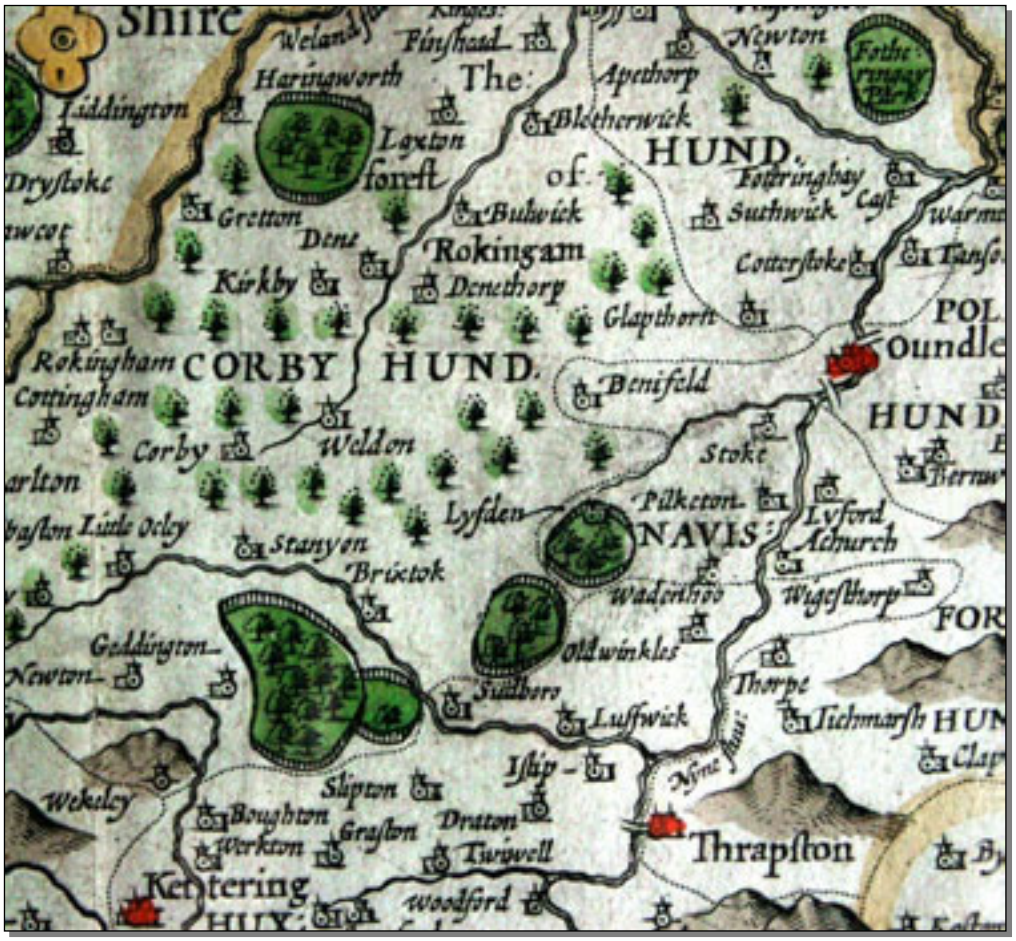
The Historic Landscape of Rockingham Forest



Glenn Foard David Hall Tracey Britnell

2003

The Historic Landscape of Rockingham Forest

its character and evolution from the 10th to the 20th centuries

'The Forest of Rokingham after the olde perambulation is about a 20 miles yn length, and in bredthe 5 or 4 miles in sum places, and in sum lesse. There be dyvers lodges for keepers of the fallow dere yn it. And withyn the precincte of it is good corne and pasture and a plentie of woodde.' *John Leland 1546*

Glenn Foard David Hall Tracey Britnell

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Cover picture:
Rockingham Forest as depicted on John Speed's map of Northamptonshire of 1610

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A wide range of people have provided advice and assistance during the project. We would like to than in particular the staff of the Northamptonshire Record Office and Public Record Office; also various owners who provided access to their collections of historic maps including Boughton Estates, Burghley Estates, Mr M. Hipwell, Mr D. T. Pain, Major J. V. A. Watts Russell. Also Gill Johnson for providing transcripts of the Southwick maps and Paul Martin for use of his archaeological site data. Finally we would like to thank the many landowners and occupiers who, over many years, have given permission for field survey on their land.

Copyright

Abbreviations

BEO	Burghley Estate Office (for maps held at Burghley House)
BRO	Bedfordshire Record Office
DMV	Deserted medieval village
Ex	Exeter Muniments held at Burghley House
LRO	Leicestershire Record Office
NCC	Northamptonshire County Council
NRO	Northamptonshire Record Office
OS	Ordnance Survey
PRO	Public Record Office
RCHM	Royal Commission on Historical Monuments
SMR	Sites and Monuments Record
VCH	Victoria County History (Northants).

SUMMARY

This report deals with the historic landscape of Northamptonshire's Rockingham Forest. It presents the results of a long term programme of survey work and digital mapping of the medieval open fields and of the post medieval enclosed landscape, which replaced it between the 15th and the 19th centuries. Illustrated with a wide range of mapping refined from the base data and supplemented by other evidence, it describes the evolution of the Forest landscape from the Anglo-Saxon period through to the present.

It defines the character of the Forest, focussing on the end point of each of the three key phases of landscape development: the height of medieval expansion, circa 1300; the time of change between enclosure for sheep farming and the shift to that for mixed farming, around the beginning of the 18th century; and thirdly the completion of this enclosure for agricultural improvement in the mid 19th century.

Finally the report provides a rapid assessment of the survival of the historic landscape, identifying the best surviving areas and providing initial suggestions for their future management.

Where provided in digital form this report comprises a text in Adobe Acrobat format including maps, created as jpegs. All maps are also provided as individual files in Extended Metafile format (one for each figure as listed in the text) in order to retain the high resolution vector detail. The digital archive of the project has been deposited with the Northamptonshire Sites and Monuments Record.

CHAPTER 1: INTRODUCTION

This report comprises the historic landscape component of the Rockingham Forest Project, a multidisciplinary programme mapping the natural, historic and aesthetic character of the landscape of the former medieval royal forest. The initiative has been led by the Rockingham Forest Trust with partners including Northamptonshire County Council, the Forestry Commission, English Heritage and English Nature. It is intended to provide guidance for the management of the landscape of the Forest through the various conservation and land use planning mechanisms, including the hedgerows regulations, Countryside Stewardship and the Local Plan and Development Control processes.

The historic landscape component of the project, reported on here, was designed by Glenn Foard and implemented in 2002-3 by David Hall, Tracey Britnell and Glenn Foard, working as consultants for Northamptonshire County Council on behalf of the Rockingham Forest Trust. The project was funded by the Heritage Lottery Fund, English Heritage and Northamptonshire County Council.

Figure 1: Rockingham Forest Project Area with pre 1895 county boundary, also showing major 17th century roads (after Ogilby 1675)

Project Area

Rockingham Forest was one of three major Saxon woodlands within the historic county of Northampton.[1] It lay on the boulder clay covered watershed between the rivers Welland and Nene. After the Norman Conquest of 1066 this became known as Rockingham Forest. The forest was an area of legal jurisdiction to preserve the king's hunting rights rather than simply a tract of woodland. The area under forest law grew in the late 11th and 12th centuries to encompass a vast area of both woodland and agricultural villages with their fields. However from 1299 onwards the area under forest law shrank until finally being extinguished in the 19th century.

Figure 2: The Historic boundaries of Rockingham Forest

The project area covers 572 square kilometres (221 square miles) in the north east part of the historic (pre 1895) county of Northamptonshire, comprising almost the whole of the Rockingham Forest landscape character area defined by the Countryside Commission. It encompasses the land between the rivers Welland and Nene. While the north, east and west boundaries follow closely the bounds of the royal forest of Rockingham as it was in

[1] Where not using data from the mapping conducted for the project, unless otherwise referenced, this report draws upon the detailed discussion in Foard, G. (2001a) *Medieval Archaeology*, **47**. For general information on the open fields of the county and for detailed information on the functioning of individual open field systems see Hall, D. (1995) *The Open Fields of Northamptonshire*, Northamptonshire Record Society, Northampton.

1286, the southern boundary is somewhat arbitrary, but it has been drawn to ensure that the whole of the intensively wooded area of 1086 and that encompassed by the forest in the late 13th century is included. The area comprises 63% of the Forest as recorded in 1286 and almost all the ancient woodland that remains today. It lies within the modern Northamptonshire district council areas of East Northamptonshire, Kettering Borough, Corby and Daventry but also includes one Leicestershire parish and three from the Peterborough Unitary Authority.

The area contains a wide range of archaeological and historic landscape features. Some are of national importance, such as the exceptionally complete open field earthworks of Sutton Bassett, evidence of ironworking from the 7th century BC to the 15th century AD and a remarkable collection of well preserved post-medieval landscaped parks. There is very good documentary, especially historic map evidence in local and national archives and extensive archaeological evidence both in records of previous fieldwork and surviving in the landscape itself. There has therefore been a wealth of primary evidence upon which to base this study.

Historic Landscape Characterisation

Recent years have seen the growth of landscape characterisation and assessment. In September 1991, the Government White Paper 'This Common Inheritance' invited English Heritage to prepare a list of landscapes of historic importance, similar to its Register of Parks and Gardens, the purpose of which would be to define areas of landscape deemed to be more 'historic' and, therefore, more worthy of preservation than the surrounding areas.[2] In the intervening years English Heritage instigated a number of pilot projects to assess appropriate methodologies for identifying 'historic landscapes'. Whereas in Wales a Register of Historic Landscapes was compiled, in England the pilot work led to the view that a simple register is not appropriate and that a more holistic approach is needed.[3] The resultant approach within the English Heritage funded characterisation projects in England of valuing everything equally and not selecting representative samples for conservation for their historic value has not gone unchallenged.[4] The priority for such character appraisal has however been reiterated in the recent review of the future of the historic environment.[5]

The English Heritage series of Historic Landscape Characterisation projects have used a process of systematic identification and description of historic components in the contemporary rural and urban landscape. These include all aspects of the natural and built environment that have been shaped by human activity in the past – the distribution of

[2] Great Britain. Department of the, E. (1990) *This common inheritance : Britain's environmental strategy*, H.M.S.O 1990, London.
[3] Fairclough, G. J., Lambrick, G., McNab, A. and English, H. (1999) *Yesterday's world, tomorrow's landscape : The English Heritage Historic Landscape Project 1992-94*, English Heritage, London.
[4] Rippon, S. and Foard, G. (1999) *Landscape History*.
[5] Cossons, N., Great Britain. Historic Environment Review Steering, C. and English, H. (2000) *Power of place : the future of the historic environment*, The Power of Place Office, London., 33.

woodland and other semi-natural habitats, the form of fields and their boundaries, the lines of roads, streets and pathways, the disposition of buildings in the towns, villages and countryside. Its objective is to define the way in which the activities of people in the past have contributed to the form and appearance of the modern landscape and the significance of this in managing future change.

Project Objectives and Methodology

The present project takes account of these general principles, but while they were largely developed in 'ancient' landscapes this project has had to address the very different problems posed by the planned landscape of the 'central province'.[6] In order to establish an effective methodology for tackling the planned landscape it has had to collect large quantities of 'new' archaeological and documentary data and has worked at a much higher level of detail on many aspects of the medieval and post-medieval landscape than is usually the case with historic landscape characterisation projects. Although not a specific objective of the project, some initial conclusions on the definition of a simplified methodology relevant to the problems of characterising the planned landscapes of the 'central province' are presented in chapter 6, although this whole topic requires further research based on the present detailed data set.

The project has mapped the two main phases of the historic landscape of the last 1000 years, that of the open field systems and then of the enclosed field systems that progressively replaced them from the late medieval period through to the mid 19th century, together with the other aspects of the landscape, most notably the extensive tracts of woodland. The nature of the data collected has enabled two major time slices to be defined, through which the character of the medieval and post-medieval landscape can be determined. The first represents the maximum extent of agricultural expansion, circa 1300; the second shows the landscape immediately before final enclosure by the parliamentary enclosure Acts between 1727 and 1841, representing broadly the period when enclosure for agricultural improvement replaced the earlier enclosure for conversion to permanent pasture. For specific townships there are individual historic maps which give a greater time depth to the picture of the post-medieval landscape, the earliest major collection being for the late 16th century, while the earliest individual map is from 1518. In addition project wide data from the Ordnance Surveyors' Drawings at 2 inch scale from the 1810s, the 1st edition 6 inch Ordnance Survey mapping of the 1880s and the land use mapping of 1928 have been used to further enhance the picture. The modern landscape has been taken from the modern Ordnance Survey MasterMap digital mapping, supplemented where necessary by reference to the 2000 vertical air survey.

The open field systems have been mapped by David Hall from the data collected during his field survey over the last 30 years, supplemented by aerial photographic evidence and, where necessary because of landscape destruction, from documentary sources. This data

[6] The 'ancient' as opposed to 'planned' landscapes of England are most concisely defined in Rackham, O. (1987) *The History of the Countryside*, J M Dent, London., 1-5. The central province is defined in Roberts, B. K. and Wrathmell, S. (2000) *An Atlas of Rural Settlement in England*, English Heritage, London.

was manually drawn to a 1950s Ordnance Survey 1:10560 map base. It was converted into digital form by Tracey Britnell, who has also conducted the digital mapping of the post-medieval landscape of anciently enclosed fields and forest, from the evidence from some 250 historic maps, including estate maps, Enclosure maps and Tithe maps. This mapping included the extent of landscape parks and the plan form of villages and of woodland to give a detailed picture of the pre-industrial landscape. The extent of the area enclosed between 1727 and 1841 by Parliamentary Enclosure Acts has also been mapped, while the resultant pattern of fields has been examined using digital copies of the 1:10650 1st edition Ordnance Survey mapping of the 1880s registered in GIS (MapInfo). The latter has also formed the map base for all the digital mapping of the post-medieval landscape in this project. The accuracy of the mapping generated by the project from historic map sources is dependant upon the accuracy of these scanned base maps, in addition to the problems of transcription of the often highly inaccurate estate, enclosure and other source maps to this OS map base. Whilst we have sought to register the 1880s maps as accurately as possible a few have significant internal inconsistencies of scale due to damage to the original paper maps, but an overall accuracy level in the mapping of ±5 metres has been attempted.

The historic map data for the Forest has previously been studied by Pettit who produced a map of selected aspects of the historic landscape of the 17th century, supplementing the historic map data with other documentary information.[7] This was an important piece of research for its time, but it was not intended as an historical geography of the Forest. Much of the methodology of his mapping is not specified, while individual features cannot be directly related to particular sources. Learning from this work, a more rigorous but far more time consuming digital mapping methodology was defined for the current work. It must be noted however that there are several sources, most importantly the Cliffe Bailiwick map of circa 1641, from which it has not been possible to accurately map certain important detail for the project. This map is to be the subject of a separate study which will deal with the omissions from the current data set and will provide a more comprehensive analysis of the uniquely detailed picture it provides of a large tract of the forest at one time.[8]

This evidence has been supplement to a limited degree with selected data from the Northamptonshire Sites and Monuments Record and by other digital mapping of the historic landscape previously undertaken by Glenn Foard. In addition the project has produce digital mapping of the pre-medieval settlement and other archaeological evidence recorded during the last 30 years by David Hall and Paul Martin. The full methodology is detailed in Appendix I.

Using this mapped data this report provides a general discussion of the historical development of the landscape. It then defines the historic landscape character of the Forest in the medieval and post-medieval periods. Finally it gives a rapid assessment as to the survival of the historic landscape, enabling the completeness of each historic

[7] Pettit, P. A. J. (1968) *The Royal Forests of Northamptonshire 1558-1714*, Northamptonshire Record Society, Northampton.
[8] Britnell, T. and Foard, G. (in preparation) *Northamptonshire Past and Present.*

landscape type to be assessed on a township by township basis. This has allowed the best surviving areas of the characteristic landscape types of the Forest in the medieval and post-medieval periods to be identified.

A popular publication ‘The Story of the Forest’, based on this work, is being prepared for the Rockingham Forest Trust and the publication of a comprehensive Atlas is under discussion with Northamptonshire Record Society.

CHAPTER 2: THE NATURAL AND ADMINISTRATIVE CONTEXT

Physical geography

Rockingham Forest lay between two of the main rivers of Midland England, draining eastward through the Fenland into the North Sea via the Wash (figure 1). The south east to north west trend of the Jurassic rocks has determined the course of the main rivers and streams and gives the area its broad structure. The landscape takes the form of a plateau tipping gently south eastward. On the north western edge the scarp slope falls quite precipitously into the Welland valley. In contrast, the dip slope gives a far gentler fall into the Nene valley on the south east side. Over most of its area the plateau is capped by boulder clay, but in the far north east there is no capping and an expanse of limestone formed a very different but equally inhospitable environment for settlement and agriculture.

Figure 3: Relief and drainage pattern

The plateau is heavily dissected by lesser tributaries, almost solely of the river Nene. Only a handful of quite short streams breach the crest of the scarp to drain small parts of the north and west of the area into the river Welland. Thus the watershed lies on the south side of but very close to the scarp slope. For much of their course the rivers and streams run from south west to north east, with the grain of the rock formations, but they take sharp turns south or eastward where the cut through the harder bands of rock before again resuming the trend of the underlying geology. The project area also sits at the point where the Jurassic formations turn from a south eastward dip in Northamptonshire to an eastward dip in Lincolnshire, causing the tributaries on the north to trend east west and those in the south to trend north south. The resultant pattern has had a dramatic impact on both land use and communication throughout the past.

Figure 4: Simplified geology

Where the rivers and lesser streams have cut down through the plateau they have generally exposed a complex layering of permeable and impermeable geologies. In the Nene and its tributaries these rocks are mainly permeable. In the Welland and, to a lesser degree, in the upper reaches of the Ise, these tend to be mainly impermeable clays. In addition to the mixed geologies exposed in the valley sides, the floor of the Welland and especially the Nene valley has significant areas of river gravels. Finally on the floodplains of the rivers and major streams there are areas of alluvial silts overlying the gravels and other geological formations. It appears likely that much of this alluvium was laid down in the late Saxon and medieval periods as a result of soil erosion caused by intensive arable cultivation within the watershed.

Physiographic zones and their land use potential

The Forest can thus be divided into a number of broad physiographic zones: the boulder clay plateau and the much smaller area of limestone plateau; the Welland valley with its mainly impermeable geology; the Ise valley with its more mixed geology and the Nene valley and its tributaries with their mainly permeable geology. The Nene's main tributaries, the Harpers Brook and Willow Brook, have been distinguished as discrete sub zones because they form quite separate narrow corridors cutting through the clay land plateau. The other main tributary, known in the 10th century as the Navis Brook, severs a small section of plateau, also once part of the Forest, just as the Ise severs the other larger area of the early Forest, both outside the study area. The minor valleys within the Nene zone have also created a distinctive area which could be separated from the main valley as a sub zone.

Figure 5: Physiographic zones

These variations in geology and relief, particularly through their intermediate influence on soil type and drainage, have had a dramatic influence on the character of land use across the forest. Unfortunately, in the absence of large scale (1:25,000) mapping of soil types for the Forest, it has not been possible to assess the degree to which differences exist between soil type and parent geology. Generally it would appear that there is a close correlation, but some variations in soil type significant for understanding land use may have been missed. One known to have been important is the presence of decalcified soils on part of the limestone plateau in the northern corner of the Forest. These soils have an acid character which, if accurately mapped, is expected to provide a clear association with the distribution of heath, as noted by Morton.[9]

Boulder clay plateau

The boulder clay capped plateau forms by far the most extensive zone within the forest. It generally produces heavy, poorly drained, intractable soils. Before drainage, beginning in the period of agricultural improvement in the 18th century, this produced the most marginal land, best used for woodland. When cleared by felling or intensive grazing the resultant pasture yielded inferior quality grass. Though cultivation was possible, as seen over large areas of the Forest in the high medieval, it seems to have been some of the poorest, least productive of arable land and the area most likely to revert to pasture or even woodland in the face of population decline and economic recession. This zone does not however generally lack reliable streams, so occupation is not impossible, as can be seen from the pattern of Iron Age and Roman settlement, and from the occasional medieval settlements which developed there.

[9] Morton, J. (1712) *The Natural History of Northamptonshire*.

Limestone plateau

At the north eastern edge of the forest the limestone plateau, without boulder clay capping, was also highly marginal land. These very dry, thin soils have in part of the area been decalcified giving an acid rather than the alkali soil that one would normally expect on limestone geology. This area also provided soils less well suited for arable exploitation. When cleared of woodland for grazing however, where there were acid soils, it tended to develop into heath. This area of the plateau was largely devoid of springs and streams, except for the White Water, and so occupation was difficult and appears to always have been fairly limited, except on the periphery, even in the Roman period.

Permeable valleys

The mixed, mainly permeable geologies of the valley sides and gravel terraces of the valley floor of the Nene and its tributary streams, have proven far more favourable to agriculture than almost any other part of the forest. These areas seem to have been intensively settled from the early prehistoric onwards, being well suited to arable as well as to pastoral land use. Though the extent of this good agricultural land varies according to the size of the valley, the land use and settlement potential will have been broadly comparable.

The one exception, until drainage in the 20th century, was the alluvial area on the valley floor, where periodic flooding made them unsuitable for cultivation. However the regular silt deposition resulted in high soil fertility and thus they proved to be some of the most valuable of agricultural lands in the region, used in the medieval and post-medieval for the production of hay and then, later each year, for pasture.

Clay valleys

In the north west part of the forest, below the Jurassic scarp in the Welland valley and, to a lesser degree, in the upper Ise valley, there are extensive areas of clay rather than permeable geologies within the valleys. These were probably less favourable to arable than any other part of the river valleys.

Administrative Organisation

Although physical geography was the dominant force determining the character of this landscape until recent centuries, the administrative and tenurial framework within which the land was organised and exploited was also a major influence. It was not practicable to reconstruct the changing tenurial pattern between the 11th and 19th centuries within this project, but an attempt has been made to reconstruct the administrative structure. This was so fundamental to the management and evolution of the landscape that it would have been impossible to develop any meaningful characterisation without this framework.

There is sufficient evidence as to the broad structure of Saxon administration and tenure to be able, using the evidence from later sources, to suggest a conjectural structure within which the Saxon landscape was managed. By the late Saxon period our knowledge of this

pattern becomes more secure, thanks particularly to the Domesday survey. For the medieval it is believed that boundary alignment will in general only have varied in a limited number of cases from the pattern recorded in the maps from the 16th to 19th centuries.[10]

The Saxon pattern of provinces and multiple estates, from at least the 7th century, replaced in the late Saxon by the evolving townships, had a fundamental influence on the evolution and character of the landscape through to the 19th century. This is because they were the primary territories through which the local communities and their lords managed and exploited the land. It is within this developing structure that the early evolution of the landscape has to be understood. By the mid 11th century the township, each typically with its own separate open field system, had become the primary unit of organisation. They have been mapped in fine detail for the post-medieval in this project and provide the framework for our analysis of the medieval and post-medieval landscape. The earlier and larger Saxon units are only briefly discussed but their more accurate reconstruction in the future will have considerable importance in advances in the understanding of the Saxon landscape.

Tribes, provinces and multiple estates

In the early-middle Saxon period the region appears to have been divided into a number of tribal units, later becoming provinces of the Mercian kingdom. One, centred on Oundle, dominated the project area and traces of its boundaries may have been recovered in the township and furlong mapping undertaken in this project. It seems to have extended from the Nene to the watershed of the Welland, and slightly across the watershed with the Ouse to the south east, stretching from the centre of the Roman small town at Kettering on the west to Wansford on the east. This territory thus encompassed almost the whole of the woodland which became known as Rockingham Forest, which may in the early-middle Saxon have been the woodland of Oundle.

That part of the province on the north west of the Nene seems to have comprised four major royal estates centred on Saxon royal manors at Oundle, Nassington, Brigstock and Weldon/Corby. Each probably had a large tract of woodland attached to it in the Saxon period, though the pattern in 1086 had already been confused by late Saxon reorganisation. These tracts of woodland became the three bailiwicks by which the forest was organised in the medieval and post-medieval period. The woodland of Oundle, because already out of royal control by 1066 and so not in initially incorporated into the forest in the same way as the others, seems to have been largely lost to agriculture during the early medieval.

Beyond the boundaries of the province of Oundle are probable territories in the Welland and to the south west of the Ise. These have other multiple estates, probably including Gretton in the Welland and Rothwell in the Ise.

[10] Foard, G. (1985) *Anglo-Saxon Studies in Archaeology and History*.

Figure 6: Historic townships and forest bailiwicks

Townships

The townships were created by the progressive dismemberment of the multiple estates and then further subdivision, a process almost completed by the end of the Saxon period. Examples of the sequence are seen in the late Saxon creation of Newton (the new 'tun' or township) out of the land of Geddington, or the subdivision of the three townships of Ashley, Weston by Welland and Sutton Bassett, as shown by their names, out of a single land unit. Creation of the townships may have involved the conversion of large tracts of pastoral land to arable open field, followed by a massive expansion of arable at the expanse of woodland on the boulder clay. In the heart of the forest this may explain the grouping of townships with 'wick' names, where small pastoral hamlets seem to have been elevated to open field townships (Blatherwycke, Bulwick etc).

The historic townships used here typically represent the earliest available mapped boundary, mainly from the 17th or 18th centuries. It is not a complete data set and does not represent the situation at a specific moment in time. There is the need for further detailed research to refine these boundaries though, as the late Saxon charters and 19th century enclosure maps for Oundle and Kettering demonstrate, there was a high level of stability in most township boundaries through the medieval and post medieval periods.[11]

Figure 7: Allocation of resources by township, showing conjectural area of late Saxon woodland and medieval clearance.

The townships can be seen to have been defined so as to enable each community, as far as practicable, to have access to a range of resources. The exact composition varied according to the topographical and geological location of the settlement, mediated by cross cutting tenurial, economic and other influences, including earlier patterns of land use history. When townships were subdivided the boundaries were, as far as possible, redrawn to retain this balance of resources. Typically they began with meadow on the valley floor, ran through the core of the open field arable on the mixed geologies, with some pasture interspersed in the slades and small valleys, up onto the woodland or heath on the plateau. Away from the main valleys the meadow could be absent. It was normally within the arable core that the nucleated settlements lay, usually on permeable geology and adjacent to a stream or on a spring line. Because the field-land and woodland lay in such close proximity there appears rarely to have been the need for detached blocks of woodland. When the townships are viewed against the high medieval pattern of land use this organisation can be seen very clearly in some cases, as with the townships of the

[11] Foard, G. (1991) *Northamptonshire Past and Present,* **8,** 179-189, Foard, G. (2001b) Northamptonshire County Council.

Nene valley between Oundle and Aldwincle. However there are many cases in the largely champion lands of the west where all or most of the woodland had gone by 1300. However, if one views the townships against the extent of boulder clay, which we argue broadly defines the extent of Saxon woodland in all but the north east sector of the forest, then the pattern of resources within almost all these townships in the late Saxon is seen to match that of those across the rest of the Forest.

These townshiops, once stabilised, provided a straightjacket within which later intensification was largely constrained. However, when the townships were created large tracts of land remained in common between the former members of the early estates, as woodland and wood pasture. This was the land which became the core of the royal forest after 1066. These common rights were progressively extinguished over subsequent centuries and the land divided between the relevant townships or taken into the sole control of the manorial lords. One of the earliest examples of this may have been the Lyveden valley, which seems to have been woodland circa 980, but was divided between the townships of Benefield, Pilton, Brigstock and Aldwincle and new settlements established separately on each portions. This may have been after the period of open field creation, explaining why it was here and nowhere else in the forest that a dispersed settlement pattern developed.[12]

The significance of these townships in the management of the agricultural landscape was only finally removed in the mid 19th centuries, following the completion of the process of enclosure and the dissolution of communal farming.

The Royal Forest

The extensive tracts of woodland that appear not to have been allocated to any township by 1066 seem to have belonged to major royal or former royal manors, and it was here that the various townships held common rights. Soon after the Conquest these woodlands were removed from the royal manors to create the royal forest. The term forests represented an area of legal jurisdiction related to the management of the king's hunting preserves rather than meaning an area of continuous woodland. This forest by 1157 took its name from the important royal castle of Rockingham, together with which it was often administered, although it was subdivided into three bailiwicks managed from the royal manors of Rockingham, Brigstock and Kings Cliffe.

Progressively during the late 11th and 12th century other woodland, attached to non royal manors, and very many townships themselves including their open fields, were also drawn within the perambulation of the forest. By 1286 Rockingham Forest encompassed an area of 350 square miles (907 square kilometres), extending from the walls of Northampton to the south bridge at Stamford, although by then the forest was already in decline. The 1286 perambulation reflects a far wider distribution of woodland in the later 11th century, when the bounds were being established, than that seen in 1299 figure 2.

[12] Foard, G. (1991) *Northamptonshire Past and Present,* **8,** 179-189.

During the 12th century exemptions had begun to be granted to manorial lords removing their land from forest law. This was, in part, linked to the process of assarting, the clearance of woodland within the forest for agricultural use. Thus much land was effectively removed from the forest and re-incorporated into the townships, though often not into the open fields. In response the forest bounds were redefined in 1299 to encompass just 77 square miles (198 square kilometres), following closely the areas which had not been cleared of woodland, but still including whole townships, particularly where these were in royal control. Only fairly small areas of woodland lay outside the bounds.

Extensive clearance for agriculture and thus erosion of the forest bounds continued until the early 14th century, when the economic recession and population decline called a halt. The bounds of the forest and of the wooded land continued to be eroded in later centuries, particularly as the economy and population levels recovered. The final stage of dissolution of the forest took place with parliamentary enclosure of the bailiwicks of the forest in the late 18th and early 19th centuries, followed by another great bout of woodland clearance for agriculture.

CHAPTER 3: THE EVOLUTION OF THE FOREST LANDSCAPE

Overview

The defining characteristic of the Forest landscape from the early Saxon period until the 19th century has been the woodland, which survived to a greater or lesser degree on the boulder clay and limestone plateau.[13] The story of the forest is to a large extent the story of the progressive removal of the woodland, a process reaching near total destruction in a last massive phase of clearance in the 19th century. By the 1880s the forest had been fragmented to a tiny remnant. But at the same time, in the later 18th and 19th century, one sees the appearance of substantial new planting, in small parcels scattered across the wider landscape where little or none had existed for a thousand years, perhaps longer. By the end of the 19th century the Forest had in effect been destroyed. In the 20th century some new planting has begun a slight restoration of the core of woodland. However it is the process of new scattered planting that has continued apace through the 20th century, leading towards a far more consistent distribution of woodland across the whole landscape. This is perhaps the clearest example of the way in which the diversity of landscape zones has and continues to be destroyed during the industrial period.

Figure 8: Woodland clearance and planting from the late Saxon to 2000

In contrast, agriculture, especially arable agriculture, has generally been more productive in the valleys, on the mixed geology. In times of economic boom and population growth agriculture, particularly arable, has expanded across much of the plateau. In times of recession it has tended to retract to the better soils of the valleys, the plateau reverting to lower intensity use. In the major recession following the end of the Roman period this resulted in massive woodland regenerated on much if not all of the plateau, presumably as the intensity of pasturing fell with the loss of provincial and imperial markets and the fall in population levels. Just a few areas, perhaps Benefield, Churchfield and Benefield[14] Lawn, may have remained as open pasture throughout this period until the major expansion of arable in the late Saxon. However, unlike many parts of England before the Industrial era, almost the whole of the landscape, including the boulder clay, was capable of exploitation as arable and by 1300 furlongs had expanded over more than 50% of the boulder clay.

Figure 9: Changing patterns of land use from the high medieval to 2000

In the late medieval recession land again began to be converted back to pasture, both within the functioning open field systems but also most comprehensively where whole tracts of arable were enclosed for sheep farming. In the latter the township pattern tended

[13] The limitations in the existing data means that the medieval extent is of woodland, comprising both woods and wood pasture, while later mapping is of woods only.
[14] Known today as Beanfield.

to provide the framework and so very discrete blocks of land were converted. As the post-medieval progressed some land was perhaps being enclosed for arable cultivation but by 1700 the division between enclosed and unenclosed townships probably still largely reflected the major division between pasture and arable. Even during the completion of enclosure, under parliamentary Acts in the 18th and 19th century, the result must have been primarily a conversion to pasture, for as late as 1928 we find that most of the Forest was under pasture (figure 9). Only since the 1940s has the Forest begun to approach once more the extent of arable exploitation that had been reached by 1300. Within what is now the modern county, in 1300 there were some 128 square miles under arable. By 1928 this was just 52 square miles while in 2000 it had risen again to 104 square miles. This is an almost identical percentage as in 1300, for by 2000 some 20 square miles had been lost to urbanisation.

The development of settlement has largely mirrored the changes in land use over this period. Settlement that spread in a largely dispersed pattern across most of the landscape in the Roman period had contracted to the permeable geology of the valleys by the early Saxon, the same general area where the medieval settlements would lie. Many of the Saxon sites were however abandoned, leaving the remainder to grow in the late Saxon with the massive expansion of arable, to form the villages we know today. Just a handful of isolated farms and hamlets existed during the medieval period. During the subsequent conversion to pasture a few settlements were lost, mainly the hamlets and isolated farms but also several small villages, though many others shrank, some quite dramatically. Enclosure led to the creation of a small number of isolated farms but it was not until the 19th century that a major dispersal of settlement took place. This has been reinforced dramatically in the 20th century, creating a major dispersed component to the settlement pattern of the Forest that had not existed since the middle Saxon, indeed on this scale not since the Roman period. At the same time there has been an even more dramatic urbanisation in Corby and Kettering and, on a smaller scale, in a handful of other towns. As a result the urban areas have begun to be almost as dominant a feature of the modern landscape as woodland had been in the high medieval.

