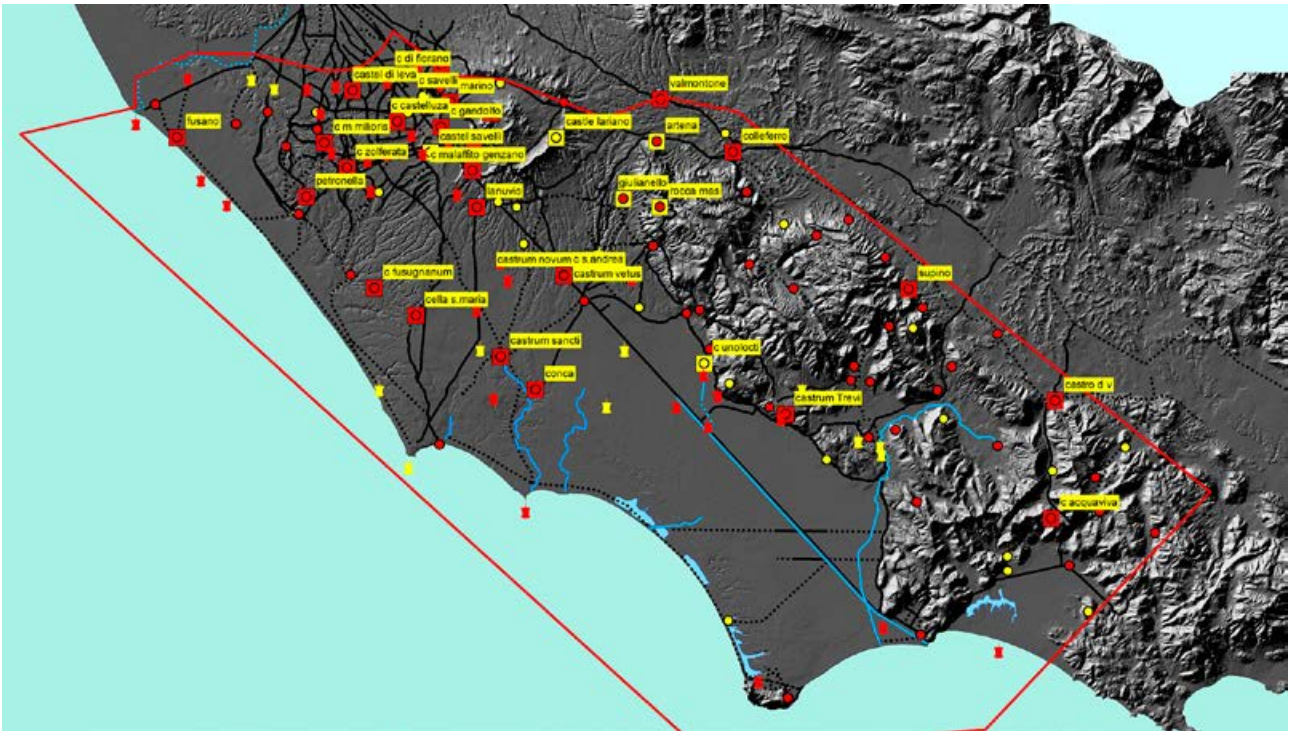


Figure 7.185. 13th century's castra, other fortified settlements and isolated fortresses.

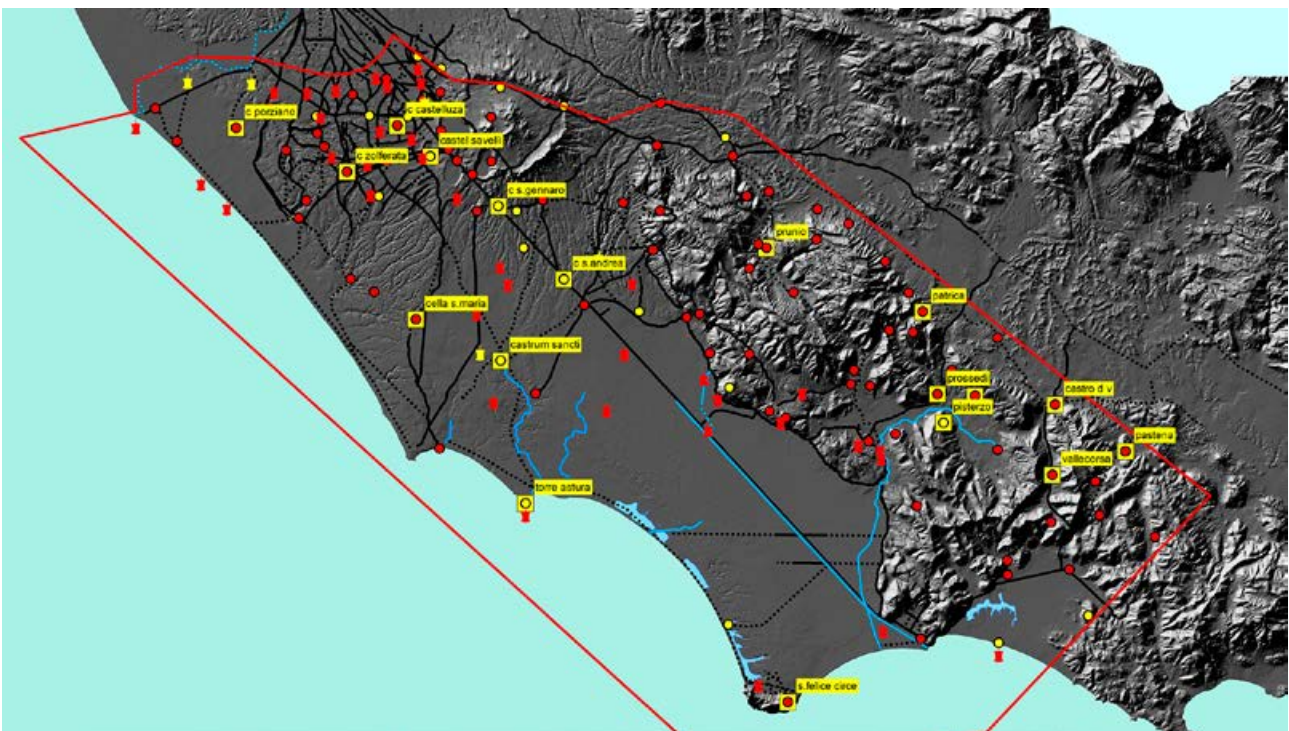


Figure 7.186. 14th century's castra, other fortified settlements and isolated fortresses.

During the 12th and 13th centuries quite a few, all pre-existing, larger villages were listed as being a *castrum*, for example Cisterna, Bassiano, Norma, Nemi, Maenza and Sonnino. Conspicuously, the number of *castra* across the Lepine and Ausoni Mountains drops after the 12th century: i.e. from 13 *castra* (of which 11 were “certain” *castra*, 2

were “possible”) in the 12th, to 7 (3 certain) in 13th and 5 (4 certain) in the 14th century. It seems that whilst in the 12th century *castra* in these mountains predominantly consisted of large incastellised settlements (such as Norma, Bassiano, Sezze and Sonnino), in the 13th-14th century most cases of *incastellamento* involved strategic fortresses

with small inhabited nuclei (such as Prunio, castrum Trevi, Unolocti and Giulianello)⁴¹³. This state of affairs holds true for the whole studied area in the 14th century, when most *castra* seem to have consisted of inhabited fortresses; and large settlements were no longer listed as a *castrum* as of then.

If one looks at the studies performed by Toubert regarding the Sabina, Osheim on Tuscany, Citter and Vaccaro (2005) on the Grosseto area, roughly two waves of *incastellamento* foundations can be discerned, although their proceeding has local varieties. The first wave, dated to the early 10th until the late 11th/12th century, involved the creation of primitive defensive measures in existing villages. In the second wave during the late 11th to 12th century, the villages were more strongly fortified. The lords would actually (temporarily) live there. Because of a lack of historical and archaeological detail in the database such a specific differentiation could not be considered in this study, at least not in a chronological perspective nor for the whole study area⁴¹⁴. The only discernible phasing I can observe with certainty is the fact that in the 10th and 11th century *incastellamento* projects seem to have materialised in smaller fortresses, mostly on pre-existing sites, while in the 12th and 13th centuries existing larger villages would become *castra* as well.

The assumption of Osheim that close to larger towns (such as near Pisa or Lucca) *castra* did not develop, or that their development was cut off earlier, could not be checked because of a lack of large towns in the current study area. However, Osheim's hypothesis could not be refuted either, as *incastellated* settlements were absent near the only two large towns of Tyrrhenian southern Lazio: i.e. Rome and Terracina. Indeed, the absence of *castra* in the wider area of Terracina is striking, being the largest and most important town in the research area with its Episcopal seat, large harbour and accommodating a free commune since the year of 1207⁴¹⁵.

7.III.2.2.2.c The end of *incastellamento*

The number of *castra* progressively grew between the 10th and 13th century. In the 14th century the number of listed *castra* dropped drastically (see figure 7.182). Together with the growing uncertainty regarding the interpretation of the term "castrum", it is clear that the 14th century marks the end of the *incastellamento* era. This end date of *incastellamento* becomes even clearer considering that while the number of *incastellated* settlements dropped in the 14th century, the number of other site types (such as fortified locations, monasteries, individual churches and villages) more or less stayed the same. This plausible end date for *incastellamento* chronologically matches other parts of Italy⁴¹⁶.

Some *castra* would become known as *casali* in the 14th century; this held true for Fusano and Pratica di Mare. Castrum Conca became a *casale* as well, although it is unknown when it did so exactly⁴¹⁷. The same held true for the modern Casale di Buonriposo, which likely was the location of castrum Nave (OLIMsite 90 and OLIMtoponym 117).

What exactly happened to the *castra* after the 14th century is beyond the time scope of this study. The fate of some of the former *castra* was determined by the *détente* between the papal court, roman nobility and the Commune during the 15th century. With this lessening of tensions, the positions of the parties in the countryside were consolidated⁴¹⁸. The strategic *raison d'être* of most of the fortified locations was lost. Many smaller fortresses fell into disuse or became residences. Several former *castra* became *palazzi* in the 16th and 17th century, such as the castles of Castel Gandolfo and of Castel Fusano.

7.III.2.2.2.d Failure of *incastellamento* projects

Most of these first *castra* had problems getting started up, or would end quickly. In the two well-documented cases, those of castrum Vetus and castrum Fogliano, the enterprises had to be restarted shortly after the first endeavour. The castrum of Fogliano was not documented after the 10th century. Rather likely, this *castrum* fits into the picture of the many failed *incastellamento* projects that were studied by Toubert. He described the relative quick abandonment of many of the new *castra* between the 10th and the beginning of the 12th century⁴¹⁹. This impression of failed *incastellamento* would be supported by the fact that areas with a less clear manifestation of *incastellamento*, showed much less cases of *castra* desertion as well.

What does the current database tell about the failure or success of *incastellamento*? There are only a few possible *incastellamento* settlements which provide affirmed evidence for continuation during two centuries or more. It seems that many, if not most, of the *incastellamento* projects died out quite soon after their start. Then again, I have to be careful to draw any definite conclusions, as I rely heavily on the affirmed occurrence of the term "*castrum / castellum*" in the texts I analysed; it is quite possible that I missed out on a number of such occurrences, as I have not been able to read first hand all available texts⁴²⁰. From the available written sources it appears that the *castra* listed in table 7.11 possibly saw continuity for some time; these castle I tentatively qualify as 'viable' *castra* (see also figure 7.187).⁴²¹

If one looks at the distribution of potential viable *incastellated* settlements one might rather cautiously conclude that all *incastellisation* projects in the Lepine Mountains

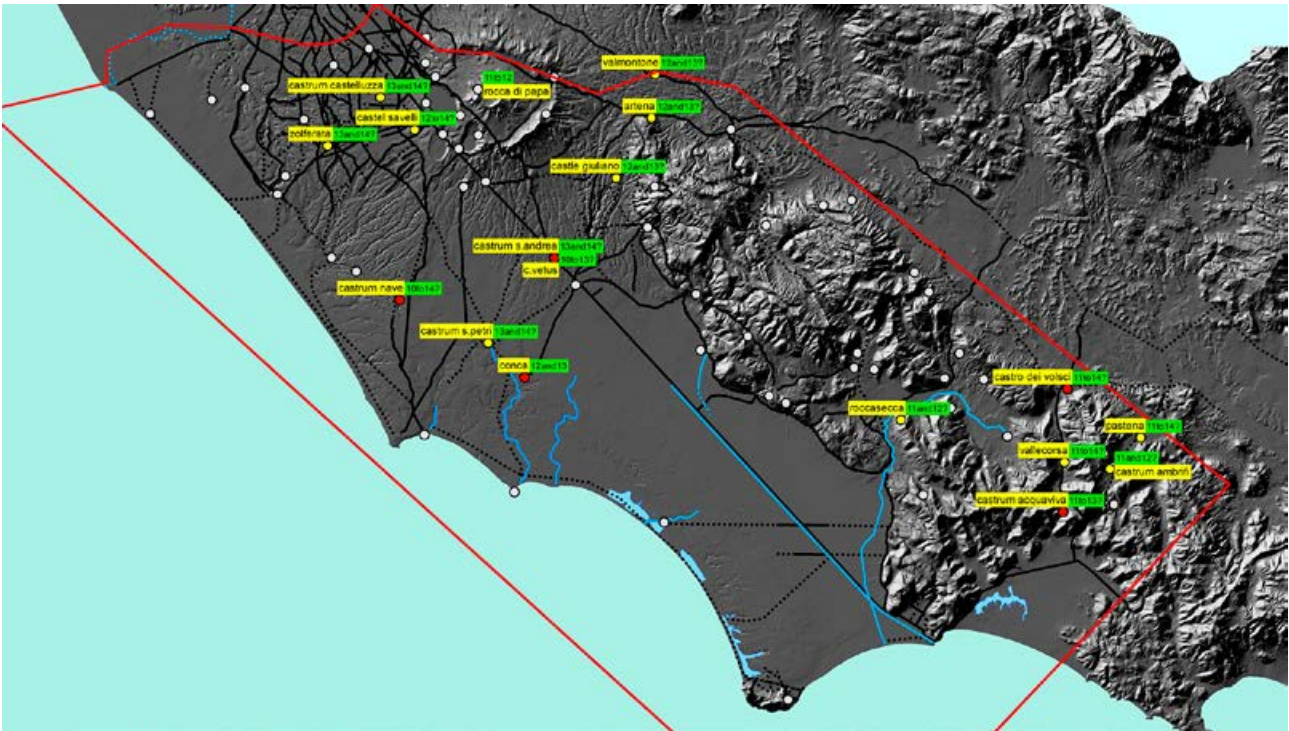


Figure 7.187. ‘Viable’ incastellised settlements of the 10th-14th century with their (possible) life span. Red dot depicts a certain incastellisation, a yellow one a possible incastellisation during two centuries or more. A white dot portrays a castrum/castellum listed for only one century.

Table 7.11. Possible ‘viable’ castra.

OLIMsite	name	possible life span of the castrum
3	castrum s.petri	13th and 14th century?
55	roccasecca	11th and 12th century?
60	castrum ambrifi	11th and 12th century?
90	castrum nave	10th to 14th century?
133	c.vetus	10th to 13th century?
138	castrum s.andrea	13th and 14th century?
156	castel savelli	12th to 14th century?
175	rocca di papa	11th to 12th century
257	castro dei volschi	11th to 14th century?
269	valmontone	12th and 13th century?
270	artena	12th and 13th century?
273	vallecorsa	11th to 14th century?
274	pastena	11th to 14th century?
277	conca	12th and 13th century
290	castle giuliano	12th and 13th century?
296	castrum acquaviva	11th to 13th century?
366	castrum castelluzza	13th and 14th century?
386	zolferata	13th and 14th century?

were short-lived; no “viable” castrum is found here (figure 7.187). This contrasts significantly with the viable castra located in the area between the Alban Hills and the coast and in the area to the north of Fondi. Because of

this clarity through contrast, the short-livedness of Lepine incastellamento sites is the only cautious conclusion to be drawn from the analysis of viable incastellamento sites⁴²².

7.III.2.2.2.e New foundations?

According to Toubert, there was no common denominator for castra to be found regarding the castra’s sites appearance before they were incastellised⁴²³. A number of the castra were built as new foundations, other were created within an existing settlement or fortress. In the Biferno valley most of the 11th century castra had older phases⁴²⁴. Regarding my study area it is clear that most castra developed on previously existing sites, or on sites in the presence of ancient ruins. Fogliano might have been an example of the usage of an ancient site as the foundation of a castrum, possibly being founded on the ruins (“criptis and parietinis destructis”) found here in the 10th century⁴²⁵. On some sites, the castrum phase was preceded by a phase in which a castle or fortification had already been built on that same site. Some examples of these are Lanuvio (a castrum in 1244) and possibly Ardea (a castellum in 1081). Both towns demonstrate late-early medieval walls, possibly to be dated to the 9th century. On several other sites the castrum phase was preceded by a casale phase, such as at Castel di Leva.

However, there are also castra which seem to have been built from scratch. Examples of these are Nettuno, Giuliano di Roma, Conca, Monte Gabum, castrum Fusignanum, castrum Nave and several other sites

whose names in the database start with the term “castrum”. It seems no coincidence that most of these newly built *castra* sites were built at the formerly more marginal parts of the landscape: i.e. the shoreline and the Lepine Mountains. This might have been related to the absence of earlier settlements and existing population centres to be used as the basis for new incastellised settlements.

7.III.2.2.2.f Was Tyrrhenian southern Lazio less affected by the process of *incastellamento*?

Toubert hypothesised that southern Lazio was less consistently affected by the process of *incastellamento* compared to the Sabina and the Tiburtine area. He suggested that this first of all had to do with the fact that southern Lazio had less large monasteries that were zealously active in *incastellamento*, such as Farfa and Subiaco would be elsewhere, and in addition many of the larger monasteries in the area were founded later. Furthermore Toubert emphasised that these monasteries were founded by orders (e.g. the Cistercian Order, but also Order of Chartres and the Joachimite) that had had, for their own individual reasons, a more negative attitude regarding the politics of active involvement in the affairs and the settlement of the local populace than what he dubbed the large “traditional” Benedictine monasteries of the 10th and early 11th century (i.e. Farfa and Subiaco). Other factors deemed of importance might have been the relatively less abundance of free space to build, due to the presence of ancient sites and the fact that existing towns were narrowly distributed. Furthermore, probably a less active urban nobility was connected to the dioceses; less active than those of the Sabina. It is a well-documented fact that nobles connected to the dioceses had been very active in *incastellamento* in other parts of central Italy⁴²⁶.

The assumption that southern Lazio was less consistently affected by *incastellamento* than northern Lazio could not be checked for the Tyrrhenian part of southern Lazio, as this would involve a thorough study of the castles in other regions, in order to underpin subtle differences between the pace and the distribution and the nature of the elite involvement in the process. What is more, my view is blurred by the fact that there is less documentary evidence available regarding the research area compared to other areas where the monasteries of Farfa and Subiaco were active. Most of all, as is seen all over Italy, it seems that regional diversity was to be the nature of the process of *incastellamento*. The dominance of castles was not to be a total one. Some areas, as most of the Farfa area, and Apulia integrally, would never be incastellised at all (see 2.I.9.1). On a micro-regional level this was confirmed: i.e., the Pontine plain, the area around Terracina and the coast saw very little manifestations of *incastellamento*, while it was abundantly seen in other parts of Tyrrhenian southern Lazio. The current dataset

does not confirm the absence of “active” monastic orders either: Benedictines were ever so present in Tyrrhenian southern Lazio as they were actively indulged in *incastellamento*⁴²⁷. The only clear distinction compared to other areas that could be filtered out when analysing my current dataset was the rather overdue start of *incastellamento* in the research area in comparison to the Sabine and Tiburtine regions.

7.III.2.2.2.g Who was involved in *incastellamento*?

The nature of seigniorial authority at incastellised settlements was varied, as Toubert showed: i.e., the clergy (e.g. monasteries, the pope, bishops), as well as secular noblemen were involved as *lords entrepreneurs*⁴²⁸. For a more thorough understanding of the process, it is, in my opinion, necessary to study in detail who was involved in the *incastellamento* projects. From the consulted documentation it proved indisputably clear that early acts of *incastellamento* across Tyrrhenian southern Lazio were fought along the lines of the famous struggles among the Crescentii and the Tusculi⁴²⁹. In all cases of the four early irrefutably documented *castra* these two families were distinctly involved. In all early *incastellamento* enterprises too, at least one church institution was involved as well. In northern Lazio, there were several cases of *incastellamento* without the involvement of a single secular party. In Tyrrhenian southern Lazio this was merely the case at Monte Julianu (OLIMsite 298), where the monastery of Villamagna seemingly had been the only party involved. This should remind that whereas *incastellamento* itself was part of the development of feudal systems in Italy, a *castrum* itself was not always a fiefdom, i.e. a combined project of a lord landowner and a lord entrepreneur. Other forms of *incastellamento* existed as well, as in the case of *castra* that were founded solely by peasants. And vice-versa, fiefs embedded in fortified settlements were not always *incastellamento* projects. For example, the fiefs at Fondi⁴³⁰ and at Terracina⁴³¹, did not involve colonisation.

It seems advantageous to have a further look at the actual numbers of the parties involved in *incastellamento* projects⁴³². Usually one could expect a combined project of a lord entrepreneur and a lord landowner, as was learned from Toubert. The lord entrepreneur involved is known in 26 of the 72 cases of (possible) *incastellamento* projects of Tyrrhenian southern Lazio. In one case, a monastery (i.e. Villamagna) acted as manager of the project, at the earlier mentioned *castrum* of Monte Julianu (OLIMsite 298, 11th century). In two cases local lords were being documented as rulers of the town: i.e. the lords of Bassiano and of Supino in the 12th-13th century. In all other cases, the managers of the incastellisation projects were members of the famous elitist families of which the Tusculi (6 times during the 10th-12th century), the Annibaldi (5x, 12-14th),

the Crescentii (4x, 10th century) and the Savelli (3x, 12-14th century) were best represented. In 12 cases both the lord landowner and a lord entrepreneur are known. Usually alliances were not repeated, with the noteworthy exception of the Crescentii who apparently preferred cooperation with monastic landowners from Rome (2x S.Erasmo al Celio).

The lord landowner involved is known in 30 of the 72 cases of (possible) *incastellamento* projects. In six cases the pope was involved in *incastellamento* projects, throughout the 12th-13th century⁴³³; related to these cases, no preference can be perceived for a specific elite party as being the projects executor. Fondi was listed as being owner of five *castelli* during the 11th century⁴³⁴. Monasteries turned out to be the most common owners of *incastellamento* sites; they were so in 14 known cases. There seems to be no monastic order that prevailed the others: the Basilian (1x), Benedictine (5x), Cistercian (3x), Cluny (1x) and Franciscan (1x) orders were all among the monasteries involved as being lord landowners. In two cases a bishop is known to have been involved in *incastellamento*: i.e. the bishop of Velletri (in the case of *castrum Vetus*) and of the bishop of Veroli (at *Castro dei Volsci*).

A study of the distribution of the parties involved did not yield any correlations between parties and space (such as a strong preference for a specific part of the landscape), except in case of the Tusculan *castra* which were found in the area from the Alban Hills southwards up to the coast (see “corridor” in 7.II.1.1.1-5). In the vast majority of cases of *incastellamento*, it turned out all but impossible to perceive if the documented parties involved actually had been involved from the start of the *incastellamento* project, as in almost none of the primary sources the foundation of the *castrum / castellum* was explicitly mentioned, the exception being the four foundation charts mentioned above. As such it proved quite impossible for me to comment on Toubert’s hypothesis that there might have been two phases in the *incastellamento* process. He proposed that at first *incastellamento* was performed as a stitch-up by the *seigneurs* whereas the concerned populace involved was not to be more actively involved in the settlement on new locations until later on⁴³⁵.

7.III.2.2.2.h What was the set-up of an incastellised settlement?

It is most difficult to reconstruct the appearance of incastellised towns, as many were subjected to intensive building activities during later times. Yet some common reoccurring features may be pointed out in this study. Mostly the whole town would be walled (e.g. at Ardea, Lanuvio, Pratica di Mare, Sezze). At the heart of many of the incastellised settlements often a separate stronghold was found (e.g. at Marino, Supino). It is probable that

in the *castra* many of the buildings, and especially the houses, were made of wood. This may be deduced from a string of town fires recorded in the 12th century. E.g., in 1125 in Maenza, in 1149 in Ceccano (not a *castrum*), in 1150 in Sezze; in 1165 in Amaseno. Indeed there are many contemporary references to houses made of wood, for example in the Farfan registry (*lignamina casae*)⁴³⁶.

The foundation chart of *castrum Vetus* shows that satellite estates could exist around the incastellised settlement, probably functioning as production sites. They might be seen as a means of intensifying control over the peasants and production, as seen elsewhere in central Italy around monasteries during the 8th and 9th century⁴³⁷. In the Biferno valley the presence of satellite settlements seem to have been a fairly normal second phase in the development of *castra*⁴³⁸. There smaller *castelli*, *casali* and monasteries were founded on secondary (i.e. lower) positions within the territories of the incastellised centres. If satellite settlements were to be a common thread of *castra* could not be examined because of a general lack of other detailed *incastellamento* charts, and, in contrast to the Biferno valley, the shortage of widespread survey projects examining structural developments around *castra*.

7.III.2.2.2.i The Lepine and Ausoni Mountains: *castra* vs. large settlements and communes

An interesting observation made by Osheim (2004) was the apparent absence of castles in the neighbourhood of large towns (e.g. at Pisa, Lucca) beginning in the 11th century: i.e., all the power in and around large towns seemed to have been concentrated on the commune from the 12th century and onwards⁴³⁹. Apparently, in this new political constellation, castles had become all but superfluous. The same was seemingly true in the Grosseto area according to the results of the research done there⁴⁴⁰. There from the 13th century onwards the manifestations of power (e.g. manorial houses, towers, and material associations such as building techniques) disappeared from the hilltops, and at that same time large towns became the focal points of new-born social hierarchies.

These observations, the correlation between the presence of free communes and/or the size of villages, may to some extent hold true for the current study area as well, whilst taking place a bit later: i.e., in the 13th and 14th century the Lepine Mountains suffered a clear decline in the number of incastellised settlements (figures 7.183-6). Here as well, there is no evidence for long-lasting *castra* to be found (see above). To me it seems fair to correlate this decline and the brief lifespan of *castra* to the fact that the Lepine and Ausoni Mountains were to be the bases of several new (semi) free communes as of the 12th century and onwards (see figure 7.188 and 7.189). As to the size of the villages, the observations north of Rome seem valid as well, although there was but one large town with a

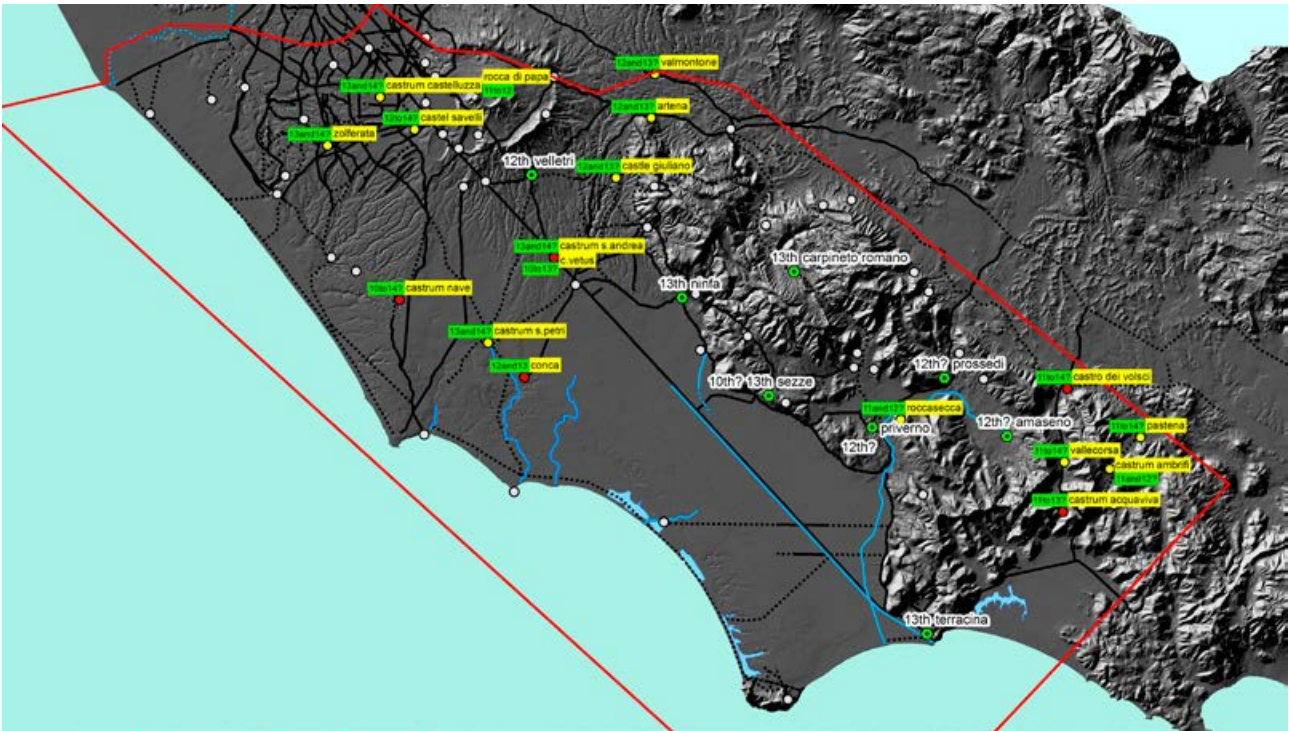


Figure 7.188. 'Viable' castra during the 10th-14th century with name and date (black font against a yellow and green background; the white dots stand for other castra), and free communes with foundation date (black font against a white background).

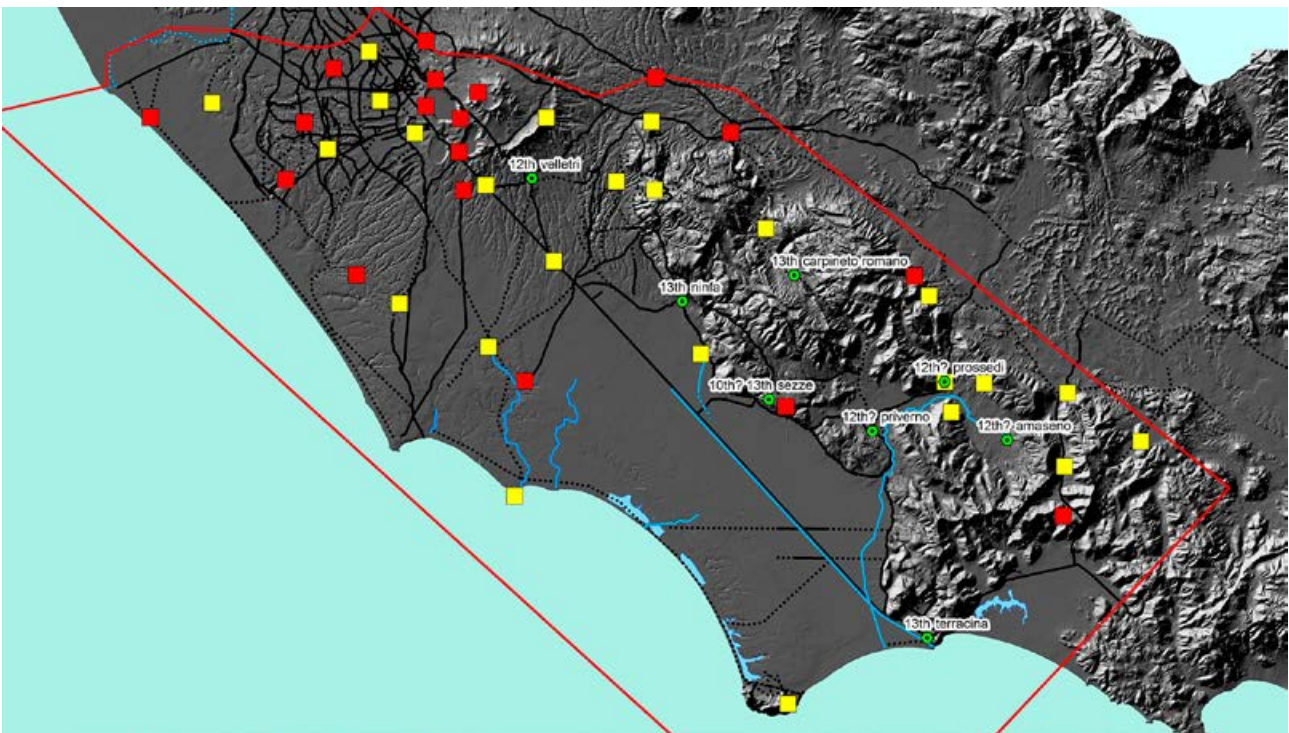


Figure 7.189. Free communes with foundation date and 13-14th century's incastellised settlements (castra). A red square red denotes an affirmed incastellised settlement (of the 13th century), a yellow square signals a possible (13-14th century) one.

commune in these parts, i.e. Terracina. It should be rather telling that *castra* were nowhere to be seen in the wider area around this town.

A second aspect seems to acknowledge a paralleled process compared to Tuscany, namely there would be a peak in the establishment of *castra* that were purposely situated strategically in the second half of the 13th century. These *castra* were mostly located on territorial borders or on

roads. These *castra*, however, should not be seen as being part of the *incastellamento* process anymore, yet as a tool in the battle between powerful communes; *castra* in which seigniorial power and its markers would be focussed from the 13th century and onwards. Indeed, in the 13-14th century, throughout the Lepine and Ausoni Mountains most cases of *incastellamento* would be inhabited strategic fortresses (see above). It proved not possible to extract data that could differentiate if these *castra* were part of *incastellamento* or rather of the communal era.

To conclude: In the Lepine and Ausoni Mountains the lesser lifespan of the process of *incastellamento* may be correlated to the development of communes. Another factor of this shortening might have been the somewhat volatile geo-political situation; i.e., especially the papal battles with the elite families could have impeded or would at least have discouraged lasting entrepreneurship. Perhaps the absence of an easily accessible large market was another factor involved⁴⁴¹. Or the fact that the area (i.e., at least the western parts of the Lepine Mountains) was swamped with monastic, papal and non-*incastellamento* elite activity – which could have restricted the wiggle room for economic exploitation and effective control of the area surrounding the settlements. And lastly, in the Biferno valley a correlation seemed to exist between abandoned *castra* and marginal positions susceptible to erosion, in areas with soils less suitable for agriculture and yet more suitable for pasture and forest grazing. These erosion-prone sites proved vulnerable to phases of demographic or economic decline. These explanations for the less durable process of *incastellamento* throughout the Ausoni and Lepine Mountains remain mostly speculative.

7.III.2.2.2.j Castra as economic factors

By the investments of the pope, bishops, monasteries and elite families, based either locally or at Rome, castles were built. It is believed that this new investment climate should be seen as one of the principle stepping stones of the recovery of the Italian rural economy from the 10th century onwards. The foundation of castles would be a means of increasing the economic potential of the area. It is likely that the sites at which *incastellamento* “projects” were started, were connected to local markets and to the home bases (i.e., rather often Rome) of the parties involved in their foundation. The economic potential of *castra* did not only entail agricultural production or extraction of natural resources, but for instance tollage as well – although there is solely one secure record of this: i.e., Ariccia was a *castrum routier* or péager (Toubert)⁴⁴², providing income for its inhabitants and its owners (being the Tusculi) by asking a fee for the underpass of the castle.

Unfortunately, because of the lack of detail of research and primary data regarding most *incastellamento* projects, it

proved impossible to generalise on the economic value of the *castra*, and the way they were operating in a market system. Of course, many of the parties involved had their home base in Rome (e.g. the papacy, some monasteries, many of the elite families), and much of the revenue of the *castra* would end up in the City. However, only in the case of the early *castrum Vetus* a well-documented case of *incastellamento* exists, which allows to study what exactly was produced and by whom.

7.III.2.2.2.k The Astura resettlement: material evidence for *incastellamento*?

The Astura settlement (OLIMsite 33) knew a second phase of occupation during the 12th to 13/14th centuries as was attested by the recovery of locally produced ceramics. This new occupancy phase may be a rare example of an *incastellamento* process backed up by archaeological proof, at least in my studied area. Astura was firstly listed as a *castrum* in 1268 and secondly in 1303. In this case, resettlement might have taken place within an earlier abandoned settlement⁴⁴³. More *castra* in Tyrrhenian southern Lazio seem to have been resettlements of earlier abandoned sites, for example Ariccia, Ardea, and Lanuvio. Regarding these sites, however, there could not yet be found any clear-cut archaeological or detailed historical evidence on the state of the site at the start of *incastellamento*. The question remains why the Crescentii or Tusculi had not yet started a *castrum* at Astura earlier, in the 10th century? In that period, the area was owned by S.Alessio and the Crescentii, a combination of rulers that elsewhere had been involved in early *incastellamento* (*castrum Nave*, OLIMsite 90). Maybe the coastal area tended to be too vulnerable at that time? The first affirmed coastal *incastellamento* project was the *castrum* of Nettuno in the 12th century.

7.III.2.2.2.l Population transfers

Relating to Southern Etruria it has been suggested that a population resettlement took place from the (former) *domusculata* centre of Monte Gelato (part of the *domusculata Capracorum*) to the nearby castle site of Castellaccio (known as *castrum Capracorum*, firstly mentioned in 1053) in the late 11th or early 12th century as part of an *incastellamento* process. This transfer from the “open” site of Monte Gelato to the “enclosed” hilltop site of Castellaccio was deduced from the fact that the last phases of the first site coincide with the earliest phase of the latter⁴⁴⁴. It is not known if this was a forced movement, or a voluntary one, spurred by the fact that the earlier location turned out to be difficult to defend⁴⁴⁵. Therefore Monte Gelato-Castellaccio may well have been a perfect example of a population transfer embedded in the process of *incastellamento*, which must have occurred often between the 10th and 12th/13th century. So far, it remains the only known

example of a transfer from a former *domusculta* site to a *castrum*, and to my knowledge the sole transfer for which archaeological evidence exists. Future research should search for additional evidence of such transfers.

In the current study area, there is no distinct (archaeological, historical) evidence to be found related to such transfers by a populace from one site to another as at Monte Gelato-Castellaccio. The three case studies available that explicitly deal with repopulation (i.e. at Monte Julianu, at castrum Vetus, and at castrum Fogliano) do not furnish information about the people's former whereabouts⁴⁴⁶. Only at Monte Julianu there is some evidence to be found that suggests something of the origin of the resettled populace: i.e., this chart (1003-1029) registered the settlement of a population at a "castellum" by Jean, the abbot of the monastery of S.Pietro de Villamagna⁴⁴⁷. It seems plausible that the abbot created the castle for the monastery's vassals and that the population came from the site of Villamagna itself, or its surroundings⁴⁴⁸. As was discussed, in the 12th and 13th century many existing larger villages were listed as being a *castrum* (7.III.2.2.2.b); whether or not this actually implied a genuine resettlement of populations to these villages could not be found in the consulted written sources.

Are there no clues for population transfers related to *incastellamento* projects at all? With the utmost caution, one might envisage similar transfers from some known or suggested *domusculta* sites in Tyrrhenian southern Lazio: e.g., from Formias (Satricum?) to the castrum of Conca, and from the *domusculta* Anthius to the *castrum* of Nettuno; both *castra* were for the first time documented in the 12th century, yet without written evidence of a population transfer. Something similar may hold true for the population of the *domusculta* Sulficiana, which was located close to Sabellum / Monte Savello (OLIMsite 164), later on dubbed as possibly being the fundus Savello (documented in 1017, 1024), which may have been transferred to castel Savelli (OLIMsite 156, first reference in 1279). As of yet this continues to be nothing but speculation; the identification of the site of Satricum with the *domusculta* of Formias, for example, is purely hypothetical: merely one shard cannot be seen as sufficient proof of this, nor of the possibility that a larger group of residents was settled there. Another possible resettlement set in the frame of *incastellamento* might have occurred at the end of the site of Norba and at the start of Norma; the latter site was listed as a *castrum* in 1179. Although so far there is no written evidence found of a population transfer, the *communis opinio* accepts the possibility anyway. In general, it should be interesting to see if future research on these tentatively potential transfer sites (i.e. Satricum-Conca; Norba-Norma; the exact location of the *domusculta* Sulficiana is not known) will provide a similar site sequence as at Monte Gelato-Castellaccio. It could

be appealing to restudy the assemblages of the Norba site in order to date the time of abandonment more exactly.

7.III.2.2.2.m Conclusions on *incastellamento* in Tyrrhenian southern Lazio

The level of detail of the consulted archaeological and written sources did not allow me to make a detailed analysis of some of the important aspects of *incastellamento*. Evidence of active colonisation and renewed exploitation of parts of the landscape of Tyrrhenian southern Lazio proved to be out of reach. There were no written sources informing about the revitalisation of pieces of farmland, or archaeological evidence for outhouses connected to *castra* production. Similarly a detailed study of the way lords governed over colonists within the settlements was all but possible, as was research on the *castrum* as the new focal point of religious topography. The current database did enable a study of the phasing and distribution of *incastellamento*. It is clear as to when the process began and when it started to fade away. The ecclesiastical institutions and elite parties involved could be studied as well to some extent, by the consistent study of chronology and spatial distribution of interests.

Indeed, in the research area *incastellamento* started later than it had in the Sabina and southern part of eastern Lazio (the focal areas of Toubert's study). There is a clear explanation for this. The absence of large rural monasteries, that were very active in the process of *incastellamento* across the Sabina and Tiburtine regions (i.e. in the wider areas of Farfa and Subiaco), very likely affected the pace of *incastellamento*⁴⁴⁹; this lack of rural monasteries seems correlated to the presence of strong ecclesiastical institutions in Rome, and the lack of a rural elite, which, as was already known from earlier historical studies, was focussed on towns/the City⁴⁵⁰.

With the exception of its starting date, most of the observations related to *incastellamento* in the Sabine were confirmed, at least, as far as the evidence allows one to see: i.e., a wide array of parties was involved in the *incastellamento* process. The papacy and the monasteries usually represented the Church in the process, as being the landowning parties. Elite families were involved as well, mostly as lord executors, yet as landowners as well. The assumption that Tyrrhenian southern Lazio was less affected by *incastellamento* than northern Lazio could not be verified: within the scope of this study it proved impossible to assemble enough relevant data from other areas, needed to quantify any form of comparison. Moreover, there turned out to be less documentary evidence available in the research area, which impeded a comparison as well. The available evidence could not bear out the assumption that a less active nature (order) of monastic presence would be one of the main causes of a lower level/shorter lifespan of *incastellamento* in the analysed area.

As in the Sabina, the *castra* were predominantly found in the mountainous areas, especially at their outer ridges, mainly at the higher positions overseeing the plains and the valleys. All the same, in the 12th century *incastellamento* would spread to the low-lying parts of the landscape and the coast as well. In contrast to the general schemes of earlier studies, the nature of the process of *incastellamento* at my investigated sites cannot not be subdivided into clear-cut phases (e.g. from primitive defensive measures in existing villages to large refortifications of villages which acted as residences). In this thesis' study area, phasing needs to be restricted to the observation that in the 10th and 11th centuries *incastellamento* projects would chiefly materialise in smaller fortresses, mostly on pre-existing sites, while in the 12th and 13th centuries existing larger villages would become incastellated as well. Most *castra* developed on existing sites. *Castra* built *ad novo* could be found at the coast and in the Lepine Mountains, i.e., the formerly more marginal parts of Tyrrhenian southern Lazio's landscape.

In the Lepine Mountains *castra* were short-lived, and seemed to have materialised mostly at fortresses with small inhabited nuclei rather than in large villages. As in northern Lazio and the Grosseto area, this might be correlated to the development of free communes in the same area, although other factors, such as the distance to markets, may have played a role as well. The hypothesis that in the proximity of larger towns *castra* could not develop, or were cut off earlier, could not be verified by me simply because relevant towns were all but absent; the hypothesis could not be refuted as well: i.e., in the wider hinterland of the only large town of relevance, i.e. of Terracina, *castra* proved to be absent. The 14th century would mark the end of the *incastellamento* era. This would confer to the chronology of the process in other parts of Italy.

7.III.2.2.3 Theme: the economy and systems of redistribution

7.III.2.2.3.a Local economic activity, 10-14th century

For the current study period it is out of the scope to make detailed observations on local economic activity, neither on the micro-economic level of monasteries and *castra* as socio-economic units, nor on subsistence level; the functional relationship of these centres with subsidiary farms is out of reach. As stated before, for insights on these local levels a more intense level of micro-regional field studies is needed, as has been done to the north of Rome (see 2.II.3.2). In some cases, we do get a glimpse on what is going on in such a micro-regional economic setting, through anecdotes in written sources:

- There is 13th to 15th century explicit written evidence for fish breeding in the Fogliano area. Here several monasteries acquired concessions to breed fish

like the monasteries of S.Quiziano, S.Eufemia and Grottaferrata, and several Roman *basilicae*.

- In the 15th century the Caetani controlled the fish breeding activities on the Fogliano lake which were intended for trade: The Caetani held the monopoly on salt water fish farming for Rome until the 17th century⁴⁵¹.
- The promontory of Monte Circeo was a good spot to hunt for migratory birds, especially quails. This has been pronounced in a historical source in 1322, describing the location on Monte Circeo to catch quails for the widow of a merchant from Terracina⁴⁵².
- The ruins of Ostia Antica (OLIMsite 392) were used as a quarry for marble used in the cathedrals of Pisa, Florence and Orvieto between the 11th and 14th century; the same practice must be widespread, on a micro-regional level. In Ostia and Astura settlement marble was also processed on the spot. It was processed into a mortar base material by burning it in lime-kilns.
- In the early 13th century Castel Savello became a large agrarian centre. Written documentation shows that the centre around the *castello* attracted farmworkers from Ariccia. It is uncertain if this was part of an *incastellamento* project ("castello").
- For the Alban Hills west key area it may be assumed that much of the agricultural activities were deployed from within the *casale*, a rural village or small agricultural centre.
- Fossanova acquired vast lands in the Sacco Valley and along the Amaseno for agricultural production⁴⁵³. The monastery exploited the forests of the surrounding mountains as well (see 7.III.1.7.3).
- The Lepine forests were of economic value in these centuries. In the early 13th century a conflict is documented between the town of Priverno and the monastery of Fossanova, on the rights of using the forests. In Terracina too, a late 12th century source records the exploitation of the forest (7.III.1.10.3).
- The buffalo may have played an important role in the livestock of the monastic domains in and around the Pontine plain in the 12th and 13th century.
- In the 13th century Statute of Sonnino strict guidelines are given for watering places for livestock, in order to avoid damaging river dams on a stream near Sonnino⁴⁵⁴.
- The area around Norma was known for its chestnut forests in high medieval times, as were the surrounding mountains of Segni.
- Sermoneta profited from its position on a navigable stream towards the Tyrrhenian coast; here a harbour is recorded in the 14th century, but traffic on this river must have started earlier and contributed to the growth of the town.

- At Sezze, the old tradition of wine production, mentioned by Pliny, may have been picked up again⁴⁵⁵.
- The selling of pieces of waterlogged lands near Mesa in the early 11th century may be seen as a sign of the areas' economic value. The nature of economic activities on the spot is unknown, but possibly people were fishing here, an activity visible on pre-*bonifica* maps (*piscine*).
- In the central Pontine plain (Mesa, Forum Appii), 9-13th century pottery has been found, pointing to trade and local economic activity.
- A document of the late 12th century seems to show that Terracina was an important salt marketplace in the high middle ages.
- On the 946 lease document connected to the *incastellamento* of castrum Vetus, 50 estates are mentioned, 6 of which can be identified. Most of these estates likely functioned as production sites for the castle, as can be read from the production targets set in the leasing contract. The revenues of these estates must have ended up in the town of Velletri, as all these *fundi* were leased by the Duke of Velletri.

7.III.2.2.3.b Economy on a regional scale

On a regional level, the status of research offers slightly better views on the development of the regional economy and of networks of regional and local supply/trade compared to the previous study period. Pottery typologies are better developed, although Tyrrhenian southern Lazio still falls behind in pottery studies compared to Rome and northern Lazio. Especially the glazed and *dipinta in rosso* wares of the 11-14th century have been studied on a number of large and smaller excavation sites in the landscape (like Ostia, Villamagna, Torre Astura, Astura settlement, Privernum, Albano Laziale, Ceriara)⁴⁵⁶. The pottery research of the locally produced ceramica *dipinta in rosso* of Astura settlement for example allows us to delineate local distribution: it seems to have found its way at a local level along the Astura river. Possibly these pots found also their way along the coast to the south (until Minturno) and north (Civitavecchia), to Rome and surroundings, the Amaseno and the Liri valley. Here too, comparable fragments have been found. Yet, in order to determine the exact range of trade of the Asturan *dipinta in rosso*, an additional comparative study of the fabrics of the above sites is needed.

Privernum is the second verified production site of ceramica *dipinta in rosso* of the second period (11th to 13th century). These wares from Privernum found their way across many parts of southern Lazio and beyond⁴⁵⁷. Generally, the archaeology of Privernum is well developed. It shows that the sites' economy in the 8th to 10th century was strongly focussed on the south, specifically

Campania, from the 10th century the site had trade connection to the south and the north (Rome and beyond).

Despite these findings, the reconstruction of regional exchange systems remains out of reach for the current study: the publication of high medieval pottery typologies is too fragmented to create an overview of regional pottery distribution for Tyrrhenian southern Lazio.

It is clear that there was a huge upsurge in economic activity in the countryside from the 9th century onwards, but even more so from the 10th century, with the start of *incastellamento*. The economic boom is visible in the rise in the number of recorded villages, fortresses and monasteries. The *incastellamento castra* played an pre-eminent role in the economic developments of the 10th and 11th century. Economic fortune was also boosted by the resumption of large scale trade during the 11th century (in Rome⁴⁵⁸ already from the 9/10th century). Extra-regional distribution networks were formed, as the fine ware pottery studies north of Rome have pointed out⁴⁵⁹. Elsewhere in central Italy too, excavations reveal the new economic prosperity and the emergence of long-distance exchange networks⁴⁶⁰.

7.III.2.2.3.c Transhumance

There is nowadays no scholarly consensus on the nature and (dis)continuity of pastoral/transhumant activities since prehistoric times in central Italy. Models of transhumance are very difficult to verify from the archaeological and ethnographical record; for the study of pastoral nomadism multidisciplinary research is called for⁴⁶¹. Although time does not permit a detailed tussle with conceptualisation on transhumance, it is clear that in central Italy post-Roman historical records on transhumance activity are rare until the 12/13th century⁴⁶².

As discussed earlier, however, it may be assumed that transhumant activities in the countryside of Tyrrhenian southern Lazio continued throughout the middle ages, likely on a smaller scale than in Roman times. Pastoral activities should be seen as inherent to the Lepine Mountains, as documented in Antiquity, in sub-recent times, but also nowadays. The pedemontana is seen by some scholars as a passageway for flocks since ancient times. And the higher areas along the river Astura, together with lagoonal areas of Fogliano and Caprolace were deemed very much suitable areas for winter pasture⁴⁶³.

7.III.2.2.3.c1 Transhumance between the research area and the Apennines

Like in the Biferno Valley and in Tuscany⁴⁶⁴ the first concrete sources of transhumant activities, documenting the ownership of the lands, the people involved and pastoral strategies, date to the 12th century.

For the 12th century there are indications that herds moved between the Sacco Valley and the Cicolano summer fields in the Apennines. One specific source dating to 1167 speaks of a large gathering place for herds near Ceprano, called *platea ciclana*⁴⁶⁵.

Seasonal pastoral movement between the Pontine plain and the Apennines (“double transhumance” as Toubert calls it) since protohistoric times has been the subject of a number of studies⁴⁶⁶. Seasonal shuttling between the plain and the mountains and the Casamari monastery, situated in the Monte Ernici to the south-east of the study area, is well-documented in the late 12th century. Casamari became a Cistercian monastery in the years 1151-1152 by the instigation of Pope Eugene III. Immediately after the new order was installed, the monastery began to promote transhumance and pastoral activities, as can be read in several *bullae* in the middle of the 12th century⁴⁶⁷. One privilege by Pope Alexander III, dated in 1170, is specifically explicit on these activities⁴⁶⁸. Furthermore, it can be read that the monastery tried to literarily enlarge its *sylvae et pascua*. This transhumance has been reconstructed by Kehr as summer fields north of Casamari and winter pasture in the “Maremme pontine” (Pontine plain)⁴⁶⁹.

As the case of Casamari shows, the rise of the Cistercian order seems to have had a positive influence on transhumant activities, or in the recording of them: in the period of intensive Cistercian activities, the 12th century, the first clear proof of organised dual transhumance is found⁴⁷⁰. It can be argued that the Cistercian monastery of Fossanova was involved in the transhumance activities between the (sub)Apennines and the Pontine plain of the likewise Cistercian monastery of Casamari.

In conclusion: the medieval historical record shows that there were two possible winter meadow areas, the Pontine plain and the Latin valley, suggesting transhumance routes between the Ernici (and further inland) and the Pontine plain. Then again, this is the only historical evidence for the existence of *tratturi* in the high middle ages.

7.III.2.2.3.c2 Different strategies

As discussed, several kinds of local and regional (long-distance or short-distance) strategies probably coexisted in the middle ages, like in Roman and sub-recent times⁴⁷¹. Veenman wrote about the difficulties in distinguishing between such strategies. It is hard to concretely say something about the groups involved, and about their way of life⁴⁷². She shows, however, that short-distance pastoralism is a consistent element of the Pontine region. It existed since protohistoric times, long before long-distance pastoralism. In sub-recent times (18th and 19th centuries) a type of short-distance transhumance has been recorded, in which transhumance routes led from villages

in the Sacco and Latina valleys to the winter pasture fields in the southern Pontine area⁴⁷³. One should be aware, however, that these activities existed within socio-economic circumstances that were likely very different from Antiquity. The sub-recent strategies however bear witness to the intrinsic suitability of the Pontine coast for winter pasture in regional (short-distance) transhumant pastoral strategies.

In the literature, criteria for long-distance transhumance vary. Some scholars use the time involved in getting to and fro, others apply the number of meters that had to be climbed or descended⁴⁷⁴. Veenman, who has studied pastoralism in an area roughly similar to the one currently studied, used the criterion of a week or more travel (125 km). She convincingly showed that a prerequisite for long-distance transhumant pastoralism is cohesion in society and political stability⁴⁷⁵. This ensured access to fields in areas located at a considerable distance from each other. Both criteria of cohesion and stability for long-distance transhumance were met during the Roman republic and early Empire. This is not the case during much of the middle ages. The politically stable Papal States of the late 8th century and onwards however do meet these criteria. From the beginning of Carolingian presence, long-distance transhumance must have been possible: the Carolingians held the whole of central Italy. Later, after the weakening of Carolingian power by the late 9th century, long-distance transhumance may have been hindered by the geo-political fact that the Papal States, or at least Lazio, was too small to contain a *tratturo* of 125 km.

On the other hand, Veenman’s criteria concern (pre) Roman society. If they apply to the middle ages, with its complex and constant changing geo-political constellation, remains to be seen. It is clear that geo-politically one obvious feature distinguishes medieval society of Lazio from the (pre)Roman: the papacy. From the middle of the 8th century papal authority transcended regional politics. One can speculate that thus the papacy could wield its authority for economic influence outside the borders of the Papal States after the wane of Carolingian power. Having said this, however, the fact remains that the current dataset does not yield much concrete evidence on contemporary economic ties of the current key area with other regions.