Figure 10: The changing landscape of the Forest from the Saxon to the present

Landscape phases

Since the end of the Roman period up to the beginning of the Industrial period the Forest has passed through four main phases of landscape development, between the 5th and the 19th century. Each phase was built upon its predecessor but created distinctive patterns of its own. The end of the evolution of this rural landscape is marked by the impact of industrialisation. The date ranges allocated here for the transitions are somewhat arbitrary, having been drawn in part to relate to clearly identifiable archaeological or documentary horizons closest to the beginning and end of each main phase of landscape change.

Prehistoric and Roman (to AD 410)

An almost wholly wooded landscape had developed under the natural influence of climate change at the end of the last ice age. The character of this woodland will have varied significantly in terms of species composition and density across the area, depending mainly upon the geological formations and hence the soil types and how freely they drained. The low density of human population at this time, and the fact that they pursued a lifestyle based on hunting and gathering, meant that man's impact on the character of the landscape was minimal.

The first major phase of human induced change began with the introduction of agriculture in the Neolithic period. It is believed that during the Neolithic and the subsequent Bronze Age clearance for arable and/or pastoral uses led to the removal of trees from much of the area of free draining and most productive soils on the permeable geologies. This was concentrated largely within the main river valleys and their lesser tributaries, though it also included limited areas of the limestone plateau. However, extensive 'wildwood' probably remained on much of the impermeable geologies, especially on the large areas of often poorly draining boulder clay on the plateau.

Clearance progressed rapidly on the boulder clay plateau during the Iron Age and Roman period and many areas which were woodland in later centuries have been shown to have been under agricultural exploitation in the Iron Age and Roman period, even in the very heart of the Forest. It is however believed that areas of woodland did survive, in part to deliver the fuel needs of the iron and pottery industries as well and more general fuel and timber requirements. Moreover, the most intensive exploitation and densest of settlement did continue to be on the better agricultural land in the valleys, where for example the Roman villas are to be found. It may be that pastoral exploitation was a more dominant land use at this time than arable, however the extent and character of each land use type in this phase is poorly understood.

While our understanding of settlement patterns derives largely from programmes of fieldwalking, the overall character of this 'Celtic' landscape is less well understood but has begun to be revealed, mainly through aerial survey, supplemented in a few places by extensive excavation prior to mineral extraction, mainly in the 1970s. However it is still a very fragmentary picture compared to some other parts of Northamptonshire and so it is not possible to begin to define broad patterns or character variations.

Early-middle Saxon (circa 410- 850)

Although the early history provided the canvas upon which the later landscape would be painted, the present character of Rockingham Forest has been largely determined by human land use over the last 1600 years.

The first major change occurred in the late Roman or immediate post Roman period, in the 4th or early 5th century, when settlement retracted from the boulder clay plateau.[15] In addition there seems to be a high level of discontinuity in plan form between the 'Celtic' landscape, as seen from aerial survey,[16] and the English landscape of the late Saxon to 19th century, as mapped in this project. This may indicate that the transition into the Saxon period saw a breakdown of the 'Celtic' landscape structure as well as, and perhaps directly associated with, that reorganisation of the settlement pattern. This discontinuity can be seen to apply equally to the plan form of the medieval and post medieval woodland as it does to the arable fields. This is most clearly seen in the now cleared area of Geddington Chase where an earlier boundary system has been revealed which respects the Roman road but has a completely different plan form to the documented coppice pattern of the post medieval woodland, which is believed to have medieval origins. There are however other possibilities that will need to be explored and unfortunately the evidence for the Celtic landscape is currently too fragmentary across most of the Forest to enable an adequate comparison with the medieval furlong pattern.

Much of the Saxon woodland was probably a reversion from arable or, far more likely, from pasture in response to a combination of massive economic recession and possibly also population decline. By the late Saxon period woodland had expanded over the Iron Age and Roman settlements and fields across much if not all of the boulder clay of Rockingham Forest, probably as a result of a significant reduction in grazing levels. On the permeable geologies in the river valleys and on the Welland scarp a dispersed settlement pattern, similar to that of the Roman period, seems to have been retained in the early Saxon. The settlement distribution is similar to that of the villages of the subsequent, medieval period but there were many more settlements in the early-middle Saxon. This was probably a period when pasture was the dominant land use on the permeable geology.

In the early-middle Saxon the woodland was far more extensive, judging by the place names of the settlements, and to have concentrated on the boulder clay plateau extending into what by the medieval period became 'champion' lands.[17] The boulder clay seems to mark the broad extent of this woodland over most of the Forest. In the west the place names like Ash'ley' and Ding'ley' betray this earlier wooded character, while in the south one can find 'Graf'ton and Week'ley'.[18] Such a reconstruction of the middle Saxon landscape, based largely on the geology, gives even more meaning to many of the place names in the forest, showing how small an area of cleared land probably existed in some valleys, in places like Oakley, and explaining perhaps the presence of the numerous wick and other hamlet names, like Bulwick and Henwick. There were perhaps a small number of open pasture areas called 'felds' set back within the woodland zone, notably Benefield, Churchfield and Benefield Lawn,[19] surviving from the Roman period. These 'felds' were

[15] Brown & Foard, A. G. (1998) In *The Archaeology of Landscape*(Eds, Williamson, T. and Everson, P.).
[16] Deegan, A. and Foard, G. (in preparation) *The Northamptonshire National Mapping Programme Project*.
[17] The term 'champion' derives from the French 'champagne' and was typically used in the medieval and post medieval to describe the vast open landscapes why typified much of central England.
[18] Gover, J. E. B. e. a. (1933) *The Placenames of Northamptonshire*.
[19] Known today as Beanfield.

connected by ‘rodes’, that is linear clearings which cut across the clay land or ran along the minor valleys, giving access through the forest. ‘Leys’ are also encountered in close proximity to the woods and are clearings within the woodland on the permeable geology. The dark bulk of the woodland on the adjacent plateau must have given a somewhat oppressive, enclosed feel to the narrow forest valleys, a feel that must have remained well into the medieval period and in some places, such as Southwick, right up to the 19th century.

By the 7th to 8th centuries the intensity of agricultural exploitation may have begun to increased once more with the establishment of some of the first core areas of the open field systems that would come to dominate the landscape in future centuries. By the end of this period many of the dispersed settlements had been abandoned and when the major phase of growth began it was concentrated on those sites that remained, turning these farms or hamlets into nucleated villages. In a few areas the desertion of the early-middle Saxon settlements seems not to have been as complete as elsewhere and this may explain why in certain circumstances we find a number of small hamlets with their own small townships, as with Barford, Glendon, Perio or Coton. This is particularly noticeable in the territory around the great Saxon royal estate of Rothwell.

Figure 11: Roman, Saxon and Medieval settlement distribution related to geology

Medieval settlement areas define maximum possible extent but many are likely to have been smaller. High concentrations of Iron Age/Roman and Saxon sites reflect areas of intensive archaeological survey, as in the Lyveden valley, Brigstock Parks and in the area of the expansion of Corby in the 1970s. The latter show the true density of settlement while the gaps mainly result from the absence of information. **(Geological data derived from the 1:10,000 scale BGS Digital Data under Licence No 2001/004, British Geological Survey. ©NERC)**

It is therefore probably in the 7th or 8th century that the second major step was taken which would determine the character of the forest and the distribution of its villages, and when the majority of our settlements gained their names. In the heart of the Forest the settlement names are quite different to those seen on the periphery, in the valleys of the Nene, Welland and Ise. In the Welland and Ise there are many ‘tun’ and ‘ing’ place names, while in the heart of the woodland zone hamlet place name elements like ‘by’, ‘wick’ and ‘thorpe’ are dominant. The limited tracts of permeable or mixed geologies, with their better agricultural potential, may have provided a potential for larger settlements while in the forest these were restricted to quite narrow corridors along the small stream valleys, with boulder clay or dry limestone plateau offering poor agricultural potential. In the latter areas the settlements seem likely to have been much smaller, perhaps no more than single farms. Other potentially significant associations in the distribution of place names are beginning to appear as a result of the detailed mapping provided by this project, but these require further study before their relevance can be confirmed.

There is a great deal in the plan form of the medieval and post medieval landscape, together with detail of its land use rights, which may contribute to the reconstruction of the character of the early-middle Saxon landscape. For example the division between the

enclosed and unenclosed wood pasture may be relevant to the extent of early manorial rights within the woodland zone, as for example with the distinction between the open wood pasture of Rockinghamshire and the coppiced woodlands to the south. Similarly the pattern of droves, such as that recognisable in the plan form of Wakerley village and its furlongs and wood, may be another major component of the early landscape that it will be possible to recover through detailed enhancement and analysis of the data collected in this project.

Late Saxon to early medieval (circa 850-1350)

The end of the Saxon period saw a replanning which determined, more than anything else, the character of the Forest for the next 1000 years. There was a massive intensification of agriculture involving the creation of an extensively planned, highly arable landscape of open field systems, one to each township. They expanded to their maximum extent by around 1300, when more land was under arable cultivation than is the case even today. But further expansion at the expense of the woodland was halted by the recession following the great famines of the 1310s and Black Death and other successive plagues from 1348 onwards.

Open Fields

The townships were created as the basis for the development of the middle Saxon settlements into late Saxon villages, by the division of the land of the middle Saxon multiple estates. The planning of open fields probably involved a conversion of significant areas of land from pasture to arable. Soon after, if not immediately, there began a major expansion of arable up onto the plateau, a process continuing until around 1300. Some of the townships were to see subdivision in the late Saxon as such extensive areas were cleared that it made it possible for two villages to be supported where only hamlets had existed before, as perhaps in the case of Great and Little Oakley. Within each township the common rights were shared between the tenants, though occasionally wider shared right persisted, with intercommoning of certain open fields, as between Glapthorn and Cotterstock.[20] But in the woodland such intercommoning of wood pasture between various townships remained the norm. Such land was only later subdivided between the townships, a process seemingly under way in the medieval but only finally completed in some areas with the parliamentary enclosure of the forest in the 19th century.

Figure 12: Land use within each township and forest bailiwick in circa 1300

[20] Foard, G. (1988) In *First Millennium Papers*, Vol. International Series 401 (Eds, Jones, R. F. J., Bloemers, J. H. F., Dyson, S. L. and Biddle, M.) BAR. Other examples are Nassington with its dependent hamlet of Yarwell and Deene with part of Kirby.

During this period almost all of the settlements in the study area must have seen dramatic expansion of their townships to create true villages, with the conversion of large areas of pasture or more likely clearance of large tracts of woodland for new open field furlongs. In some cases it is perhaps possible to see the creation of new townships, with a village centred on a minor stream and tiny block of permeable geology, but with the new regular furlongs on the cleared boulder clay creating the agricultural resources to now support a medieval village. One of the best examples is Grafton Underwood. On the periphery of the woodland zone many townships were transformed into wholly champion land, as the woods were cleared and the arable furlongs extended up onto the boulder clay to the watershed, meeting those of the adjacent townships. In the heart of the forest such clearance must have enabled many tiny settlements to grow into substantial villages, seeing some of the paired hamlets, like Henwick and Bulwick coalesce into a single built up area. In some places landowners, such as the abbot of Pipewell, at the very head of the Harpers Brook, continued the clearance at the expense of the wood to create a largely open landscape by the 14th century where in the late Saxon it must have been largely woodland. However it was rare in the heart of the forest for such expansion to breach the woodland barrier on the clay land watershed, though all along the edges of the clay land one can see common field and then, apparently slightly later, assarted land held in severalty eating away at the woodland. Where the manor lay in royal control, or where manorial lords created deer parks, this process seems to have been even more restricted, whereas in non royal townships the process seems to have continued to a far greater degree. Thus one township may have been tightly constrained with large areas of woodland remaining on the township periphery, while adjacent townships had cut back far closer to the watershed.

The fine detail of the functioning of the open field systems was not studied in this project, but it is likely that some differences will be found between the forest villages and compared to the regular three-field types that occur in champion regions. For example, Geddington had five great fields, but the land of some proprietors did not extend throughout all five. What is clear from the project is the remarkable degree to which the layout of the furlong pattern was as a result of regular planning. Where the topography allows, furlongs tend to lay one under the other with strips running in the same direction. For example at Wakerley all the furlongs except seven have lands in the same direction, up to 1200m in overall length, while on the northern side of Wadenhoe there are twelve furlongs on the same alignment, 2300m in length, with only one furlong partly interrupting the sequence. At Easton on the Hill the draft Inclosure map of c.1820, which plotted ‘quality’ parcels (groups of lands valued for enclosure purposes), shows the curvature of strips in a series of adjacent furlongs. This reveals a great curve of strips, 1100m long, passing through 8 furlongs lying east of the village. This could not be achieved by piecemeal addition of one furlong at a time, as arable land expanded in what used to be conjectured as the early days of ‘colonization,’ but only by sub-division of long strips that had first to be laid out. Such regularity does begin to break down where the furlongs lay on more broken topography. If there was an occasional interruption by slades, then a rectangular system of furlongs results, as at Slipton or Pilton; if it was a highly dissected watery terrain then the furlong pattern is fragmented.

Most townships boundaries in the study area lie along brooks, and field systems necessarily are constrained by these features. Others however have boundaries running through the arable. In some cases these boundaries may predate the arable and are respected by the furlongs, but others have right-angled zig-zag kinks, indicating that the arable furlongs were in existence before the township boundary was created.

There are a range of examples which seem to predate the furlongs. Weston by Welland and Ashley have a mutual boundary with right-angle bends. Although the angles do reflect the furlongs either side, the relationship in this case is rather incidental and none of the furlong boundaries can be said to pass through the township boundary. In other words the boundary is probably older than the furlongs, being modified to accommodate them when they were formed. Other similar examples are between Nassington and Fotheringhay, Collyweston/Duddington, Pilton/Wadenhoe, where there are kinks caused by furlongs, yet the boundaries either side do not to pass through. The boundary of Sutton Basset against Weston runs almost entirely through arable, yet its firm course with one right-angle is clearly older than the furlongs. No furlong boundary passes through, and furlongs on either side of the NW-SW boundary approach it in a very fragmented manner. No other firm boundary line could be drawn to separate the townships. In 1086 they were both shared between the same two owners, and Sutton is a chapelry of Weston. Yet they have a clear boundary that must predate 1086, since by then the manorial ownership was already fragmenting. A similar boundary with one right-angle, clearly predating the furlongs, occurs between Little Oakley and Newton Willows. The conclusion from these examples is that township boundaries are older than the field systems.

There are various other examples where the boundary may be more recent than the strips and furlongs. Between Nassington and Yarwell the township boundary is formed by one of a series of parallel furlongs, so no furlong boundary can be said to go 'through' it. However the strip orientations in eight furlongs lying either side of the township boundary are in alignment over 1100m. It could be argued that the strips were laid out before the townships were formed. Both places belonged to the same estate and, in 1552, it was noted that Nassington and Yarwell intercommoned through all their fields 'without lett'.[21] It is at present unclear whether the zig-zag boundaries represent the creation of new townships well after the laying out of the open field or if they represent later resolution of issues of intercommoning, never resolved at Glapthorn and Cotterstock for example until parliamentary enclosure.

Meadow & pasture

The one area of the landscape which could not be put down to arable was the land which was subject to periodic flooding each year, the alluvial floodplains of the major and some minor rivers and streams. This was however of very high value as the periodic flooding provided a rich nutrient addition to the soils and an early growth of grass. These areas

[21] NRO, Westmorland 4 xvi 5.

were therefore intensively managed as hay meadows and then each year after the hay was cut they were used for pasture.

Within the open field, between the furlongs, there were also access ways and some areas of steeper land which were also not ploughed and these provided an important complement to the pastoral component within the mixed farming economy.

Assarting

When land was taken into the forest, rights of common persisted and seem to have determined which settlement would later assart which area of woodland. The exact reasons why, during the medieval period, one piece of woodland was assarted while an adjacent one was not may be unclear, but it seems to have far more to do with administrative and tenurial factors than the agricultural potential of different areas of boulder clay. This is in contrast to the situation in the Saxon period, when population pressure was far less, where it would appear that land use potential, determined primarily by underlying geology, was the major factor influencing whether land was arable or woodland. The records of assarting show that in the 13th century clearance continued in many townships within the forest.[22]

While some assarting may have led to land being incorporated into the open fields, much of it led to land being held by individual landowner in enclosures separate from the open field systems. These varied in scale between the great tract of assart within which the Abbot of Peterborough created his grange called Biggin, between Oundle and Benefield, through to tiny areas of a few acres held by lesser farmers. Such assarts which were not incorporated within the open fields were a significant but relatively small proportion of the land within the Forest.

Wood and Wood Pasture

Despite the protection offered by forest law from the late 11th century, the history of woodland in Rockingham Forest during the last 1000 years or more is largely one of contraction in the face of clearance for agriculture, with major campaigns of clearance in the 10th to 13th and then starting again in earnest in the 17th but with a last massive burst following final enclosure of the forest in the early 19th century.[23]

In such circumstances of major population increase and economic growth woodland only survived where it had other uses of sufficient economic or recreational value to the owners. This comprised a range of uses including production of charcoal fuel for the iron furnaces within the forest or the production of timber for construction purposes. Most

[22] Raftis, J. A. (1974) *Assart Data and Land Values : Two Studies in the East Midlands 1200-1350*, Toronto.

[23] The best detailed study of an individual area of woodland in the Forest during the medieval and post medieval is Bellamy, B. (1986) *Geddington Chase*.

important perhaps were the recreational interests of the king and lesser lords who managed much of the woodland for hunting.

Figure 13: Land use including major deer parks, with settlement and major communications in circa 1300

Hunting forest and deer parks

Management for deer had been the primary reason for placing the area under forest law and remained an important factor restricting woodland clearance throughout the medieval. In addition specific areas, large and small, were developed as deer parks for the better management of the deer for hunting by both the king and lesser lords. To retain the deer the parks were encompassed by a ditch with external bank surmounted by a timber pale or, occasionally, by a stone wall. The distribution is closely associated with woodland, although in a few cases they were created by the removal of areas of land from agriculture. Deer park creation sometimes invovled the extinguishing of common rights of grazing, though cow pastures might be allocated in lieu of these rights in certain other areas of the township. Although most deer parks were created out of woodland there are several which were expanded by the incorporation of open field land during the medieval period. For example Fotheringhay Park was expanded onto a few furlongs at the south at some unknown date, t King's Cliffe Park did the same in 1339 and Brigstock Little Park somewhat earlier.

Wood pasture

The woods were of significant not only for the beast of the chase and of course as valuable as sources of fuel and of timber for building. They were also an important component of the agricultural economy of the woodland villages for the grazing of cattle and pannage of pigs, allowing them to keep far more stock than farmers is champion townships. The woods were opened up at certain times of the year as wood pasture, in accordance with ancient common rights. But intensive browsing simply destroyed new growth leading to an increasingly open wood pasture and potentially ending in total clearance and therefore these rights often strictly controlled. The Apethorpe estate allowed each commoner 3 beast and 10 sheep in 1552. At Rockingham, the cottagers' allowance, in 1578, was 2 kine and a breeder, one horse, and 12 sheep. This contrasts with townships away from woodland such as Walgrave (outside the project area) where a cottage common had 1 cow and breeder and 3 sheep. However in some places animals could be kept without stint. Nassington, in 1552, had common for cattle and sheep in Rockingham Forest, 'no small relief…cattle have full walk in the forest without let or hindrance'.[24] This could lead to overgrazing which could be as destructive in the longer term as cutting down the wood, particularly if there was overstocking. The clearest examples are in areas of intercommoning, for example Weldon, Benefield and Deenethorpe plains, which were all completely clear of trees by the 1580s but had been

[24] NRO: Westmorland 4 xvi 5; Watson Mun. A.5.22, court roll 20 Eliz; D2817; Westmorland 4 xvi 5.

wooded in the medieval period, as can be seen from the evidence of the dense distribution of charcoal hearths.

In addition to its influence on the character of the woodland and wood pasture, the existence of these common rights in the woodland resulted in the creation of droveways which formed a major component of the forest landscape, connecting the villages through the arable and into and through the woodland. Thus for example the animals of Brigstock were herded from the village along …'3 greate ridings leading from the towne fields of Brigstock to the wasts of Benefield…those ridings ly through the forest [Fermimg Woods] 3/4 of a mile….[25] Deenethorpe and Weldon had similar grazing rights in their plains that laid next to Benefield Plain. Such ridings can be seen very clearly connecting Brigstock to its other great wood pastures, in Geddington Chase, while Geddington too had a similar connection to the Chase from the south west (figure 24).

Coppice management

In response to the threat from grazing, by at least the 14th century and perhaps earlier, many of the woods were managed by coppicing. After felling the coppices were fenced for a period of years, with a ditch and a bank topped either with a 'live hedge' or a 'dead hedge' made of stakes and branches. This stock proof barrier excluded animals so they did not eat young shoots and prevent the natural regeneration of the coppice stools, as in 1360, when a ditch and hedge were placed around Hill Wood, Oundle to exclude the Glapthorn village herd from entering for seven years.[26] Where such management had been instituted then the woodland generally appears to have survived right through the medieval and into the post-medieval period. However, by the time of the economic recovery of the post-medieval period the economic factors had changed. The iron industry had collapsed, the priority for hunting was giving way to other pursuits and even management for timber appears to have been less intensively pursued. As a result land that had been retained under woodland throughout the height of medieval agricultural expansion would succumb in the 17th, 18th and 19th centuries to a last dramatic phase of clearance.

Heath

In a relatively small area in the north of the Forest, where the plateau was not boulder clay capped, the limestone geology with its thin soils were in some parts decalcified. These acidic soils led to the development of heathland rather than grassland when cleared by grazing. The chronology of this conversion is however not well understood nor indeed the degree to which the limestone plateau was under woodland at any point from the end of the Roman period, though it is assumed that much of it had reverted to woodland during the early Saxon. These areas were treated as common by the adjacent townships, with Easton on the Hill still retaining its heath and the drove connecting the heath

[25] NRO: Buccleuch 13/1 in X359.
[26] Society of Antiquaries MS 60, f 258d.

through the open fields to the village until the early 19th century, while elsewhere fossilised droves seem to be visible in the furlong pattern.

Settlements

The pattern of settlement locations may have been established by the middle Saxon, but it seems likely that the plan form of most if not all of the villages was largely determined after about 900, as a direct result of the process of replanning of the landscape, both of village and fields. This village planning involved the laying out in the settlements of the tenements, each ultimately with a house, outbuildings, yard and garden. It was from these tenements that the farm holdings, dispersed in strips throughout the township of that community, were worked. The expansion of the open fields was accompanied by the growth within the villages, in part by subdivision of existing tenements, in part by the addition of new tenement rows through the encroachment over blocks of agricultural strips on the edges of the villages. Some settlements also seem to have accommodated growth by encroachment upon greens within or on the edge of the village.

In general the plan form of settlements was a regular one, resulting from the formal planning of the villages in the 10th century and then by the addition of planned extensions over the open fields on the village edge. It is often difficult to distinguish these two components of the settlement. However some show irregular plan forms, often at the core of the settlement. These will in some cases have resulted from encroachment on pre-existing greens or wide roadways, but in other cases the irregular forms, including the greens and roads, will reflect the pre-existing plan form of the landscape at the time when the village and fields were laid out. Some for example seem to reflect early droves which once connected the meadow/pasture on the river floodplains to the woodland on the plateau, running through the centre of the arable fields, as for example at Wakerley. In other places the influence of major roads passing by the village can be seen in the expansion of the settlement, as at Duddington where the original irregular plan form sees a regular planned expansion along the line of the adjacent Stamford road. At Cottingham tenements were located on the straight alignment of the Roman road from Leicester to Godmanchester. The unravelling of this aspect of settlement development, and indeed of the development of the field system, was not within the remit of the present project and so is not considered further in this study but it is the subject of separate ongoing research.

Figure 14: Medieval nucleated and dispersed settlement patterns

In the woodland zone expansion seems to have involved the creation of new townships and the promotion of what may have been tiny hamlets or even single farms into villages. These are the ‘new’ ‘tuns’ and the ‘by’ and other such townships which are found across the heart of the forest. Thus by the medieval even in the heart of the woodland zone the pattern was one of nucleated settlement. During the 11th to 13th centuries these settlements continued to grow both through the further expansion of their townships at the expense of the woodland, where such reserves of land remained, and by the

increasingly intensive exploitation of the existing agricultural lands. But it was during the medieval period that the control of some of the more major tracts of woodland, particularly by the crown, restricted the growth of the arable and thus of some villages.

In just one area was there a largely dispersed settlement pattern, in the Lyveden valley to the west of Oundle, where there was fragmented lordship. However to a far lesser degree a dispersed component to the settlement pattern is seen occasionally in other locations across the woodland zone and it is to be expected that small numbers of other medieval farms will come to light from future archaeological and documentary work. There are apparent hamlet names preserved in various locations, as with Sultofts in the valley upstream of Kirby or Walcot in Kettering, although some may prove to have somewhat earlier significance. The dispersed component of the pattern, almost without exception, represents new settlements, usually single farms, formed by assarting from the woodland to create agricultural land held in severalty, rather than incorporated into the open fields of the villages. The other dispersed components of the settlement landscape are buildings or groups of buildings with specialised functions, especially hunting lodges and mills. No attempt has been made here to consistently map the mill sites, but some of the lodges have been located.

Despite the substantial scale of clearance the forest remained less densely settled than the champion lands. Although several of its villages, such as Kings Cliffe and Geddington, acquired functioning markets in the 13th or early 14th century, they never had a sufficiently wealthy hinterland to support their own small towns. Hence in the medieval period, just as in the Roman, the forest looked to the wealthier lands of the Nene, Welland and Ise valleys for its urban centres, the towns of Oundle, Stamford, Rothwell, Kettering, Thrapston and Market Harborough.[27]

Industry

There was a range of industrial activity within the forest in the medieval and post-medieval period. Some had a significant impact on small areas, just two or three settlements, such as the building stone production in Weldon and stone slate in Collyweston and Easton on the Hill. Some other industries such as lime burning and tanning may have been attracted to the forest by their need for fuel or other woodland products, but the only large scale industries which were located in the forest because of the availability of fuel was the pottery industry and most importantly the iron industry. These industries will have had a limited impact in the character of some of the villages in the core of the forest. More importantly the existence of major industries, alongside its management for deer and for timber production, may have played a significant role in the preservation of woodland, for its very survival through the 13th century in the face of large scale clearance for agriculture seems to have been determined by an economic balance of profitability.

[27] Foard, G. (2001b) Northamptonshire County Council.

Communications

Four 17th century post roads run through the project area.[28] Each was clearly important it the medieval period for each have hermitages and hospitals along their course (Rockingham, Harringworth) and castles (Rockingham, Benefield, Fineshade, Fotheringhay). These also appear to have been major Saxon roads for each have Saxon ford place names, otherwise rare in the forest, where they make major river crossings (Wansford, Lilford, Barford). In addition the Harringworth route seems to be identified as the 'ealdan rode' in the 10th century boundary charter of Oundle.[29] These are major national routes, running south east to north west and thus cutting across the relief and drainage system. The London to Leicester road passes through just Little Bowden withint he project area. The others are the Great North Road, the London to Oakham road via Harringworth and the London to Oakham road via Kettering.

More regional in character are the two routes which run broadly south west to north east, following the trend of relief and drainage, from Northampton to Stamford. One runs along the Nene the other, via Kettering, runs along the Willow brook. These also have their associated hermitages and hospitals (Weldon and Perio). The medieval significance of these and of the post roads is also supported by evidence of medieval bridges and tolls discussed by Goodfellow.[30] The regional routes need more detailed research before their alignment and importance can be confirmed, while several other roads have been tentatively identified in the project but need further work to confirm their medieval importance, while others may also be identified from the detailed map data.

Late medieval to early modern (circa 1350 – 1850)

In the early 14th century the expansion of the previous centuries came to a sudden halt in a major recession as, first under the impact of the famines of the 1310s and then after 1348 due to the successive plagues, population levels plummeted. The premium on grain production to feed the large medieval population was now gone, removing the pressure that had led to the expansion of arable onto land that was poorly suited to such exploitation. The immediate effect was to cause many of the remaining tenants to move from farms in the townships with more marginal land to take up farms in the townships with the better agricultural land. This led to a drift away, in the later 14th century, from the less fortunate townships. Places like Brigstock suffered significant decline while Hale was completely deserted.

Enclosure

The process of depopulation took a more dramatic shift in the 15th century because, driven in large part by the collapse in population numbers, the high profitability of arable

[28] Ogilby, J. (1939) *Britannia, vol.I : or, An illustration of ye kingdom of England and dominion of Wales, by a geographical & historical description of the principal roads,* A. Duckham, (London.
[29] Foard, G. (1991) *Northamptonshire Past and Present,* **8,** 179-189.
[30] Goodfellow, P. (1985) Ibid.**3**..

agriculture relative to pastoral was reversed. The production of wool was now more profitable on the poorer land than production of grain and in the 15th century there began large scale conversion of arable to pasture.

This involved the enclosure of tracts of former open field arable into, often huge, hedged fields or sheep walks. Some were in largely depopulated villages where tenants had moved away to better farms elsewhere, but in order to achieve conversion there was frequently a degree of coercion, with some tenants being forcibly ejected by major landowners. The impact led to the enclosure enquiries of the Tudor period. But though depopulating lords were fined, this was an inevitable process driven by fundamental economic forces. All that could be done was to ease the transition rather than halt it. The monastic houses, often substantial landowners, were as important an influence in this process as the secular lords and then, after the dissolution of the monasteries, the new owners of the monastic estates continued the process of enclosure. Common rights had to be extinguished in order to enclose and in some townships later in the period this led to enclosure riots, as at Brigstock around 1610 when the Parks were enclosed. Generally there was an allocation of land in lieu of the rights, usually through the provision of cow commons elsewhere in the township

Although tending to concentrate on the smaller townships and on the poorer land, the pattern of enclosure was a very fragmentary one, depending to a large degree on the vagaries of land ownership and the degree to which any township had already seen significant population decline. This process of change continued through the 16th century. However within the forest there is relatively little evidence for piecemeal enclosure and only one or two examples of whole great fields being taken out of cultivation. Typically it seems to have been whole townships that were enclosed by agreement. As population levels began to increase more rapidly and the economy recovered, there was again pressure on the woodland leading to clearance this time mainly for pasture as well as continuing enclosure of arable open field townships.

In parallel to the enclosure of some townships for complete conversion to pasture, there were also significant changes within the many townships where the open field system continued to function. Here a proportion of the land was often put down to grass within the fields to increase the number of stock which could be kept.

As the 17th century progressed the pressure for enclosure was not just for conversion to pasture. Increasingly it was seen as a way of improving agricultural production generally, and this process of enclosure for agricultural improvement of mixed farming accelerated in the 18th century. It is however unclear at present exactly where and when within the Forest such pressures came to bear. The pace of enclosure increased significantly as the whole process of enclosure was brought under a more formal system. Efficient implementation as well as a degree of safeguarding of the interests of the lesser parties was achieved under a new system of private Acts of Parliament, one for each township to be enclosed. In all 49% of the study area (56370 Acres) was anciently enclosed and 38.74% (44540 Acres) was enclosed by parliamentary Act. These figures exclude the forest enclosure Acts which covered 14030 acres and the 18410 acres for which the date

or extent of enclosure has not been accurately determined (the 'fields uncertain' areas on figure 16, which could be resolved by reconstruction of the extent of parliamentary enclosure from the Award[31]). By 1841 the process of enclosure was complete and so in the 1st edition 6 inch Ordnance Survey mapping we have a detailed picture compiled within 40 years of the completion of the process.

Not only did the purpose of enclosure change, there were developments in agricultural practice which saw significant variation in the nature of the landscape of fields of the 15th century and those recorded in the 1880s. The pattern of fields that were suitable for the early enclosure for sheep, the great sheepwalks, were not suitable for later management. Progressive subdivision is therefore seen. One of the best examples of this, and one which still survives very well today, is that of the Great Park at Brigstock, where the early 17th century large fields had been substantially subdivided by the 1880s. However this sequence cannot always be assumed as there are some very specific examples of early small enclosures, such as the Pen Closes in Benefield (figure 24) or the allotments laid out on Desborough Plain some time between enclosure from the forest in 1518 and the map of 1776.

Deer parks to landscape parks

Hunting remained a significant pastime in the late medieval, with Henry VIII being its greatest proponent, making regular visits to Rockingham Forest as he did to other forests for the sport. There were a number of new deer parks created in the 15th and 16th centuries and several were in the woodland, as with the New Park at Harringworth, probably created by the Zouche family who had a great house in the village. However others were taken out of the open field, as at Fotheringhay where the Little Park next to the castle was created by the king in 1464 and Collyweston, in existence by 1480. Apethorpe Park, created before 1552, may be partly on demesne land but also appears to have taken in a significant part of the fields of the deserted village of Hale. When earlier parks had been created it was in a landscape where the best arable land was under high demand and locked into complex open field systems. By the late medieval these restrictions had eased and the creation of parks by enclosure of arable land went alongside the conversion of arable to pasture for stock.