7.III.2.2.4 Synthesis: observations on Tyrrhenian southern Lazio between the 10th and 14th century

The site distribution maps show that during the study period activity gradually spread over the entire landscape of Tyrrhenian southern Lazio. In the 10th century a sharp growth in the number of sites in most key areas can be seen, reflecting a growth in actual activity but also in the available sources. However, activities were still mainly restricted to the main routes, in correspondence with the

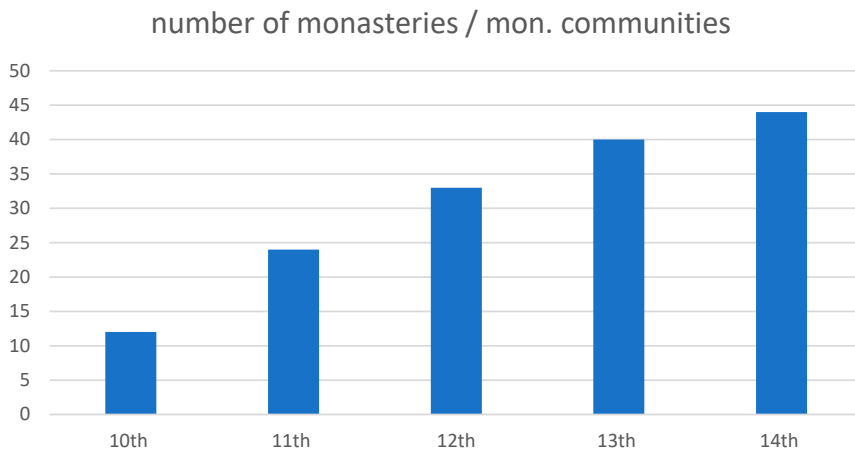


Figure 7.190. Chart showing the number of monasteries between the 10th and 14th century.

site distribution that we have seen since the late Roman period. In the 11th century the more marginal parts of the landscape, such as the central Pontine plain, the Lepine inland areas and Monte Circeo, began to show activity as well. As has been stipulated in the Themes, not only the new economic exploitation of these parts, and demographic growth, but also the gradual “fortification” of the landscape was at the basis of this dispersion of activity. The following observations provide detail on the changing landscape:

7.III.2.2.4.a The 10-11th century: new activity in and around the Pontine plain and in the mountains

There was an outburst of activity in and around the Pontine plain in the 10th and 11th century. Just north of the plain, Cisterna (OLIMsite 57) began to develop into an important regional centre. Around the Pontine plain, substantial investments were made, for example in the castrum Fogliano, the canal Rio Martino, and in the new (phases) of settlements positioned on the ridges of the Lepine Mountains, like Norma, Sezze and Sermoneta. Along the Appian route, activities seem less economically instigated, mostly involving churches built on ancient sites from the 11th century onwards⁴⁷⁶. From the 11th century onwards, recorded activities are found in the central parts of the Lepine and Ausoni mountain ranges as well.

7.III.2.2.4.b The 10-14th century: a continued rise of rural monasteries

The 10th century quick expansion of monastic life in Tyrrhenian southern Lazio is drawn out in the next centuries⁴⁷⁷, as visible in figure 7.190, a chart showing the number of monasteries between the 10th and 14th century.

The wider Pontine pedemontana area between Cori and Sonnino and the adjacent Lepine Mountains was the most important region for high medieval monasticism in

Tyrrhenian southern Lazio (see figure 7.191 and 7.192). In this zone, not only the highest number, but also the largest and most influential monasteries (Valvisciolo, Fossanova) were located. Striking is the absence of monasteries on the coast south of Rome. This absence may be caused by the influence of monasteries from without Rome in these parts, who had many interests as far as the Fogliano lake (see 7.III.2.2.1.b). The impression arises that monasteries preferred a location away from the coast, on or next to the edges of mountain ranges and further inland⁴⁷⁸.

Monasteries played an important role in the worldly affairs of Tyrrhenian southern Lazio, among others in a number of *incastellamento* projects (see 7.III.2.2.2.g). Monasteries became powerful players in the areas directly surrounding them, not only as religious centres, but also as economic forces. From Fossanova for example we have documentation of the widespread acquisition of the lands in the Sacco Valley and along the Amaseno for agricultural production. Other documentation shows how the monastery exploited the forests of the surrounding mountains. Fossanova from the 12th century developed into an important cultural and artistic centre with much influence on the surrounding areas (especially architecture)⁴⁷⁹. In contrast to northern Lazio, there are only a few smaller monastic registers available. Villamagna and Grottaferrata are the only local monasteries in the study area with a surviving register. Both registers started in the late 10th century.

External monasteries exerted a large influence in Tyrrhenian southern Lazio from the 10th century onwards. Each external monastery focussed on specific landscape sectors, as discussed in 7.III.2.2.1.b: Montecassino on the Ausoni Mountains and the Fondi plain, Grottaferrata on the Alban Hills and the Pontine area as far as the Astura peninsula. Subiaco concentrated its activities on the area west and south of the Alban Hills and the southern Pontine coast.

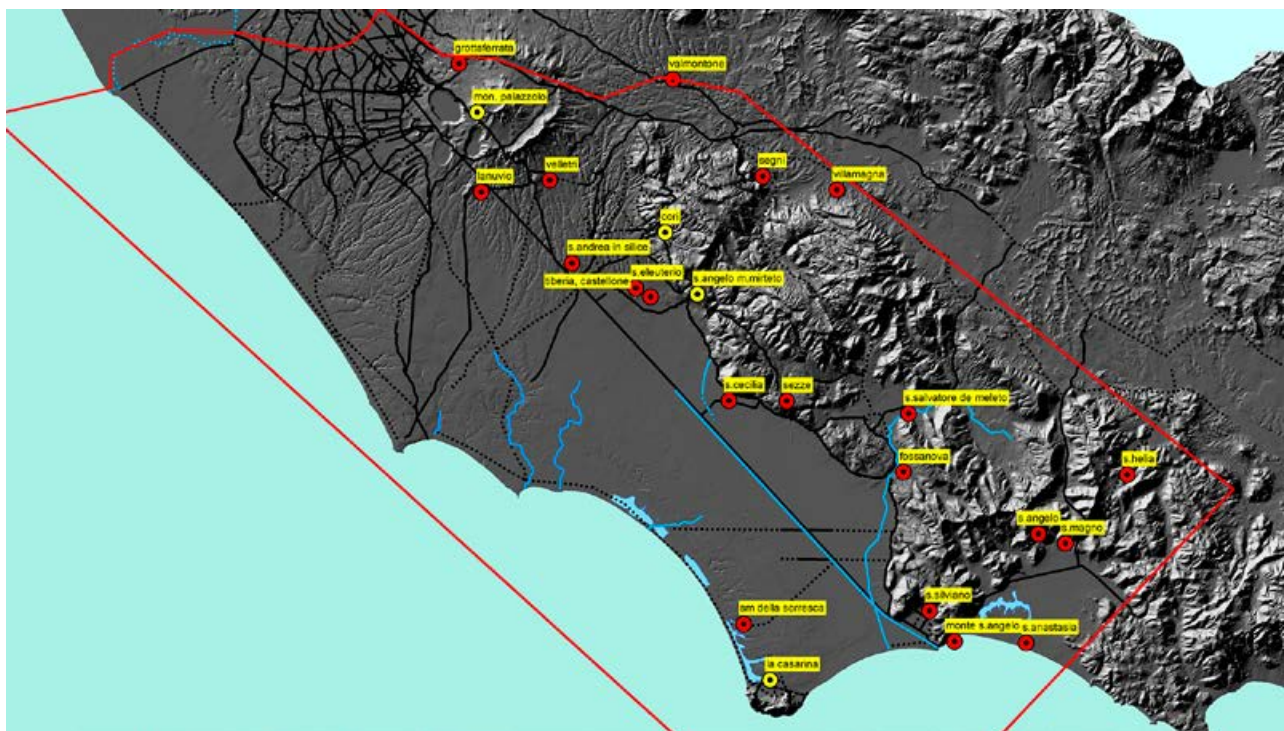


Figure 7.191. 11th century monasteries in Tyrrhenian southern Lazio.

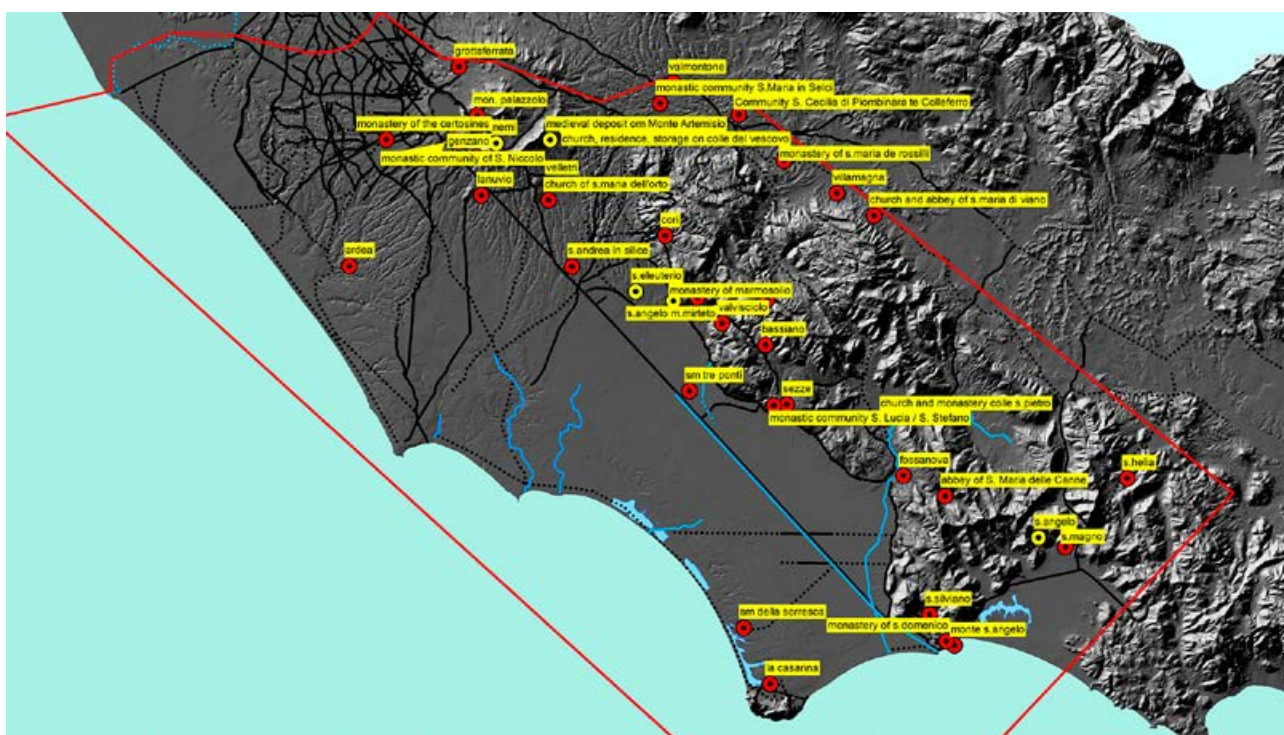


Figure 7.192. 13th century monasteries in Tyrrhenian southern Lazio.

Grottaferrata

After an initial focus on the Alban Hills and coastal area, the monastery of Grottaferrata expanded its interests over large parts of the research area in the 13th century: in 1233 Grottaferrata owned lands and had privileges in Velletri,

Giuliano, Ninfa, S.Pietro in Formis, Conca, Nettuno, near Ostia, near Terracina and on the Fogliano lake⁴⁸⁰.

Subiaco

Subiaco acquired the Fogliano area in 917, as part of possessions of the monastery of S.Erasmo al Celio⁴⁸¹. Subiaco maintained its possessions in the area until the 12th century, when the monastery of Farfa extended its possessions here. Subiaco owned the Benedictine monastery of S.M. del'Orto (OLIMsite 182) in the Velletrian key area in the 11th century. The extensive fundus Soranianus (OLIMsite 15) was owned by the monastery of Subiaco in the 10th and 11th century. It is not known why the monastery of Subiaco owned such a large domain in these parts. Maybe Subiaco specialised in the agricultural products for which the soils in these parts were well suited, like olives and wine, although evidence for the idea lacks. The Subiaco domain finally dissolved after the 11th century.

Montecassino

The donation in 1072 by Duchess Littefrida of Fondi of a number of settlements to Montecassino in the wider Fondi area shows the influence and stature of the monastery in these parts⁴⁸².

7.III.2.2.4.c The 10-12th century: secular elite activities dominate

See 7.III.2.2.1.c Theme: a dynamic geo-political landscape, Secular elite activity.

7.III.2.2.4.d The 10-13th century: *incastellamento*

See 7.III.2.2.2 Theme: *incastellamento*.

7.III.2.2.4.e The 10th century and onwards: *casali*

From the 10th century onwards the *casale* is found in the written sources. It is unknown what most of the listed *casali* looked like and functional and topographical descriptions of the sites involved mostly lack. The meaning of “casale” varies⁴⁸³. From earlier studies we know that generally a *casale* denotes a rural settlement or small agricultural centre.

Almost all *casali* are found in the areas closest to Rome (see figure 7.193). It may be assumed that in these parts, much of the agricultural activities were deployed from within the *casale*. However, descriptions lack of what kind of estates / manorial systems were used. Why *casali* are mostly restricted to the area close to Rome cannot be explained within the scope of this study. The *casale* continued into the Renaissance and later. In contrast to the current study period, the 15th to 19th century *casale* is found all over the low-lying parts of Tyrrhenian southern Lazio.

The following *casali* are recorded in the research area:

- The *casale* of Castel Romano (Vecchio) (OLIMsite 2) is found in the written sources from the 10th to 16th century.
- At Schizzanello (probably the location of the contemporaneous tower) and Mandriola, west of the Alban Hills, a *casale* is listed in the 12th century.
- The 12th century village found at Villamagna was probably one of the “*casalia*”, rural open settlements,

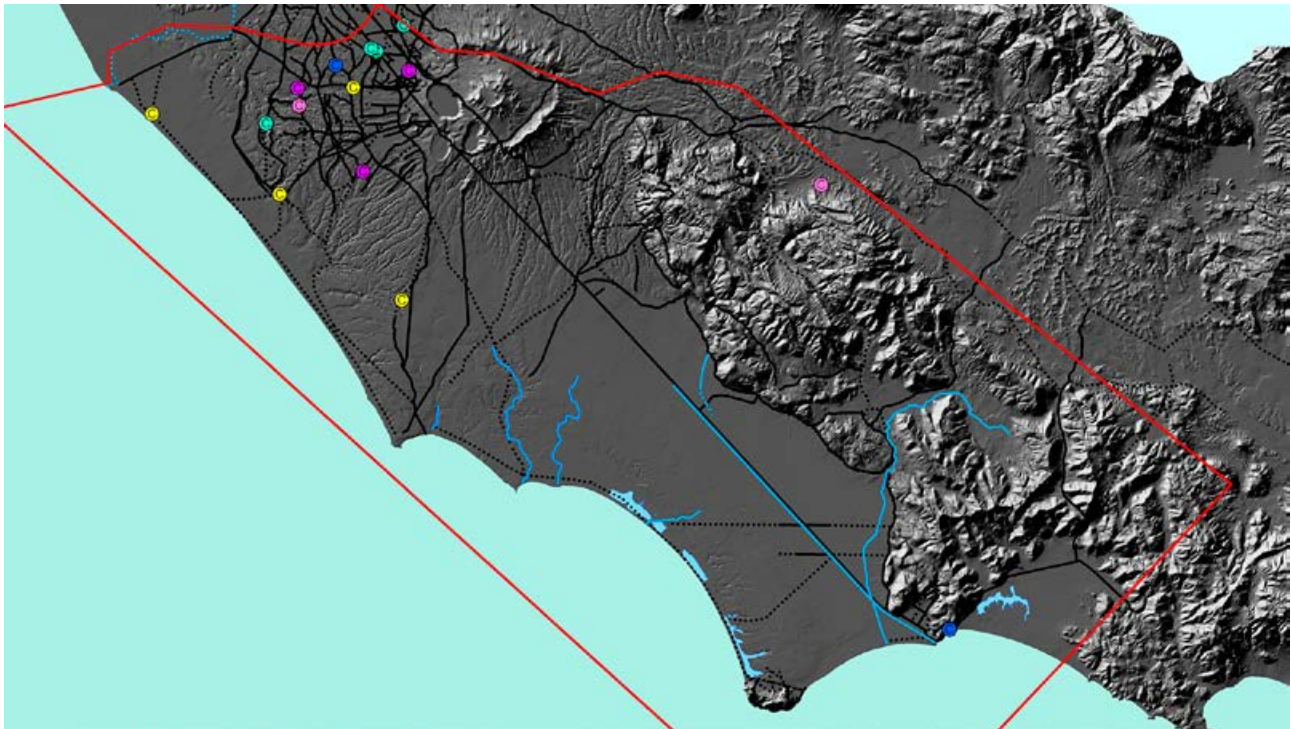


Figure 7.193 *Casali in the 10-14th century*. A light blue symbol is a 10th century *casale*, dark blue 11th century, pink 12th century, purple 13th and yellow 14th century.

in which the lay villagers lived in unfortified groups of dwellings. These *casalia* are documented in the 10th to 13th century sources of the monastery.

- In the 11th century a casale and locus De Flexu (OLIMsite 165) is documented east of Terracina; the site is probably short-lived, as it soon disappeared from the sources. It is unknown how this *casale* looked like.
- Former *castra* often became known as *casale* in the 14th century. This is true for Fusano and Pratica di Mare. This is also the case at Conca, although it is unknown when exactly the site first became a *casale*, somewhere between the late middle ages and the 17th century.
- It can also be the other way around: Castel di Leva is first listed as “casale castellione”, and in the 13th century as “castrum leonis”.

7.III.2.2.4.f The 11-13/14th century:

the “fortification” of the landscape

All over Tyrrhenian southern Lazio the number of fortified positions (*castra*, *civitates*, and small fortresses) increases between the 11th and 13/14th century⁴⁸⁴. Indeed, earlier studies dubbed the 13th century as the (qualitative and quantitative) zenith of fortified constructions in southern Lazio⁴⁸⁵. These fortified positions served as strongholds and control points in the recurrent struggles between elite families. In specific parts of the landscape, control systems seem to have been erected, such as the Tusculan “corridor” to the sea (see 7.III.1.1.5 and 7.III.2.2.1.c1), although explicit written references to such systems lack. Church institutions, i.e. the papacy, monasteries and the powerful bishoprics, with their interwoven intricate interests and changing alliances (with each other and with the elite families), played an important part in this militarised landscape. The worldly affairs of *incastellamento*, a process in which control over and protection of agricultural production was central, was as much an ecclesiastical as a secular process, as can be read from the *incastellamento* charts. The fortified positions bolstered the political-military presence of parties in the landscape, and at the same time were a way to deal with bandits roaming about. They also facilitated economic control. Economic control was literally executed by the facilitation of tolling on the roads from within these fortresses (Pisco Montano, Ariccia); more positions may have been used for this practice of toll collection, although concrete documentary evidence lacks.

After the steady increase in the number of fortified positions from the 11th to the 13/14th century, from the 15th century onwards many fortresses and fortified settlements fell into disuse. Many became residences. From that period onwards, the friction between the parties involved

in Rome and in the countryside (papacy, Roman nobility and the Commune) diminished (see 7.III.2.2.4.m).

7.III.2.2.4.g The 11-12th century:

the scaling-up of bishoprics

As was discussed above, the role of local bishoprics grew during the high middle ages, attracting much worldly power, especially apparent from the late 10th century onwards. In the 11th and 12th century, several of the bishoprics in Tyrrhenian southern Lazio were gradually scaled up, which added to the growing strength of bishops⁴⁸⁶:

- In 1150, the diocese of Ostia and Velletri were united. The suburbicarian diocese of Velletri maintained its close ties with the papacy, not sharing the generic decline in influence of suburbicarian dioceses on the papacy in the high middle ages: between 1058 and 1303 five Velletrian bishops rose to the papacy.
- At the start of 11th century, the dioceses of Priverno (including the parishes of Sonnino, Roccasecca dei Volsci, Maenza and Roccagorga) and Terracina (including San Felice Circeo) were fused. The Episcopal seat remained in Terracina. In the 12th century, the diocese of Sezze was joined to the diocese of Priverno and Terracina. During the high middle ages, popes on occasion took shelter in well defended Terracina for the unrests that took place in Rome, and sought protection from the German armies during the Investiture Conflict, among others Gregorius VII (1073-1085). Urban II was elected by a small meeting of cardinals held in Terracina in 1088, the first pope to be elected outside Rome.

The dioceses of Castra Albano, Fondi, Veroli, Anagni and Segni continued as independent bishoprics.

7.III.2.2.4.h The late 12th century:

the collapse of the Tusculan dynasty

The end of the powerful Tusculum dynasty at the end of the 12th century led to a major change in the geo-political landscape, especially near the Alban Hills and on the pedemontana road (see 7.III.2.2.1 Theme: a dynamic geo-political landscape).

7.III.2.2.4.i From the 12th century onwards:

the commune

As was discussed, the political weight of the town progressively grew in the 10th and 11th century. Towns began to flourish, both the existing and those who proved successful foundations during *incastellamento*. Communal self-consciousness was on the rise. The ‘communal age’ would come into flower at the end of the 11th century in most parts of the northern Italian peninsula, although already in the 10th century free communes existed there⁴⁸⁷. Communes throughout Italy overall showed

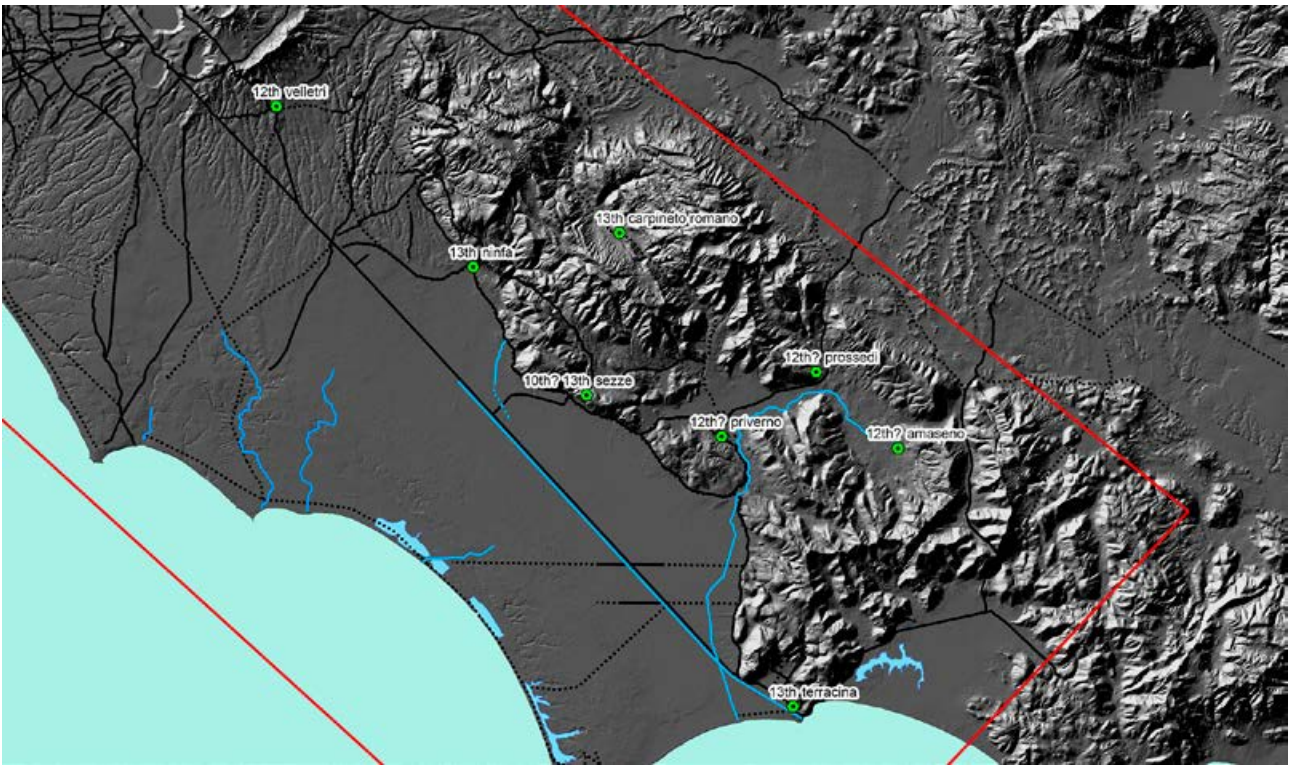


Figure 7.194. (Semi) autonomous communes in the research area with the date of the first reference to a commune.

Table 7.12. (Semi) autonomous communes in the research area.

OLIMsite	name	certain free commune?	commune first documented
4	ninfa	Y	1257
17	sezze	Y	956; 1228 certain
31	terraccina	Y	1207
58	priverno	P	12th century?
147	velletri	Y	1183
201	prossedi	P	1175
252	amaseno	P	1175
258	carpineto romano	Y	1224

the same development (see 2.I.10): From ad hoc gatherings at first, the assemblies elected consuls to take care of law and order, and to represent the commune externally. The communes sought to control *contado*, the surrounding area of the town. In Rome, from the middle of the 12th century, the commune would become a formidable political player. The commune of Rome, like other communes, sought for expansion in the surroundings, seeking to establish a *districtus* in Lazio. There would be armed conflicts with other communes in the region, as recorded north of Rome. These conflicts which were as much economically as politically instigated, being directed to control infrastructure and the grain producing lands to the north of Rome. In Tyrrhenian southern Lazio only at Velletri such a conflict has been recorded⁴⁸⁸.

The commune often started a legal archive. Large strong independent towns like Amalfi, Pisa, Genoa and Venice, which developed from the 11th century onwards, are absent in the current study area. Several smaller independent communes (see figure 7.194 and table 7.12) developed in the research area from the late 12th century onwards, i.e. generally later than in northern Italy, although Sezze may be an exception (956). The mechanisms behind this later development are not easy to define, but it is known that the pope opposed communes in central Italy and in Rome⁴⁸⁹. In Rome, the commune developed only from the middle of the 12th century. From the current study it is clear that many of the towns in Tyrrhenian southern Lazio had allegiances or regular good contact with the papacy until the 12th century at least⁴⁹⁰. In fact, there are

only a few early communes known in the surroundings of Rome: Tivoli and possibly Sezze in the 10th century, Viterbo in the 11th century, Nepi in the early 12th century.

Details:

- Velletri was administered semi-autonomously. In 1183 a kind of semi-autonomous *commune* was erected, although under strong influence of the Roman commune.
- Although Priverno was a papal possession, its inhabitants for a long time strove (and were successful now and then) for an independent commune between the 12th and 14th century.
- In Sezze, an independent commune developed in the 13th century, although some scholars claim that its free commune dates to the 10th century.
- Prossedi and Amaseno in 1175 are referred to as communes in a bull by Pope Alexandre III⁴⁹¹; their degree of autonomy is not known however.
- The semi-autonomous commune of Carpineto Romano was founded in the 13th century and was led by a “miles”, appointed by the Ceccani rulers⁴⁹².

The documented “free” communes are in fact all semi-autonomous, with the exception of Terracina perhaps. There was always a party in the background that officially and actually had authority in the village, mostly the papacy (Priverno, Sezze), or the Roman commune (Velletri), or, in the case of Carpineto Romano, an elite family (the Ceccani).

As was discussed in the Theme on *incastellamento*, there may be a correlation between the existence of communes in the Lepine Mountains and the lack of success of *incastellamento* in these parts⁴⁹³.

7.III.2.2.4.j The 12th and 13th century:
a peak in the number of fiefs

The number of recorded feudal arrangements (fiefs), in which an owner (lord) conceded towns or estates to a feudal party (vassal), steadily increased since the 10th century. The number of such fiefs in Tyrrhenian southern Lazio peaks in the 12th and 13th century, as can be read from table 7.13 and chart figure 7.195⁴⁹⁴. Because of the lack of details given in much of the secondary literature, it is not possible to make a detailed study of the nature of feudal arrangements. It often remains unclear what exactly were the condition of service for the land grant (military service? economic benefits - financial payments?)⁴⁹⁵. All recorded fiefs in our study area concern elite families who acted as fiefs for an ecclesiastical institution, although I have to stress the lack of details on many of the vassalages recorded in the secondary literature. The only secure exception, which no ecclesiastical institution is involved

in the fief is the concession of the fief of Caposelce (OLIMsite 78) to the Frangipane by the free commune of Terracina in 1207. In the 14th century the number of fiefs drops considerably.

7.III.2.2.4.k The 12th and 13th century:
the regained strength of the papacy

Between the later 11th and 13th century, the papacy began to rebuild strong Papal States by accumulated landed property and more and more gained control over local aristocracies (see 7.III.2.2.1 Theme: a dynamic geo-political landscape)⁴⁹⁶. From Nicolas II (1059-1061) onwards, the papacy upheld an active policy of regaining authority over a series of *castra*, located in areas that before had become aristocratic backyards. These ideas on papal recovery in northern Lazio have been confirmed by the current evidence (see 7.III.2.2.1 Theme a dynamic geo-political landscape). In the early 12th century there were papal successes in Tyrrhenian southern Lazio against the local baronage by acquiring lands and castles near Velletri and Subiaco. Ninfa was regained in 1110⁴⁹⁷. The papacy also regained the rights over several *castra* in the first half of the 12th century like Maenza, Roccasecca, Giuliano and Acquapuzza.

The military and financial power of the papacy reached a new zenith in the late 13th century. Because of the strong French influence over the papacy and the climate of continuing power struggles in Rome, the papacy temporarily moved to Avignon between 1309 and 1376.

7.III.2.2.4.l The 14th century: the end of *incastellamento*,
a generic drop in fiefs

In the 14th century the number of fiefs drops considerably. The cause of this drop is out of reach for this study. The 14th century was a time of major socio-political change, as was studied in 2.I.12. The blooming of the communal age in the 12th and 13th century, causing the dissolving of vassalage around towns, must have contributed to major changes in feudal systems, changes which had most effect in the 14th century⁴⁹⁸. The regained strength of the papacy also changed the feudal playing field in Tyrrhenian southern Lazio. Whatever the intricate causes behind these changes, it is no coincidence that the end of the feudal system of *incastellamento* occurs simultaneously with the wane in the number of feudal arrangements in the research area.

7.III.2.2.4.m The 14th century: a continuation in settlement, less (recorded) activity

Despite the end of *incastellamento* in Tyrrhenian southern Lazio, and the end of feudal arrangements, settlement in the landscape continued with little changes compared to the 13th century, or even seems to have continued to

Table 7.13. 10-14th century feudal arrangements in the research area.

OLIMsite	name	vassal	location vassal	lord-vassal	10th c.	11th c.	12th c.	13th c.	14th c.
5	norma	tusculi	tusculum	pope-tusculi			Y		
17	sezze	ceccani	??	pope-ceccani				Y	
17	sezze	??	local	pope-commune				Y	
17	sezze	frangipane	??	pope-frangipane			Y		
27	cori	annibaldi	??	?-annibaldi				Y	
31	terraccina	crescentii	??	pope-crescentii	Y				
31	terraccina	daiferius	traeto	pope-daiferius	Y	Y			
31	terraccina	desiderio	montecassino	pope-montecassino		Y			
31	terraccina	frangipane	??	pope-frangipane			Y		
45	castellionem	frangipane	??	s.alessio-frangipane				Y	
51	Nettuno	orsini	??	??-orsini			Y	Y	Y
51	Nettuno	tusculi	tusculum	grottaferrata-tusculi		P	Y		
54	roccagorga	annibaldi	??	?-annibaldi			P	Y	
54	roccagorga	ceccani	ceccano	pope-ceccani				Y	Y
58	priverno	ceccani	ceccano	?-ceccani			Y		
58	priverno	frangipane	??	?-frangipane			Y	Y	Y
60	Ambrifi	??	??	pope-?				P	
61	Sonnino	l.bassiano	??	?-lords of bassiano				P	
62	bassiano	annibaldi	??	pope-annibaldi				Y	
62	bassiano	caetani	??	pope-caetani				Y	Y
62	bassiano	l.bassiano	??	?-lords of bassiano			P		
64	torre astura	tusculi	tusculum	s.alessio-tusculi			Y		
78	caposelce	frangipane	??	terraccina-frangipane				Y	
90	castrum nave	crescentii?	rome	s.alessio - crescentii?	Y				
101	acquapuzza	sanguigni?	??	?-sanguigni?			Y		
113	s.donato	crescentii	velletri	s.erasmo- crescentii	Y				
127	fogliano	crescentii	velletri	s.erasmo- crescentii	Y				
133	c.vetus	Crescentii?	rome	s.andrea s- crescentii	Y				
133	c.vetus	Crescentii	velletri	bs. velletri- crescentii	Y				
159	ariccia	tusculi	tusculum	?? - tusculi	Y				
159	ariccia	mlbranca	??	pope-mlbranca			Y		
159	ariccia	tusculi	tusculum	pope-tusculi		Y			
166	fusumgnanum	annibaldi	??	?-annibaldi				Y	
177	castellone	frangipane	??	?-frangipane			Y		
177	castellone	tusculi	tusculum	?-tusculi		P			
197	trevi	ceccani	ceccano	pope-ceccani				P	
203	asprano	ceccani	ceccano	pope-ceccani				P	
218	s.thomas	demtr mel	velletri	bs. velletri- crescentii	Y				
277	conca	mlbranca?	??	grottaferrata-mlbranca?			P		
277	conca	tusculi?	tusculum	grottaferrata-tusculi?			P		
285	c.paolis	tusculi	tusculum	grottaferrata-tusculi		Y	Y		
287	algido	tusculi	tusculum	?-tusculi			P		
290	giulianello	annibaldi	??	pope-annibaldi				Y	
177	castellone	frangipane	??	?-frangipane			Y		
177	castellone	tusculi	tusculum	?-tusculi		P			

Table 7.13 continued. 10-14th century feudal arrangements in the research area.

OLIMsite	name	vassal	location vassal	lord-vassal	10th c.	11th c.	12th c.	13th c.	14th c.
277	conca	mlbranca?	??	grottaferrata-mlbranca?			P		
277	conca	tusculi?	tusculum	grottaferrata-tusculi?			P		
290	giulianello	annibaldi	??	pope-annibaldi				Y	
290	giulianello	conti	??	pope-conti				Y	

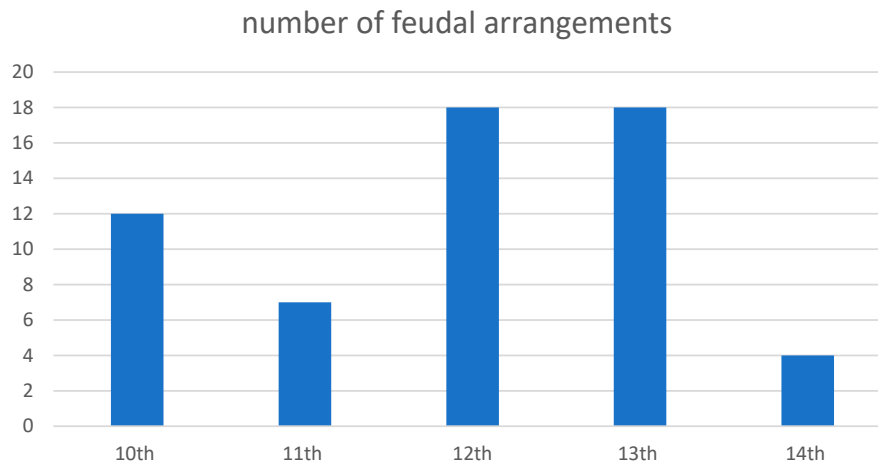


Figure 7.195. Chart showing the number of feudal arrangements in the research area, 10-14th century.

expand. In comparison to Apulia, the number of villages does not decrease⁴⁹⁹. While the evidence for some villages runs dry (Vicus Augustanus, castrum Bolocti), several new villages appear (castrum Pruni, Montelanico, Gavignano). The number of fortifications in service does not drop either. Several new monasteries were erected (like the monastery of S.Lorenzo, monastic community S.Martina and church and the monastery “Sacco”), while the existing ones continued to function. However, there are signs of change. The drop in ecclesiastical activity (interests) is a clear break with the centuries before. A major factor in this must have been the move of the papal court to Avignon, which seems to have caused a decline in Church revenues as a result of which there was much less building activity within Rome and in its surroundings⁵⁰⁰. The number of secular elite interests drops as well, be it less dramatically than the number of ecclesiastical interests⁵⁰¹. Both drops in numbers are likely related to the relative tranquillity on the geo-political front in Tyrrhenian southern Lazio as a result of the wane of *incastellamento* and decline in feudal arrangements in general. The dominance of the Caetani family in the southern part of the research area may have attributed to this calmness. Maybe the decline in recorded activities is correlated to Toubert’s idea of an economic decline in the countryside of Lazio of the middle of the 13th century, a process in which the profits of the lords started to stagnate (see 2.I.12). This decline, according to Toubert, may have been

caused by an imbalance between the growth of the population and the economic output of the human resources put at work. It may have caused the large landowners to shift their investments partly away from the countryside until at least the early 14th century. Although chronologically a bit off, it is an interesting thought that needs verification. Toubert’s hypothesis, however, cannot be verified by solid primary evidence, except for the (negative) fact that less activities (interests) were recorded⁵⁰².

Endnotes

- 1 As has been argued above, 7.I.1.1.1 this lack of contemporary archaeological evidence is aggravated by the lack of published archaeological studies at Antium and the (generic) lack of (published) typologies for high medieval pottery. The current study on the Torre Astura assemblages is a first effort in building such typologies.
- 2 *Rerum Italicarum Scriptores*, IV, 488, nota 1. Count Tolomeus wrote: “Ptolomeus Iulia stirpe progenitus, Romanorumque Consul excellentissimus, Petro nepoti carissimo salutem. Relatum est nostrae Gloriam quod Seniorectus emisit te a Casino. Quapropter si ad nos reverti volueris, et te et patrem tuum honeste recipiam, et tibi cunctas Basilicas Casinensis Ecclesiae tradam....Vale XII Ka. Iulii in Castro Neptuni”.
- 3 *Libellus querulus monachorum monasterii S.Mariae in Gryptaferata* [Grottaferrata], dd 28.2. 1140 in a document in the Vatican archives: Arch. Vat., AA, LXVIII, 3698; see also Rasi 1832, 11 and Lombardi 1847, 136
- 4 MGH, *Scriptores* XXVII, 114 (dated to 1190)

- 5 R. Benedetti in Caneva & Travaglini 2003, 473
- 6 As can be read in the *bolla* of Innocentius III, dated 12th December 1210, in: Arch. Vat., Reg.Vat., 8.129
- 7 The walls of the *borgo* have been built in the late 14th century, ordered by Lorenzo Orsini in 1380 and strengthened at the time of the building of the fortress Sangallo in 1501, R. Benedetti in Caneva and Travaglini 2003, 473.
- 8 In this source the 'heredes' ("heirs") of Domenico di Conca were mentioned. These heirs of Domenico di Conca were neighbours of a vineyard donated by the archpriest of Ariccia to the monastery of S.Ciriaco at Rome. Primary source not replicated but paraphrased in Pagliaro 1990, 14, n. 4. In 1009 AD it was possibly referred to as *Casale Conca*, Arch. Soc. Rom. St. p. XXVII, 1904, 177.
- 9 A survey of the Borgo Montello and its near hinterland may be executed in future research to study the origin of activities here, not only with regard to the *incastellamento* phase, but also the idea of the site of Conca as one of the Formias *domusculta* centres, being the second natural prominent elevated position in the Astura basin, next to Satricum. Parts of the Borgo and surroundings seem suitable for field survey, in contrast to the nowadays overbuilt *castrum* of Nettuno. See the recommendations for future study, 8.II.2..
- 10 As "Castrum Ascianum in Castro Conke", Brandizzi Vittucci 2000, 147, n. 712 and Pagliaro 1990, 14, primary source not mentioned. The *castrum* included the churches of S.Giovanni, S.Giorgio, S.Pietro in Turri and a "Graecorum".
- 11 De la Blanchère 1885, 81-95; the walls of Conca resemble the fortifications of the second phase of Ardea (12th to 14th century), cf. Mauri 2007, 47.
- 12 The Tusculi temporarily occupied Nettuno in the second quarter of the 12th century, as can be read from the two letters of 1126 and 1140. In 1140 the Tusculi occupied Torre Astura as well. It may be suggested that the initial collaboration between the Tusculi with Grottaferrata in the *castrum* of Nettuno ultimately went wrong. This idea may be inferred from the cooperation between these parties in the *castrum* of Castel de Paolis (OLIMsite 285, De Rossi 1969, 167, undisclosed primary source of 1033). Whether the Tusculi were involved in the *incastellamento* project of Nettuno, or not, it is clear that the interests of the Tusculi in the 12th century were focussed on the area between the Alban Hills and the coast at Nettuno-Astura, areas in which they controlled several strongholds, see below on geopolitics, 7.III.1.1.5, and 7.III.2.2.1.c1 The Tusculi.
- 13 Coste 1990, 134
- 14 *Regesta Chartarum* I, 235, n. 1379
- 15 1268: MGH, *Scriptorum* XXVI, 583 "castrum Asture supra mare situm". 1303: *Regesta Chartarum*, 231-232; see also Ployer Minione 1995a, 90.
- 16 See 7.II.1.1.1-3 on the two 10th century sources which suggest an operational harbour. As discussed, it is possible that the Roman lighthouse (turned into a fortified tower in the 6-7th century) continued to be used.
- 17 The fishponds might still or again have been in use in the 12th century, given the specific reference to them in two sources in the monastery of S.Alessio, dated 1163 and 1217: A. Monaci, *Registro di S.Alesio all'Aventino*, Monaci 1904, 389, dated 1163: abbot Pietro gives in lease to Gionata de Tusculano "...insulam de Astura, cum suis piscariis, et cum terra sementaricia ab ipsa insula usque Asturam modiorum triginta..."; A. Monaci, *Registro di S.Alesio all'Aventino*, Monaci 1905, 156, dated 1217.
- 18 Piccarreta 1977, 66; Tomassetti 1979 I, 323
- 19 *Libellus querulus monachorum monasterii S.Mariae in Gryptaferata*
- 20 See also 7.II.1.1.5.
- 21 The ceramic evidence runs dry in the 8th century, see Tol 2012, 301 ff, Tol 2018; in the 10th century the settlement is described as being in ruins, in which the abandoned ecclesia Sanctae Marie Seu Salvatoris (OLIMsite 629) church was situated.
- 22 Tol 2012, 320
- 23 See the paragraph on economy, production and trade below, 7.III.1.1.3.
- 24 Tol pers. comm. Although the presence of these kilns left no clear traces on the surface, their presence is inferred from the found wasters and kiln spacers, Tol 2012, 238. A parallel of these kilns may be found in Ostia, where these were used to burn marble to produce base material for mortar.
- 25 Cecere 1989, 31, n. 42. Primary source is not specified. A settlement of this size most likely relates to the Astura settlement site and not the Torre Astura site on which there are no signs of a large medieval habitation area.
- 26 Such a symbiosis may be put forward for the 4th to 6th century as well, see 7.III.1.3.3.
- 27 On Astura settlement as pottery production site, see below 7.III.1.1.3.
- 28 Tol 2012, 320
- 29 Lombardi 1847, 127. In 1163 Torre Astura was still leased to Gionata of Tusculum by abbot Pietro of S.Alessio all'Aventino, see Piccarreta 1977, 10, n. 14
- 30 Tol 2005, 22; the same year in which the first reference was made to the *castello* on this spot, cf. Tomassetti 1979 I, 385.
- 31 See 7.II.1.1.1.
- 32 Tol 2005, 18, Piccarreta 1977, 66. In this construction large parts of the ancient harbour of Torre Astura were reused.
- 33 Like in many parts of Tyrrhenian southern Lazio, the (reconstructed) infrastructure map of this study period does not substantially differ from the previous. The reason for this is as follows: The dating categories of roads in the literature or found during this study "high medieval" and "of unspecified date" are plotted for the current period and Roman roads are left out. This does not make a difference on the map as most are (again) in use in the high middle ages. As there are not large developments on the infrastructure map, it is not plotted here; for an overview of the roads and river see the site distribution map and in the infrastructure map of the section on the 7-10th century, fig. 7.52.
- 34 See 7.II.1.1.2. On the Volpaia map (map XV) the road is called the Via di Campomorto.
- 35 Among others Ameti Map XXXVI, 1693
- 36 De Rossi 1981, 98
- 37 Tol 2012, 307
- 38 Next to Conca, Astura, Privernum and Campoverde, other sites with 12-13th century types of dipinta in rosso in Tyrrhenian southern Lazio are: Ceriara, to the west of Privernum, Mezzagosto near Privernum, Veroli (other side of Sacco Valley), two *castra* in the Liri valley, Gregoriopolis (Borgo di Ostia) (OLIMsite 393) and Cori. Pannuzzi 2009, 34 ff
- 39 Arch. Vat., reg. Vat., 8.129, a letter by Pope Innocentius III, dated to 1210. Another source from that period, an unspecified juridical verdict of 1204, mentioned Nettuno as part of the suburban diocese of Albano, Toubert 1973, 1341.

- 40 Tomassetti 1910-1926 *La Campagna*, IV, 302. The primary source is not specified.
- 41 The modern toponym of Pantano (o grotte) dei Frati probably reminds of the monastic ownership in the middle ages, Del Lungo 2001, 56.
- 42 *Registro di S.Alesio all'Aventino*, Monaci 1904, 383
- 43 Del Lungo 2001, 117
- 44 Horden & Purcell 2000, 125
- 45 There is no proof that the Torre del Monumento was actually used as a control tower in the middle ages, as Del Lungo proposed. He suggested that in this period the old mausoleum was possibly already refurbished into a tower. In its current state, no clear high medieval wall-facings can be seen on the tower.
- 46 The high medieval tower on the intersection of the La Selciatella and Nettuno alternative of the Anziate – Nettunense, see 7.II.1.1.2, may tentatively be added into this hypothetical system as well.
- 47 In the southern part the interdistances are much larger than to the north of Campomorto. More on the idea of control systems, and a mapping of the strongholds involved, see below in 7.III.2.2.1.c13 Control schemes / lines of control.
- 48 The Tusculi were in control of many settlements in the Alban Hills in the 11th and 12th century, for example Ariccia, Marino, Castel Paolis, Rocca di Papa. See also 7.III.2.2.1.c1 The Tusculi.
- 49 De Rossi 1981, 98
- 50 Local tradition tells that the tower was built by the Counts of Tusculum in the 10th or 11th century, Del Lungo 2001, 117, although here is no concrete written or material evidence for this idea, nor the date.
- 51 This castle and its nearby tower may have secured the eastern flank of the corridor. They are situated close to this road (about 2 km), situated on an elevated position above it. The castle of Presciano (OLIMsite 169) was in 1140 occupied by Tolomeo II of Tusculum, Severini 2001, 80.
- 52 Lanuvio / civitas Lavinia (OLIMsite 84) was in Tusculum hands in the 11th century at least (Mauri 2007), as was castle Fajola (OLIMsite 146), Ployer Mione 1995, 62, n. 87; the location of this castle is not certain, but it is certain it was situated somewhere north-east of Lanuvio.
- 53 The trajectory of the route northwards of Lanuvio is not certain, but must have reached the Via Appia in the vicinity of castle Fajola and S.Gennaro (OLIMsite 132).
- 54 The 1140 and 1163 sources show that they were involved in the Astura area, see 7.II.1.1.5.
- 55 See the recommendations for future study, 8.II.2..
- 56 Fischetti 2005, 225
- 57 See 7.I.1.1.1 and 7.I.1.1.5.
- 58 See also Brandizzi Vittucci 2000, 9 on this theory.
- 59 Partner 1972, 206. At the height of this struggle the battle of Monte Porzio took place, on the 29th of May 1167. In this battle, the Tusculi fought alongside emperor Frederick Barbarossa of the Holy Roman Empire against the Commune of Rome. Although the Tusculi were on the winning side, Tusculum was in the end destroyed by the communal forces in 1191.
- 60 This way tolls going southwards may have been avoided as well. For a discussion on this and of the different changing parties around the plain see below Analysis 10-14th century, 7.III.2.2.1 Theme: a dynamic geo-political landscape.
- 61 “Gregorio excellentissimo viro, qui [vocatur] de Tusculana, atque praefecto navili” *Rerum italicarum Scriptores* I, 502; MGH, *Diplomata*, Ottonis III diplomata, II, 768
- 62 Brandizzi Vittucci 2000, 146
- 63 *Rerum Italicarum Scriptores* IV, 507, dated 1105
- 64 Codex Diplomaticus Caietanus, II, Montecassino, 1891, p. 169, n.278; also [BV 200, 10, n. 19.
- 65 Brandizzi Vittucci 2000, 9
- 66 Brandizzi Vittucci 2000, 147
- 67 Toubert 1973, 322 ff.
- 68 Although some authors suggested an early to high medieval phase at Foce Verde, like De Paolis & Tetro 1985, 11 ff. and Brandizzi Vittucci, 2000, 146, n. 707, no archaeological evidence for a medieval post or tower has been found in its vicinity.
- 69 *Regesta chartarum* VI, 59, parchment 2577 and 2609 (dated 21-02-1478)
- 70 In the *Chronicon Farfense*, monk Greogorius de Catino wrote that under abbot Berard III (1099-1119) Farfa acquired “item in Folliano mansos XII” (*mansus* denoting “Casale”), *ChF*. 285; see also Toubert 1973, 309.
- 71 Pope Boniface VIII (from the Caetani family) gave Pietro Caetani the “ius piscandi et exigendi responsiones” on the Fogliano and Caprolace lake; Caetani 1925-1930, I, p. 134, 145; Cf. also Cecere 1989, 29. The Caetani held on to possessions in the area until at least the 1368 source.
- 72 See 6.I.2.
- 73 Reg.Chart. II, p. 282-282, n. 798; It is not known to whom the *piscaria* was sold.
- 74 Reg.Chart. II, p. 95, nr. 886
- 75 Del Lungo 2001, 54, n. 36 and 56
- 76 See 7.II.1.2.2.
- 77 See 7.II.1.10.1.
- 78 Del Lungo 2001, 87. The sources mention the *Rigus* as demarcating the boundaries of the territory of Terracina in the Pontine Marshes. The root [rigus] would be used until the 14th century, after which the derivative [rio] took over. See also Chapter 4.
- 79 Egidi 1980, 123 and Paolis & Tetro 1985, 24 link the renaming of the canal to a restoration, assuming the canals overhaul took place during the pontificate of Pope Martinus V (1417-1431).
- 80 Linoli 2005, 34
- 81 See 7.II.2.2.4.c.
- 82 *Regesta chartarum*, I, 134, 145; Cecere 1989, 29. Between 1201 and 1475 the rights to cultivate fish in the Fogliano lake were granted to several ecclesiastical institutions, like the monasteries of S.Quiziano, S.Eufemia and S.Maria di Grottaferrata and several Roman *basilicae*. For example: in 1233 AD Gregory IX confirmed in a bull to the monastery of Grottaferrata possessions and privileges in Velletri, Guiliano, Ninfa, S.Pietro in Formis, Conca, Nettuno and the right to collect/breed fish in the Fogliano lake, and the use of the Stagno near Ostia and a *piscaria* of a river near Terracina, Tomassetti 1910-1926, *La Campagna*, IV, 302. The primary source is not specified.
- 83 See 7.III.1.2.3.
- 84 Cecere 1989, 29 says that the concession to several monasteries on pisciculture in the Fogliano area is a clear sign that the jurisdiction over the area was still in the hands of the Church.
- 85 Allodi & Levi 1885, p. 25, doc 10, p. 43, doc. 15 and p. 43, doc. 21 respectively; according to Cecere it is not totally certain if these texts are all (partly) authentic.
- 86 Cecere 1989, 28

- 87 Cecere 1989, 33; The Caetani held the monopoly on salt water fish farming for Rome until the 17th century.
- 88 De Rossi 1969, 70
- 89 A second meaning for medieval *civitas* is “bishopric”, see Toubert 1973, 795 and Del Lungo 2001, 26 and 6.I.2. This seems a valid connotation for Gregoriopolis, to which the see of Ostia was transferred.
- 90 Bakker & Heres, Website Ostia Antica [Accessed January 2006]
- 91 Paroli 1993, 163
- 92 Lauro 1998, 99
- 93 De Rossi 1971, 59 ff.
- 94 Del Lungo 1996, II, 207: “Paterni”, primary source not specified.
- 95 According to De Rossi 1971, 59 there are several rebuilding phases, and it is uncertain what the first phase was; the last phase is mentioned in a *bolla* by Pius V “de aedificandis turribus in oris maritimis” (1567).
- 96 De Rossi 1969, 64, nr 97. “Castrum Pircilgiani” (1351) and “castrum Porcigliani” (1393).
- 97 We do not know if this reference to a *castrum* points to an (unfolding or continued) *incastellamento* process as from the 14th century the word “castrum” has more meanings than a fortified incastellised settlement alone. By that time, *incastellamento* seems to have come to a halt. See 6.I.2 and 7.III.2.2.2 Theme: *incastellamento*.
- 98 The text “castri olim nunc reducti ad casale quod vocatur patrica” of an undisclosed document (1385) in De Rossi 1969, 66 leaves no doubt that the *castrum* was reduced to a *casale*. The document states that the abbey of Grottaferrata and Ludovico de Papazzurri shared ownership of this *casale*. More on the change in denomination from *castrum* to *casale* in the Theme on *incastellamento*.
- 99 In an undisclosed document by Pope Marinus I (882-884) the “civitas patrica” is given to the monastery of S.Paolo. This concession of the “civitas patrica cum ecclesia S.Laurentii” is confirmed by Pope Gregory VII (1073-1085), see De Rossi 1969, 66, nr 100, who did not specify the primary source.
- 100 De Rossi 1969, 66 referred to an unspecified primary source that reports that during the Lateran *concilio* (1139) abbot Anzon of S.Paolo appealed to Pope Innocentius II that “quandam partem in castro nostro quod vocetur Patrica” should be given back to the monastery of S.Paolo, as Patrica was then owned by the Baronzini family.
- 101 Claridge 1993; Lauro and Claridge 1993, 46 ff. Dating is based on the pottery finds. The site consisted of a small fortified settlement with a church (which could not be dated precisely). This phase shows graves and a medieval tower.
- 102 In the 16th century the site had been abandoned as it carried the toponym La Palombara – [**palomba**] and derivatives in the middle ages often became to denote ruined towers, funerary monuments or villa’s as these ruins were places were birds and especially doves used to nest in large numbers; cf. Del Lungo 1996, 83; see Chapter 4 Toponyms.
- 103 De Rossi 1969, 71, nr 115; De Rossi 1971, 58-59, nr 20.
- 104 Del Lungo 1996, II, 216; The name Boacciana stems from the Bovazzani family, who owned the land near the tower in the 13th century, website ostia.org 2009.
- 105 Bakker & Heres, Website Ostia Antica [Accessed January 2006]; several lime-kilns have been excavated. Possibly there are parallels with the lime kilns studied on the Astura settlement site (OLIMsite 33); these have been dated in the 12th century by radiocarbon dating.
- 106 Wickham 2015, 102; Stasolla 2015, 157
- 107 In the 12th century, Frangipane influence was documented in Decima.
- 108 Bakker & Heres, Website Ostia Antica [Accessed January 2006]
- 109 Bakker & Heres, Website Ostia Antica [Accessed January 2006]
- 110 Privilege of Innocentius III to the Lateran basilica dated on the 4th of March 1201, Regesta Honorii Papae III, I, CXXII.
- 111 Toubert believed that the *castrum Vetus* was abandoned by the 13th century. Toubert 1973, 435
- 112 First reference to *castrum S.Andrea* dates to 1219, cf. Nibby 1837, I, 422 undisclosed primary source.
- 113 Mentioned in 1137, see ASRSP.12, 104-105. See also Coste 1990, 130.
- 114 Cf. Mauri 2007
- 115 The same type of 9th century walls as found in Lanuvio can be seen in Ardea (OLIMsite 275), which became a “castellum” in 11th century. *Castellum* can denote a “castrum” in that period of time, see Chapter 6. For more on the pre-*incastellamento* phases of sites, see the Theme on *incastellamento*.
- 116 Severini 2001, 117
- 117 Del Lungo 2001, 55, primary source not specified.
- 118 Severini 2001, 117
- 119 On the possible continued use of the Via Mactorina, see 7.II.1.1.2 and 7.II.1.4.2. It may be hypothesised that the harbour of Astura, next to the reoccupied Astura settlement, again facilitated part of the sea traffic to and from the wider Velletri area. Traffic to and from Velletri may have used the Mactorina and/or La Selciatella. The idea may be tested by comparative morphological fabric studies of the pottery produced at Astura, and the pottery found in Velletrian area. A study of production and distribution of the Asturan *ceramica dipinta a bande rosse* has been suggested by Tol 2012, 320 as well.
- 120 Coste 1990, 135-136. The first reference to this road dates to 1332 in which it is called a “via publica que ducit ad castrum marenii” (Marino) southwards: Archivio di S.Pietro in Vincolo, Perg. 601.
- 121 Coste 1990, 135-136; see Coste for an overview of the written sources which describe this detour. See also Severini 2001, 11.
- 122 See Chapter 2.I.13; the Velletrian see does not share the generic wane in influence of suburbicarian dioceses on the papacy in the high middle ages.
- 123 Severini 2001, 117
- 124 Duchesne 1892
- 125 Falco 1988, 73; Miller 1916, 78
- 126 Except for the Fogliano area and the western part of the Alban Hills area, 7.III.1.2.1 and 7.III.1.6.1.
- 127 Most prominent source is the Registers of Montecassino, partly published in the *Tabularium Casinense* series. See also Chapter 3.II.
- 128 *Tab.Cas.* II, p. 114, n. CCXLVII; on the effect of this transfer to the monastery of Montecassino, specifically that of the monastery of S.Magno, on the territorial organisation of the monastic estate of Montecassino see Stasolla 2015, 150.
- 129 Carbonara & Messineo 1998, 127, tav. 5 and 120, nr. 72; Cassieri & Quadrino 2015, 17
- 130 *Tab.Cas.* I, 127-131, n. LXX
- 131 *Tab.Cas.* II, 114, n. CCXLVII (1072 AD)
- 132 See 7.II.1.5.1; Del Lungo 2001, 99.
- 133 *Tab.Cas.* I, 90, n. LII

- 134 Del Lungo 2001, 9 and 54 for an overview of the entries in the *Tabularium Casinense*
- 135 *Tab.Cas.I*, 108-110, n. LVIII; Del Lungo 2001, 11, 12, 117.
- 136 See 6.I.2.
- 137 For the possible reasons of this lack see 7.III.1.9.1 and 7.III.1.9.5.
- 138 See 7.II.1.10.5.
- 139 The donated possessions are described in the source as follows: “civitate fundi (Fondi) et de aquaviva castello (Acquaviva, OLIMsite 296), et de castello de vallecorsa (OLIMsite 273). et de castello de ambrise (Ambrifi, OLIMsite 60). et ipso castello de pastina (Pastena, OLIMsite 274). et de ipso castello qui dicitur ynola (Lenola, OLIMsite 299) e de ipso castello de campu de melle (Campodimele, OLIMsite 586) et de ipso castello qui dicitur vetere (Castello Vetera, OLIMsite 89)”.
- 140 The historical temporary control of the Duchy by the papacy in the 13th century is also attested by the separately recorded papal possessions of Ambrifi (OLIMsite 60) and Acquaviva (OLIMsite 296) in 1211: *Tab.Cas. II*, 14-115, n.CCXLVII.
- 141 Carbonara & Messineo 1998, 129
- 142 Carbonara & Messineo 1998, 10
- 143 Severini 2001, 31, primary sources not specified: the town was occupied in 1108 by anti-Pope Guisberto and in 1120 by the Pierleoni, who supported anti-Pope Anacleto; in 1137 Albano became in papal possession, against which it resisted, resulting in the destruction of the town in 1168.
- 144 Together with “castrum quod dicitur turris de Candulphis”; this *atto* of Iacopo Savelli in Moroni 1840, 156
- 145 Tomassetti 1979 I, 160, original source not specified. Also Coste 1990, 130. The *hospitalis* of Cantaro was founded in 1143 in the near vicinity of Albano. Its exact location is unknown.
- 146 See 6.I.2.
- 147 Toubert 1973, 635
- 148 In 1099 the cardinal of the S.Clemente promised Ariccia, Tibera and Ninfa to Tolomeo of Tusculum for a vote in his election as pope, cf. Ployer Mione 1995, 58. Primary source not specified.
- 149 Severini 2001, 51, primary sources not specified.
- 150 Severini 2001, 21
- 151 See 7.II.1.6.1.
- 152 In the testament of future Pope Honorius IV, see Coste 1990, 135 note 70.
- 153 The family is recorded in the sources since the 10th century (see their interests in Albano); it can be surmised but not proven that this family already owned the area of their later castle at Monte Savello.
- 154 Marta 1989
- 155 De Rossi 1969, 35-37.
- 156 Severini 2001, 35
- 157 Del Lungo 2001, 15, primary source not disclosed.
- 158 De Rossi 1969, 56, undisclosed primary source.
- 159 De Rossi 1969, 55, undisclosed primary source.
- 160 This site is not depicted on the maps because the date of the medieval towers is unspecified.
- 161 We do not know if these 14th century references to *castra* are actual continued *incastellamento* “projects”, see 6.I.2.
- 162 Severini 2001, 11, 89-93 vs. Coste 1990, 135
- 163 De Rossi 1969, 34
- 164 Coste 1990, 136, see also 7.III.1.4.2.
- 165 Pagliaro 1989, 14 referring to an undisclosed “instrumento” dated to 988.
- 166 Severini 2001, 37, primary source not mentioned.
- 167 Nibby 1819, capo xxviii, primary source not clearly specified.
- 168 On the struggles between the Crescentii and Tusculi see 7.II.2.2.3.b The networks of the Tusculi and Crescentii.
- 169 One has to be careful in drawing conclusions from the fact that most defensive sites pop up in the 13th century. The most recent study of the wall-facing techniques of these sites dates to 1970 (De Rossi). It could be that a restudy of these sites with the new typological insights yields a new dating for a number of sites.
- 170 Severini 2001, 81.
- 171 Carbonara & Messineo 1998, 78, unspecified primary source in the archives of the monastery of Fossanova.
- 172 Carbonara & Messineo 1998, 78
- 173 Carbonara & Messineo 1998, 76
- 174 Amici 2016, 159 ff.
- 175 De Rossi 2002, 21
- 176 Coccia and Fabiani 1997; De Rossi 2002, 79; the 10-11th century wall is dated by its paintings.
- 177 Ployer Mione 1995, 66, primary source not specified, a bull by Pope Alexander III.
- 178 Carbonara & Messineo 1998, 91
- 179 *Rationes Decimarum Latium*, 1333 AD: 2726
- 180 Zaccheo 1985, 105-107
- 181 Carbonara & Messineo 2001, 82
- 182 *Rationes Decimarum Italiae. Latium*: 2236-2238
- 183 See 6.I.2.
- 184 Mazzucato 1987
- 185 *Le pergamene di Sezze* doc 14, dated 1262.
- 186 Del Lungo 2001, 17, n. 10; Ployer Mione 1995, 66; Coste 1976, 492
- 187 See the recommendations for future study in the final Chapter, 8.II.2..
- 188 See also 7.II.1.7.2 and 7.III.1.8.2.
- 189 For example Map XVII. La Campagne de Romme, dated 1555/6
- 190 See also Coste 1990, 128
- 191 Pannuzzi 1994, 143
- 192 See also 7.III.2.2.3.c1 Transhumance between the research area and the Apennines.
- 193 Pannuzzi 2009, 34 ff.
- 194 The Register of Pope Innocentius III described a conflict in 1206 between the municipality of Priverno and the monastery of Fossanova, on unknown subject but probably on right of use of lands: Migne, *Patrologia Latina*, vol. 215, col. 982 aq.
- 195 According to Toubert, the forests of the Marittima near Priverno were threatened by the Cistercian monks of Fossanova, Toubert 1973, 340, nr. 1 and 2 which is proven by an agreement dated 1227, found in the registers of Pope Gregory IX between both parties on the rights of using the forests of the Marittima (Lepine and Ausoni Mountains).
- 196 See 7.III.1.10.4.
- 197 Duchesne 1892, Bianchini 1952, 14
- 198 Text of the 1175 document in Kehr II, 119
- 199 Zaccheo 1985, 216, primary source not mentioned. See below on geo-politics
- 200 Zaccheo 1985, 216, Ployer Mione 1995, 51

- 201 *Falconis Beneventani*, 1116.2.7; Duchesne 1886 II, 309, n. 41.
- 202 Carbonara & Messineo 1998, 64 ff.
- 203 Duchesne 1886 II, 309
- 204 Toubert 1973, 2 and 29
- 205 Duchesne 1886 II, 430; see also Toubert 1973, 1059, nr. 1
- 206 *Regesta chartarum* I, 163-164, n. 647; Del Lungo 2001, 120
- 207 Carbonara & Messineo 2001, 55 and Zaccheo 1985, 128 no primary source mentioned.
- 208 Duchesne 1886 II, 303
- 209 Pope Gregory IX bestowed Riccardo Annibaldi in 1240 with the title of Signore di Sermoneta e Bassiano; Carbonara & Messineo 2001, 41, undisclosed primary source
- 210 Carbonara & Messineo 2001, 55
- 211 Carbonara & Messineo 2001, 46
- 212 Linoli 2005, 32.
- 213 Nowadays in the Archivio di Stato di Roma. Toubert 1973, 29, nr. 4
- 214 See 7.II.1.8.1.
- 215 Zaccheo 1985, 190, primary source not specified
- 216 Ployer Mione 1995, 105, referring to Kehr II, 108
- 217 Severini 2001, 35
- 218 Although its status is difficult to read from the written sources, Ninfa can be ranked as a town because of the present of several distinct public buildings, like a *municipio*. See 6.I.2.
- 219 Toubert, 1973, 1185. Pascalis II acquires “Nimphas” as can be read in the *Liber Pontificalis* Life 161, Duchesne 1886 II, 303. This is confirmed in the *Liber Censuum* I, 407-408, CXXXII, which dated the event in 1110.
- 220 Haderman 1986, 28
- 221 *Liber Censuum* I, 407-408, CXXXII
- 222 Haderman 1986, 29
- 223 Haderman 1986, 23
- 224 Ployer Mione 1995, 105, undisclosed primary source.
- 225 Ciammaruconi 1998, 65, undisclosed primary source.
- 226 Coste 1990, 131
- 227 Severini 2001, 134
- 228 Ployer Mione 1995, 105, primary source not disclosed
- 229 It is interesting to see if we can explain this differentiation. More on this in 7.III.2.2.2 *Theme: incastellamento*.
- 230 See Appendix 6.2, table Monastery for a list of recorded orders in the research area.
- 231 Ployer Mione 1995, 65. An unspecified source of 1169 recalls a “molendino, quod vulgo Mola monticuli dicitur”, owned by Santa Maria church of Sermoneta.
- 232 Map ONC E7 shows the intact original hill in the late 1920s, showing its former dominant position on pedemontana: the passage between the hill and the Lepine hills is only 150-200 meters wide.
- 233 Del Lungo 2001, 60; rectangular tower in *opera incerta*, of which the corners reinforced with larger blocks.
- 234 D’Erme 1994, 142
- 235 In 1299 “turrim de pretaro” is referred to as border marker of the territory of Sermoneta with Sezze, Ninfa and S.Donato, Del Lungo 2001, 120.
- 236 Coste 1990
- 237 D’Erme 1994, 141
- 238 D’Erme 1994, 148
- 239 Coste 1990 upholds the idea that the Appian road south of Sezze, parallel to the canal, may have remained in use throughout the middle ages, be it not as main route.
- 240 See 7.III.1.10.1.
- 241 Oxford Latin dictionary
- 242 *Le pergamene di Sezze* doc 2, p.9; doc. 3, 10 et passim (codice diplomatico di Roma e della regione romana, 5)
- 243 Pantanelli 1972 I, 247; D’Erme 1994
- 244 Pantanelli 1972 I, 270-272
- 245 For an overview of the fate of the Appian road between the 9th and 17th century see Coste 1990.
- 246 De Haas 2017; De Haas, Tol, Armstrong & Attema 2017
- 247 Linoli 2005, 32
- 248 See 7.II.1.3.3.
- 249 The buffalo [*bos bubalus*] was the only addition to the fauna in Lazio in the middle ages. It originated in Asia. See Toubert 1973, 268 for a discussion on the introduction of the buffalo in Italy, for which three peoples have been hypothesised as responsible: the Avars, Arabs and Longobards. Paul the Deacon (8th century) was the first writer to mention the buffalo, Paul, HL, IV.10-11.
- 250 *Spicilegium Liberianum*, n.XV, p. 635
- 251 See Toubert 1973, 269
- 252 Toubert 1973, 192
- 253 Enciclopedia Italiana, lemma: Caetani
- 254 See 7.II.1.8.1.
- 255 Carbonara & Messineo 2001, 64
- 256 Toubert 1973, 801
- 257 Bianchini 1972, 14
- 258 Bianchini 1972, 15
- 259 See also 7.III.2.2.1.d Conclusions.
- 260 In Roman times, banditism was a widespread phenomenon in the Pontine plain, see also De Haas 2011, 206. In the 15th century the inhabitants of Sezze destroyed the remains of castrum Trevi, as these were used by bandits, Del Lungo 2001, 20. Pope Sixtus V (1585-1590) is reported to have tried to get rid of banditism in the Pontine plain by destroying the robbers shelters, Del Lungo 2001, 139. He visited Rocca di Papa in 1586, which thus got its name. Cf. also Zaccheo 1985, 98.
- 261 Monti 1985, 209. Primary source is not mentioned.
- 262 Monti 1985, 208; however, the first secure reference to active involvement of local elite families in Segni dates to the 12th century.
- 263 Toubert 1973, 1953
- 264 Toubert 1973, 322, 1074
- 265 Molteni 2003 on the church here, possibly connected to the *castrum*. She has tried to identify some of the structures here as the church of S.Secundina, mentioned in the sources. Caroline Goodson, member of the Villamagna excavation team, conducted a short study of the site, see www.villa-magna.org [Accessed June 2009]. See also Fentress, Goodson & Maiuro 2016, 284-286.
- 266 Villamagna Excavation reports 2006-2010; Fentress, Goodson & Maiuro 2016
- 267 *Le pergamene del monastero di S.Pietro di Villamagna (976-1237)*
- 268 Villamagna Excavation report 2007, 8
- 269 Villamagna Excavation report 2007, primary sources not specified. Cf. also definitions of 6.I.2, *casale*.

- 270 Villamagna Excavation report 2009 and 2010
- 271 Villamagna Excavation report 2010
- 272 Villamagna Excavation report 2010
- 273 Villamagna Excavation report 2009
- 274 Villamagna Excavation report 2009
- 275 Fentress 2006
- 276 Villamagna Excavation report 2006
- 277 Campagna 1978, 29; this unspecified primary source was the first in which the name Carpineto is listed.
- 278 Campagna 1978, 29
- 279 *Liber Censuum* I, 400, CXX (1159 AD); Toubert 1973, page 1187, nr. 1
- 280 *Liber Censuum* I, 400, CXX and 427, CLXIX
- 281 Coste 1990, 134. The consulted primary sources are not specified.
- 282 *Liber Censuum* I, 382-383
- 283 A *bolla* by Pope Innocentius III of 1205, primary source not specified in Contatore 1706, 176-177
- 284 Carpino, Giuliani and Luttazi 1999, sito 61
- 285 Toubert 1973, 310 and 629
- 286 *Liber Censuum* II, 128; see also Toubert 1973, 629 and 1078, nr 4.
- 287 As can be read in a manuscript found in the Vatican Archives, Arch. Vat. A.A., arm. I-XVIII, n. 5000 (5), dated the 18th of December 1208.
- 288 Monti 1995, 62 ff. Consulted primary source is not made explicit.
- 289 Toubert 1973, 629. Toubert saw these as stations on regular interdistances and calculates Rome-Valmontone = 42km, Valmontone - Frosinone = 41 km; Valmontone - Anagni = 25 km, Anagni - Ceprano = 42 km.
- 290 Toubert 1973, 630, nr. 1
- 291 Toubert 1973, 192
- 292 Benigni 1912 [Catholic encyclopedia online, accessed April 25 2010]
- 293 Carbonara & Messineo 1998, 101
- 294 Toubert 1973, 1188, nr. 2; Kehr II, 120, n.9
- 295 Carbonara & Messineo 2001, 101
- 296 Carbonara & Messineo 2001, 101
- 297 BAV *Vat.Lat.* 12632, f.386.
- 298 Coste 1990, 217
- 299 Cecere 1989, 27, n.28; the primary source is not specified.
- 300 Del Lungo 2001, 116. In the 19th century this mausoleum was called Tor del Vescovo (1820).
- 301 Del Lungo 2001, 113-114
- 302 Map XXVI. *Designo della Via Appia, pars 2da and 3a.*
- 303 Del Lungo 2001, 113-114, undisclosed primary source
- 304 Del Lungo 2001, 113-114
- 305 1039 AD: "Casale de Flexu", *Tab.Cas.* I, 342-344, n. CLXXII; 1093 AD: "loco qui vocatur Flexu", *Tab.Cas.* II, 152-153, n. CCLXVII
- 306 Del Lungo 2001, 113, n. 52, 53. Cf. *Livy History* 7.39.7; 9.23.4; 25.2.5.
- 307 Bianchini 1972, 23, Lugli 1926, 6
- 308 Dating based on *opus saracinesca*, the irregular wall-building technique.
- 309 Carbonara & Messineo 2001, 102, 116
- 310 See 7.II.1.10.1.
- 311 Del Lungo 2001, 21; Carbonara & Messineo 1998, 103
- 312 See 7.III.1.10.2
- 313 Terracina, *archivio curia vesc.*, p. 52-57; Toubert 1973, 182, n. 2
- 314 Toubert 1973, 340, n.3
- 315 *Tabularium S.Maria Novae*, p. 110-111; Toubert 1973, 650
- 316 Duchesne 1892, Bianchini 1952, 14
- 317 Bianchini 1972, 14, the primary source is not specified.
- 318 Bianchini 1972, 15
- 319 For more on Terracina as frontier city in the high middle ages, see Caciorgna M.T., 2008. *Una città di frontiera. Terracina nei secoli XI-XIV*, Roma.
- 320 Del Lungo 2001, 21; the primary source is not specified.
- 321 Del Lungo 2001, 21; the primary source is not specified.
- 322 On the concept of (chance) availability and distribution of written sources, see evaluation of the previous study period, 7.II.2.1.a.
- 323 Secular elite documents become available from the 11th century onwards, see 3.II.
- 324 Philips 1985, 97 ff. on slavery in medieval Italy, which in rural parts was largely replaced by serfdom during the middle ages. For more on the aspect of slavery see 8.I.2.1.
- 325 See 7.III.2.2.3.a Theme: the economy and systems of redistribution
- 326 This may reflect a growth in actual activities but also in the available sources, see 3.II.2.
- 327 Carbonara & Messineo 1998, 10
- 328 The Fogliano key area proved void of evidence dated to the 11th until the 14th century. Indeed, Fiorani 1996, 22 ff. saw the 13th century as the zenith of fortified constructions in southern Lazio.
- 329 In the database I discern between a fortified location in general, a fortified settlement, a *castrum* and a stand-alone tower. This rather basic categorisation contrasts with the attempts made by others, for example by Bartolini who discerned two types of (fortified) settlements in the defensive system of the Ceccani families in the Lepine Mountains: fortified villages (It. *borghi fortificati*, consisting of a castle that acted as the seat of a liege lord and a walled village) and military castles (It. *rocche militari*, i.e. locations enclosed by walls, acting as control points and equally as armed defensive locations).
- 330 See 7.II.2.2.3.a. for an overview of the evidence for the validity and usefulness of separately studying ecclesiastical and non-ecclesiastical elite activities. There proved to be but one type of interest that did not fit into these two categories, being neither (specifically) elite nor ecclesiastical in nature: i.e., interests of local communes within the landscape. This type of interests will not be treated separately in my analysis of this Theme, as there are only a few secure records: i.e., the influence of the Commune of Rome in Velletri during the 12th to 14th century, and the free commune of Terracina that owned pieces of land on the Monte Circeo in the early 13th century. Other communes in Tyrrhenian southern Lazio did not have recorded interests in their nearest surroundings. Although the exploits of the municipality of Priverno in the wider landscape surrounding the town were documented (see 7.III.1.7.3) there is no valid evidence that this municipality truly represented a free commune. Additional deliberations on the commune will be presented below, 7.III.2.2.4.i From the 12th century onwards: the commune. Ecclesiastical "interests" were constituted by:

- documented ownership (e.g. possession, bequest, donation, and infeudation), economic activities or investments (such as the embellishment of a church, or the building of a castle), taxation, or other manifestations of significance to a church institute (e.g. the presence of a papal residence). Secular elite interests consisted of documented ownership (e.g. possession, bequest, donation, infeudation), administrative or military control, economic activities or investments (such as the building of a castle), taxation, or other manifestations of significance pointing towards a particular elite party. As was discussed earlier, it proved impossible to create an analysis based on types of interests, as in many primary and secondary sources the differentiation between types could not or was not made, see 7.II.2.2.1 Theme: The expansion of the papal patrimonium and the creation of the Papal States.
- 331 A total number of 33 in the 12th century, of 40 (13th century) and of 44 (14th century), see figure 7.190, 7.III.2.2.4.b The 10-14th century: a continued rise of rural monasteries. These figures include monasteries of which the actual functioning in that century is quite probable but is not certain. See Appendix 6.2 for the list of monasteries documented in the research area.
- 332 Fentress, Goodson & Maiuro 2016, 284; see also 7.III.1.9.1.
- 333 See also 7.III.2.2.4.b.
- 334 For the extent of the dioceses in the high middle ages see the Battelli map (Map 3).
- 335 Farfa's documented interests are limited to the Fogliano area, during the 12th century. On the territorial focus over long distances of large monasteries of central Italy, see Stasolla 2015, 157
- 336 Subiaco also, with many other Roman monasteries, owned parts of the salt pans of Ostia in the 11th century, Wickham 2015, 102, Stasolla 2015, 157.
- 337 Beolchini 2006, 59: During the 12th century, on several occasions the monks of Grottaferrata took refuge at Subiaco during the attacks on nearby Tusculum by Roman forces.
- 338 *Tab.Cas.* II, p. 114, n. CCXLVII
- 339 See also 7.III.2.2.4.g The 11-12th century: the scaling-up of bishoprics.
- 340 In the year of 1217 the integration of the diocese of Sezze (including Bassiano) in the diocese of Terracina was confirmed by Pope Honorius III by a papal bull, Bianchini 1972, 14, undisclosed primary source.
- 341 The papacy began to reclaim its authority and properties, doing so not only in central Italy but over the entire peninsula (including Sicily and Tuscany). At the start of the 13th century, during the pontificate of Innocentius III (1198-1216), Fondi once more became part of the Papal States. For more on the successful politics of Innocentius III see 2.I.11 The 13th century: expansion of papal authority. In the Duchy of Spoleto and somewhat later in Le Marche, numerous towns yielded to him. In the year of 1261 Farfa was finally placed under direct papal control by decree.
- 342 The list of *castra specialia* was compiled for Gregory IX on the 16th of January of 1234, *Codex diplomaticus domini* I, 102-103.
- 343 This was explicitly stated in the written documentation on their foundation. These villages were meant to remain in papal hands, and therefore should not be leased out to any other party, in order to keep the church in control. Beolchini 2006, 101, and note 316. Also Coste 1990, 134
- 344 See also 7.III.2.2.1.c13 Control schemes / lines of control.
- 345 See 7.III.1.2.3; Cecere 1989, 29 and Tomassetti 1910-1926 La Campagna, IV, 302
- 346 See also 7.III.1.8.3.
- 347 Barber 2012, 229 ff.
- 348 Which the Knights according to some scholars had founded: Istituto di studi politici S.Pio V, 2007; Carbonara & Messineo 1998, 44 ff. A justification for the hypothesis that the Knights Templar founded the monastery of Valvisciolo could be the fact that the Order was closely connected to the Cistercian order. Some other secondary proof is for instance a small templar's cross dated to 1312 found at Valvisciolo.
- 349 See 7.III.1.10.1-3 and Corsi 2007.
- 350 Krautheimer 1980, 228; Christie 1991, 358
- 351 See 7.III.2.2.2.c The end of incastellamento.
- 352 In this paragraph on secular (elite) activity I will focus on the documented activity of the elite families. In the current study period the vast majority of documented secular activity was related to activities by elite families. This is shown by the figures on secular interests: 295 of the grand total of 306 secular interests found for the period relate to elite families, the other 11 to secular/civic interests of communes and town councils (listed from the 11th century onwards). For a full list of secular interests see Appendix 6.2. On secular activities in the other study periods also 7.II.2.2.3. In the same section it is explained why I separately study ecclesiastical and non-ecclesiastical elite activity.
- 353 The families will be presented in order of the occurrence of their first recorded interest. There are several important families known to have played an important political role in Rome and its hinterland, yet their interests are only sparsely documented in the available primary and secondary sources, such as regarding the Conti of Segni, the Farnese and the Pierleoni. These were left out of the overview below. Within the scope of this study proved it was not possible to examine what caused their meagre presence in the database.
- 354 From Rossano, Calabria.
- 355 Enciclopedia Italiana, lemma: Tusculi
- 356 Toubert 1973, 635
- 357 In general, given several historical references to toll-collection in the high middle ages in other parts of Italy, it is rather feasible that it was a regular source of income for parties who held strategic locations on the main routes. To what extent tolling was common practice, and in what way it was organised is not well-documented. There are no documents to be found which explicitly referred to toll-collection by the Tusculi.
- 358 After several attacks in 1167 and 1183, during which the armies of Frederick Barbarossa came to Tusculum's aid, Tusculum finally fell in the year of 1191. It was all but completely destroyed by the Roman Communal army, immediately after the Romans had won the Emperor's favour. The city of Tusculum thus became a quarry for building material for the cities nearby in the Alban Hills. Enciclopedia Italiana, lemma: Tusculi
- 359 See 7.III.1.10.3
- 360 From the reading of the secondary sources it is mostly unclear in what way these transfers of authority took place. For example did these take-overs involve political or military force? In one case more details were disclosed: i.e., at Ninfa the pope forced the Tusculi out in the year of 1110, and only from the year of 1146 did the Frangipane receive their feudal concession of the town.
- 361 De Rossi 1969, 31
- 362 The Caetani were strongly connected to the Dukes of Fondi and traditionally had had much influence in the town. One of the

- founders of the Caetani family was Marinus I, Duke of Fondi (recorded in the late 10th century). The Caetani restored the enclosing wall of Fondi between the years of 1319 and 1329.
- 363 Del Lungo 1996, 124. The wider area of Molare had been part of the patrimony since 1030.
- 364 Carbonara & Messineo 1998, 10
- 365 The last outpost of the Annibaldi in the pedemontana zone was the site Zenneti (OLIMsite 77), which, after a period of Annibaldi ownership (since 1368) was transferred to the Caetani in 1411; Del Lungo 2001, 18 and note 17. Zenneti, located somewhere in the territory of Sezze, could not be located exactly and is therefore not depicted on this study's distribution maps.
- 366 Carbonara & Messineo 1998, 46
- 367 Bartolini 1987 called these sites a defensive line. The first source that listed the centres owned by the Counts of Ceccano dates to 1224: *Regesta honorii papae*, p. presutti, i, Roma 1888, app. p. LXXXV
- 368 Around the year of 1100 the Pierleoni were the other dominant elite force in Roman politics. This particular family did not engage in politics outside of Rome. The only exception to this was at Castra Albana, which the Pierleoni held for a short while in the 12th century.
- 369 Kleinhenz 2004, 981
- 370 Lombardi 1847, 128
- 371 *Enciclopedia Italiana*, lemma: Caetani
- 372 Regarding the families' struggle for control over Tor Ser Paolo in the 13th century see De Rossi 1969, 166, nr. 342 and De Rossi 1979, site 432
- 373 At Norma the fief was transferred from the Colonna to the Orsini in the middle of the 13th century, see 7.III.1.8.1.
- 374 Genzano was owned by both families during the 14th century as well, although not consecutively.
- 375 See Coste 1990, 134
- 376 Marchetti-Longhi 1942, 8
- 377 The expansion of the Caetani's patrimony to the north of Rome seems to have been hindered by the possessions of the Orsini family, *Enciclopedia Italiana*, lemma: Caetani.
- 378 See 7.III.2.2.4.j and figure 7.195.
- 379 In order to winnow the sites that stood out as focal points of elite parties I benchmarked the arbitrary norm (or critical value) of the occurrence of 4 or more simultaneous or consecutive interests in two successive centuries or of 3 of those in one single century. I am fully aware of the arbitrary nature of these cut-off values. However, the outcome is of relevance to the study of focal points of interests, certainly if, in addition, one studies the nature of the interests involved (were these conflictual of nature, such as a conquest or violent take-over?), and furthermore analyses local topography and local histories of the sites involved, set against the histories of other sites and other parts of the landscape.
- 380 When combining (accumulating) the documented church and elite interests, I chose to change the critical values. In this case I applied the arbitrary rule that more than 4 simultaneous or consecutive interests during two successive centuries or 4 in one century have to be identified, in order to designate sites as standing out as focal points.
- 381 The critical value is only reached by sites in the 12th to 14th century, which is very likely a question of available references of interests. The number of interests recorded in the database dated to the 10th century is 52; to the 11th: 88; to the 12th: 148; to the 13th: 173; and to the 14th: 87.
- 382 To remind of a few examples of the turbulent histories of these sites: Ninfa proved to be a strategic key site and therefore contemporaneously sought-after by several parties. It became one of the significant prizes of the struggle between Pope Paschal II (1099-1118) and the rebellious Count of Tusculum, a battle that ended with the tearing down of Ninfa's walls. With the demolition of its walls, the pope neutralised Ninfa's threat to papal authority in the area, as the site occupied a vital strategic spot between the Via Appia and the pedemontana area. In the year of 1159, emperor Frederick Barbarossa sacked and burned the village. The position of S.Gennaro on a new detour of the Appia is another case in point. Built by the Savelli in the 13th century and captured by the Annibaldi in the second half of that century, the inhabitants of Velletri devastated the fortress twice in the 14th century (i.e., in 1303 and in 1370). This clearly demonstrates the strategic importance of this site. The fortress most likely constituted an obstacle to the Velletrians in their day-to-day communications with Rome and the Tyrrhenian coast. Authority over Sezze was also frequently sought-after because of the town's strategic position. Lordships under papal ownership of the village changed hands many times between the 11th and 13th century. The nearby castrum Trevi, located on the mountain top just to the south of Sezze, also underwent several changes in lordship during these centuries. The castle of Genzano knew many changes of elite and ecclesiastical authorities between the 12th and 14th century; some of those involving damages done to the castle. In 1183 many of its defensive structures were torn down. Especially in the late 14th century its authorities changed rapidly, from an anti-pope to the Orsini, to the Savelli/Colonna, until it was finally conquered by the pope in 1399. Of all towns in the area, Maenza may have changed hands most frequently during the high middle ages. It was held in fealty by, among others, the Annibaldi, the Borgias, Orsini, the Caetani, the Frangipane, and the Ceccani once again. The latter party would hold the town for most of the high middle ages, and erected its defensive walls, which are still visible today. At several times throughout the 12th and 13th century the Papal troops overtook the town, as part of the contemporary papal struggle with the local baronage. Sermoneta, too, has had a turbulent history, involving the pope and several changing feudal lordships; its oldest church was destroyed in 1030 by the Ceccani.
- 383 Only at S.Gennaro, Fusugnanum and Valvisciolo the papacy had not directly been involved.
- 384 For a comprehensive list of the recorded border markers in the studied area, see Appendix 6.2.
- 385 **Torre Boacciana** (OLIMsite 399), located at the mouth of the Tiber Valley, became well-known as the subject of tussles between several Roman families from the 13th century onwards. **Cisterna** owned its growth to its strategic location at the crossing of several important roads. It was the object of several struggles between baronial families throughout the 11th to 14th centuries, as is shown by written documents describing transfers of power and at least two destructions. **Albano Laziale** (OLIMsite 155) was desired by both papal and anti-papal forces as well, and the struggle to own it resulted in at least one case of serious damage to the town, in the year of 1168, when the town opposed direct papal ownership. **Marino** (OLIMsite 144) was a stake in the struggles between competing families and within the Church from the 13th century onwards. The medieval town centre held, and still holds, two fortresses, built by the Frangipane and the Orsini. In 1379 the town constituted the battlefield of the struggle between Pope Urban VI and anti-Pope Clemens VII. The civitas of **Gregoriopolis** (OLIMsite

- 393) showed in what way a strategic position could also result in a higher degree of vulnerability. Gregoriopolis was damaged several times by a variety of troops on their way to or coming from Rome: in 1167 by the fleet of Frederick Barbarossa and anti-Pope Pasqual, in their struggle with Pope Alexander III. In 1264 the *civitas* was occupied by Riccardo Annibaldi, during his quarrel with the pope.
- 386 Within two timeframes the pedemontana route was close to being monopolised by one of the elitist parties: the Tusculi, followed by an effort by the Frangipane; both occurred in the 12th century.
- 387 BAV *Vat.Lat.* 12632, f.373 V holds a record of a woman from Terracina embarking on a pilgrimage to Santiago de Compostela around the year of 1220, using the said itinerary going north.
- 388 A well-documented example, illustrating the fragmented and intricate local legislation, is the claim of rights of passage regarding persons and goods until Terracina by the monastery of S. Angelo / S. Maria di Monte Mirteto, located near Ninfa (OLIMsite 63). These rights were granted in 1221 to Pietro Frangipane and were reconfirmed in 1236 by Pope Gregorius IX; See Coste 1990, 130 for details on the primary sources.
- 389 Maybe tolls were charged to shepherds by the lords controlling the areas of transhumance activity (the pedemontana, as was documented in the high medieval Biferno valley, Hodges & Wickham 1995, 283.
- 390 Coste 1990, 128
- 391 A general note should be made regarding the historical analysis of interests: although the chronological and spatial analysis of types of interests proved impossible, because of the lack of detail in the primary and secondary sources, the occurrence of direct control (as a fief or lease) or ownership of sites (fortresses) could often be securely ascertained.
- 392 See figure 7.103.
- 393 See figure 7.161-2.
- 394 See figure 7.159.
- 395 The wilful nature of the Templar “multinational” may have drove a wedge in the Tusculan dominance; See 7.III.2.2.1.b.
- 396 The Frangipane supported the pope in his struggle with emperor Frederick Barbarossa in 1171, a position which led to the devastation of Ninfa and Cisterna.
- 397 Coste 1990, 134 and note 59; this can be read from a bull by Pope Innocentius III of 17 January 1205, see Contatore 1706, 176-177, and a bull by Boniface VIII of the 25th of July 1300, *Codex Diplomaticus Domini* I, 372-373.
- 398 Del Lungo 2001, 117
- 399 Cf. De Rossi 1969, 65
- 400 The watch posts nrs. 48-50 and 68-70 in De Rossi 1969, 47 along the roads around Tor Maggiore (OLIMsite 379) must have been parts of a large defensive system formed around the large tower according to De Rossi 1969. De Rossi 1969, 55 discerned another “defensive signalling line”, stretching west-eastward and consisting among others of the Torre della Castelluccia (OLIMsite 382, De Rossi nr 65, 13th century building techniques), Torre S.Anastasia (De Rossi nr 66, no date possible from the remains, first historical reference in the 15th century – outside the current database because of this late date) and Castel di Leva (OLIMsite 374, De Rossi 34, probably a *casale* in the 11th century and a *castrum* in the 13th century).
- 401 De Rossi 1969, 167. According to De Rossi, central in this defensive array would have been the Torretta del Sassone (OLIMsite 396). The fortress of Sassone together with several other fortresses would have acted as a defending line for the Castello di Borghetto (located outside my research area to the east of the Via Latina - the modern Via Anagnina - slightly to the north of Grottaferrata) and Castello de’ Paolis (OLIMsite 295). Whether or not such a defensive array existed, it is clear that the Torretta del Sassone was strategically situated on the crossing of the Via Cavona with the new main route Rome- Marino-Velletri.
- 402 Brandizzi Vittucci 2000, 147
- 403 Hodges & Wickham 1995, 283
- 404 Relating to elite families, and a small number of secular/civic interests of communes and town councils, see 7.III.2.2.1.c introduction.
- 405 The Dukes of Fondi focussed on the south as of the middle of the 10th century until the first half of the 12th century. During that period the Duchy of Fondi was part of the realm of the Gaetan Byzantines.
- 406 Horden & Purcell 2000, 81
- 407 In Roman times, banditism was a widespread phenomenon in the Pontine plain, De Haas 2011, 206. In the 15th century the inhabitants of Sezze destroyed the remains of *castrum* Trevi, as these were used by bandits, Del Lungo 2001, 20.
- 408 The foundations of *incastellamento* settlements are best described as projects, as these were collaborative enterprises that were well-planned and managed, and documented, to achieve the clear and particular aims described in this paragraph; see also 2.I.9.1.
- 409 In these centuries the term was strictly used to designate incastellated fortified villages, see 6.I.2. I would like to stress once again that not all fortified large settlements were part of *incastellamento*, which involved a social process in which the rural population was resettled. For example, Gregoriopolis, was in the first place built for defensive purposes, and was not so much part of a new process of reorganising the surrounding area. Later on it would develop into a *civitas*, which generally meant “fortified town” or bishopric; both connotations applied to Gregoriopolis. The fortified town of Terracina, never was a *castrum* as well, just as Velletri and Segni never were.
- 410 However, from the 14th century onwards, the term “*castrum*” became more generally accepted, denoting any kind of fortress, with or without settlement. Therefore, in the 14th century a “*castrum*” should be seen as a possible *incastellamento* site. The expression “*castellum*” was used as a term to describe an *incastellamento* project as well, but it had also additional meanings as well, i.e. any kind of fortified settlement or fortress, or ruins. Therefore a “*castellum*” needs to be seen as a possible *incastellamento* site as well. There are several instances of the usage of the term “*castellum*” that I found that with certainty were aimed to refer to an incastellated settlement. For example in the case of (texts dealing with the) “*castellum* monte Julianu” (OLIMsite 298), which had one of the ten first clearly documented *incastellamento* charts, the term “*castellum*” was used. Decima (OLIMsite 387) was referred to as a *castrum* in 1074 and almost simultaneously as a *castellum*, in 1081.
- 411 Hodges & Wickham 1995, 283
- 412 See 2.I.9.1; Toubert 1973
- 413 This differentiation is primarily based on what is known of the *castra* settlements from consulted secondary written sources. As will be explained in the forthcoming paragraphs on *castra* vs large settlements and communes, it might be possible, but it could not be verified, that the 13th and 14th century’s *castra* of the Lepine and Ausoni Mountains did not involve (re)

- settlement of population, but instead were used as tools in the power struggles of the communes.
- 414 Only in a limited number of cases there was enough evidence to differentiate between a large incastellised settlement and a small inhabited incastellised fortress.
- 415 See also below the paragraph on *castra* vs large settlements and communes, 7.III.2.2.2.i.
- 416 Although Toubert and other scholars did not explicitly date the end of *incastellamento*, it is clear that in other parts of Italy this process had started to wind down during the 13th century, and seems to have ended in the 14th century.
- 417 The first *casale di Conca* is known from the Map 36, Ameti 1693.
- 418 Severini 2001, 12
- 419 Toubert 1973, 352. In the Sabine and Tiburtine areas more than 80 *castra* have been abandoned between the 10th and the beginning of the 12th century.
- 420 Quotations of contemporary texts, for example, are rare in secondary literature.
- 421 See also Appendix 6.2, table *castra*.
- 422 For more about the lack of success of *incastellamento* across the Lepine Mountains see below, 7.III.2.2.2.i.
- 423 Toubert 1973, 331
- 424 Hodges & Wickham 1995, 272
- 425 These were mentioned in the source that recorded the *castrum* in 977: *RS 977*, nr.51.
- 426 Toubert 1973, 354
- 427 See Appendix 6.2.
- 428 See 2.I.9.1.
- 429 See 7.II.2.2.3.b The networks of the Tusculi and Crescentii
- 430 Fondi was part of the realm of the Gaetan Byzantines, and (temporarily) of Montecassino, until the 12th century, see 7.III.1.5.5.
- 431 For a long time Terracina remained under the rule of the pope, who every now and then would concede the town to a baronial family.
- 432 See Appendix 6.2, for more detailed information on the *castra* of Tyrrhenian southern Lazio and the parties involved.
- 433 The *castra specialia* should not be seen as *incastellamento* projects, see 7.III.2.2.1.b Ecclesiastical activity.
- 434 All five were mentioned in the document of 1072 which recounted the donation of these *castelli* by countess Litterfrida of Fondi to the monastery of Montecassino.
- 435 See 2.I.9.1.
- 436 Toubert 1973, 336, nr 1; Toubert was not convinced that wooden constructions were widespread in the incastellised towns, despite the Farfan references to building in wood.
- 437 See 2.II.3.4. A study: 8th and 9th century satellites around monasteries.
- 438 Hodges & Wickham 1995, 283
- 439 Osheim 2004, 164; see 2.I.10.
- 440 Citter & Vaccaro 2005
- 441 Maybe the main factors involved were the same as summarised by Arthur & Patterson (1994), who assessed successful late Antique and early medieval towns. Their conclusions were that size and economic viability (i.e. the means and populace to sustain a (local) market), their trade possibilities (e.g. harbour towns) and their defensive qualities were key elements for sustainable success.
- 442 Toubert 1973, 635
- 443 Possibly this *castrum* was related to the Torre Astura – Astura settlement conglomerate, consisting of two sites on which widespread (late) Roman ruins would still have existed. As has been pointed out above, statements related on *incastellamento* on the Asturan peninsula must remain tentative until more detailed historical proof for the *incastellamento* process over there (a chart) surfaces, see 7.III.1.1.1.
- 444 Potter 1993, 79, 150, 197, 426. After a reconstruction of the church and baptistery in the late 10th and early 11th century, the site of Monte Gelato would be abandoned shortly after and consequently all buildings would be dismantled. No ceramics have been found that could be dated later than 1100. From the fact that the last phases of this site coincided with the earliest phase (i.e. based on pottery evidence) of the castle site of Castellaccio, it has been suggested that the population was resettled over there.
- 445 Potter 1993, 426; Christie 1991, 358
- 446 The only historical evidence of the movement of population dates to 1152 and related to a transfer of people from Gorga to/ from Anagni, Toubert 193, 656. There is no historical proof to be found this transfer was part of *incastellamento*.
- 447 See 7.III.1.9.1.
- 448 Fentress, Goodson & Maiuro 2016, 415
- 449 Cf. Toubert 1973, 354. Toubert assumed that the absence of large monasteries in southern Lazio was the main reason it was less affected by *incastellamento* than northern Lazio was.
- 450 See 2.I.6.
- 451 Cecere 1989, 33
- 452 Toubert 1973, 267, nr 1
- 453 A document in the Vatican archives dated to 1238, Arch. Vat.A.A, arm.I-XVIII, nn. 3530, 3674, describes how the fields in the plain near Fossanova should be worked: the lands are “*ad tanta aratra, quattuor bovis per aratrum computatis*”. The fact that four oxen per plough should be used may point to large scale agricultural exploitation, although this is not certain. The description itself, however, seems to show the close supervision of the monastery on agricultural production.
- 454 Del Lungo 56, 20; Tomassetti 1979 II, 49
- 455 Pliny *NH* 14.8.61.
- 456 See for example Pannuzzi 2004, 199 and 2009, 37; Tol 2012, 307; Fentress, Goodson & Maiuro 2016, 278, 412 ff.
- 457 Tol 2012, 308, 320
- 458 In the 9th and 10th century, Rome again became a large production centre of pottery, that found its way across the Mediterranean, Hodges 1993, 357. Interregional / international exchange becomes visible in the assemblages of the Crypta Balbi excavation, cf. Arena *et al.* 2001, Vendittelli and Paroli 2004.
- 459 Moreland 1987, 416
- 460 This becomes clear from the pottery production and imports in the village of Colle Castellano (Molise), the upland site Vacchereccia (Molise), and at Montarrenti (Tuscany), Francovich & Hodges 2003, 113. On Montarrenti, *Lo scavo archeologico del castello di Montarrenti (Siena). Per la storia della formazione del villaggio medievale in Toscana (secc. VI-XV)* by Federico Cantini (2003). This project, between 1982 and 1987 co-directed by Francovich and Hodges, was the first stimulus for them to re-examine the status quo on the research of the transition from the late Roman period to the Middle ages. As a matter of fact, the excavations of Montarrenti are those that triggered the archaeological discussion about *incastellamento*, as earlier conceptualised by Toubert. The volume edited by Francovich

- & Milanese, *Lo scavo archeologico di Montarrenti e i problemi dell'incastellamento medievale. Esperienze a confronto. Atti del colloquio Internazionale (Siena 1988)*, All'Insegna del Giglio, Firenze (1990) remains a benchmark for the discourse on the matter. In this book, Toubert's model of *incastellamento* is challenged by means of archaeological evidence. On the resumption of long-distance trade in the high middle ages in Biferno Valley see Hodges & Wickham 1995, 282.
- 461 Veenman 2001, 12
- 462 See 7.II.2.2.4.c; see also Toubert 1973, 272.
- 463 Veenman 2002, 139; 113; see earlier 7.I.1.1.3.
- 464 See 7.II.1.1.3.
- 465 Toubert 1973, 272, 1: Veroli, arch. Capit.n.398 (Scaccia scarafoni 1925, 215)
- 466 For a small overview of older publications see Toubert 1973, 148.
- 467 Toubert 1973, 903
- 468 Kehr II, 169, n.9
- 469 Kehr II, 127, nn.5-8
- 470 Toubert 1973, 903
- 471 See among others 7.II.2.2.4.c
- 472 Veenman 2002, 37 ff.
- 473 Veenman 2002, 112 ff. and 120-121
- 474 Veenman 2002, 116 for references
- 475 Veenman 2002, 139
- 476 However, there are signs that north of Sezze the Appia again became difficult to use in the 12th and 13th century, as can be seen at the demise of *Mercatum vetulum supra silicem* (OLIMsite 361), Treponti (Tripontium, OLIMsite 61).
- 477 See Appendix 6.2, table monasteries. Despite the growing number in the current database, many smaller monasteries remain outside our view, specifically a number of medium size monasteries which must have acted from within settlement, often *castra*, cf. Toubert 1973, 900, n. 3. These monasteries maintained 10 to 15 local churches. Many of these monastic centres are only known by their names, like S.Nicola near Ceprano, S.Salvatore de Trevi (near Alatri), La S.Trinità near Cori, S.Maria de Rosili near Segni and S.Salvignano near Terracina. Some of these historical monasteries have archaeological remains.
- 478 The plotting in the database IGM Toponimi 25000 of modern toponyms relating to monasticism, i.e. [frat] [abate] [monastero] [monas] [abat], seems to confirm the idea in northern Lazio too.
- 479 Carbonara & Messineo 1998, 10. Monasteries in southern Lazio played a key role in the distribution of Gothic art in Italy, best visible in the Burgundian early-Gothic abbeys of Fossanova and Casamari (near Veroli in the Sacco Valley).
- 480 See 7.III.2.2.1.b Ecclesiastical activity.
- 481 See 7.II.1.2.1.
- 482 On the bias in the database the 1072 sources constitutes, see 7.III.1.5.1.
- 483 See 6.I.2.
- 484 See figure 7.181,83-85
- 485 Fiorani 1996, 22 ff.
- 486 See above 7.III.2.2.1 Theme: a dynamic geo-political landscape
- 487 Pohl 2002, 33
- 488 Kleinhenz 2004, 980: These wars show the strong identification of the Romans with their commune. Likewise, these wars were economically and strategically indispensable as they affected the control over infrastructure and the grain producing lands north of Rome.
- 489 <http://www.britannica.com/place/Papal-States>
- 490 Frosinone, Terracina, the suburbicarian seats, Maenza, Artena, Priverno, Sezze, but also Anagni.
- 491 Ployer Mione 1995, 65, undisclosed primary source.
- 492 Campagna 1978, 29
- 493 See 7.III.2.2.2.i
- 494 The relatively high number of feudal arrangements compared to the 11th century is due to one source, i.e. the concession (feudal arrangement) of bishop Leon of Velletri to Demetrius de Melioso dated 946, which described a large number of funds in the wider Velletri area, six of which can be located, see 7.II.1.4.1.
- 495 In the literature a feudal arrangement is often generically described as "given in concession to" or "granted to", or "was transferred to".
- 496 See also Toubert 1973, 1039-1081, conclusions 1080 ff.
- 497 Toubert 1973, 1074
- 498 This was not the end of feudalism in Italy. Feudalism would only be abrogated in the 19th century.
- 499 Arthur 2006. In Apulia the number of villages seems to drop in the 14th century. According to Arthur this drop is the result of a reorganisation of the town and its hinterland, in which the owner of the town actively resettled the parishes and parish community of surrounding settlements into one central municipality. The stimulus for this is partly motivated by the fear of the growing power of the Ottomans, partly by economic necessity: more extensive land use required less direct control over the lands. Several parishes are concentrated into one central parish. In the central municipality churches were given the same dedication as the churches in the deserted towns.
- 500 See 2.I.12.
- 501 There are no signs that the drop in the number of interests is caused by less available primary or secondary sources.
- 502 Unfortunately, most recorded activities / interests cannot be dated more precisely, nor can their nature, for example of the kinds of investments made, be studied in more detail. Such specification of data would enable an in-depth study of the effect of suggested economic decline on the late 13th century activities.

Part III

Conclusion and summaries

Chapter 8 Synthesis, evaluations and recommendation

8.I The synthesis

8.I.1 *An introduction to the synthesis*

In the below introduction to the synthesis I will (re)introduce the basic principles of exploring the past of the typical Mediterranean landscape of Tyrrhenian southern Lazio. Based on this prelude, I will explain how I will relate my database's landscape data to the dominant models of historical landscape analysis in the Mediterranean: the Braudelian scheme, and Horden and Purcell's perspective of microecologies and their connectivity.

8.I.1.1 A typical Mediterranean landscape

This study explores a long gone landscape. The centuries that passed left their mark on the countryside of Lazio, which nowadays only shows glimpses of its late Roman and medieval appearance. Drastic changes have taken place since then, in the ways people lived, worked, and travelled in this landscape, where they lived and in what way natural resources were used. Industrialisation,

urbanisation and rationalisation of its exploitation during the last century or so, have all greatly impacted the landscape. The traditional rural way of living almost came to an end. In some parts, the natural environment has been forever modified, as in the Pontine plain after the *bonifica integrale*.

In the context of this study two crucial questions arise: "what did the research area look like in late Roman and medieval times?," and: "what past landscapes are actually being explored?" To answer these questions "insider" information is needed. Insider information is provided by sources that take us scholars, being distant observers, straight into the reality of past landscapes, and may teach us more or less concretely how they functioned'. The present study argues that such sources are merely fragmentary available, and that insider information has to be raked to explore past landscapes. I for one regard the following example as one of these rare sources, and the closest to an insider's view of the past landscape of Tyrrhenian

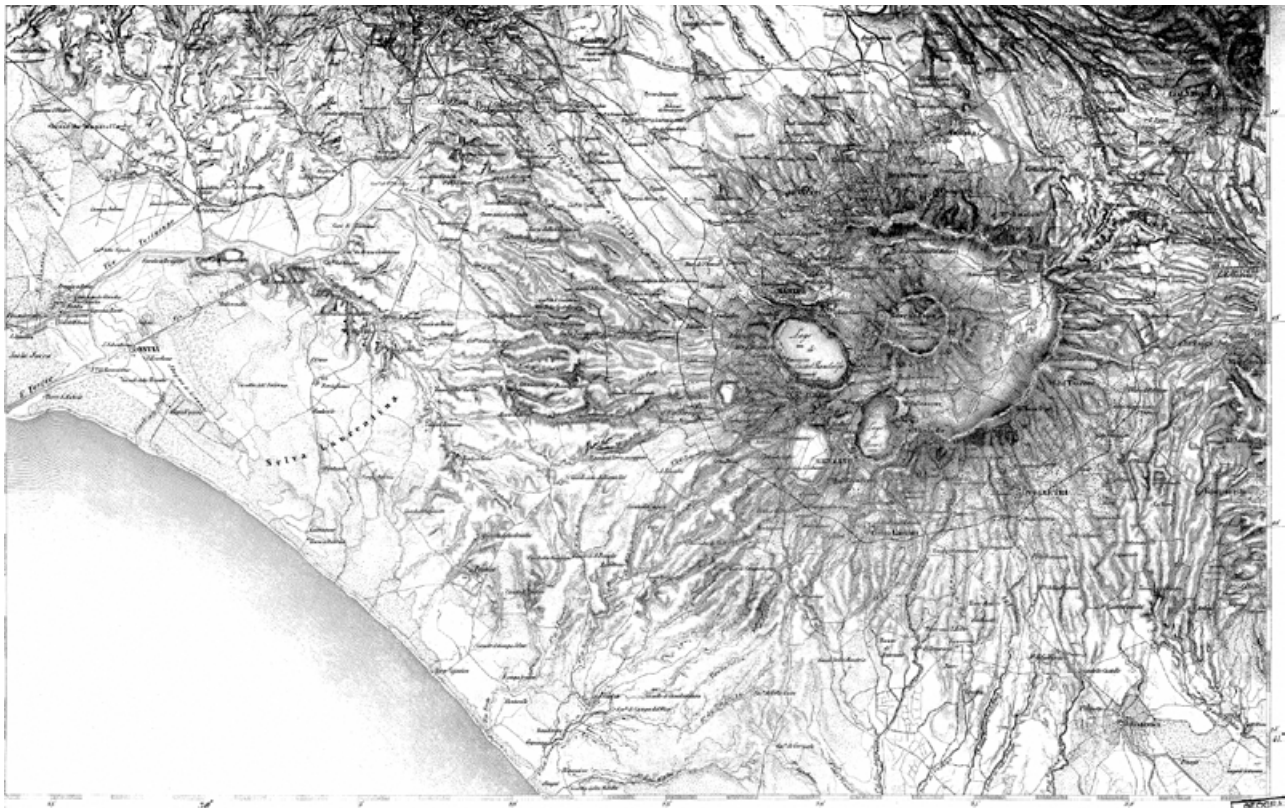


Figure 8.1. The 1851 IGM map, Sheet H16. Source: IGM Florence.

southern Lazio as one can get: namely the map that was compiled by the Istituto Geografico Militare in 1851 (Map 49).