The creation of such parks became more common and was later transformed into the creation of landscape parks around the country houses, great and small, which were distributed in large numbers across the Forest. At the upper extreme was Boughton, with its planned landscape of avenues and vistas which was laid out for many miles across woodland, enclosed and open field alike, in the 18th century. At the other extreme lay the parks of Stoke Albany or Barton Seagrave. The landscape parks, created as estate owners strived to recapture a romantic, idyllic vision of the past that mimicked the deer park lawns which were now decaying on the clay plateau. Only a handful of the landscape parks were created directly out of deer parks, notably at Rockingham and Biggin, while

[31] The method of reconstruction from Enclosure Awards is detailed in Rumbold, M. (1997-8) Ibid.**9,** 368-72.

only one was created wholly afresh in the heart of the woodland, at Fermyn Woods Hall near Brigstock.

Woodland

The late medieval recession had led to a respite from the pressures for clearance, but as the economy recovered in the 15th and 16th centuries the restrictions which previously protected the woodland had been significantly relaxed. The iron industry was in terminal decline, if it had not already expired, and with it had gone the large demand for charcoal fuel. Finally in the mid 18th century, with the opening of the Nene navigation, the use of wood for fuel was rapidly replaced by coal. Later in the 16th century the deer parks in the woodland periphery began to be replaced by parks around the great houses, the first stage of the move to the great landscape parks of the 18th century. The management of the forest itself as a hunting preserve also ceased to be important. As the constraints were increasingly removed so a remarkably large area of woodland or common pastures in the forest were disafforested, cleared and enclosed in the 16th and 17th centuries. This included the plain at Pipewell, which was divided up in 1518 between the townships which shared rights of common there, Desborough, Pipewell and Rushton, and enclosed. The same happened on the plain between Benefield, Deenethorpe and Weldon in the late 16th century. In Brigstock deer parks the woodland clearance followed swiftly after disparking, when sold by the crown in 1602 to Sir Robert Cecil. He cleared and sold the timber from both parks over the next two to three years and turned it all over to pasture for cattle, enclosing the land and allocating a 228 acre (92 ha) cow pasture to the tenants of the township in lieu of common rights. In 1612 the parks were officially disafforested, though a prohibition of tillage was still retained.

The final massive phase of clearance followed the enclosure of the final tracts of forest in parliamentary enclosure Acts in the late 18th and earlier 19th centuries. In the 1810s, on the Ordnance Surveyors' drawings, the forest woodland is largely intact, except for the north part of Geddington Chase. By the1880s large tracts had been cleared, for example most of Morehay Walk (figure 28). In one short but massive phase of woodland clearance the final fragmentation of the forest was completed, leaving just scattered remnants of the great tract of woodland that had regenerated in the centuries after the Roman period.

Figure 15: The pattern of ancient enclosed landscapes across the forest, compiled mainly from 18th and early 19th century maps.

Settlement and communications

The transformation in the character and distribution of settlement was nowhere near as great as that seen in the agricultural landscape over this period. The one exception was the dispersed component of the medieval settlement pattern. Although some of these dispersed settlements have survived through into the post-medieval and modern periods, for example a number of the deer park lodges, and detailed research is likely to identify a few more such early farms, most of the dispersed components were lost in the recession

of the late medieval and in subsequent land use change. The opposite is true of the nucleated settlements, which have survived through to the present with just a few notable exceptions. These were settlements which were lost in the recession following the Black Death, such as Hale and Newbottle. While Hale was depopulated by the plague itself, the others were lost through later conversions to pasture or later still during the creation of the landscape parks, as at Kirby. These lost settlements were typically hamlets sites in the least favourable geological or topographical locations, with the worst agricultural land.

Many of the other villages did however suffer decline in the late medieval recession and some also lost individual tenements or tenement rows as a result of a range of later changes, as seen at Braybrooke (figure 20). But some of the settlements show evidence of growth in the post-medieval, in some cases drawn in a new direction by new influences, such as the economic 'pull' of a major road, as at Easton on the Hill. In those settlements where the open fields were not enclosed until the 18th or 19th century the expansion of the settlement, or its 'drift' under such new influences, was however largely restricted by the pressures of the communal agricultural system.

Although the appearance of dispersed farms is usually associated with enclosure, where early enclosure took place there is only limited evidence for the appearance of new settlement. The dispersal of settlement, with new farms being created in the newly consolidated fields, seems only to have taken place on a substantial scale in the 19th century. In some cases this also resulted in a fragmentation of the nucleated settlement, as farms moved out of the villages, although in others continued population growth meant that the village did not shrink significantly.

Within the forest several settlements, as in the high medieval, attempted to promote themselves to market towns during the post medieval as the economy recovered, notably Brigstock, Kings Cliffe and Rockingham. They did grow significantly by the 17th century but none succeeded in gaining true urban status and their markets soon failed. Urbanism remained the preserve of the medieval towns on the forest periphery. Not until the 20th century would this barrier be broken, and then under the influence of new town planning based around the iron industry, at Corby.

The urban centres around the periphery grew substantially in the post medieval and acquired an improved road network which criss-crossed the forest core. These were the turnpike or toll roads created in the 18th and early 19th centuries. This was a system which linked the towns of the region and on the east and west edges of the forest comprised national routes, the Great North Road and the Kettering-Oakham route. The other major early route to be upgraded was the Kettering-Stamford road. But other routes were raised to regional significance in this programme of turnpike creation, such as the Kettering – Harborough road, if it did not already have an early importance not yet established. The other major improvement to the communications system in the mid 18th century was the Nene navigation, enabling barges to travel between Peterborough and Northampton, having a significant impact on the transport of heavy goods, such as coal, to various wharves along the river, including Oundle.

The Enclosure process: A detailed discussion

Hedged and occasionally walled fields are the dominant component of the Forest landscape today and so it is important that the process of their creation is explored in detail. For the purposes of analysis it was necessary to establish a methodology whereby townships could be classified as either 'anciently' enclosed or 'parliamentary' enclosed. The date of 1727 was chosen as the benchmark as this was the date of the first enclosure by parliamentary act within the county. The mapping of the ancient enclosures has been accomplished by the analysis of historic maps only (for a comprehensive list of sources see gazetteer). There are numerous documents, particularly estate records that would shed light upon the process of enclosure, where they occurred, whether they were piecemeal or en masse, the influence of tenure etc. but the study of these was beyond the remit of this project. It must therefore be understood that the analysis of the data is subject to refinement with further research.

There were eight townships for which no historic map was identified. With the exception of Churchfield all were parliamentary enclosures. Over a period of 349 years from Thorpe Underwood in 1492 to Collyweston in 1841 the 79 townships within the project area were enclosed. Of those 25 were fully enclosed pre-1727 and 54 were enclosed during the parliamentary period post 1727. Enclosure of the open fields was a continuous process that probably began in the Forest at the end of the 16th century with the monastic grange of Thorpe Underwood. A further 9 townships were enclosed during the sixteenth century followed by more rapid advance in the seventeenth with another 16 townships being fully enclosed by 1723. A further 28 were enclosed between 1748 and 1800 and the most rapid advance of all saw the remaining 25 enclosed between 1800 and 1841.

Townships wholly anciently enclosed

The anciently enclosed townships though noticeable by their absence along the Welland valley do not display any obvious pattern with regard to geology, topography or former land use. The key factor that appears to determine their origin is that they are almost all the centres of estates, either monastic as at Pipewell, Fineshade, Biggin and Thorpe Underwood or royal as at Fotheringhay, or they contain country houses as at Boughton, Kirby and almost all the others. However, the presence of an estate or country house did not guarantee that early enclosure would take place. Rockingham and Kings Cliffe were both early royal estates but did not completely enclose until 1815 and 1809 respectively. Similarly Slipton and others had country houses but did not enclose until the 1770s.

Our knowledge of the pattern of early enclosures within the townships is dependant upon the existence of early maps. Early enclosure does not necessarily mean early maps. There are six townships for which sixteenth century maps have been identified; Great Weldon, Little Weldon, Gretton, Kirby, Deenethorpe, from the same collection of Finch Hatton estate maps, and Fineshade. Early maps are always important to our understanding of the

landscape but on their own they offer only snapshots in time. Their particular importance is when viewed against later maps so that the evolution of the landscape can be explored. Kirby, Gretton and Deenethorpe all have later maps detailing different aspects of the enclosure process.

Figure 16: Anciently enclosed landscapes showing country houses.

The sequence of maps for Kirby dated 1585, 1586 and 1587 is particularly important as it illustrates the process on a small scale as the owner Sir Christopher Hatton progressively encloses the open field and removes part of the village to make way for his formal gardens and park. Gretton reveals a different facet of enclosure as the scattered closes seen on the 1585 map are identical to those shown on the enclosure map of 1832 with a small addition in the south-west corner. These early closes represent the demesne holding. It is noteworthy that the pattern of land use in Gretton remains static for 250 years. The influence of tenure is remarkable in both Kirby and Gretton not least because it had the opposite effect in each instance. Deenethorpe has an even greater range of maps dating from 1585, 1635, 1678 and 1738. In 1635 the township is still open, by 1678 the whole township is enclosed but with larger enclosures than is shown on the 1738 map. Large early enclosures were for stock management and predominantly for sheep walks. These became subdivided and replanned as the practicalities of the agricultural system demanded. If one accepts that the subdivision of large closes into smaller ones was part of the enclosure process then it is possible to illustrate at Deenethorpe that this process did not necessarily halt once the full enclosure of the township had taken place, rather it continued to evolve to suit the needs of the local agricultural economy.

Of the 16 townships enclosed between 1600 and 1727 only five have maps from that period. Of these four follow the pattern of having large early fields which are subsequently subdivided or replanned. Fotheringhay is the exception having much smaller closes but the field pattern here is very complex nor does it not follow the underlying furlong plan. It is possible that subdivision had already occurred between enclosure in 1649 and the date of the map 1716. None of these townships retains its early field pattern. Indeed it is rare to find evidence of very early boundaries within the modern field systems. But there are exceptions.

Dingley was enclosed in 1633 though the earliest map we have of the field system is the tithe map of 1837. Having commented on the practice of subdivision and replanning of enclosed fields we cannot be certain that the fields of Dingley had not undergone some change in the two hundred years between enclosure and map. However, it is possible, given our knowledge of examples from those townships where evidence does exist, to be confident that many of the closes in Dingley seen on the tithe map, particularly those in the north of the township, given their size and form are indeed early. What is more remarkable is that these fields are still surviving in almost complete form.
Brigstock Great Park is an exceptional survival. Brigstock Great and Little parks were disafforested and enclosed for pasture between 1603 and 1612. A map of 1603 shows the close boundaries. Four hundred years later the mass of small enclosures that fill the area of Great Park would at first glance suggest that nothing survives of its former structure.

However when the two data sets from the modern fields and those of 1603 are overlaid it becomes apparent that the early structure survives within the later one almost intact. What is still more important is that these small closes in the modern landscape of the Great Park are almost all in existence on the Ordnance Survey 6 inch maps of the 1880s. Great Park therefore represents the survival of enclosures from both the ancient and parliamentary enclosure periods. Little Park fared less well having lost almost all of its former structure.

Townships enclosed in the parliamentary period

The townships enclosed during the parliamentary period can be divided into two groups, roughly equal in number, those that already had substantial areas of enclosure and those that had little or none outside of the settlement core. Of the former group a further subdivision can be made between those that have extensive enclosure in the form of deer parks, those that are enclosing from the woodland and those that are enclosing from the open fields.

Partially enclosed townships

The four 'deer park' townships are Rockingham, Harringworth, Brigstock and Kings Cliffe. In terms of the area of land enclosed Rockingham had a greater influence on the neighbouring township of Cottingham into which it progressively encroached from the mid-thirteenth century. Rockingham is the only example that made the transition from deer park to landscape park. Harringworth Park accounted for just over half the township area as did Brigstock Parks. Kings Cliffe Park was roughly half the township area. Nor were the parks the only anciently enclosed lands within the townships. Kings Cliffe had a fringe of small closes around the inner perimeter of its boundary. These may represent assarts as they correspond closely with the edges of Morehay and Westhay, though they are outside of the boulder clay upon which the woodland is predominantly found. Alternatively they could be the result of the enclosure of the demesne lands as at Gretton, or simply the consolidation of the lands furthest away from the settlement which are the most bothersome to work. There are other townships where parks are influential though the extent is not as significant, as at Oundle with Biggin Park, or they are less well understood as at Apethorpe New Park which includes the DMV of Hale the fields of which became a park.

The townships that have extensive early enclosures that probably came from woodland are Desborough, Great Oakley and Little Oakley. The block of ancient enclosures in the north-east corner of Desborough are called 'plain closes' in the enclosure award and many have wood names. The earliest map we have for this area is a monastic plan of 1518 which is showing the division of a substantial plain between Desborough, Rushton and Pipewell. Plains were open commonable land within woodland. This particular plain must have once been open and intercommoned between the three townships and in 1518 it was parcelled out with each township receiving their share. Further documentary work would be necessary to determine how early the plain in Desborough was subdivided.

Unfortunately the area of Desborough and Pipewell plain has suffered substantially from quarrying. Great Oakley has two large blocks of ancient enclosure in the north-west and north-east of the township. Those in the north-west have been taken out of the open field, as can be seen by overlaying the furlong data with the source map data. Those in the north-east have no furlongs within them and are shown on the map of 1744 to have wood names. Similarly Little Oakley, which abuts to the east, is fully enclosed in the northern half of the township. The northern most of these closes have no furlongs within them and are all called coppice names on the map of 1727. There are also two enclosures called 'Great wood close' and 'Little wood close' on the same map but as these contain ridge and furrow it is likely that they have been so named because of their proximity to the wood, a not unusual practice, rather than their direct origin from it.

Other townships have large areas of ancient enclosures that come from a variety of sources. Both Stanion and Glapthorn have evidence of enclosure that has come from both assart and open field. For Glapthorn there are good documentary sources relating to the assart of Provost Closes in the north-west of the township and good archaeological evidence for ridge and furrow.[32] Stanion has documentary sources (see gazetteer) relating to assarting but has lost almost all archaeological evidence to quarrying. Bulwick too has evidence of enclosure from open field and from the wood.

Enclosure of the open field on a significant scale, outside of those full enclosed, is rarely seen. The block of enclosure in the south-west corner of Kettering represents the enclosure from the open field of the demesne which had been accomplished by 1587. Here the manorial holdings were consolidated unlike Gretton where the demesne lands were enclosed but remained dispersed. At Braybrooke one of the three fields in the east had been enclosed by 1649 and part of another in the south-west by 1776.[33] With the exception of a small area relating to the former castle and its curtilage to the east of the settlement all the ancient enclosure, almost one half of the township area, had come from the open field. Braybrooke is the only parliamentary township within the project area that has anywhere near this proportion of open field ancient enclosure. Braybrooke is especially interesting in that within the ancient block are closes of very varying size (figure 19). Rather than representing subdivision, as seen elsewhere when whole townships was enclosed at one time, the smaller closes are more likely to represent the allocation to the smaller holdings in lieu of common rights.

It is interesting to note that, with the marked exception of emparking, there is no significant expansion of ancient enclosure around the settlements over the open fields. Villages were of course not static and we can see examples all over the project area where ridge and furrow sits over village closes or where the patterns revealed by the ridge and furrow would suggest that whole or part furlongs had been taken into the settlement. But these encroachments are related to occupation. The settlements are not haloed by unoccupied enclosure, rather the reverse. Where piecemeal enclosure has occurred, for whatever reason, it is scattered around the township in what often looks like, but almost certainly is not, a random order.

[32] Foard, G. (2001a) *Medieval Archaeology*, **47**.
[33] Hall, D. (1995) *The Open Fields of Northamptonshire*, Northamptonshire Record Society, Northampton..

Townships with little or no ancient enclosure

The remaining townships to be looked at are those where the extent of open field still functioning as such at the time of enclosure was most if not all of the township. The true champion lands. Of these no less than fifteen did not enclose until the nineteenth century. But nothing about the enclosure process is uniform and there were variations within this group too. The 'true' champion lands are perhaps best described as those townships were the open field arable, the ridge and furrow, was the dominant land use type, as opposed to those townships where the open field encompassed significant tracts of land use other than ridge and furrow such as pasture or heath. Of the former the best examples are at Ashley, Sutton Bassett, Weston by Welland, Little Bowden, Cranford St John, Twywell, Cotterstock, Nassington, Middleton and Cottingham. Also worthy of note are Corby and Yarwell though these both contain woods. These townships were overwhelmingly arable. They all contained some degree of other land use types such as open field pasture, generally in strips along the slades, and meadow. In some cases the extent of meadow was substantial as at Weston by Welland, Ashley, Sutton Bassett and Cotterstock. But other townships, such as Weekley, Warkton and Grafton Underwood, that were almost wholly open contained large tracts of pasture as well as their arable fields. Similarly Easton on the Hill and Collyweston both had significant areas of heath that were enclosed along with their arable fields. Easton's heath was so extensive it represented 22 per cent of the township area. It also had a large area of wood, some ancient enclosure and meadow and had undoubtedly the greatest mix of resources of any township in the project area. It was also one of the largest.

So what were the forces that drove the enclosure process and prompted its inception at a particular time? We have seen with the ancient enclosures that tenure was perhaps the overriding factor. Was this also true of the parliamentary enclosures? The evidence for the group of townships that were part of the Boughton estate would suggest that this was certainly the case. Almost all the twelve townships of this estate were late enclosures the only exceptions being Newton which was enclosed by the previous owner and Boughton itself which was largely made up of the park. Within this group some were partially enclosed; Little Oakley, Kettering, Geddington, Stanion and Brigstock; some had mixed resources of arable, wood and pasture; Warkton, Weekley, Grafton Underwood; and some were champion lands, Twywell and Cranford St John. It is possible that it was the sheer scale of the estate that was the overriding factor in determining the rate of enclosure and it was this that enabled flexibility within the agricultural system, as can be seen by the different land uses within the group of townships, without the need or expense of enclosure. Of the townships outside of large estates the reasons for the date of enclosure can only be surmised without further research. The two most obvious causes are failure to get agreement amongst the tenants, or the agricultural system they employed worked well enough for them not to see a reason the change it.

The transition from a medieval open field agricultural system to a modern enclosed system was a gradual process that was completed in the nineteenth century with the medieval system being wholly replaced. At either end of this spectrum are two separate systems. But during the long period of transition the two systems were not mutually exclusive. Open field land and enclosed land could and did function together. Traces of

the early system can still be seen in the form of ridge and furrow, in fewer and fewer places, in the modern landscape. Evidence of the later hedged field system can paradoxically be equally elusive. It is undoubtedly true that the hedges of the parliamentary system are more regular than those of the ancient. And whilst there are still fields of irregular shape being created, as at Arthingworth, on the whole most conform to a regular geometric pattern and some such as Collyweston and Easton on the Hill have been arranged and laid out with mathematical precision. These are not difficult to spot. The earlier field boundaries however, though having certain traits by which to identify them, sinuous boundaries, irregular shape and pattern, are not that obvious within the modern landscape especially when they have been surrounded by or infilled with modern hedges.

It is not possible to tell simply from looking where the modern fields came from. It is oversimplifying in the extreme to suppose one can look at modern fields and be able to distinguish their antecedents by shape and size alone. The modern field system has 'a complex pattern with a complicated history, and generalisations do not do it justice'.[34]

Modern (circa 1850 – 2000)

The industrialisation and urbanisation of the whole landscape over the last 150 years has included massive conversion of pasture to arable as well a large scale mineral extraction, urbanisation and construction of new communications systems.

The final step opening the way for the dissolution of the rural English landscape had been achieved by the mid 19th century, the removal of the last vestiges of the communal structure which had underpinned it ever since the first stages of its creation in the early-middle Saxon period. The industrialisation and urbanisation of the later 19th and 20th centuries represents the generation of a completely new landscape, a transformation as fundamental as those of open field and village planning in the late Saxon or enclosure by Act of Parliament in the 18th. Just as surely as those earlier reorganisations rewrote the landscape, fossilising just fragments of the earlier structures within the new patterns, so the industrialisation and urbanisation of the countryside that has been underway since the later 19th century is rewriting the landscape and preserving only fragments of the earlier forms. Where the pressures have been greatest then the earlier patterns have been almost completely destroyed. In other areas which have been under less immediate pressure then there is still a relatively good survival of the earlier forms.

It is not the purpose of this report to describe the evolution of or to characterise the modern landscape. However it is an objective to determine the degree to which the landscape character and components derived from the pre industrial period have survived to the present. It has therefore proven necessary to review and to map the main aspects of modern land use change and to present a brief discussion of the mechanisms of change. These fall into two main classes, the first are industrial, urban or communication

[34] Hoskins, W. (1988) *The Making of the English Landcape*., 124.

'activities' which since the mid 19th century have been transformed to a wholly new scale compared to earlier centuries. These processes, in little more than a century, have completely transformed large tracts of the study area, creating wholly new urban and rural landscapes. Indeed even the latter are themselves becoming increasingly urban in character as a result of a wide range of changes including road construction, road signage & lighting and farm building construction techniques. Because the concern of the present study is the historic landscape of the pre Industrial period, so the factors of landscape change in the later 19th and 20th century have in effect been treated as destructive forces.

The impact of these new forces was felt in a significant way soon after 1850 with the arrival of the mainline railways, the linked start of the iron industry and subsequent industrialisation of boot and shoe production. This led to the development of a major corridor of industrialisation focussed on the rail line. Industrialisation was accompanied by large scale urbanisation in the towns of Kettering and Market Harborough and to a lesser degree in Rothwell and Desborough by the late 19th century. The very first stages of this development can be seen on the 1st edition six inch Ordnance Survey mapping of the 1880s, which provides a baseline against which to measure the change in the landscape in the industrial period. Then, beginning in the 1910s but taking off on a large scale in the 1920s and 1930s, the development of the Corby iron and steel works and its associated quarries, provided a new focus which completely transformed the former Rockingham bailiwick. This process has most recently been accelerated, particularly in the Ise Valley, by the construction in the 1990s of the A14 road.

Within many villages there has also been substantial growth, particularly in the last 50 years, with infilling and the addition of new estates in or on the periphery of the settlements. This has completely altered the character of some villages and in others it has isolated the earlier core from its fields by swathes of modern housing. There are however a significant number which have suffered very little addition or alteration, which both preserve their early plan form and retain the interface between this and their fields. There is however another major change that has taken place in the settlement pattern, beginning on a significant scale in the 19th century and increasing rapidly late in the century and in the first half of the 20th century, only retarded following the introduction of the Town and Country Planning Acts in the last 50 years. This has been the introduction of a major dispersed component to the settlement pattern across the forest, where almost none existed previously. In part this was a dispersal of farms into the consolidated holdings created by enclosure, but more recently it has been industrially related.

Figure 17: Major influences on land use change in the 20th century

Another major influence on the landscape has been the construction of a series of military airfields during World War II. This involved the complete removal of hedgerows over substantial areas and the introduction of various structures, some within the woodland. Only one airfield remains, RAF Wittering, which has created a wholly new landscape component which is classified here as urban. The other airfields have been abandoned but the buildings on some, as at Desborough, have become industrial units, so introducing a

permanent new component to the settlement pattern. While the urbanisation has created an almost irreversible and wholly new type of landscape that did not exist before the 19th century, mineral extraction and airfield construction where the land has typically restored to fields or woodland, but the result is a wholly new landscape which contains little or nothing from before the 20th century.

The other changes in the landscape are largely related to the industrialisation of agriculture in the 20th century. The impacts are initially far less obvious but have still transformed the character of the landscape. In the late 19th and early 20th century the vast majority of the project area was pasture, with the arable concentrated especially on the permeable geologies in the main river valleys and on the limestone plateau. However a shift to arable had already begun by 1928. This heralded the first stages of replanning for mechanisation, which are probably to be seen in the late 19th century reorganisation of some small areas of field systems, with replacement of irregular by very regular fields of similar size. The best examples are in parts of Thornhaugh and Fotheringhay. This was presumably to accommodate the needs of steam ploughing.

From the 1940s, beginning with the needs of the wartime economy, there was a dramatic change from pasture to arable. This was massively expanded by the industrialisation of agriculture and the large scale grants given for agricultural intensification. This has been accompanied by removal of hedgerows over substantial areas to produce larger fields to better suited to modern agricultural machinery, though this has been far from a consistent pattern across the project area. There are some landscapes which have retained their 19th century pattern of fields almost unchanged, notably in the upper Welland valley on the clay land, where even today several townships are still largely pastoral. But in other areas, like the Lyveden valley, there have been massive increases in field size. Hence there are some landscapes that appear to have a high degree of land use continuity or ‘time depth’, whereas in fact the quality of the survival of that enclosed field landscape is in reality very poor.

Figure 18: Modern landscape types

The other remarkable transformation of the landscape in the 20th century has been the introduction of large numbers of trees in small plantations into the landscape in areas where there has not been woodland for as many hundreds of years. At the time when the final fragmentation of the ancient woodland was taking place, the process of dispersing small patches of trees across the landscape began. Often promoted by grants in the last two decades, this is continuing to transform large areas of the rural landscape without any consideration as to the impact of those changes on the character of the historic landscape. In its own way these ill informed and poorly thought out conservation measures, like various other conservation actions, have been and continue to be as destructive of the historic environment, in their own way, as the grants promoting agricultural intensification.

Figure 19: Urbanisation and settlement dispersal in the 19th and 20th centuries

CHAPTER 4: LANDSCAPE CHARACTER

Because the majority of the population was supported by agricultural production until the industrial period, land use potential determined by physical geography has been the greatest influence on the character of the landscape, right through to the 19th century. There is therefore a very close correlation between landscape character areas and the physiographic zones. However from the early Saxon through to the present, with a minor dip in the late medieval, there has been an increasing overriding of the physical constraints as a result of the increasing technological sophistication of the agricultural system. This is particularly noticeable in the changes of the last 150 years, with the physiographic zones now playing a far more limited role in the determination of landscape character. This has resulted in the dissolution of the main zones which, although declining in importance, had still shown a high level of continuity from the 5th to the 19th century. The decoupling of land use from the variation of the natural environment has resulted in a progressive, and in the last century a dramatic loss of diversity and local distinctiveness.

The characterisation undertaken in this project has focused most heavily upon the open field system, as the landscape which was the dominant one for most of the last 1000 years. Three levels of characterisation are presented here. The first and lowest level is the historic landscape type, which were very closely linked to the physiographic context. Secondly there are the historic landscape zones which deal with the different balance of the types within the townships. Finally these are classified into two landscape character areas.

Historic Landscape Types

To appreciate the finer detail of the character of the forest it is important to understand the variations in the allocation to the settlements of the various land use types, through the definition of their township boundaries and their access to intercommoned woodland resources. This allocation determined the fundamental character of the forest landscape from the Saxon period through to the 19th century. Certain of the landscape types have been wholly removed while others have been reduced to a tiny fragment of what previously existed, as a result of the process of enclosure from the 15th through to the 19th century. In contrast urban areas have increased dramatically from the 1880s through to 2000.

Woodland

Almost exclusively located on the boulder clay capped plateau but partly on the limestone plateau, the woodland combined both woods and wood pasture. By the high medieval it included both carefully managed coppices and unenclosed woods, as well as various areas of pasture comprising lawns, greens, plains and ridings. There was one tiny area of a typical woodland, at Easton on the Hill, which lies towards the bottom of the

steep side of the Welland valley where outcropping clays beneath a large depth of limestone presumably produced wet and intractable clays that were most suitable for woodland, most of which does not appear to have been ploughed in the medieval period.

The forest was organised into three Bailiwicks for management purposes. These were subdivided into the main woodland areas. In Cliffe Bailiwick there was Morehay to the south west of the Willow Brook and Sulehay and Westhay on the north east side; Brigstock Bailiwick was divided into two main zones: Fermyn Woods and its various outliers on the north east of the Harpers Brook and Geddington Chase with Brigstock parks with their outliers to the south west; Rockingham bailiwick comprised a largely consolidated woodland zone extending from Pipewell in the west to Harringworth in the east, with just Wakerley woods having become detached as a result of agricultural expansion. Each of these tracts of woodland can then be further divided into individual woods and these often in turn into coppices, with ridings between them giving access through the woods. Within the woodland there were then various discrete areas used primarily for pasture, including the enclosed lawns and the unenclosed plains and greens.

Survival

Today the largest surviving tracts are of Geddington Chase, Farming Woods, Westhay and Wakerley Great Wood. But it must also be noted that several significant areas of apparent survival can be seen from the 1880s mapping to actually have been cleared and the replanted shortly afterwards, for example most of Southwick Wood.

In most woods the irregular coppice forms of the medieval woodland management have been replaced by a pattern of regular ridings. Where the earlier forms survive then this gives even greater significance to the survival of the woodland, although a few do retain elements of their earlier plan form. However, archaeological survey has shown that in many of these woods with 18th or 19th century plan forms the earlier coppice boundaries can be traced as distinct earthworks on the ground, still an important reminder of the early structure of these woods. But, because the amount of surviving historic woodland is relatively small, so any large tract will be of importance whether or not they retain their early plan form.

Deer parks

Typically a special subset of the medieval woodland, the deer parks were areas which were specially enclosed and managed for hunting, though also used for grazing stock. Their broad character was probably in most cases similar to the surrounding woodland.

Survival

None survives today other than as archaeological features, with the notable exception of the medieval lodge at Harringworth,[35] together with the high stone wall which remains around half of the circuit of the latest deer park.

[35] RCHM (1984) *An Incventory of Architectural Monuments in North Northamptonshire,* HMSO..

Open field

The open field was dominated by arable land in the form of furlongs comprising bundles of parallel strips, which have left their mark in the landscape in some places in the form of earthwork ridge and furrow. The core of these fields lay on the mixed geologies of the valleys, around the villages, but they expanded massively in the late Saxon and medieval across large tracts of the plateau.

Within the open fields or townships which abutted the woodland it is possible in some cases to identify droves which led from the settlement and/or the meadow, through the arable up to the plateau woodland or, in the far north, onto the heathland. One of the clearest examples is at Wakerley, though many more probably existed but where the pattern has since been confused by encroachment on to the drove during the medieval or post-medieval.

Post-medieval cultivation ridges have not been digitally mapped in this project. They represent a problem of interpretation, especially on the 1940s vertical aerial photography when more of it survived than exists today. Good examples remain in Biggin Park, Brigstock Great Park, King's Cliffe and Slipton. They must be studied in detail to ensure that they are confidently distinguished from the remains of open field systems of medieval date or else our land use mapping for circa 1300 and much else on the field to woodland boundary will be in error. They may also of course yield valuable information about the nature of land use in the post-medieval.

Survival

The last open field systems were finally extinguished in the mid 19th century. With them went the pattern of interspersed strips of pasture and small areas of marsh and furze etc that lay in complex patterns between the arable furlongs of the open fields. Moreover the enclosure process was accompanied or followed by drainage and other agricultural 'improvement', so removing these wet or rough grazing areas. Thus enclosure and agricultural intensification in the 18th and 19th century saw the loss of diversity, and produced a consistent pattern of hedged fields with even expanses of pasture or arable.

Of high importance are Ashley, Weston by Welland and especially Sutton Bassett. These show remarkable survival of earthwork ridge and furrow over wide tracts of the former open field land, giving a dramatic feeling for the character of the medieval open field system. These are some of the best examples of such preservation in England and in Sutton Basset these remains have been identified as of national importance.[36] There are other small areas of ridge and furrow, sometimes no more than two or three furlongs, which are of great importance because they are exemplars of specific types of open field landscape. Key examples include Biggin Park where possible medieval assart strips lie close by straight strips that are clearly of post-medieval in origin, all interrelated to the

[36] Hall, D. (2001) *Turning the Plough: Midland open fields: landscape character and proposals for management*, Northamptonshire County Council & English Heritage, Northampton.

very well documented and well preserved earthworks of the medieval deer park and to the grange of the Abbots of Peterborough.

Open field pasture

This represented a sub set of the open field with strips of pasture, mainly on the minor stream valleys and slades where cultivation would not have been possible.

Open field meadow

A distinct part of the medieval field system. It lay exclusively on the alluvial floodplains where periodic inundation rendered cultivation impossible. It produced hay in the summer and then was opened up to common pasture. Meadow was a relatively restricted land use type but it was widely distributed through the forest and represented a resource of high importance, especially in the townships along the main river valleys.

Survival

The floodplain meadows were progressively enclosed in the post-medieval but the majority remained as pasture in 1928. Today however very little is still managed as hay meadow and, thanks to drainage and flood protection schemes, the greater part of that meadow has been cultivated. The handful of surviving floodplain meadows which have not be cultivated and especially where they retain their pattern early stream channels, either functioning or as earthworks are clearly important because of their rarity today.

Enclosed fields

Villages closes

Small parcels of land held in severalty were attached to each of the village tenements from the outset. Additional small areas of closes were added, enclosed from the open fields, during the medieval and post-medieval period around most villages. The boundaries of these enclosures are often in the form of stone walls, in contrast to the use of hedgerows in almost all field boundaries in the wider landscape.

Assarts

From at least the 12th century some clearances from woodland were immediately managed in severalty as enclosed fields, although many of them appear to have been cultivated in strips like the rest of the open field systems attached to the villages. They can often be recognised as a band of relatively small enclosures on the common field/woodland boundary, but were often ploughed in medieval ridge and furrow.