One might ask: “Why is this considered an insider’s view?” First of all, as shown in the cartographical study in this book, through historical maps one can see the “natural” landscape, in the shape of (a 2D vision of) what the landscape was before its overhaul during modern times. Maps can exhibit surprisingly detailed glimpses of past landscapes. But why is this particular map of relevance? Of all the available cartography dated before sub-recent modifications within the landscape, the 1851 *IGM map* provides the best geodetics, the most topographical details and the most intricate legend. It is known that all topographical data were gathered at first hand, as the maps were compiled by teams actually walking the fields. And indeed, in this study several concrete indications (and no clear contra-indications) were found that demonstrated that the landscape depicted on the 1851 *IGM map* complies to the fragmented contemporary information of the ancient “natural” landscape².

Therefore, an insider’s view this map is. What is actually to be seen on the 1851 *IGM map*?

The 1851 *IGM map* portrays a typical Mediterranean landscape. Like a lot of other regions of the Mediterranean, Lazio is a complicated environment, with a large natural diversity, in geology, soils and relief. The contrast in the landscape, between the coast, the waterlogged plains and the mountains is strong. Although not visible on the map, it is known that this diversity is enhanced by a large environmental mutability *per annum*: rivers were and are notoriously changeable, in nature, courses and deposition; there are large fluctuations in dry and wet conditions throughout the landscape. Fertility and soil potential varies as can be seen from the diverging kinds of soil-use depicted on the maps³. Typically Mediterranean as well is the easy access to the sea. Seaborne communications are very well developed. However, like every Mediterranean region it has a few specific characteristics that distinguish it from other regions. In this landscape the most obvious idiosyncrasy is the waterlogged Pontine *graben*. The presence to the north of the ever powerful city of Rome is another feature that puts its mark on the history of this landscape.

This insider’s view of 1851 shows how a typical non-industrialised Mediterranean landscape operated, frozen in time. It is this characteristic Mediterranean landscape on which Horden and Purcell shed some light in their ground-breaking book *The Corrupting Sea*. As was introduced in the first chapter of the current study, they put forward the novel idea of understanding the Mediterranean, as a region characterised by an enormous fragmentation

because of staggering ecological diversity on the one hand, and a high degree of *connectivity* on the other. They emphasise the primary production within and redistribution between so-called microecologies (or microregions) as an effective way of understanding how the Mediterranean landscape operates. They describe their model of primary production as containing four elements which are considered distinctive for the Mediterranean:

- a distinctive regime of risk;
- the logic of production;
- an extreme topographical fragmentation;
- a distinctive regime of communications.

Each microregion portrays one or more distinctive geographic features, and has specific environmental circumstances and natural boundaries imposed by nature. And each microregion was forged and re-forged by various human adaptive responses to the ever changing environmental circumstances. But the developments within and between microecologies are determined by more than nature alone: Microregions are shaped and reshaped by adaptive responses of its people to changing socio-economic and political circumstances as well. In Horden and Purcell’s model, the connectivity (i.e. interrelations) within microecologies, among each other and with the distant outside world, is a major force in the shaping and reshaping of their constitution.

The 1851 *IGM map* presents a blueprint of a typical Mediterranean landscape, all but unsoiled by the forces of modernity. The intrinsic characteristics of this landscape and its environmental diversity, being aspects of the *longue durée*, must have been predominantly the same in the late Roman period and early to high middle ages. However, it should be understood that while the long-term environmental backdrop might have been the same in 1851 as in, let’s say, 500 AD, the human adaptations to and usufruct of the landscape must have differed a lot between these different periods. From the perspective of *The Corrupting Sea*: the microecologies, their coalescence and their internal and external connectivity must have been largely different between these two points in time – as would be the likely case concerning any other pair of points fairly distantly spaced in time, in any other Mediterranean region. After all, it is the nature of microregions (and their coherence) to constantly change, through human adaptive responses to and by changing socio-economic, political and environmental circumstances. On the other hand, the discrepancies between the landscape when analysing any two given points in time should be put into perspective: the closer two points in time are, the more likely that microregions functioned and interacted in the same fashion: The constellation of 14th century’s microecologies, with their widely exploited landscape dominated by

hilltop settlements, may have been closer to 19th century's reality than for example that of the 6th century.

As was argued, it is this subtle concept describing geographies of fragmentation (i.e. microregions) and connectivity (i.e. redistribution, communication and mobility), that offers a very valuable perspective to my synthesis, next to the Braudelian perspective. It should provide a novel way of analysing the diachronic distribution of sites, interests and events in my database. I believe the current study allows for an attempt to analyse on the microregional level. First of all, this study's long research period enables to analyse (ir)regularities of human action and interaction, i.e. within and between microregions. Although microregions change all the time, their internal and external mechanisms, coalescence and connectivity should follow certain recurring patterns, given the relative stable factors of the *longue durée* of the "natural" landscape, and the constant presence of Rome. Secondly, the very extensive and diverse database, encompassing six different types of data, maximises the evidence of (medium-term) patterns of production and redistribution (and connectivity in general), and of changes within and between microecologies. The study of (inter)connectivity of sites and areas will be essential in the assessment of the functioning of microregions throughout the studied period. As Purcell stated: "the key variable in assessing the social and economic character of any Mediterranean microregion at a given historical moment was connectivity"⁴. I will elaborate upon the concept of microregions and its practicality to this synthesis in a separate paragraph (below).

The 1851 IGM map provides input for this study in yet another way. To me, this map embodies the potential of a retrospective approach: in combination with the late Roman and medieval data, and topographical studies, historical maps later helped to examine the landscape over a long period of time. The depicted 19th century's landscape constitutes (almost) the end of this study's retrospective perspective, which spans roughly two millennia. As has been touched upon in Chapter 1, the retrospective point of view allows the landscape to be studied on a true Annaliste (Braudelian) scale. It helps understanding the intrinsic characteristics of the physical landscape, aspects of the *longue durée*, which are more often than not difficult to grasp in archaeological studies with a smaller chronological time span. This long-term knowledge enables to better appreciate medium-term (i.e. conjunctural) changes of human presence in the landscape, and the human adaptive responses to environmental change within it. Especially the history of the Pontine plain area provides a first-class illustration⁵ of the intricate interplay of the *longue durée* (of the landscape), and the cycles of its medium-term exploitation, as measurable in the ebbs

and flows of economic investment, demography, agrarian economy, and of socio-political systems⁶.

In the following I aspire to make full use of this potential. In the synthesis, Braudel's scheme will be used as a heuristic device, i.e. as a structure for studying the past. The attested developments in Tyrrhenian southern Lazio between the 3rd and 14th century will be treated separately along the lines of the three Annaliste wavelengths of time: the *longue durée*, the *conjoncture* and the *événement*. Summing up: in the following synthesis I will relate my database's landscape data to two dominant models of historical landscape analysis in the Mediterranean:

- The attested developments will be studied along the lines of the Braudelian scheme. At first the structures of the *longue durée* are treated, followed by the *conjonctures*. I divided the analysis of structures of the medium term in two parts: at first the generic tendencies or most common repeating cycles of human adaptation to the medium-long term will be described, followed by a chronological overview. Events will be treated whenever measurable as elements of the *conjoncture* or *longue durée*⁷.
- The evidence is analysed from the perspective of unity by diversity through the study of microecologies and their connectivity. The microecological perspective should be seen as complementary to the main analysis. Whenever possible I will try to comment on aspects of microregions and connectivity within the main periods / structures defined along the Braudelian tripartite sub-division of the past: events, medium-term and long-term.

Before starting the synthesis both models will be explored further.

8.I.1.2 The Annaliste model as a structure to explore the history of a landscape

How does one use the Braudelian scheme as a heuristic device, as a structure to analyse the past? Birnbaum defined five tasks for an Annaliste historical analysis which one can use as a starting point⁸.

- 1 First of all one should analyse the available data to establish which temporal periods (or structures) one is dealing with, and establish on which level of the three levels of time analysis should take place.
- 2 The general lines of developments within these periods should be defined, as should be
- 3 the measurable (documented) constants or regularities within these periods.
- 4 After that one should identify innovations and the surfacing of new structures within and between these periods,

- 5 to see if one can find elements (i.e. data) to explain why things changed or continued within or between the periods – what were the forces at work in the landscape?

It is no sinecure to define the lengths of time along the lines of Braudel's three temporalities. The main difficulty lies in the fact that the three wavelengths of time are paralleled and will (almost) always interrelate: they simply will not exist separately. As Bintliff stated: "The reality observed when we reveal how a particular era or region underwent historical change is the final result of an inner dialectic between these different temporalities."⁹ Therefore, in earlier archaeologists' applications of the Annales approach it proved to be very difficult to unravel the interwoven temporalities and to reach a consensus on the lengths of time¹⁰. By some the *longue durée* is considered a matter of centuries, to others a matter of millennia. As Shaw pointed out: "Archaeologists [...] have encountered some difficulties in agreeing on the lengths of time to which Braudel's three temporalities correspond, e.g. is the *longue durée* a period of centuries or millennia, and is something like the Neolithic Revolution an *événement*?"¹¹. Suffices here to stress that demarcating the duration of periods and developments within them should be performed with the utmost care, whilst underlining the insecure nature of any reconstruction of the time span of past developments, especially as closely related developments may have similar or different time scales¹². "A crucial decision for the archaeologist, therefore, is to choose the appropriate time scale on which to weigh particular variables and, in the total time span of human behaviour, to find suitable data and apt chronological resolution" (Knapp 1992)¹³.

If one thus has defined the periods and their characteristics, one should turn to the analysis of continuity and change (i.e. breakpoints) within them. In the Annales approach (and in landscape archaeology in general) this is done regarding the dimensions of time, place and social reality (i.e. the socio-economic, demographic and political forces that were at work in the landscape)¹⁴. So for each level of time, and the established developments and changes in them, one should define and analyse the when, where and why. One should be aware not to be focussed on change alone. In the past, many archaeological reconstructions of the developments within a landscape were mainly focussed on change, disregarding the subtle social and economic forces at the root of developments¹⁵. Continuity should not be forgotten; some things remain the same for a long period of time – often beyond the barriers of what the resolution and this study's time span (i.e. the late Roman period to 1400) of evidence allows us to see.

The resolution of the evidence at hand is a vital point to take into consideration: one should at all times be aware that one cannot identify all developments, explicitly recognising "the relativity of knowledge and the subjectivity of scholarship" (Bintliff 1991). One should therefore be clear about the biases and about the elements in the reconstruction of the past landscape that are out of reach for analysis because of a lack of data, or because of the impediments of one's own methodology and database. In this study I have tried to be as explicit as possible on these aspects.

Therefore, the goal of this synthesis should be to discern with as much common sense as possible the main long-term and a well-wrought cross-section of the conjunctural developments (or: structures), fixing them with care in space and time. As to an analysis of the social reality underneath the attested developments, in advance one can see two clear limitations (or focuses): As I explained previously¹⁶, this study's focus is on the functional aspects of living, producing, wielding authority etc. in the landscape of Lazio – as these are clearly identifiable in the available data contrary to some more elusive concepts as for example ideology or *mentalité*. What is more, the focus in this synthesis will be on the higher levels of society: as was stated, of life on subsistence level, even on the level of peasants linked to the elite, nothing much may be said from the analysis of all the available data¹⁷. The elite dominate the records, certainly the written records, and the latter dominating even all information after the 10th century.

Events

In the reconstruction set out below of the developments in Tyrrhenian southern Lazio that took place over the millennium under scrutiny, short-term events will be explained only by being referenced to the medium and long-term¹⁸; or vice-versa, only those events visible or measurable as elements of the conjuncture or *longue durée* are dealt with, i.e. if these impacted an extended level of time. First of all this is principally a question of limitations to the extent of this study: effectively all historical documented acts and archaeological finds are part of individual événements, for example the erection of a fortress, or the production of a pot. Available time and space would not allow to treat each one of these as an event individually. Likewise, not all events could be straightforwardly linked to medium or long-term structures¹⁹.

Questions to be asked:

- Which long-term and medium-term temporal periods (or structures) can be defined? Which events could be made visible or are measurable as elements of the medium-term?

- What are the developments, the constants and changes, and breakpoints within these identified periods of time?
- In what parts of the landscape did the attested developments occur? Could regional diversity be observed?
- Can one comment on the forces at work within these structures, forces that shaped life and brought about change within the landscape. In other words: can one comment on the social reality underlying the developments? The main forces at work seem to be the landscape itself, demography/settlement, socio-economy, religion and geo-politics.
- In what way did the outside world influence the developments in the landscape? Which external forces were at work, especially those relating to Rome?
- How did the different parts of the research area interact?

Secondary questions are:

- Can one comment on the actions of individuals or groups of people shaping the landscape?
- What could not be said / what evidence is likely to be missing?

8.I.1.3 The concept of microecology as a way to explore the history of a landscape

As was discussed in the introductory Chapter, Horden and Purcell created a new understanding of Mediterranean history, summarised as an interplay of fragmentation through ecological diversity on the one side and a high level of *connectivity* on the other side²⁰. Their concept is based on the idea that the ecological diversity of the Mediterranean created a vast number of so-called microecologies, or microregions (these terms are used synonymously²¹) which should be seen as niches in the overall "Mediterraneanism". Each microregion bears one or more specific geographic qualities, with environmental particularities and natural boundaries imposed by local nature (such as the presence of the sea, rivers, and mountains) that all have had much influence on its local history. Some straightforward examples of microecologies are a distinctive northern African *wadi*²², an isolated island (such as Lampedusa), and perhaps in the current study area the central Pontine plain, or one of the plateaus of the central Lepine Mountains. But microecologies usually are not that easily delineated, as they are usually defined by a variety and mixture of several elements of climate (e.g. rainfall, draught), relief (i.e. terraces vs. slopes), hydrology (e.g. seasonal flooding, perennial rivers, swamps) and other local factors. So whereas a plain on the lee side of a mountain (i.e. in its rain shadow) is normally very dry, other parts of the same plain may be very wet because of recurring rainfall. Therefore, the concept of *microclimate* is an important aspect of microecologies, describing the

often hard to predict nature of climatic conditions of specific zones, which may differ much from adjacent zones²³.

But the portrayal of microecologies should entail a lot more than just their natural setting. In fact, changes throughout their history are only seldom solely directly related to their physical environment. The social, economic and political networks (i.e. interrelations) within themselves and with their outside worlds are as much a factor in their history – networks whose interactions are covered by the term *connectivity*. Microecologies were and are always "responsive to the pressures of a much larger setting", i.e. the outside world²⁴. Intrinsically, microregions and their primary means of production, their focal points of accumulation, their coalescence, and their ways of communicating and redistributing goods and people are constantly changed by (ir)rational human adaptive responses to the ever-changing socio-economic, political and environmental circumstances. These adaptive responses can lead to microstrategies of production and redistribution, and of measures to deal with the environment, which are adjusted when and where necessary²⁵. As Horden and Purcell stated: "Each microecology has its physical characteristics, which may be discernible in a number of different periods by means of archaeological or documentary evidence. But their significance can change radically between one period and the next through alternations in the networks that bind the microecology to its neighbours. A pasture in South Etruria may exist for millennia. Its contribution to its locality will, however, vary enormously as the animals on it change from being those of a local proprietor to those of a large-scale investor from the city of Rome whose flocks are scattered across Italy; or to those of a Roman veteran soldier with interests in a nearby city; or to those of the dependants of a papal state. The grass and the goats comprise only a small part of the overall picture"²⁶.

Adaptations in primary production are a central element in the microecological concept. Within and between microecologies storage and redistribution of crops from this primary production were ways of diminishing risk. Redistribution in the form of the exchange or the trade of goods ensured steady supplies in times of bad harvests, or in cases of other periods of poor production, for example caused by draught or flooding²⁷. Storage is considered just as important a response to risk as redistribution²⁸. As Horden and Purcell stated: "redistribution is an extension of the strategies of production and storage"²⁹.

Horden and Purcell outlined the essence of a microecology as follows: "our definition of the microecology, [...], is a locality (a 'definite place') with a distinctive identity derived from the set of available productive opportunities

and the particular interplay of human responses to them found in a given period. It is not the solid geology or the characteristics of the climatic zone, the relief or the drainage, that of themselves define microecologies. It is the interaction of opportunities: for animal husbandry, foraging, hunting, intensive agriculture, forest management, horticulture, fishing, or whatever – and, as the final but by no means the last ingredient, for engagement in larger networks of redistribution”³⁰.

The two major advantages of this ecological conception of the Mediterranean landscape are its diachronic flexibility, enabling to better understand change, and its “spatial indeterminacy”, i.e. geographical boundaries are not static, or uncrossable³¹. However, to pinpoint microecologies is difficult. It is impossible to formulate a standardized set of features from them. Their size and natural and socio-economic set-up differ much. Their inherent aspect of microclimate makes them hard to distinguish physically. Moreover, they are ever-changing by nature through human adaptive responses to changes within and between them, as a result of which the foci and the borders of microecologies may rapidly shift³². As Horden and Purcell put it: “[microecologies] are kaleidoscopic; it does not matter what their actual size might be. The fragmentation is more important than the scale. So we shall not attempt to propound a typical size for our microregions”³³.

Microecologies and connectivity

A fundamental feature of Horden and Purcell’s idea of *Mediterraneanism* is *connectivity*, i.e. the intricate web of communications and mobility in and among microecologies at various extents. “*Connectivity*” may be defined as “the various ways in which microregions cohere, both internally and also one with another – in aggregates that may range in size from small clusters to something approaching the entire Mediterranean”³⁴. So obviously *connectivity* does not simply entail the large long-distance roads (e.g. Via Appia, Via Latina) and well-documented sea-lanes (e.g. Rome – northern Africa or Rome – Constantinople)³⁵, but also the subtle interrelations of settlements with their direct and wider hinterlands, and the interaction between a certain hinterland and other hinterlands. In fact, in Horden and Purcell’s analysis of *connectivity* mostly revolves around small-scale and short-distance interactions, and around local or regional redistribution strategies, which appear to be very adaptive to changes in the interactions between microecologies and to influences from further away³⁶.

Connectivity should not be confused with “*accessibility*” or “*reachability*”. It is the act of connecting and communicating. So connectivity is not simply related to physical boundaries but its essence lies in “[...] the highly complicated and always changing interaction of human productive opportunities. This interaction could give highly

varying significance to even the simplest local feature – so much that environmental determinism had no place in the analysis”³⁷. Concretely, *connectivity* entails all forms of interaction or exchange within the landscape, like redistribution of raw materials (e.g. trade, exchange), mobility of people, communication, dissemination of ideas, of technology and art. For these reasons, piracy is also a kind of connectivity.

In Horden and Purcell’s work connectivity is firstly studied as the movement of goods and people³⁸. The way these were redistributed eventually was not the result of geographical circumstances only, but far more the result of social relations – i.e. of the way people interacted and found new ways of making use of the resources within their microregion. Not all redistribution is considered to be part of commerce; there also existed part-time producers, such as monks or small farmers who exchanged their crops³⁹.

The mobility of people is an important aspect of connectivity, appearing in various shapes: e.g. pastoral activity, traders and craftsmen moving around, ferrying or passenger transport⁴⁰, pilgrimage, but also demographic mobility⁴¹. To dwell a bit more on the last observation: one has to be aware that many societies were fluid by nature⁴². Horden and Purcell convincingly showed that the constant (peasant) community was more of a rarity than a common feature (as was often previously mistakenly thought). In almost every region of the Mediterranean, people and manpower (were) regularly moved. Seasonally or flexible and temporal movements (as in cases of agricultural mobility, such as transhumance or local and regular movement of peasants⁴³), or permanent movement (like in many cases of *incastellamento*) took place. Sometimes it occurred safely and controlled (for example because of changing opportunities within the microregions), and sometimes forced, caused by violent circumstances (e.g. general insecurity or war) or as part of slave transport/human trafficking⁴⁴. Day-to-day movement of people within and between microregions was not merely related to production (e.g. going to the fields) but also directed to locations of exchange (e.g. markets, ports, cities, fairs, sanctuaries). “The road to the centre of the microregion and back again is one of the most frequently used channels of Mediterranean mobility”⁴⁵. However, as became apparent in Chapter 7, mobility of people, and certainly day-to-day movement, proved hard to be found in all the available evidence. Regarding the more permanent forms of demographic mobility, charts of *incastellamento* foundations are among the little genuine evidence to be found.

Horden and Purcell showed that sea-connectivity was the most enduring means of interaction between

microregions, in the first place because of the navigability of the sea itself: this remains valid throughout history. It is only at the ports that sea-connectivity reaches its first obstacle and its limits. Secondly, land transport, certainly over great distances along many settlements and regions, generally came at a higher cost than transport by sea⁴⁶.

The sea was the backbone of transport, trade and communication throughout history of most Mediterranean regions, and certainly of the current study area, even during periods ruled by socio-economic depression. However, sea-connectivity should never be treated separately, but always in conjunction with land connections. Land and sea interaction were and are always interwoven, i.e. ports are gateways between different microecologies⁴⁷; “in patterns of relationship between microregions, the coastal enclaves that are part of the world of the sea but interact with the ‘depths’ of the hinterland have always played a special, if highly volatile, part. They function as what geographers have labelled gateway settlements, through which goods and people are ‘funnelled’ in both directions”⁴⁸. Therefore, a study of harbours, being gateways between microregions connected by the sea, should be part of any study of a region’s connectivity. However, not only sites located near the sea are such gateways. Inland sites may act as ports or gateway sites between different systems of redistribution and between different ecological zones as well⁴⁹. Horden and Purcell stressed that such nodes do not only bring together social and economic systems, but also, and often, ecological systems. ecological variety results in more exchange. An example present in the current studied area may be Cisterna, located between the mountains and the Pontine plain, and on the main roads to the sea and the fertile soils of the Alban Hills.

Visibility is considered an important aspect of connectivity. Horden and Purcell: “quite generally, Mediterranean microregions are patterned by ties of mutual visibility. The watch-tower or look-out has been a prime constituent of the region’s landscapes...”⁵⁰. Signal stations were common in the ancient Mediterranean Greek and Roman world. However, this aspect could not be systematically explored in this study due to matters of time and space⁵¹.

One quick elaboration on the mountains. One has to be aware that mountain crossings were often rather fluent ways of travelling and communicating, and were not necessarily barriers, as may be suggested from the documentation on Roman road systems (like those depicted on the Peutinger map)⁵². In fact, many parts of the Mediterranean show examples of enduring communication, interchanges and (bulk) transportation of goods between regions that took place across mountains⁵³. Mountainous regions often had and have a strong

net of communications that bound and binds the region together, which was and is only apparent to the region’s locals. Horden and Purcell showed that the areas where mountains touch the sea often are gathering points of communication (e.g. the Taurus mountains in Turkey)⁵⁴.

To summarise: as, in my opinion, Horden and Purcell convincingly showed, strands of connectivity continued or ebbed away through time with the mutation of the microecologies and their coalescence⁵⁵. The routes that proved to be important in classical times often totally differ from the current ones, or those of prehistoric times, as evidence shows all over the Mediterranean. This adaptable connectivity, with its constantly changeable “clusters and series of points of contact” and with its locally very mutable degrees of connectivity⁵⁶, is an important subject of study in the synthesis. Because one of the main characteristics of the region of Lazio was its easy access to the sea, coastal connectivity and external influences could be made visible by the records. The developments in and around ports and their hinterlands should be interesting subject matter for the synthesis as well. Another main feature of Lazio was and is the presence of Rome, which undoubtedly influenced connectivity up to the wider hinterland of the city⁵⁷.

The practical applicability of the concept of a microecology for the synthesis

In *The Corrupting Sea* and later studies, the microecological approach has proven to be a very useful structure to explore the history of landscapes. So what is the practical applicability of Horden and Purcell’s concept of microecologies in relation to this study’s final synthesis? I will not compile a list of the microecologies of Tyrrhenian southern Lazio through the study period, as that is not the point of the concept or of importance to this study. Besides this, microecologies are elusive by nature. Therefore, any comprehensive list would be enormous. Moreover, only a very limited amount of “insider” information is available to track the evolution of microregions throughout the middle ages, rendering a complete listing of microecologies virtually impossible.

I shall employ Horden and Purcell’s concept as a way of looking at continuity and change within the region of Tyrrhenian southern Lazio, appreciating the basic set of environmental characteristics and primary production potential of the area’s microecologies. In the synthesis, I shall attempt commenting on the relation among the research area’s microecologies during the research period, whenever made possible by the available evidence, for reasons of further understanding of changing redistribution, communication and mobility. Vital will be to examine the responses of the microecologies “to the pressures of a much larger setting”. Examples of such

pressure were geo-political or socio-economic influences from outside Lazio, which often reached the countryside of Tyrrhenian southern Lazio channelled through Rome (e.g. Carolingian influence, the newly developing interregional trade of the 9th and 10th centuries, the elite's influence from the 10th century onwards etc.).

As touched upon in this chapter's introduction, *connectivity* will be a vital element in such a study, as it is often the best evidence available regarding the workings of the microregions. By means of the study of pottery distribution scholars can acquire a lot of knowledge of connectivity. As Purcell put it: "The enormous production and widespread circulation of certain broad types of pottery, both containers and tableware, have served to map connectivity, and to distinguish its periods"⁵⁸. But also by the historical evidence of interaction among sites and areas, i.e. the distribution of interests and historical anecdotes one might see glimpses of the proper functioning of microregions throughout the studied period. In the previous chapter lines of control and of communication / mobility were defined. Now these insights will be used to study some aspects of connectivity. However, the scrutiny of *connectivity* has its limitations. As was discussed, *connectivity* is somewhat subtle in nature. Horden and Purcell show that subtle interconnections proved to be of vital importance to the understanding of the history of an area. The current study shows, like *The Corrupting Sea*, that these small-scale interactions usually are hard to be identified in the available evidence, and may stay invisible without necessary knowledge of the local contemporary practice of contact and redistribution⁵⁹.

Some questions from the microregional point of view to be answered in the synthesis are:

- Which primary production and redistribution strategies could be identified from contemporary archaeological (especially pottery distribution) and historical data (e.g. interests, treaties/ agreements, historical anecdotes etc.)?
- From the same sources of data, what evidence does show up regarding forms of interaction within the landscape – pointing to connectivity: i.e. redistribution, communication, distribution of interests, control lines, ease of roads, mobility of goods and people, pilgrimages, passenger transport, piracy, flexibly deployed manpower etc? The examples of communication and mobility and of lines of control earlier identified in Chapter 7 shall be put into context.
- Could an apparent continuity or change in production and redistribution strategies, or in connectivity be found?
- Which biases may be identified that obscured a clear vision of aspects relating to microregions and connectivity?
- Zooming in on microregions:
- If one examines the geographical and environmental situation, do the attested production and redistribution strategies and instances of connectivity help delineating specific microregions at a certain given point in time?
- What were the foci (i.e. centres/cores) of activity related to microregions?
- What was the role played by the landscape in (changing) microstrategies, or: what could have been the human response to (changes of) the physical environment?
- What exactly were the changes in the microregions, and what remained unchanged? From a Braudelian perspective: regularities in human action and interaction may be indications of the long-term functioning of microregions and their workings; interaction and connectivity might follow certain recurring patterns given the relative stable *longue durée* of the "natural" landscape, the presence of Rome being a constant factor. What was the nature of these long-term (consistent) activities and connectivity related to microecologies? What evidence of medium-term patterns and changes within and amongst microecologies and in connectivity could be identified?
- Could changes in the foci of microecologies be detected?
- What economic, political or demographic factors might cause these changes? What were "the pressures of a much larger setting" that might have influenced the functioning microecologies?

More questions regarding connectivity:

- Which were the nodes of connectivity in Tyrrhenian southern Lazio? Could be established which of these nodes served as a gateway? What lines of connectivity could be seen in the physical landscape?
- Will I be able to identify the distance and nature of interactions, and then differentiate between connectivity within a microregion, between adjacent microecologies (i.e. short, medium distanced) and external connectivity? And will I be able to comment on specific types of interactions such as sea connectivity, among harbours and their hinterland, and the connectivity with Rome.
- Could change in connectivity be related to changes in and amongst microregions (e.g. changing microstrategies, redistribution strategies, geo-politics, spheres of interests) and/or to environmental changes?

8.1.2 *The synthesis*

8.1.2.1 *The longue durée*

The long-term perspective is one of the strong suits of this study, for it enables me to isolate and examine *longue durée* structures within the landscape. Using Birnbaum's five tasks for an historical Annales' analysis, I defined the following contexts as, in my opinion, the most important and best documented long-term developments in late Antique and medieval Tyrrhenian southern Lazio:

8.1.2.1.A *The physical landscape*

First of all the *longue durée* of the landscape itself needs to be addressed. With its distinct variations in topography, climate, soil potential, drainage and natural communications, the typical Mediterranean landscape of Tyrrhenian southern Lazio offered a great variety of environmental constraints and opportunities for settlement, production, redistribution and communications⁶⁰. In this study many examples of the direct influence of the landscape on human activities within the landscape on the long-term were stipulated. To recapitulate a few: the Pontine swamp and the strongly undulating landscape east and north of Ardea, intersected by many streams, were and are difficult to cross – leaving them virtually void of recorded activities for long intervening periods of time. The Lepine hills above a certain altitude were malaria free and therefore were preferred over the Plain for settlement during the middle ages and beyond. Much of the soils of the Alban Hills were and are highly fertile, rendering it suitable as vital production area for Rome throughout history.

The landscape instigated different and continuously changing human responses throughout history, as was so effectively envisaged by Horden and Purcell. Human adaptations to the environment are usually most visible when acted out in a middle-long-term time scale, subjected to the demographic and economic ebb and flow, like investments in landscape maintenance or changing micro-strategies of food production (see below in the section of *conjunctures*). However, many human activities were performed over long periods of time and should therefore be categorized as long-term structures. Exemplary of the latter are pastoralism, specific technological means of exploiting the agricultural resources, and (albeit hard to prove) polyculture⁶¹. It appeared to be difficult to monitor these structural activities in detail in the current study area, as large-scale fieldwork with due regard for the middle ages has not yet been conducted – unlike, for example in the Biferno Valley and the areas north of Rome.

By analogy with the results of research in other regions, two of these long-term adaptations to the environment may be looked at in more detail: agricultural technology

(i.e. non-industrial primary production) and (transhumant) pastoralism.

Long-term adaptations to the environment: agricultural technology and pastoralism

Barker wrote the following concerning the medieval and post-medieval Biferno valley: “An important long-term factor has been agricultural technology, and the limitations it imposed on what soils could be cultivated, factors in essence unchanged until the introduction of heavy ploughs and caterpillar tractors in the post-war period”⁶². In the studied area too, since Roman times technology changed only little regarding arable and pastoral systems of land use, as was the case in more extensive forms of extracting resources from the landscape, such as gathering, and wetland activities⁶³ notably fishing and hunting, fish breeding, and the exploitation of the forests to harvest construction timber, firewood, chestnuts and tree resin. Such basic (non-industrial) production practices very likely continued until the introduction of the large-scale exploitation of the landscape in the 20th century. Perhaps the only exception to this was (the événement of) the introduction of the buffalo in the early middle ages, which must have had impacted the mid-term pastoral conditions in the Pontine plain⁶⁴.

The environmental circumstances in the studied area were that favourable that pastoral transhumant activities, i.e. involving the regular movement of cattle over parts of the landscape, very likely continued throughout the middle ages, but presumably at a reduced level compared to the Roman period. Before the argument is explored further, I have to stress that there is no direct evidence of transhumance in the research area to be found in contemporary records⁶⁵. However, analogies with other parts of central Italy offer some help. In the Biferno valley pastoralism continued, with its output and size fluctuating in line with the changing economic and political structures of the conjuncture⁶⁶. In Tuscany evidence was found for transhumant activities in the 8th century⁶⁷.

One should distinguish between different kinds of local (i.e. short distance) and regional (long-distance) pastoral strategies, which are known to have coexisted in Roman and sub-recent times⁶⁸. Short-distance pastoralism most likely continued during the middle ages. As was pointed out⁶⁹, its practise has been a consistent element in the Pontine region since protohistoric times, existing long before long-distance pastoralism evolved in Roman times. Given the particular suitability of the coastal areas of Tyrrhenian southern Lazio for winter pasture, one may assume that transhumant interchange with the closest inland mountain ranges continued all through the middle

ages. Regarding long-distance transhumance (i.e. movements at least stretched over a distance of 125 km) the latter assumption is at most uncertain: this is the most complex form of pastoralism, which requires a relative stable geo-political situation⁷⁰.

Not only the degree of political stability is of importance to transhumant systems, the availability of well-functioning markets is as well: “Pastoralists flourish where they can exchange, not just where they can find grazing” (Horden & Purcell)⁷¹. Bearing this in mind, it is feasible that during late Antiquity and the early middle ages, being times of more difficult travel, transportation and trade, and of lower population levels, pastoralism most likely was less practised. Back then, very likely there was less market volume and demand for sheep and meat, and for secondary products of animals (e.g. wool, cheese) than in Roman times⁷². These markets were more difficult to reach as well.

Transhumance was a particular form of connectivity that created regular lines of interaction across the landscape. As the evidence for transhumance appears to be scarce, one cannot exactly specify these lines regarding this study’s period of interest. Sub-recent *tratturi* may indicate where such axes of connectivity among the micro-ecologies of mountain pastures and winter pastures of the plains might have been situated: e.g. the *tratturo* Liri valley – Amaseno valley – pedemontana zone – marine terraces west of the current town of Latina⁷³ and the pastoral route through the Lepine Mountains which entered the plain near Norba⁷⁴. Furthermore, two Roman and medieval roads in the lower parts of the research area that may have found their origins in ancient transhumance routes: the road Campomorto area – Via Appia (Cisterna area) and La Selciatella⁷⁵. It is likely that more medieval roads started off in the same way. Possibly these roads continued to act as lines of pastoral connectivity throughout the centuries until sub-recent times.

Environmental change

As earlier studies indicate⁷⁶, the landscape is not simply a determinist backdrop of human activities. The observations that were made possible by the time span of this study attest to this: the landscape itself underwent considerable changes, which were not only caused by natural changes of the (micro)climate or environment, but also by human activity. Humans clearly affected their environment in the long run.

A prime example of humans impacting the long-term environment of Lazio is the environmental deterioration in and around the Pontine plain in late Antiquity and onwards, effectively causing large-scale drainage problems and swamping, and gravely enhancing the dangers

of malaria⁷⁷. It is not known at what point exactly these drainage problems had started (Strabo, 64 BC – 25 AD, already mentioned them)⁷⁸. Actual confirmation of this deterioration is provided by the coring-based chronology of the alluvium of the central and eastern Pontine plain⁷⁹. Indirect proof is provided for by the testified abandonment of sites on the Via Appia in the central Plain and the growing importance of the *pedemontana* zone.

This ecological relapse occurred on the thin line dividing the long-term and conjuncture. The deterioration may have been set in motion by human neglect of the medium term, such as the abandonment of drainage systems, in conjunction with a general “natural” environmental deterioration on the scale of the *longue durée*⁸⁰.

- As regards the medium term: The gradual loss of structures of the Roman Empire (see below) at that time must have contributed to this period’s human neglect of the landscape. Contemporary parallels of the human causation of environmental change were found in southern Etruria and in northern Campania. There a correlation was found between decreasing expenditure in drainage works with increased sedimentation and swamping during the late Empire⁸¹.
- As regards the long term: The “natural” ecological change of the long-term does not seem an isolated case of alterations in microclimate or local environment of the Pontine area: environmental deterioration in this period has also been attested in other parts of Italy⁸².

Then again, in the course of the early middle ages the environmental circumstances seem to improve around the Pontine plain⁸³. This may have been a natural process enhanced by human intervention as well. Human intervention was confirmed by records showing economic intensification and new settlement activities⁸⁴, and in new drainage projects, like the digging of the Rio Martino and the 13th century’s Ninfa-Cavata canal⁸⁵. However, throughout the ages drainage and malaria problems in the Pontine region never wholly disappeared; they were not properly resolved until far in the 20th century.

Environmental changes themselves can prompt new constraints and opportunities, and new human adaptive responses⁸⁶. The environmental change of late Antiquity and the early middle ages considerably affected life in large parts of the landscape of Tyrrhenian southern Lazio. Not only the Pontine plain was affected, the increased sedimentation in the plain most likely meant that higher upstream, in the mountain river valleys, erosion had increased. It is feasible that the swamping of the Amaseno valley, which may have led to the transfer of the town of Privernum to its current hilltop position, (re)started within the ecological deterioration of late Antiquity⁸⁷. On

the other hand, one has to remind oneself that there were zones in which likely at most small or even no ecological deterioration occurred, especially in the non-alluvial parts of the landscape, for example in the Alban foothills, in the areas close to Rome and in the mountain upland plains.

8.I.2.1.B *The presence of Rome*

The fate of Rome and its hinterland are interwoven.

“Nobles who were at home in Rome...had major holdings and palazzi in smaller towns, and they had great country estates and fiefs throughout central Italy in places like Palombara, Palestrina, Terracina and Ninfa...So, in a way, a realistic map of Rome would not be bounded by the walls, but rather it would stretch out into the surrounding provinces in a series of superimposed networks following personal connection and the interests of real property”⁸⁸.

The presence of Rome proves to be an important factor of the *longue durée* in the countryside of Tyrrhenian southern Lazio. Throughout the middle ages it radiated its influence in its hinterland; as was stated in this study, the forces present in Rome helped shape much of the developments in the countryside, and used it as a base to expand their economic, political and religious interests. At first the emperor, then (this list is of course incomplete) the papacy, the Roman monasteries, Theodoric, the Byzantines, the Carolingians, and later on the large elite families as well, the Hohenstaufens, and the commune of Rome. “Rome’s network of influences permeates the areas around it, transforming and shaping them in various ways from age to age” (Horden & Purcell)⁸⁹.

Rome also constituted a socio-economic and demographic focal point for its hinterland. It had a constant and intense economic relationship with it. Throughout the middle ages, large parts of the landscape of Tyrrhenian southern Lazio remained an area of interest regarding resources and production for Rome (like wax for candles as reported in the *Liber Pontificalis*), but also as a market for Roman products (Forum Ware, found on a number of sites across the landscape). Out of Rome taxation was administered, at certain intervals, although this must have been done out of other towns as well at some point in time during the high middle ages (e.g. by *castra*, and later on also by communes).

This intense relationship with Rome’s hinterland mostly affected the areas closest to it. There must have been a steady day-to-day movement of people going to the fields, to sanctuaries or to places of exchange, although such mobility is hard to identify in the available evidence. In order to minimize transport costs, economic rationale dictates that supplies must have been delivered from as nearby as possible. The fact that especially the areas

closest to Rome (i.e. roughly between Ostia and Velletri) continued to interact with Rome is best documented in pottery records and in written records, like the *Liber Pontificalis*⁹⁰. The largest of the roads southward nearby Rome (including the Via Appia) and the Tiber river all continued to be frequented during the middle ages (see the map of continued sites and lines of interaction of the 3rd to 14th century, figure 213)⁹¹.

As can be learned from the perspective of microecologies, the relationship with Rome was by no means a one-way-street: the fates of Rome and its hinterland were interwoven. The distinction between towns and the countryside is not the key issue. Towns should be seen as “loci of contact or overlap between different ecologies”⁹², as places where activities from microregions which at times stretched far into the hinterland were focussed and concentrated to a very high degree. The town is not to be perceived as an isolated point of concentration, but may only be seen in the context of its surroundings. One should not consider Rome virtually but factually as being part of the region under scrutiny. That is why Rome and its ramifications should be included in every final synthesis of any in-depth analysis of the countryside of Lazio.

To paint a correct picture, Rome did not have the full monopoly as a force of influence: there were local powers present as well, aside from Rome, that radiated their authority and influence into rural southern Lazio, like local bishoprics, monasteries and local baronage (like the Tusculi and Ceccani), and the communes. Moreover, the eastern Lepine and Ausoni Mountains and Amaseno valley (Privernum) were focussed on the south and east of Lazio – at least during the late Roman period to the 9th century⁹³. Sea ports, like Ostia and Terracina undoubtedly had a wide range of contacts with other parts of the Mediterranean.

However, Rome was and had been the most influential centre in the whole region by far. It filtered and channelled or catalysed the “pressures of a much larger setting”, i.e. it passed on the influences from outside the region into (the microregions of) the hinterland. This external pressure on the City was always present by means of the memory of its former glory and most of all by its position at the heart of the Church. Rome had always remained a centre of international attention: Byzantines, Lombards, Carolingians, the German Empire, the French and others, all strived to control the city. All their different interventions influenced the countryside in various ways.

Although, in the long run, the areas closest to Rome were most affected by Rome’s presence, distance is not the only factor at play. There are two other important factors to

consider. First of all, as was stressed in the discussion of the concept of microregions, interaction (among microregions) was not restricted to specific localities or physical boundaries, but is defined by necessity and demand. The essence of connectivity lies in “the highly complicated and always changing interaction of human productive opportunities”⁹⁴. And secondly, the effectiveness of interaction may stretch the radius of connectivity⁹⁵. This is specifically the case for overseas connectivity, for which Lazio had, and has, a lot of potential.

Therefore, Rome’s interaction with other microregions could reach very far, in order to meet the town’s demand for supplies, or to secure control of vital parts of the region. This is why the relatively distant but strategically vital town of Terracina constantly remained in contact with Rome (among other things as a place of special interest to the papacy) throughout the middle ages⁹⁶. This contact was probably mostly facilitated by sea traffic. And connectivity by sea could reach out to far more distant places. It is known that the cities of Ancient Rome and medieval Istanbul had dispersed “hinterlands”, reaching far into Italy and Turkey and way beyond. Grain transports by sea and caravans (i.e. regarding Istanbul) accommodated these cities over large distances⁹⁷. In Rome’s case its range of redistribution (i.e. of grain) reached all the way to Egypt, possibly until the 7th century⁹⁸. Other late Antique and early medieval overseas production areas serving Rome were Sicily, Sardinia. Actually, the gradual loss of these overseas areas in the course enlarged the importance of the direct surrounding countryside of Rome. Thus, the hinterland of Rome effectively was reduced.

The current study confirms how the nature and the intensity of the interaction between the City and the countryside constantly changed on the medium term waves of socio-economic and political cycles. This will be treated in this chapter in more detail subsequently as a part of the exploration of conjunctures (8.I.2.2).

The influence of Rome: delayed and aberrant developments

The presence of Rome had a major influence on the character and pace of developments in Tyrrhenian southern Lazio. As was stated throughout this study, major developments frequently impacted the researched area later on, or sometimes did so anomalously, compared to other parts of Italy:

Late involvement of the elite

The elite became involved in the economic and political affairs of the countryside of the research area in the 10th century. This was rather late in comparison to

other parts of the Italian peninsula, where from the onset of Carolingian involvement in Italy competing local landed aristocracies were established, particularly in the Lombard-Carolingian kingdom. One may distinguish two factors that may have contributed to this belated elite involvement. In Rome (as was the case in Naples and Benevento) the elite continued to be more narrowly linked to the City⁹⁹. And the Church would dominate the countryside of the Papal States until the late 9th century, leaving little room for interests of other parties.

Late development of rural monasteries

The number of rural monasteries had been small until the 10th century. The first monastic registers had not been available until then¹⁰⁰. This contrasts with the Lombard and Carolingian ruled areas in other parts of the Italian peninsula, where the number of rural monasteries had already been growing from the 8th century onwards¹⁰¹, some of which had acquired huge territories¹⁰². No late Antique/early medieval large rural monastery was to be found in Tyrrhenian southern Lazio, unlike in the Sabina (Farfa), in eastern Lazio (Subiaco) and in southernmost Lazio (Montecassino). It is quite feasible that this lag of monastic life was caused by the dominance of the papacy and the strong monasteries of Rome. These monasteries controlled (and owned) large parts of the countryside all through the early Christian period and the early middle ages¹⁰³. The presence of strong suburbicarian bishops (e.g. of Ostia and Velletri) perhaps added to this. Moreover, the absence of a rural elite implied that no large investments were made in monasteries, as opposed to the Carolingian elite that had done so in several large monasteries, such as Farfa.

The curtis was absent

Another deviation from the general picture of central Italy is the near absence of the *curtis*, the newly arisen nucleus of production and storage in the 8th and 9th centuries. *Curtes* are absent in the current study area, with the exception of Dragoncella (OLIMsite 391), referred to as *curtis* in 827, and Morena (OLIMsite 304), listed as such in 962 and 992. This absence may be correlated to the dominion of the pope as well, who exerted direct control over the countryside and its production through the *domusculta* estates. Another factor explaining the absence of the *curtis* may have been the lack of rural monasteries until the 10th century, which elsewhere on the peninsula were involved in the developing of many of the *curtis* centres of the 8th and 9th century¹⁰⁴. Another factor involved in the absence of *curtes* may have been the fact that the elite was focussed on the city of Rome (as in the Naples region)¹⁰⁵: competing local landed aristocracies are deemed vital in the formation of *curtis* centres.

Incastellamento was delayed

Incastellamento started rather overdue in comparison to the Sabina and the Tiburtine area – be it only by half a century – in the second half of the 10th century. The reasons for this are quite unclear; *incastellamento* seems to have evolved in the same way as in the northern and eastern parts of Lazio, whilst the same parties were involved and with castra predominantly being found in the mountainous areas. However, the absence of large rural monasteries, that were very active in the period of *incastellamento* of the Sabine and Tiburtine regions (Farfa and Subiaco), may have influenced the pace of incastellisation¹⁰⁶. Another factor that might have mattered may have been the absence of nobility connected to the rural sees, which was very active in *incastellamento* in other parts of central Italy, like in the Sabina¹⁰⁷. The only documented exception to this stems from Velletri: its see and local nobility was jointly involved in the Castrum Vetus.

Late development of free communes

The presence of Rome influenced the pace of development of communes as well. Independent communes developed in Tyrrhenian southern Lazio from the late 12th century onwards, i.e. almost a century later than in northern Italy (with the exception perhaps of Sezze). The exerted influence of the pope in the research area was most likely the main cause of this belated development: the pope actively opposed communes in central Italy and in Rome¹⁰⁸. Early large independent maritime communes (i.e. city states) such as Venice, Pisa, Amalfi and Genoa were absent in the wider hinterland of Rome. The Roman commune developed only from the middle of the 12th century onwards. Tivoli and possibly Sezze in the 10th century, Viterbo in the 11th century, Nepi in the early 12th century were among the few early communes known in the surroundings of Rome.

The presence of Rome and the influence from its forces from within most likely caused these deviations from the developments elsewhere. I believe there were three possible main factors involved. First of all, exerted out of the City, control may have been more direct than in other (northern and eastern) parts of the City's hinterland. Influential churches and monasteries and, most of all, the papacy, dominated the countryside of Tyrrhenian southern Lazio throughout the early Christian period and the early middle ages. As can be exemplified by the existence of the papal *domuscultae*. The second key factor might have been the seemingly absence of an active Carolingian elite during the 8th and 9th century. Another possible factor involved might have been the relative effectiveness of connectivity, by means of a still functioning road system and fairly easy marine communications. Perhaps such

effectiveness was greater in Tyrrhenian southern Lazio, although concrete comparative data are yet to be found. Striking is the contrast with other intensively explored parts of the eastern and northern hinterland of Rome, located at the same distance from Rome: i.e. the Tiber Valley (Tiber Valley Project) and the Tiburtine and the Sabina (Toubert 1973). The Sabina, where the monastery of Farfa is situated, seemed more in line with the major developments on the Italian peninsula regarding the evolution of monasteries and the *curtis*. Moreover, *incastellamento* started earlier in the Sabina and Tiburtine area than in the current study area. However, it is not known if such contrasts existed in the area directly north-west of Rome, i.e. between the coast, Lago di Bracciano and Civitavecchia, as there are no large-scale project results available for comparison regarding these areas.

8.1.2.1.C The end of Roman social-economic and political structures

The end of the Roman Empire inevitably changed society structurally. The stable Roman socio-political and macro-economic and administrative (tax) structures gradually faded, causing major transformations in the ways people lived, in the economy, in population levels, in settlement patterns and in the physical landscape, by a lack of maintenance, as was witnessed throughout this study. However, one has to be aware of two things. First of all, change did not come that suddenly. And the collapse of Roman structures was not the only factor initiating the changes taken place in late Antiquity. Natural environmental deterioration, the aggressiveness of external forces and the rise of the Church all added to a cocktail of causes leading up to structural change. A treatment of the complex question of an exact causality is out of reach here, but it is beyond any doubt that the end of the Roman Empire contributed a great deal to the change in the physiognomy of settlements and cities, population decline and contraction, and the disrepair of infrastructure¹⁰⁹.

The end of an integrated Roman economy meant that parts of the landscape were gradually cut off from interregional exchange. Most of the activities in the landscape became focussed on its direct area. The dwindling of the Roman state and the end of the *Pax Romana* signalled the dawn of a period of great insecurity, with invading troops causing serious threats to the people working and travelling in the countryside of southern Lazio – certainly throughout the 5th and 6th centuries. However, as has been demonstrated in northern Lazio, the end of Roman structures usually involved slow transformations; it did not involve sudden collapse¹¹⁰. Indeed the Roman Empire would have a long-lasting after glowing impact on the landscape. Walls, roads, centuriation patterns and ruins formed permanent

remnants that would be used and re-used over the centuries. But in terms of settlement there was some continuity detectable as well: habitation on a lot of former Roman sites continued until the 6th and 7th centuries, on some sites even throughout the middle ages (see 8.I.2.1.D). Production and redistribution for the city of Rome in some parts (certainly when close to the city) undoubtedly continued – although as was stated before it proved to be difficult to comment on this decisively from the available evidence. Even administratively some things stayed the same for a lengthy period. To mention but a few: imperial estates were transformed into Church estates. There was juridical continuity between the Roman *pagus* and the medieval church community¹¹¹. The territories of dioceses were often defined by the borders of Roman municipalities (i.e. *municipia* or *civitates*)¹¹². The Ostrogoths would keep the main elements of the Roman tax system intact. Central taxation was revived by the Byzantines¹¹³.

On the whole, in the available evidence, continuation of Roman elements in the landscape is harder to be discerned than change: i.e. local production (e.g. subsistence, pottery), small-scale and-short distance redistribution and contracted settlement are mainly out of sight in the current study area, as published large-scale fieldwork projects (i.e. surveys in combination with excavations) with a medieval focus still are lacking – in contrast to southern Etruria, the Tiber Valley, northern Campania and the

Biferno Valley. In those regions continuity (and transformation) is better documented and therefore better understood.

However, there are however two elements in Lazio's landscape which might serve as markers for continuity, i.e. sites and lines of interaction, which will be discussed in the next paragraph.

8.I.2.1.D Continuity within the landscape: sites and connectivity

The current lengthy research period enables an analysis of human actions and interaction in the long-term. Besides structural socio-economic or geo-political developments, such as the physical landscape and the presence of Rome, there were spatial elements of the landscape that acted on that wavelength, as they continued throughout the study period: sites (or clusters of sites) and lines of interaction / connectivity (i.e. communication, redistribution and mobility) within the landscape.

Continued sites

To start off with a first manifestation of continuity: a number of sites, or clusters of adjacent sites (which succeeded each other or existed in symbiosis), showed continued activity (i.e. building, living, trading, interests) throughout the examined period: S.Andrea in Silice - Le Castella, Torre Astura - Astura settlement, Castra Albana, Fondi, Fossanova, S.Magno, Lanuvio, Norba - Norma, Ostia

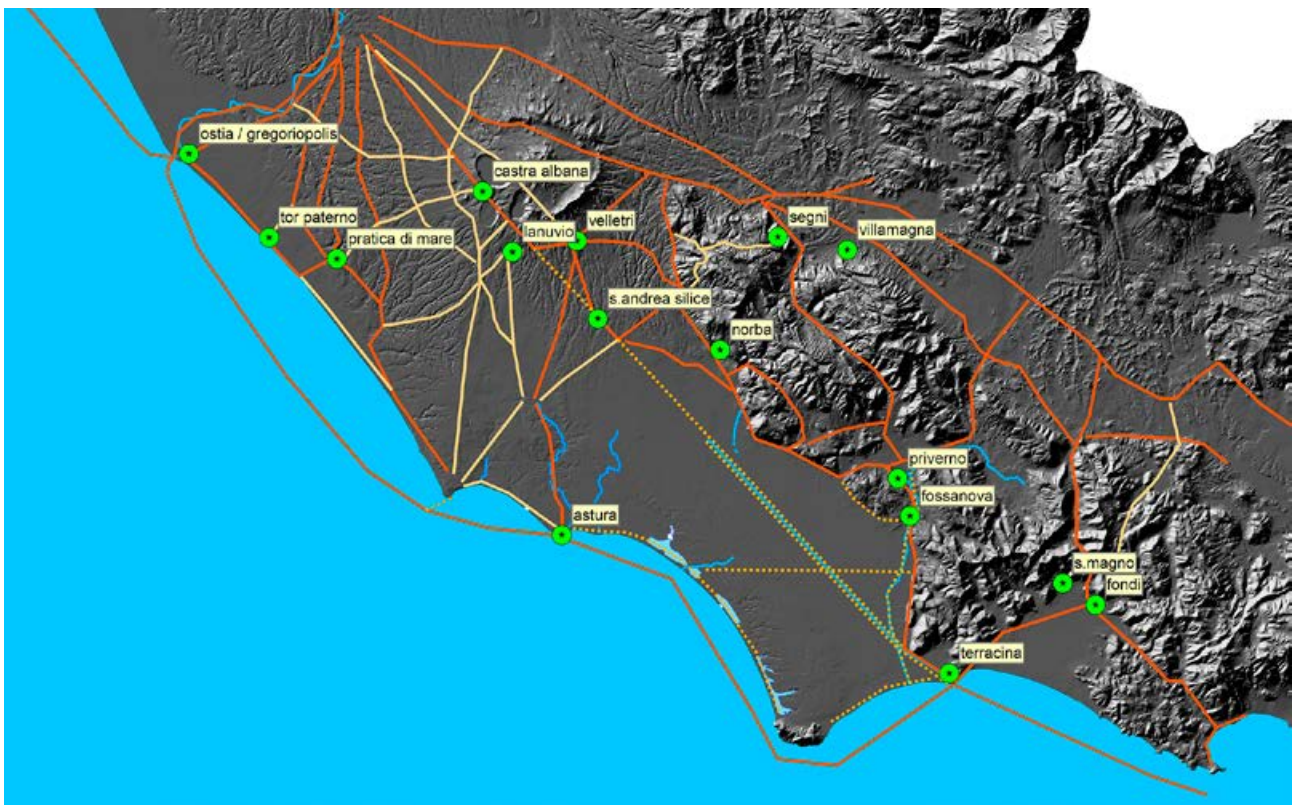


Figure 8.2. Continued sites and lines of interaction of the 3rd to 14th century. Routes: orange denotes a confirmed / very likely route, mango depicts probable routes, the dotted lines represent possibly continuously frequented routes

- Pianabella - Gregoriopolis, Pratica di Mare, Privernum
 - Priverno, Segni, Terracina, Tor Paterno, Velletri, Villamagna. All these sites very probably had been occupied continuously since (pre)Roman times until the end of the period that has been analysed for the purpose of this study, being the 14th century¹¹⁴.

I plotted these sites on figure 8.2. Obviously, this picture is not a complete one. Continuity should have been a more widespread phenomenon than I was able to demonstrate. Its partial invisibility is a question of (lack of) scholarly attention or the (un)availability of evidence¹¹⁵. Generally, most scholarly attention goes to the largest and best-documented sites, such as all the above mentioned sites. Similarly, phases of activity at a number of sites could have been overlooked because the inhabitants lived on subsistence level, remained unrecorded or merely left non-monumental or non-diagnostic archaeological remains – as was learned from the results of studies elsewhere¹¹⁶. The reality of the factor of the degree of scholarly attention is exemplified by the site of Villamagna, which only recently was excavated intensively, proving that it had been continuously occupied¹¹⁷.

Despite some reservations and biases, there are observations to be made from this overview of continued sites:

- Defences were a general element of continued sites. All sites deployed defensive activities at a given point in time during the studied period. However, defensibility is not unique for these sites: many other sites show evidence for defensive measures.
- Most of the sites with continuous activities were, or would develop into, seats of a bishop, or would become strongly connected to one (e.g. S.Magno to Fondi; Villamagna to Anagni¹¹⁸). It seems that the presence of a local bishopric increased the chances for continued activity to be recorded, although it provides no guaranty for continuity: the sites of Antium and, possibly temporarily, Tres Tabernae were abandoned at some point. Moreover, one should be aware of the factor of chance regarding the availability of sources as a factor in understanding continuity: the bishoprics are always well-documented.
- All sites were well-connected, via roads and by the sea. In fact, all these sites were located on or near the three large continuous tracts of the middle ages southwards from Rome: the Valle Latina, the Appian – pedemontana route and the coastal (sea) route¹¹⁹.
- The fact that all continued sites were relatively large and easily connectable seems to corroborate Arthur and Patterson's conclusion (1994) that size and economic viability (i.e. means and populace to uphold a (local) market) and trade possibilities (e.g. harbours and roadside locations) were key elements for success

and continuity of settlements throughout the Dark Ages. However, once again: I, and other scholars before me, may have missed out on smaller, less visible sites.

- One cannot be entirely certain in what form this continuity presented itself. It is quite unlikely that these sites remained fully urbanised centres; most likely continuity manifested itself by concentrated activity around a church (see below¹²⁰) or at a small fortified location. Without excavations scholars cannot comment with confidence in what way sites survived, or on settlement planning, on size and hierarchy, nor on the economic background for continuity, like craft specialisation, market systems or surplus levels¹²¹.

While most of the common elements of these sites were not unique and there were many things not to be seen, another general observation can be made: All these continued sites were of regional economic and/or socio-political significance, in Roman times¹²² and throughout the middle ages as well. The fact that their importance reached beyond their direct hinterland may be deduced from the traded goods found there (like at Astura, Ostia, Terracina, Priverno, Norba), from their historically documented function as production or distribution centres (such as was documented for Massa Normas, Fogliano, Le Castella, Ostia and Astura) or as religious centres (e.g. the sees of Castra Albana, Ostia, Terracina, Fondi, Priverno, Segni and the monasteries of S.Magno, S.Andrea in Silice, later of Fossanova and Villamagna) and from the manifestations of interests at these sites by parties that were elsewhere-based. All these sites were located on the main (Roman and medieval) routes, and therefore must have been easily accessible and had themselves easy access to regional markets.

From the perspective of Horden and Purcell: these sites were all foci if not centres of microecologies, and interacted with other microecologies nearby or further away (of which Rome usually was one). What is seen here may be considered hints of stable elements of microregions and between microregions: although microregions changed all the time, and are therefore difficult to grasp, their mechanisms, coalescence and connectivity may display undeniably persistent patterns, correlated to the stable "natural" landscape and the constant factor of the presence of Rome.

Most of the settlements involved must have acted as gateways. First of all the ports which are places of redistribution, portals between different microecologies – often at large distances overseas¹²³: e.g. Ostia, Astura and Terracina¹²⁴. But most of the continuous inland sites may have acted as gateway sites between different systems of redistribution as well¹²⁵ - in fact, most of the inland sites were located on the edge of a mountain range and a plain, and never at the centre of one of them. Among other

sites Fondi, Fossanova, Norba, Velletri and Terracina might have connected the ecology of a plain with that of the mountains. The town of Terracina needs some additional attention. Its importance as a gateway is beyond any discussion: it continuously acted as an international¹²⁶ large marine port and control and/or end point (on a narrow passage) of several large inland communication routes (i.e. the Via Appia, the pedemontana route and the ancient trade route from the Amaseno Valley¹²⁷). However, Terracina's original success might be explained by its geographical position on the edge of the sea and the mountains. Horden and Purcell observed that mountainous locations which touch the sea often were rendezvous points of various types of communications all across the Mediterranean¹²⁸. Unfortunately, little archaeological (e.g. pottery) research within Terracina has been published to shed some light on the circulation of late Roman and medieval goods via the town and its port.

Continued lines of interaction

Of the mentioned sites (depicted on figure 8.2) one can be fairly certain as to their continuation, as these remain discernible in Lazio's soil or in writing. The map depicts a second category of long-term elements in the landscape as well: the major axis of communication, redistribution and mobility. Or, translated to the perspective of Horden and Purcell: the major lines of connectivity. Again, this overview of long-term connectivity should not strive for completeness, and its processing should be tentative as well. Why? First there is the chronology of evidence. All these lines of interaction originated in (pre)Roman times. While the archaeological (e.g. dated pavement, material proof for activity on sites along routes, functioning bridges) or historical (e.g. travel accounts, listings of routes, recorded sites along routes) evidence seems to suggest that the depicted routes continued to be frequented throughout the middle ages, the available data for none of them is without gaps, regarding all centuries under examination. In addition, the evidence that could be found usually is only valid for some parts of the tracts involved. With the exceptions of the Via Appia – pedemontana route, the Valle Latina, the Tiber and the marine routes, one cannot be certain if all depicted continuous tracts in fact were constantly frequented over their entire lengths. Secondly, the list of continuous lines of interaction within the landscape is undoubtedly incomplete as it must miss out on a number of small scale and more subtle forms of connectivity. Horden and Purcell's study show that the major (marine and land) roads are merely the tips of the icebergs of interactions between parts of the landscape at any given point in time; connectivity entails all interaction of social, economic and political networks within a landscape. Small-scale connectivity may have been continued as well, for example by means of

transhumance *tratturi*, mountain passes or inland routes to (small) harbours. Transport across rivers or lakes may have continued unimpeded as well¹²⁹.

Now let's focus shortly on marine connectivity: as was argued this is the most enduring form of interaction among microregions. This is especially the case for Tyrrhenian Lazio, where easy access to the sea has been a continued dominant element in its history¹³⁰. Lines of redistribution and communication along the coast and from port to port must have continued all throughout the studied period. Several of these lines are depicted on the above map (figure 8.2). Conclusive evidence of this continued marine connectivity was found at Ostia/Portus (at the mouth of river Tiber), at Terracina and Astura, and at Gaeta. Although the Tyrrhenian coast harbours only a few natural harbours, it is rather likely that a number of smaller, less well-documented, harbours received goods during the studied period as well, and perhaps some of them did so continuously. Antium, Fogliano and S.Felice Circeo perhaps could be examples. The case of the small and seemingly off-beat harbour of Oropos, which Horden and Purcell identified as to have been an important harbour for Athens, raised awareness of the importance of small landings and less obvious anchorages to connectivity¹³¹.

Although the list of continued lines of interaction may not be complete, the discussed larger routes are in fact far more likely to have been continuously used than any one of the myriad of intrinsically changing small-scale lines of connectivity that must have ran across the landscape during the middle ages. These larger routes were constructed with long-lasting hardware and techniques (i.e. Roman roads were very well-built; a few harbours remained –partly- useable) and often remained appealing for settlement (i.e. given the abundance of proof indicating continued or revitalised activity along them).

The Pontine coast: less activity than in other parts of the studied area

Continuity within the landscape could also be found in marginality. Throughout the middle ages, the Pontine coast from Ardea southwards until Terracina, and especially the large coastal region south of Astura, has produced less evidence for demographic, economic and geo-political activity than other parts of the landscape. In late Antiquity and the early middle ages fewer settlements and less ecclesiastical interests are documented here than elsewhere. In the high middle ages just a few new significant villages and ports developed, and all did so later than in inland areas. *Incastellamento* was feeble and delayed (with the exception of the early Fogliano castrum, which seems to have faltered soon). The only bishopric here (i.e. Antium) faded out soon. In addition, there were just a few monasteries in these coastal parts. To compare: other

marginal areas, such as the central Lepine and Ausoni Mountains, hosted far more activity throughout the high middle ages (i.e. from the 11th century onwards). The region's exploitation by external parties since the 10th century (by an elite family from Velletri and by faraway important monasteries) of the Pontine coast seems evidence of the lack of economic activities by strong local (monastic) communities.

There are several factors that may be identified as the cause of this marginal state of the coastal area during the middle ages. To me the most important are the local landscape (ecology), the particular bad accessibility from the coast to the interior, and the coast's relative vulnerability. When starting with the ecological factor mainly the abundance of water bodies needs to be mentioned. The area's waterlogged condition, the danger of malaria, and in general the region's environmental instability, must have constituted major obstacles to intensive exploitation and population growth, especially east and south of Astura. The natural geological built up of the coastal landscape, which offers little natural shelter, is a major cause of the rather small amount of harbours that evolved to any importance (i.e. at Anzio, Astura, S.Felice, later Nettuno). A second ground for the lack of large ports and settlements seems the absence of a direct hinterland to thrive on. The waterlogged areas of the Pontine basin and the Astura basin / Campomorto¹³², but also the undulating landscape east and north of Ardea, being intersected by many streams, made interaction with the inland difficult. As one learns from Horden and Purcell, a hinterland appears vital for ports to thrive, as a well-developed hinterland fuels commerce¹³³. In other words: the ports of the Pontine coast could not act as gateways between different overseas and inland microecologies¹³⁴ – as Ostia and Terracina could throughout their history. The exception to the above was the Anzio-Astura area which seems to have had a smoother connectivity with the interior parts of the landscape. A regular connection between this coastal area and the Alban Hills was reported since Roman times. It is historically linked to the Alban Hills and may have continued to be so, acting as a gateway for Byzantine interests (i.e. at Astura) and later for the elite family of the Tusculi (via Nettuno). It is certainly no coincidence that here two settlements connected to a harbour thrived both in the early (Astura) and high middle ages (Astura and Nettuno).

The factor of (in)security and danger of raids most likely made the coastal area less attractive for settlement (also for monasteries), particularly during the 5th and 6th centuries when foreign troops crept about, and during the period of the Saracene raids (during the 9th and 10th centuries) – certainly if there is some truth in the idea that population centres were targeted as Fundgrube for slaves¹³⁵.

8.1.2.1.E Mentalités

The researched period also witnessed critical changes in long-term aspects of *mentalité*, i.e. collective systems of belief, perceptions, attitudes which “reflect and can transform human life” (Barker)¹³⁶. Such ideologies or mental frameworks are usually very difficult to capture from material culture and in historical documentation – sadly this study is no exception in respect of this. However, mentalities had large effects on daily life in the countryside of Tyrrhenian southern Lazio of our studied period or, having said that, on any other period. In my view, the following four items comprise the most important long-term mental frameworks that evolved throughout the middle ages:

The Christian faith

The Christian faith gradually replaced Greco-Roman polytheism and won dominance from the 4th century onwards. The important role of the Christian church as a *mentalité* for the studied area and period is an obvious one: it would emit a continuous strong religious as well as worldly influence on the hinterland of Rome¹³⁷. The results of the current study corroborate the notion of earlier studies that initial expansion of the Christian church took place along the main routes out of the main urban centres (i.e. regarding the current study area: out of Rome, and probably Terracina). However, it is not exactly known how the christianisation of the mountainous areas happened. The evolving Christian Church has been well-documented in a large number of written sources. In this study's area of interest the triumph of Christianity was materialised best in the building of Christian churches and in the conversion of Greco-Roman temples into Christian churches¹³⁸.

The development of a feudal society

Alongside the growing power of the elite from the 9th and 10th centuries onwards, feudal arrangements evolved. The development of a feudal society proved to be a clear breach of the collective mindset of the previous era, in which lord-vassal vassalages were not common. In a system of feudalism, the elite and free men (i.e. peasants or townsmen) (and initially mostly voluntary and by mutual agreement) organised themselves in a social construct, which involved protection and support by the lords in return for physical labour and military service¹³⁹. *Incastellamento* was an intricate part of feudal society in Italy.

The development of (semi) autonomous communes

With the growth of the political weight of the cities during the 10th and 11th centuries, the importance of the urban elite grew on the Italian peninsula. In this period the first signs of the imminent ‘communal age’ would be witnessed,

which would flourish from the end of the 11th century and onwards across most parts of Italy¹⁴⁰. These developments show the changing attitude of local peasants and citizens, and of the local aristocracy towards the traditional dominance of the State. As the results of this study show, communes in Tyrrhenian southern Lazio would develop later, from the 12th century onwards, in an area restricted to the edges of the Lepine and Ausoni Mountains and along their foothills.

Slavery

The keeping and trading of slaves is as much a socio-economic act as it is part of a *mentalité*. The nature of slavery was subjected to change during the analysed period. Although in rural parts slavery was largely replaced by serfdom during the middle ages, in the urban context domestic and artisanal slavery continued until the 17th century¹⁴¹. Italian slave merchants were active all over the Mediterranean during the middle ages. Venice was documented as being an important slave trading town since the 8th century. Later on Amalfi and Genoa would develop into slave trading ports as well. Italian people were not only involved as actors in slave trade, they themselves were victims of slavery as well. Slave-raiding and exchange was a common practice of the classical and medieval Mediterranean¹⁴². As stated, many Saracene raids probably were primarily intended to capture as much slaves as possible and therefore targeted larger population centres¹⁴³. This may also have been the case with the raids recorded in the studied area (846, 872-3 and 877) which not only affected Rome and the coast but the inland areas situated near the main roads as well.

8.I.2.2 Conjonctures

Here the main attested conjonctures are treated. The analysis of structures of the medium term is subdivided in two parts: at first the generic tendencies or most common repeating cycles of human adaptation to the medium-long term are described (8.I.2.2 A), followed by a chronological overview (8.I.2.2 B).

8.I.2.2 A General tendencies

Conjunctural changes of the nature and organisation of production and redistribution

Over the long run, arable and pastoral systems of land use, and other forms of extracting resources from the landscape, technologically barely changed since Roman times¹⁴⁴. However, continued technological practice does not mean that things did not change at all: in the medium term the “nature and organization of agricultural production have changed fundamentally and repeatedly, often in close harmony with demographic cycles though also in response to external economic forces.” (Barker)¹⁴⁵. These

medium-term adaptations of primary production are at the heart of the microecological concept which described the interactions of opportunities that go with these adaptations¹⁴⁶. As Horden and Purcell pointed out, production and redistribution were always driven by the opportunism that is so typical of the changing human responses to their environment¹⁴⁷.

This does not solely apply to farming, but to more extensive forms of production and livelihood such as the exploitation of forests, animal husbandry, pastoralism / transhumance, wetland production (i.e. fishing, hunting and pisciculture¹⁴⁸) as well, yet also to the production and redistribution of non-edible goods (e.g. metals, textiles, pottery and salt), to slave trade and to banditism. All these examples of primary production and redistribution were likely continued from the Roman period onwards yet were continuously changing regarding their execution by the sways of the medium term.

Wetland and woodland production were among the most characteristic primary production practices of Tyrrhenian southern Lazio. Both were flexible forms of production, particularly suitable within the framework of constantly changing microstrategies. As Horden and Purcell stated: “the areas that we often dismiss as least hospitable, or perceive as residual fragments of a landscape that was once hostile to humanity, are among the most diverse and complex portfolios of complementary productive opportunities. They offer, in most dramatic fashion, the opportunity of harnessing natural variety to buttress against normal risk. Woodlands and wetlands are prime examples”¹⁴⁹. Wetlands are diverse and therefore offer flexibility in drawing resources. Throughout history people made use of Lazio’s wetlands in innumerable ways. The marsh economy of the Pontine area attracted people because of its opportunities of gathering, hunting, fishing and fish breeding, lumbering, extensive agriculture and pastoralism of course¹⁵⁰. Exemplary for the attraction of the Pontine wetlands to production were the continuously changing monastic concessions – and as a consequence continuously changing redistribution strategies – in regard of fish production in the Pontine wetlands all through the high middle ages¹⁵¹. The importance of the exploitation of Lazio’s forests can be demonstrated by several anecdotes of local woodland practices (e.g. on the famous chestnuts of Norma and Segni) and in a number high medieval treaties on the rights of the use of forests¹⁵². In medieval northern Lazio forest margins were cultivated in a wide variety, as Toubert mentioned, with its most ambitious effort resembling gardening¹⁵³.

Animal husbandry and pastoralism must have been fairly common practices in Tyrrhenian southern Lazio throughout the middle ages as well. Animals can ensure flexibility when a swift change from one production

(micro)strategy to another was necessary for survival. Animals could be the primary source of existence, or could be kept as a by-product. As was learned from Horden and Purcell, animal husbandry often existed in combination with agricultural cultivation. Animals are mobile to a certain extent, depending on the species. However, the main advantage whenever changing microstrategies occurred, is the fact that animals could be redeployed, more than them being mobile¹⁵⁴. Similar as in the Biferno valley, the output and size of transhumant pastoralism may have fluctuated consistently with the changing economic and political structures¹⁵⁵, but the environmental circumstances were thus favourable that pastoral transhumant activities likely continued (possibly at a lower level), as was already discussed¹⁵⁶. In respect of long-distance pastoralism this can only be stated with less certainty. Long-distance pastoralism requires a stable geo-political situation over large parts of the coast and the mountainous hinterland. This proved not always to be the case during the middle ages. Periods of relative regional political equilibrium might possibly have been the Byzantine era and from the introduction of the Papal States onwards. However, it proved to be impossible to determine if the complicated political landscape of the high middle ages did permit stable transhumance routes, and what routes these in reality were.

Conjunctural changes in settlement and connectivity

Change in settlement is the most common, or at least the best visible, element of human adaptation in the medium-long term. Settlement is well-presented in this study's cumulative database and therefore should be given considerable attention in my analysis - although I am fully aware of the potential biases present within it, and of the fragmentation of the information available about the complex cycles of demographic expansion and contraction. Settlement transformation during the studied period involves contraction (i.e. within towns), expansion (e.g. around medieval suburban churches), abandonment, reoccupation, new foundation etc. Changes of settlement patterns will be treated in detail in the chronological overview that follows (8.I.2.2).

Connectivity is affected by conjunctural change as well. As described in the overview of the *longue durée*, there are several major lines of connectivity, and gateways (i.e. connecting nodes between microecologies), that may have continued to function during the studied period. However, as Horden and Purcell convincingly argued, connectivity often changes with the conjuncture: strands of connectivity continue or ebb away through time alongside the mutation of the microecologies and their coalescence¹⁵⁷. As research across the Mediterranean shows this does not only hold true for smaller lines of communication (such as along mountain crossings) but rather often for the main routes across the landscape as well. As

a result, the main infrastructures of classical times more often than not differ from the current ones, as they do from the ones of prehistoric times as well.

In what way is this notion of constantly changing connectivity reflected by the current evidence? First of all, I can only comment on the larger routes, as small-scale interaction, let's say "mule track connectivity", proved hard to grasp during this study. When focusing on the main routes it turned out to be as hard to prove continuity of connectivity¹⁵⁸, as it was to paint a general picture of the effect of change on connectivity.

The most conspicuous recorded changes of connectivity were the abandonment as a main route of the Via Appia in the Pontine plain, and the growing importance of the pedemontana route, probably during the 6th or 7th century, the rerouting of the main route from Rome using the Sacco valley from the Via Latina to the Via Labicana in the course of the middle ages, and the rise of the new *highway* from Rome passing through Marino - Velletri - Cisterna in the 13th century. And a section of the Via Severiana may have been replaced by an inland route via Pratica di Mare, although this assumption remains tentative at best.

Most of the routes that were abandoned, or came to occupy a lower position in the hierarchy of roads and therefore disappeared from our view, would be reinstated as main routes at some point, such as la Selciatella (probably abandoned in the early middle ages, to be used again in the high middle ages), and the Via Appia in the Pontine plain (i.e. new evidence of activity suggests local traffic from the 9th / 10th century onwards). Others were given alternative local tracts roughly following the old routes, such as the Nettunense, the Via Latina and the Via Ostiense. Most of the documented new roads that were created in the high middle ages were local bypasses, as can be seen along the Via Trigatoria and the western Ardeatina, and local routes to and from new settlements as Nettuno, Gregoriopolis, Fusano, Priverno. Shifts in (the perceived) importance of the ancient Roman roads seem to be epitomised by the fact that from the early 9th century onwards, the names of the old Roman roads started to disappear from the records - although this did not imply a total abandonment. Sometimes new names were given to the old Roman roads: the "Via Latina" was renamed the "Via Casilina" in the high middle ages.

In conclusion, from what the evidence allows to conclude: in case of the main routes in the studied area, abandonment was often only temporary in nature (that is, if one would call a few centuries temporary). Mostly change in connectivity denoted a rerouting of the *highways* towards and from Rome, or the use of local tracts which ran parallel to the old tracts.

What was the impetus change of connectivity? The foundation of new settlements often involved the need for new local roads to be built. The environment often played a key part in change as connectivity is “constructed from the accidents of the physical environment by human endeavour” (Horden & Purcell)¹⁵⁹. There are several regional examples of such medium term adaptations in which the environment played a role, like the abandonment of the Via Appia in the Pontine plain, and the growing importance of the pedemontana, the silting up of the harbours of Antium and Ostia or the decay of the Roman Rio Martino. Change in connectivity also occurred based on medium-term geo-political and socio-economic developments that caused changes in and between microregions. The 13th century’s development of the new main route southwards from Rome via Marino and Velletri is a good example of such changes.

With the changing coalescence and connectivity among microecologies and the wax and wane of economic fortunes and political significance of individual parts of the region, new gateways emerged. Examples of these new gateways in the current study area were Sermoneta (with a small port on the river Cavata), Cisterna, Nettuno and Marino, and Ceccano – a settlement on the Sacco plain that became the focal point of the extended sphere of influence of the Ceccani in the Lepine Mountains.

Interesting aspects of adaptability in connectivity were the so-called “wandering ports”. As research across the Mediterranean shows, coastal gateways (and connected storage locations and outhouses) were mutable in nature, adapting and relocating to a nearby spot if doing so proved to be necessary or more efficient¹⁶⁰. The main factor that induced this relocating seemed to be environmental change - mostly caused by a river at its mouth. Human response to economic and demographic changes within or between the microregions might have been a factor as well. In the current study area there are several examples of such wandering ports: i.e. Portus in the 4th and 5th centuries took over Ostia’s role as the main port of Rome¹⁶¹. In the early modern period the role of Portus was assumed by Civitavecchia¹⁶². Antium was ultimately replaced by Nettuno as main port of the cape of Anzio area. The role of Terracina as the main port for the wider Velletri area may have been taken over by Astura, when the Pontine plain route became inaccessible in the 6th or 7th century¹⁶³.

Changing geo-political and economic interaction with Rome

As has been argued (8.I.2.1.B), interaction of Rome and its surrounding countryside had been and is of all times, and therefore is an aspect of the *longue durée*. My study shows how the nature and intensity of the interactions

with Rome constantly changed over the medium term waves of socio-economic and political cycles. One could use the terminology defined in *The Corrupting Sea* as a way to interpret these constant changes: i.e. Rome was at the centre of a multitude of overlapping microregions that stretched far into its hinterland. While microecologies by nature change constantly, so do their interactions (i.e. connectivity) with their surrounding microecologies.

The continuous and fluctuating relationship of Rome with its neighbouring countryside is illustrated by a continuous flow of investments and acquisitions by Roman parties, which peaked in the 4/5th, the 8/9th centuries and the late 10th century (see the chronological overview below). The changes in interaction of Rome and its hinterland are exemplified by the variation of types of production centres used to extract resources for Rome as well. During the 7/8th centuries the Church owned *fundis* in the Colli Albani and Velletri area, papal *domuscultae* evolved in the 8/9th centuries, and *casali* seem to have been the most important rural production centres from the 10th century onwards (see distribution charts, all situated relatively close to Rome)¹⁶⁴.

During late Antiquity, the importance of the surrounding countryside to Rome might have grown, with the collapse of the Roman Empire and the loss of overseas production areas. If one period can be mentioned in which these contacts might have been less intense, especially with the south of the researched area, it would be the 6th to 8th century. By then the regional economy had hit rock-bottom and the papacy had still not become the powerful player it would eventually become (see the next Section 8.I.2.2.B). However, in the areas closest to the City, the intensive relationship of Rome and its countryside would very likely have continued as before¹⁶⁵.

8.I.2.2 B A chronological overview of medium term developments

8.I.2.2 B.1 The socio-economic and demographic transitions in late Antiquity

The signs are unmistakable. The historical, archaeological and environmental evidence clearly shows that the settled landscape of Tyrrhenian southern Lazio was changing during late Antiquity – although in most parts of Lazio’s landscape there occurred no major and sudden breakdown of society, as was thought before. The end of the Roman Empire was a major force initiating change in the region’s society. However, there were other factors involved, such as the rise of the authority of the Christian Church, environmental deterioration and a growing assertiveness of foreign powers. Regardless of the causality of change, an economic and demographic downward trend was set in, which seems to have lasted until the 8th century – although there were local and temporal flares

of economic revival, as will be seen below. As early as the 2nd and 3rd century things had begun to change at a local level. At that time the Fogliano region became marginalised, probably correlated to the environmental deterioration which had already started to affect the wider Pontine plain before that¹⁶⁶. Signs of transformation (or disintegration) are a general decline in the number of sites and the state of disrepair a substantial part of the Roman infrastructure was in. Rome itself began to show major signs of neglect and abandonment, judging from the laws in the Codex Theodosianus, but it is also well visible in the construction history of buildings and in the nature of archaeological assemblages. At that time, other towns were in a ruinous state as well (e.g. Ostia, Privernum). In settlements internal reorganisation and contraction took place from the 4th century onwards, more often than not caused by a combination of economic and demographic wane and/or of defensive need, which necessitated a concentration of people and resources. The decreasing expenditures in maintenance and drainage schemes within the landscape were partly responsible for the environmental deterioration during late Antiquity and the early middle ages.

As the early marginalisation of the Fogliano area demonstrates, during these processes of transition, micro-regional variation was a fact. Some settlements and roads continued their existence as before, while others waned¹⁶⁷. The New Faith firstly expanded along the main arteries out of the larger cities. Most attacks of foreign troops were reported as taking place on the main roads (e.g. the Via Appia) and along the coast; all those parts across the landscape where most defensive measures were taken.

The end of the integrated Roman economy

Some rural parts were cut off from interregional / international trade throughout the 3rd and 4th centuries, as were the tuff hills west of the Lepine Mountains in the Velletri key area and parts of the Sacco valley north of Segni – as attested by surveys of the GIA¹⁶⁸. At that time, bulk traded (African) goods did not reach these parts anymore. This progressive cut-off from cross-Mediterranean trade is the most obvious indication denoting the end of an integrated Roman economy¹⁶⁹. Pottery evidence is by far the best indicator of this (of which ARSW constitutes by far the largest group)¹⁷⁰. All the evidence seems to indicate that this cut-off first occurred in the areas which were “off-road”, i.e. outside of the main arteries, and at a distance from larger settlements and from the coast. In these parts, production and redistribution might have continued mostly merely in the vicinity of the immediate microecology and its neighbouring regions. Connectivity at that time was largely reduced to trade, communication and mobility over short distances. However, significant evidence regarding locally oriented activity is poor,

and, when found, stems primarily from the distribution of locally produced pottery¹⁷¹. Nevertheless in general, one has to be careful in respect of the firmness of assumptions concerning redistribution, as scholars can only be resolute in their statements in relation to the high commercial trade – the bulk transport which is clearly visible in the found pottery. Other forms of small-scale trade might have continued, such as the trade of untraceable, non-diagnostic or perishable goods (e.g. grain, wooden vessels and coarse wares)¹⁷². Travellers might have continued to visit even the most remote parts of Lazio’s landscape. These travellers might have been locals or might have originated from more distant regions, even from overseas areas¹⁷³.

To complete this overview of the demise of Mediterranean high commercial trade: from the 5th century onwards the general decline of imported (north-African) wares truly set all over Tyrrhenian southern Lazio, although these imports were still found in many parts of the researched area¹⁷⁴. African pottery typically found its way the longest to accessible areas (i.e. situated along roads, rivers, the coast) nearby large settlements, until the 7th century at the latest. While parts of the landscape were cut-off from Mediterranean high commercial trade, the coastal ports still provided evidence of the high degree of connectivity that is typical for the Mediterranean. Astura settlement, Ostia and Portus were part of a (new?) trade network that stretched along the coast of Italy between the 4th and the 6th centuries. Until the 7th century, occasionally eastern Mediterranean imports found their way to the coast (e.g. to Astura, Pianabella, Ostia, Portus and Rome)¹⁷⁵. At the gateways to Rome (i.e. Ostia - Portus) continuation of international trade transpired until the 8th century. During the 9th century Rome became a hub for international trade once again.

The Church increased its influence and possessions from the 4th century onwards

During the process of christianisation between the 4th and 6th centuries institutions of the Christian Church ramified their influence over the studied area, starting along the main routes. From the 4th century onwards the papacy built up its authority and economic interests in the countryside around Rome by acquiring many properties, mostly by donation. The *Patrimonium Petri* grew. Thus the pope became the largest ecclesiastical landowner by far. Revenues of his estates would flow to Rome and as such the liquid assets of the holy Chair grew rapidly¹⁷⁶. The vast majority of these estates were situated in those parts of the hinterland of Rome closest to the main roads – an unambiguous indication that direct communications and cost effective redistribution were vital to the estates’ choice of location. The papal possessions stretching from the

south-western quarter of the *suburbium* became known as the *patrimonium appiae* as of the late 6th century¹⁷⁷. While one could trace the locations of newly built churches and the progressing papal *patrimonium* rather effortlessly, the exact establishment of the Church's organization in the countryside between the 4th and 8th centuries, such as the relation between a certain parish church and its rural society, and the way authority was acquired or enforced, proved much harder to be established¹⁷⁸.

From the 4th century onwards, monasteries in Rome became landowners as well. Historical evidence of monastic properties has been found proving their existence possibly as far as in the Lepine Mountains (i.e. the fundus Corbianus) and Anzio (i.e. the massa Urbana). The newly founded bishoprics added to the expanding influence of the Church in the countryside of Tyrrhenian southern Lazio. The suburbicarian dioceses (Ostia, Porto, Albano, Præneste, and Silva Candida, Velletri, Gabii, Tivoli, Anagni, Nepi – and Segni in the high middle ages) did have an intense contact with the papacy throughout the early middle ages. The suburbicarian dioceses were officially established by creating the Cardinal-bishops in the 8th century.

8.I.2.2.B.2 The demographic and economic refocus of the 3rd to 7th century

In respect of the transitions of late Antiquity, activities in the landscape were refocused on:

Accessible locations. Well-connected road and sea-side locations stand out as focal points of trade and (the local) economy, defensive activities and Church activities between the 3rd and 7th century. This corroborates the findings in Tuscany where habitation and rural cultivation during the 5th and 6th centuries were concentrated at maritime centres and along the functioning roads. Accessibility led to sustained economic purposes and trade (i.e. transport to Rome and local market centres). Nearby larger centres accessibility may have meant a relative higher defensibility (i.e. by the possibility of deploying troops from the nearby centres), although road side locations are more vulnerable to attacks as well. However, in those times of the decline of Roman infrastructure, accessibility was not self-evident: i.e. maintenance works were restricted to the main roads from the 4th century onwards. Many of these accessible sites remained of interest for trade or grew into new foci for trade. Or, from the perspective of the microregions, they grew into centres or gateways for their respective microregions. Astura settlement is an example of a successful newly founded gateway, located along both a long-distance road (the Via Severiana) and several maritime routes. Another example

is Antium, a harbour town that became the focal point of the economic activities of the villa sites along La Selciatella in its direct hinterland. These roadside villas continued to exist in some kind of symbiosis with Antium. In the Velletri area, the rural sites closest to the road and to Velletri held on the longest. Developments in the Alban Hills area shows how (visible) activities slowly shifted to the main axes during the 5th to 7th century, i.e. the Via Appia and the northern transverse road.

Villages became the new foci of activities between the 3rd and 7th century. Some overlap with the category of “accessible locations” occurs. Villages stand out as places of continued activity in several key areas such as Nettuno-Anzio, Ostia, Velletri and Alban Hills. However, one has to be careful to consider these villages as beacons of continuity within a landscape otherwise void of activity¹⁷⁹. In other parts of Italy, such as Tuscany, (maritime) villas converted into settlements became hubs of elongated continuity. There is however no conclusive evidence if such conversions occurred frequently throughout the research area. Possible indicators of such conversions were discovered at Antium, the villa of Pliny, at Fossanova and at Villamagna.

Sees. Episcopal seats were among the most successful villages from the 4th century onwards, and especially the suburbicarian sees were. As was stated in the overview of continued sites, most sees would continue to exist as successful towns throughout the entire studied period.

Churches became new foci of activity from the 4th century onwards. Some rural or suburban churches became centres of ecclesiastical and demographic organisation of rural areas (i.e. Pianabella, S.Cesareo and Villa dei Ottavi near Velletri and Lanuvio, possibly S.Maria della Sorresca and Sole Luna as well). On a few occasions churches seem to have influenced the rejuvenation of a settlement positively (e.g. at Villamagna, Norba). Of course a large overlap between the network of villages and churches in late Antiquity (and onwards) occurred. Earlier studies showed that, although 5th to 7th century churches constituted strong indicators of continued activity in the countryside, their presence may not always have been a demographic indicator – but sometimes need to be perceived as merely a sign of private devotion and status¹⁸⁰.

Environmentally safe high locations. The environmental deterioration during late Antiquity and the early middle ages might have caused malaria to become endemic in the plains and must have contributed to the abandonment of many sites. The foundation of both Norba and S.Vito conceivably were examples of human adaptive responses

to this threat, i.e. of changing microstrategies, although another factor may add an extra explanation for the success of these locations: their defensibility.

Defensible locations became foci of continued activities.

Building activities aimed at defensive structures, whether orchestrated by the Byzantines or by the Church, seem focussed on the main roads and the sea. Fortresses were built at places with a high strategic value (e.g. at Terracina, Torre Astura, Segni, Patrica and, possibly, Villamagna). The general insecurity that ruled those times spurred to relocate to defensible positions, as was illustrated by the late 6th century transfer of the sees of Tres Tabernae and Velletri to Le Castella; perhaps the reoccupation of the Norba plateau was another example. However, there was no sign for a ‘flight into the hills’ – as was earlier suggested to be the case for the Ager Faliscus¹⁸¹.

8.I.2.2.B.3 Episodes of political and socio-economic stability or revival

Within the transformations of the landscape that took place, there were some episodes of political and socio-economic revival, or at least a slowdown of socio-economic and demographic decline.

- The 4th century revival of sites. As in many parts of the Italian peninsula, the 4th century was a period of continued vitality. In that century some sites were revitalized, especially villages¹⁸². Examples were Astura settlement, Ostia, Forum Appii, Sole Luna and Pianabella.
- The reign of Theodoric. During the reign of Theodoric (493-526) a *renovatio urbium* was executed, i.e. rebuilding programs in towns. These renovation projects took place in the countryside as well, such as in the Pontine plain. These activities were financially viable by adopting the main elements of the Roman tax system, yet they only had a temporary effect.
- The Byzantine period. This period will be elaborated upon in the next paragraph.

8.I.2.2.B.4 The Byzantine period: stability and less intense relationship with Rome (?)

Byzantine rule was weak and strong at the same time. The Byzantines were unable to create a solid rule over the whole Italian peninsula in the years after the Gothic wars – the unity established by Rome was fading. And as in other parts of the peninsula, Byzantine authority was one-dimensionally focussed on the larger towns, as documented for Rome, Terracina and Velletri. In some towns a Greek minority was established. From other studies it is known that smaller rural communities were given a high level of administrative autonomy by the Byzantine court.

Despite the historically well-documented weak presence on the ground¹⁸³, the Byzantine had been able to keep foreign troops out of Lazio from the middle of the 6th century onwards. Regular tax collection was expanded, which stabilised the administration. The stable Byzantine control of Northern Africa helped keeping the trade route to the pottery industry of Northern Africa open¹⁸⁴. As is learned from studies elsewhere, economical change and decline had been probably slower in Byzantine Italy because of the Mediterranean exchange with, in and around other Byzantine centres¹⁸⁵. Generally, the Byzantine-led regions of Lazio, the Exarchate of Ravenna, Abruzzo, Naples, Calabria and Liguria were among the few regions dynamically engaged in Mediterranean exchange systems during the 6th and 7th centuries¹⁸⁶. However, such active systems of redistribution do not show up in the available archaeological evidence concerning the current studied area¹⁸⁷.

It is feasible that in Byzantine times the relationship of Rome with its wider hinterland was less intense than during the Roman Empire – as was the case later on, from the early 8th century onwards, as we will see below. Byzantine rule was focussed on the larger towns, such as Rome, and the rural population could act autonomously to some extent. In the middle of the 6th century Sardinia and Sicily became available for the market of Rome once more – which may have implied that the Roman countryside temporarily became less important to the City¹⁸⁸; likewise Byzantine trade networks saw to it that Rome could attract resources from overseas. In other parts of the Italian peninsula “a golden age of a largely independent peasantry” has been attested by scholars as existing during the 6th and 7th centuries, in which there was to a certain extent a return to *niche* economies and subsistence farming became widespread (for example in Tuscany and northern Lazio)¹⁸⁹. In in some parts of the landscape, production and redistribution may have been aimed at the direct microecology and its adjacent areas, with connectivity mostly restricted to shorter distances¹⁹⁰.

However, close to Rome, the relationship of Rome with the countryside might have continued as before: there the papacy and monasteries still held on to their possessions. In the 6th and 7th centuries, here the amount of papal and monastic possessions even increased slightly (although insignificant compared to the explosive growth of estates of the 8th century)¹⁹¹. Supplies for the City must have come from as nearby as possible, to minimise costs. However, the absence of contemporary archaeological contexts complicates clear-cut observations on the intensity of interaction within the countryside and with Rome. The exception to this is the pottery evidence from Ostia – Portus.

8.I.2.2.B.5 The lowest economic tide in the late 7th to the middle of the 8th century?

The rock bottom of economic decline in Rome, hit from the late 7th until the middle of the 8th century, appears to match the general evidence on settlement: it coincides with the period in which many sites in rural Tyrrhenian southern Lazio are least visible in the historical and archaeological records¹⁹². This is especial clearly at sites which showed continued activity. Exemplary is the excavated site of Villamagna, where solely the church remained in use. At the continuous sites of Fossanova, Fondi, Torre Astura, and Cori, the late 7th and 8th centuries provide the least evidence¹⁹³. It is tempting to declare the late 7th to the middle of the 8th century as the lowest socio-economic and demographic tide in the researched area. By analogy with the low economic tide in Rome and in northern Lazio, where parts were cut off from direct exchange relations with Rome between the 7th and late 8th century, it is reasonable to uphold this. However, whether the evidence actually reflects the true socio-economic and demographic circumstances can never be fully assumed. Perhaps random availability of evidence plays a role at these sites. Maybe these settlements were simply not recorded in the written sources throughout these centuries (although during the 8th century an overall rise in the number of documents occurred)¹⁹⁴, or maybe scholars have missed out on contemporary locally produced pottery. Without further extensive surveys and excavations of survey sites across the researched area one cannot be sure.

8.I.2.2.B.6 Churches as hubs for continuity during the 7th and 8th centuries

During these years of least historical and archaeological visibility throughout the 7th and 8th centuries, churches appear to have been markers for continuity. Most of the sites that were rekindled and eventually developed into a village or monastery in the 9th century, had continued to function in the 7th and 8th centuries mainly with activities concentrated around the church. Examples of these are Villamagna, Pianabella, S.Andrea in Selice, Lanuvio, S.Vito and Norba, and possibly Cori and the Villa in località Casale. The sites of S.Maria della Sorresca and Gregoriopolis probably experienced a phase of growth a bit later on, in the course of the 10th century.

In this period of little activity, the church at some sites may have been the focal point of small communities, as seems certain at Norba, Ostia, Villamagna and Pianabella. Some of the activities around 7/8th century churches might have been related to elite families who owned private churches¹⁹⁵.

8.I.2.2.B.7 The late 8th and 9th century: new investments, closer ties with booming Rome

In the course of the 8th century the socio-economic conjuncture of Tyrrhenian southern Lazio changed. New investments were made in the countryside. As I will argue, these developments were largely fuelled by events in Rome. New economic growth within the City, and a politically strengthened and economically more active papacy would begin to influence settlement in and the socio-economy constitution of the late 8th and 9th century countryside. The economic and political relationship of Rome and its countryside intensified once again.

The consolidation of the papal patrimonium into the Papal States

A crucial element of the new conjuncture was the expansion of economic and administrative control and authority of the papal court in the countryside. It reached its climax in the middle of the 8th century with the formation of the Papal States. This historic turning point of the region's history was made possible by a string of favourable contemporaneous geo-political and socio-economic processes. From the very beginning of the century the papal court had started building up its political emancipation to oppose the Byzantine authority. This process was accelerated by the pressure of an acute external Lombard threat, which necessitated a strong ruling power in and around Rome – which the Byzantine had been unable to provide. From the middle of the 8th century onwards the Carolingian alliance with the papacy further strengthened papal authority, and their accompanying financial support and political protection advanced the pope's ambitions. These Frankish investments epitomized a major contribution to the economic upsurge of Rome, detectable in archaeological contexts from the middle of the 8th century. In addition, Frankish political weight contributed to the jurisdictional and liturgical centralisation of the Church which added to the pope's power as well. At the end of the 8th century, the centralisation of the Church had made considerable progress. Simultaneously, the loss of the traditional papal possessions in Calabria, Campania and Sicily, and the growing need for supplies of booming Rome, necessitated the acquisition of new landed properties in the nearest hinterland.

Investments in the countryside: economic growth and geo-political necessity

The first signs of renewed investments in large-scale agricultural activities of Rome in the countryside can be dated in the early 8th century. Despite the fact that the early 8th century was part of the lowest economic tide of Rome, the number of recorded papal estates increased. Papal *fundi* were found all over the Alban Hills, in the region around Velletri and near the Via Laurentina. All these estates

were situated within a short distance of Rome, and most were situated along the main infrastructural arteries - as the papal estates of the 4th to 7th century had been before. The vast majority of these estates could be found in the Alban Hills, tapping into the rich local ecology of fertile soils, which were excellent for viticulture and olive culture¹⁹⁶. At the beginning of the 8th century, the papal patrimonium began to stretch over the Pontine plain towards Terracina and to the coast as far as the Fogliano lake.

The pope embarked on stimulating the rationalisation of agricultural economy, to achieve more effective and better supervised agricultural production, storage and redistribution by establishing the *domuscultae*. These vast estates were forged by (merging) new acquisitions and reforming existing estates from the middle of the 8th century and onwards, and enabled the pope to directly control large parts of the countryside, as explicitly stated in the *Liber Pontificalis*. These agricultural production centres for the benefits of the Church and Rome had a direct redistribution link to Rome, as described in the *Liber Pontificalis* and as is illustrated by the research data of the *ceramica a vetrina pesante* (Forum Ware) studied at the papal estate centres north of Rome¹⁹⁷. They were all situated at or near main roads or near harbours (e.g. at Anzio and Astura). Their *raison d'être* probably was not merely economic. By means of these estates the popes ensured papal authority in the countryside around the city of Rome. One source mentioned the participation in the building of the Leonine walls by the *militia* of the *domusculta* Capracorum in the middle of the 9th century. This *militia* should be seen as a flexible workforce which was by no means actively deployed as a military force, and probably did not work on just one specific location¹⁹⁸. Flexibly deployed manpower usually does not show itself in the archaeological and historical data. The anecdote of the Leonine walls should be considered a rare example of an event related to such flexible deployed manpower that was documented.

Aside from the *domuscultae*, the pope was engaged in other projects, such as the fortifications built to repel the Saracene threat which would become acute from the early 9th century onwards. In Rome the Leonine walls were built. In the coastal area, near the mouth of the river Tiber, Gregoriopolis was erected, a fortress in which the population of Ostia was resettled, and possibly already the tower of Boacciana as well.

There are also signs of renewed activities in the landscape that cannot directly be attributed to influence of, to interests of, or to control of the pope, or to Rome in general. At Lanuvio and Ardea new walls were built, in all probability related to the Saracene threat. Another possible

contemporary activity connected to the Saracene menace was the fortification of Villa S.Vito. Other new activities were the permanent reoccupation of Villamagna in the 9th century, and the restoration of the church at S. Andrea in Selci in the late 8th century, as similarly happened to the church of Pianabella in the 9th century. In the 9th century Cisterna may already have been a large settlement - a gateway settlement connecting the mountainous, lowland and coastal microecologies. The structures of Monte S. Angelo might date to the 9th century as well. The transfers of inhabitants to an upper town at Privernum and Ariccia (although both dates are insecure) were events clearly interacting with the medium-term trends of the period. These transfers seem part of the new economic vigour from that era, although some scholars saw these transfers as being stimulated by the Saracene threat.

Despite these sites without a distinctive direct link to Rome, activities in the 8th and 9th centuries are most obviously detected in the key areas close to Rome, and/or on sites which had the infrastructure to easily access the City (i.e. access by roads and harbours)¹⁹⁹. Most remarkable is the near absence of contemporary sites directly south of Rome, in the area between Castel Porziano and the Appian road. Only as from the 11th century a number of functioning sites were situated here. This can be explained partly by the fact these parts have not been available for large-scale archaeological fieldwork so far. Another possible explanation could be that for centuries the area had been mostly part of the estates of several monasteries of Rome, and might have been ran from out of the City, and therefore, as one might expect, lacked larger administrative centres (settlements). The near absence of fortifications in the area until the 13th century might be related to the protection it enjoyed from Rome which might have postponed the 'fortification' of the area (see below). This particular question still stands.

To conclude: these were times in which the economic ties of the City with its hinterland were strengthened and the new economic vigour of Rome stretched far into the countryside. The movements of the *militiae* and the day-to-day communications of the *domuscultae* were examples of connectivity focussed on Rome. By the *domusculta* estates one is able to see glimpses of the functioning of a number of microecologies until well into the hinterland of Rome. What seems evident is that in the late 8th and 9th centuries much of the strategies of production and redistribution in the microregions in the wider hinterland of Rome were controlled by the papacy. However, this economic upsurge is also visible when observing sites which were not in the direct proximity of the Roman economy. Then again, economic and demographic growth in the countryside of Tyrrhenian southern Lazio in the 8th and

9th century is historically and archaeologically less well-quantified than it is to the north of Rome. Census figures lack in the research area. Contrary to Farfa and San Vincenzo, the current study area did not have a contemporary (rural) monastic archive. Moreover, the relative meagre archaeological data are without a doubt due to less intensive archaeological fieldwork performed.

It is rather striking that in this age of new economic vigour, from the early 9th century onwards, the names of the ancient Roman roads began to disappear from the records (they were, to quote Toubert, “depersonalised”²⁰⁰). In the year of 837 the Via Tiburtina was listed for the final time, in 897 the Via Latina, in 929 the Via Nomentana, in 961 the Via Appia, and in 993 the Via Labicana. As Toubert pointed out, the loss of their ancient toponyms does not have to indicate that routes were abandoned at all. However, it does denote that the region’s infrastructure had changed. Some arteries had grown in importance (e.g. the pedemontana), while some of the old routes had become more difficult to travel or were partly abandoned (e.g. the Via Appia and the Via Latina). I would suggest this was partly the result of a changed mentality: the focus of the people of Tyrrhenian southern Lazio was no longer directed backwards, contemplating the faded Roman Empire, but now rested on the challenges of a new era.

8.I.2.2.B.8 An overview: microregions and connectivity in late Antiquity and the early middle ages

As one learns from other studies (Francovich, Moreland) much of what happened in the (later) late Antique and, especially the early medieval landscape seems to have evolved on the level of subsistence and mostly involved various kinds of small scale redistribution (in contrast to the bulk shipments during Roman times). These kinds of small-scale primary production and redistribution have been poorly studied in the studied area. Researching small-scale and subtle connectivity proved to be out of reach. There is no direct evidence to be found in what fashion small independent landowners worked the fields and redistributed their crops, or in what way (and why) some settlements operated as gateways for *niche* micro-ecologies in the landscape, for example for the mountainous communities focussed on forest exploitation and on mountain pastoralism, or for the coastal people working as fishermen or for small-scale farmers. And whereas the economic focus of the papal *fundi* and *domuscultae* is generally known (i.e. on the City), elsewhere it is difficult to say anything about primary production and its redistribution. Scholars do not know how wide the “interaction radius” (as I would like to call it) was of the continuous settlements (e.g. of Velletri, Terracina) or of other rekindled 9th century centres (such as Ardea, Lanuvio, S.Andrea and Villamagna). Did the inhabitants cultivate

the lands from the settlements themselves? What was the size of the religious service area of villages and sees? How extensive was the area that their walls needed to protect? Roads must have stretched this interaction radius. It remains difficult to say anything about the scale of interactions during the early middle ages.

Focussing on connectivity during late Antiquity and the early middle ages

As small scale connectivity is elusive by nature, one will have to focus on other, more visible lines of interaction. If one zooms out and examines late Antiquity and the early middle ages at large, the connectivity of Rome and its hinterland proves to be most visible. Rome arose as a continuous centre of a multitude of overlapping microregions and their corresponding lines of connectivity that stretched far into the City’s hinterland. During the early days of Christianity, missionaries, priests and bishops reached out to the countryside travelling the main roads. The connectivity among papal estates and the City is constantly discernible from the 5th century onwards. This can be deduced from the easier accessible locations of the papal estates, and was on occasion explicitly written down in the *Liber Pontificalis*, which addressed direct papal control of landed estates. Roman monasteries had owned lands in the nearby countryside since the 4th century – with an early peak in the 4th century, when monastic properties were found as far as Antium. However, monastic ownership proved less constant than its papal counterpart. Another form of regular connectivity related to the papacy was the interaction with bishoprics, especially the Suburbicarian ones (i.e. in the current study area: Ostia, Porto, Albano and Velletri) which did have considerable influence on Rome.

The interactions visible in this study’s data were almost all related to the church, being recorded in writings – on which the church had a virtual monopoly until the 10th century. Non-church related connectivity of Rome and its hinterland is less visible; exceptions to this are the sites on which Forum Ware was found, and the pottery contexts of Ostia-Pianabella. The latter demonstrate a sustained exchange relation with Rome until the 9/10th century – a constant connectivity related to the ongoing importance of the river Tiber to the City. More elusive, less regular or visible forms of connectivity of Rome and the countryside were constituted by travellers, merchants and pilgrims – some using the stations on the Via Appia and other main roads until an indeterminate point in time. Flexible workforces (such as day-workers and slaves) from Rome working in the countryside evade the evidence as well.

Late Antique and early medieval evidence of the practices of production and of connectivity that were not focussed

on Rome, thus exclusively within and among purely rural (or coastal) microregions, is quite rare. Written records were monopolised by Roman institutions – and this contrasts with northern Lazio. There is little archaeological evidence that illustrates local production and redistribution. The trade network that existed between several harbour sites on the Tyrrhenian coast from the 4th to the 6th century is an exception, in its not being specifically focussed on Rome. Maybe this network is an early example of the small scale pan-Mediterranean trade that Horden and Purcell described and continued throughout the middle ages – even during the deep depression of the Mediterranean maritime economy that lasted until the late 9th century²⁰¹. Another positive exception is the network of exchange between the far south of Lazio and the Amaseno Valley (Privernum) that lasted until the 9-10th century. The Lombard influence in the Amaseno valley (i.e. as found at Ceriara) and possibly at Villamagna is another glimpse of connectivity within the researched area that did not involve Rome. Lombard influence probably arrived from the south via the Sacco valley, possibly aided by pastoral movements, which were attested until sub-recent times.

A particular form of connectivity was the result of Saracene activities. During their raids throughout the 9th and early 10th centuries the Saracens used the sea and main roads to seize the treasures of the larger towns of the region, and especially of the sees. Perhaps they were looking for bounty by means of enslavement as well. The Moorish impact on the area transcends these particular events: for a longer period of time the coast near Nettuno was influenced by Moorish culture, as visible in eastern traditional local costumes. Moorish influence in Nettuno may have originated from the Pontine island of Ponza, which seem to have been held by the Saracens for some time during the 9th century²⁰². Historically Nettuno and Anzio are the harbours most used to reach the Pontine islands.

To conclude: the vital elements related to the study of microregions, production and redistribution, and connectivity were meagrely and fragmentary documented in late Antiquity and the early middle ages. Therefore, during that era, the microregional concept can only be applied in general terms. Specific microregions proved difficult to define – with the exception of activities focussed on Rome. From the 10th century on, connectivity is better visible, and therefore to some extent the functioning of some specific microregions, as we will discuss below in the paragraph on microregions and connectivity in the high and late middle ages. The interactions, spheres of interests and struggles among elite parties became documented, and the number of ecclesiastical records increased, thus

providing detailed (though mostly anecdotal) information on production and redistribution.

8.I.2.2.B.9 Landed property scaled-up between the late 8th and 10th century

From the late 8th century onwards, synchronous to the waves of new activities in the landscape of Tyrrhenian southern Lazio, landed property was scaled-up. Examples of this process are the *domuscultae*. From studies elsewhere it is known that this socio-economic conjuncture occurred at the expense of small landowners; certainly as, from the 8th century onwards, on many ecclesiastical properties the collection of tithe was introduced²⁰³. One event to the north of Rome perfectly illustrates the frictions caused by this trend of scaling up. In the year of 816 some small Roman landowners planned and executed the burning of several *domuscultae* farms, an eruption of violence that seems to show the discontent with the foundation of the *domuscultae*. However, on the whole there is not that much known about the social complications involved by the scaling up of landed properties.

Landed ownership, or even any other kind of documented interest in the countryside, by any other ecclesiastical party than the papacy was rare in the research area between the 8th and the 9th century. The sole other recorded owners in these centuries were Roman monasteries, but their total *patrimonium* was much smaller than that of the pope. This picture significantly contrasts with other parts of central Italy, where in the Carolingian period individual churches and monasteries acquired huge rural territories, by donation and bequest²⁰⁴.