Field closes and hedges in the open fields

Occasional areas of enclosures were created within the open fields in the post-medieval period without extinguishing common rights and so had to be opened up to common pasture after harvest. Also occasionally there were short sections of hedges and even longer hedges established within the open fields to assist in the management of stock, in a few cases comprising full ring hedges to each Great Field, as at Kings Cliffe in 1641. These features are not recorded on enclosure maps and so in the absence of draft enclosure maps or open field maps their existence will normally have escaped our attention. However, for the large number of open field maps examined in the project it is clear that even by the early 18th century these were relatively rare features in most townships.

Ancient enclosures

Hedged fields had been absent from most of the high medieval landscape. However progressively from the 15th century they came to dominate the landscape. Until the 19th and especially the 20th century most were intended primarily for pastoral agriculture. Many of the early enclosed areas show a high degree of continuity between the early hedgerows and the boundaries of the preceding furlongs, but as the fields were typically very large the degree of correlation is relatively small and most have been subdivided by later hedges which do not respect the furlong pattern.

Parliamentary enclosures

The enclosures under Acts of Parliament in the 18th and 19th centuries tended to produce a far more regularly planned pattern of field laid out by surveyors according to what became a fairly well established procedure. These field boundaries and the road systems tend to conform far less to the earlier furlong pattern than fields in the anciently enclosed townships. While the vast majority of the field boundaries are hedges, there is a small area on the limestone plateau where walled boundaries were constructed, largely in the area enclosed by Parliamentary Act, particularly in Collyweston and Easton on the Hill.

<u>Enclosed field Survival</u>

All agricultural land in the project area is now within enclosed fields. There are many areas of fields where, although there has been a high degree of continuity of agricultural land use, the actual plan form of the system has been transformed through insertion of hedgerows, replanning or the more recent removal of boundaries. Thus in assessing survival of the systems account has to be taken in the pattern of fields as well as the continuity of land use. It has been noted that even where there has been insertion or removal of boundaries, as opposed to replanning, then the fundamental skeleton of the anciently enclosed field system may be largely preserved.

The open field landscapes appear to have had a significant influence on the plan form of the enclosed field systems that replaced them, particularly those from the period of ancient enclosure. As a result the latter can preserve the earlier local road pattern and furlong alignments. Such hedged field systems can even, through the intermediary of the

open fields, fossilise very early landscape plan forms. By far the most important of these so far identified in the forest may be that at Benefield, which shows a high degree of conservation of early plan form, including three circuits of oval forms which may even prove to relate to Saxon organisation of the landscape (figure 24). There is the need for a far more detailed analysis of the project data to identify other such early patterns which have not previously been recognised but would be of high historic landscape value.

There are a number of factors that have proven a major destructive force in terms of the enclosed field systems, but surprisingly one is an historic landscape component that has been given the highest level of conservation of any, the landscape park. They have in fact removed the frameworks of fields, sometimes one with a long history. These landscape parks have rewritten the landscape, sometimes as completely as a World War II airfield or modern mineral extraction.

Heath

Heath was a very minor landscape type within the project area but was locally very important in the north east corner of the forest on the limestone plateau, particularly in the townships of Collyweston, Easton and Wittering. It appears to be a sub set of the woodland zone, probably created from woodland by intensive grazing because it has free draining acid soils. It is however difficult to determine when this land was under heath and when under woodland without detailed documentary research which is beyond the scope of the present project. It was part of a wider heathland zone extending eastward of the A1.

Survival
The small tract of heath in the north east corner of the forest was wholly enclosed in the 18th and 19th centuries and converted to agricultural fields.

Landscape parks

From the 16th century onwards landscape parks, focused around the country houses of the great landowners, came to replace the medieval hunting parks, which had existed away from the villages in the heart of the woodland. These landscape parks seem to have tried to re-capture an idyllic view of what the landscape had been, recreating in some respects the character of the forest and deer park lawns with their veteran trees. Only in one case does such a park appear to have been created directly from a woodland landscape, that of Fermyn Woods Hall, immediately to the east of Brigstock. Several other examples have however been created directly from medieval deer parks, most notably Rockingham and possibly also Blatherwycke.

Settlement

Almost all medieval and post-medieval settlement was in the form of nucleated villages. A small number of dispersed farms and hunting lodges did exist in the medieval but only in the tiny area of the Lyveden Valley did dispersed settlement dominate. Although

mapped where found on historic maps, no attempt has been made here to study the distribution of isolated hunting lodges, watermills, windmills and the very occasional buildings which are related to industrial activity or are have been dropped into the waste adjacent to roads, the other major dispersed elements of the settlement pattern. The medieval dispersed pattern was largely lost in the late medieval recession and almost all the dispersed settlements that exist today were a creation of the 19th and 20th centuries. This was made possible by the enclosure of the townships and the extinguishing of the communal farming that dominated the medieval Forest.

The location of settlement is related to the access to and control of a range of agricultural resources. Firstly the settlement location was determined by the availability of water, whether by stream or by spring. Secondly they are almost without exception located on the permeable geologies, where these exist within the local area. This provided a range of optional locations. Within the woodland core of the region these options were very restricted, but on the periphery they were far more numerous. This broad pattern of availability of site was explored to a far greater extent by the early-middle Saxon settlement pattern, of which we have a very fragmentary picture. However a significant number of these sites were deserted, the remaining ones surviving to develop into villages. It may be that by comparing and contrasting the deserted and the surviving sites it will be possible to recognise factors in the distribution of the land use potential that determined which would survive, just as the desertion in the late medieval is seen to have a major focus on the marginal land. Alternatively it may prove to be an essentially random process, i.e. one where the factors were not dominated by particular environmental considerations that could yield consistent patterns.

Although the primary economic activity of all the villages in the forest was agriculture, there was a significant variety of other industrial and related activities in some of the woodland villages, providing a limited degree of additional variety to the settlements. Examples are the stone industries of Collyweston, Easton on the Hill and Weldon. However it is not currently believed that these other activities had a substantial impact on the overall character of most of the forest villages.

Settlement plan form

Typically the medieval and early modern villages had rows of tenements with buildings set at the frontage onto the road, a plan form probably set down in the late Saxon replanning. These tenements accrued small areas of attached closes, creating a small knot of enclosures around the settlement surrounded by what, even in the heart of the forest, was normally a wholly open landscape of open field furlongs.

Figure 20: Braybrooke in 1776.

An example of a large village typically associated with mainly parliamentary enclosure landscapes. The earthworks (after RCHM) reveal the location of a great house which was deserted in the mid 16th century, perhaps in part explaining why the township was not anciently enclosed.

The plan forms of the nucleated settlements were probably largely determined by a process of replanning in the late Saxon period to create the tenements rows which typified the villages throughout the medieval and early modern periods. The plan form of individual settlements may reveal a great deal about the origins and development of the settlements and that this evolution has played a significant role in the character of the settlements. They vary from the highly regular rectilinear tenement rows which dominate some settlements, such as Woodnewton or Nassington, through to the irregular forms which lie at the heart of many others, such as Gretton or Ashley, with regular rows appended in some places. No straightforward forest wide patterning has yet been recognised in these plan form variations but the ongoing research may well prove to be a significant association with other environmental or administrative and tenurial factors.

The analysis here has concentrated on the distinguishing of broad zoning within the settlement pattern. Three main character zones can be distinguished:

The Welland Valley settlements and townships

There was a string of settlements along the scarp edge above the Welland, where the land drops dramatically into the valley. The majority of the settlements are on the slopes or plateau edge immediately above the scarp, although several are at the base of the scarp on the edge of the valley floor. They generally lie at the centre of their townships and these contain a broad spread of resources from the alluvial floodplain meadows of the Welland up through the arable on the mixed geologies up to the woodland zone on the boulder clay or in the far north east the dry limestone plateau, the latter at some times at least down to common headland grazing.

In addition there is a small outlier on the north western end, where a detached island of higher ground is skirted around by the river Welland. This group have their settlements at the scarp bottom with townships which run up from the Welland floodplain meadows onto their own small island of boulder clay capped hills.

Nene Valley settlements and townships

These were generally the largest and wealthiest of villages. They typically lie at one end of their township, close to the river but just above the floodplain, or set a little further back. Here the townships extended from the floodplain meadows through areas of typically very extensive open field arable on permeable or mixed geology with only very limited areas of clay, then up onto the boulder clay plateau.

The Forest valleys settlements & townships

The dip slope of the Jurassic formation falls gently south eastwards as a largely boulder clay capped plateau. There are limited areas in the far north east without such capping where the limestone lies immediately below the thin dry soils. The plateau is heavily dissected, almost solely by streams which are tributary to the Nene. The most major of these are the Ise, Harpers Brook and Willow Brook. These and various lesser streams lie

at the centre of the often very narrow areas of permeable and mixed geologies revealed by down cutting through the boulder clay capping or the limestone. These valleys formed a magnet for nucleation of settlements. These villages site along the streams like beads on a necklace, often in the form of paired settlements, one on either side of the watercourse. Some of these pairs each acquired their own separate townships, like Deene and Deenethorpe, the two parishes of Blatherwycke or the settlements of Bulwick and Henwick. However others retained single townships but still show a dichotomy in the settlement plan form, as at Brigstock and Glapthorn.

There are just a handful of settlements which do not follow this pattern, notably Upper Benefield and Hale. These perhaps have a very different history of foundation, perhaps being creations of the last phases of expansion into the woodland zone, on the poorer clay lands. Equally there is the small number of dispersed farms, only concentrated in the Lyveden valley as a truly dispersed settlement pattern.

Modern settlement forms

In the modern period the pattern of nucleated villages has survived as an important component of the settlement pattern. Many still retain their medieval and early modern plan form and have not been swamped by recent development. Two new components of the settlement pattern have been established in the last 150 years however, in contrast to the medieval and early modern, these do not resolve themselves into distinct zones.

Firstly and most significant is the urbanisation process. Medieval and early modern towns were little more than large villages in character, but in the late 19th and 20th century there has been a dramatic expansion of several settlements. Corby has engulfed the villages of Great Oakley and the Weldons, and Kettering has expanded over Barton Seagrave and Market Harborough over Little Bowden. There has also been lesser expansion of Oundle, Rothwell and Desborough. Though not strictly urban, Wittering airfield has engulfed Wittering village.

The character of the settlement pattern has also been dramatically transformed by the insertion of a major dispersed component. This began in a very modest way in some of the anciently enclosed townships in the early modern period with the dispersal of a few farms from the nucleated villages into the fields. The process continued with parliamentary enclosure, the new structures whether full farms or just single or groups of barns, were being constructed within the new consolidated holdings. However the Ordnance Survey mapping of the 1810s reveals that this process was very modest. The real impact occurred with the dispersal of farms in the mid to late 19th century, as revealed in the 1880s Ordnance Survey mapping. A limited number of the dispersed farms were lost, but in the 20th century the dispersal process proceeded to a far greater extent, not only for agricultural purposes but also under the impact of airfield construction where, after the war, buildings were often converted to industrial uses.

Communications

The major road system of the area takes two main forms. The national routes cross the area against the grain of the geomorphology, in a south east to north west direction, radiating from London. The regional routes tend to follow the grain of the land, running along the Nene or through the core of the forest along the upper Willow Brook route. There may be a number of medieval routes which still await identification and two are known which require detailed mapping. The latter are shown in short sections on the 1640 Forest map, the Bedford Way from Market Harborough and the Harborough Way, probably running from Stamford. The detailed mapping of the local road system was beyond the scope of this project, but this will be an issue to be addressed in the refiningof the evidence for the representative areas identified as having well preserved historic landscapes.

Survival

Of the early routes the Great North Road is now the A1 and largely transformed, except for short sections which have been bypassed, as at Wansford bridge. The Oakham road via Kettering has been similarly upgraded as has the Northampton to Stamford road over much of its route. In contrast the Oundle to Stamford route is largely abandoned or on minor roads. However it is the Oakham road via Harringworth which is clearly of the highest importance. It has been preserved over most of its route as minor roads or lanes but only in several short sections has it been abandoned altogether. This is clearly of very high value given its early documentation and the way in which distinctive elements of the pattern can be clearly seen preserved in the furlong pattern and the pattern of village closes. The way in which it interacts with the settlements and the ways in which the settlements respect it even today provide a dramatic perspective on the medieval and post-medieval major road system.

All the turnpike roads, apart from the Oundle to Cottingham route between Oundle and Weldon, have been largely improved, making this an important survival. Otherwise there are only short sections where routes have been bypassed, as at Bulwick where earthworks remain.

Figure 21: A north – south transect across the forest in circa 1300 (blank green and buff coloured areas indicate a lack of plan form detail)

Historic Landscape Zones

It would be possible to use the pattern of relief and drainage or to use viewshed analysis for issues of inter-visibility, to identify broad landscape zones from the landscape type. However, as we are dealing with an historic period this is not the most appropriate approach. The integration of the types to create the zones has been achieved here with reference to the townships which were the primary units of landscape organisation. While the landscape types were closely correlated with the physiographic zones, the landscape zones produced by the township analysis integrate resources from several types and cut right across physiographic zones, showing the balance of resources that were exploited by each community. This can be very clearly from examples like Wakerley where in the early medieval the Great Wood appears to have been connected, between the fields and through the village, to the meadow, a pattern seen in more fossilised form in various locations within the forest, as perhaps on the north side of Little Oakley. Thus it is the linkages within the zones which determined the character of the types.

Figure 22: Percentage of each landscape type within each township in circa 1300

Figure 23: Classification of townships into landscape zones based on the balance of land use resources in circa 1300

No attempt has been made to define separate character zones for the post-medieval because the picture is very much a fragmented one of a landscape in transition. The patterns are to a large degree random, at least in the sense that no clear zones can be defined. This may well be a result of the fact that the patterning in the post-medieval period if far broader and that the project area was simply too small, concentrating as it does largely on one historic landscape character area. Patterns may, to a limited degree, be revealed by a countywide study.

Forest core

Woodlands

Great tracts of woodland survived on the most extensive areas of boulder clay plateau despite the advance of cultivation by 1300. On the north side of the upper Willow Brook and upper Harpers Brook was the long band of woodland of Rockingham bailiwick. To the south east of these streams were the two bailiwicks of Brigstock and Cliffe separated by the great Saxon ‘feld’ of Benefield. The woodland in each bailiwick was divided in two by their respective valleys. In Cliffe the Willow Brook divided Morehay from Westhay with Sulehay; in Brigstock the Harpers Brook divided Geddington Chase and Brigstock Parks from Fermyn Woods.

'felds'

The area of Benefield, Churchfield and the Lyveden valley appears to be very unusual within the forest. The Saxon 'feld' place names indicate open areas extending onto the boulder clay, a picture confirmed by the Oundle charter of circa 980. Later, when the woodland of Lyveden was cleared that valley acquired a totally atypical dispersed settlement pattern, while in Upper Benefield we see the foundation of the only substantial village laid out in the heart of the boulder clay plateau. These 'felds' may have a very early origin and could represent a component of high importance for the understanding of the character of the Saxon forest.

Figure 24: The 'felds' of Benefield and Churchfield

These are possible clay land pastures from the Saxon period. The inset bottom right indicated several major plan components revealed in medieval furlongs and 18th century enclosure boundaries, taking the form of large ovals. The degree of survival today of these components is indicated in the inset bootm left. (Inset maps © Crown copyright. All rights reserved. NCC: Licence no. LA076767).

Forest core Valleys

The valleys of the small streams which dissect the boulder clay plateau provide a distinct zone which represents the core of the forest. The narrow valleys are encompassed on both sides with substantial tracts of woodland on the plateau. The villages typically lie along the streams and most comprise paired settlements across the stream, some developing into separate townships, others not.

There is a clear difference between the townships of the lower Willow Brook and those of the rest of this zone. The former has a fairly wide valley with extensive permeable geology. The rest have narrow valleys with small areas of permeable geology and larger surrounding tracts of woodland.

Figure 25: A Forest core landscape: Brigstock and Geddington

(note: post-medieval ridge and furrow in Brigstock parks is not shown. The absence of medieval ridge and furrow from enclosures at north west corner of map is due to destruction leaving no data not an original absence).

This pattern was however substantially transformed by the expansion of arable across much of the plateau before 1300. This converted tiny cultivated areas in the valleys into major townships field systems with in some cases only small areas of woodland remaining on the periphery. Examples are the Oakleys, Deene and Deenethorpe and Bulwick. However not all townships saw such large scale expansion, as a result of the restrictions imposed by royal control of the woodland for hunting, as for example at Brigstock and Stanion.

Ise valley and Navis brook champion

The Ise valley was originally integral to the forest but most of the townships wholly cleared their woodland by 1300 converting almost the whole of the Ise into an essentially 'champion' landscape with open fields extending to the boundaries of their neighbours. It can however be broadly divided into two sub zones: an upper Ise area where the townships have a good deal of pasture between the open field furlongs; and the middle Ise where meadow is a minor component and open field pasture less significant. The townships in the small valley of the Navis brook were also probably once typical of the forest area. Their villages lay on the permeable geology but extended up to the woodland. However much of many of these townships was boulder clay and they seem to have experienced massive woodland clearance, probably beginning with expansion in the 10th century. This turned them into essentially champion townships with open field furlongs extending to the boundaries of the township, but most retained some woodland, in the case of Twywell in an almost detached portion. Neither areas can be fully understood without reference to the lower Ise and to the 'wold' outside the project area to the south.

Welland valley and woodland

With the exception of a small inner group comprising Brampton, Stoke and Wilbarston, these townships all had meadow resources on the valley floor. The arable land lay on the intermediate ground while all had a share of common rights in the plateau woodland resources, although in the east this woodland degraded to heath at some point. In some cases the woodland resources lay, at least in part, within the townships while in others, such as Rockingham, the resources lay within the adjacent forest. This difference may be the result of the non royal townships acquiring, or recovering, the woodland areas from the forest.

Welland valley champion

In the upper Welland there is an outlying group of five townships in the main valley which lack the limestone outcrop and have significant areas of floodplain meadow. Most of the villages are near the valley floor. Though originally including areas of woodland on the boulder clay, these townships were cleared of wood before 1300, thus turning themselves into fully champion townships. These townships cannot be fully assessed without reference to the adjacent areas outside the forest, to the west and across the Welland.

Figure 26: Welland valley clay land: the example of Weston, Ashley and Sutton

Nene valley

The pattern of townships in the Nene valley mirror those of the Welland, extending from valley floor meadow through central arable up onto woodland resources on the plateau. However the geology of the Nene valley has a far higher percentage of permeable geology and so probably produced far more productive arable land. The villages mainly lie adjacent to but just above the river floodplain, though some lie on small side brooks, occasionally forming twin settlements across the stream.

Heath

The easternmost section of the Welland zone is intimately associated with the limestone plateau. These townships are grouped here with Wittering, which lacks access to the river, and with Thornhaugh, which accesses the Nene though lacks significant meadow there. Here the plateau resources were heathland, at least for part of the period, instead of woodland. This plateau needs to be assessed together with the adjacent areas of the historic Soke of Peterborough, outside the forest, as the zone extends eastward of the A1.

Figure 27: Limestone plateau and Welland valley scarp: the example of Collyweston and Easton on the Hill

Landscape Character Areas

A progressive simplification has taken place in the agricultural landscape over the post-medieval and early modern period. The mixed functions of any individual piece of land in the medieval: meadow/pasture, arable/fallow, wood/wood pasture, has become a single use of arable, pasture or wood. This process to monoculture has been further intensified in the modern under the impact of mechanisation and chemical application. The diversity of deciduous woodland has been replaced by the swathes of conifer and arable has replaced pasture or mixed farming rotations. In its way however this is of course only a final extension of a process underway in the medieval itself, the creation of the open fields representing a massive shift towards monoculture, which is after all the reason why the Central Province could become the grain factory which underpinned the urbanisation of medieval England, just as the agricultural improvement and intensification of the 18th to 20th centuries has underpinned the industrialisation of the modern period.

This has all been achieved by the progressive moulding of the land to meet the needs of agricultural production rather than varying the character of the agricultural systems to the variations in the land. So from the retreat of pasture, wood and marsh in the face of the great swathes of furlongs of the late Saxon open field system, employing its new fixed mould board plough and eight ox teams, through to the large fields worked by today's great internal combustion engine monsters, we see a landscape that has been drained, under drained, top dressed until one field is very much like the next, right across the

landscape. This is a process now only held in check, at least in part, by conservation measures. Thanks to a thousand years of intensification of agriculture, the place names of the Anglo-Saxon period are almost all that we have left of the great diversity of field and ley, ham and wick, marsh and moor that gave Northamptonshire its character before the laying out of the open field systems.

High medieval open landscape

Based on the Landscape types and zones discussed above it is possible to distinguish the project area two broad historic landscape character areas for the open field landscapes, based around the mapping of the high medieval (circa 1300) situation, distinguished by reference to the percentage of land under arable cultivation and the extent of woodland.

Woodland character area

The first and by far the most extensive area was the true forest landscape, defined by a mixture of woodland and agricultural land in close proximity. Through most of the project area this was the dominant form from the late Saxon to the 19th century. It appears likely that nowhere within the study area was the woodland/heath zone originally absent, with the possible exception of Kettering and Barton Seagrave, which may always have belonged to a separate region. However the progressive expansion of the arable at the expense of the wood, as the economy expanded and population increased, saw evolution within this basic early structure.

'Champion' character area

As a result of massive woodland clearance, by 1300 a second zone had come into existence, on the western and south western periphery of the study area. This is the 'champion' land of intensive arable where open field furlongs extend from river meadow right up to the boundary with adjacent townships, leaving little or no woodland on the periphery. These are townships such as Braybrooke, Arthingworth and Ashley. In reality, by 1300 this had become part of a far wider zone of champion townships which extended far to the south and west of the forest. Thus, though clearly part of the Saxon forest, by the high medieval they were no longer truly forest villages, something that was recognised in the redefinition of the forest bounds in 1299.

Early modern enclosed landscape

Characterising the enclosure landscape of the Central Province is a very different task to that for other regions of England and to that for the high medieval. This is because it was generated by broad processes, one the conversion to pasture and the other, later, the conversion to mixed farming, a process completed by the 1840s and mapped in detail in the 1880s. Initial ideas are presented here, on the basis of the project data, but further

analysis is needed to produce a refined methodology which defines the minimum data required for effective characterisation of the planned landscapes of the Central Province.

The characterisation has, like the medieval, still to be based on the township, because that was the unit by which the change occurred. Adjacent townships could follow totally different trajectories of development with very different landscape character, some for as much as 350 years, as between Rothwell, enclosed in the early 19th century, and its neighbours Thorpe Underwood, Glendon and Rushton which were enclosed in the 15th and 16th centuries. As a result, it is not possible to create a simple zone map, at least at the scale of the study area. Over a whole county broad zones might be distinguishable, though how meaningful such a percentage picture would be is far from clear. In this context the attributes of field shape and size are not relevant. That of size we have seen is largely nullified by the progressive subdivision of all enclosed field systems over time to a late 19th century maximum, enclosure at any particular date causing a field system to broadly take on the scale appropriate to the agricultural management regime reached at that time.

Figure 28: An example of the detailed picture of the fully enclosed landscape revealed by the 1st edition Ordnance Survey six inch scale mapping of the 1880s, showing a large tract of the woodland of Morehay recently cleared.

For the enclosed landscape the characterisation must be based upon the picture provided by the 1880s 1st edition Ordnance Survey mapping, which is the system at the height of its evolution, soon after the last township had been enclosed and communal rights fully extinguished. At this time the subdivision of hedged fields had reached its height as had the clearance of woodland. To draw distinction within this it is necessary to consider which areas were anciently enclosed and which enclosed by parliamentary Act, for the two do appear to have certain distinctive attributes.

Ancient enclosed landscapes

The anciently enclosed townships were usually enclosed for pasture and typically have the following attributes:

- Shrunken or depopulated village
- Great house
- Landscape park, if the great house survived to the 18th century
- High percentage if not total pasture land use in the post medieval
- Key field boundaries which tend to follow furlong boundaries, where enclosed from open field
- Road systems that follow their medieval precursor

A quite different type exists where no open field system existed, which are typically enclosures from woodland of medieval or post medieval date. These were either not part of a township or peripheral to a township.

Parliamentary enclosed landscapes

Parliamentary enclosure townships tend to be characterised by:

- Surviving nucleated village, possibly largest where a substantial arable component was retained after enclosure
- Regular small fields bearing relatively little correspondence to the preceding open field furlong pattern
- Road system tending to be on new straight alignments unrelated or only loosely related to earlier roads
- No great house or landscape park

Modern industrialised landscape

After the 1880s the process of creation of the modern landscape began with the progressive dissolution of that hedged field system under the pressure of the various agencies discussed above. It is not the purpose of the present study to characterise this modern landscape, however it is essential that two important misconceptions are dealt with, relating to the degree to which field size and field shape can be used in the planned landscapes of the Central Province to characterise the historic landscape.

Firstly, field shape, where not affected by the sort of replanning seen at Thornhaugh and Fotheringhay, will have been determined in part by which hedges, if any, have been removed to facilitate mechanisation. They will therefore in part still reflect to a degree the earlier enclosure patterns. However these patterns were, as we have seen, largely determined by the process of infilling in the 18th and 19th centuries rather than by the character of the earlier landscape.

Figure 29: Modern land use showing field shape and size

Secondly, there is field size. A very rapid assessment of modern field size has been conducted to see if there is a correlation with historic landscape character in the project area. Although distinct patterning can be seen, with a tendency for small fields to concentrate around the villages and larger fields to lie towards the periphery of the townships on the boulder clay plateau, this is in essence a 20th century creation. Where the ancient enclosure pattern is examined it is found that the modern large fields tend to be where there has been removal of ancient field boundaries, while small fields tend to preserve the late 19th century pattern. The specific reasons for the existence of large fields include factors such as the construction of airfields, restoration from quarrying, the clearance of woodland and imparking. It must be concluded therefore that in the Forest, and probably in much of the rest of the Central Province, modern field size is not generally a useful guide to historic landscape character.

CHAPTER 5: ASSESSMENT

Land use continuity or 'time depth'

Time depth has been assessed on the basis of when each area of surviving landscape type came into existence. Where there has been short term conversions of land use, as for the airfields or for mineral extraction yet where the area has been later restored to agriculture then this is treated as a new land use, as it has involved the complete rewriting of the landscape. The distribution of the modern landscapes lay in two major areas: first the Corby iron and steel zone; secondly the Midland mainline/A14 corridor. Smaller isolated areas are the RAF base at Wittering and former ironstone quarries at Nassington. Elsewhere in the forest the clearance of woodland has been a significant element creating other modern landscapes.

Figure 30: Time depth: showing the period of origin of each area of each landscape type (% of landscape of modern origin)

The greatest time depth for coherent, if small, blocks of landscape is seen in the ancient woodland and in the villages. But whereas the areas of the woodland survive they rarely preserve much of the pattern of the earlier compartments and ridings. In contrast in most villages the plan form established between 700-1000 years ago is still largely preserved in many settlements. A remarkable and now very restricted survival of the very highest landscape significance is the pattern of earthwork ridge and furrow in the upper Welland clay land villages which dramatically fossilises the pattern of a whole landscape which was laid out at some time around the 10th century. There are then substantial areas which preserve to a greater or lesser degree the framework of fields created during ancient enclosure from the later 15th through to the early 18th century. Finally there are the large tracts of fields created under the parliamentary enclosure Acts from open field and in some areas from woodland or from heath.

Figure 31: Land use continuity or 'time depth' assessed by township

This time depth has also been assessed according to the percentage of modern landscape within each township to give a simplified overview and scoring.

Survival of plan form

Because the parliamentary enclosure fields were not mapped, which could only have been done consistently using the 1880s field boundaries, it was not practicable to carry out a computer based analysis of the survival of hedgerows without a very large amount of extra digitising. Rather than assess ancient enclosure fields on a different methodology from the parliamentary enclosures it was decided to carry out the assessment of plan form

continuity, i.e. the survival of pre industrial period field boundaries, by a subjective visual comparison between the modern, 1880s and for anciently enclosed townships the project vector data.

Figure 32: Enclosed Landscape plan form survival assessed by township

For settlements a similar visual assessment was conducted between the modern and the post-medieval building and enclosure data generated by the project for each nucleated settlement. This professional judgement assessed the degree to which the plan form survived, the amount of modern infill and the degree to which the interface between village and fields had been destroyed by peripheral development. In general this provided a close correlation with the wider landscape assessment, the industrialised zones showing the poorest preservation while the best preserved areas of historic landscape tended to have villages with good preservation of plan form, interface and limited infill. Though it was surprising the degree to which infill or replacement of buildings had taken place even in some of the most rural of settlements, the variations were not felt sufficient to justify modifications to the overall assessment of the landscape.

Figure 33: Settlement plan form & village/field interface survival and degree of infilling

Larger symbol indicates better survival

Plan form tended to survive well in most villages except where they had been enveloped by urbanisation or they had been largely depopulated as a result of early enclosure, although in the latter case some have excellent archaeological earthwork survival of the early plan form. In contrast, there was a major variation in the degree to which villages had suffered infilling and loss of the interface between the village core and its fields. These patterns tended not to be closely associated, but generally the areas identified as having the best historic landscape survival also tended to have the best survival of pre-industrial village character. However it should be noted that this is derived purely from a map based assessment and not on the actual survival of the buildings within the villages.

Key areas of pre Industrial landscape survival

Using this data we have tentatively identified a number of areas of good historic landscape survival, where it is suggested there should be priority given to the management of the landscape for its historic value. Further research is however needed on each of these zones, including more detailed fieldwork assessment, to ensure that all the important surviving elements of the historic landscape are identified and their management needs determined.

Figure 34: Suggested grading of historic landscapes

CHAPTER 6: CONSERVATION AND RESEARCH PROPOSALS

This project has revealed the major transformations through which the landscape of the Forest has passed over the last thousand years and more. It was extensively replanned in the late Saxon and early medieval; then in the late and post-medieval it saw a growing rate of reorganisation through enclosure, reaching its height in the 18th century and completed in the mid 19th century. All through this period the woodland was in decline and by the 20th century had been totally destroyed as a landscape zone. Most recently, in the 19th and 20th centuries, there has been an even more dramatic and rapid transformation, through urbanisation and industrialisation, which is creating a wholly new landscape.

Throughout the past millennium there has been conservation action of one form or another, in an attempt to preserve or indeed enhance aspects of earlier landscape character. In the medieval this took the form of forest law and deer parks to protect the woodland's recreational value for hunting, in the face of rapid clearance for arable. In the post-medieval the deer parks were replaced by designed landscapes which were, in one sense, an attempt of the landed classes to retain or rather to recreate a lost or decaying rural idyll, through the laying out of landscape parks which to a degree, in their wide pastures and irregular planting, mimicked the medieval deer parks with their lawns.

In the 20th century conservation measures like Countryside Stewardship are attempting to conserve the pattern of enclosed fields, and indeed of the landscape parks and other components of the post-medieval landscape which, as a result of the decline of the great estates house and especially the industrialisation of agriculture, have in reality increasingly lost the purpose for which they were originally created. Conservation in all these periods has had clear practical value but also to some degree it may be seen as attempting to capture and preserve a rural idyll that never actually existed and, in some senses, trying to conserve features in the face of overwhelming economic imperatives.

If there is to be conservation of the landscape for its historic value in the 21st century it should be conservation based on a sound understanding of the nature of past landscapes, and of the rarity and significance of the various components of those landscapes. That is what the historic landscape component of the Rockingham Forest Project has attempted to do, to provide a clear definition of the character of the historic landscape of the Forest and to identify what are the best preserved and most representative examples of the various landscape types which have existed across the Forest at various times over the last thousand years.

Conservation recommendations for the Forest

It is recommended that conservation of the historic landscape is, as far as practicable, conducted by township and area of woodland, as these were the principal units by which

the local communities shaped the landscape and also because they tend to encompass the full range of landscape character types within any landscape zone.

It is clear from this study that it is not appropriate to treat all areas of landscape as of equal historic value. There are some townships and woodlands which preserve particular aspects and phases of their historic character far better than others. These should be the focus of conservation efforts because the most can be achieved there. Small scale change over a long period in such areas can be as destructive as single major changes, for they cause progressive fragmentation of coherence. It is therefore particularly important that, in the representative area, there is positive management to conserve those components which make up the particular historic character for which the landscape has been selected, so as to deal effectively with the small scale as well as large scale changes.

There is a range of detailed work that it was not practicable to undertake across the whole project area but that is required within the historic landscape selected for special management of their historic landscape. The data provided by the project has the potential to reveal a far greater depth of complexity and meaning within the landscape as regards the character and evolution of the forest in earlier centuries. These avenues of research should also be pursued, especially in the selected areas, in order to ensure that the full significance of the surviving features is recognised, in order that the management efforts are most effectively targeted.

There is also a range of more detailed information that needs to be collected for the selected areas. These include the mapping of the distribution of standard trees within the hedgerows, because trees have a dramatic impact on visual character and hedgerow trees are particularly significant in this respect. Such a study could be based on the 1880s mapping, where every tree is believed to be accurately located, supplemented if necessary by the 1940s RAF vertical air photographs, with assessment as to which still survive today. It will also be important to identify where agricultural improvement from the 18th century onwards has not 'improved' elements of the landscape. There may be streams that have not been straightened and over deepened and so where the earlier, medieval character still survives. There may even be tiny surviving areas of marsh, furze or the like which should be identified. The roads created by enclosure, which originally often had just a single hedge on one side, may in a few places not have received new hedges on the other side and so the early open feel of the road system may remain in a few places. Such fine detail of survival of the historic landscape can only be identified by local survey, yet these details are very important if the character of the best areas of historic landscape survival is to be effectively conserved.