Regarding Tyrrhenian southern Lazio, this picture of the dominant²⁰⁵ papacy drastically changed during the 10th century, when the elite families and large “external” monasteries started to accumulate rural possessions on quite a large scale. At the same time, the papacy was in a spiritual and political crisis, and lost a great deal of its landed properties (see below). The newly acquired elite and monastic estates and domains were often huge. The large properties of Count Benedictus and his wife Stefania on the Astura peninsula are an example of these. The largest recorded “external” monastic property was the fundus Soranianus, roughly stretching over 7 km from the west to the east to the south of the Alban Hills. The properties of the monasteries of Rome seem to have grown as well, and could be found further away from Rome than in the previous centuries: e.g. in the 10th century S.Alessio was donated the Asturan properties of Count Benedictus and his wife Stefania; S.Erasmo al Celio acquired parts of the Fogliano area. These very large estates of the 10th century, with their tenants spread out over wide areas and containing several estate centres, were not unique phenomena merely typical

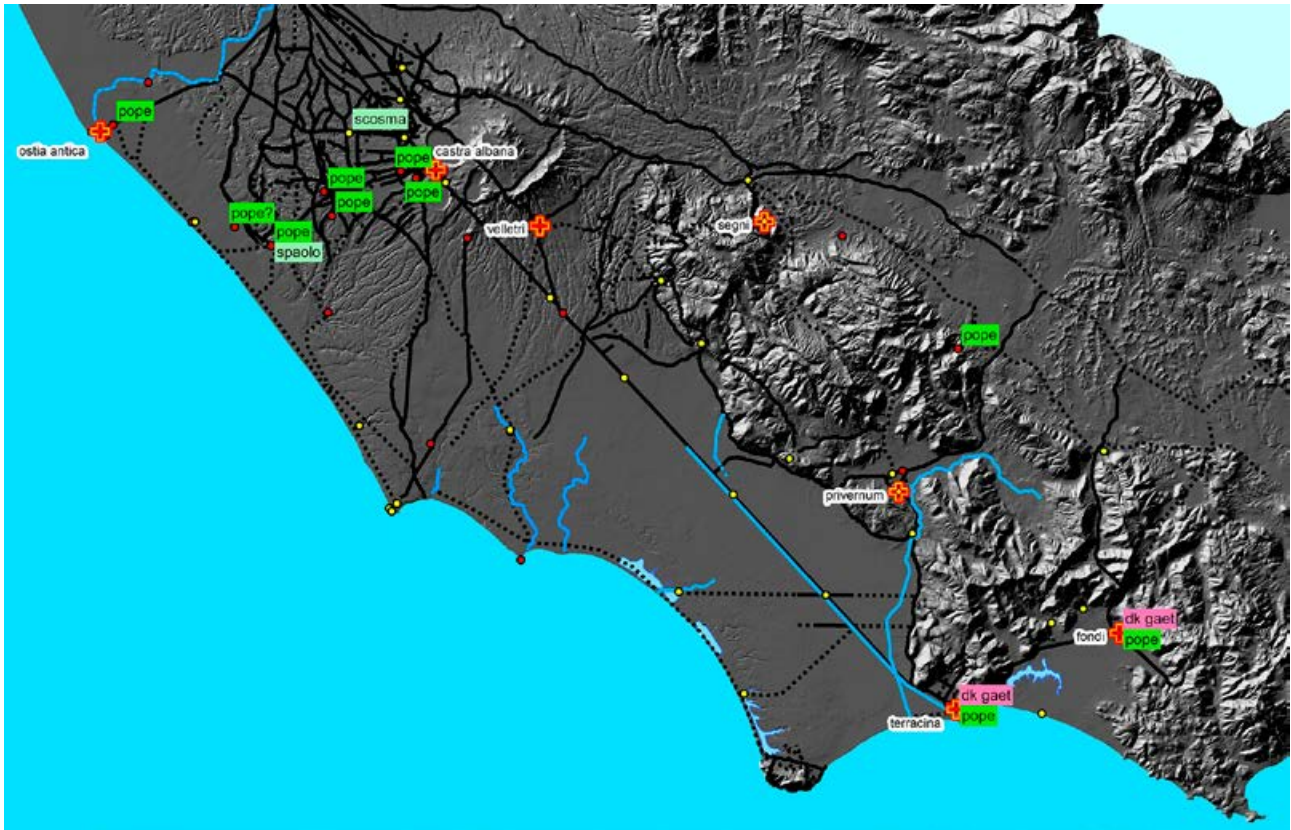


Figure 8.3. Overview map of 9th century sites with recorded activity and interests²⁰⁸. Labels: yellow labels are interests of rural and/or external monasteries, the green represent (anti)papal interests, light green depicts monastic and/or church interests from Rome, grey portrays other interests (i.e. by local churches, sees, communes, knights templar), fuchsia reflects elite interests. Red dots are sites with certain human activities, yellow are sites with possible activities. A red cross denotes a bishopric.

of Lazio: at that time these were actually found in many parts of the Italian peninsula²⁰⁶.

8.I.2.2.B.10 A dip in papal power from the late 9th until the mid-11th century

The number and spatial distribution of papal interests in the current database corroborate the historical fact of the temporary dip in papal power from the end of the 9th until the middle of the 11th century. The origin of this wane was the dwindling of Carolingian power (and of their funds). This was later enhanced by internal moral and political conflicts within the papacy itself. During this period, the centralisation of the Church was temporarily on hold. Inside Rome, the papal court was controlled by the Roman elite. In this period the pope lost much of his land properties. The disappearance of the *domuscultae* seems part of this process. On the basis of the distribution of papal interests between the 9th and 11th centuries it could be concluded that the papacy restricted its presence to the vital parts of the landscape only, as such focussing on the main routes. As will be treated in detail below, the landscape became the playing field of other factions: i.e. the local bishops, (external, local rural and Roman) monasteries, elite families and local communes (see figures 8.4

to 8.8). The fact that the papacy lost much of its power in socio-political affairs is exemplified by the fact that only one of the documented 10th century feudal concessions involved the papacy²⁰⁷. The number of papal interests increases once again in the 12th and 13th centuries (see below).

8.I.2.2.B.11 At a turning point: the 10th century. The start of the development of a new landscape (10-13th centuries)

The start of the slump of papal power could be seen as the dawn of a century of change. The 10th century witnessed a boom in activity. It is a turning point in the region's history at which several conjunctures converge - some of which had started earlier, but only just now gained serious momentum: i.e. economic and demographic growth, dominant (civic) elite power, *incastellamento*, blooming monasticism, the rise of strong local bishops and growing German influence. These converging structures of the medium term would continue to shape the geo-political, socio-economic and demographic constitution of the landscape in the centuries to come. From the 9th century onwards environmental improvement contributed to more (recorded) rural activities²⁰⁹.

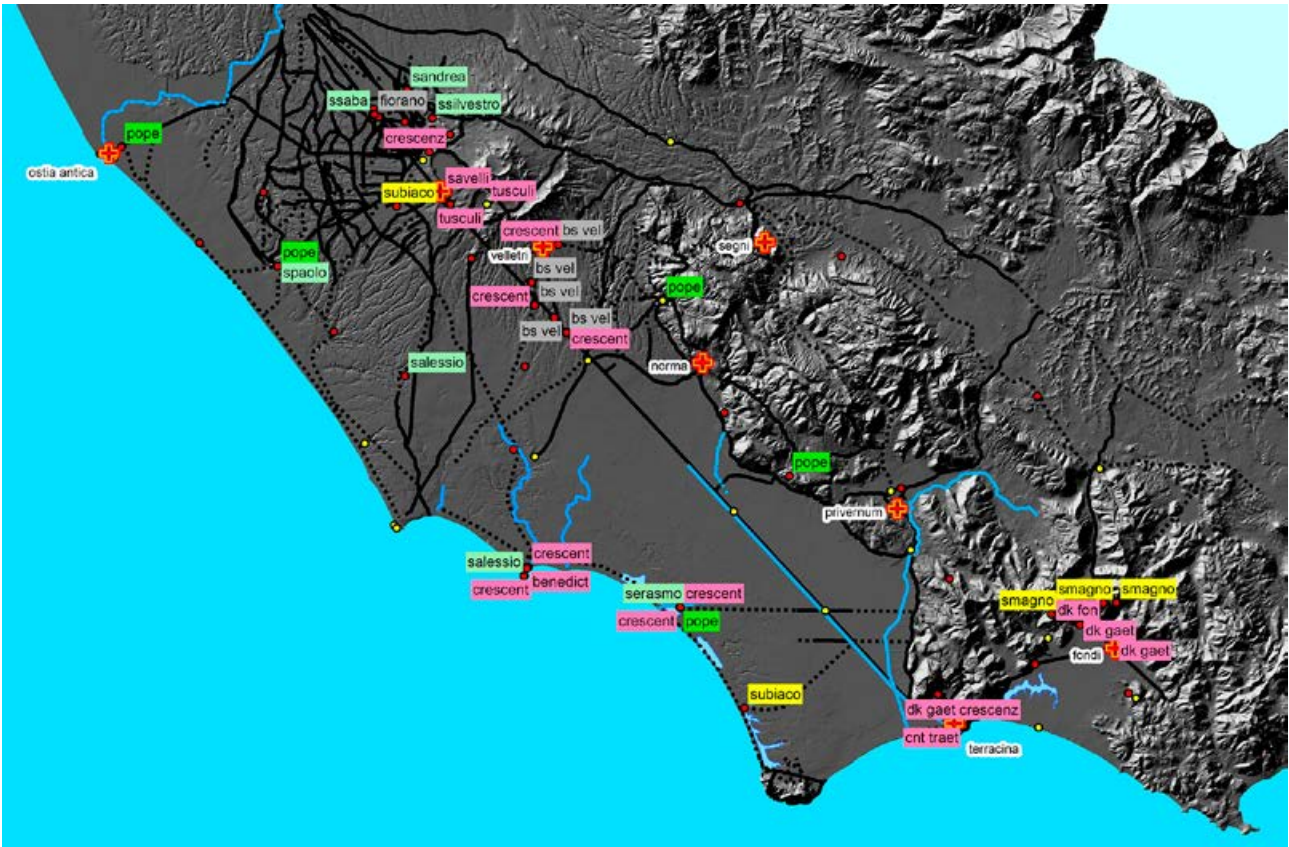


Figure 8.4. Overview map of 10th century sites with recorded activity and interests.

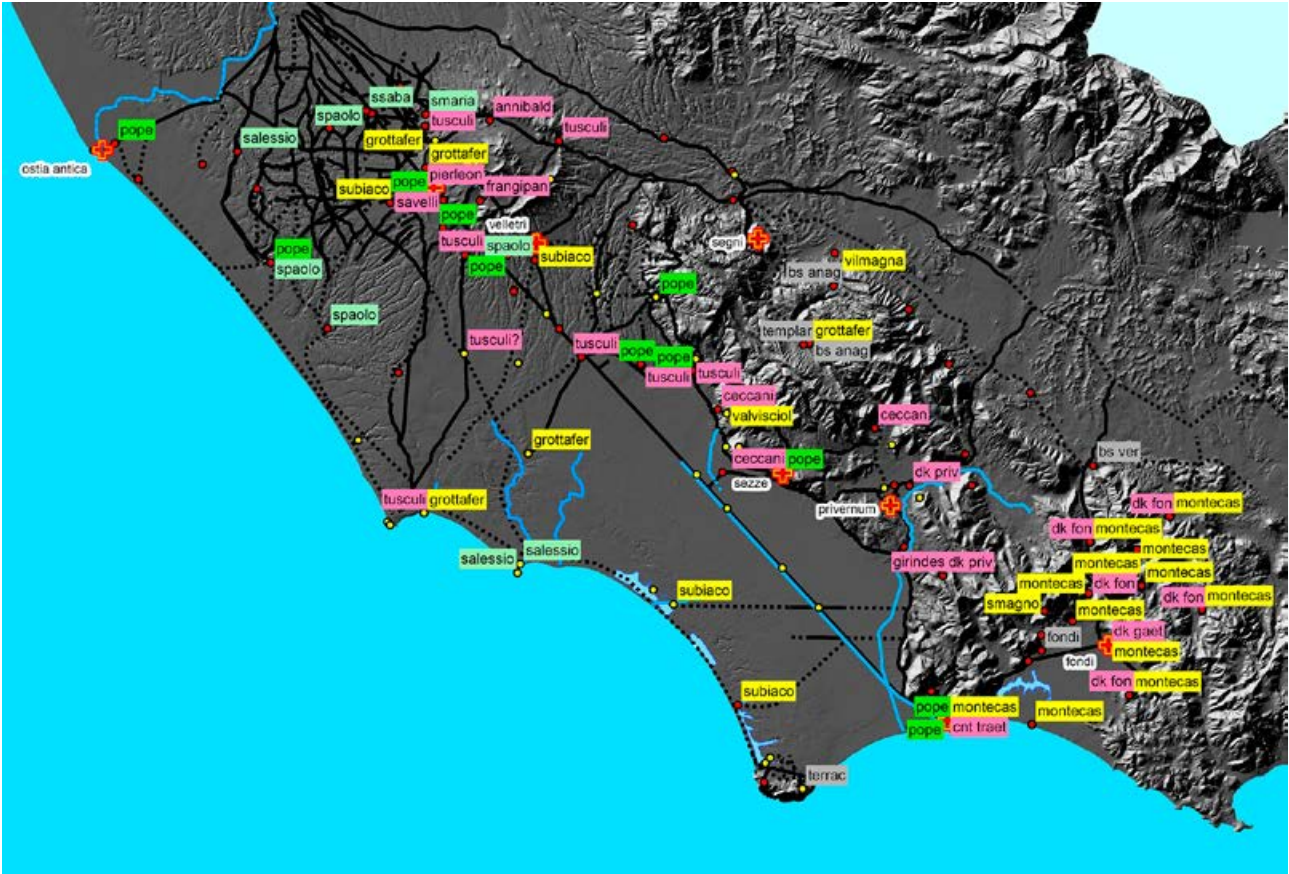


Figure 8.5. Overview map of 11th century sites with recorded activity and interests.

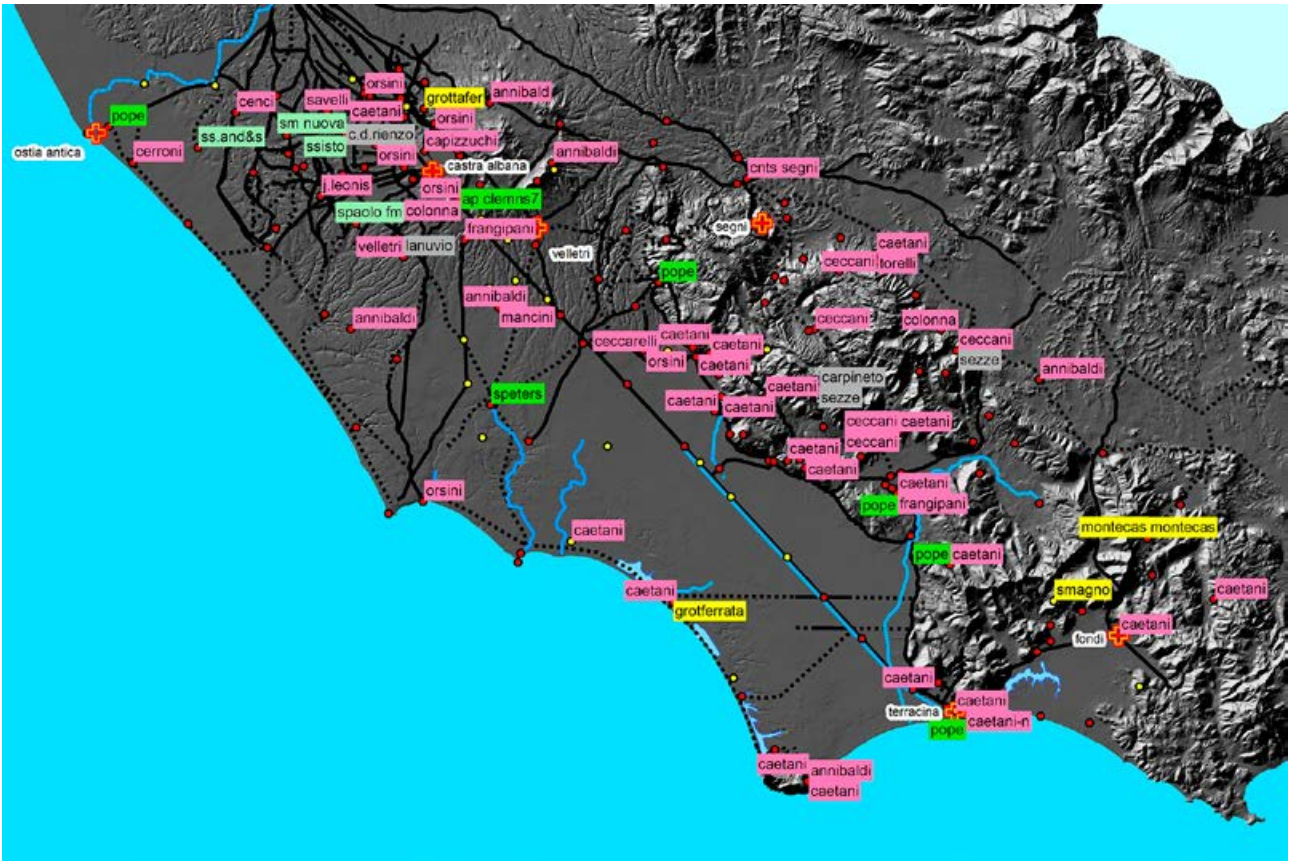


Figure 8.8. Overview map of 14th century sites with recorded activity and interests.

From the 10th century onwards, a dynamic geo-political and socio-economic landscape developed, with inherent forces at work that would influence the mid-term conjuncture for a long time to come. The constellation of interwoven elite, local clerical, papal, communal and monastic powers would change constantly, in its local intensity and in its geography. In this geo-political landscape networks of interests often changed, as could be seen in the shifting distribution of interests of the papacy, several elite families and some of the monasteries (as S.Alessio). Much of these powers must have pursued economic or political control of agricultural production, transportation (e.g. enabling the charge of tollage and controlling rights of passage), taxation and available labour. This is illustrated by a number of historical anecdotes regarding economic strife and geo-political battle among the elite families, among the pope and local baronage, among monasteries and local communities, and among some villages. It could be suggested that competition among the forces at work speeded up change and socio-economic growth.

After a rapid growth of activity during the 10th century, from the 11th century onwards Tyrrhenian southern Lazio developed into a fully exploited landscape. My database clearly shows that from the 10th century onwards there is a sharp increase in the number of sites with recorded

activity (such as building, agricultural exploitation, trade, ownership, investments or the imposition of tollage). As such a new environment was forged; a large number of new villages (i.e. often *castra*) and monasteries were founded; new infrastructure was built, and the former was renewed; numerous parts of the landscape were practically littered with fortifications, which seems to reflect the volatile geo-political situation and competitiveness in the countryside at that time.

Overall, in this first phase of expansion of activities within the landscape, settlement and demographic growth were concentrated at favourable geographical locations. Such locations, like Cisterna, Sezze, Fossanova and Grottaferrata, allowed easy access to the main routes, and the control of connectivity. And in the next centuries the demographic, economic and political centres of gravity would continue to lie at such well-connected locations. The Alban Hills and pedemontana zone became the most contentious battle ground among the regional powers, as is apparent by the many changes of authority and the “fortification” of the landscape of these parts²¹⁰. From the 11th century onwards the more marginal parts of the landscape began to show a range of activities as well; such as occurred at the coastlines, at the central Pontine plain, at the Lepine and Ausoni inland areas and on Monte Circeo.

In the course of the 13th century all the marginal parts of the early medieval landscape showed activities again, and lastly the more remote Lepine hilltop locations did so as well, during the 13th and 14th centuries. Nevertheless, within this at that time generally intensively exploited landscape, some parts remained relatively marginal, all through the studied period: i.e. the southern Pontine plain and Pontine coast (an intrinsically unfavourable area for activities), and parts of the central Lepine and Ausoni Mountains. Here the types of sites which were so typical of this new era of expansion, i.e. large (incastellised) settlements and monasteries, did not evolve.

In this newly developing landscape, as before, Rome directly influenced the contemporary conjuncture(s) in numerous ways. Amplified by the weaknesses of the papacy, a large part of the complicated geo-political constellation of Rome would be exported to the countryside: e.g. competing families, papal ambitions, internal strife within the Church and foreign (German, later French) influence. However, the processes of change in the countryside more and more found their origin in the powers and communities present in the landscape itself – or, to put it differently, out of and among microecologies which were less focussed on Rome. This “emancipation” to some degree was connected to the loss of papal power to which other local powers reacted by expanding their influence; notably by local elite families, monasteries, bishops and other local clerics, and later on by town communes. This is visible when observing the spheres of influence of some local elites that shunned Rome (such as the Tusculi, the Ceccani and the Caetani). It is also visible in the documented local interests (in their direct surroundings) of town communities (e.g. Terracina from the 11th century onwards), of local churches (e.g. the cathedral of Terracina, 13th century), of rural monasteries (e.g. S.Magno in the 10th century, Villamagna and Valvisciolo in the 11th century) and eventually of bishoprics (the see of Terracina in the 13th century).

One has to be aware that regarding this perceived presence of local powers, the availability of sources plays a role as well. Correlated to the “emancipation” of the 10th century was the start of a sharp increase of the number of written sources, which were not solely focussed on Rome’s interests anymore. Increasingly documents featured local communities and the rural landscape, and numerous copies of these documents can be found in the registers of rural monasteries and communities²¹¹.

Although the region’s long period of growth was a development typical of the medium term cycle of demographic and economic contraction and expansion, its impact would be lasting: i.e. out of the developments that were

started in the 10th century a physical landscape was forged between the 10th and 13th centuries, dominated by hilltop settlements, fortifications and monasteries, that to some extent lasts to the present day.

8.I.2.2.B.12 The conjunctures of the 10th-13th centuries
The conjunctures shaping the region’s new landscape of the 10-13th centuries may be summarised as follows:

Economic bloom and renewed long-distance trade

The signs of future economic growth had already existed in Rome as from the late 8th century, and in the countryside of Lazio as from the 9th century, but in effect the 10th century turned out to be the century of wide-ranging economic bloom all over the landscape of Tyrrhenian southern Lazio – just as in other parts of the Italian peninsula. This economic expansion is generally reflected in the huge rise of recorded villages, fortresses and monasteries. The sharp increase of the general number of recorded sites in this study’s database confirms the situation²¹². Settlements were founded or rekindled and new investments were made. As was studied in detail by Toubert, *incastellamento castra* were vital tools for the economic developments of the 10th and 11th centuries. Much of the agricultural activities from the 10th century onwards were deployed from out of the *casale*, certainly in the areas closest to Rome. Unfortunately it is not yet known what kind of estates / manorial systems were used at these *casali*²¹³.

The economic bloom of that time is exemplified by the fast intensification of activity in and around the Pontine plain. The recent survey studies conducted in the central Pontine plain confirm this new vigour. After several centuries of archaeological blanks the sites of Forum Appii and Ad Medias, and the plain between these sites, showed activity again: in the survey *ceramica a vetrina pesante* (Forum Ware) and *ceramica a vetrina sparsa* were found, being broadly dated to between the 9-13th and 9-11th centuries respectively²¹⁴.

Economic fortune was also boosted by the resumption of large-scale long-distance trade during the 11th century, comparable to evidence found at other rural parts of central Italy²¹⁵. Rome was the first area to show signs of a recovered interregional redistribution system, from as early as the 9th or 10th century onwards²¹⁶. In the late 9th and 10th centuries, the Mediterranean maritime economy recovered from the depression it had been in since the 6/7th centuries (although small-scale long-distance trade never had ceased completely)²¹⁷. The reinvigorated trade was not the only aspect that boosted long-range interaction: i.e. as a result of the 10th century Cluniac reforms²¹⁸, monasteries started international contacts

with pan-European ecclesiastical movements, as such enhancing the dimensions of international contacts.

Incastellamento

As was thoroughly discussed²¹⁹, *incastellamento* was a process focussed on the control of production and human resources through the establishment (or colonisation) of specific settlements, the so-called *castra*. *Incastellamento* was part of the *longue durée* development of feudalism. The elite families such as that of the Crescentii and the Tusculi played an important role in its initial phase. The power of the reigning families would become invested in their *castra*. Hodges and Wickham have some interesting views on *incastellamento*²²⁰: “[*incastellamento*] was in large part the takeover of formerly public functions by private landowners”, these functions being the wielding of local public authority over a large territory, the protection of it and the administration of the rural community. But frequently *incastellamento* took shape in alternative forms to the usual clear elite – peasant vassalage in which a seemingly passive populace was (re)settled by a lord landowner and a lord entrepreneur; in some instances, e.g. in Tuscia Romana, a *castrum* was founded by peasants themselves.

As this study of Tyrrhenian southern Lazio shows, the *incastellamento* process was indeed regionally divergent. Although many of the *incastellamento* projects faded out soon after their start, and some areas were never *incastellated*, *incastellamento* proved to be a far-reaching structural process throughout the landscape whilst influencing settlement (demography), socio-economy and geo-politics, and infrastructure²²¹.

The lack of detailed evidence on most *incastellamento* projects renders it all but impossible to make general statements in relation to the economic value of the *castra*, and the way they acted in a redistributive system in and among microecologies. Of course, many of the stakeholders had their home base in Rome (i.e. the papacy, monasteries, many of the elite families), and much of the goods produced by the *castra* would be redistributed to the City.

The rise of rural monasticism

As from the 10th century onwards the blooming rural monastic life in Tyrrhenian southern Lazio is exemplified by the rapid growth of the number of rural monasteries, and of the number of monastic interests in the area. All over the studied area monastic communities were founded, especially clustered in the wider Pontine pedemontana area between Cori and Sonnino and the adjacent Lepine Mountains. The recorded monastic interests of the period relate to monasteries from Rome, local rural monasteries and large rural “external” monasteries (i.e.

located outside the current study area). It is known that monasteries were vital centres of production and of accumulation of knowledge and wealth. However, in the studied area there is little evidence to be found in what way agricultural or any other productive microstrategies were executed by monasteries, in what way monasteries influenced the socio-economy and politics of their hinterland, or in what way these may have acted as focal points of microregions or as gateways between them. For *surveillance* out of monasteries (or out of their satellites), as a means to actively control peasants and agricultural production²²², little evidence in the studied area was found (though *Castrum Vetus* and *S. Magno* are possible exceptions to this observation). On several occasions one perceives a clear shift of monastic focus (i.e. shifting interests) to other parts of the region (for example in the case of the monastery of *S. Alessio*²²³). This fits the picture drawn earlier regarding the fate of the papacy, i.e. that networks of interests were no fixed configurations but changed over time. The impact on worldly affairs by monasteries was considerable and was exemplified by their partaking in *incastellamento* projects (e.g. at *Monte Julianu*). Many monasteries had erected walls to protect their interests, as can be observed at *Villamagna*, at *S. M. della Sorresca*, and at the *Knights Templar* fortresses. In the research area one example of a monastery used as control point for the right of passage is known (i.e. at *S. Angelo Mirteto* in the 13th century)²²⁴. Monastic travel must have constituted a sizable part of the total connectivity within the landscape, because of the large number of pilgrims that visited monasteries, or used them as a lodge when heading for Rome (e.g. *S. Andrea in Silice*). The most famous recorded monastic visitor was *Thomas of Aquino*, who died in 1274 at *Fossanova*.

Strong bishops

The impact on society of local bishoprics grew from the late 10th century onwards, attracting a great deal of worldly power. Their growing zeal, and worldly authority, was exemplified by the involvement of the bishop of *Velletri* in the *incastellamento* process at *Castrum Vetus*. From the 10th century onwards there was a rise of an aristocracy strongly connected to the bishop, such as the *Crescentii*. In the 11th and 12th century some bishoprics were scaled up (e.g. the dioceses of *Priverno* and *Terracina*). Of course, this would have added to the growing strength of local bishops²²⁵.

Civic elite power

The 10th century saw the first large-scale civic (i.e. secular as opposed to ecclesiastical²²⁶) elite activities in Tyrrhenian southern Lazio since the downfall of the Roman senatorial elite²²⁷. This renewed elite activity would continue to expand until the 13th century²²⁸. The rise of civic elite

power was a vital part of the broader *longue durée* development of the feudal society. Elite families were involved as participants in numerous economic and geo-political activities in the countryside of the research area, as was documented by *incastellamento* projects and as was in many other recorded interests. At first elite interests were restricted to the main route southwards (i.e. along the Via Appia and in the Velletrian area), and to the Pontine coast, probably because of the easy access to and communications with their home bases of Rome and Fondi / Gaeta²²⁹. In subsequent centuries elite families developed rural home bases as well, like the Tusculi at Tusculum, the Savelli at Albano Laziale and the Annibaldi at Castel Molare. By then rural civic interests were to be found more and more distanced from the main roads. The influential elite families dominated substantial parts of the countryside, by owning entire villages and holding fiefs on strategic positions along major routes and on key-(i.e. defensible) locations across the landscape.

I have identified two types of elite spheres of interest across the countryside of Tyrrhenian southern Lazio: local and regional. In the case of local spheres of interest, elite parties focused on a specific part of the landscape (as did the Ceccani, the Dukes of Fondi, and the Savelli), wielding their power out of their rural home base. Other elite parties operated on a more or less regional scale, such as the Crescentii, the Tusculi, the Frangipane the Annibaldi, the Orsini, the Colonna and the Caetani. Their interests did not seem to originate or to be controlled out of one specific settlement. Their main power base was Rome (except in the case of the Caetani, who would develop branches in Naples, Pisa, Rome and Anagni). The recorded interests of these families help draw the above quoted “*realistic map of Rome*” that was not bounded by the walls²³⁰.

Elite families constantly were competing over power and possessions. Sometimes competition amongst families involved the use of force, and of political or economic pressure as well, which rather often resulted in transfers of possessions and privileges²³¹. Families constantly rose and declined. Some families (such as the Tusculi and the Frangipane) repeatedly changed political sides during the ongoing struggles between papal and imperial parties. Therefore, elite networks of interests were no fixed configurations and would change in whatever way over time. The quarrels between family clans were not merely fought directly, but along the line of clergy as well, as many elite family members were involved in ecclesiastical institutions as monasteries, bishoprics or the papal court²³². The volatile nature of the political constellation of the landscape is illustrated by the abundance of examples of direct take-overs of parts of the landscape between several families. Thus the Savelli subdued all other authority in

order to exclusively control the wider area of Albano. The Frangipane seemed to have taken over the control over the pedemontana zone from the Tusculi. Control of connectivity seems to have been of vital importance to those in power. As discussed, the evidence of (mostly) elite interests allows to discern lines of control over parts of the landscape (see also below)²³³.

The German influence

As from King Otto I's intervention, that unified the Italian and German kingdoms (in the year of 962), until the end of the Hohenstaufen dynasty in the middle of the 13th century, the German emperors stabilised the Italian peninsula and controlled its political arena. However, the emperors' direct leverage in Rome, and on the papacy, remained relatively limited and would peak merely during a personal visit. The emperor would solely interfere in the political affairs of the Papal States when needed²³⁴. However, in some cases, the German emperor actively interfered in the countryside of Tyrrhenian southern Lazio, as the violent punitive actions of the army led by Frederik Barbarossa in the studied area show (recorded in the years of 1159, 1167 and 1171). The pinnacle of the German imperial influence was the election of several German popes in the middle of the 11th century²³⁵. From the 11th century onwards the pope began to oppose the emperor, which led to tensions between papal and imperial parties in Rome and in the countryside. The Concordat of Worms (1122), that ended the Investiture Conflict, should be considered a victory for the pope and helped to increase the authority of the papacy considerably²³⁶. The influence of the Holy Roman Empire would recede fast. Soon, the French kings of Anjou seized the role of the Germans. The struggle of the German Hohenstaufen dynasty and the French royal family of Anjou for influence in Italian and especially papal politics was exemplified by an event that took place at Torre Astura, the capture of Conradin of the Swabia²³⁷.

In the 12th century two new dimensions were added to the above-mentioned reality of a renewed landscape: i.e. the papacy would regain its dominant position and the commune would start to develop.

The 12th century: the recovery of the papacy

From earlier historical studies it is known that from the later 11th onwards, the pontificate began to rebuild its authority. The popes political muscle began to grow and once again he started to accumulating landed properties²³⁸. The outcome of the Investiture Conflict had strengthened the new papal moral and political confidence. The rise of the papacy is made visible by the increasing number of papal interests in the 12th and 13th centuries. Especially in the Alban Hills and Lepine Mountains the pope extended his influence. However, the papacy never regained its

dominance on the more low-lying parts of the studied area between Rome and Terracina, i.e. roughly from the old Appian road westwards. These parts would remain dominated largely by Roman monasteries (i.e. in the areas close to Rome) and by large monasteries situated outside the studied area, i.e. Subiaco, Grottaferrata and Farfa. Elite families, be it to a lesser extent than in the mountains, showed interest in those areas as well. It proves difficult to assess why this was the case. Maybe this was a strategy, to be seen in the context of the history of aggressive papal politics towards local elites, exemplified by the recorded act of the acquisition of the *castra speciale* in the year of 1234 which was most probably intended to gain control of the main routes from Rome to the south of the Italian peninsula. Perhaps the more productive coastal parts were considered less vital by the papacy throughout that struggle. The Lepine Mountains were the main geo-political battle ground for the struggle of the recovering papacy with local baronage in the 12th and 13th centuries²³⁹. This struggle must have contributed to the “militarisation” of some parts of the area, especially visible in the triangle Sermoneta – Sezze – Torre Petrarà²⁴⁰.

In the middle of the 12th century, the pope divided Tyrrhenian southern Lazio into two administrative provinces of the Papal States, in order to better control the countryside: i.e. into *Campagna* (the Lepine and Ernici Mountains) and *Marittima* (the area between the Alban Hills, the Lepine Mountains and the sea)²⁴¹.

The military and financial power of the papacy culminated in the late 13th century. Because of the significant French influence over the papacy and the environment of continuing power struggles in Rome, the papacy temporarily moved to Avignon between the years of 1309 and 1376.

The 12th century: the rise of the commune

The long-term development of communes found its origin in the 12th century with the possible (late 10th century) exception of Sezze. In Tyrrhenian southern Lazio these communes were founded on the fringes of the Lepine and Ausoni Mountains and in their foothills. These local communes seem to have had a negative influence on the process of *incastellamento* in those parts. The commune of Rome had some influence in the studied area, as is apparent from the history of Velletri and Tusculum.

8.I.2.2.B.13 The 14th century: less (recorded) activity geo-political détente or economic stagnation? French influence and the temporary move of the papacy to Avignon

The 14th century showcases a less dynamic landscape. A significant fall in the number of recorded ecclesiastical

and, yet less dramatic, of elite interests can be observed. It is conceivable that this drop in recorded activity was related to a combination of geo-political and socio-economic processes of the conjuncture. It is obvious that the feudal society was changing. The communal age that characterized the 12th and 13th centuries caused the all but dissolving of feudal vassalages around towns. Most likely two of the main causes for the relative tranquillity across the earlier more volatile landscape was the wane of *incastellamento* and the general drop in the number of feudal arrangements.

Maybe there was less room for a wide variety of contenders, and thus for competition: the Caetani dominated the southern part of the researched area, hence blocking out the other elite competitors. Another likely factor involved was the relocation of the papacy to Avignon between the years of 1309 and 1376, which might have caused a decline in Church revenues and a decline in building activities within Rome and in its surroundings²⁴². From earlier studies it is known that during the Avignon period the authority of the pope in the Italian Papal States was greatly diminished.

It stands to reason that the decline in recorded activities correlated to the economic stagnation in the countryside of Lazio from the middle of the 13th century onwards, as proposed by Toubert. He maintained that the profits of the lords started to stagnate because of an imbalance between the growth of the population and the economic output of the human resources put at work. Rome itself was subjected to a long period of recession during the 14th century. Despite the conjunctural changes, settlement in the landscape of Tyrrhenian southern Lazio seems to have continued at the same level as in the 13th century, and even seem to have continued to expand in some parts – as is proven by the growing number of monasteries and the constant number of active settlements and fortifications.

8.I.2.2.B.14 An overview: Microecologies and connectivity in the high and late middle ages

From the 10th century onwards, activities within the landscape are better documented. The interactions among, possessions of and struggles between elite parties were written down – revealing spheres of interests. Similarly the number of ecclesiastical and communal records increased, providing detailed (be it mostly anecdotal) intelligence regarding interaction and some production practices. Regarding that period of time connectivity is better visible than it is for the early middle ages; this also applies to interactions that were not directed towards Rome, so throughout and amongst rural (or coastal) parts of the landscape and/or microregions. Written records were no longer monopolised by Roman institutions. Examples of

this connectivity are the documented lines of communication and mobility and lines of control, which have been examined in the previous chapter. These lines seem to suggest that some parties (like the Savelli, the Ceccani and the Dukes of Fondi) controlled sections of the landscape, and the mobility occurring within it²⁴³. However, most common is the picture of a mutually shared (and often disputed) presence in the landscape, as in the pedemontana zone and in the Alban Hills²⁴⁴. In what way this presence was translated into economic or political purpose is historically and archaeologically badly documented. It may only be discussed in general terms of exploitation of the landscape, struggles among families, collection of taxes and tollage, and the control of rights of passage. There are only a few spatial or chronological conclusions left to be drawn, such as the fact that expansion of activity in the landscape initially was focussed on favourable geographical locations facilitating easy connectivity (see also below here).

However, evidence of small-scale connectivity, such as the daily execution of agricultural labour and the deployment of flexible work forces remains elusive. In general, the role of the “common man” still remains hard to identify. Just as regarding the early middle ages there is little archaeological evidence to be found that shows local production and redistribution. Historical evidence is more abundant, although mostly anecdotally in nature, in treaties, concessions and complaints. Travellers, merchants and pilgrims are better visible than in the early middle ages, on account of the many contemporary travel accounts that have survived.

Although there exists historical information and more preserved material culture (e.g. walls, churches, canals) than before, there appears to be less archaeological information about specific trade networks²⁴⁵. The publication of high medieval pottery typologies proved to be too fragmented to create an overview of regional pottery distribution for the research area²⁴⁶. I am inclined to think that the relevant pottery studies of that period were less focussed on such networks. Maybe these networks are less visible because of the restart of bulk production, as the occurrence of standardised pottery shapes may hinder insight into exchange across the region and beyond.

The vital role of connectivity: Expansion primary focussed on favourable geographical locations

During the first phases of expansion within the landscape, settlement and demographic growth were focussed on favourable geographical locations which allowed easy access (to the main routes) and control of mobility²⁴⁷. Stating the obvious, this fact demonstrates how vital connectivity was for economic prosperity – hence for

the successful functioning of microregions. Examples of early successful and durable new or renewed settlements at such advantageous locations, showing the importance of smooth redistribution and connectivity in general are Cisterna, Sermoneta and Sezze. These towns did have unambiguous advantages as a result of their favourable geographical positions near crossroads of routes to the mountains, the sea and Rome (i.e. Cisterna); near a strategic position dominating the main infrastructural route at the entrance of a valley (i.e. Sezze); and near a river allowing bulk transportation of goods (i.e. Sermoneta). In addition the newly founded 10/11th century monastic communities of Fossanova and Grottaferrata most likely owed a significant part of their success to their respective locations as well.

The influence of the revival of long-distance bulk trade

The restart of large-scale long-distance trade must have reshaped the constellation of many microecologies in the landscape, which are always “responsive to the pressures of a much larger setting”. This should have mostly affected areas with a direct linkage to microregions further away²⁴⁸, and particularly those lying beside the sea shores and at the main land routes. To these areas, Rome became merely one of the focal points of communication and redistribution; however, the City undoubtedly never stopped being an important one.

The rekindling of long-distance trade must have contributed to the development or strengthening of several villages as gateways²⁴⁹. The economic and demographic growth of Astura, Ceccano, Cisterna, Marino, Sermoneta and Terracina might have been related to their role as funnels of increasing streams of goods and people.

What can be stated about microregions and connectivity?

Does the improved visibility of production and connectivity mean that I can somehow comment on the functioning of specific microregions? The short answer is yes, but only to some extent. Further on I will argue that one can see only part of the picture: i.e. the fragmentary availability of evidence results in an image of interaction across the landscape but usually does not portray production or redistribution. The inherent elusive nature of microecologies (for they change quickly and frequently) does not help either.

In general, the varying compositions of spheres of interests, and changing connectivity, operating on the level of medium term developments, fit the situation outlined in *The Corrupting Sea* of a Mediterranean landscape consisting of microregions. Constant adaptations to new economic and political circumstance was of key importance.

One can observe (the outlines of) constant changes of microstrategies aimed at control (cf. the observed lines of control²⁵⁰), in connectivity (cf. the discerned lines of communication and mobility), and alterations of focal points (cf. the observed centres coveted by several parties) and in infrastructure. Underlying these observations are aspects of production and redistribution; these remain concealed or are at very best poorly visible. Usually it is unclear what the parties exploiting and interacting in the countryside were producing, and for what beneficiaries they did so.

Throughout the high middle ages Rome continued to be the centre of a multitude of overlapping microregions and corresponding lines of connectivity that stretched far into its hinterland. Of all the lines and constellations of connectivity in Tyrrhenian southern Lazio those of the City with its hinterland still remain the best discernible. Rome more and more grew to be a major production centre linked to “international” redistribution lines. When researching the high middle ages, evidence of interests of parties located in Rome can be found all across the researched area. Rome sustained a strong direct link with the coastal area around ancient Ostia, the Alban Hills and the Velletri area. And the Lepine pedemontana zone was strongly interwoven with Rome’s overlapping microecologies as well. In the 12th and 13th centuries, the Lepine Mountains came within Rome’s ambit almost entirely through the newly established papal possessions. Papal activities, and monastic and elite ambitions stretched Rome’s microecology far into the current study area. Only in the 14th century the number of recorded interests of Roman parties dropped.

By following the distribution of recorded interests, the lines of communication and mobility, and lines of control across the landscape, glimpses of the way other rural microregions functioned and were connected to the outside world could be seen, i.e. glimpses of those which were not primary focussed on Rome. Tusculum for example, at first was economically and geo-politically directed towards Rome, dominating the papacy, and their homeland in the Colli Albani, in the early 11th century. Later on, during the late 11th and 12th century, as the struggle with the commune of Rome evolved, the Counts seemed to have turned their attention to the south (to the coast) and the east (to the pedemontana). The coastal connection (the earlier discussed “corridor”) might have ensured the upholding of pan-regional communication and redistribution for the Tusculi²⁵¹. But the interests of the Ceccani and the Savelli were pointers to a specific system of authority and communication, which may be described as microregions as well. However, here too aspects of production and redistribution remained unrevealed.

Monastic interests may tell a lot about the way individual monastic communities interacted with other parts of the rural landscape. Regarding those communities there sometimes are clues to what was produced and redistributed (e.g. fish production in the Fogliano area; grazing and agricultural production and forest exploitation around Fossanova). Most recorded monastic interests in Tyrrhenian southern Lazio stemmed from outside of the studied area, from Roman and “external” monasteries. In at least one case it was reversed, by the documentation of an interest of a rural monastery in the studied area reaching outside it: i.e. in the year of 1322 Fossanova acquired the island of Ponza²⁵².

The various interests of external monasteries in the southern Pontine plain in the high middle ages show how intricate and subtle connectivity may have been: whereas all roads were controlled by different families, external monasteries somehow kept connected to the coast. To what extent rights of passage had to be paid or alliances were involved is hard to tell. Maybe monastic travellers were avoiding the major roads. As Horden and Purcell showed, even small tracts, including those in seemingly rugged mountainous terrain could be used for interaction and transport. “Even routes that cross difficult terrain, and that might be expected to prove ineffective as lines of communication, often turn out to admit of surprisingly fluent and varied interchanges between regions”²⁵³.

An example of causality in changing connectivity: the new route over Marino and the detour of the Via Appia
The influence of medium-term conjunctures on the way microregions interacted, or on connectivity in general, is exemplified by the impact of the growing political significance of the Castelli Romani, especially of the towns of Marino and Velletri²⁵⁴. As a result of this change in geo-political and socio-economic gravity, a new main route southwards from Rome developed in the 13th century, running through Marino, Velletri and Cisterna²⁵⁵. At the same time the old Appian road was broken off at S. Gennaro, and since took a detour towards Velletri. With this new detour of the Via Appia the strategic stronghold of S.Gennaro grew much in importance, and became a new focal point of fierce local struggles during the 14th century.

Religious connectivity:

local visits to shrines and processions

I want to end this section with a specific kind of connectivity for which there is evidence, which I will dub, “religious connectivity”. A few examples are: the inhabitants of Gregoriopolis frequented a shrine near the theatre of Ostia Antica until the 12th century²⁵⁶. In the high middle ages, the inhabitants of Terracina regularly visited

Caposelce, in the Pontine plain, to attend mass²⁵⁷. It is not known if these visits were performed by individuals or were marched processions. No further detailed specifics are known. Nevertheless, it is evident that these kinds of interactions constituted a religious connectivity that must have played a rather important role in local communities²⁵⁸.

8.II An evaluation of this study's method and recommendations

8.II.1 An evaluation of method

This section comprises an evaluation of the results of this study, and the possibilities and pitfalls of the utilized methodology. This review's goal is twofold. First of all to understand the current results and secondly to see how the current methods might be used in future studies.

I split up this evaluation into two parts. At first a review of the results of this study shall be given; results that eventually cumulated into the above synthesis which provided a regional and long-term perspective on change and continuity. It will be delineated what developments could be plotted and, likewise, to delineate what could not be concluded within the context of the used methods. Secondly an evaluation of the used methods to extract data from the available sources, as treated in Chapter 3 to 7, will be conducted. It will be discussed what are the strengths and weaknesses of the multidisciplinary and retrospective approach in general, and of the different used sources in creating the database. The toponymic research, the use of maps and the small scale pottery study will all be reviewed.

8.II.1.1 An evaluation: the results and synthesis

In the final synthesis of the first part of this chapter a regional and long-term perspective was taken which enabled the study of change and continuity. As a result, new connections and constellations became visible which were not yet visible in the separate study of the key areas of Chapter 7. The database proved detailed and chronologically extensive enough to first of all execute Birnbaum's five tasks enabling an Annaliste historical analysis, and to secondly define with as much care as possible the lengths of time along the lines of Braudel's three temporalities, whilst appreciating the "inner dialectic between these different temporalities"²⁵⁹. I thus arrived at a complex history of settlement, production, connectivity and power, successes and failures, modified by expansions and contractions, and characterised by an ongoing close relationship with Rome.

The long-term perspective

The long-term perspective of analysis is one of the main outcomes of this current study. This study covers

a research period spanning roughly 1000 years, and in combination with the consulted retrospective sources has a scope of some 2000 years. This lengthy timescale, combined with the extensive multidisciplinary dataset, and comparative study of the results of research projects of regions in the proximity and of Rome, has allowed me to isolate and analyse *longue durée* structures within the landscape of Lazio. Because of this study's broad scope and time-span, the outlines of structures of collective systems of belief, perceptions and attitudes, i.e. generically termed *mentalité*, emerged. These are usually beyond the "normal" fields of evidence for landscape archaeologists.

Spatial analysis of a web of sites

A second vital element of this study is the plotting of a fine web of separately studied and dated sites, and of the recorded activity (such as building and production) and interests (such as ownership, influence, authority) at these sites. This web of historical / archaeological sites enabled me to diachronically map activity in a regional setting. It allowed me to identify the actors at work in the landscape, and to track interaction and describe regional diversity within it. In this way I was able to identify sites and routes which appear to have been continuously in use. To some degree, and despite the obvious biases in the available data, the mapping of these elements in the landscape disclosed something about preferred places for activities throughout the history of the region and the role the landscape may have played in the history of human activity within it. In addition, the web of sites and interests enabled me to spatially track the demographic, socio-economic and political processes within the landscape; processes that usually come to pass on the medium long-term, i.e. the *conjuncture*. Conjunctions (as are regional diversity and connectivity) proved best visible in the high middle ages, because of the sheer amount and detail of the available evidence.

What is visible and what not?

This study knows how to find activity and relations of the 'powers that were'²⁶⁰. This study enabled me to spatially track the interests of state and church institutions, of nobles, of the well-to-do in general, of the literate, i.e. those closely entangled groups at the high end of society. Most of the discernible developments in the countryside were the results of the major historical geo-political developments and power strategies involving the elite, usually originating from Rome. Large-scale high commerce trade, of luxury goods, belonging to the realm of the better situated, proved relatively well-visible as well, certainly until the 6th century (e.g. in the African imports); more recent, evidently diagnostic pottery associated with the elite particularly was Forum Ware, and a number of other (high) medieval luxury wares.

Contrary the lives at the high end of society, the life of “commoners” proved to be mostly out of the scope of this research. It appeared to be difficult to comment on economic activity on subsistence level, on diffuse settlement and on different forms of land use (such as polyculture). The same held true for local micro-economies as those of villas, monasteries and castra as socio-economic units, and for the functional relationship of these centres with their subsidiary farms and the markets (with a few exceptions, such as *Castrum Vetus*). Details of local redistribution of goods and information within and among microecologies predominantly stayed out of reach. Exceptions were provided by the assemblages of Rome, of the wider Ostia area, of Privernum and of Astura settlement (especially the data by fine pottery studies) and by the anecdotes recorded in written sources which provided glimpses of local socio-economic activity.

To a degree this lack of information was resulted by the fact that the “common man” and local economies typically remained outside the realm of texts, especially during the early middle ages. The then written sources normally focussed on interests of the city of Rome and especially on those of the church, therewith on a few specific locations in the landscape (such as the *fundi*, larger towns and especially the dioceses and *domuscultae*). An additional complicating factor related to texts was the fact that many smaller historical sites could not be located. As a result the focus of the analysis mostly is on the well-documented and (also archaeologically) well-known larger sites.

The underrepresentation of groups at the low end of society is also caused by the current state of research (and publication) of medieval archaeology in the research area. Material culture, during most of the studied period, provided only limited additional data regarding the lives of peasants, shepherds, lumberers, hunters and slaves. As analogy with other parts of central Italy showed, for a genuine idea of life at this level, large-scale surveys and excavations of key-sites, and the creation of local (non-luxury) pottery typologies is needed. As of yet, the archaeological record is only fragmented in Tyrrhenian southern Lazio, and highly unevenly distributed among the key areas. Only as of now, early to high medieval pottery studies are gaining ground. In view of this all, I consider it of importance that in the recommendations section of this thesis future perspectives for archaeological research, including some focussed on the life of at the level of “commoners”, will be given.

Nevertheless, much of the dealings of the “common man”, the economic activities in which he was involved, where he was settled and travelled, although generally not directly visible, were implicitly present in the texts containing the well-documented elite and ecclesiastical activities

(i.e. interests) – and in the surviving material culture that is usually associated with these parties (pottery, churches, walls etc.), especially in the high middle ages. And to some extent one could use the tool of analogy to address this heuristic imbalance of high end and low end data. For insight into the life of “commoners” I have examined the results of studies elsewhere in central Italy, particularly those performed in northern Lazio and the Biferno Valley. This had to be done with the upmost care, with an eye for the obvious regional differences (in landscape, in socio-economic history, in the nature of relationship with Rome etc.) between those regions and the current studied area.

It has to be stressed that the absence of evidence on the life of “common man” does not mean that developments did not involve him. On the contrary, recent literature from Germany, the UK, Belgium, Italy and France seems to show that the developments in post-Roman Europe often involved bottom-up processes. The elites often played a secondary role and more than once acted after the situation was already on the move (as found in the research by Dries Tys, Joachim Henning, Susan Oosthuizen)²⁶¹.

Stages of transformations

By the available evidence it proved impossible to produce defined consecutive stages of transformations during late Antiquity and the early middle ages, as Moreland (for northern Lazio) and Francovich and Hodges (for Central and northern Italy) had been able to do. The primary reason for this is that the region’s archaeological data were not as detailed as elsewhere. Likewise, the written sources of late Antiquity and the early middle ages almost all were ecclesiastical; non-ecclesiastical (such as civic elite) activity usually remained hidden. As stipulated before, it is often difficult to interpret (dis)continuity. Is this a question of availability of data by chance and/or the (un)recognisability of evidence? Subtle changes proved hard to see, and likewise substantive markers of change are rare (as the burning down of a town, or the changes in organisation of rural production and resettlements). However, the fragmented evidence did not contradict the overall perception of the stages of transition as defined by other studies. Regarding the high middle ages the historical evidence allows me to conclude that the major conjunctural developments were generally the same as everywhere else, but mostly slightly aberrant compared to other parts of central Italy, probably because of the presence of Rome in the vicinity of the researched area. But this should not be of any surprise. As the wide perspective of *Villa to village* showed, the transition from the late Roman World to that of the high middle ages should not be attempted to be captured in uniform terms. All over the Italian peninsula, local and regional deviation was commonplace.

It is all but possible to definitively refute or verify the seemingly obsolete idea of Toubert that merely during the period of *incastellamento* there occurred an unambiguous break with the classical landscape. In the areas close to Rome much may have stayed the same, possibly for a long time, as these parts continued to have frequent day-to-day contacts with the City (and with the Church). However, in most parts of the current studied area there is found undeniable evidence, as was found throughout Italy (e.g. in the Farfa area), of earlier breaks with Roman structures, i.e. before *incastellamento*. The found largely human-induced environmental changes in and around the Pontine plain are a case in point. From the 8th century onwards the foundation of the *domuscultae* and the scaling-up of landed property must have fundamentally changed the organisation of large parts of the researched area.

The microregional perspective

In essence the typical Mediterranean landscape of Tyrrhenian southern Lazio, with its diverse environment and great natural diversity, constitutes a good environment for an analysis from Horden and Purcell's microregional perspective. To what level one can take such an analysis, i.e. of primary production and connectivity within and among ecologically diverse microregions, depends on the amount of insider information one can obtain, being provided by researching contemporary and retrospective sources.

This study showed that only fragmented evidence was available for the prime aspects of the microregional perspective, i.e. *interaction* and *primary production*. Of these aspects, connectivity within the landscape, and overseas, proved best documented. This held certainly true after the 10th century. Connectivity was best made visible by means of spatial analysis of historical references (i.e. interests). Pottery distribution, which is normally the best way to detect connectivity, proved to be underdeveloped in our studied area. Throughout the research period communication and mobility constantly experienced changes. Changing spheres of interests and microstrategies of control (often lines of control), alterations in focal points (e.g. centres coveted by several parties) and transforming infrastructure were to be seen. However, these forms of interaction within the landscape were mostly related to the well visible communications of the well-to-do and the powerful. Small-scale and subtle forms of connectivity ignoring the main roads, involving mobile yet common men, usually stayed out of sight, as was to be expected based on the experiences in *The Corrupting Sea*²⁶².

Primary production and redistribution were less well-visible as well. It usually remained out of sight who was producing what, and for whom. Only by consulting

relatively rare historical documents such as treaties and complaints did I see glimpses of the socio-economic realities of life in the countryside. Regarding production and redistribution archaeological evidence still has to fulfil its potential.

Concrete visions of specific microregions are rare, due to the fragmented supply of evidence regarding production and redistribution, and, of course, because of their intrinsic elusive nature of constant adapting to changing environmental, socio-economic and political circumstances. A number of the presumable foci (centres) of microregions could be pinpointed, usually larger sites which showed enduring activity and supported easy communications, most of which acted as gateways to other (often distant) microecologies. Examples were Cisterna, Norba/Norma, Terracina, Ostia and Velletri. Some microregional foci stood out in the evidence as focal points of a certain sphere of interests, as did Ceccano, Fondi, Terracina and Tusculum. Episcopal seats seemed typical microregional foci. Rome was always visible as the centre of a number of overlapping microecologies, exerting itself considerably influence over or channelling external (often international) influence to its hinterland. However, throughout the high middle ages the City proved less dominant on the level of interaction with its hinterland. As of then one saw glimpses of activities of rural microregions that were not primarily focussed on Rome (e.g. at Tusculum and at Ceccano).