Such investigation should ideally, and can most effectively be conducted in collaboration with the relevant local communities, as part of a process by which they and the conservation professionals collectively define the detailed management priorities for each selected township. These management priorities might be best defined in some form of Conservation Management Plan for individual or, perhaps more usefully and practically, for groups of townships covering coherent areas of the best preserved tracts of historic landscape.

English Heritage has demonstrated the way forward for the conservation of historic landscapes with its approach to the management of historic parks and gardens. The principles applied to these elite landscapes should be extended to the wider historic landscape which, as can be seen for this project, has a far greater breadth of significance than the landscape park. The principles of selecting representative samples on the basis of rarity and survival, and managing them as exemplars should be followed. Not only should there be conservation of the character they currently demonstrate, but also in some cases work undertaken to restore important elements which may have been partially removed or altered. Hence for hedged fields this might include gaping up where parts of the system have started to decay or replacing elements of major historic significance that have been partially lost. In terms of woodland it might be to restore lost coppice components of a well preserved area of woodland or to restore a forest lawn, as perhaps over part of Morehay where some of the veteran trees of the lawn still survive. In the selected landscapes there should also be consideration of the careful placing of any new planting. Objectives could be to reinforce the former pattern of woodland on the plateau while retaining the framework of agricultural fields elsewhere and especially avoiding the planting of blocks of woodland within the hedged field systems where they did not previously exist.

Any such conservation or restoration should of course take full account of the surviving archaeological evidence of the historic landscape, in the form of ridge and furrow, coppice or deer park banks, village earthworks and the like, which also in certain areas survive to a remarkable degree. The most important archaeological remains on a landscape scale are the ridge and furrow earthworks preserved in the three townships of Weston by Welland, Sutton Bassett and Ashley. But these townships offer not only the potential to conserve the visual fossils of the open field system for future generations to appreciate. These same three townships are also those which show probably the best preservation of the parliamentary enclosure field system in the forest. The combined conservation of the two components would be particularly beneficial and effective and would be of national importance.

Recommendations for work in the rest of the Central Province

A number of conclusions can be drawn from the Rockingham Forest Project about the problems of and priorities for the characterisation of the historic landscape of the planed landscapes of the Central Province. The Historic Landscape Characterisation methodologies used in English Heritage projects have been developed and applied in the ancient landscapes and depend upon the presence of a high level of ancient structure within the plan form of the enclosed fields, settlements, woods and road system. It is clear from the current project that in the planned landscapes there is a high degree of continuity of plan form in the settlements, but that beyond this in the wider landscape there is very limited continuity in plan form between the medieval open field system or the woodland structure and the enclosed field system or woodland organisation that replaced them. The degree to which the structure of the enclosed landscape differs from

its predecessor appears to be far greater in the planned landscapes than it does in the ancient landscapes, even where enclosure took place well before parliamentary enclosure.

The Rockingham Forest Project has however demonstrated that the detailed pattern of the open field landscape is recoverable and that this gives a dramatic picture of the character and evolution of the system which dominated the planned landscapes between the 10th and the 18th centuries. It also has also indicated that this pattern provides unique evidence which may enable the structure of the preceding Saxon landscape to be investigated and thus allow a bridge to be built between the increasingly well understood 'Celtic' landscape revealed by aerial survey and the Saxon landscape through to the medieval and thus to the present. This potential to provide a time depth and continuity of understanding to the planned landscapes of the Central Province equal to the continuity that has been demonstrated in some of the ancient landscapes is of high importance.

A detailed methodology for the recovery and mapping of the pre enclosure character of the planned landscapes has been provided by the Rockingham Forest Project. It has also suggested indicators which may enable the potential for such reconstruction to be identified in other regions of the Central Province. Hartley, working in Leicestershire, has demonstrated the large quantity of data that is available for the reconstruction of the open field system in the form of earthworks recorded on the 1940s RAF verticals.[37] But his mapping, confirmed by the base data collected in the Rockingham Forest project, has also revealed that substantial gaps still remain even in what were the best preserved areas in the 1940s. Such gaps mean that study of large scale patterning, possible with the Rockingham Forest data, could not be realised elsewhere without complementary fieldwork to fill in the gaps.

This project has demonstrated that the national 1928 land use survey may provide a good indicator of the national survival of ridge and furrow in the Central Province on those verticals. From this it should be possible to determine the degree to which ground survey is needed to fill the gaps in that data. Where those gaps are of manageable proportions then it should be possible, in the short term, to recover much of the missing pattern by ground survey of headlands and other features, as used by Hall to reconstruction the Rockingham Forest landscape. However the destruction of those headlands, especially rapidly on the lighter soils, has been demonstrated by Hall and so the window of opportunity for such survey work is fairly limited. If this assessment and fieldwork is not undertaken then an historic landscape data set, as important as the 'Celtic' landscape being mapped in the English Heritage National Mapping Programme, with dramatic implications for the understanding of the planned landscapes of the Central Province, will be lost. The data from the reconstruction of the rest of the Northamptonshire open field landscape is available in the form of field records and should be interpreted and converted to digital map form. A project should be run on Leicestershire to convert the existing mapping from the RAF verticals, by Harley, into digital form and to conduct field survey, where practicable, to fill the gaps that remain while the headland evidence still survives. This would then enable the viability of similar work elsewhere in the

[37] Eg: Hartley, R. F. (1984) *The Medieval Earthworks of North West Leicestershire,* Leicestershire County Council, Leicester..

Central Province to be determined. A national assessment should then be undertaken, using the 1928 land use survey mapping with associated sampling of the 1940s RAF verticals, to establish where else within the Central Province there is a high potential for the recovery of the open field landscape and those areas where gaps exist where it is practicable to fill the gaps.

In this way a characterisation of the planned landscapes of the Central Province would be achieved which would enable them to be studied and appreciated at an equal level to the ancient landscapes of the west, north and south east of England. Without such targeted action the characterisation projects for the planned landscapes will yield a very shallow perspective on the nature of a complex land use history. This will be a great loss, for such evidence has the potential to yield a deep understanding of the nature and especially the origins of the archetypal English landscape of nucleated villages and open fields, complementing the detailed largely settlement based studies like those in the Raunds Area Project or the Whittlewood Project.

Conclusion

This project has mapped and characterised the open and enclosed landscapes of Rockingham Forest. It has provided much of the base data and analysis that is needed to enable the identification of the best preserved tracts of historic landscape which are representative of the character of Rockingham Forest for much of the last 1000 years. It has also suggested some approaches that could be followed in defining a management plan for these landscapes, informed by more detailed data collection on the survival of elements of the historic landscape within the best preserved landscapes, work which should be undertaken in collaboration with the local communities. Decisions as to whether these important areas of historic landscape are or are not to be conserved and enhanced can now be based on good evidence and with a far better understanding of the historic value of what will be lost if effective management is not implemented.

The areas tentatively identified in figure 32 as of high value and requiring active management of the historic landscape, still leaves a vast tract within the forest where there are wholly modern landscapes or where the pre industrial landscapes are so fragmented that their historic value is very limited. These areas may of course include much smaller sections of well preserved historic landscape which might be conserved and enhanced for their more local value to the adjacent communities. However over most of these areas which have already been partly transformed into landscapes of the industrial era, the creation of wholly new landscapes to achieve a range of modern needs should be considered perfectly acceptable, even if it does totally transform what remains of their historic character, just as has happened a number of times in the Forest over the last 2000 years or more.

The Rockingham Forest Project has also demonstrated the enormous research potential of the reconstruction and mapping in digital form of the open field landscapes of the Central Province. It has provided a methodology for such work and has indicated a strategy for

the assessment of the potential for such reconstruction across the rest of that area. If no action is taken to realise this potential in the short to medium term then continued land use change will destroy that potential, making Northamptonshire and particularly the Rockingham Forest area, our only detailed and near complete sample of the historic character of the planned landscapes of the Central Province over the last 1000 years.

APPENDIX 1: ARCHAEOLOGICAL SITES RECORDED

This discussion is restricted to a consideration of the lithic, pottery and slag scatters identified during the present fieldwork survey. It has been integrated with information held in the SMR. The statistics provided by the SMR are: 367 sites identified within the project area. Of these 89 (24%) are enhancements of previously existing SMR sites, and 278 (76%) are previously unrecorded sites. As well as the site data and tables on the GIS, there is an Excel database that gives full details of all the sites, organized by civil parish. These numbers are also used on the bags of finds (which are unsatisfactorily dispersed at various locations in the absence of a county museum).

The database has 386 entries which represents about 350 sites, since multiperiod sites have more than one entry. In spite of the 'pre-medieval' title the list includes DMVs and two post-medieval items, entered here for convenience.

Summary by period

Mesolithic flint scatters: 14.
Neolithic flint scatters: 28
Undated flint scatters: 8

Bronze Age: 25 sites, of which 5 are barrows (with some mound surviving), 3 cairns, and the remainder are flint scatters.

Iron Age: 36, of which 3 had a few sherds only, the remainder are believed to be settlements.

Roman: 114 of which 8 are villas, and nearly all the remainder settlements (101).

Saxon (pre-9th century): 30, plus one brooch fragment at Rothwell.

Slag concentrations: 38, not including background thin scatters.

Medieval: 36, that include 4 park lodges, 5 windmill mounds and 3 earthwork pounds. Most of the remainder are DMVs including the Lyveden industrial pottery-kiln complex.

Post-medieval: 2 items, one being a statue in Blatherwycke Park and the other a merestone at Cottingham. Post-medieval items are not normally entered on the database.

The prehistoric flint scatters are confined to light soils exclusively (apart from a single site at Desborough, lying on Boulder Clay, but close to Ironstone). This is striking where sites occur on narrow exposures of ironstone exposed by small brooks. However, on

extensive belts of light soils, occurring in this region only at the heaths of Easton-on-the-Hill and adjacent townships, then sites are located next to water. At Easton near the upland spring and stream that passes through the White Water on the heath, sites of several periods are concentrated.

Iron Age and Roman sites occur on any soil, although villas concentrate on good soils. Only one villa of the seven identified lies on Boulder Clay (at Little Oakley). Of the minor Roman sites there is a slight prevalence for a clayland location; 63 of the total of 102 lie on Boulder Clay and many of them are in areas where medieval woods survived until the 19th century. The interpretation of this distribution is complex. The simple one that there were no woods in the Roman landscape is unlikely. Perhaps the sites represent some form of woodland management, or are pastoral sites in clearance areas. The problem can be solved by selected limited excavation, since sites of this period generally have deep ditches that will be waterlogged in the clay and so provide environmental remains (as proved by excavation of an Iron Age site at Easton Maudit lying on Boulder Clay). The environmental evidence will tell if the sites are pastoral and whether there was woodland nearby.

Saxon sites lie entirely on light soils and not a single one occurs on clay of any type.
Reference to the extensive outcrops of Boulder Clay mapped in Figure 11 demonstrates that light soils were preferentially selected for early prehistoric and Saxon sites. Were the sites placed at random, then more than half the sites would necessarily have fallen on clay soils.
One of the most interesting Saxon sites is at Cotton in Gretton. It lies near to a deserted medieval vill of the same which has a territory defined by late medieval enclosures. Because the small Saxon site in effect survived as an independent estate until the Middle Ages, we are able to view the territory that went with it. In contrast, most of the Saxon sites discovered are just pottery scatters whose territories are lost and subsumed in the open fields of the larger medieval vills.

Slag representing smelting sites are mostly undated; some may be Roman. One at Fineshade was associated with Roman pottery sherds. Overall distribution is very much in association with the woodland, there being none in the west or south of the study area.

Most sites lie on limestone because they tend to be associated with present-day villages which are sited in valleys where limestone is exposed between flanking ridges of Boulder Clay. Only 3 slag sites lie on clay. Some vills have extensive background spreads of slag near them; Apethorpe, Blatherwycke, Bulwick, Fineshade, Nassington and Southwick.[38] Morton commented on the slag heaps at Gretton and Fineshade. He says ‘in the district betwixt the Ise and Willowbrook, there is scarce a lordship, at least in the northerly part of the District, but has of these slags in greater or lesser plenty scattered up and down in their fields’.[39] Related to the slag scatters are dark stains of charcoal visible in former

[38] Bellamy, B., Jackson, D. and Johnson, G. (2001) *Northamptonshire Archaeology*, **29,** 103-128.
[39] Morton, J. (1712) *The Natural History of Northamptonshire*., 549-50.

woodland areas such as Brigstock Park and Benefield Plain. These were the locations of charcoal burning and have been discussed by Foard.[40]

There is little direct evidence for medieval ironworking, although fieldwork cannot tell what was happening in backyards. Nearly all the identified slag scatters lie within the medieval strip fields and so cannot be involved in iron production in the Middle Ages. The name 'synder hilles' occurs in furlong names (e.g Little Oakley, 1379) that seems to be a recognition of the (former) industry.[41] At Southwick a slag-bearing area was called 'bloome furlong in 1633 (glebe) and is marked on the early 17th century map. One of the Fineshade sites still survives as a slight mound 30m diameter that interrupts ridge and furrow (Site 3, SP 9760 9780).

There is limited historical evidence for iron working. Domesday records iron working at Corby, referring to 1066. The foundation charter of Fineshade Abbey mentions ironworks.[42] Reference to a 'furnace' in Little Oakley, in 1302, when land was partitioned between the daughters of William de Kirkeby, was probably for iron production.[43] Manorial bakehouses are not usually mentioned in such documents; it was worth 8s annually. None of the many other places involved in the partition has reference to a furnace or oven.

APPENDIX 2: METHODOLOGY

The townships of Little Bowden, Wittering and Thornhaugh are not covered by the OS datasets Landline and MasterMap, the geology dataset and the NCC Modern Field Pattern Assessment as they are outside of the modern county. These three townships are therefore excluded from any assessment using the above named datasets.

There has been no attempt in the current project to characterise and look at the time depth of networks, particularly road networks. Although these have a significant contribution to make to the character of the historic landscape they were not part of the original project design.

2.1 Sources

The methodology for mapping the post-medieval/early modern landscape was first established for a pilot project for South Northants Council in the Whittlewood Forest region. However it has been significantly enhanced for this project with the use of digital photography of the original sources, digitising directly to screen against the Ordnance Survey 1st edition 1:10560 base maps and additional detailed mapping of the historic plan-form of the settlements.

[40] Foard, G. (2001a) *Medieval Archaeology*, **47**.
[41] NRO: Buccleuch 16/97 in X379.
[42] Bridges, J. (1791) *The History and Antiquities of Northamptonshire*., ii, 307.
[43] BL: Add Ch 41,576.

Four base data-sets were mapped digitally and transferred to the SMR to provide the basis of the characterization.
The first two comprise archaeological fieldwork information recorded at the 1:10,560 scale on Ordnance Survey plans. Scanned copies of the maps are part of the Project Archive. The originals will be deposited at the NRO.
The third data-set is based on information from historic maps, most of them held in the NRO, some in PRO but some belong to private archives, as sourced in the Gazetteer with specific references.
The fourth data set is the modern land use created by G. Foard and T. Britnell using OS MasterMap.

2.2 Pre-medieval archaeological data
The archaeological data is multi-period and includes the location and extent of lithic and pottery scatters (normally settlement related). These data, although incidental to the main project, were mapped because of their importance for management of the wider archaeological resource.
Print-out copies of the original fieldwork 1:10,560 maps were marked in a series of colours in preparation for digitizing. The items marked were:
Lithic and pottery (settlement) scatters (red), the extent of medieval village earthworks (yellow), linear earthworks surrounding medieval deer parks and woods (red lines), and quarries of all dates (ochre).
Each category was digitized onto separate tables in GIS (Mapinfo).

2.3 Open-field and related archaeological landscape data
The plans drawn represent the open-field furlongs and strips (ridges) as accurately as possible. At the scale of mapping all the strips cannot be represented; there would have been, on the ground, about four times the number drawn. The reverse-S curvature of the strips was often greater than can easily be shown on the plans.

2.3.1 Open-field plans
Copies of the original fieldwork 1:10560 plans were checked against RAF 1940s vertical photographs (held by the NMR at Swindon) to confirm, correct and infill gaps in the ridge and furrow record. Great care was taken not to include R&F visible on the photographs that was of post-medieval origin and of no relevance to the open fields. The record of the photographs consulted is listed in the Gazetteer. The plans were marked up with green lines to distinguish the AP data from the fieldwork data.
Archaeological features relating to the open-field system consist primarily of linear furlong boundaries (headlands; low banks of soil) and surviving ridge and furrow. Slades (shallow valleys) also form part of the open-field boundaries.
Plans of each township were drawn by hand at the 1:10560 scale, accurately marking furlong boundaries (thick lines) and slades (thin dot-dash lines). Schematic strips were drawn (thin lines) showing, as far as was known, the correct orientation and curvature. About a fourth of the real number of strips was drawn on the map (ie each strip drawn represents about four on the ground). Slight gaps were left between the thick lines of the furlong boundaries and the series of strips for the benefit of the vectorising programme. Each plan was marked with an outer set of four NGR kilometer reference points.

Where the modern landscape has been destroyed by quarrying or urban development, and where no data was available from the 1940s RAF photography, then outline detail of the open fields was mapped from pre-inclosure historic maps (thick dash double-dot lines), and added to the plan. The 17th and 18th century open-field plans have their own conventions. They are not maps of ridge and furrow, but plans of strip ownership or tenure. For instance the plan of Little Bowden shows strips reaching to a brook at the south, whereas the arable ridges left a narrow space for pasture or meadow. This is because the ownership of the narrow belt of pasture went with the strips. Meadows, too, were held in strips, but never ridged – they were sometimes said to lie in 'furlongs' of meadow. Sometimes the historic maps are not entirely accurate. The Brasier map of Warkton has a small furlong, still surviving in an avenue of trees (SP 896 795), drawn at right angles to the actual ridges on the ground. Hence the furlong plans of Kettering and Corby taken from open-field maps do not have the same validity as those derived from recent physical mapping.

The hand drawn township plans were scanned, and transmuted into vector format using the vectorising programme Scan2Cad after which they were registered in GIS (MapInfo) and a seamless map created. Each data set was placed in separate tables in MapInfo, producing a detailed record of the source of all evidence from which the final open field reconstruction was produced.

2.3.2 Land use and sources

Two other data sets were produced from the original field data; the land use and the source of the data that established the strip orientations.

Land use was marked on township print-outs of the vectorized furlong GIS maps with an OS 'Landline' background. There are six categories; open-field arable (white), (medieval) village extent (yellow), alluviated meadow (ochre), [medieval] woodland (blue), heath (red) and wood or pasture (green). The last category included 'wood pasture' where it was impossible to tell from the fieldwork evidence if there had once been woodland now grubbed up (e.g. at Easton on the Hill). The historic map data (below) generally showed where woodland had been before 1820, but the data sets were kept separate.

The table 'wood or pasture' was then further separated into tables 'woods', 'wood pasture' and 'open field pasture' using historic map data, geological evidence and professional judgement.

The initial land use areas were digitized onto separate tables to enable colouring of finished maps by historic land use.

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The source of the strip orientation data was marked on the same 1:10560 field-record maps used for the transference of archaeological data. Each area (commonly one 'modern' field) was manually coloured for the following categories; earthwork ridge and furrow (green), soil-mark and crop-mark strips observed on APs (purple), soil-mark and crop-mark strips seen on the ground (blue). The strip orientation source data was digitised.

Areas of strip orientation not covered by these categories were worked out from professional judgement taking into consideration the pattern of headlands and slades, and

the topography. Where a block of landscape has been destroyed and the furlong boundaries are mapped by 'dash double-dot' lines it may be assumed that strip orientation is as indicated on the original historic map.

No data

Areas for which no archaeological or documentary data exists were digitised to a set of tables 'Field Work no data' and 'Project no data' with an explanation as to the reason e.g. destroyed/quarried, destroyed/built up.

Polygons for 'Field Work no data' and 'Project no data' are not the same. FW polygons relate to the archaeology and in some cases such as Kettering and Corby there is none, whereas Project polygons relate to land use and it is sometimes possible to reconstruct the landscape from documentary sources (maps/aerial photographs) as at Kettering though no archaeology survives. Therefore the FW no data polygons for Kettering will encompass the whole township but land use tables will have reconstructed data. Digitised to separate tables with FW held under 'Archaeology' sub-directory and Project held under 'D Hall Furlong maps' sub-directory. By separating FW from Project the archaeology tables and land use tables remain discreet data sets.

Source data and conventions used in mapping features will distinguish what is 'real' and reconstructed data.

2.4 Historical data of the post-enclosure landscape

2.4.1 Townships

Townships are the unit of administration within which a community and its resources are organised. In order to understand how a community worked and evolved it essential to understand the constraints within which they operated. Administrative boundaries were arguably as influential as the physical extents of geology and topography. It was therefore critical to create accurate township boundaries from the earliest possible map source

The digital table 'townships' as supplied by the SMR, though mapped at a low resolution, was the starting point. The data from this table was in places enhanced to more accurate boundaries and in most cases completely redrawn to earlier sources and digitised to the table 'RFP townships'. Details of individual maps used can be found in the gazetteer. For some townships only one source map will have been used usually the enclosure map or, in the case of anciently enclosed townships, the tithe map. For other more complex areas such as Lyveden or Boughton multiple maps including those from adjoining townships have been used. For those townships where there is no historic map (see 'no data' below) the township boundary has been drawn from the OS 1st edition 1:10560 with reference to adjoining township maps. The three bailiwicks, Cliffe, Brigstock and Rockingham, that made up the Forest are excluded from the townships. Only at inclosure were these areas absorbed into surrounding townships.

The township table, as described above, is of particular relevance to the post-medieval period as it is from this period that the source data is derived. It cannot be stated with authority that the same boundaries were in existence in the medieval period, or that they remained static during the post-medieval period. However, considerably more research would have been required to establish the township boundaries of the medieval period.

Therefore the data from both the medieval and post-medieval periods has been analysed using this table.

2.4.2 Communications

Mapping of the road system has proven very problematic in the project. Only major medieval and post-medieval roads and the early modern turnpikes have been mapped, at a low resolution. This is because of the difficulty of reconstructing the pre enclosure road pattern where open field maps are not available, while the sheer number of roads within the enclosed landscape over such a wide area poses major problems of both mapping and analysis. This should be a topic for further research.

2.4.3 Historic Maps

OS 1st edition 6" map sheets have been registered in GIS as the earliest, accurate, large scale countywide map base for the historic mapping and regressive map analysis. These maps make the following tasks easier than using modern 1:10,000 maps, as they relate to pre-1850 maps better than modern digital mapping.

For each parish or township all relevant historic maps have been digitally photographed enabling direct on screen digitising and easy availability of the original map data for reference purposes throughout the project. The more complex data, particularly settlement plans, have been digitised directly onto GIS by tracing over a LED computer screen where the GIS map base, comprising raster 1st edition 1:10560 OS mapping underlying modern landline boundaries, has been scaled to fit the relevant section of the traced historic map.

The amount of data extracted from the historic maps was largely dependant on the quality of the original. Some were in poor condition, dirty or torn, and the majority had large internal inconsistencies with regard to scale. In some cases the only copies available were often at greatly reduced scale which made identifying features difficult and accurately mapping them still more problematic. However, digital photography has greatly improved the resolution and accuracy of the data produced, in that poor quality original manuscripts can be digitally enhanced to allow obscure features to be more accurately plotted. Details of particular issues regarding the quality of the source maps can be found in the gazetteer.

In addition to the map sources digital tables of RCHM earthwork surveys (warped and registered in MapInfo), and MapInfo tables Apewks, Apcrops, Apsoil from the Northamptonshire project of the English Heritage National Mapping Programme have been used, where they exist for individual townships, to locate features accurately. This has been particularly useful for the alignment of roads, boundaries of closes and settlement detail. Where the AP evidence differs slightly from the maps but it is clearly the same feature the AP data has been taken as correct. Where the AP data differs significantly the map data has been used. Details of where AP evidence has been used will be noted in the gazetteer under individual township entries. Users are advised to refer to the archive copies of the maps.

All historic land use features from the post-medieval period are digitised as polygons into separate tables and held in sub-directories according to the township and date of source.

For each source map used there were typically four digital tables created: buildings, enclosures, woods, source (extent of historic map). Many will also have additional tables of significant features such as parks, unenclosed roads, greens, ridings, lawns and plains.

For each parish or township with parliamentary enclosure the enclosure maps were examined and the hedges of all ancient enclosures mapped to the OS 1:10560 map base. There were only four townships for which draft enclosure maps were found; Little Bowden, Braybrooke, Collyweston, Easton on the Hill. Where these existed they were used in preference, but with reference to, the finished enclosure plans as the drafts contain significantly more detail than the finished plans. Furlong boundaries, names and numbered strips are recorded as are the boundaries of the new allotments and the old and new alignments of roads, as well as various other data noted in the gazeteer. The complexity of the data can make them difficult, but essential, to work with.
For parishes privately enclosed (before the first parliamentary enclosure act in Northamptonshire in 1727 and the handful privately enclosed after 1727) the relevant map closest in date to that of the enclosure was used as the initial map base. In some cases there were Tithe maps (of the 1840s) in others estate maps. Where present on these historic maps the extent of each woodland coppice, lawn and riding was mapped, as was any heathland, common, and landscape parks. Individual buildings both within the settlement and dispersed within the township were also mapped and any details relating to significant buildings such as the church, manor or mills, was recorded in the browser. Field names that indicated a former type of land use, particularly when related to former woodland, such as ‘dibbings’ were also recorded in the browser.
Where no other map was identified the 2” OS 1st edition draft maps from the British Library were used for woods and commons but proved to be too inaccurate to use for field boundaries and buildings.

In addition to the primary map source, early maps that show a significantly different extent or pattern of compartments were also mapped. This is particularly important to shows the earlier extent and character of ancient enclosures or of coppices, parks etc, providing a chronology to the development of the landscape, as for example where a designed woodland landscape or regular rides have replaced a coppice pattern of medieval origin or where a landscape park has replaced an enclosed field system. Details for each mapped source can be found in the gazetteer.

2.4.4 No data
For those townships for which no pre-OS 1st edition map exists the area of the township has been digitised to a table ‘no data’. The settlement has then been mapped from the OS 1st edition 1:10560 with reference to the OS 2” 1st edition draft maps and cut from the area ‘no data’. Woods from the OS 2” 1st edition draft maps have also been added and cut from the no data polygon.

2.4.5 Source data

A single polygon has been mapped to the boundary of the source map and attributes relating to the source references have been included in the browser.

2.4.6 Additional data sets
Ordnance Survey MasterMap, panorama contour data supplied by NCC under license
British Geological Survey supplied by NCC under license.
NCC SMR: quarried land, parks and gardens, countywide relief, Roman Iron Age and Saxon settlement location, historic railways, 1810s and 1880s woodland, settlement, landscape parks and avenues.
1928 landuse scanned from maps in Northampton Reference Library
G. Foard: turnpikes (Steane, 1974), post roads of 1675 (Ogilby, 1675), deer parks, 1299 and 1286 Forest perambulations, fenland extent, medieval towns, country houses.
The Battlefields Trust: national relief, rivers.

2.5 Modern data
Modern landsuse tables, as detailed below, were created for the project by G. Foard and T. Britnell.

Modern built up – extent by digitising an interpretive polygon with reference to the various MasterMap data tables.

Modern woodland – extent as vector polygon from MasterMap woodland, excluding scattered trees, edited with reference to Forestry Commission data set to produce simplified polygon data.

Modern fields - extent as vector polygon created by taking project area and deleting from it modern woodland and modern built up.

Modern Landscape Parks – extent digitised with reference to 2000 aerial photography landscape character, but based on 1950s 1:25,000, 1880s and earlier extents. There are some uncertainties about the actual extent of what can now be considered part of some of the landscape parks, especially where land has now been put down to arable.

World War I & II airfields – from the SMR table with Wittering added. All data derived from Gibson, 1982.[44]

Quarries – a combination of SMR quarries extent, largely up to date to circa 1979, and D Hall's survey data on quarry extent. There may be some additional areas which are not included, but the NCC Minerals Team quarry data set could not be used as it defines extent of consented area rather than area actually extracted. This data set may therefore need some enhancement for completeness, almost solely with regard to ironstone extraction between 1979 and closure of the British Steel works.

2.6 Assessment
2.6.1 Pre-medieval archaeology data

[44] Gibson, M. (1982) *Avaiation in Northamptonshire : An Illustrated History*..

No analysis of the pre-medieval archaeology data has been undertaken. A basic assessment of the amount of new or enhanced monument data, by type and period added to the SMR has been provided by NCC.

2.6.2 Land use

Where possible a standard use of colours was applied to the maps .

The table 'deer parks' was initially created by G Foard.

The base table 'Modern Field Pattern Assessment' utilizing various OS MasterMap tables was provided by NCC and used in figure 29.

Once the base data tables for each historic time period were collected, as described above, they were then combined to create the broadest extents of land use.

These extents were then further broken down into the component parts of each land use type.

2.6.3 Settlement

Medieval

The 'possible' extent of medieval settlement is created using data from a variety of tables including: archaeology tables; post-medieval settlement area; RCHM earthwork surveys; NCC SMR APewks, APcrop, APsoil; Alluvium; Boulder clay; aerial photographs; historic maps; D Hall's original fieldwork maps.

A polygon is drawn around the extent of the 'possible' settlement area as defined by the post-med enclosures including those that do not contain buildings but excluding those that have furlongs within them, and incorporating those areas that have evidence of earthworks. This gives a broad area which is defined as the area of search for settlement remains not the definitive area of the settlement.

Post-medieval

The post-medieval settlement area is defined as the nucleated area and incorporates only those closes that have buildings within them. All buildings are included regardless of function as it is usually impossible to determine function of buildings from the map sources – with the notable exception of the churches.

Imparking significantly alters the plan form of the settlements and makes analysis of their evolution from the medieval to the post-medieval difficult at best and virtually impossible at worst.

The full extent of the parks is not included in the settlement area but the area that includes buildings is.

All settlements that have no map pre the OS 1st edition 1:10560 are given a post-medieval polygon incorporating those closes with buildings but excluding any that are not shown on the 1810s. Similarly any buildings shown on 1810s but gone by 1880s are included in the settlement area. The medieval extent is defined in the same way as all others.

APPENDIX 3: GAZETTEER

Note. The Gazetteer is intended to give only brief comment on the archaeological sites and on the physical aspects of the open-fields. Information on the nature of the field systems can be found for most of the townships in Hall 1995.[45] Information about places not there included, or that has come to light since 1995, is summarized below in fuller entries under 'open fields'.

For each township there is a list of the aerial photographs (APs) used to supplement the field data, and references provided for the historic maps used. References for the date of enclosure, if not given, are taken from Hall 1997.[46]

Dates of the RAF flights are

CPE/UK/1891	10 Dec 1946
CPE/UK/2109	28 May 1947
CPE/UK/1932	3 Jan 1947
CPE/UK/1925	16 Jan 1947
F21 82/RAF/865	8 Mar 1954
F22 82/RAF/865	8 Mar 1954
541-256	10 May 1949
106G/UK/982	16 OCT 1945

Aldwincle

RAF aerial photographs consulted

F22 82_865 frames 347-9 for N; F21 82_865 fr. 347-8 & [N] 268; and UK 1891 fr. 2296-8. More of SW on 541-256 fr. 4117 & 8. Also for E of the vill CUCAP obliques ATY 19; CEP 42-52; & vertical RC8 CH 131, 133.

Archaeology

The north of the parish runs into the Lyveden Valley and includes both the Old and New buildings. There are Iron Age and Roman sites, and at the NW a small post-medieval site (Ald U2), possibly a keeper's lodge in the Tresham Park (see Lyveden). The E side was not studied for pre-medieval sites.

Open fields

Aldwincle was a double township according to the open-field evidence (Hall 1995, 171-2) with a field system for each manor. At the time of Parliamentary Enclosure, in 1772, the new allotments and old enclosures were assigned to each township (NRO Enrolment Vol. D, pp173-78). The boundary needs plotting on a reconstructed enclosure plan.

Away from the vills, the furlongs lie in more or less rectangular blocks separated by major topographical features and roads. No furlong boundaries were identified W of Aldwincle Lodge (SP 990 837) and the area was probably former woodland. Most of the surviving woods have ramparts.

[45] Hall, D. (1995) *The Open Fields of Northamptonshire*, Northamptonshire Record Society, Northampton..
[46] Hall, D. (1997-8) *Northamptonshire Past and Present*, **9,** 350-367., 351-67.

Enclosed fields
Map 3761 of 1794 is remarkable in that it shows Lord Lilford's arable land marked with post-enclosure cultivation strips. Some of the land W of Aldwincle Lodge was then ploughed. Elsewhere, the relation of the post-enclosure cultivation strips follows the open-lands logically but they fit into the new enclosed fields and ignore inconvenient old furlong boundaries.
Settlement:
Mapped using both 1796 and 1814 map.
Township boundary:
It has not been possible to identify the boundary between the two townships of Aldwincle St Peters and Aldwincle All saints from the sources available, therefore they have been combined as a single polygon. The sources used for this were both the estate maps of 1794 and 1816 and the boundaries of the adjoining townships. In addition to this the parish boundary from the OS 1st edition 1:10560 was used in conjunction with the 1816 estate map for the boundary along the river where Aldwincle abuts Titchmarsh and Thorpe Achurch. The area of Lyveden that is part of Aldwincle is not shown on any of the estate maps. However, the Brigstock enclosure map (NRO Enclosure Plan 60), Benefield enclosure map (NRO Map 2885) and the tithe map of Pilton (NRO T115) all clearly show where the boundaries of Aldwincle are. The township boundary has been mapped using all these sources.