To conclude: the results

Despite the distortions (i.e. the biases) caused by the fragmented archaeological records and elite-focussed historical records, a few crucial structures and developments unambiguously stood out during the process of this study. First of all, the continuous role of Rome. The Eternal City continuously influenced much of the (pace of) developments in the studied area, by its role as a regional centre and as a funnel of outside influence. In addition, this study showed that a demographic and economic refocus occurred on accessible locations, villages, churches, sees, and at environmentally safe and defensible locations between the 3rd and 7th centuries. Another conclusion is that the Pontine coast showcased less activity than other parts of the researched area throughout the research period; likely caused by unfavourable ecological circumstances, bad accessibility from the coast to the interior, and the coast's vulnerability. The evidence once more confirmed some of the general conclusions of earlier historical and archaeological studies, such as the assumption that the influence of the early Church was extended along the main roads to and from Rome; as was the notion of temporary dip in papal power between the late 9th and the middle 11th century. What is more, the earlier attested

7th/8th century deepest economic slump in Rome seemed to coincide with the evidence on the ground in the countryside. Churches stood out as markers of continuity, which seems consistent with earlier studies performed in other parts of Italy. The evidence showed in what way, like everywhere else, from the 10th century a new landscape was developed, fully exploited, and forged by economic bloom and by a revival of long-distance trade, by *incastellamento*, by fast growing civic elite power and by expanding rural monasticism. The accumulated evidence showed that the commune may have influenced (or hindered) *incastellamento*, as was suggested by Toubert before. The volatile nature of the political constellation across the landscape during the high middle ages was unambiguously recorded and spatially analysed.

These results bear testimony to the added value of a study such as mine, a study that was primarily based on a re-evaluation of existing data. It proved to be more than merely a methodological test case. Its multidisciplinary character, its lengthy research period and its regional scale, and its eye for details alongside with developments on a macro-regional level, provided a better understanding of long-term and conjunctural processes regarding the studied area. The current study outlines a history “in” the Mediterranean (Horden and Purcell), that together with similar studies in many more regions (such as the Biferno Valley, the Tiber Valley and Etruria) will help to tell the story “of” the Mediterranean²⁶³.

8.II.1.2 *A further evaluation: sources and methods*

A substantial database was built. As was stated in the evaluation of the synthesis, this database’s size and comprehensiveness enabled research in a long-term perspective and a spatial analysis of the distribution of sites and interests throughout the research period. It helped me identifying past long-term and medium-term structures. In this section I will evaluate in short the methods I used to construct this evidence. What are the strengths and weaknesses of a multidisciplinary and retrospective approach in general? To what extent did the study of different types of data succeed?

The multidisciplinary approach

Overall, I beforehand identified six types of data that could shed light on the researched period: i.e. archaeological, historical, toponymic, cartographical, sub-recent topographical and ethnographical data, and modern aerial photographs²⁶⁴. These were combed through, in order to find every little bit of information regarding human activity throughout the researched period. I examined primary sources and reworked secondary sources. As I insisted in Chapter 1, this effort’s aim was not to be exhaustive. I studied as many relevant sources as possible

that were available to me in libraries in the Netherlands, in Rome and Latina (*Archivio di Stato*), and online.

As I addressed in Chapter 1, it is essential to multidisciplinary research to examine each of the different types of data separately, whilst bearing in mind their specific interpretative challenges. I did so as consistently as possible, as was treated in detail in Chapter 3 to 6. The data identified in the sources were studied along the lines of the six types of data and “cleaned up” as much as possible in regard of their earlier scholarly interpretations. This proved to be a great deal of work. Not only because of the amount of data that had to be processed. Arranging the disclosed information along the lines of the six types of data required a substantial effort as well. Written sources and maps quite often contained a range of valuable data, such as historical data (e.g. the dating of a site, interests of stakeholders, unprecedented events), information regarding local topography and various local toponyms. All these pieces of information had to be assessed by me as to their reliability or relevance. Was the respective information certainly or possibly of value or should it be altogether left out of the database? Furthermore, I had to find ways to deal with broad/relative (as at the *opera saracinesca*) or unspecified archaeological dating (such as assemblages dated “between the late Roman period and the high middle ages”²⁶⁵). And I had to assess the evidence itself constantly. How solid was the proof for a hypothesised Roman *civitas* near Nettuno? How literally should one take the distances on the Peutinger map?

I had to deal with these issues consistently throughout the database. Essential for consistency was the creation of my own “working definitions”, or classifications of site types, describing what I consider to have been the physical (i.e. archaeological) manifestation of the term and its accompanying interpretation. Only in this way I could create a database of the different types of data, and could handle difficult interpretations of historical terms (e.g. what is a “castrum”, a “turrem” or a “civitas?”) and was able to deal with diverging definitions of archaeological site-types in earlier studies (e.g. what is a villa, or a town?). The site classifications, as treated in Chapter 6, grew organically as the building of the database progressed. As a by-product whilst creating these definitions, this study offered new knowledge into the regional meaning of the historical term *civitas*.

The data extracted from the six different data were conjoined on the level of sites. In this study, “sites” are considered nodes of human activity within the landscape, and their plotting was used to analyse patterns of activity. In the end, this study identified a grand total of 662 sites. This study’s final database, to be found in Appendix

6.1 and on the University of Groningen/UMCG research database (Pure), showcases the results of these efforts.

In theory, by cross-referencing different relevant data, human action at each site could be given a maximised chronological and typological depth. Indeed, the large body of multifarious data proved complementary when studying individual sites. Of course, many archaeological sites were documented in the written sources; especially the larger settlements. In some cases I could, with a high degree of certainty, pinpoint smaller historical bodies to a specific archaeological site, as in the cases of the castrum of Fogliano, the fundus Sole Luna, the church of S. Andrea and the church of S. Giacomo. Sometimes these identifications were built on earlier studies, sometimes these were new findings. Similarly, by combining different disciplines, solid hypotheses of the location of enigmatic large historical sites could be concocted, for example of the location of *domuscultae* (and especially regarding Formae) and of Clostra Romana. At many sites the combination of a close examination of the descriptive historical details, the local topography, the dating of the archaeological objects found and a toponymic study has led to a better understanding of the sites' functions and/or their contemporary states, and/or to a fine-tuning of the sites' chronologies. Such accumulations of data led to the deepening of universal knowledge of sites and areas, such as of Torre Astura / Astura settlement, of Lanuvio, of Norma, and of Pianabella / Ostia / Gregoriopolis²⁶⁶.

Handling imbalance and bias

During this research I had to deal with an inherently imbalanced dataset. There were obvious biases in the available sources and in the data extracted from them. Some periods, areas or sites were better documented and studied than others. My study shows that the views of *conventional wisdom*, as stipulated by Moreland, with historians focussing on the high middle ages, and the archaeologists on late Antiquity and the early middle ages, come naturally from the available evidence. In this study written sources and historiography provided the most solid information, and provided the bulk of the data for a study of the high middle ages (or, at least, from the 10th century onwards). As it turned out, archaeology proved to be the best source for research of late Antiquity and the early middle ages. In general, the high middle ages were much better documented than the early middle ages. Historical sources were particularly focussed on Rome, and on Church activities, and not so much on the countryside, especially during the early middle ages. Likewise, the archaeological evidence showed many gaps: several parts of Tyrrhenian southern Lazio have not yet been subjected to (published) archaeological studies; or the studies that were performed have lacked focus regarding the middle

ages, for a variety of reasons. And then there is the issue of the standard of the archaeological studies performed; this was not on the same level at each site. Archaeological evidence is equally biased by the fact that specialist studies have not been conducted equally over the whole study area (e.g. pottery studies, wall facing typologies) and by the overrepresentation of some types of assemblages in the literature (such as monumental vestiges) as well. Then again, other areas have been exposed to high quality "holistic" archaeological investigation, such as the Ostian coast. In the below section on Recommendations, I will comment on as to what choices future study could make to handle these imbalances of the available evidence.

In order to deal with imbalanced evidence and to make the database suitable for the analysis, three measures were taken in the set-up of this study:

1. at all times imbalances and biases of sources were monitored and made explicit, by commenting on what could be concluded and what could not.
2. The spatial imbalanced distribution of data across the landscape was tackled by dividing the area to be studied into 10 key areas.
3. the diachronic imbalance was dealt with by separating the research period into three different periods.

Were these measures effective in facilitating the analyses? On balance, the answer to this question should be yes. These measures taken proved to be fairly effective in dealing with the detected biases and in analysing the dataset. At all times during the final analysis of Chapter 7 and the above synthesis of Chapter 8 it was clear to what extent something could be concluded with certainty, what should remain tentative and what remained outside of the scope of conclusive analysis for this study.

It should be noted that comments regarding biases are not always that straightforward. It turned out not that easy to assess the effects of individual biases for the analysis. Given the lack of (published) large scale multidisciplinary projects with a lengthy study period in the researched area, there were no regional benchmarks to be consulted. It remains unclear, even in respect of the GIA projects, to what extent late Antique and early medieval coarse wares and high medieval glazed wares in the past might have been overlooked, disregarded or misdated²⁶⁷. In secondary sources, as archaeological-topographical studies, imperial Roman phases were often overrepresented. It is difficult to assess to what degree the late imperial and subsequent phases were underrepresented and small (non-monumental) sites were disregarded by these studies. Biases hidden in historical sources proved also hard to assess. Were the elite really absent in the countryside until the 10th century, as was implied by their absence in

the (mainly ecclesiastical) sources? Additionally, the 8th century produced a large body of historical papal *fundì*. This seems largely caused by the availability by chance of two large epigraphic sources, thus constituting a bias. However, it is known from other historical and archaeological sources that the 8th century was a century of growth and papal expansion as well.

Analogy with results of regional and long-running studies of other parts of central Italy has often been of help in assessing the effects of the biases. However, comparing the database with other studies may mix things up as well: for example, did the absence of 5th or 6th century maritime settlements in converted villas (as observed in Etruria) reflect the lack of published intensive studies of the coastal villas, or were these settlements completely absent in the studied area?

All in all, the chronological and spatial partition of the evidence proved to be useful. It forced me to focus and refocus again and again, and to zoom in and out, digging deep into the available data in order to reveal any kind of structure in the evidence to the greatest possible extent. Because I had to say something concrete about each individual key area per every single period, and then synthesized my observations for the whole study area per period, tendencies and discrepancies presented themselves naturally. I believe that with this *modus operandi* structure (temporary and at a local level, but also continuously and over large areas) cannot have escaped my attention. Importantly, the differences in the available evidence per key area became transparent and were incorporated in the analyses per period and in the final synthesis. The major downside of the individual key areas and three-period approach was that it proved to be very time consuming, and that it produced all kinds of repetition.

Now I shall put forward some comments on the specific types of data examined during this study:

The start of a medieval reference collection for the Astura area

In this study a small-scale analysis of the medieval pottery of the Sangallo Museum in Nettuno was undertaken²⁶⁸. I examined all the fragments believed to be medieval found by Arnaldo Liboni at the site of Torre Astura, or in its immediate vicinity. This study was executed in collaboration with Cristina Leotta, valued member of the ceramics research team of the site of Privernum. Altogether 26 shards were described.

The results of the Liboni analysis

The pots that we examined were all found at the site of Torre Astura, or in its immediate vicinity. We were able to identify and date most fragments, mostly by confronting

them with published material from well-dated contexts such as those of the sites of Priverno and of the Crypta Balbi at Rome. Two fragments might have been influenced by Lombard or Byzantine pottery. A first possibly 9th century shard was diagnosed, the first material evidence for this century at Torre Astura, and in fact for the whole Nettuno key area. Most fragments dated to the high middle ages and more recent times; included were well-known wares as *ceramica dipinta a bande rosse* and *maiolica arcaica*.

Was this study of the Liboni collection worth the effort? I am confident it was. The processing of the small-scale pottery collection spanned roughly one month of work, including identification, description and photography. During this short time-frame we were able to set-up a small reference collection for the middle ages for the Nettuno key area. Especially the high medieval pottery was given more body by this study. This project demonstrated that even relatively limited pottery studies may further develop the chronology of a medieval site and the (exchange) networks it was involved in (e.g. by the Lombard / Byzantine influenced wares and by the high medieval Campanian wares).

First hand analysis of historical sources

Whenever within my grasp, every single historical primary source was re-read. This was done in order to uncover potential intentions of the authors, which might have had bearing on the document as a source of facts. Moreover, in this way I might be able to find new topographical clues, to find family relations or identifications of individuals, or to unearth dating information and toponymic clues that had been disregarded in earlier studies. Several examples illustrate why first-hand study is time and again needed to truly appreciate documented evidence, and in order to refrain from uncritically adopting conclusions from earlier historiographies. One of the most information rich documents illustrating this was the bull of the monastery of S.Alessio all'Aventino featuring the wider Astura peninsula, dated 987 AD²⁶⁹. It showed to what extent texts may contain genuine evidence regarding everyday-life of the studied period. The text's reflections on ruins and a former church are clues to some former functions and the chronologies of (possibly) two abandoned sites. In this text the couple Stefania and Benedictus was mentioned, which the current study for the first time was able to link to Benedictus I Campaninus, who married Stephania Senatrix of Rome; she was a member of the mighty Crescentii family. The Crescentii family dominated Roman politics in the second half of the 10th and first quarter of the 11th century. A close-reading of the text thus revealed an important piece of evidence of the area's ownership status, and of the radius of influence of Rome's

elite families in the countryside of Tyrrhenian southern Lazio.

The retrospective method

One of the novel aspects of this study was the extensive use of retrospective evidence, mainly drawn from maps and toponyms. This evidence allowed me to see glimpses of the post-medieval landscape (i.e. its environment, land use, settlement and infrastructure), and it often exposed fragments of contemporary post-medieval perception (cf. the Da Vinci map²⁷⁰). Most importantly, the retrospective evidence proved instrumental in locating historical sites by the examination of the historical maps with their elaborate topographies and by the study of toponyms.

Toponyms

In short: the toponymic research was based firstly on the toponyms uncovered in the relevant primary sources, the, what I called, “historical” toponyms, dating back to the researched period (i.e. to the 3rd up to 14th centuries). It was based secondly on the cartographical toponyms depicted on the 51 historical maps (which generally dated from the 11/12th century to the early 20th century). These two types of toponyms were treated separately. The toponymic sub-study was based on tracing origin, meaning and usage of place-names originating during the researched period. By monitoring toponymic roots and their changes throughout the ages until the present, this study was aimed at identifying and linking (historical) toponyms and as such helping to pinpoint the physical location of the site or area bestowed with that place name. This sub study was complemented by an analysis of toponyms found on modern maps. Many ancient toponyms proved to have modern counterparts. The results of this study are reflected in Appendix 4.1.

The results of the toponymic sub-research²⁷¹: The study of contemporary “historical” toponyms (i.e. 3rd to 14th centuries) resulted in obtaining new evidence of the location of several historical sites:

- By confirming earlier hypotheses regarding the identification of toponyms and combining this secured information with the fresh examination of topographical clues on historical maps or knowledge of the current landscape. An example of these results was for the substantiated link between the toponyms of Basilicam S. Mariae and massa Fonteiana, and their tentative location north of Pratica di Mare.
- By matching contemporary historical and retrospective cartographical toponyms (12th to 21st century). This approach resulted in relevant results as toponyms on maps proved instrumental in locating sites mentioned in the written sources. An example of the results of this analysis was the specification of the location of

the domusculata Calvisiana because of the presence of the toponym Calvisiano on the 17th century Catasto Alessandrino. An additional example was the location of the 8th century fundus of S. Thomas north of Le Castella. In some cases the performed study corrected earlier identifications of toponyms, as in the case of the *Loco qui dicitur Apranu*. The IGM database of current toponyms yielded some additional clues on the (possible) location of historical toponyms.

In some respects, the current toponymic study was not executed as detailed as were some other studies, in which, for example, on a large scale names of Roman villas and landowners were traced back to medieval villages (cf. Moscatelli 1995, Tomassetti 1913), or in which a large-scale study of the (changing) meaning of geographical-archaeological toponyms within the landscape of Lazio (like De Lungo 1996 and 2001) was executed. Contrary, the current study is focussed on sites and their functions and location, and the study of toponyms is just one of the ways of getting that focus.

The study of maps

The results and practicality of the study of maps was discussed in detail in 5.V. In summary: The study of maps was an intensive and meticulous work. It produced some good results. First of all, the effort yielded a large inventory of cartographical toponyms, which proved to be very useful in identifying and locating toponyms (and sites) – see Chapter 4.III. The analysis resulted in the retrieval of a fair amount of valuable information on the contemporary state of a variety of ancient vestiges and roads still present in the landscape as well. It also clearly showed the difficulties and particularities of the environments of the Pontine and Amaseno plains.

The topographical details of the 19th and 20th century’s maps provides valuable information for this research, especially in order to locate sites, such as Petra Aquara, Torre Sessano, S.Eleuterio and the mill of Monticule. At times this study irrefutably showed the large amount of detailed information sub-recent maps may hold of the ancient Roman and medieval landscape. One of the best examples of this was the land use depicted on the 1851 *IGM map*, which confirmed the veracity of the 10th century documentation on the crops of the *castrum Vetus*²⁷². Additional evidence for the value of maps as bearers of glimpses into the past of landscapes was found in Strabo’s *Geography*. His topographical description²⁷³ of the Pontine swamps matched the extent of the waterlogged areas visible on some of the historical maps studied in this thesis, again most prominently on the 1851 *IGM map*.

Overall, the digitalisation of the 1851 *IGM map* has paid off, first of all because of the detailed information

these maps provided about sub-recent land use and about the position of the waterlogged areas in the plains. The map provided a vast amount of useful cartographical toponyms, and, moreover, showed examples of the small-scale Mediterranean connectivity that was described by Horden and Purcell, for instance the small mule tracts along the coastal Pontine lakes depicted on them.

19th and 20th century topographical studies

The landscape descriptions and topographical-toponymic publications of 19th to early 20th century scholars such as De La Blanchère, De Prony, Ashby, Tomassetti and Nibby have contributed first of all to the study of toponymic roots. Secondly, their accounts provided valuable details on ancient vestiges still in place (e.g. at Antium, Ardea and Conca) and gave ethnographical information (e.g. on the Moorish costumes of the coast) as well.

Concluding words

By means of my current research an inventory was made of all the relevant and available resources. I am confident my effort turned out to be a sound review study which by itself, in its completeness and interdisciplinary set-up, yielded new understanding of medieval life. But it should be seen as a new departure as well. Regarding the southern parts of Lazio, the current research could be perceived as the initial phase of a new research project, a start-up phase such as the long-running and interdisciplinary projects in the Tiber Valley²⁷⁴, in Apulia²⁷⁵ and in the Biferno Valley²⁷⁶ also went through. By using their collected information, those project's teams were able to build new strategies which constituted the foundation of a successful (re) analysis of the post-Roman to high medieval landscape²⁷⁷. They were able to bridge the gap between historical and archaeological tradition and thus enlighten the Dark Ages. I am hopeful that it will be possible to do the same regarding my researched area, on the basis of the current multidisciplinary database.

8.II.2 *The recommendations for this study's follow-up*

Based on the experiences regarding the results and the used methods of the current study, including the attested challenges in the analyses and the omissions found in the available data, what could be the emphases of future studies? In this section, this question will be addressed from four different but overlapping research angles that stood out in the course of the current study: formulating general research strategies, the building and improving of typologies, the study of specific sites and the reading of documentary evidence. The goal of this discussion is to facilitate future studies, using one or a combination of the various disciplines deployed during the current research, and to build new strategies regarding the analysis of

human activity within the landscape of Tyrrhenian southern Lazio between the late Roman and late medieval period.

8.II.2.1 General research strategies

Conducting a multidisciplinary study

As the current study showed, multidisciplinary studies may greatly add to the study of medieval Lazio. To me, two preconditions apply to such multidisciplinary studies. Firstly, the separate treatment of each of the different types of data, with attention for their specific interpretive challenges and biases. Moreover, as a rule, one should make a study of biases of the used sources before integrating these diverse data. This holds especially true when studying periods for which only fragmented data are available. Only when analysing biases, one can state what, for that specific study, positively can be concluded, what conclusions must remain tentative and what is outside of the scope of a plausible analysis.

Looking out for the “normal man”: a focus on local contexts

In general, there is not much concrete information available on those people that mostly remain outside the scope of texts: the peasants, shepherds and transhumant people, lumberers and fishermen, and slaves. The contexts in which these people lived proved overall difficult to detect by archaeological fieldwork for a number of reasons, such as the fact that less durable built structures are hard to detect and it is hard to get a real grip on locally oriented (coarse ware) pottery – which may have been discarded in earlier research. As was shown in the Farfa, Tiber Valley and Biferno projects, local excavations and systematically conducted surveys with an explicit focus on the middle ages are needed to effectively tell the story of these groups from the perspective of local production, redistribution and demography (See also 8.II.2.2., focus on medieval coarse wares)²⁷⁸. As of yet, such archaeological research projects with a focus on local medieval contexts are rare in the research area.

The use of absolute dating methods

In Apulia, the use of absolute dating methods in medieval urban contexts has shown its merit. Paul Arthur's carbon-14 dating of medieval layers in Apulian villages in combination with an intensified excavation and historical socio-economic and topographical analysis, brought about a breakthrough in the insights of the evolution of medieval villages. Several of the villages previously dated to the 11-13th century based on historical information, could by means of the carbon-14 dating be dated back as early as the 8th century²⁷⁹. Although it remains to be seen if such an early date may hold true for towns in Tyrrhenian

southern Lazio, taking into consideration the real dissimilarities between medieval Apulia and Lazio in geography and geo-political circumstances, the results of the Apulian study exemplify the common challenges in archaeological recognisability of the period, and the potential of new techniques and new angles of approach to be attempted.

Trade networks: ports and their hinterlands

It was established that between the 4th and 6th century a maritime trade system functioned consisting of several coastal centres on fixed routes, among which are Astura settlement, Ostia, Portus, Rome, Naples, Marsiglia and S. Antonino (Liguria). At these established trade hubs ships would dock and cargo would be handled. Evidence for this trade network are the reoccurring of the same wares shapes and/or their relative share on all of these maritime centres²⁸⁰.

Future research should focus on ports and their hinterlands, preferably covering long stretches of the Italian coast, in order to better understand the functioning of Roman and medieval maritime trade networks. A study of harbours, as gateways of exchange of goods and people in both directions, would be vital part of further study of connectivity. It goes without saying that pottery studies would be pivotal in such research. Numismatics and typological study of wall facing techniques should be integrated as well. An innovative approach would be the consistent study of the hinterlands of ports. Questions that could be asked are: How far inland do we see reoccurring shapes? Is there a common denominator in the types of hinterlands involved? For example, is a mountainous backdrop a factor involved? As discussed, the points where mountains reach the sea often became a gathering point of communications in antiquity and the middle ages²⁸¹. Were maritime trade networks institutionalised or market led? Are there specific fixed distances between the ports involved in established trade networks?

In the current study area, Terracina should be given priority. Terracina is a strategical hub, most likely involved in a number of networks at different stages during Roman period and the middle ages²⁸².

Mixed-culture assemblages

On a local level in inland south-eastern Lazio, in the Amaseno valley (Ceriara) and the southern Sacco Valley (Castro dei Volsci), material cultural blending took place in the 6th and 7th century: It has not yet been established why these mixed cultural assemblages are found locally in these parts of the region only. Future research should focus on the factors behind the occurrence of these assemblages. In this research two possible factors have been addressed:

- the presence of long-distance exchange systems in that particular part of the region: the archaeological

evidence seems to show that an active exchange system functioned between the Sacco and Liri-Garigliano valleys and the southern Italian peninsula²⁸³.

- The socio-political situation. The areas in which the mixed assemblages were found are situated relatively remote from regional centres of power (Rome of course, Terracina, Anagni), possibly at a local level resulting in a more volatile or “open” socio-political situation. In the areas where the Duchy of Rome had more power on the ground (on the coast, near main roads, near Rome, and near towns like Terracina) no indications for possible ethnic blending has yet been established.

Population transfers

Future research should pay heed to indications for high medieval population transfers, which are seen as an intrinsic part of the *incastellamento* process. Only in northern Lazio such a transfer may appear from the archaeological evidence, i.e. the pottery of (domusculta) Monte Gelato and Castellaccio. In our study area, no direct historical nor archaeological evidence exists for such transfers. The three explicit *incastellamento* charts on repopulation (Monte Julianu, castrum Vetus, castrum Fogliano) do not furnish information on the origin of the transferred population. In the current research a number of population transfers have been postulated, which could be the subject of future exploration: a transfer from Norba to Norma, from Satricum to Conca, from Villamagna to Monte Julianu, and from domusculta Sulficiana – fundus Savello to castel Savelli²⁸⁴.

Survey field work to localize and study historical sites

Further archaeological reconnaissance research could be focused on the localization and/or analysis of abandoned *castra* and monasteries, especially in the mountainous areas. Toubert was convinced that thus a number of *castra* known from the written sources could be pinpointed, and I agree²⁸⁵. Moreover, many of the historical sites that already have been (tentatively) identified could be studied by such survey fieldwork. The preliminary reconnaissance work done at the sites that have been identified as Monte Giulianu (OLIMsite 298), Monte Acuto (OLIMsite 588) and at the monastery of S. Angelo (OLIMsite 8) serve as examples. In future studies, securely identified historical sites such as Monte Trevi (OLIMsite 197), castrum Prunum (OLIMsite 263) and castle S. Silvestro (OLIMsite 289) could be subjected to such survey fieldwork.

Satellite sites to *castra*

Future studies should pay attention to the existence of satellite sites to *castra*, as have been attested in the best documented *incastellamento* project in our study area, castrum Vetus. The presence of such tributary sites has

been attested in the Biferno valley, not only through the written sources, but also by survey field work²⁸⁶. In the Biferno valley, satellite settlements were part of the second phase in the development of *castra*²⁸⁷. These contributory settlements came in different shapes, ranging from smaller *castelli*, *casali* to monasteries, usually founded in lower positions within the territories of the incastellised centre.

Analysis of historical maps

The digitized 1851 map holds a lot more “insider” information than I was able to recover in the context of the current study²⁸⁸. Like in De Silva and Pizziolo’s *reverse cartographic approach*, future study could execute a wide scale comparison of the 1851 map (and other maps to digitise) with aerial photographs. Such study would make it possible to find detailed information on ancient hydrography and infrastructure, and on antique field allotment.

8.II.2.2 Building and improving typologies

Pottery

Unlock and published earlier conducted pottery studies

An important step in future studies would be to unlock the datasets of the earlier conducted excavations of Antium, Terracina, Velletri and Castra Albana, and make the results of these (pottery) studies available for a wider public. As discussed, for a number of such excavated key-sites, with a huge potential for new data on the research period, the publication of the available datasets is still awaited.

Study of pottery collections of museums

Many local museums hold relevant permanent collections of medieval pottery, as can be seen on display at for example the museum of Castel Porziano, Castra Albana, Segni, Sezze and Terracina. The potential of these largely unpublished collections has not yet been (fully) exploited. Future research should involve a study of these collections, in collaboration with local scholars who have detailed knowledge of the contexts in which the pottery was found: the village and its surrounding countryside.

Focus on medieval coarse wares

In earlier survey research many late Antique and medieval coarse wares (called generically *ceramica comune*) were overlooked or misdated, as the Tiber Valley project shows. This is undoubtedly also the case in the PRP study area. The lesson learned is that in order to get a grip on local coarse pottery traditions, excavations are necessary, accompanied by a thorough typological study of shape and ware. Indeed, the small-scale excavation and pottery study at Astura settlement shows what could be achieved. Here a regionalisation of pottery from the late 6th century

onwards can be seen. Further excavations could help pinpointing the causes of this regionalisation and, finally, the site’s abandonment in the 7th century. Medieval local coarse ware traditions presumably were not distributed evenly over the study area. In the wider *suburbium*, the exchange links with Rome remained strong throughout the early middle ages²⁸⁹. Local coarse ware traditions, it may be expected, may have been less developed here compared to areas situated further away Rome, or away from the main routes.

Extending pottery reference collections to the 8th-14th century AD

This study shows how difficult it is to investigate the *domusculta* and *incastellamento* period. The available archaeological data barely adds to the slim historical narrative. As touched upon in Chapter 7, research on the *domuscultae* and the *incastellamento* process would be enriched by extending existing pottery reference collections to the *incastellamento* period. This way, survey sampling will not be typically focussed on the (pre)Roman periods, as was common until recently. As the current pottery analysis and Tol’s study of Astura show, coarse ware and richly decorated (imported) ceramics dated from the 8th century and later are emphatically present in the landscape, and may already be present in older pottery collections. Of great help in extending these reference collections would be on-site survey of early to high medieval sites. Concretely, in the Nettuno – Astura coastal area, Borgo Montello could be a fitting location to start such field-work; the site is historically well-documented in the high middle ages, and its near vicinity seems well suited for survey reconnaissance. Other examples of sites with the potential of finding relevant 8th to 14th century pottery assemblages are Astura settlement, the “castellum Valentinum” and the Norba plateau.

A typology of Forum Ware in Tyrrhenian southern Lazio

As has been stipulated in the paragraph on the possible direct relationship between the *massae* in the foothills and the coastal *domuscultae*, in future research a typology of the Forum Ware in Tyrrhenian southern Lazio should be set up. This has been done in northern Lazio, as has shown that *ceramica a vetrina pesante* was not only produced in Rome but also locally, probably on *domusculta* centres. In future research, the *ceramica a vetrina pesante* specimen found in the research area, especially the large assemblages of Villamagna, Norba, Privernum and Pianabella, can be weighed against each other and the Roman produce. This way we may be able to distinguish between possible local and Roman production / distribution.

ARSW

The intensive study of ARSW, and the continued finetuning of its typology, is indispensable. Without the study of African imports, the analysis of late Antique and early medieval regional site distribution patterns lacks the necessary chronological depth. However, while ARSW offers a relatively fine chronological fine-tuning tool for the 4th to 7th century, it is more problematic as a dating tool in the 2nd and 3rd century in reconstructing the settlement patterns. Therefore, the study of ARSW should be complimented with the study of other diagnostic ware types, and with the dating provided by other types of evidence (e.g. wall facing techniques, numismatics, historical evidence and absolute dating methods).

Typological study of wall-facing techniques

Most studies of medieval wall-building and facing techniques in the studied part of southern Lazio date to the 1970-ies²⁹⁰. The improvement of these existing typologies could be achieved with relative little effort by a systematic study of wall structures, local or regionally, such as executed for example in Ardea, Lanuvio and Torre Astura. If wall-building and wall-facing typologies would be improved, preferably in combination with on-site pottery studies and absolute dating methods (see below), they could provide a formidable additional dating tool. In the current study area one could start with:

- opera saracinesca. In the context of creating a new regional typology, opera saracinesca brick layers at Antium and Castel Savelli could be compared to other examples of the wall facing technique; possibly this study could tell if these walls had a clear correlation to the existence of *domuscultae*, as may be suggested from the current state of research.
- opus vittatum. The use of *opus vittatum* primarily seems to have been used for crude building activities associated with internal reorganisation and contraction of sites from the 3rd century onwards, as the excavations in Ostia Antica show. *Opus vittatum* is found on a number of other sites such as the Vicus Augustanus Laurentium, Piccarreta 7, at the villa of Nero, in the town of Antium, at the villa of Torre Astura and on several sites treated in the *Tellenae* Volume of the *Forma Italiae*²⁹¹. Unfortunately, at most sites the *vittatum* brickwork has not been studied as of yet²⁹². This is unfortunate, as this brickwork should be dated more precisely and its context studied in order to effectively say more about its potential as an indicator for reorganisation: for which buildings was vittatum used, what spaces were created? For this, test trenches or excavations are needed. Only such invasive techniques, in combination with intensive pottery study, would enable us to make statements about possible internal

reorganisation or, possibly, of the conversion of coastal villas into maritime villages.

- Byzantine influenced masonry (as found on Torre Astura). Fabrizio Galeatti found morphological similarities between the *opus latericium* on the lower wall on the inland side with Byzantine structures of that time, and concluded that this is a 6th or 7th century construction phase. Likely the tower was redone during this building phase. Future research could shed more light on these Byzantine techniques in Tyrrhenian southern Lazio. The possible 6th century stronghold of Picco di Circe would be a good place to start. Such research may clarify if Torre Astura and Picco di Circe where part of a (hypothetical) 6/7th century Byzantine defensive system.
- A typological study of the high medieval remains of Torre di Spaccasassi (OLIMsite 570), castle and Torre di Presciano (OLIMsite 169 and 574) and castle Fajola (OLIMsite 146), all sites associated with the realm of the Tusculi in the 12th century. As of yet, wall-facing research of these historically connected sites has not been executed. Confirmation of parallels in the walls on these sites may be additional proof for a Tusculan “corridor” from the Alban Hills to the sea.

8.II.2.3 The study of specific sites

Based on the experiences of the current study, there is a strong urge for (continued) excavations and pottery studies on key-settlements and towns such as Torre Astura, Astura settlement, Antium, Norba and Terracina.

It is clear that Astura settlement was a settlement of considerable size in the 4th to 6th century. Tol classified it as town. The distinguishing characteristic of a town is a public building, proof for a centralised administration²⁹³. Such public building has not been found yet. More field work is needed for further insight in the sites’ status, beyond the small window provided by the exposure and the recent ground radar study. Extended excavations can also shed more light on the trade network in which the settlement was involved, and on the causes and chronology of the suggested regionalisation of the site in the 6th century. The reasons for the possible abandonment of the site (a gradual marginalisation, destruction perhaps?) could be tackled. Maybe there was some kind of contracted habitation around the local church *ecclesia Sanctae Marie Seu Salvatoris* from the 6/7th century onwards. Additionally, new fieldwork could shed more light on the renewal of the site in the high middle ages. Possibly more could be said about the role baronial families (Crescentii, Frangipane) may have had in the settlement’s revitalisation²⁹⁴. The hypothesis of increased connectivity of Astura settlement with its further hinterland in the 4th to 6th century

Table 8.1. Sites with further study potential.

OLIMsite	name	focus of future research
8	Monastery of S. Angelo	Field survey and study of wall-facing techniques. Given the fact that walls of the church (and other structures) are still standing it is conceivable that the church was in use until sub-recent times. Briefly surveyed by Van Leusen in 2007: republican fattoria, possibly early in view of the tile and dolium fabrics, and continuing into, or re-occupied in, post-Roman times.
23	Norba (plateau), Civita	A restudy of the assemblages of the early 20th-century excavations might enable to date the abandonment of the site.
31	Terracina	Publication / restudy of existing pottery / museum collections
32	Antium	Publication, restudy of existing pottery collections; excavation when possible; wall-facing study of opera saracinesca.
33	Astura settlement	Extend excavations to establish size and importance of the site and retrieve evidence on possible public buildings, trade networks, causes of regionalisation of the site and its abandonment in the 6/7th century, and on the renewal of the site in the high middle ages. Continued field survey in direct area; confront pottery to that of the Velletri area.
34	Satricum	On the site of Satricum future research should focus on the hypothesis of Satricum as a domusculata centre in the late 8th and 9th century. Studies on the provenance of the pottery (among others Forum Ware) are required to see if a close economic link to Rome existed, a typical aspect of a domusculata site.
41	Picco di Circei	Evidence for Byzantine presence (wall-facing technique vs the site of Torre Astura, pottery)?
46	Ad Turres Albas	Field survey on the site at Porto di San Nicola which has tentatively been linked to the historical site of Ad Turres Albas. What is the extent and dating of this site? Are there clues as to verify the hypothesis of the site being Ad Turres Albas?
51	Nettuno, civitas Antium	All the evidence for a hypothetical late Roman civitas nearby Nettuno is circumstantial. A habitation centre nearby however, can be surmised, given the Roman and late Antique cemetery for which evidence does exist. This is an interesting notion that should be incorporated in future fieldwork strategy in the Nettuno area.
53, 133, 137, 138	San Andrea in Silice / castrum Vetus	Field survey. The site of San Andrea in Silice (Le Castella)/ castrum Vetus (castrum novum / S. Andrea) is largely built over nowadays. A survey of the surrounding countryside may provide hints about the way rural habitation and agricultural production in the direct surroundings of the castrum was organised.
64	Torre Astura	Continued field survey in direct area; confront pottery to that of the Velletri area; study of opus vittatum of the fish pond; further study of opus latericium on inland side of tower (Byzantine influence vs. the site of Picco di Circei).
101	Castle of Acquapuzza	Field survey. No known remains but the ortophotos show a surveyable raised terrain, possibly artificial, consisting of two long-drawn circular features of roughly 500 x 200 and 200 x 100 meters.
128	S. Maria della Sorresca	Field survey and study of wall-facing techniques. Ortophotos: the surrounding area seems surveyable.
147	Velletri	Publication / restudy of existing pottery / museum collections; confront pottery to that of the Astura area.
155	Castra Albana	Publication / restudy of existing pottery / museum collections
166	Castrum Fusumgnanum	Field survey and study of wall-facing techniques. Very probably the round hill with signs of circular terracing and surrounded by ditches, as visible on the ortophotos. Tomassetti saw local tuff as primary building material. The site is now partly overgrown by trees.
190	Monastery of Marmosolio	Field survey of the possible location of the monastery of Marmosolio, on a location where Roman terra sigillata and basalt blocks and a medieval to modern structure have been recorded (Forma Italiae, Cora). Ortophotos: the site and surrounding area seems surveyable.
205	Castel Savelli (Borghetto)	Field survey and study of wall-facing techniques. Ortophotos: the surrounding area seems surveyable.
210	Castellum Valentinum	Field survey and typological study of the wall-facing techniques used of the vestiges at «castellum Valentinum» could elucidate if the site actually was occupied in the high middle ages, as may be indicated by the word «castellum» in 1262.
219	domusculata St. Edistus	Field survey and typological study of the wall-facing techniques used at Tor Maggiore (OLIMsite 379) and at the site of Tor and casale Cerqueto (OLIMsite 380). Both sites may have been centres of the domusculata Edistus, given their strategic hilltop positions. Future research on this domusculata should start on these sites.

Table 8.1 continued. Sites with further study potential.

OLIMsite	name	focus of future research
238	Villa S. Vito	Field survey and typological study of the wall-facing techniques used.
250	Montelungo	Field survey and study of wall-facing techniques. The site is situated near the modern toponym Mura di Montelungo and distinguishable as a concentration of foliage surrounded by a circular pattern (road?). It is situated on a plateau between a vale and mountain peaks and looked surveyable on recent ortophotos
251	Cacume	Field survey and study of wall-facing techniques
263	Castrum Prunum	Field survey and study of wall-facing techniques. On the ortophotos the contours of the walls can be seen between the foliage and trees. Ortophotos: The area not totally covered with macchia, thus possibly surveyable.
277	Borgo Montello, castrum di Conca	Field survey of the wider area, very likely the site of castrum Concae. The site and its surroundings largely consist of ploughed up fields. Parts of the area have been levelled.
288	Castle Lariano	Field survey and study of wall-facing techniques
289	Castle S. Silvestro	Field survey and study of wall-facing techniques. Ortophotos: the site and surrounding area seems surveyable.
296	Castrum of Acquaviva	Field survey. On the ortophotos only some terracing is visible, no built structures.
354, 359	Fogliano area	Field survey and typological study of the wall-facing techniques used. The agglomerate consisting of rpc site 10583, FOG218 (OLIMsite 359), and rpc site 10585, FOG220 (OLIMsite 354): are both part of one larger settlement? What is the size and chronology of the site, what is the nature of the many bulldozered built structures? Is this the site of enigmatic Clostra Romana? Are there remains of the Roman transverse roads to be found nearby?
366	Castrum Castelluzza	Field survey and study of wall-facing techniques. Ortophotos: the site and surrounding area seems surveyable.
379	Tor Maggiore	Field survey and typological study of the wall-facing techniques used. Is there evidence for the presence of (a centre of) domusculca St. Edistus?
380	Tor and casale Cerqueto	Field survey and typological study of the wall-facing techniques used. Is there evidence for the presence of (a centre of) domusculca St. Edistus?
380	Tor and Casale Cerqueto	Field survey and study of wall-facing techniques. The tower (still standing, of unknown date) is situated inside the modern casale; on a small hill 200 meters to the south west an abandoned small castello of unknown date (ancient Cerqueto?) is visible. The two sites were clearly connected. The whole area is an agricultural area nowadays; the castello on top of the small hill seems available for research. The contours of the road that possibly originally led to the abandoned castello site were still visible on recent ortophotos.
386	Zolferata	In situ evidence for the hypothesis for a centre of the domusculca Calvisiana?
391	Dragoncella	Field survey and study of wall-facing techniques of the 13th century tower, probably earlier part of a curtis.
409	Rpc site 11546, medieval fortress	Field survey and study of wall-facing techniques.
415, 156	Domusculca Sulficiana / Castel Savelli	Field survey and study of wall-facing techniques. Confront brick layers of Castel Savelli to other examples of opera saracinesca. Evidence for a population transfer from domusculca Sulficiana – fundus Savello to Castel Savelli?
458	Rpc site 15004, Liboni 4, villa	Field survey and typological study of the wall-facing techniques used.
466	Liboni 36	Field survey. On this site a coarse ware fragment has been earlier tentatively dated in 9th century AD. This date however remains disputed. Future survey research on this site is needed to see if there are more indicators for activity in the 8th or 9th century. The potential of the site has not been fully exploited as the survey visibility was poor during the RPC field work.
467	Piccarreta 7	Field survey and typological study of the wall-facing techniques used. Relatively well preserved site on which a large fishpond can still be seen. A future effort on finetuning the dating of the vittatum masonry and new pottery sampling might reveal if this site possibly saw occupation until the 5th century, and, possibly, a later conversion or contraction, as observed in Tuscany.
467	Rpc site 11207, Piccarreta 7, Saracca	Field survey and typological study of the wall-facing techniques used (opus vittatum)
570	Torre Spaccasassi	Typological study of the wall-facing techniques used

Table 8.1 continued. Sites with further study potential.

OLIMsite	name	focus of future research
571	Torre del Padiglione	Typological study of the wall-facing techniques used
573	Civitana	Field survey and study of wall-facing techniques. Unfortunately levelling activities have cleared most remains at the site of Civitana, as was visible on recent ortophotos.
576	Torre del Monumento	Typological study of the wall-facing techniques used
645	Walls near Fogliano	Typological study of the wall-facing techniques used

could be explored by studying and comparing the pottery assemblages of Velletri and Astura.

An inventory of the unlocked pottery finds of Antium is called for, because of the presumed continued activity here through the middle ages. There is much reason to excavate other parts of the town: the current excavated sections display primarily distorted layers with little useful stratigraphy. The *opera saracinesca* could be studied as well, in the framework of a regional typological study of medieval wall structures (see above).

In the wider Torre Astura – Astura settlement area pottery sampling should be continued, in order to extend the current small-scale reference collection. At Torre Astura, the *opus vittatum* restorations on the fish pond should be dated more precisely in order to date late Roman pisciculture activities.

The Norba plateau and its late Antique and early medieval contexts would be a good subject for further study. The site substantiates the period between the 6/7th century and the 10/11th century which is meagrely documented in the study area. A restudy of the assemblages of the Norba excavations might enable to date the phase of abandonment. Possibly more evidence could become available to confirm or reject the idea of a direct population transfer from Norba to Norma, possibly a case of *incastellamento* (Norma is a castrum in 1179). A good first start would be to restudy the documentation by Savignoni and Mengarelli and the artefacts salvaged by them. Recently excavations have been carried out on in the area of the medieval church of which the results have not yet been published²⁹⁵.

Terracina continuously acted as an international large marine port and a node of mainland connections. Additional archaeological (e.g. pottery) research within Terracina, or the publication of earlier conducted research or local museum collections, could help elucidate the circulation of late Roman and medieval goods through it.

It would take too far to elaborate in detail on each site with research potential found while conducting my research. I therefore drew up Table 8.1, which comprises all sites which, based on the experiences of the current study, could be the subject of further study. The focus of research for each site is bulleted.

8.II.2.4 The written evidence

For the future study of contemporary historical sources no specific research strategy can be recommended. The adage should be to study as much as contemporary texts as possible, as the background of the source is no predictor of its potential as a source of information. The commemorative or grave stone of Gregory II in the Vatican basilica, dated to 715-732 AD²⁹⁶ shows how a simple list of can hold much chronological and spatial data. Contrary, sections of the famous *Liber Pontificalis* proved to hold little useful information. Their study will be a question of their availability, and of the research time available. For the current study as much as possible historical sources were studied. Should new written sources become available, these should be incorporated into a comparable framework as was used for the current study, pinpointing clues for activity in time and space (i.e. as “sites), with a keen eye for topographical clues, family relations or identifications of individuals, dating information and toponymic clues. Similar to the current study, every single historical primary source should be read afresh, in order to find possible intentions of the writer, which might influence the document as a source of facts. As was discussed, it was how first hand study is needed to really understand documentary evidence. If one should delineate one specific focal point in future documentary study it would be to search for texts about civic activity in the early middle ages. These are almost absent in the current overview.

Endnotes

- 1 Cf Attema 1996, 176 ff. The term insider information has been coined by Attema, based on models used in anthropological studies; more on this subject see 5.II.
- 2 Exemplary is the position of the Pontine swamps on the 1851 *IGM map* vs. the descriptions of Pliny and Strabo, and the 1851's land use in the wider Cisterna area vs. the agricultural production as described around Le Castella during the 10th century, see respectively 7.I.1.8 and 7.II.1.4.
- 3 As is known from other studies, even volcanic soils need not always be fertile, cf. Horden & Purcell 2000, 61.
- 4 Purcell 2005, 10
- 5 See 1.I.3.
- 6 After Barker 1995b, 309
- 7 See 8.I.2.1
- 8 1978, 230; see also Knapp 1992, 9

- 9 Bintliff 1991, 6
- 10 Bintliff 1991, 16; Barker 1992, 39 on the difference between time-scales of the conjunctures of prehistoric and (proto)historic times.
- 11 Shaw 2006, 64
- 12 Knapp 1991, 12
- 13 Knapp 1992, 12
- 14 Knapp 1992, 11
- 15 See also Knapp 1992, 12
- 16 See 1.II.7.
- 17 See 3.II.2 and 7.III.2.1.
- 18 Much the same as Braudel 1949 – see Bintliff 1991, 9
- 19 See Bintliff 1991, 10 ff. for a discussion on the visibility and study of individual action in the Annales approach
- 20 1.I.4
- 21 Both terms will be used here. I prefer the term microregion, as it is a more neutral term. The term microecology cannot live up to its true meaning: microecologies cannot be studied like a real ecologist would, i.e. with humans as being the operating organisms and accompanied by a very close study of the environment. Microecologies observed as in the approach of the Corrupting Sea are much more than that: local human ecosystems involving not just the geography or botany, but also information, technology and social organisation, even perception need be analysed; Horden & Purcell 2000, 48.
- 22 Horden & Purcell 2000, 71
- 23 Horden & Purcell 2000, 152
- 24 Horden & Purcell 2000, 54
- 25 Horden & Purcell 2000, 78 ff.
- 26 Horden & Purcell 2000, 64
- 27 Horden & Purcell 2000, 151 ff.
- 28 Horden & Purcell 2000, 151, 178, 205
- 29 Horden & Purcell 2000, 392
- 30 Horden & Purcell 2000, 80. “*Redistribution*” is the collective word used in the Corrupting Sea, and in this study it is used as meaning “exchange and trade of primary resources”, such as goods and people. Cf. Horden & Purcell 2000, 365.
- 31 Horden & Purcell 2000, 80
- 32 Horden & Purcell 2000, 143
- 33 Horden & Purcell 2000, 79
- 34 Horden & Purcell 2000, 123
- 35 Horden & Purcell 2000, 127
- 36 Horden & Purcell 2000, 134
- 37 Horden & Purcell 2000, 124
- 38 Horden & Purcell 2000, 342 ff. and 365
- 39 Horden & Purcell 2000, 365
- 40 Horden & Purcell 2000, 378
- 41 Horden & Purcell 2000, 384
- 42 Horden & Purcell 2000, 384.
- 43 Horden & Purcell 2000, 385
- 44 Horden & Purcell 2000, 384
- 45 Horden & Purcell 2000, 386
- 46 According to Horden and Purcell, factors involved in the higher costs for land transportation were the less easy and relative inefficient transport, the risks of having to pay protection money, encountering intentional obstruction, tollage, or encounter robbers. However, it proved to be less expensive than was claimed in earlier research. Horden & Purcell 2000, 377; Morley 2007, 26 ff
- 47 Horden & Purcell 2000, 133, 151, 168
- 48 Horden & Purcell 2000, 133
- 49 Horden & Purcell 2000, 392
- 50 Horden & Purcell 2000, 125
- 51 As was done in the study of Lazio by Alessandri (2009), who systematically analysed viewsheds in mountainous areas.
- 52 Horden & Purcell 2000, 131; Peutinger map is Map I.
- 53 Horden & Purcell 2000, 151
- 54 Horden & Purcell 2000, 82
- 55 Horden & Purcell 2000, 128-130
- 56 Horden & Purcell 2000, 172
- 57 The absence of a specific centre is one of the specific Mediterranean traits, according to Horden and Purcell. The studied area, which throughout its history has been under the influence of Rome, may be one of the exceptions.
- 58 Purcell 2014, 64
- 59 Horden & Purcell 2000, 130; see also the evaluation below, 8.II.1.
- 60 See also Barker 1991, 54
- 61 Although there is no concrete evidence for the practice of polyculture (mixed farming) in the research area, there is plenty of proof of its practice in adjacent and physically comparable regions, such as Southern Etruria and the Biferno Valley. Horden & Purcell 2000, 61 ff: In the complicated environment of southern Etruria polyculture was a common adaptive response, just like pastoralism. Barker 1991, 53 reached the same conclusion for the Biferno valley, from the Roman period and onwards.
- 62 Barker 1991, 53
- 63 Part of the “Marsh economy”, Attema 1996, 190
- 64 See 7.III.2.2, Theme: a dynamic geo-political landscape, *ecclesiastical activity*.
- 65 Although some implicit indications exist that Fossanova was involved in a long distance transhumance route between the Casamari lands (Ernici Mountains) and the Pontine plain in the 12th century, see 7.III.2.2, Theme: the economy and systems of redistribution.
- 66 Barker 1995b, 309
- 67 Wickham 1988, 24
- 68 It proved to be difficult to distinguish between such strategies and to genuinely comment on the groups involved, see 7.III.2.2, Theme: the economy and systems of redistribution.
- 69 See 7.II.1.1.
- 70 See 7.II.2.2, Theme: a dynamic geo-political landscape
- 71 Horden & Purcell 2000, 86
- 72 See 7.II.1.1.
- 73 See 7.I.1.1.
- 74 See 7.II.1.8.
- 75 De Rossi 1981, 89 ff. maintained that this road goes back to post-Archaic period or even earlier, see 7.I.1.1.
- 76 See 1.I.3.
- 77 See 7.I.2.2, Synthesis: transformations in Tyrrhenian southern Lazio between the 3rdrd and 7thth century.
- 78 Strabo *Geography* 5.3.5.231C; see also 7.I.1.8.
- 79 Van Joolen 2001, see also 7.I.1.2.
- 80 See 8.I.2.1.