Apethorpe
RAF aerial photographs consulted;
CPE/UK/1925; NW frames 3118-24; S fr, 1116-24.

Archaeology
Apethorpe was only searched for pre-medieval sites at the NW, there were prehistoric flints and later sites on limestone, with areas of charcoal and burnt pebbles on boulder clay. In the valley south of the village lies an extensive area of iron slag stretching into Woodnewton. On the west is the DMV of Hale curiously sited on a spur of Boulder Clay. The known Roman villa was not visible.

Open fields
West of the village the furlongs form a compact block. To the NE the pattern was not fully recoverable where there had been old enclosure called Blue Field. The S is complicated and interlocks with the fields of Woodnewton, probably because they had shared part of the fields of Hale. A remarkable result of the survey was that Morehay Lawn included the western part of Hale furlongs, and was therefore not medieval (Morehay is first recorded as a *lawn* in 1551.[47] It is likely that the northern area of 'Southwick woods' was ridge and furrow so linking all the Apethorpe fields together. Apethorpe has a fieldbook of 1551 that has not yet been fully studied (NRO W(A)4.xvi.5). Only 25 percent of the parish was open-field in the mid-18th century (W(A) 7.xv).

[47] Gover, J. E. B. e. a. (1975) *The Placenames of Northamptonshire*., 207

Enclosed fields. Enclosed 1777
Maps consulted: NRO Enclosure Plan 15, (1778, copy made 1914) includes Nassington, Yarwell, & Woodnewton.
Enclosure map difficult to work from as colour coded but colour of old enclosures virtually the same as 'new enclosures copyhold of the Earl of Westmorland' both yellow. Not helped because the map is discoloured and the background is also yellow.
The enclosure of Hale and Apethorpe was complicated. Part of Hale fields was incorporated into Morehay Lawn by 1550 and the village site was described as closes in the 1551 fieldbook. The Little Park immediately south of Apethorpe village was also formed by 1551 and had been taken out of ridge & furrow. In 1609 a survey refers to the Little Park 75 acres and Great Park and woods extending to 297 acres. The 17th century map of the Forest shows that the Great Park (called New Park) laid at the south-west (PRO MR1/314). Between 1703-32 six separate maps show all the old enclosures that are marked on the enclosure map of 1778 (NRO Maps 1491-6).

Settlement:
Very complex as the eastern half of the village has been removed by emparking by the 1880s. Table 'Apethorpe settlement line' included to show boundaries that are not enclosures but to contribute to the structure of the village. The road running directly east of the settlement is removed at emparking and by 1880 is shown skirting around the park and entering the settlement from the north.
Township boundary:
From enclosure plan.

<u>Arthingworth</u>
RAF aerial photographs consulted;
541_265 frames 3385 N; main 3089-93; S 4089-91; F21 82_865 fr. 305-9 and id. F22 fr. 305-7 (S).

Archaeology
Lying in the upland clay area, Arthingworth yielded only three sites, two Roman and one small Saxon pottery scatter.

Open fields
There is a high percentage of arable with limited pasture and meadow in a series of slades running to the main brook. The slades cut the fields into a series of lobes in which there are linear or approximately rectangular furlongs. The lack of pasture was partly accommodated by the 18th century by reverting many strips to grass (ley, 39%). Including meadow and pasture there was 60% grass in 1767.
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Enclosed fields. Enclosed 1767
Maps consulted: No pre-tithe map has been identified for Arthingworth.
Tithe map unusable as it shows only three small closes. Extent of ancient enclosures reconstructed by D. Hall.
Settlement
From OS 1st edition 1:10560.

Township boundary
From OS 1st edition 1:10560.

Ashley
RAF aerial photographs consulted
CPE UK 1925 frames 1175-9; CPE/UK 2109 fr. 4135-9

Archaeology
Only three sites were discovered, of Iron Age and Roman date.

Open fields
The fields form a compact block around the vill which is sited by a brook that collects water from the surrounding slades. Considerable meadow lies to the NW by the Welland. A small area of upland pasture formed on an exposed scarp S of the vill. The field pattern is dominated by the long EW line of the southern watershed. Much ridge and furrow survives. An 18th century tithe book gives farming detail (NRO Ashley 16P/15).

Enclosed fields. Enclosed 1806.
Maps consulted: NRO 3002 (Enclosure Map 1807). Negative Photostat
Only three closes shown outside of the village two marked 'wood close', the smallest marked 'Tanners close'.
Settlement:
From enclosure map.
Township boundary:
From enclosure map.

Barford
RAF aerial photographs consulted; see Rushton.

Archaeology & open fields. Nearly the whole township (in Rushton parish) has been quarried, including the vill site. Historical evidence for the open fields is given in Hall 1995, 341.

Enclosed fields. Enclosed 1515.
Maps consulted: Two estate maps of Glendon and Barford have been located in private ownership, Mr. M. Hipwell of Glendon (1830, 1869). Barford mapped from 1830.
Settlement:
There is no nucleated settlement area in the post-medieval period. The medieval settlement is deserted and no data was available to map its location.
Township boundary:
Estate map 1830.

Barton Seagrave
RAF aerial photographs consulted
F21 82_865 frames 398-402; CPE/UK/1925 fr. 1237; 4348-52.

Archaeology. Barton was not searched for ancient sites; much of the township on the west is built up.

Open fields.
The surviving fields are cut into lobes by slades draining into the Cranford Brook. Furlongs on the lobes have simple planned patterns. Old Head Wood next to Grafton Park belonged to Barton.

Enclosed fields. Enclosed 1633.
Maps consulted: NRO T185 (Tithe Map 1842)
Virtually no change from tithe to 1880s. Several substantial farms within township.
Settlement:
A lot of substantial buildings associated with the Hall but the settlement itself is very small. A lot of planting and park-like features though interestingly the avenues all seem to emanate from the church or the building next to it – probably the rectory – rather than the Hall. Although there are park-like features such as avenues and planting it very difficult to see a 'park' as such. No park boundary mapped but symbols added to 'land use' table to identify that there are two distinct designed landscapes within the settlement.
Township boundary:
From tithe map.

Benefield
RAF aerial photographs consulted
CPE/UK/2109 frames 3238-46; 4364-72; 4417-424; 3417-21. Lyveden F22 88_865 fr. 270.

Archaeology
The extensive township of Benefield lies on Boulder Clay and has a large number on Iron Age and Roman sites (19). There are also parts of the Lyveden Valley medieval complex including the DMV of Upper Lyveden (Site 17) in the parish. East of the vill are two undated earthwork sites (18 &19), likely to be medieval, the whole forming a dispersed settlement pattern with the two major vills of Upper and Lower Benefield.

Open fields.
The large area of furlongs is dissected by long slades which largely determine the pattern. There are several woods of medieval origin on the south and west, and farther W, towards Brigstock, is a large area called Benefield Plain, devoid of open-field remains and probably once woodland. There was still surviving in 1947 post-medieval cultivation ridges; most of the ridge and furrow published by the RCHM (1975, 73) in the Lyveden Valley is of this type.

Enclosed fields. Enclosed 1820.
Maps consulted: NRO Enclosure Plan 4 (1826); NRO T174; estate map in private ownership, Major Watts Russell of Biggin Hall, (1747).
Although formally enclosed by Act of Parliament in 1820, this was only a ratification of an earlier enclosure and a merger of tithes into land (all the land is described as 'closes').

The new owners were the lord, J. W. Russell, who had 84% of the land, the rector 15%, the remainder going to the churchwardens and for public stonepits. Enclosure plan 4 shows a small group of ancient enclosures to north-east, a group in the middle of the southern half, settlement closes and the woods. The rest it is shown on the enclosure map as open which was clearly not the case as the estate map of 1747 shows the whole township fully enclosed.
The glebe terriers show there was a payment of £200 from the lord in 1759 instead of the usual description of scattered strips. It seems therefore that the 1747 map, showing enclosed fields is the enclosure map. The tithe map of 1848 shows land that was exempt from the 1820 enclosure and was probably 'ancient enclosure' in 1747.
Settlement:
Settlement very difficult to map, particularly the buildings as the original maps are very faded. Added to which they are behind glass and hung where the light reflects directly on them so the resolution of the photographs is quite poor. This should be taken into account when viewing both Upper & Lower Benefield.
Township boundary:
From NRO Enclosure Plan 4.

Biggin
RAF aerial photographs consulted; see Oundle.

Archaeology.
There are Iron Age and Roman sites near Biggin Hall, and in front of the Hall a rectangular earthwork is probably the remains of the Peterborough Abbey Grange.

Open fields.
In Biggin Park all the surviving ridge and furrow is post-medieval. It is not certain that Biggin had a field system independent of Oundle. The two detached parts lying to the west were probably once wooded; one of them seems to have subsequently been ploughed, the other cannot be proved to have had furlongs in it.

Enclosed fields. Enclosed ?
Maps consulted: NRO Box X5394 Smith of Oundle 511/1 (sale catalogue 1819); NRO Map 4652 (estate map 1864).
The Park had likely been an enclosure since its inception in the 13th century (Gover et al., 212). Biggin closes are listed in 1623 (NRO Bru.H.xxviii).
1819 map used for digitizing. No 'park' on 1819 map but by 1864 NRO Map 4652 landscape park features, planting, avenues, ponds etc. are shown though no park boundary is given. The estate was purchased by Watts Russell family in 1820.
Settlement:
There is no nucleated settlement at Biggin.
Township boundary:
From maps of adjacent townships: Benefield NRO Map 2885 (copy of enclosure map); Oundle NRO Map 2858; Glapthorn NRO Map 4526; and where Biggin abuts the Forest the Cliffe Bailiwick Map PRO MR 1/314.

Blatherwycke
RAF aerial photographs consulted
CPE/UK/1925; frames 3128-34; S, 1131-4; far S, CPE/UK/2109 fr. 4102-6.

Archaeology
Blatherwycke has several Roman and Iron Age sites and three iron-smelting slag areas. The Willow Brook slade has a high background of slag, extending from Bulwick. The large Roman site (Site 6) lies over a low gully similar to a hollow way, but it is likely to be of glacial origin.

Open fields.
The furlong system could not be adequately mapped NE of the vill. The arable area is broken by long slades and the furlongs slope down on either side. To the east were woods lying on high Boulder Clay ground.

Enclosed fields. Enclosed 1800. Part of Blatherwycke was enclosed with Laxton and the remainder privately in c.1800.
Maps consulted: NRO T189 (tithe Map 1847); OS 2" 1st edition draft maps (c.1810); PRO MPE 1/459 (Forest Perambulations of 1285 & 1299, c.1640); PRO MR 1/314 (Cliffe Bailiwick c.1640).
Mapped from the tithe. The park is shown on all three maps, though the Forest Map of c.1640 map is too inaccurate to map from. There has been considerable alteration to the park between the map of 1810 and the tithe of 1847 notably the creation of huge ponds and the laying out of formal gardens.
Settlement:
From tithe map. The early settlement plan form is extremely difficult to establish due to emparking. Archaeological AP evidence suggests the focus of the village has shifted to the south and former roads within the park have been removed or realigned.
Township Boundary:
From tithe map and Cliffe bailiwick map. Most of the township boundary is as shown on the tithe map with one or two slight differences. Where these occur, the earlier maps from adjacent townships have been used. For the boundary with Laxton PRO MR 1/314 has been used. This map is of the Cliffe bailiwick c.1640 and shows the eastern half of the boundary between Blatherwycke and Laxton to be the same as that shown on the OS 1st edition 1:10560. The tithe map shows a different boundary. For this reason and because tithe maps are not necessarily showing townships, the Cliffe map has been taken as the most accurate.

Boughton
Enclosed fields. Enclosed: c.1540.
Map consulted: NRO Map 4531 (Park 1720); NRO Map 5965 (1810); NRO Enclosure Plan 18 (1808); NRO BRU Map 2 (Brudenell Estates 1737).
Boughton House Maps:
Manors of Boughton, Warkton, Weekley & Geddington (Nunns, 1714 Booth, 1715); Boughton Estate (1737); Geddington Fields (1717); Weekley Fields (1719); Warkton

Fields (c.1716); Boughton & Grafton Underwood woods (undated); numerous maps of the house and park, undated.
Mapped from Boughton map of Manors of Boughton, Warkton, Weekley & Geddington, 1715.
Settlement:
There is no nucleated settlement at Boughton in the post-medieval period.
Township boundary:
Boughton maps Weekley Fields 1719; Geddington Fields 1717; Manors of Boughton, Warkton, Weekley and Geddington 1715; Warkton Fields 1716.
Despite the number of maps for Boughton and its adjacent townships, it has proved extremely difficult to identify the township boundary. This is largely due to the fact that Boughton, Geddington, Warkton and Weekley was in single ownership, the Duke of Montagu, and the maps do not necessarily make clear distinctions between townships. However in consultation with D. Hall and using the maps listed below a reconstruction of the probable township boundary has been made. Further documentary analysis will be needed to refine this. The area of the 'Ruines Common' and 'Bancroft Closes' both shown on Enclosure Plan 18 as part of Geddington were, according to D. Hall, very likely once part of Boughton. These have been added to the land use table for Boughton but remain within the township boundary of Geddington. The boundary between Boughton and Weekley has been the most problematic to identify but it originally most likely followed the River Ise south from Geddington, through the park and continued following the stream through Weekley. This is the boundary used but the original stream course through the park has been altered due to landscaping.

Bowden**,** Little
RAF aerial photographs consulted
CPE UK 1925 frame 1189; 541_256 fr. 4435-7.

Archaeology. Bowden was not searched for ancient sites. On the west there is much destruction by building from Market Harborough.

Open fields. There is a largely rectangular furlong system divided by a brook and low area of meadow and pasture. The western part of the system has furlong data from a draft enclosure map of 1780 (LRO MA\EN\A\199\1 DE1185). Where furlongs survive, the map can be shown to be very accurate.

Enclosed fields. Enclosed 1799.
Maps consulted: LRO MA\EN\A\199\1 DE1185 (draft enclosure map c.1780).
The draft map is very faint and contains complex data making it fairly difficult to identify boundaries. The only ancient enclosure was around the settlement.
Settlement:
Significantly changed by 1880s largely due to two railway lines cutting through on either side of the settlement core but many buildings and closes altered.
Township boundary:
From draft enclosure map.

Brampton Ash

RAF aerial photographs consulted
CPE UK 2109 frames 3140; 4277-83 all for S; NW CPE UK 1925 fr. 1183; other N 541_256 fr. 3340-42.

Archaeology
The varied soils of Brampton yielded a range of sites; prehistoric flint scatters, Iron Age & Roman sites, one Saxon site, and a mound of a likely windmill that produced one piece of a Millstone Grit grinding stone.

Open fields
The furlongs are much dissected by slades which dominate the pattern. The area S of Hermitage Wood seems to have been ploughed, but may be late assarts. The Hermitage is an intriguing medieval site that has no known ecclesiastical history.

Enclosed fields. Enclosed 1638-1673.
Maps consulted: NRO T166 (Brampton Tithe Map 1839); NRO T140 (Dingley Tithe Map 1837); OS 1st edition 1:10560.
Brampton was enclosed in two stages. A large part of the north had been enclosed in c.1638 (QSR 1/14) which consisted of 1105 acres with the woods according to the tithe. The rector received a 50-acre close and 7 acres of wood in lieu of the tithe (NRO Glebe terriers). In 1673 the remaining 1153 acres were enclosed (and remained titheable), the rector receiving additional 23 and 57 acre closes for his glebe. The tithe map shows only the southern half of the township. Though the north was enclosed it has been mapped as a single polygon as there is no map showing internal boundaries.
Settlement:
The tithe map shows none of the buildings (a farmstead) north of the east-west road and excludes the rectory which is south of the road. However even if these were included Brampton would still be tiny numbering less than a dozen buildings. By 1880 the village was virtually unchanged with only a few more buildings added. Unlike the majority of the settlements in the project area Brampton did not expand in the industrial period, rather the opposite. Today Brampton has shrunk to the church, what appears to be two farms (both shown on the tithe map) though they may now be domestic residences, the rectory and three or four houses.
Township boundary:
From Brampton and Dingley tithe maps. In south east corner (where the tithe map is torn) from Kain & Oliver.[48] For boundary with Stoke Albany not shown on Brampton tithe the OS 1st edition 1:10560 was used.

Braybrooke
RAF aerial photographs consulted
CPE UK 1925 frame 1189; 541_256 fr. 4435-7; CPE/UK/2109 fr. 4283-5. CUCAP obliques, AGU 46-51 (1963), BRT 99-103 (1976), CFP 44-52 (1978).

Archaeology
Braybrooke has sites of all periods including one Saxon pottery scatter.

[48] Kain & Oliver, R. J. P. R. R. *The Tithe Maps of England & Wales*.

Open fields.
The extensive area of furlongs is dissected by slades, but the NW has a fairly rectangular pattern. A very fine open-field map and related survey shows the state of the township in 1767 (NRO uncat. Map in X9947, survey ZA 7158). It describes 1386 acres of old enclosure, 2831 acres of open field which consisted of 63 yardlands and supported 263 cattle and 1050 sheep.

Enclosed fields. Enclosed 1778.
Maps consulted: NRO Braybrook draft enclosure (1776/7), uncatalogued; NRO X9947 (estate map 1767).
The enclosure history is in two parts; one of the three fields was enclosed in 1649, and the remainder, re-divided into three fields, in 1778.
The draft enclosure map shows the whole township with named fields and furlongs, strips, pasture, named closes, the extent of the common and the settlement.
Settlement:
From the draft enclosure map which has huge internal inconsistencies regarding scale. The RCHM earthwork survey was invaluable in accurately locating the features in the eastern side of the settlement around the area of the castle. With the exception of the windmill and the hermitage no buildings are shown outside of the settlement.
Township boundary:
From draft enclosure map and 1767 map for west boundary where draft map is torn.

Brigstock
RAF aerial photographs consulted
F22 82_865 centre, frames 248-53; N fr. 274-9; S on F21 fr. 270-5.

Archaeology
There are many Iron Age and Roman sites on the Boulder Clay, especially in the Parks on the W. There are two earthwork sites, likely to be the same date, in Fermyn Woods (sites 16 & 17). Greenfield 1961) excavated a Roman shrine in the former Luscott Coppice (E. Greenfield 'The Romano-British shrines at Brigstock, Northants', *Antiquaries J.* 43 (1963) 228-263) and Foard has described iron and charcoal production sites in the region.[49]

Open fields.
Although Brigstock is a very large parish (5,900 acres), more than half was woodland coppices and or royal deer parks. The modest sized field system lies along Harpers Brook and the field pattern is determined by the adjacent slades. There is an open-field map and fieldbook of 1734 (NRO Map 1380; Buccleuch 13-16 in Box X361). The Buccleuch records for Brigstock are copious; Pettit (1961) has described the Forest and Bennett discussed some of the medieval social aspects from data based on the court rolls.[50]

[49] Foard, G. (2001a) *Medieval Archaeology*, **47**..
[50] Bennett Judith, M. (1987) *Women in the medieval English countryside : gender and household in Brigstock before the plague*, Oxford University Press, New York.

Enclosed fields. Enclosed 1795.
Maps consulted: NRO Enclosure Plan 60 (1805); NRO Map 3112 (Fermyn woods 1728); PRO MPI 1/250 (Great & Little Parks, 1760); PRO MPE 1/462 (Crown lands leased to the Duchess of Buccleuch 1777); Hatfield House collection Ralph Tresswell's Map (1602). Boughton House maps: Brigstock Enclosure Map (1805); Brigstock Brasier survey (1725).
Enclosure plan used as base map with reference to Boughton Brasier map of 1728. Woods were part of the Brigstock Bailiwick within the Forest mapped from Map 3112. Parks from PRO MPI 1/250.
Settlement:
From enclosure plan.
Township boundary:
From enclosure plan & PRO MPI 1/250. Excludes the woods as they were part of the Forest.

Bulwick
RAF aerial photographs consulted
CPE/UK/1925; frames 1133-42; CPE/UK 2109 fr. 4106-9 for S & E.

Archaeology
There are three Roman sites and several iron-smelting sites with abundant slag in the Willow Brook slade towards Blatherwycke and elsewhere. The slade has a dense background of slag showing that there was considerable activity. A single Saxon sherd was found with a Brinze Age barbed and tanged arrowhead in an upland slade on an exposure of limestone at the E (Site U1).

Open fields. Hall 1995, 224-5.
The furlong pattern is fairly simple with furlongs lying in blocks under each other. A map of 1728 shows the furlong outline and gives names (Map 763A). A terrier of 1661 (NRO TB 589) has very detailed abuttals that will allow the orientation of the strips to be determined. There were 8 fields worked on a three-tilth system involving fields that were not adjacent. The settlement is double, that W of Willow Brook being called Henwick. Documents also refer to 'Hardwick', but a settlement has not been identified (NRO TB 13 of 1556).

Enclosed fields. Enclosed 1728.
Maps consulted: NRO Map 763a, 1728
There were old enclosures to the E and W by 1728. Those in the W seem to have been formed as a result of exchanges of open-field lands made in 1565 (NRO TB 16-17).
Settlement:
Map 763a was difficult to use due to internal inconsistencies of both scale and orientation. AP earthwork and cropmark data plus the RCHM earthwork survey were used wherever possible. The problem was exacerbated by the fact that a very large portion of the settlement had been emparked by the late 19th century, taking in part of the open field, and obliterating many of the early closes. Emparking had also completely

removed some roads and realigned others. The roads that have disappeared have been digitised to the table 'line'.
Township boundary:
For most of the township the 1728 map has proved adequate. For the border with Harringworth and the south-west corner of Laxton, for which no map exists, the 1619 map of Harringworth, NRO Map 4527, has been used as this clearly denotes the green and pasture belonging to Bulwick. For the south-east corner of Bulwick where it abuts Southwick the Forest maps, PRO MR 1/314 and PRO MPE 1/459 have been used. This area was particularly difficult to work out as the Bulwick map is an estate map and is therefore showing a property boundary rather than the township boundary. However, by using the boundaries of the Forest maps, which are significantly earlier, with boundaries from the Bulwick map of 1728 and the OS 1st edition 1:10560 from the 1880s and particularly utilising wood and close names, it has been possible to establish a reasonably accurate township boundary. Further research will be needed to determine the definitive boundary

Churchfield
RAF aerial photographs consulted; see Oundle.

Archaeology
Churchfield in Oundle parish lies in the Lyveden Valley. It is uncertain whether it was an independent township. There are Roman sites nearby.

Open fields
There was some ridge and furrow next to Churchfield lying in the valley.

Enclosed fields. Enclosed by 1565.
Maps consulted: NRO T114 (Oundle tithe); NRO T115 (Pilton tithe); NRO T207 (Stoke Doyle tithe); NRO Map 2885 (Benefield enclosure 1826); NRO Map 2858 (Oundle enclosure 1810).
The area was enclosed by the time of the 1565 Oundle survey (NRO ML 116). See Oundle. The few fields shown on the Oundle tithe map have been digitised.
Settlement:
There is no nucleated settlement in Churchfield in the post-medieval period.
Township boundary:
The area of Churchfield that abuts Stoke Doyle is called 'Lyveden' on the tithe map of the latter. Similarly the tithe map of Pilton also calls the area of Churchfield that abuts it 'Lyveden'. Benefield enclosure map calls the area Oundle. Oundle enclosure map calls it Churchfield.
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Collyweston
RAF aerial photographs consulted
CPE/UK/1925 frame 4124; CPE/UK/1932 fr. 6055-7.

Archaeology

The light limestone soils yielded prehistoric flint scatters, two Roman sites and a few sherds of Saxon pottery.

Open fields.
The furlongs lie in a compact block on the best limestone soils. The pattern is cut by roads, but otherwise looks planned with furlongs lying one over the other on ground sloping down to the Welland. The Park on the west of the village was taken out of the fields. There is a draft enclosure plan that shows the furlongs and gives their names (BEO M399).

The draft shows slate pits on the E of the vill in 1841 and there are various accounts relating to slate production in 1545 and 1648 (NRO SG 130, 85). A survey of 1628 refers to the three fields and there was pasture in Hill Field (on the clay slopes), 133 acres, and on the heath 127 acres (NRO SG 121).

Enclosed fields. Enclosed 1841.
Maps consulted: NRO map in V2793 (enclosure map1842); BEO M81 (draft enclosure map 1839); BEO M398 (Collyweston Park1692); BEO M352 (Collyweston Woods 1703); PRO MR 1/314 (Cliffe bailiwick c.1640).
The Park (108a in 1608) was created by 1480 (VCH ii 553), the remainder of the township was enclosed by Parliamentary Act in 1841.
Enclosure map used as base map. Draft enclosure map, very large, colour but difficult to work from, faint and poor quality, but it does show details of the slate quarries that are not shown on the enclosure map. Area to east of Great Wood shown as 'Cow Wood' but no trees and part of parliamentary enclosure. Presumably this represents loss of the wood to open field or more likely heath. Collyweston woods are shown on the Cliffe bailiwick map of c.1640 with the area of cow wood shown devoid of trees.
Settlement:
From enclosure map.
Township boundary:
From enclosure map.

Corby
RAF aerial photographs consulted; none relevant, the open-field area was destroyed before 1945.

Archaeology
The whole of Corby is either built up or quarried and no field survey occurred, apart from a few coppices and the ancient village. The open-field maps, enclosure map and 1st Edn OS 1885 shows that the village was sited between two brooks and the open fields lay either side of the main slade and also cut through the woods into a valley on the north that runs eventually to the S of Kirby and to Deene.

Open fields.
The plan has been drawn from available open-field maps. NRO Map 2644 of 1616 shows the demesne and most of the furlongs. A map of c.1720 map (Map 3281) shows the

furlongs marked with names and distinguishes the demesne. There is a third map of 1733 (Map 4657).

Enclosed fields. Enclosed 1829
Maps consulted: NRO Enclosure plan 11 (1831); NRO BRU Map 125 (1733); NRO Map 2919 (1838).
There are no ancient enclosures outside of the settlement core. Enclosure plan excludes all the woods as they are part of the Forest but they are shown on the 1733 map and the Forest enclosure map of 1838.
Settlement:
From enclosure plan.
Township boundary:
From enclosure plan and Map 2919.

Cottingham cum Middleton
RAF aerial photographs consulted
F22 82_865 cent 248-53; N 274-9; S on F21 270-5

Archaeology
The E side of Cottingham only was searched for pre-medieval sites. There were prehistoric flints, Iron Age and two Saxon pottery scatters, as well as a moated lodge site in Rockingham Park (S5).

Open fields.
The furlong pattern of both townships is fairly simple with furlongs lying one under the other on the slopes falling to the Welland. The villages are sited on the scarp where there were areas left as unploughable pasture. No furlongs were identifiable in the SE of Rockingham Park; it was probably once woodland taken in from Rockinghamshire Plain.

Cottingham contains the two townships of Cottingham and Middleton. Parts of Rockingham Forest laid in both townships. Cottingham had three fields in c.1590; Wood, Park (or Upper) and Meadow Fields with land equally divided between them (NRO 85P/325). There were the same fields in 1632. A payment was made to the rector for Rockingham Park where it had encroached. In 1705 Meadow Field had 18 people as glebe neighbours and three of them held 34 percent of the positions, suggesting an irregular arrangement (NRO Glebe in X580).

A Berry Field mentioned in c.1590 (NRO 58P/325 m.10) is marked on the 1815 enclosure map. It was presumably demesne. Details of 18th-century open-field farming survive (NRO 58P/341). Enclosed with Middleton in 1815 (Award 1815; NRO Map 3011 (1825). The map shows the township boundary.

Middleton. A terrier of 1743 describes land in three fields, Wood, Meadow and Gaulberon Fields. The enclosure map shows the same fields in 1815.

Enclosed fields. Enclosed 1815.

Maps consulted: NRO Enclosure Plan 48 (1825); NRO FH 272 (1585); NRO Map 2329 (Rockingham 1805); NRO Map 2328 (Rockingham 1615).
Enclosure plan used as the base map. Area to the south of Middleton where it abuts the Forest called 'Cattage Wood Field' this is shown on FH 272 as wood but by 1838 when the Rockingham bailiwick is enclosed it is marked as 'old enclosures'. To the east of Park Field outside the enclosure boundary is marked 'Rockingham Park enclosed from Cottingham'.
Settlement:
From enclosure plan.
Township boundary:
Cottingham: from enclosure plan and Map 2329. It is clear from the enclosure plan that part of Cottingham was enclosed by Rockingham when the park was extended. The 1615 map of Rockingham gives no indication of the division between Rockingham and Cottingham within the park. The map of 1805 shows a stream running north-south through the park the western side of which is called Cottingham and the eastern Rockingham. It is this boundary that has been used as the earliest identifiable boundary between the two townships. The boundary with Middleton has been taken from the enclosure plan.

Cranford St. Andrew
RAF aerial photographs consulted:
F22 82:865 frame 394; F21 fr. 294-8; CPE/ UK 1925 fr. 4344-6 & 1246.

Archaeology
Much of both the Cranfords has been quarried. Only two Roman sites were discovered, both in St John's.

Open fields.
The field pattern of both townships was completed with data from an open-field map of 1748. The furlongs of St Andrew's is very simple based on south-draining slades. St John's is more complex with small furlongs to the SE where it has been quarried.

Enclosed fields. Enclosed 1805.
Maps consulted: NRO Map 4446 a-d (estate map 1782) Map 1388 (strip map of both Cranfords 1748); NRO Map 3019 (Cranford St John enclosure map).
Much of the NE half of St Andrew's was enclosed by 1628 (Glebe terriers; as mapped in 1748). Cranford St John had enclosures around the settlement only in 1805.
Settlement:
Cranford St Andrew emparked, no earthworks, plan form to village lost.
Township boundary:
Maps 1388, 3019.

Cranford St. John
RAF aerial photographs consulted. See Cranford St Andrew.

Deene

RAF aerial photographs consulted;
CPE/UK/2109 frames 3230-40; fr. 4370-78.

Archaeology
Only two ancient sites were discovered, both Roman and one of them an iron-smelting slag area associated with Roman sherds.

Open fields. Hall 1995, 248.
The furlong pattern is moderately simple based on the central slade.

Enclosed fields. Enclosed 1612.
Maps consulted: NRO FH 272 (c.1585); NRO Map 1352 (collection of Brudenell estate maps 1635); NRO Bru Maps 13 (1601), 1 (1612), 6 (1678), 2 (1737), 3 (c.1738), 8 (1738).
The enclosure process at Deene is very complex but given the plethora of maps it possible to unravel the sequence. Base digitising from BRU Map 13.
Settlement:
From Bru 1. Emparking has significantly changed the village on the south side of the road with many enclosures and buildings being removed. Similarly closes to both sides of the parsonage have been absorbed into the park and the road realigned removing two former access lanes to the church. The park is shown as two adjoining but distinct polygons with the smaller of the two containing deer. The park was extended sometime between 1585 and 1601. The township boundary between Deene and Deenethorpe is shown in 1585 cutting through the centre of what is shown as the deer park on the 1601 map and in 1585 this was open field of Deenethorpe. The 1612 map also notes that this area of the park was 'Sometymes part of Hellands fielde' and a hedge within the park follows the line of the early township boundary and may be the remnant of that boundary. The park boundary has been extended to the west by 1738 taking in much of what was open field but also absorbing some enclosures.

Township boundary:
From FH 272 and Bru Map 1. There are several maps of Deene from the early 17th century and the early 18th century. It is clear from these maps the boundary of Deene changes quite rapidly largely as a result of emparking. The FH 272 maps, though not specifically of Deene, cover the adjacent townships of Deenethorpe, Kirby and Little Weldon. Using all these maps it has been possible to map what is probably the earliest township boundary. Bru Map 1 being the earliest map of Deene has also been used to accurately map the boundary with Little Weldon. The boundary between Deene and Kirby is problematic. There are three FH 272 maps for Kirby dated 1585, 1586 & 1587. The 1585 maps shows the fields of Kirby and Deene, which are adjacent, to be unenclosed. It is possible that the fields of Deene and Kirby were intermixed and were consolidated at Kirby's enclosure in 1586 with part of Kirby's fields going to Deene (Hall). The earliest boundary as shown on the map of 1585 has been used which shows Deene Wood as detached.

<u>Deenethorpe</u>

RAF aerial photographs consulted;
CPE/UK/ 2109 frames 4108-10 for N; main fr. 4245-9.

Archaeology
A single Roman site was discovered.

Open fields. Hall 1995, 248.
The plan is incomplete on the E where it is damaged by an aerodrome. Away from the Willow Brook and the vill, the pattern is simple with furlongs lying under each other on the slope.

Enclosed fields. Enclosed 1650.
Maps consulted: NRO FH 272 (1585); NRO BRU maps 6 (1678), 8 (1738); NRO Map 1352 (collection of Brudenell estate maps 1635).
Base Map BRU 8 shows considerable sub-division of enclosures has taken place since 1678. Deenethorpe is encroached upon by Deene park, see above.
Settlement:
From FH272
Township boundary:
From FH272.

Desborough
RAF aerial photographs consulted;
F21 82_856 frames 311-317 for SW; F22 id fr. 232 NE, fr. 297-304 NW; 541_256 S only fr. 3095-7; UK 2109 centre fr. 4336-8; N is fr. 3280.

Archaeology
Desborough has considerable quarry damage and urban expansion, the former occasioning various 19th century discoveries, notably the Iron Age mirror.
Two lithic sites were discovered.

Open fields.
The incomplete plan could not be improved from an outline plan of 1726 that shows furlong blocks. The 1726 plan has no indication of strip orientation, although this could be provided by an analysis of terriers. The area NW of Gaultney Wood has no furlongs and was probably pasture or wood, consistent with it being called a ‘plain.’ Ridges in Eleven Acre Spinney are probably post-medieval (SP 815 816).

Enclosed fields. Enclosed 1776.
Maps consulted: NRO Map 4642 (estate Map c.1776); PRO MPC 1/42 (Hen. VIII c.1518).
The 1776 Map shows closes towards the NE, many have wood-type names. The enclosure award refers to these closes collectively as ‘plain closes’. This area is shown on the monastic map of 1518 which is the plan of the division of a large plain between Desborough, Rushton and Pipewell Abbey.
Settlement:

From Map 4642.
Township boundary:
From Map 4642.

Dingley
RAF aerial photographs consulted;
CPE/ UK 2109 frame 4283 S; N, CPE/ UK 1925 fr. 1185-7; other S is 541_256 fr. 3338-40.

Archaeology
Apart from village earthworks, the only site discovered was four adjacent scatters of Saxon pottery.

Open fields.
The furlong pattern is dissected with slades.
In 1633 the glebe holding was dispersed between three equal fields called, South Field (28 scattered parcels of 2 roods), Middle Field (32), and North Field (31), with common for 10 cows and a bull (NRO Glebe in X582).

Enclosed fields. Enclosed 1633.
Maps consulted: NRO T140 (tithe 1837).
Some enclosure occurred at Dingley in 1555 when 72 acres were made into a park (Bridges ii p.305). The remainder was enclosed in 1633 (Glebe).
Settlement:
Plan form much altered by emparking.
Township boundary:
From tithe.

Duddington
RAF aerial photographs consulted;
CPE/UK/1925 frames 4124-8; CPE/UK/2109 fr. 4021-5.

Archaeology
The northern half of the township was searched for pre-medieval sites. There were several flint scatters on the light limestone soils and one Roman site. There is background scatter of slag.

Open fields.
The furlong pattern is fairly simple with furlongs lying one under another on the slopes falling to the Welland, except in the deeply cut ground next to Fineshade where there were assarts and old enclosure. Some of the assarts were ploughed flat before the current reafforestation and the pattern at the SE cannot be reconstructed.

The ‘enclosure map’ (an estate map of Hugh Jackson) gives some furlong names (NRO Map 2857). The details have been further worked out by terrier analysis. A terrier of 1577 describes lands in the North, Over and West fields (NRO (J(D) 52). A half yardland was 13 acres. The lands occupied the same furlongs as named in 1775, showing that all the old enclosure next to Fineshade was already in existence. In 1690 there were three

fields called Pitt Field, Wood Field and South Field (J(D) 515). The same fields were used in 1712; Wood Field included an ‘assart furlong’ (J(D) 532). By 1775 (NRO Map 2857) the former South Field had become Fineshade Field and laid to the east. Furlongs are named but boundaries are not marked. At the north was an area called Assart Lands not involved in the enclosure.

Enclosed fields. Enclosed 1774.
Maps consulted: NRO Map 2857 (enclosure Map 1775) NRO J(D)603 (c.1815); NRO Map 3633 (1798).
There were assarts and ancient enclosure next to Fineshade, as mapped in c.1775. The assart lands were enclosed by 1610 (J(D) 541). Land formerly part of Westhay wood were given to Duddington in respect of Forest common rights following the act of 1796 (mapped J(D) 603 c. 1815).
Settlement:
From enclosure map.
Township boundary:
From maps 2857 & 3633.

East Carlton
RAF aerial photographs consulted;
CPE/UK/2109 frames 4126-9 N.

Archaeology
East Carlton was not searched for ancient sites. N of the present vill are medieval type earthworks which are identifiable from the 1726 glebe terrier as an area called Littlethorpe (SP 829 897).

Open fields.
The furlong pattern is simple on the high clay ground and near the Welland but complicated on the scarp near the vill. Toes Hill, lying NW of the village, has a complicated pattern to cover the circular area.
The glebe of 1632 refers to four fields, Toes Hill, Little, Over and North Fields. By 1684 there were three, Town, Toes Hill and Wood Fields, which continued to 1705. They were not exactly equal and there was 8 percent ley in 1684 with 3 people holding 90 percent of the neighbour positions, indicating a regular order. The meadow had subdivisions called wandoles and furlongs had dale name-elements (NRO Glebe terriers). The manor house had a park in 1333 (NRO FH 2484).

Enclosed fields. Enclosed ?1723.
Maps consulted: NRO Map 704 (estate map 1723).
The map of 1723 is probably the private enclosure map since the glebe was open in 1705 and laid in two closes in 1726. Map 704 is a very fine colour plan of the estate with enormous detail. Large closes on the 1723 map have been sub-divided by 1880. The settlement has not increased significantly but the park has almost doubled in size stretching across to the village of Middleton.
Settlement:
From 1723.
Township boundary:

From 1723.

Easton on the Hill
RAF aerial photographs consulted;
CPE/UK/1925 frames 2132; 4119-22; CPE/UK/1932 fr. 2057-60; 4057-59; CPE/UK/2109 fr 3028-31.

Archaeology
The light soils of Easton produced many prehistoric flint scatters as well as Roman and Saxon sites and a slag patch. A significant concentration of sites lies along the small steam feeding the White Water. The southern part of the township within Wittering Aerodrome was not searched.

Open fields.
The furlong pattern lies in large parallel blocks and does not extend to the sandy heath to the S. The pattern is split at the south by a drove funnelling out as it approaches the heath. East of the drove the lands in seven furlongs form a great curve 1100m long, demonstrating that there was large scale planning and that the strips are older than the furlong boundaries. The draft enclosure map of c.1817 shows furlong boundaries, but no furlong names, and indicates the curvature of the lands where they form edges of the quality parcels (NRO Map 2895). There were areas of pasture and leys on the clay slopes.

Enclosed fields. Enclosed1817.
Maps consulted: NRO enclosure plan 15 (1820); NRO Map 2895 (draft enclosure map); BEO M399 (draft enclosure map).
Draft enclosure maps are very difficult to interpret. North of the township mapped by Hall.
There was a small park on the clay scarp below the village, as well as another next to the A43.
Easton is a large township incorporating the full range of landuse types. The boundary of the heath and the drove leading to it from the south of the village are clearly marked on the enclosure map. Apart from a few isolated buildings around White Water there were no buildings outside of the village at enclosure. There were ancient enclosures and woods in the north of the township and woods in the south.
Settlement:
Large and quite complex. Some large irregular plots in west of settlement. A very large plot belonging to the rector with large fishponds lies to the north abutting the church. The row of long narrow tenements in the south of the village when viewed with the furlong data can be seen to have expanded over a furlong re-aligning the road in doing so.
Township boundary:
Enclosure plan 15 and M399.

Fineshade
RAF aerial photographs consulted
CPE/UK/1925 frames 2130-2.

Archaeology
Only the W and S of the township was searched for ancient sites in the normal way, the rest being afforested. However survey in the woods revealed two charcoal areas and a medieval lodge site (S6). In the arable fields was a Bronze Age barrow and the extensive slag deposits noted by Morton.[51].

Open fields
The furlong map is very incomplete because it cannot be reconstructed in the afforested area, most of which had been ploughed flat before planting in the 1920s. Ridge and furrow survives in the wooded ground in four separate places, one at the far NW of the township, showing that there had been an open-field system.
No information is currently available for the open field arrangement. Fineshade was enclosed before 1588 and the only known source is the monastic cartulary that has not yet been studied (Lambeth Palace Library, MS Court of Arches Ff.291).

Enclosed fields. Enclosed *b*.1588
Maps consulted: NRO 5627 from PRO MR398 (1588); PRO MR 1/314 (Cliffe bailiwick c.1640).
The PRO map dated 'c.1600' probably relates to a dispute of 1588 and shows a fully enclosed township.The 'Nether Field' is likely to be enclosed pasture. A deed of 1545 describes the same closes (NRO X5211) so it is likely that there had been monastic enclosure before 1540.
The copy of the PRO map held at NRO is of very poor quality photocopy and very difficult to work with. Details were drawn up to 1:10560 scale on tracing paper by G Foard (not whole of township). This tracing has been used in conjunction with the AP cropmark data for digitizing. AP cropmark table gives accurate boundaries for some of the features notably the western boundary of 'Conygre' and the eastern boundary of 'Wheate Close'. Those areas not covered by G. Foard's tracing have been digitised using D. Hall's data marked up to 1:10560 and a photocopy of the early map.
Settlement:
There was no nucleated settlement at Fineshade.
Township boundary:
PRO MR398, PRO MR 1/314.

<u>Fotheringhay</u>
RAF aerial photographs consulted;
CPE/UK/1925; frame 3108 NE; S, fr. 1109-15.

Archaeology
The township revealed a range of sites from pre-historic flints, a Bronze Age barrow, Iron Age and Roman settlements and most interestingly Saxon pottery mixed with Iron Age and Roman sherds from Walcott Lodge, the area being called Walcot Field in the 18th century (NRO Map 468).

Open fields.

[51] Morton, J. (1712) *The Natural History of Northamptonshire*..

The furlongs are split into three groups by the brook from Southwick; each is fairly planned. The Park encroached on to the field system.

Enclosed fields. Enclosed 1635
Maps consulted: NRO Map 467 (estate map 1716).
Fotheringhay was enclosed in 1635.[52] There is a very complex pattern of closes in 1716 and it is unclear why, since they do not follow furlong boundaries. By 1880 this pattern has been completely replaced.
Settlement:
Fotheringhay is a linear settlement with open areas of ground at either end. There is little open ground left within the former market place.
Township boundary:
Map 467.

Geddington
RAF aerial photographs consulted;
541/256 frames 244-8, & 283; 541/256 fr. 3103-7.

Archaeology
Geddington is damaged by quarrying. Only one site was found, a slag patch near the Chase.

Open fields.
The furlongs are split into two parts by the River Ise, the patterns are fairly simple. The Bancroft Closes to the E were probably pasture, and the Brand to the NW certainly was, all the ridge and furrow visible in it being post-medieval. The field structure is complex. The furlongs correspond closely to the open-field map of 1717 (NRO Map 1379; fieldbook, 1716 Buccleuch 10/52 in X354); information for the quarried area was supplied from this map. There was a small area of cow pasture to the south that had probably been open field, but lying in the quarried area this could not be determined.

Enclosed fields. Enclosed 1807.
Maps consulted: NRO Enclosure Plan 18 (Geddington & Weekley 1810); NRO Map 5965 (Geddington Chase 1810); Boughton House Maps: Manors of Boughton, Warkton, Weekley & Geddington (Nunns 1714, Booth 1715); Geddington Fields (1717 Booth); Geddington Chase (1735 Brasier); Geddington Chase (1801 Gibbons); The Brand (1604). PRO MP BB 2 (The Brand 1610); PRO MPI 1/250 (Brigstock parks 1760).
Geddington is very complex with numerous maps all showing different features of the township. The enclosure plan has been used as the base map as it shows the whole township. Geddington Chase was part of the Brigstock bailiwick within the Forest, it has been mapped from the 1735 original at Boughton House. The 1810 map of the Chase at NRO shows rectilinear ridings being laid over the top of the earlier curvilinear pattern. There was a dispute over the area called the Brand in the early 17th century. For a full discussion of this see under Newton.

[52] Bridges, J. (1791) *The History and Antiquities of Northamptonshire*., ii 356.

Settlement:
From Enclosure Plan 18.
Township boundary:
Geddington township boundary has been taken from the Geddington Fields map of 1717, PRO maps of the Brand and Brigstock parks, and Enclosure Plan 18. It includes Bancroft closes as these are shown on the enclosure map and abut the boundary with Brigstock Great Park. It also includes the detached area called 'part of Geddington Fielde' to the north of the Brand shown on the 1610 map of the Brand and on the enclosure plan. It includes West Leas, but excludes the Brand.

Glapthorn & Cotterstock
RAF aerial photographs consulted;
CPE/UK/2109 frames 3230-40; fr. 4370-78

Archaeology
There is a range of sites from prehistoric flints to an iron-smelting site and a late medieval/16th century pottery kiln. The known Roman villa site was obscured by pasture.

Open fields
The furlong pattern is fairly simple, being dominated by the slade of the Benefield Brook, and furlongs lie one under the other. The NE against Perio Barn was not reconstructable. One field system seems to operate for these parishes, with intercommoning restricted on some of them (Hall 1995, 272). There were multiple fields in 1470, 1563 and 1635.

Enclosed fields. Enclosed 1813.
Maps consulted: NRO 2842 (enclosure map, Glapthorn & Cotterstock 1814); NRO Map 2991 (1635); NRO Maps 4526/1-8 & 4537 (1614); NRO BRU J.XXX.vi 17 (Provost Closes 1673).
There was early enclosure north of Glapthorn according to the park-type bank (in the Frith Close of 1614) and the small medieval site (1) that was possibly a lodge. This was located in the demesne Hall Close of 1614 (Map 4526). Map 4537 shows the unenclosed roads and some hedges in open fields. The roads have been realigned by or at enclosure, particularly in Cotterstock. Unenclosed roads have been mapped.
Settlement:
Township boundary:
From NRO maps 4526, 2991, 2842.

Glendon
RAF aerial photographs consulted
F22 82_865 frames 235; 321-3; 411. 541/256 fr. 4099, 4101-3.

Archaeology
Most of Glendon has been quarried and the current landuse of the undisturbed ground is mainly pasture, so no sites could be discovered.

Open fields

The surviving furlong pattern is determined by the slades that fall to Rothwell brook.

Enclosed fields. Enclosed 1514
Maps consulted: Two estate maps of Glendon, 1830 & 1869 have been located in private ownership, Mr. M. Hipwell of Glendon.
Settlement:
There is no nucleated settlement at Glendon in 1830 only the Hall and park and two farms at the west and east of the township.
Township boundary:
From 1830 map.

Grafton Underwood
RAF aerial photographs consulted
541/256 frames 3110-1; 3364-6 aerodrome; 4109-13 S; F22 82_865; fr. 335-7; 395-9; ditto F21 far S fr. 396-98.

Archaeology
Grafton was not searched for pre-medieval sites except for Grafton Park Wood in which there was one irregular earthwork enclosure. It is probably Iron Age or Roman, of the type that occur in neighbouring Brigstock Park. There is damage caused by the aerodrome.

Open fields.
The furlong pattern is a very simple planned arrangement with large furlongs draining to the central slade in which the vill lies. The open-field map of c.1748 shows that all the heavy ground at the north was cow pasture (NRO Map 1372). Although the area has been destroyed by the aerodrome, APs show that much of it had been ridge and furrow.

Enclosed fields. Enclosed 1777.
Maps consulted: Boughton House Maps: Grafton Underwood & Boughton woods (undated); Grafton Underwood (Brasier c.1748); Grafton Underwood (Eagle 1801).
There is some ancient enclosure on the 1748 map in the north of the township between the woods and the cow pasture.
Settlement:
From 1748 map.
Township boundary:
From 1748 map.

Gretton
RAF aerial photographs consulted
CPE/UK/1925; Far N frame 3148; main 1148-52. S CPE/UK/2109 fr. 4123 & 22.

Archaeology
Some of Gretton has been destroyed by quarrying.
A Roman site and areas relating to ironworking were found, especially S2 where there are three slag heaps about 15m in diameter. The most interesting site was a Saxon pottery

scatter lying close to the DMV called Cotton. The Saxon site is most probably the source of the name, rather than the medieval hamlet, by analogy with other known field names called ‘cotton’ where there are Saxon sherds.

Open fields.
Below the Welland Valley scarp, the furlongs lie in a simple pattern as do what little survive on the high ground. There are a few areas of ridge and furrow on the scarp, but most of the steep slopes were left as pasture that are marked as demesne closes on the 1587 Map (NRO FH272). The map was made to show the disposition of a dispersed demesne, and the isolated strips correspond well with the mapped plan. The 1947 APs are very clear for the NW of Gretton, which then remained as an extensive area of ridge and furrow (CPE/UK/1925, frames 1150-52).

Enclosed fields. Enclosed 1832
Maps consulted: NRO enclosure plan 17 (1837); NRO FH 272 (1587).
There is a block of ancient enclosures in the south west of the township and more scattered along the boundary with the Forest that are virtually unchanged from 1587 to 1837.
Settlement:
In 1587 Gretton is a fairly complex settlement with what appears to be encroachment and infilling of a central green or possibly market place. There is a cross in open ground in front of the church in 1587 but it is not shown in 1832. The manor and church are to the north of this area. By 1832 the village has expanded, particularly in the number of buildings, but has retained its plan form which it still retains today.
Township boundary:
Enclosure plan 17, FH272.

Harrington
RAF aerial photographs consulted
541_256; frame 4091-5; N & Newbottle 3087; F22 82_856; fr. 307-13; S, F21 id. fr. 428-22

Archaeology
There were 11 sites discovered in Harrington, ranging from early prehistoric to Saxon. The parish includes the deserted settlement and township of Nobottle.

Open fields. No data.
The furlong pattern S of the east-west ridge road is fairly simple; to the north it is much dissected by slades running to the brook. A high percentage of both townships was arable. The rectory and church site are of interest located on their own half way between Harrington and Newbottle.

Enclosed fields. Enclosed ?
Maps consulted: NRO T221 (Harrington tithe); NRO Map 4642 (Desborough 1776).
Closes virtually unchanged from tithe to 1880s with the exception of the very large fields in the south east of the township which have been sub-divided.

Settlement:
From T221.
Township boundary:
From T221 and Map 4642 for boundary with Desborough.

Harringworth
RAF aerial photographs consulted
CPE/UK/1925 frame 2138-44 for N; main fr. 3138-48; far S fr. 1140-48.

Archaeology
Much of Harringworth has been destroyed by quarrying and an aerodrome.
The light soils produced prehistoric flint scatters and several Saxon sites, and there was a widespread scatter of slag.

Open fields.
What survives of the furlong pattern is simple on the slopes of the Welland Valley at the N, and more broken by slades near the vill. To the S, APs show that there had been ridge and furrow taken into the medieval park.
There are two maps that show the furlong boundaries; 1619 and 1732, the latter with names (NRO Maps 4727, 763B). They are conformable with the mapped remains. Since the maps do not indicate strip direction it is not possible to determine which boundaries would give the physical remains of headlands (until a detailed analysis of terriers has been made).

Enclosed fields. Enclosed 1774
Maps consulted: NRO Map 4527 1-10 (1619); NRO Map 763b (1732).
An embanked ringwork (Site 1) located across a slade (to have access to water?) have been interpreted as a medieval sheepfold referred to in 1273.[53]
The south was subject to two stages of emparkment. First in 18 Hen III (Bridges ii,) a park was 'made from a wood called stockes extending by the common field'. The NE boundary of this park as mapped in 1619 zig-zags around the furlongs lying on the N. The 'new park,' lying farther S, next to Bulwick field is named on Gretton 1587 Map (FH 272). The 1619 map shows the woods and a large lawn. There still survives an EW wall dividing the two parks.

Settlement:
Settlement digitised using tracing of Map 4527, G. Foard's digitised settlement plan and the rectified RCHM earthwork survey to 1880s 1:10560 base.
Township boundary:
From Map 4527.

Islip
RAF aerial photographs consulted

[53] Hall, D. (1995) *The Open Fields of Northamptonshire*, Northamptonshire Record Society, Northampton., 15.

F21 82_865 frames 382-6 for S & N, F22 id. fr. 343-7.

Archaeology
Islip revealed prehistoric sites of all periods, both lithic and Iron Age, and one Saxon site.

Open fields.
The furlong pattern is substantially rectangular fitting in with the north-south draining slade.

Enclosed fields. Enclosed 1800.
Maps consulted: NRO Enclosure Plan 36; NRO Map 2849; Award Enclosure Vol. K; NRO 180P 593/594
The enclosure map shows 480 acres to the north-west that may be old enclosure, but was included in the enclosure process to gain exemption from tithes.
Settlement:
Quality of maps was very poor. Very difficult to identify close boundaries and buildings within settlement.
Township boundary:
From Map 2849.

Kettering
RAF aerial photographs consulted.
CPE/UK 1925 frames 1233-7 for S; centre F21 82_865 fr. 404-10; id. F22 fr. 323-29 & 406.

Archaeology
The urban expansion of Kettering has enveloped the township, except for a few ridge and furrow fields at the NE and some fragmentary remains in the Wicksteed Park.

Open fields. Hall 1995, 301-3.
The furlongs have been drawn from the Brasier map of 1727, leaving space for pasture by the slades. There is no information for the west which was enclosed at that date. The pattern is fairly simple and looks planned. The Brasier map has a fieldbook of 1728 (NRO Buccleuch Terriers, Map 5730).

Enclosed fields. Enclosed 1804.
Maps consulted: NRO FH 272 (1587); NRO Map 1411 (1727); NRO 2648 (enclosure map 1804).
The demesne on the west was enclosed by 1587, but was still probably open in 1543 when it was 'pasture and arable'.[54]
Settlement:
Map 1411 with additional data from G. Foard. Enclosures in settlement mapped as tenement blocks due to the complexity of the data. There is an additional table 'settlement line' which details the subdivisions within the closes
Township boundary:

[54] Ibid..

From Map 1411.

King's Cliffe
RAF aerial photographs consulted;
CPE/UK/1925, frames 2117-26. N of Park fr. 4122, 1119. S fr. 3124-8.

Archaeology
There are many sites at King's Cliffe, some Roman, but most of them connected with charcoal production and iron smelting. A possible Bronze Age cairn lies in the Buxton Wood, now added to the civil parish (S19).

Open fields.
The furlong plan is fairly simple with furlongs draining towards the main slade.

Enclosed fields. Enclosed 1809.
Maps consulted: NRO Map 2860 (Enclosure 1813); NRO Map 2695 (Cliffe Park c.1592); BEO M375 (Cliffe Park 1711); BEO M119 (park and woods c.1800); PRO MR 1/314 (Cliffe Bailiwick c.1640).
There was a band of ancient enclosures almost all the way around the township boundary. The Park was mentioned in 1227-31 and expanded on to some of the open fields of King's Cliffe and Apethorpe in 1339.[55] A stone wall 7 feet high around this southern part was built in 1361, much of which still exists. Some of the 14th-century ridge and furrow also survives (TL 016 972), being cut by a quarry in use for stone to build Burghley House in the 1550s. (Till 1997-8, 330).
A map of c.1592 shows the parkland landuse of coppices, lawns and a lodge (Map 2659). It was disparked soon after being divided into closes and the woods removed (mapped in 1711 & 1800 (NRO copy Map 4365)).
Settlement:
From enclosure map.
Township boundary:
From enclosure map.

Kirby
RAF aerial photographs consulted;
CPE UK 2109 frames 4214-18.

Archaeology
Much of Kirby has been quarried and it was not searched for ancient sites.

Open fields.
The furlong pattern is very simple where it survives, being based on the slade.

Enclosed fields. Enclosed 1587.

[55] Steane, J. (1974) *The Northamptonshire Landscape*.5, 227.

Maps consulted: NRO Enclosure Plan 17 (Gretton 1837); NRO FH 272, maps of 1585, 1586, 1587.
FH 272 has three maps showing Kirby dating 1584, 1586 and 1587. These show the process of enclosure and the removal of part of the settlement to make way for the formal gardens. After enclosure in 1587 some of Kirby was transferred to Deene.
Settlement:
Most of the settlement is removed at enclosure and by emparking. By 1837 only the hall remains.
Township boundary:
FH272

Laxton
RAF aerial photographs consulted;
CPE/UK/1925, frames 3136-40. Far S fr. 1138.

Archaeology
Laxton produced a Roman site and some slag.

Open fields
The furlong pattern is fairly simple at the south, but incomplete at the north where it has been obscured by the 19th-century landscape emparkment for Laxton Hall.
The glebe of c.1633 names three fields Nether, Spannoe and Windmill Field, and includes 10-acre and 16-acre pieces as well as individual lands and small closes. The closes may have been the result of partial enclosure or woodland assarts.

Enclosed fields. Enclosed 1772.
Maps consulted: PRO MR 1/314 (Cliffe Bailiwick c.1640).
Enclosure of 1334 acres of open field was completed in 1772 with some lands in Blatherwycke (Act B(D) 707 (1772); Award (1773) Enclosure Enrolment Vol. M p.36).
The Forest map is not of sufficiently high resolution or accuracy to map settlements or closes. Woods only mapped from 1640. No other map pre-OS 1st edition 1:1056 identified for Laxton. Township excluding woods and settlement mapped as 'no data'.
Settlement:
Mapped from OS 1st edition 1:1560.
Township boundary:
PRO MR 1/314 and maps from all adjacent townships.

Lowick
RAF aerial photographs consulted
541_256 frames 3360-3 & 4113-7; also F22 82_856 fr. 341-5; far S 21 id, fr 388.

Archaeology
There were several sites ranging from prehistoric flint scatters to Saxon in the fields. One of the Saxon sites was on a villa site with ploughed-out tesserae, possibly the site recorded as found near Drayton House in 1736 (VCH i (1902), 194).

Open fields.
The furlong pattern is fairly complicated because of dissection by slades; there are planned blocks of furlongs at the W. In the woods to the NE, on Lowick Green, is a large earthwork enclosure (pound) that features in commoning disputes with Aldwincle in 1552. There is a field book of the early 18th century (NRO ML 115).

Enclosed fields. Enclosed 1771.
Maps consulted: No map has been identified for Lowick.
Mapped as 'no data' except for Woods from OS 2" 1st edition draft maps and settlement from OS 1st edition 1:10560.
Drayton: probably buried under park. No documentation, earthworks or maps. Detached settlement to the west of Lowick may be Drayton.[56].
Township boundary:
NRO Maps 5154, 2849, 1409, 4323, (adjacent township maps) OS 1st edition 1:10560.

Lyveden
RAF aerial photographs consulted
CPE/UK 2109 frames 4417-21; 3419-21. Obliques; CUCAP UC 22-31 & ATT 30-33.

Archaeology
There are many Iron Age and later sites, including the two main Lyveden the vills that have been recorded under the townships into which Lyveden is divided.

Open fields.
Only small areas of furlongs could be mapped. Most of the ridge and furrow recorded on APs is post-medieval (including that published by the RCHM[57]). A few genuine furlong boundaries survive. It is unlikely that a regular open-field system operated in this valley of dispersed industrial settlement.

Enclosed fields. Enclosed 1540.
Maps consulted: NRO Map 6331 (Aldwincle); Enclosure Plan 60 (Brigstock); NRO T115 (Pilton); NRO T174 (Benefield).
There is no map of 'Lyveden'. Each of the above maps show sections of Lyveden that make up the whole. The boundaries of these sections have been mapped to 'Lyveden'. The closes and buildings shown on the individual maps have been mapped to their 'parent' township.
Enclosed as a park in 1540.[58]
Settlement:
There is no nucleated settlement at Lyveden.
Township boundary:
From maps 6331, T115, T174, enclosure plan 60.

[56] Hall, D. (1995) *The Open Fields of Northamptonshire*, Northamptonshire Record Society, Northampton., 311-2.
[57] RCHM (1975) *An Inventory of the Archaeological Sites in North East Northamptonshire*., 73.
[58] Steane 1975, 227-8.

Nassington
RAF aerial photographs consulted
CPE/UK/1925; SE frames 3106-12; Far W fr. 3116; N 2114-16.

Archaeology
Nassington was partly searched for early remains and revealed Roman and iron-working sites. More study would doubtless discover prehistoric sites on the light soils of gravel and limestone.

Open fields.
The furlongs fit into the lobes defined by streams and the N-S road. A long SW tongue reaches near to Walcot in Fotheringhay. A survey of 1551 describes the furlongs and will assist with their identification (NRO W(A) 4.xvi.5).

Enclosed fields. Enclosed 1778
Maps consulted: NRO enclosure Plan 15 (1778, copy made 1914, includes Nassington, Yarwell, Apethorpe & Woodnewton); NRO Map 1498 (Nassington Woods c.1800); NRO Map 1499 (Nassington Woods 1797).
Enclosure plan very poor. Ancient enclosure difficult to distinguish from map. Colour coded but colour of old enclosures virtually the same as 'new enclosures copyhold of the Earl of Westmorland' both yellow. Not helped by the fact that the map is discoloured and the background is also yellow. Nassington woods, comprising Sulehay, Fermes and Shortwood, were in the Cliffe Bailwick and part the Forest.
Settlement:
Tenements in settlement virtually unchanged by 1880. Very small dense tenements around three sides of a square.
Township boundary:
Enclosure plan.

Newton Willows
RAF aerial photographs consulted
F22 82_865 frames 240-246 for N; NE is fr. 283; F21 fr. 285-291 for S

Archaeology
A Roman site and a large area of Saxon pottery were discovered.

Open fields. Hall 1995, 322.
The furlong pattern is partly damaged by quarrying. It seems to have been fairly simple with furlongs aligned on the River Ise, modified in the centre by slades running to the Great Newton.

Enclosed fields. Enclosed c.1605.
Maps consulted: NRO Map 1374 (Newton le willows Manor 1717); Boughton House Maps: Newton (1717 Booth); Newton (c.1717 Booth); The Brand 1604; PRO MP BB 2 (The Brand 1610).
Enclosed in c.1605 by the Treshams.

The Brand was originally an area of waste within the Forest in which the villagers of Geddington, Stanion, Brigstock and Little Oakley had various common rights. It was at the centre of a land dispute between Thomas Tresham and William Montagu that came to head between 1607-1610. Thomas Tresham had illegally enclosed part of the Brand insisting that it was part of Newton parish, whilst Montagu claimed it as part of Geddington. For a full discussion of the dispute see B. Bellamy (1986). PRO MP BB 2 is two copies of the same map of the Brand dated 1610 one may be the draft for the other. The 'draft' map of the Brand clearly labels the area of the Brand as 'Newton Wood' and 'Newton waste'. It also calls West Lees 'Newton Lee' though this is included as part of Geddington at enclosure. Despite the documentation relating to the Brand it has not been possible to clearly define which township it originally belonged to as the outcome of the dispute is not known. By 1717 (Newton Lordship map) the Brand has become part of Newton. But whether this was as a result of the dispute is not clear as by 1717 Newton is also in the ownership of the Montagus and the Boughton estate maps are not necessarily concerned with township boundaries. The Brand has been included in Newton township.
Settlement:
There were two settlements at Newton, Great and Little. Great Newton medieval extent from is mapped from earthworks and APs but uncertain extent as earthworks are poor. It was also very difficult to get a post-medieval area as the maps are so poor, either the buildings are nearly impossible to see or they are not depicted at all. Little Newton medieval extent is mapped from earthworks and APs. By 1717 there is no nucleated settlement at Little Newton only the church and buildings associated with the hall.
Township boundary:
Boughton 1717 and PRO MP BB 2.

Oakley, Great
RAF aerial photographs consulted
F22 82_265 frames 287-8; CPE/UK/ 2109 fr. 3265-8; 541_256 fr. 4349-52; NE F21 88_865 fr. 243.

Archaeology
Great Oakley was not searched for ancient sites and has much quarried land and urban development at the north.

Open fields
The field pattern south of Harpers Brook consists of a few furlongs only. What little survives to the north is affected by smaller slades. The RAF APs show strips lying in some of the area now quarried but most of them are post-medieval.
The furlongs lying S of Harpers Brook were the villein fields that were divided into three in a very regular order by 1329 and until enclosure in 1784 (Cave of Stanford Cat. nos 562-6; B(O) 316/3; Map 895 (1744), published by Moore-Colyer[59]). One field in 1572 consisted of a single furlong (B(O) 316/3).

North of the brook was a block demesne called the Hall Field. A rental of 1511 refers to (open) land in Hall Field next to Neusted (NRO B(O) 322/11, rental 4 Hen 8). Newsted is

[59] More-Colyer (1997) *Agricultural History Review*, **45,** 149-164..

the name of a small 1744 close lying north of the village and so identifies the area as the Hall Field. It is again mentioned in 1543 (NRO B(O) 319/5 grant of Pipewell Abbey land) and in 1579. The Hall field was mostly arable before 1543. In the early 13th century 3 acres of land was said to abut Thornhawe; these lands lie in the later Colliers Field. There was also a Thornhawe furlong that may have been arable on the site of the wood, or a furlong adjacent to it (NRO B(O) 316, charter CB 11). Reference was made to five butts (short lands) abutting the Hey in 1511 (NRO B(O) 322/11 rental 4 Hen 8); these were arable strips that also became part of Colliers Close or Field.