- 81 See also 1.I.3.
- 82 7.I.1.3.
- 83 Van Joolen 2003, 81-84. Van Joolen suggested an approximate date of 800 AD for this phase of improvement. This date however should only be considered a rough indication, as discussed above (7.I.1.2.). It is based on the sampling of a single part of the entire landscape: i.e. the alluvium core of the Amaseno river in the eastern part of the Pontine plain.
- 84 Cf. the activities at sites along the Lepine foothills, and the *castrum* at lake Fogliano. Moreover, pottery imports in the plain point to renewed (?) activity along the Appian road, possibly from 9th century onwards (although the pottery was broadly dated), see also De Haas 2011.
- 85 The new investments in the Pontine area may have been connected to the contemporary economic expansion within Rome, see also below on the conjunctures 8.I.2.2.
- 86 See also Barker 1995b, 308
- 87 The waterlogged conditions of the Amaseno Valley were still clearly visible on the 1851 IGM map.
- 88 Horden & Purcell 2000, 112 on the interests of nobles in the 13th century, quoting Brentano 1974 Rome before Avignon: A Social History of Thirteenth-Century Rome, 17.
- 89 Horden & Purcell 2000, 65
- 90 Pottery: Ostia area. Unfortunately, other areas of this study's research area closest to Rome have not been thoroughly archaeologically researched appreciating the middle ages; this especially holds true for the area roughly between Decima and the Via Appia.
- 91 Continuity is based on references to these roads and evidence for continued activities at specific sites along these routes.
- 92 Horden & Purcell 2000, 100
- 93 See 7.III.2.2, Theme: the economy and systems of redistribution.
- 94 See 8.I.1.3.
- 95 Although interaction between microregions is not limited by physical boundaries, and often revolves around short distance interaction, even across difficult terrains, it can be expedited by the right circumstances like straight paved roads or seaworthy ships.
- 96 More on the position of Terracina, see below; see also sites with continued activity
- 97 Horden & Purcell 2000, 114
- 98 See 8.I.2.1.D for more on sea connectivity.
- 99 See 7.II.2.2, Theme: The expansion of secular (elite) activities.
- 100 See 7.II.2.1.
- 101 See 7.II.2.2, Synthesis: observations on Tyrrhenian southern Lazio between the 7th and 10th century, The 10th century: the rise of rural monasteries, and Azzara 2002, 95 ff.
- 102 See 7.II.1.1.
- 103 As was discussed, 2.I.13.
- 104 Examples of such active monasteries were Farfa, Matura, San Salvatore and San Vincenzo al Volturno.
- 105 See 7.II.2.2, Theme: The expansion of secular (elite) activities; on the elite of Rome in the 9th century Gasparri 2002, 77 ff.
- 106 Cf. Toubert 1973. Toubert assumed that the absence of large monasteries in southern Lazio was the reason it was less affected by *incastellamento* than northern Lazio; however, the difference in degree of incastellisation between the Sabina and southern Lazio could not be verified in the current effort because of the lack of comparative data. See also 7.III.2.2, Theme: *incastellamento*.
- 107 Toubert 1973, 354
- 108 see 7.III.2.2, Synthesis, *From the 12th century onwards: the commune*.
- 109 On the demographic and economic refocus of these times, see below the section on conjunctures, 8.I.2.2.
- 110 See 2.II.3.2.
- 111 See 2.I.13.
- 112 See also 2.I.13.
- 113 See 2.I.3 and 2.I.4.
- 114 The notable exceptions to this are the sites of S.Magno and S.Andrea in Silice, the former being founded in the 5th or 6th century and the latter in the 6th century AD. I added these as these originated in late Antiquity and as these were the only sites founded in that period that bridge the gap of the formerly so-called Dark Ages (5/6th century to the 9/10th century).
- 115 See also 7.II.2.1.
- 116 see Chapter 2, introduction.
- 117 Fentress, Goodson & Maiuro 2016
- 118 See 7.I.1.9 and 7.III.1.9.
- 119 On the importance of easy accessibility or *reachability* see also 7.I.2.2, Theme: the economy and systems of redistribution.
- 120 Regarding churches as hubs for continuity, see 7.I.2.2, Theme: expanding Christian activity throughout the landscape and 7.II.2.2, Synthesis, *The 7-8th century: churches as hubs for continuity*.
- 121 See also Barker 1995b, 262
- 122 Except for the post-Roman sites of S.Andrea in Silice - Le Castella and S. Magno.
- 123 Horden & Purcell 2000, 133, 151, 168
- 124 As will be seen when dealing with conjunctures, not all gateway ports were permanent ones: the microregional adaptation leads to so-called "wandering ports". See below 8.I.2.2 A.
- 125 Horden & Purcell 2000, 392
- 126 See 7.I.1.10.
- 127 See 7.II.1.7.
- 128 See 8.I.1.3.; They convincingly pointed out as well that ports as main nodes of international luxury trade always have had a hinterland which was of major importance, at least during their early phases of growth; "in most Mediterranean ecologies, production and redistribution were inseparable".
- 129 Although transport and traffic across rivers does not seem to have been a major factor in the studied area, as there were no large navigable rivers, except for the Tiber, it is more than likely that it did take place on small scale. Navigable rivers "constitute a zone of communications", Horden & Purcell 2000, 133. See also 7.I.2.2., Synthesis: transformations in Tyrrhenian southern Lazio between the 3rd and 7th century.
- 130 Horden & Purcell 2000, 65. As Horden and Purcell convincingly pointed out, the dying out of large-scale shipments during the 7th century did not mark the cessation of the movement of goods across the Mediterranean. As before, during the heydays of Roman high commerce, a wide variety of goods was transferred across the sea by means of a myriad of small-scale, often short-distance exchange contacts. However, these are often more difficult to identify in the archaeological and historical records. Cf. Horden & Purcell 139 ff, 150. Horden & Purcell 2000, 152: "Even in periods when overall demand was at its slackest, and the movements of luxuries least in evidence, the

- requirements of the relatively poor could remain very large in total and generate an interregional trade in cloth, foodstuffs and perhaps other commodities too”.
- 131 This holds also true for, for example, Civitavecchia in the early modern period, which acted as an important harbour for Rome. Horden & Purcell 2000, 395, see also 8.I.2.2.A.
- 132 See 7.II.1.1.
- 133 Horden & Purcell 2000, 117-119
- 134 See Horden & Purcell 2000, 133, 151 and 168 on the subject of ports as gateways between different microecologies.
- 135 See also below on slavery as *mentalité*.
- 136 Barker 1991, 51
- 137 About “the power of the church as *mentalité* whether operating at the level of local patronage or directly from Rome” see Barker 1991, 53 and Barker 1995b, 310.
- 138 See 7.I.2.2, Theme: expanding Christian activity throughout the landscape.
- 139 See 2.I.9.2.
- 140 See 2.I.8.
- 141 Philips 1985, 97 ff
- 142 Horden & Purcell 2000, 88 ff
- 143 See 7.II.2.2, Theme: The Saracene threat.
- 144 See 8.I.2.1.A.
- 145 Barker 1991, 53; see also 1995, 310
- 146 See 8.I.1.3.
- 147 Horden & Purcell 2000, 343 ff
- 148 Regarding fish breeding in the Pontine lakes see Cecere 1989, 22 and 7.I.1.2; however fish breeding took place as well, at least in Roman times, in salt water basins along the coast – as such this kind of pisciculture should not be seen as being part of wetland production.
- 149 Horden & Purcell 2000, 182
- 150 As Attema 1993, 50 pointed out, in post-modern times, the Pontine plain was used for extensive cereal cultivation, in which only a quarter of the soils suitable for agriculture were actually used; the remainder was used for pasture by herds of oxen – apparently for feeding and manuring. Regarding the marsh economy see Attema 1996, 190.
- 151 See 7.II.1.2.
- 152 See 7.III.1.7.
- 153 Toubert 1973, 266
- 154 Horden & Purcell 2000, 199
- 155 Barker 1995b, 309
- 156 See 7.I.2.2, Theme: the economy and systems of redistribution.
- 157 Horden & Purcell 2000, 128-130
- 158 See 8.I.2.1.D.
- 159 Horden & Purcell 2000, 392
- 160 Horden & Purcell 2000, 393 gave the example of southern France.
- 161 See 7.I.1.3.
- 162 Horden & Purcell 2000, 395
- 163 See 7.I.1.1, economy, production and trade.
- 164 See 7.III.2.2, Synthesis, The 10th century and onwards: casali
- 165 See 8.I.2.2.B, The Byzantine period: stability and less intense relationship with Rome (?).
- 166 See 7.I.2.2, Synthesis: transformations in Tyrrhenian southern Lazio between the 3rd and 7th century.
- 167 See 8.I.2.2.A
- 168 See 7.I.1.8.
- 169 Regarding the discussion of the degree of integration of the Roman economy, see for example Bransbourg 2012.
- 170 Other material evidence, like coins, only constitutes a small fraction of the evidence for pan-Mediterranean exchange, see also 7.I.1.1.
- 171 There are two sites on which locally produced and redistributed pottery has been attested, i.e. at Ostia in the 5th century and at Astura settlement in the 6/7th century. The Amaseno Valley (i.e. Privernum, Ceriara) until the 9th-10th century was involved in trade or exchange systems originating in the southern Sacco Valley and south-eastern Lazio, see 7.I.1.10. and 7.II.2.2, Theme: The economy and systems of redistribution.
- 172 See 7.I.2.1.
- 173 Horden & Purcell 2000, 65. See also 7.II.2.2, Theme: The economy and systems of redistribution.
- 174 Van Leusen, Tol & Anastasia 2010
- 175 See 7.I.2.2, Theme: the economy and systems of redistribution.
- 176 See 2.I.4.
- 177 Marazzi 1990, 119
- 178 See 7.I.2.2., Theme: expanding Christian activity throughout the landscape.
- 179 See 7.I.2.2, Synthesis: transformations in Tyrrhenian southern Lazio between the 3rd and 7th century.
- 180 See 7.I.2.2, Theme: expanding Christian activity throughout the landscape.
- 181 See 2.II.3.1
- 182 See 7.I.2.2, Synthesis: transformations in Tyrrhenian southern Lazio between the 3rd and 7th century.
- 183 See 2.I.4.
- 184 See 7.I.1.1, economy
- 185 See 2.II.2.1.
- 186 Pottery evidence showed this. Francovich & Hodges 2003, 51; In Byzantine ruled parts of the Mediterranean, amphorae were traded to remote inland parts by means of local trade networks, Horden and Purcell 2000, 170
- 187 See 7.I.1.1, economy.
- 188 See 7.I.2.2, Theme: the economy and systems of redistribution.
- 189 See 2.II.2.
- 190 See above 8.I.2.2.B, The end of the integrated Roman economy
- 191 A number of 5 possessions in the 6th century increasing to 11 in the 7th century.
- 192 See also 7.I.1.4, Discussion: the 7th century lacuna, a lack of activity or a question of availability of sources? and 7.II.2.1.
- 193 At Fossanova there is a chronological gap between the phase of the 6-7th centuries restructuring (dated by ARSW Hayes 90) and the 8-9th centuries wall. At Fondi only regarding the 8th century concrete historical references lack, but archaeologically this period is covered: the church of St.Peters remained in use. At Torre Astura, the 8th century here proves absent in the pottery collection I studied (see 3.I.1.). At Cori, 7th and 8th century evidence is absent, 9th century evidence was possibly found.
- 194 See 3.II.2.
- 195 See 7.II.2.2, Theme: The expansion of secular (elite) activities; privately owned churches are rarely present in our database.
- 196 See 7.II.1.6.
- 197 Most of the Forum Ware found on rural sites north of Rome was produced in Rome itself. However, it was also locally produced.

- Nonetheless, in the current study area, on most sites it has not yet been proven by typology that the Forum ware found was produced in Rome (only at Villamagna it has).
- 198 Potter & King 1997, 358
- 199 The *domuscultae* were all situated on or near main roads, and nearby harbours, enabling bulk transport. It is feasible that one of the main reasons for founding the *domuscultae* in the hinterland of Antium and Astura, and therefore relatively far from Rome, was the presence of still functioning harbours in that area. One should bear in mind that the Saracene danger had not yet commenced when the *domuscultae* were founded
- 200 Toubert 1973, 627
- 201 Horden & Purcell 2000, 153; 140, 154. Such small scale trade did not only involve commerce, like cabotage, but other kinds of redistribution as well, for example petty piracy, slave-raiding and transportation of travellers or pilgrims.
- 202 Panetta 1973, 69
- 203 See 2.I.6.
- 204 See 7.II.2.2, Theme: The expansion of the papal patrimonium and the creation of the Papal States.
- 205 It should be stressed that although the papacy had controlled much of the landscape before the 10th century, the papacy never had and has exercised total sovereignty over the Papal States as local and international forces constantly were striving for their own share of power, economic benefit and territory, see 2.I.6.
- 206 See 7.II.2.2, Synthesis: observations on Tyrrhenian southern Lazio between the 7th and 10th century, The 8th to 10th century: scaling up.
- 207 See 7.II.2.2, Theme: The expansion of the papal patrimonium and the creation of the Papal States.
- 208 The maps should be seen as illustrations of the described developments, they are not complete as not all interests are depicted (labelled) by lack of space; for a full list of interests see Appendix 6.2.
- 209 Environmental improvement may have affected those areas which before suffered from erosion and alluvial depositions positively, i.e. the valleys and the plains. Indeed these areas gradually saw new activity. However, in general it proves difficult to define the causal relationship between environmental improvement and socio-economic growth exactly.
- 210 See 7.III.2.2, Theme: a dynamic geo-political landscape, Focal points of interests and 7.III.2.2, Synthesis, The 11 - 13/14th century: the "fortification" of the landscape.
- 211 As discussed in 7.III.2.1, An evaluation of results, sources and methods used of the 10th to 14th century, the growing number of written sources from the 10th century onwards increases the identification of the activities in the landscape. However, to some extent this growing number may cause a diachronic bias as well, as earlier activities which had not been written down thereby could not make it into the database. However, there should not be any doubt that the fast growing number of activities documented in written sources from the 10th century onwards reflects an actual growth of activity. This should be concluded given the converging conjunctural developments in the landscape (which were not merely written down abundantly, but of which many standing walls still serve as evidence), the well-studied economic boom of Rome and the paralleled growth in other parts of central Italy which have been subjected to extensive multidisciplinary studies (e.g. in the Biferno valley, in the Farfa area). The developments since the 10th century were much more than plain quantitative adaptations – the structural changes in living and ruling truly represented a fundamentally changed landscape.
- 212 See 7.II.2.2, Synthesis, The 10th century: an eruption of activity.
- 213 See 7.III.2.2, Synthesis, The 10th century and onwards: casali.
- 214 De Haas, Tol, Armstrong & Attema 2017
- 215 Barker 1995b, 282; see also 2.I.9.
- 216 In the 9th and 10th centuries Rome became a large production centre of pottery that found its way across the entire Mediterranean. Interregional / international exchange became visible in the assemblages of the Crypta Balbi excavations, Arena et al. 2001, and Manacorda 2005, 84. Other economic recovery and trade on other sites in Rome: Vendittelli & Paroli 2004, specifically Paganelli 1994, 23 and Romei 2004, 290 ff. On the contemporary economic growth in Rome in general see earlier Delogu 1988c, 32 ff, Hodges 1993, 357
- 217 See 7.I.2.2, Theme: the economy and systems of redistribution; Horden and Purcell 2000, 153
- 218 See 2.I.9.
- 219 Among others in 2.I.9.2 and 7.III.2.2, Theme: *incastellamento*.
- 220 Hodges and Wickham 1995, 271
- 221 See 7.III.1.4.
- 222 As has been attested in the wider area of Farfa and San Vincenzo all Volturno. See 7.II.2.2, Theme: The expansion of the papal patrimonium and the creation of the Papal States
- 223 See 7.III.2.2, Theme: a dynamic geo-political landscape, ecclesiastical activity.
- 224 In 1221 and 1236, Pietro Frangipani and Gregorio IX respectively confirmed the right of passage underneath the monastery of S. Angelo del Mirteto (located just above Ninfa) for persons travelling to Acquapuzza and Terracina. See. Arch. Di S. Scolastica di Subiaco XxxVI, 1A. see also Pantanelli 1972, I, 262 and also Coste 1990, 130.
- 225 See 7.III.2.2, Theme: a dynamic geo-political landscape, ecclesiastical activity.
- 226 Regarding the artificial distinction between ecclesiastical and secular elite activities see 7.II.2.2, Theme: The expansion of secular (elite) activities.
- 227 See 7.II.2.2, Theme: The expansion of secular (elite) activities; with the exception of the Dukes of Gaeta.
- 228 See 7.III.2.2, Theme: a dynamic geo-political landscape, secular elite activity.
- 229 See 7.III.2.2, Theme: a dynamic geo-political landscape, secular elite activity.
- 230 See 8.I.2.1.B.
- 231 See 7.III.2.2, Theme: a dynamic geo-political landscape, secular elite activity.
- 232 See 7.II.2.2, Theme: The expansion of secular (elite) activities.
- 233 See 7.III.2.2, Theme: a dynamic geo-political landscape, Conclusions.
- 234 See 2.I.9.
- 235 See 2.I.9.
- 236 See 2.I.1.3
- 237 In 1267 Conradin of the Swabia, a member of the Hohenstaufen dynasty, tried to regain control of southern Italy, which his uncle Manfred had lost the year before to Charles of Anjou. Only 15 years old and with nothing more than a moderate army at his side, Conradin lost the battle at Tagliacozzo (1268) to king Charles of Anjou. Yet Conradin managed to escape to Torre Astura. After initially having been granted asylum into

- the castle, castle Lord Giacomo Frangipani betrayed him and handed him over to Charles. Later on that year, Conradin was beheaded in Naples. Conradin was to be the last of the Hohenstaufens. After this event, the influence of the Holy Roman Empire in Italy ceased. Torre Astura would suffer dearly from the outcome of this episode: it was captured and destroyed soon after this event; Lombardi 1847, 128. The Frangipane lost control over the castle. In 1303, the Caetani were given jurisdiction over the castle and over large parts of the Asturan region; R. Benedetti in: Caneva & Traviglini 2003, p. 473.
- 238 See 7.III.2.2, Synthesis, The 12th and 13th century: the regained strength of the papacy.
- 239 See 7.III.2.2, Synthesis, The 12th and 13th century: the regained strength of the papacy.
- 240 See 8.I.2.2.B, The 12th century: the recovery of the papacy.
- 241 See 7.III.2.2, Theme: a dynamic geo-political landscape, Introduction.
- 242 See 2.I.12.
- 243 See 7.III.2.2, Theme: a dynamic geo-political landscape, Conclusions.
- 244 See 7.III.2.2, Theme: a dynamic geo-political landscape, Focal points of interests.
- 245 With a few exceptions, such as the verified production-sites of *ceramica dipinta in rosso* of the second period (11th to 13th century), see also 7.III.2.2, Theme: the economy and systems of redistribution; Tol 2012, page 308, 320.
- 246 See 7.III.2.2, Theme: the economy and systems of redistribution.
- 247 See 7.II.2.2, Synthesis: The 10th century: an eruption of activity.
- 248 Only a few sites in our study area -outside Rome-, like Astura settlement, Priverno and Villamagna, provide the archaeological contexts to confirm redistribution patterns for the high middle ages.
- 249 See also 8.I.2.2.A.
- 250 7.III.2.2, Theme: a dynamic geo-political landscape, Control schemes/lines of control.
- 251 See 7.III.2.2, Theme: a dynamic geo-political landscape, Secular elite activity.
- 252 Bolla of Pope Honorius III, referred to in De Rossi, 2001 (original source not made explicit).
- 253 Horden & Purcell 2000, 130. They described mountains as places for effective productive system and transport / communications: "Mountains can seem hostile and marginal areas; yet they are actually closely integrated into the patterns of production and communication that abut them. That explains why mountain zones unexpectedly – and even paradoxically – become regions with wide internal coherence and close contact and interchange across what appear, to the outsider, to be formidable physical obstacles", Horden & Purcell 2000, 81.
- 254 Castelli Albani was a general term used from the 14th century onwards for the (former) incastellised centres of the Colli Albani. Other Castelli Romani centres were for example Nemi, Frascati, Castel Gandolfo, Albano Laziale and Rocca di Papa.
- 255 Four voyages of Pope Boniface VIII around the year of 1300 were thoroughly recorded and these confirm the central position Velletri had captured: i.e. however varied the pope's travels might have been, whether travelling by the pedemontana route or by the Via Latina, all trajectories to Rome went past Velletri; Coste 1990, 136 travels in the years of 1295, 1297, 1299 and 1302. This picture drawn of the central position of the axis Velletri-Marino is confirmed by historical events and itineraries of the 14th and 15th centuries, changing the contemporary image of the Via Appia into a rather bleak one.
- 256 See 7.III.1.3.
- 257 See 7.III.1.10.
- 258 See Wickham 2001, 7 ff. in relation to processions and "spiritual geographies" in the suburban contexts of larger cities throughout the early middle ages.
- 259 Bintliff 1991, 6
- 260 See 7.III.2.1 An evaluation of results, sources and methods used, 10-14th century.
- 261 See for example Soens, Tys & Thoen 2014; Henning 2004.
- 262 Horden & Purcell 2000, 130; see also 8.I.1.3.
- 263 This distinction between a history "of" from a history "in" the Mediterranean was first made by Horden and Purcell 2000, 9 and passim.
- 264 To this list should be added the modern toponyms (IGM, 2006) that were used to pinpoint the historical and cartographic toponyms being analysed.
- 265 The dating given for OLIM-site 446 Tombs - church, sito 54 toponym Via Giotto
- 266 See 7.II.1.3.
- 267 See 3.I.2.
- 268 The collection, consisting of fragments found in the wider Nettuno – Astura area, was collected in the second half of the 20th century by Arnaldo Liboni. Some of this pottery had been studied before, focussed on identifying late medieval material (Bosi & Romoli 1995). The work done by Tol and this current research are to be seen as a new start in studying the collection. Tol concentrated mainly on Roman and late Roman pottery.
- 269 See 7.I.2.2, Theme: expanding Christian activity throughout the landscape and 7.II.1.1.
- 270 Map 12
- 271 See 4.III.
- 272 See 7.II.1.4.
- 273 Strabo *Geography* 3.5.231, see also 5.V.
- 274 Potter 1979, Patterson et al, 2004, Moreland 2005
- 275 Arthur 2006, 2010
- 276 Barker 1995b
- 277 See 1.I.1.
- 278 See 8.II.2.2, focus on medieval coarse wares.
- 279 Arthur 2006, 105
- 280 See 7.I.1.1.
- 281 Horden & Purcell 2000, 82; see also 8.I.1.3.
- 282 See 7.I.1.10.
- 283 Corsi 2007, 254. The archaeological evidence shows that the southern Sacco Valley, the Liri Valley and the wider Montecassino area from the 6th century onwards were strongly connected to southern parts of the Peninsula, presumably via the old Via Latina to Naples, and via trans-Apenine routes to the Adriatic coast. This connection may have continued throughout the early middle ages, although this has yet to be proven by solid (comparative) archaeological evidence.
- 284 See also 7.III.2.2.2 Theme: incastellamento.
- 285 Cf. Toubert 1973, 433, note 1. He claimed that many abandoned castra sites are accessible via the ancient trails which are kept open by the rolled river stones. Furthermore, he claimed that only a few sites have been totally overgrown and are thus inaccessible, "dévorés par le maquis".

- 286 Hodges & Wickham 1995, 283
- 287 Hodges and Wickham 1995, 283
- 288 See the conclusion to 5.IV.
- 289 See 8.I.2.1.B.
- 290 Outside the current research area, for inland southern Lazio, Crova & Carbonara 2005 provided a useful overview of the aspects of creating a chrono-typology of medieval wall-facing techniques. This overview could be used as a starting point in setting up a chrono-typology for Tyrrhenian southern Lazio. See also Crova 2018, 77.
- 291 See 3.I.2.
- 292 See 7.I.2.2.4 Synthesis: Tyrrhenian southern Lazio between the 3rd and 7th century.
- 293 See 6.I.2. Used definitions.
- 294 See 7.III.1.1.
- 295 Gizzi 2008; Quilici Gigli 2009, 443
- 296 See 7.II.1.4.

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Campagna di Roma olim Latium

Een historische landschapsarcheologie van Tyrreens Zuid-Lazio van de Late Oudheid tot *incastellamento*

Het voorliggende proefschrift betreft een ruimtelijke analyse van menselijke activiteit in het landschap van Tyrreens Zuid-Lazio tussen de laat-Romeinse periode en de Hoge Middeleeuwen (3e tot 14e eeuw na Christus), op basis van een multidisciplinaire dataset. Het onderzoeksgebied beslaat grofweg het gebied vanaf het zuidelijke *suburbium* van het klassieke Rome tot aan Fondi in het zuiden, en omvat het gebied van Ostia tot aan de Albaanse Heuvels, de Pontijnse vlakte inclusief het schiereiland Circeo, de Lepini, de Ausoni en het westelijke deel van de Aurunci-bergen.

Het onderzoek is in eerste instantie een *review*-studie, gebaseerd op gegevens uit de bestaande primaire en secundaire bronnen die worden ge(her)analyseerd in een regionale geografische context. Ik heb daarvoor alle beschikbare archeologische gegevens verzameld en aangevuld met zo veel mogelijk data uit andere disciplines die hun licht kunnen laten schijnen op de onderzoeksperiode. Het doel is niet om uitputtend te zijn, maar om zo veel mogelijk relevante bronnen te bestuderen die mij ter beschikking stonden in bibliotheken in Nederland, in Rome en Latina (in het *Archivio di Stato*), en online. De resultaten van eerdere regionale archeologische en multidisciplinaire studies in Midden-Italië (behandeld in hoofdstuk 2) worden als klankbord gebruikt. Met deze gegevens als achtergrond benader ik het landschap van de Tyrreens Zuid-Lazio vanuit twee invalshoeken:

- Het contemporaine perspectief. Met behulp van contemporaine (3e tot 14e-eeuwse) archeologische en historische gegevens wordt een diachroon beeld geschetst van menselijke activiteit in het landschap. Dit beeld is gebaseerd op het vaststellen van locaties van contemporaine menselijke activiteit en het analyseren van deze *sites* in een ruimtelijke context door middel van een GIS. Er zijn twee soorten sites opgenomen in de database die op hetzelfde niveau worden behandeld: archeologisch vastgestelde en historisch gedocumenteerde sites.
- Het retrospectieve perspectief. Met behulp van historische cartografie (behandeld in hoofdstuk 5), gegevens uit de historische topografische literatuur, etnografische studies en toponymisch onderzoek (behandeld in hoofdstuk 4) wordt een retrospectieve

analyse gemaakt van het middeleeuwse tot sub-recente landschap (12e tot 20e eeuw). Door het chronologische perspectief op deze wijze uit te breiden, vergroot ik mijn inzicht in de *longue durée* van het landschap. Bovendien faciliteert deze retrospectieve benadering het vinden en interpreteren van gegevens over individuele sites.

Met deze benadering van het landschap als hoofdkader heeft mijn onderzoek een tweeledig doel:

1. *Een diachrone en ruimtelijke analyse van activiteit in het landschap.* In deze analyse wordt al het menselijk handelen binnen het landschap bestudeerd, zoals vestiging, productie, handel, uitingen van gezag, eigendom, vijandigheden, religie en infrastructuur, en de actoren die bij deze activiteiten betrokken waren. In hoofdstuk 7 wordt de diachrone en ruimtelijke analyse van activiteit binnen het landschap gepresenteerd. In hoofdstuk 8 volgt de synthese.
2. *Het testen van de gebruikte methode.* Ik probeer vast te stellen in hoeverre een multidisciplinaire review-studie nieuwe inzichten kan opleveren over de chronologie van de processen die hebben plaatsgevonden en over de maatschappelijke realiteit achter deze processen. De conclusies hierover worden gepresenteerd in hoofdstuk 8.II.

1. Een diachrone en ruimtelijke analyse van activiteit in het landschap

Het doel van de analyse is niet de bevestiging of het verwerpen van eerdere theorieën of concepten over menselijk handelen in het middeleeuwse landschap van Tyrreens Zuid-Lazio. Met dit proefschrift beoog ik nieuwe inzichten te creëren in de ontwikkelingen binnen dit landschap. Het is de eerste studie in dit gebied die bekende en niet eerder bestudeerde historische en archeologische gegevens bijeenbrengt in een ruimtelijke, landschappelijke context. Het maakt een landschaps-archeologische analyse van deze activiteiten in een regionale context mogelijk, waardoor er inzicht ontstaat in de demografische, socio-economische en politieke transitie die plaatsvonden gedurende de onderzoeksperiode. Ik monitor verandering en continuïteit, maar ook communicatie en interactie, marginalisering en vitaliteit.

In de synthese (hoofdstuk 8.I) confronteer ik mijn gegevens met twee invloedrijke modellen voor historische landschapsanalyse in het Mediterrane gebied:

1. De gevonden ontwikkelingen worden bestudeerd volgens de lijnen van het Braudeliaanse schema.
2. De gevonden data worden geanalyseerd vanuit het perspectief van eenheid-door-diversiteit van het model van Horden en Purcell dat *micro-regio's* (ook: micro-ecologieën) en hun *connectiviteit* centraal stelt.

De resultaten van de diachrone analyse van activiteit binnen het landschap kunnen als volgt worden samengevat: de database bleek gedetailleerd en uitgebreid genoeg om de ontwikkelingen te kunnen duiden binnen Braudel's model van drie temporaliteiten (de *longue durée*, de *conjuncture* en het *événement*). Zo kwam ik tot een complexe landschapsgeschiedenis van vestiging, productie, connectiviteit en macht, van successen en mislukkingen; een geschiedenis gekenmerkt door een voortdurend hechte relatie met Rome.

Het langetermijnperspectief

Het langetermijnperspectief van analyse is een van de belangrijkste resultaten van deze studie. Deze studie bestrijkt ongeveer 1000 jaar, en in combinatie met de geraadpleegde retrospectieve bronnen zelfs 2000 jaar. Deze lange tijdschaal, gecombineerd met de grote multidisciplinaire dataset en een vergelijkende studie van de resultaten van onderzoeksprojecten elders, heeft me in staat gesteld *longue durée*-structuren binnen het landschap van Zuid-Lazio te duiden en te analyseren.

De ruimtelijke analyse van een web van sites en belangen (*interests*)

Een tweede essentieel onderdeel van deze studie is de analyse van een fijn web van afzonderlijk bestudeerde en gedateerde *sites*, gecombineerd met de analyse van gedocumenteerde belangen (*interests*, zoals eigendom, invloed en autoriteit) op deze sites. Dit web van historische/ archeologische vindplaatsen heeft mij in staat gesteld om menselijke activiteit diachroon te bestuderen. Zo kan ik de actoren in het landschap identificeren, interactie observeren en de regionale diversiteit daarin beschrijven. Ondanks de voor de hand liggende vertekeningen (*biases*) in de beschikbare gegevens kon ik op deze manier sites (*focal points*) en routes identificeren die continu activiteit hebben gekend, en in kaart brengen wat de rol van het landschap is geweest in het verhaal van menselijke activiteit. Daarnaast stelde het geconstrueerde web van sites en interests mij in staat om de demografische, socio-economische en politieke processen binnen het landschap ruimtelijk te volgen; processen die gewoonlijk op middellange

termijn plaatsvinden, de *conjunctuur*. Conjuncturen (evenals regionale diversiteit en connectiviteit) bleken het best zichtbaar in de Hoge Middeleeuwen, vanwege de enorme hoeveelheid gedetailleerde data die er na de 10e eeuw beschikbaar komen.

Wat is zichtbaar en wat niet?

Uit deze studie blijkt dat vooral activiteit en relaties van de machthebbers zichtbaar zijn, dat wil zeggen het bezit en de belangen (interests) van staats- en kerkelijke instellingen, van edelen, van de rijken in het algemeen, van de geletterden, dus van de nauw verweven groepen aan de bovenkant van de samenleving. De meeste waarneembare ontwikkelingen op het platteland bleken het resultaat van de geopolitieke ontwikkelingen en machtsstrategieën waarbij de elite betrokken was, een elite meestal afkomstig uit Rome. In tegenstelling tot de levens aan de bovenkant van de samenleving, bleef het leven van de "gewone man" grotendeels buiten de reikwijdte van dit onderzoek. Deze tekortkoming is tot op zekere hoogte het gevolg van het feit dat de gewone man en lokale economieën doorgaans buiten het domein van de teksten bleven, vooral in de Vroege Middeleeuwen. Een bijkomende complicerende factor met betrekking tot teksten is het feit dat veel kleinere sites genoemd in deze bronnen niet konden worden gelokaliseerd. Hierdoor ligt de focus van de ruimtelijke analyse veelal op de goed gedocumenteerde en (ook archeologisch) bekende grotere sites. De ondervertegenwoordiging van groepen aan de onderkant van de samenleving wordt ook veroorzaakt door de huidige stand (en gebrekkige publicatie) van het middeleeuwse archeologisch onderzoek in het onderzoeksgebied.

De fasering van transformaties

Uit de beschikbare gegevens kon ik in vergelijking met andere onderzoeken elders minder detail aanbrenge in de fasering van de transformaties die plaatsvonden in het landschap tussen de Late Oudheid en de Hoge Middeleeuwen. De belangrijkste reden hiervoor is dat de archeologische gegevens van de regio niet zo gedetailleerd zijn als elders. Bovendien waren de geschreven bronnen in de Late Oudheid en de Vroege Middeleeuwen bijna allemaal kerkelijk; niet-kerkelijke (zoals burgerlijke en elitaire) activiteiten blijven daardoor meestal verborgen. Het is vaak moeilijk om (dis)continuïteit te duiden. Is dit een kwestie van toevallige beschikbaarheid, en/of van de (on)herkenbaarheid, van bewijs? Subtiele veranderingen bleken moeilijk waar te nemen. Het gefragmenteerde bewijsmateriaal is echter niet in tegenspraak met de faseringen zoals gedefinieerd in andere studies in Midden-Italië. Voor de Hoge Middeleeuwen stelt het historische bewijs me in staat te concluderen dat de belangrijkste conjuncturele ontwikkelingen dezelfde waren als overal elders in Midden-Italië, maar met kleine afwijkingen,

waarschijnlijk vanwege de aanwezigheid van Rome. Maar deze geconstateerde afwijkingen mogen geen verrassing zijn. Zoals eerdere studies in Italië hebben aangetoond, is de transitie van de laat-Romeinse wereld naar die van de Hoge Middeleeuwen geen uniform proces. Overal op het Italiaanse schiereiland zien we lokale en regionale verschillen.

Het micro-regionale perspectief

Het typisch Mediterrane landschap van Tyrrens Zuid-Lazio, met zijn grote natuurlijke diversiteit, vormt een goede omgeving voor een analyse vanuit het micro-regionale perspectief van Horden en Purcell. Mijn studie toont aan dat er slechts gefragmenteerde gegevens beschikbaar zijn over de fundamentele aspecten van het micro-regionale perspectief, zoals *interactie* en *primaire productie*. Van deze aspecten blijkt *connectiviteit* binnen het landschap het best gedocumenteerd. Dit geldt zeker voor na de 10e eeuw. Connectiviteit wordt het best zichtbaar gemaakt door de ruimtelijke analyse van historische gedocumenteerde interests. Een studie van aardewerkdistributie, normaal gesproken de beste manier om connectiviteit vast te stellen, bleek in het onderzoeksgebied minder goed mogelijk. Goed zichtbaar zijn echter de continu veranderende netwerken van belangen en microstrategieën gericht op het controleren van delen van het landschap.

Slechts zelden laten specifieke microregio's zich zien, vooral vanwege het gefragmenteerde aanbod van gegevens over productie en distributie; en natuurlijk vanwege het intrinsiek ongrijpbare karakter van microregio's, die zich kenmerken door hun aanpassingsvermogen aan veranderende ecologische, socio-economische en politieke omstandigheden. Een aantal van de vermoedelijke centra van microregio's konden worden opgespoord, meestal grotere sites die blijvende activiteit vertoonden en, vanwege hun ligging, gemakkelijk communicatie mogelijk maakten; en waarvan de meeste fungeerden als toegangspoorten tot andere (vaak verre, soms overzeese) microregio's. Rome is continu te onderscheiden als het centrum van een aantal elkaar overlappende micro-regio's, een centrum dat een aanzienlijke invloed uitoefende op zijn achterland; vaak bereikten externe (vaak internationale) invloeden het onderzoeksgebied via de Eeuwige Stad.

Conclusie

Ondanks de vertekeningen, veroorzaakt door het gefragmenteerde archeologische bewijs en de eenzijdige herkomst van de historische bronnen, komen een aantal structurele elementen ondubbelzinnig bovendien. Allereerst de continue hoofdrol van Rome. Door zijn rol als regionaal centrum en als trechter van externe invloed heeft Rome veel van de (snelheid van) ontwikkelingen in het bestudeerde gebied structureel beïnvloed. Daarnaast

toont deze studie aan dat zich tussen de 3e en 7e eeuw een demografische en economische heroriëntering voltrok op toegankelijke locaties, op dorpen, kerken, bisschopszetels, en hooggelegen (malariavrije) en op verdedigbare locaties. Een andere conclusie is dat de Pontijnse kust gedurende de onderzoeksperiode minder activiteit vertoonde dan andere delen van het onderzochte gebied. Waarschijnlijk ligt hieraan een combinatie van ongunstige ecologische omstandigheden, slechte bereikbaarheid van de kust naar het binnenland en de strategische kwetsbaarheid van de kust ten grondslag. De bewijzen bestendigen eens te meer een aantal van de algemene conclusies van eerdere historische en archeologische studies, zoals de veronderstelling dat de invloed van de vroege Kerk zich verspreidde langs de belangrijkste uitvalswegen van en naar Rome; net als het idee van een tijdelijke dip in de pauselijke macht tussen de late 9e en het midden van de 11e eeuw. Daarnaast bevestigen mijn gegevens de eerder geconstateerde diepe economische crisis in Rome van de 7e en vroege 8e eeuw. Kerken blonken uit als locaties van continuïteit, wat ook overeenkomt met de conclusies uit eerdere studies in Italië. De gegevens uit de huidige studie laten, net als elders, zien dat zich in de 10e eeuw een nieuw landschap ontwikkelde, gesmeed door een aanzienlijke economische bloei en door een opleving van de langeafstandshandel, door *incastellamento*, door een snel groeiende maatschappelijke elite en door de expansie van rurale kloosters. Het verzamelde bewijs laat zien dat de aanwezigheid van autonome *comuni* (dorpsbesturen) van invloed kan zijn geweest op *incastellamento*, zoals eerder door Toubert was voorgesteld. Verder is het volatiele karakter van de politieke en economische netwerken van de elite in het hoogmiddeleeuwse landschap van Zuid-Lazio (met name aan de voet van de Lepini, de *pedemontana*) onomstotelijk vastgesteld.

Deze resultaten tonen de toegevoegde waarde aan van een review-studie zoals de huidige, dat wil zeggen gebaseerd op een (her)analyse van bestaande gegevens. Het onderzoek blijkt meer te zijn dan alleen een methodologische testcase. Het multidisciplinaire karakter, de lange onderzoeksperiode en de regionale schaal, en het oog voor detail, zorgen voor een beter begrip van de langetermijn- en conjuncturele processen. De huidige studie schetst een geschiedenis “in” de Middellandse Zee (Horden en Purcell), die samen met soortgelijke studies in veel meer regio's (zoals de Biferno-vallei, de Tiber-vallei en Etrurië) het verhaal “van” de Middellandse Zee vertellen.

2. Het testen van de gebruikte methode

De bestudeerde data, afkomstig uit zes verschillende gegevenssoorten, zijn op het niveau van *sites* samengebracht. In deze studie gelden sites als knooppunten van menselijke activiteit in het landschap; deze sites worden in kaart

gebracht om activiteitenpatronen te analyseren. Ik heb uiteindelijk in totaal 662 sites geïdentificeerd. Bovendien werd een groot aantal *interests* (zoals eigendom, invloed, autoriteit) van partijen in het landschap vastgelegd.

De multidisciplinaire aanpak

In theorie kan men menselijke activiteit op individuele sites een maximale chronologische en typologische diepte geven door het samenbrengen van zo veel mogelijk soorten data. Inderdaad laat het onderzoek zien dat wat betreft de verzamelde data voor veel sites het geheel meer is dan de som der delen. Natuurlijk worden veel archeologische vindplaatsen ook gedocumenteerd in de geschreven bronnen, vooral de grotere nederzettingen. In sommige gevallen was het echter mogelijk om kleinere (nog niet geïdentificeerde) historische entiteiten te koppelen aan specifieke archeologische sites. Daarnaast kon ik door het combineren van data uit verschillende disciplines nieuwe, goed onderbouwde hypothesen opstellen over de locatie en functie van een aantal grotere historische entiteiten, zoals *domuscultae*. Voor veel sites leidt een nauwgezette bestudering van de beschrijvende details in teksten en van de lokale topografie, in combinatie met de nauwkeurige datering van de gevonden archeologische objecten en een toponymische studie, tot een beter begrip van de functie van de site en/of tot een verfijning van de chronologie.

Omgaan met *biases*

In hoofdstuk 1 en 3 bespreek ik hoe ik omga met de interpretatieve uitdagingen die samenhangen met het gebruik van de diverse bronnen. Om met het soms onevenwichtige bewijs om te gaan en de database geschikt te maken voor de analyse heb ik de volgende uitgangspunten gedefinieerd:

1. Tijdens de analyse worden onevenwichtigheden en *biases* in de beschikbare bronnen consequent expliciet gemaakt; ik beschrijf steeds duidelijk wat op basis van de betreffende bronnen kan worden geconcludeerd, en wat niet.
2. De ruimtelijk onevenwichtige distributie van data over het landschap wordt aangepakt door het onderzoeksgebied op te knippen in tien kleinere onderzoeksgebieden (*key areas*).
3. De diachrone onbalans in de data wordt aangepakt door de onderzoeksperiode op te delen in drie onderzoeksperiodes.

De genomen maatregelen zijn over het algemeen effectief gebleken. In de uiteindelijke analyse van hoofdstuk 7 en in de synthese van hoofdstuk 8 kan ik overal goed beargumenteren in hoeverre iets op basis van dit onderzoek met zekerheid kan worden geconcludeerd, wat als hypothese moet gelden en wat buiten het bereik van de analyse van dit onderzoek valt.

Al met al heeft de chronologische en ruimtelijke opdeling van de data (in drie onderzoeksperiodes en tien *key areas*) zijn nut bewezen. Het dwong me keer op keer te focussen en te herfocussen, en om steeds in en uit te zoomen, waardoor ik zo veel mogelijk tot de essentie van de beschikbare gegevens kon doordringen en zo in staat was om zo veel mogelijk historische structuur in de data te vinden. Ik ben van mening dat met deze *modus operandi* er weinig diachrone structuur (van kortdurende structuur op lokaal niveau, tot continue structuur over grote gebieden) aan mijn aandacht kan zijn ontsnapt. De grootste nadelen van het gebruik van *key areas* en de opdeling in drie periodes is dat het tijdrovend werk is, en dat het in de analyse leidt tot redundantie.

De retrospectieve methode

Een van de vernieuwende aspecten van dit onderzoek is het grootschalige gebruik van retrospectieve gegevens, met name van historische kaarten en toponiemen. Deze gegevens tonen fragmenten van het post-middeleeuwse landschap, dat wil zeggen van de natuurlijke omgeving, het landgebruik, nederzettingenpatronen en van infrastructuur. En ze tonen de contemporaine perceptie van het landschap van de makers en samenstellers van deze bronnen. Belangrijker nog, het retrospectieve bewijsmateriaal bleek zeer bruikbaar bij het lokaliseren van historische entiteiten (sites).

Met name de studie van contemporaine "*historische toponiemen*" (daterend uit de 3e tot 14e eeuw) heeft een grote bijdrage geleverd aan het lokaliseren van historische sites. Ten eerste doordat de omvang van de toponymische database de identificatie van toponiemen bespoedigt, met name in combinatie met nieuw onderzoek van topografische aanwijzingen op de historische kaarten. En ten tweede door het matchen van contemporaine historische met retrospectieve "cartografische toponiemen" (daterend uit de 12e tot 21e eeuw); cartografische toponiemen bleken heel goed bruikbaar in het lokaliseren van sites die in de schriftelijke bronnen vermeld staan.

De studie van *historisch kaartmateriaal* was erg arbeidsintensief. Het leverde echter enkele goede resultaten op. Allereerst een grote hoeveelheid cartografische toponiemen die zeer nuttig zijn bij het identificeren en lokaliseren van historische entiteiten (sites). Verder bevatten kaarten waardevolle informatie over de contemporaine toestand van sites en van wegen.

Aanbevelingen

Ik sluit het proefschrift af met een reeks aanbevelingen op basis van de ervaringen van deze studie (hoofdstuk 8.II). Het doel van deze discussie is toekomstig onderzoek te faciliteren en om nieuwe strategieën te ontwikkelen voor

de analyse van menselijke activiteit in het landschap van Tyrreens Zuid-Lazio tussen de laat-Romeinse periode en de Hoge Middeleeuwen. Ik beschrijf daarvoor vanuit vier verschillende maar overlappende invalshoeken de gewenste focus van toekomstig onderzoek: het formuleren van algemene onderzoeksstrategieën, het opstellen en verbeteren van typologieën, het bestuderen van specifieke sites en het gebruik van historische bronnen.

Campagna di Roma Olim Latium

A historical landscape archaeology of Tyrrhenian southern Lazio from late Antiquity to *incastellamento*

In this thesis I aim at a spatial analysis of human activity within the landscape of Tyrrhenian southern Lazio between the late Roman and high medieval period (3rd to 14th century AD), using a multidisciplinary dataset. The research area roughly covers the area from the southern suburbium of ancient Rome to Fondi in the south, covering the area from Ostia to the Alban Hills, the Pontine Region including the Circeo peninsula, the Lepine, Ausoni and western part of the Aurunci mountains.

In principle, the study is based on data from the existing literature that subsequently are analysed in a regional geographical context. The dataset is built on the (re) analysis of data from primary and secondary sources. Archaeological evidence on the research period is gathered and complemented by as much data as possible from other disciplines that can shed light on the period. This effort's aim was not to be exhaustive, but to study as many relevant sources as possible that were available to me in libraries in the Netherlands, in Rome and Latina (the *Archivio di Stato*), and online. The results of other regional archaeological and multidisciplinary studies in central Italy (treated in Chapter 2) are used as a sounding board. With these results as a background, the landscape of Tyrrhenian southern Lazio is approached from two angles:

- The contemporary perspective. Using contemporary archaeological and historical data (3rd to 14th century), a diachronic mapping is made of human activity within the landscape. This mapping is based on finding contemporary sites of human activity and analysing these sites in a spatial context, in a GIS. Two types of sites are incorporated into the database, both treated on the same level: archaeologically attested and historically recorded sites.
- The retrospective perspective. Using historical cartography (treated in Chapter 5), data from the historical topographical literature, ethnographic studies and toponymic research (treated in Chapter 4), a retrospective analysis is made of the medieval to sub-recent landscape (12th to 20th century). By extending the chronological perspective, our understanding of the *longue durée* functioning of the pre-industrial

landscape is increased. Moreover, this retrospective approach should help find and interpret data on individual sites, adding to the information we have on these sites from contemporary sources.

Within the main objective the study aims at two things:

1. *To diachronically map activity within the landscape*, such as settlement, production, trade, aspects of authority, ownership, animosities, religion and infrastructure. The actors at work are monitored as well. In Chapter 7 a chronological and spatial analysis of activity within the landscape is presented, Chapter 8.I provides the synthesis.
2. *To test the used method*. It is tried to establish to what extent a multidisciplinary review study can provide new ideas about the chronology of the processes that took place, on change and continuity and the social reality behind these processes. The conclusions on this effort are presented in Chapter 8.II.

1 Diachronically mapping activity within the landscape

The goal of the analysis is not the confirmation or rejection of specific earlier theories or concepts about human activity in the medieval landscape of Tyrrhenian southern Lazio. This thesis intends to create fresh insights on the developments within this landscape. It is the first study to accumulate known and (yet) unknown historical and archaeological data into a spatial and environmental context. It enables a landscape archaeological analysis of these activities in a regional setting, allowing insight in the demographic, socio-economic and political transitions between late Antiquity and the high middle ages, and providing building stones for the reconstruction of the social reality behind the processes at work. Change and continuity are monitored, as well as communication and interaction, marginalisation and vitality of parts of the region.

In the final synthesis (Chapter 8.I) I relate my database's landscape data to two models of historical landscape analysis in the Mediterranean:

1. The attested developments are studied along the lines of the Braudelian scheme. At first the structures of the *longue durée* are treated, followed by the conjunctures.
2. The found evidence is analysed from the perspective of unity by diversity through *microecologies* and their *connectivity*.

The results of diachronically mapping activity within the landscape can be summarised as follows: The database proved detailed and chronologically extensive enough to define with as much care as possible the lengths of time along the lines of Braudel's three temporalities, whilst appreciating the "inner dialectic between these different temporalities" (Bintliff 1991). I thus arrived at a complex history of settlement, production, connectivity and power, successes and failures, modified by expansions and contractions, and characterised by an ongoing close relationship with Rome.

The long-term perspective

The long-term perspective of analysis is one of the main outcomes of this current study. This study covers a research period spanning roughly 1000 years, and in combination with the consulted retrospective sources has a scope of some 2000 years. This lengthy timescale, combined with the extensive multidisciplinary dataset, and comparative study of the results of research projects of regions in the proximity and of Rome, has allowed me to isolate and analyse *longue durée* structures within the landscape of Lazio.

Spatial analysis of a web of sites and interests

A second vital element of this study is the plotting of a fine web of separately studied and dated sites, and of the recorded activity (such as building and production) and interests (such as ownership, influence, authority) at these sites. This web of historical / archaeological sites enabled me to diachronically map activity in a regional setting. It allowed me to identify the actors at work in the landscape, and to track interaction and describe regional diversity within it. In this way I was able to identify sites and routes which appear to have been continuously in use. To some degree, and despite the obvious biases in the available data, the mapping of these elements in the landscape disclosed something about preferred places for activities throughout the history of the region and the role the landscape may have played in the history of human activity within it. In addition, the web of sites and interests enabled me to spatially track the demographic, socio-economic and political processes within the landscape; processes that usually come to pass on the medium long-term, i.e. the *conjuncture*. Conjunctures (as are regional diversity and connectivity) proved best visible in the high

middle ages, because of the sheer amount and detail of the available evidence.

What is visible and what not?

This study knows how to find activity and relations of the 'powers that were'. This study enabled me to spatially track the interests of state and church institutions, of nobles, of the well-to-do in general, of the literate, i.e. those closely entangled groups at the high end of society. Most of the discernible developments in the countryside were the results of the major historical geo-political developments and power strategies involving the elite, usually originating from Rome. Contrary the lives at the high end of society, the life of "commoners" proved to be mostly out of the scope of this research. It appeared to be difficult to comment on economic activity on subsistence level, on diffuse settlement and on different forms of land use (such as polyculture). To a degree this lack of information was resulted by the fact that the "common man" and local economies typically remained outside the realm of texts, especially during the early middle ages. An additional complicating factor related to texts was the fact that many smaller historical sites could not be located. As a result, the focus of the analysis mostly is on the well-documented and (also archaeologically) well-known larger sites. The underrepresentation of groups at the low end of society is also caused by the current state of research (and publication) of medieval archaeology in the research area.

Stages of transformations

By the available evidence it proved impossible to produce defined consecutive stages of transformations during late Antiquity and the early middle ages. The primary reason for this is that the region's archaeological data were not as detailed as elsewhere. Likewise, the written sources of late Antiquity and the early middle ages almost all were ecclesiastical; non-ecclesiastical (such as civic elite) activity usually remained hidden. As stipulated before, it is often difficult to interpret (dis)continuity. Is this a question of availability of data by chance and/or the (un)recognisability of evidence? Subtle changes proved hard to see. However, the fragmented evidence did not contradict the overall perception of the stages of transition as defined by other studies. Regarding the high middle ages, the historical evidence allows me to conclude that the major conjunctural developments were generally the same as everywhere else, but mostly slightly aberrant compared to other parts of central Italy, probably because of the presence of Rome in the vicinity of the researched area. But this should not be of any surprise. As earlier studies in Italy showed, the transition from the late Roman World to that of the high middle ages should not be attempted to be captured in uniform terms. All over the Italian peninsula, local and regional deviation was commonplace.

The microregional perspective

In essence the typical Mediterranean landscape of Tyrrhenian southern Lazio, with its diverse environment and great natural diversity, constitutes a good environment for an analysis from Horden and Purcell's microregional perspective. This study shows that only fragmented evidence is available for the prime aspects of the microregional perspective, i.e. *interaction* and *primary production*. Of these aspects, *connectivity* within the landscape, and overseas, proved best documented. This held certainly true after the 10th century. Connectivity was best made visible by means of spatial analysis of historical references (i.e. interests). Pottery distribution, which is normally the best way to detect connectivity, proved to be underdeveloped in our studied area. Throughout the research period communication and mobility constantly experienced changes. Changing spheres of interests and microstrategies of control, alterations in focal points (e.g. centres coveted by several parties) and transforming infrastructure were to be seen.

Concrete visions of specific microregions are rare, due to the fragmented supply of evidence regarding production and redistribution, and, of course, because of their intrinsic elusive nature of constant adapting to changing environmental, socio-economic and political circumstances. A number of the presumable foci (centres) of microregions could be pinpointed, usually larger sites which showed enduring activity and supported easy communications, most of which acted as gateways to other (often distant) microecologies. Rome was always visible as the centre of a number of overlapping microecologies, exerting itself considerably influence over and channelling external (often international) influence to its hinterland.

Conclusion

Despite the distortions (i.e. the biases) caused by the fragmented archaeological records and elite-focussed historical records, a few crucial structures and developments unambiguously stand out during the process of this study. First of all, the continuous role of Rome. The Eternal City continuously influenced much of the (pace of) developments in the studied area, by its role as a regional centre and as a funnel of outside influence. In addition, this study shows that a demographic and economic refocus occurred on accessible locations, villages, churches, sees, and at environmentally safe and defensible locations between the 3rd and 7th centuries. Another conclusion is that the Pontine coast showcased less activity than other parts of the researched area throughout the research period; likely caused by unfavourable ecological circumstances, bad accessibility from the coast to the interior, and the coast's vulnerability. The evidence once more confirms some of the general conclusions of earlier historical

and archaeological studies, such as the assumption that the influence of the early Church was extended along the main roads to and from Rome; as was the notion of temporary dip in papal power between the late 9th and the middle 11th century. What is more, the earlier attested 7th/8th century deepest economic slump in Rome seems to coincide with the evidence on the ground in the countryside. Churches stood out as markers of continuity, which seems consistent with earlier studies performed in other parts of Italy. The evidence shows in what way, like everywhere else, from the 10th century a new landscape was developed, fully exploited, and forged by economic bloom and by a revival of long-distance trade, by *incastellamento*, by fast growing civic elite power and by expanding rural monasticism. The accumulated evidence shows that the commune may have influenced (or hindered) *incastellamento*, as was suggested by Toubert before. The volatile nature of the political constellation across the landscape during the high middle ages is unambiguously recorded and spatially analysed.

These results bear testimony to the added value of a study such as mine, a study that is primarily based on a re-evaluation of existing data. It proved to be more than merely a methodological test case. Its multidisciplinary character, its lengthy research period and its regional scale, and its eye for details alongside with developments on a macro-regional level, provide a better understanding of long-term and conjunctural processes regarding the studied area. The current study outlines a history "in" the Mediterranean (Horden and Purcell), that together with similar studies in many more regions (such as the Biferno Valley, the Tiber Valley and Etruria) will help to tell the story "of" the Mediterranean.

2. Testing the used method

The data extracted from the six different data were conjoined on the level of sites. In this study, "sites" are considered nodes of human activity within the landscape, and their plotting is used to analyse patterns of activity. In the end, this study identified a grand total of 662 sites. Moreover, a large number of "interests" (such as ownership, influence, authority) of parties within the landscape was recorded.

The multidisciplinary approach

In theory, by cross-referencing different relevant data, human action at each site could be given a maximised chronological and typological depth. Indeed, the large body of multifarious data proves complementary when studying individual sites. Of course, many archaeological sites are documented in the written sources; especially the larger settlements. In some cases, I am able, with a high

degree of certainty, to pinpoint smaller historical bodies to a specific archaeological site. Sometimes these identifications are built on earlier studies, sometimes these are new findings. Similarly, by combining different disciplines, solid hypotheses of the location of enigmatic large historical sites can be concocted, for example of the location of *domuscultae*. At many sites the combination of a close examination of the descriptive historical details, the local topography, the dating of the archaeological objects found and a toponymic study leads to a better understanding of the sites' functions and/or their contemporary states, and/or to a fine-tuning of the sites' chronologies.

Dealing with biases

In Chapter 1 and 3 I discuss in detail how I deal with the array of interpretative challenges of the diverse sources involved in this multidisciplinary research.

In order to deal with imbalanced evidence and to make the database suitable for the analysis, three measures were taken in the set-up of this study:

1. At all times imbalances and biases of sources are monitored and made explicit, by commenting on what could be concluded and what could not.
2. The spatial imbalanced distribution of data across the landscape is tackled by dividing the area to be studied into 10 key areas.
3. The diachronic imbalance of data is dealt with by separating the research period into three different periods.

Are these measures effective in facilitating the analyses? On balance, the answer to this question should be yes. The measures taken prove to be fairly effective in dealing with the detected biases. At all times during the final analysis of Chapter 7 and the synthesis of Chapter 8 it is clear to what extent something could be concluded with certainty, what should remain tentative and what remains outside of the scope of conclusive analysis for this study.

All in all, the chronological and spatial partition of the evidence proves to be useful. It forced me to focus and refocus again and again, and to zoom in and out, digging deep into the available data in order to reveal any kind of structure in the evidence to the greatest possible extent. Because I have to say something concrete about each individual key area per every single period, and then synthesized my observations for the whole study area per period, tendencies and discrepancies presented themselves naturally. I believe that with this *modus operandi* structure (temporary and at a local level, but also continuously and over large areas) cannot have escaped my attention. Importantly, within this setup the differences in the available evidence per key area became transparent

and were incorporated in the analyses per period and in the final synthesis. The major downside of the individual key areas and three-period approach is that it proves to be time consuming, and that it produces all kinds of repetition.

The retrospective method

One of the novel aspects of this study is the extensive use of retrospective evidence, mainly drawn from maps and toponyms. This evidence allows me to see glimpses of the post-medieval landscape (i.e. its environment, land use, settlement and infrastructure), and it often exposes fragments of contemporary post-medieval perception of the (antique) landscape. Most importantly, the retrospective evidence proves instrumental in locating historical sites by the examination of the historical maps with their elaborate topographies and by the study of toponyms.

Toponyms: The study of contemporary "historical" toponyms (i.e. 3rd to 14th centuries) results in obtaining new evidence of the location of historical sites. The sheer size of the database facilitated the identification of toponyms, in which the examination of topographical clues on historical maps was of great help. Moreover, matching contemporary historical and retrospective "cartographical" toponyms (i.e. 12th to 21st century) proved instrumental in locating sites mentioned in the written sources.

The study of maps: The study of maps was an intensive and meticulous work. It produced some good results. First of all, the effort yields a large inventory of cartographical toponyms, which proves to be very useful in identifying and locating toponyms (and sites). The analysis results in the retrieval of a fair amount of valuable information on the contemporary state of a variety of ancient vestiges and roads still present in the landscape as well. It clearly shows the difficulties and particularities of the environments of the Pontine and Amaseno plains.

Recommendations

The thesis concludes with a set of recommendations based on the experiences of this study, in order to facilitate future study. Based on the experiences regarding the results and the used methods of the current study, including the attested challenges in the analyses and the omissions found in the available data, what could be the emphases of future studies? In a final section, this question is addressed from four different but overlapping research angles that stood out in the course of the current study: formulating general research strategies, the building and improving of typologies, the study of specific sites and the reading of documentary evidence. The goal of this discussion is to facilitate future studies, using one or a combination of the various disciplines deployed during

the current research, and to build new strategies regarding the analysis of human activity within the landscape of Tyrrhenian southern Lazio between the late Roman period and the high middle ages.

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