Enclosed fields. Enclosed 1786.
Maps consulted: NRO Map 895 (1744); NRO 898 (c.1820); NRO Map 2919 (Rockingham Bailiwick enclosure 1838); NRO FH272 (1585); PRO MPE 1/457 (Pipewell C17).
The date of enclosure of the Hall Field was probably between 1511 and 1543 when Newsted was called a close. Most of the other closes north of Harpers Brook are named in 1564, 1572 or 1579. At the time of enclosure not all the land belonged to the lord of the manor, since other owners are present. The three Cottiers Closes are so-called in 1579 and, from the name-form, were land granted to cottars in return for loss of common grazing rights. Abor is described as a close in 1572 and 1759 and variously as Abor Field or Arbour Field. It was clearly enclosed and the use of the name 'field' is in the modern sense. Colliers field is not stated to be a close until 1759, but it almost certainly had been enclosed with the others since the mid 16th century.
The South Fields were enclosed privately in 1786 (Moore-Colyer 1997, 157).
Settlement:
Mapped from 1744 and 1820 maps. A table 'settlement line' has been added to the data for the 1820 map as many of the features around the hall are associated with a designed landscape, such as formal gardens and ponds, rather than being closes.
Township boundary:
Taken from the map of 1744, though the land in the north-east corner has been excluded as it was part of the Rockingham Bailiwick and remained so until the Forest was enclosed in 1838. The boundary with the Forest has been taken from Map 2919 and FH272 of c.1585. Both of these maps have the same boundary with Great Oakley and FH272 clearly labels Oakley. The boundary with Pipewell has been taken from Map 895 and the Pipewell Map PRO MPE 1/457, both having the same boundary.

<u>Oakley, Little</u>
RAF aerial photographs consulted
N is F21 88_865 frames 242-245; South, F22 fr. 242.

Archaeology
Prehistoric flints and Roman sites were found. A mound at the south near a furlong called mill leys in 1727 is probably for a windmill.

Open fields.
The furlong pattern S of the Ise is approximately rectangular. To the north it is more affected by slades. The southern open-field area mapped in 1727 (NRO Map 1386) is

similar to the field survey. There is a fieldbook of c.1730 (NRO Buccleuch16/1/1 in X379, and Map 5729).

Enclosed fields. Enclosed 1807.
Maps consulted: NRO Enclosure Plan 24; NRO Map 1386 (1727); NRO Map 4321 (1725/50); NRO Map 1406 (1733); NRO BRU Map 125 (includes Corby & Stanion 1733); Boughton House Maps: Little Oakley (1727 Nunns); The Brand & Little Oakley (1604).
The north half of the township is enclosed by 1727. The1727 map shows most of the township but omits the wood to the east which incorporates 'Sallow Coppice', Rudmore Haw' and 'Brockwelldale Coppice'. At enclosure in 1807 these coppices are called 'Oakley Purlieu' and are shown as part of the township. The large closes, some of which were once coppices, in the north-west of the township on the 1727 map become part of Great Oakley at enclosure.
Settlement:
Boughton map of The Brand 1604 is the earliest map for Little Oakley settlement. Settlement does not appear to have changed dramatically from 1604 to 1727. Some of the closes to the south have altered and there are more houses on the later map. Mapped from Boughton 1727 map.
Township boundary:
Boughton 1727 map and NRO BRU Map 125.

<u>Oundle</u>
RAF aerial photographs consulted
CPE/UK/2109 frames 4409-17; fr. 3417-09.

Archaeology
Oundle yielded several sites from prehistoric to late Saxon, the latter being the site of a DMV called Hardwick according to the fieldname in a 1565 fieldbook (NRO ML 116)).

Open fields.
There is loss of the complete furlong pattern by urban development. The western furlongs form a rectangular block and the eastern lobe fits in with the river meadows. At the N there is a furlong on the outside of the former Hill Wood. The ridge and furrow in Biggin Park is post-medieval. The fieldbook of 1565 will assist in furlong identification.

Enclosed fields. Enclosed 1807.
Maps consulted: NRO Map 2858 (enclosure 1810)
Biggin Park has encroached on some of the open fields at the NW.
Settlement:
Closes and buildings in the settlement digitised to G. Foard's original data. Enclosures in settlement mapped as tenement blocks due to the complexity of the data. There is an additional table 'settlement line' which details the subdivisions within the closes
Township boundary:
Map 2858.

Pilton
RAF aerial photographs consulted
CPE/UK 1891 frames 2296-2300; N 2109 fr. 3419-21.

Archaeology
Pilton has several Iron Age and Roman sites and two parts of the Lyveden Valley medieval complex fall into the township.

Open fields.
The furlong pattern is remarkably rectangular and based on the wide drove running W to the woodlands. There may have been a few more furlongs to the west, but the field evidence is not clear.

Enclosed fields. Enclosed c.1630
Maps consulted: NRO T115 (tithe); NRO Map 3768 (estate 1769).
The map of 1769 shows only the eastern half of the township. The tithe map shows all of the township. Both have been digitised. Between the two dates there are a few changes in the settlement but no major building phase has taken place. There appears to be some subdivision of the meadows and Woad close has absorbed the smallest of the closes into the one adjoining on the south. The area of the pinfold with a close adjoining it in 1769 has been absorbed in to the larger close abutting to the south. The closes along the south of the township are less complex though the basic pattern is still there. They appear to have lost boundaries rather than seen sub-division but it is not extensive. There is a farm complex in the closes to the north of the road but as this area was not mapped in 1769 it is impossible to say whether it is an addition or not. There are no other buildings external to the settlement shown on the Tithe that are not there in 1769
Settlement:
From 1769 map with APcrop, APewks. Though there is little change between the two maps Pilton has seen substantial loss of settlement from Hall Close as evidenced from the AP data.
Township boundary:
From Tithe Map.

Pipewell
RAF aerial photographs consulted
CPE/UK/2109 frames 3269-79 main; S, 82_865 F22 fr. 233-8, NE 541_256 fr. 4347.

Archaeology
Some of Pipewell has been quarried and the NW is damaged by Desborough aerodrome. Fieldwork on the remainder has been partial in terms of ancient remains. One Roman site was identified and there are two mounds on the E that are probably follies rather than ancient monuments. Details of a millpond in the monastic cartulary allow the identification of the present Lower Lodge Farm as the site of the monastic East Grange.

Open fields

The furlong pattern is based on one or two furlongs lying on either side of Harpers Brook that divides the township between Rushton and Wilbarston parishes. On the NE the strips are very long. The cartulary gives some medieval furlong names, but makes no statement about the field arrangements.

Enclosed fields. Enclosed *b.*1547.
Maps consulted: PRO MPC 1/42 & MPC 1/69 (Hen. VIII c.1518); PRO MPE 1/457 (LLRO 1/307 17C)
The monastic map, c.1518, suggests that most of the township was open. It seems to be enclosed by 1547 (Allison et al 1966, 45).
Settlement:
The settlement has been mapped from the OS 1st edition 1:10560. Settlement extent for post-medieval has usual the problems with emparking in addition to the 17C map not showing the buildings. Extent taken from 1810s and 1880s OS. Medieval extent from early map and earthworks.
Township boundary:
PRO MPE 1/457.

<u>Rockingham</u>
RAF aerial photographs consulted
CPE/UK/2109 frames 4123-6.

Archaeology
Two sites were discovered, one Roman and the other Saxon.

Open fields
In the Welland Valley and on the high claylands there are furlongs with many lands in the same direction. In between, on the scarps, the pattern is fragmented with areas of pasture

The demesne, in 1544, laid in four fields; approximately 37 acres in Overfeld, 3.75 in Westfeld, 23.5 on Mylfeld and 23 acres in Estfeld (Watson Muniments at Rockingham Castle, A5.4/14). The middle two were adjacent and likely this represents a three-field arrangement. The land in Overfeld and Estfeld were single furlongs and the greater part of that in Mylfeld was in one furlong, so it was a dispersed demesne but in very large pieces. There were also 42 acres of meadow and 32 acres of pasture on the Welland Valley scarps, also dispersed with some in pieces as large as 13 acres.

Field regulations are described in various court rolls (Watson A.5.22). Sheep were not to be kept upon Rockinghamshire or the Plain after May Day above the stint (1558). Wood, nuts and crabs could be taken from the Park with the lord's licence; peas were not to be gleaned on another man's land; hogs were to be sent to the swineherd; tenants were to have two loads of wood in their yards [for winter use] (1572). Wool was not to be gathered on the shire or in any close or field until 7.00am. Footpaths were defined for use when the fields were sown (1580). A series of orders including most of those above was made for 1584. It was stated that cottagers could have 2 kine and a breeder, 1 horse and 12 sheep per cottage. The herdsman was paid by a levy on the farmers who also gave him

2 measures of milk on Trinity Sunday and St Dionysus. The hogherd kept pigs together from Michaelmas until the harvest was in. Each farmer could have 2 geese and 1 gander, and a cottager could have one of each.

Rockingham open-field farmers had for common grazing, river meadows, valleyside scarps, and the common of Rockinghamshire plain next to the Forest, as well as the open-field stubble after harvest. There were the additional rights in the Forest itself. A map of 1805 shows furlong boundaries and gives their names and acreages (NRO Map 2329).

Enclosed fields. Enclosed between 1804-15.
Maps consulted: NRO Maps 2328 (1615); 2329 (1806); 2330 (1815); 2331 (1822).
Some of the open fields were taken into the Park at different dates as it was enlarged, mainly in 1485.[60]
Settlement:
Mapped from 1615 and 1815.
Township boundary:
From Map 2328 as it is the earliest map for Rockingham and Map 2329 as it gives the boundary through the park between Rockingham and Cottingham. Most of the extent of the park is excluded from the township as it quite clearly encroached into Cottingham. The first record of the park is in 1256 and it is likely that even at this date it took in part of both Rockingham and Cottingham.[61]

Rockingham Forest
Rockingham Bailiwick enclosed 1838.
Maps consulted: NRO FH272 (Rockingham bailiwick 1580-1585); NRO Map 2919 (Rockingham Bailiwick enclosure 1838); NRO Enclosure Plan 17 (Gretton); NRO Map 3569 (The Forest 1600 Pettit); NRO BRU Map 126 (copy of 17C map); NRO Map 1498 (Nassington Woods c.1800); NRO Map 1499 (Nassington Woods 1797); PRO MR 1/314 (Cliffe Bailiwick c.1640); PRO MPE 1/459 (Forest Perambulations of 1285 & 1299, 17C); PRO MR 1/317 (Rockingham Forest late 18C); BEO M119 (Westhay c.1800); PRO MPI 1/250 (Brigstock Great & Little Parks, 1760); NRO Map 3112 (Fermyn woods 1728); NRO 2859 (Brigstock enclosure 1805; Boughton House maps Geddington Chase (1735 Brasier); Geddington Chase (1801 Gibbons); NRO Map 5965 (Geddington Chase 1810).

There were three bailiwicks within the Forest; Rockingham, Cliffe, and Brigstock.

Cliffe Bailiwick: The three principle and separate areas of woodland within Cliffe were Morehay, Westhay and Sulehay. Of these only the southern half of Westhay survives, though a small part of Morehay has been replanted. These woods have been mapped from a variety of sources the most important of which is the PRO map of 1640 an exceptionally fine and important document. This map covers the whole area of the bailiwick and records enormous detail relating not just to the woodland, giving detail of

[60] Steane, J. (1974) *The Northamptonshire Landscape*.5, 230-1.
[61] Foard, G. (2001b) Northamptonshire County Council., unpublished report in SMR.

the perambulation, coppices, greens, lawns, plains, ridings and lodges, but also of the settlements, parks and field systems.
Brigstock Bailiwick: The two principle and separate areas of woodland within Brigstock were Fermyn woods and Geddington Chase. Brigstock Great and Little park were also part of the Forest until disafforestation in 1603. The earliest maps for the parks are from 1603 when clearance has already taken place. Both Fermyn and the Chase have a reasonably good degree of survival though Fermyn has been partially replanted, replanned and emparked. The Chase has lost approximately sixty per cent of its total area and has also been replanned though much of the earlier riding pattern is retained. These have been mapped from NRO 3112 of 1728 and the Boughton map of 1735.
Rockingham Bailiwick: The Rockingham bailiwick had the largest continuous extent of woodland within the Forest. The maps for this area are particularly fine with a series from 1580 to 1585 (FH272) giving details of the plan form of the coppices, lawns, ridings and lodges and depicting the activities that took place within the Forest particularly hunting. It is also the only area of the Forest for which an enclosure map survives. All mapping has been done from the enclosure map, as the most accurate, with reference to FH272. All details have been recorded including type, coppice, green plain etc with names. Woods outside of the 1838 enclosure boundary have been mapped from their individual township documents, FH272, or from the OS 2" 1st edition draft maps. Although some small woods had been lost either to assarting or they had been removed from Forest jurisdiction there was a remarkable degree of survival between 1580 and 1838. However as a result of industrial processes in the form of quarrying and urbanisation only thirteen per cent of the enclosed area survives in fragmentary form.

<u>Rothwell</u>
RAF aerial photographs consulted
F22 82_856 frames 313-325; main 541_256 fr. 4095-4101 & 3095-99.

Archaeology
There are several prehistoric flint scatters of all dates on the ironstone soils, as well as Roman sites. A fragment of a Saxon brooch probably came originally from a cemetery.

Open fields.
Rothwell has some damage by quarries and urban development. The furlong pattern is linear dominated by parallel slades. The furlongs at the north are much dissected by small slades running into the River Ise.
A terrier of 1677 (JHR 114) had land equally distributed between three fields called Wood Field, Kipton Field, and Moore Field. There were 14 percent leys, and reference to a jointway and littlewood leys. The enclosure map of 1819 marks the great fields, that on the west being Moor Field with Wood Field at the north and Kipton Field forming the eastern tongue of the township. There was old enclosure, formerly wood, from the names. In part of the Great Wood area is low-profile post-medieval ridging (SP 816 820).

Enclosed fields. Enclosed 1812.
Maps consulted: NRO Map 2878 (enclosure 1819).
Enclosed in 1812 (Award (1819) enrolment volume D p.589 (1824)). The Act states there were 86 yardlands, and 3197 acres were awarded plus 318 of old enclosure. There was a

Hall Farm, presumably demesne, Map 2878 (1819). The enclosure claims were printed (JHR 121).
Settlement area:
Enclosures in settlement mapped as tenement blocks due to the complexity of the data. There is an additional table 'settlement line' which details the subdivisions within the closes.

Township boundary:
Map 2878

Rushton
RAF aerial photographs consulted
541_256; frames 3099-3103; 3373; 4099-4103; F21 82/865 fr. 291-7, 319 & 323; at SE; F22 82/865 fr. 232-36.

Archaeology
Rushton was only searched for ancient sites at the S; quarries have damaged the east and south. Two Roman sites were discovered, one a villa with Saxon sherds lying in the debris.

Open fields.
The furlong pattern away from slades running into the River Ise consists of rectangular blocks of furlongs lying one over the other. The gap at the NW is the site of Bassenhaw Wood (mentioned in the Pipewell Cartulary and marked as a fieldname on the Tithe Map (T223)). Alder Wood and Gaultney Wood are medieval and New Wood lies on ridge and furrow.

Enclosed fields. Enclosed 1581-1604.
Maps consulted: NRO Map 5064 (1732); NRO Map 345 (1837); NRO T223 (tithe); Estate map 1732, original of NRO 5064, in private ownership, Mr. D. T. Pain at Rushton Hall Farm.

Enclosed piecemeal 1581-1604.[62] Several hundred acres of closes were named in 1608 (ZA 3463).
The original estate map at Rushton Hall Farm contains a wealth of detail but was very difficult to work from being small scale and faded as well as having additional boundaries and numbers added to the original hedges, field names and acreage.
Settlement:
The north-south road has been realigned due to emparking. All buildings within the settlement and park are mapped but there may be some loss if detail to the boundaries due to the condition of the map.
Township boundary:
Estate map at Rushton Hall Farm.

[62] Finch, M. E. (1956) *Five Northamptonshire Families 1540-1640,* Northamptonshire Record Society., 74, 87-8.

Slipton
RAF aerial photographs consulted
F22 82_865 centre frame 339-41; S on 541_256 fr. 4111-3.

Archaeology
Slipton was only searched for ancient sites at the SE, where there was a prehistoric flint scatter. A medieval lodge site of Drayton Park lies in the township. There is quarry damage in the centre.

Open fields
The furlongs lie in two near rectangular blocks either side of the N-S slade. There is wood ground at the NW, and some post-medieval cultivation ridges at SP 943 808.
The small glebe of 1632 laid in three fields (X596); Church Field (4 lands and a rood); Wood Field (1 headland); Oundle Field (0.5r). In 1733 the fields were called Church Field, Curtley Field and the Field next the Park, and in 1739 High Field, Green Slade Field and Oundle Slade Field.

Enclosed fields. Enclosed 1771.
Maps consulted: No map has been identified for Slipton.
Enclosed in 1771 (Award (1771) Vol. B p. 331), area 579 acres.
Mapped to no data excluding settlement (below) and woods from OS 2" 1st edition draft maps.
Settlement:
Mapped from OS 1st edition 6". Given lack of maps and earthworks and the large amount of quarrying which has destroyed all of the east side of the village, the medieval plan form of the village is virtually unrecoverable.
Township boundary:
NRO Maps 1372, 1409, 4323. PRO MPI 1/250 (adjoining township maps) OS 1st edition 1:10560.

Southwick
RAF aerial photographs consulted
CPE/UK/1925; 1118-9 NE; main block 2109 4232-8 for OF; woods 4102-5

Archaeology
There are many Iron Age, Roman and iron slag sites in the civil parish (that includes much former Forest land), as well as two areas producing Saxon sherds.
A 10th-century iron smelting site was excavated within the confines of the village.[63]

Open fields.
The furlong pattern is very simple, with a few furlongs in a narrow belt draining into the central slade flanked by woods. No open-field data has been discovered to identify the agricultural arrangement. The enclosed field names doubtless contain open-field names.

Enclosed fields. Enclosed *b.*1600

[63] Bellamy, B., Jackson, D. and Johnson, G. (2001) *Northamptonshire Archaeology*, **29,** 103-128..

Maps consulted: PRO MR 1/314 (Cliffe Bailiwick c.1640); NRO Map 5329 (1600); NRO Map 5330 (1794). The reproduction of the NRO maps was too poor for mapping. Tracings by Gill Johnston of original estate maps of 1600, 1794 and 1834 were used for the mapping. The original maps were not seen.
The Glebe of 1633 describes closes, the whole being enclosed (X596). There is reference to keepers of a lodge and closes some with 'field' names, the word most likely being used in a modern sense: Stony Pitt Field alias Ryland Field, Crabtree Field, Ingolswell Field or closes, Bloome Furlong Fields, Oate Field, Tottenhoe Field, Plancke Field, Spring Field, Shortwood Field, Easte Tottenhoe Field, Flaskoate Field. North and South Periho Fields, and East and West Harlow Fields. There was common for 3 kine, 1 bullock, 20 sheep in most of the meadows and closes and tithe of the forest. This suggests that the township had only recently been enclosed.
An undated map of c.1600-25 shows these closes.
A mortgage of 1606 (SG 623) referred to a close of pasture or meadow ground called Ston Pytt Feild, 102 acres, a close called Blome Furlong Feild, 106 acres and meadows called William Rowe Meadow, Greate Moores and Little Moores, 30 acres, so enclosure had occurred before that date.
The sequence of maps for Southwick allows us to trace the replanning of the closes, the retraction of the woods, the realignment of the road and the expansion of the park. All maps have been digitised.
The map of 1600 includes Perio.
Settlement:
The change in layout of the settlement around the Hall including realignment of the road and the creation of water and garden features are the result of emparking. There is a small park around the Hall in 1600 but by 1794 it has been greatly enlarged with a massive water feature created in the east of the warren and formal gardens to the north. By 1880 the water feature has retracted to a stream, much as it was in 1600.
Township boundary:
Estate map of 1600, PRO MR 1/314.

<u>Stanion</u>
RAF aerial photographs consulted
CPE UK 2109 3258/60 N; 82 865 F21 248/7.

Archaeology
The civil parish of Stanion yielded several sites of early prehistoric, Iron Age and Roman date, many of them in the former Geddington Chase. Almost the whole of the area N of Harpers Brook has been quarried.

Open fields.
The small area of furlongs is based on the Harpers Brook with interruptions made by smaller slades. Information for the quarried area has been taken from Brasier's 1737 map. It cannot be determined in the closes quarried away what was assart and what was enclosure from the open fields. On the survey relating to the 1635 map closes of 10 acres had been wood and half of Corby Haw wood had been converted to pasture. The 1737 map has a fieldbook made in 1730 (NRO Map 1381; Buccleuch Terriers, Map 5724).

Enclosed fields. Enclosed 1795
Maps consulted: NRO Map 2856 (enclosure map 1805); NRO FH 272 (c.1585); NRO Map 2991/6 (estate map 1635); NRO Map 4090 (1730); NRO Map 1381 (1737); Boughton House Maps: Stanion 1737 (surveyed 1730 Sutton & Brasier).
Many closes are mapped in 1635 and 1737 maps. The remainder was enclosed by Parliamentary Act in 1795. A wood account for Corby Haw made in 1650 raised £553 for underwood (£173), (timber) trees (£333), crabtrees (£9) and bark (£36). Costs included hedging and ditching the sale (coppice) and making a gate (BRU L.iv.11).
Boughton 1737 map and the enclosure plan have been digitised excluding the settlement.
Settlement:
From Boughton 1737 map.
Township boundary:
From Boughton 1737 map.

Stoke Albany
RAF aerial photographs consulted
CPE UK 2109 frames 3137/40; 4270 centre; fr. 4139 N; far S fr .3278. 541_256 fr. 3342-4.

Archaeology
Stoke Albany was not fully searched for pre-medieval sites and only one small Roman sherd-scatter was found at SP 7955 8895.

Open fields.
The furlongs are divided into lobes by the slades, which at the north form linear or rectangular blocks.
The glebe of 1632 (in X597) had five fields, the first and last two being grouped together; South Field, 13 items, with Bowde Field, 7 items, near to a cow pasture; North Field, 35 items; Upper West Field, 16 items near meadow ground, grouped with Neyther West Field 15 items, plus wandoles. In 1684 there were only three field names; North Field 35 items, mostly roods or half acres, including 3 items of ley; West Field, 30 items, including 2 items ley; South Field 18 items including 2 of ley. All fields had wandoles (meadow), which with the name element ‘dale’ shows Norse influence. There was 8 percent ley, which increased to 20 percent in 1744.

Enclosed fields. Enclosed 1764
Maps consulted: No pre-enclosure map has been identified for Stoke Albany.
There is a well preserved boundary bank NW and W of Park Farm that probably dates form 1200 Lund (Steane 1975 p.231). The fields were enclosed by Parliamentary Act in 1764 (Award (1765), Stac 72 P4, 1189 acres).
Settlement:
From OS 1st edition 1:10560 and OS 2” 1st edition draft maps.
Township boundary:
OS 1st edition 1:10560 and adjacent township maps.

Stoke Doyle
RAF aerial photographs consulted
CPE/UK/2109 frames 3143-19 for N; UK/CPE 1891 fr. 229-02302 for S.

Archaeology
Stoke Doyle revealed Iron Age and Roman settlements.

Open fields
The furlongs form compact blocks around the vill, only divided by two slades. At the SE the pattern is rectangular and elsewhere the furlongs lie one under the other.

A field book of 1618 describes 6 fields, giving the furlongs and the number of lands in each (NRO Glebe in X598). The of the fields are stated to be ‘enclosed,’ probably meaning that there was a ring hedge rather than the normal meaning being a block of closes, and this is confirmed by reference to a 1607 map of Stoke (NRO Map 5538). Each of the three 'enclosed fields’ had furlongs with the number of lands given, but they had very little glebe in them. The map shows that each enclosed field had a pen, presumably for sheep, and so were large sheep pastures. The map has a Hall Field with a windmill in it, probably a block demesne, not referred to in the glebe.

The glebe survey giving details of furlongs in the enclosed fields suggests that enclosure had occurred not long before. There is also evidence that there had been a single three-field system, the six fields being paired into three tilths. Four of the pairings are named and reference to the map shows that they were not adjacent, pairing one field with predominantly boulder clay to one with limestone. This is akin to 18th-century Finedon in agricultural terms, balancing good and poor land.

The commonable ground was spelled out and included common in the fields as soon as harvest was done. There were commons for 50 sheep, 6 kine, and a cow (presumably for a yardland). After a description of the meadows followed 'all upland places as leyes, landes endes, slades and closes whenever hay be mowed’.

Enclosed fields. Enclosed *b.*1689.
Maps consulted: Shropshire County Library H/1444 (Town & Town closes 1606); NRO T207 (tithe).
There was a close next to Stoke Wood, called Wakerlie Close (in Oundle), in 1622. The whole township was enclosed by 1689 (closes described in 1689 being copied into the 1723 glebe terrier).
Both maps have been digitised though the tithe shows only the western part of the township and excludes the settlement.
Watermill shown in Mill Holme to south east of village. Above this is the parsonage with a complex of buildings and grounds including formal gardens and a ‘bleaching ground’. It is possible that there was some form of industrial textile process being conducted involving the mill and some of the buildings in the parsonage complex. There is also a large timber framed barn on the south side of the homestead close.
Settlement:

Stoke Doyle settlement has changed enormously between 1606 and 1880. The village is dissected by a crossroads in the centre and by 1880 the only buildings left are those in the north-west quarter and the Church. Virtually the whole of the rest of the settlement has gone. The only plot still containing a building is that of the pub on the south-west corner of the crossroads in the village. This was a farmhouse in 1606 and may contain fabric of the earlier building. The substantial parsonage complex has also almost completely gone with the exception of one small structure which may contain early fabric.
The buildings on the map are drawn in elevation and are stylised they have therefore been digitised as rows rather than individual buildings where a plot is shown to contain a full range. The orientation of the buildings within the plot is that as shown on the map. There are five farmhouses within the settlement in 1606 and these have been identified in the browser. Unless identified as a particular type in the browser all buildings are cottages.
By 1880 the southern area has been 'imparked' with the addition of a 'manor house' which was clearly not the medieval manor. However it is probable that this was not the first settlement clearance in Stoke Doyle as the 1606 map shows a close in the same area as the later manor house, called 'hall yarde'. There are substantial earthworks in this area though no buildings are shown on the 1606 map.
Township boundary:
Shropshire County Library H/1444.

Sudborough
RAF aerial photographs consulted
F21 frames 270-5; 541_256 fr. 3114-6 all for N.

Archaeology
Only the NE of the township was searched for pre-medieval activity; three Roman sites were discovered.

Open fields
The furlong pattern is dissected by slades, with a more regular block on the NE next to the Aldwincle Woods. The north was probably wood pasture as no furlongs could be found.
In 1627 the glebe consisted of large pieces that probably had been demesne and was divided into three fields called Titchmarsh Woodfield (2 pieces); Howe Field (1 piece); and Old Field (2 pieces). In 1684 they were called Flexhill, Mill and Old Fields in the ratio 10:8:4 acres, but including some arable closes, the last having an additional 5 acres of closes. Flexhill was called Park Field by 1702 (Glebe terriers in X598). The demesne was probably dispersed, a terrier describing furlong pieces in c.1290 (but not specified as demesne, SS99).

A few orders and offences survive; Richard Read took 5 pigs out of the pound in 1565 and John Langley had pigs in the peas fields in 1586. In the same year, several people took wood from the lord's wood; there were 25 sheep to the yardland after Low Sunday, no wool was to be gathered in the fields before the sheep were sheared, and after warning from the curate all should drive stray cattle out of the fields and woods. A jury separated and set out meadow and pasture in the fields (SS 2545 and 2552).

Enclosed fields. Enclosed *b.*1627.
Maps consulted: NRO Map 5154 (tithe); NRO Map 2859 (Brigstock enclosure 1805).
Sudborough was enclosed in two parts; Snape Field was 'newly enclosed' in1587 by Lewis Mordaunt, exchanges of lands being made (SS 2510). The remaining land was divided into three fields by 1627, as shown by the glebe. On the north-east of the parish there was an additional old enclosure called Sudborough Park. This was formed partly out of assarts and partly taken from open field. The Park was in existence by 1607 (SS 4162). The surviving open-field land was enclosed in 1783 or 1784 without reference to Parliament or consent of the rector (1816 glebe terrier). Sudborough Green, 89 acres, was enclosed with Brigstock and Stanion in 1795 (Act BSL 65; Award (1805) Volume L, 316; Map 2859 (1805).
Sudborough has some woodland. In c.1290 there were rights for sucking pigs in the woods and pasturing 100 sheep (SS 98). Sudborough wood value and acreages are recorded in 1537 (SS 3632). Near Sudborough Green there was a wood called Harewyn that was common to Lowick in the late 16th century (SS408).
Settlement:
Map 5154.
Township boundary:
Map 5154.

Sutton Bassett
RAF aerial photographs consulted
CPE UK 1925 frames 1183-5.

Archaeology
Sutton Basset revealed a Roman site and a few Saxon sherds.

Open fields
The furlongs form a fairly rectangular system, given the constraint of slades. A high percentage of the township was arable.
A terrier of the late 17th century (XYZ 913) had parcels of 1-3 lands distributed in three fields; Milne Feild (31), Brook Field (52), and Side Holme Field (49 items) of which 29% were ley. Meadow amounted to 14 items and against Ashley was a hedge.
A terrier of 1685 (XYZ 916) had lands distributed in Milne Field (10 arable items and 5 of ley [19 lands and 9 leys]); Dingley Brooke Field (16 and 7 items [31 lands, 19 leys]); and Sideholme Field (18 and 7 plus Lamas close [29 lands, 11 leys]) with 8 doles plus half the hedge at Ashley Meer. In Dingley Brook Field 8 neighbours held 34 positions of which 3 people held 71% of the total, implying a regular order.

Enclosed fields. Enclosed 1802.
Maps consulted: NRO Map 2999 (enclosure plan with Weston by Welland 1802)
There was only one ancient enclosure outside of the settlement core.
Settlement:
Map 2999
Township boundary:

Map 2999

Thornhaugh & Wansford
RAF aerial photographs consulted
CPE/UK/1925 frames 4109-16 and 106G/UK/928 fr. 3028.

Archaeology
Thornhaugh produced several sites ranging from prehistoric flint scatters to Iron Age and Roman sites and includes the deserted medieval site of Sibberton, a lodge site in Bedford Purlieus, and the footing of an undated semicircular structure in the wood 48m diameter. Slag is abundant.

Open fields
The furlong pattern is near-rectangular, based on the A1 and the E-W slade. The NW was heathland.
Thornhaugh consisted of the extra-parochial wood, Bedford Purlieus, and the medieval open-field parish included the deserted village of Sibberton (TL 0685 9980) and that part of Wansford north of the River Nene. Neither of these places seems to have had medieval township status, but the tithe map does mark a boundary for Wansford.
The Thornhaugh glebe of 1632 (NRO X599) refers to nine areas, six of them called fields with no indication of how they were grouped. Three of them may have been fields for Wansford. The tenurial relationships suggest an irregular order.
A map of 1635 (Bedfordshire Record Office (BRO), R1/304) shows the open-field parish with some enclosure around the village and along meadows at the eastern boundary; there are no details of the fields.

Enclosed fields. Enclosed *b.*1720
Maps consulted: NRO T198 (tithe 1838).
The open-fields were enclosed after 1635 and before 1720 (NRO glebe terriers) but no enclosure map survives. The Great Heath was mapped in 1751 (BRO R1/305). It marks proposed new divisions of the intercommoning area of Thornhaugh and Wittering where walls were to be built. Some adjacent closes are marked and named; the previous enclosure had excluded the heath, spongs and commons. The heath probably continued much farther north into Wittering linking to the 1000 acre heath of Easton on the Hill.
The Purlieus was mapped in 1757 (BRO R1/162). It shows all the coppices with their names (many were grubbed up in the 1860s, Rix 1976). There was a wide woodland riding on its south side.
The tithe map of 1838 (NRO T198) shows the fully enclosed parish with infilling hedges. The closes in the eastern half of Thornhaugh have been substantially replanned by 1880.
Settlement:
Both Thornhaugh and Wansford mapped from T198.
Township boundary:
T198.

Thorpe Underwood
RAF aerial photographs consulted.

See Rothwell.

Archaeology
The township is now split between Harrington and Rothwell. The vill site appears to be at Hospital Farm, SP 792 813.

Open fields
The furlongs form a compact block dissected at the north by slades. There is some quarry damage.

Enclosed fields. Enclosed *b.*1492.
Maps consulted: NRO T221 (Harrington Tithe).
The small monastic township was enclosed by 1492.[64]
The area included in Harrington Tithe has been mapped the rest of Thorpe Underwood township added to 'no data' table.
Settlement:
There is no nucleated settlement at Thorpe Underwood in the post-medieval period.
Township boundary:
NRO Map 4642 (Desborough), Map 2878 (Rothwell), NRO T221.

Twywell
RAF aerial photographs consulted
Small part of N, F22 82_865 frames 339-341; some S fr. 307 main F21 idem, fr. 390-4.

Archaeology
Twywell was not searched for pre-medieval sites. There is quarry damage.

Open fields.
The furlong pattern consists of large furlongs at the N and NW, becoming more complicated towards the S caused by slades running into the Woodford brook. A high proportion of the township was arable. A fine coloured map of 1736 shows the details of the furlongs and has a 'fieldbook' as a schedule (Map 1409). A draft map also survives containing more information such as the number of lands in each ownership parcel (Map 4323). The field survey and map agree, and details from the 1736 map were added for the missing quarried area.

Enclosed fields. Enclosed 1765.
Maps consulted: Boughton House map Twywell (1736); NRO Map 4323 (strip Map c.1736).
The Boughton map is a superb open field strip map in full colour. A ring hedge is shown around the whole of the township except for the south where the boundary is the river. There are also strips of hedges (not enclosures) shown within the open fields. There was very little enclosure outside of the settlement.

[64] Leadam (ed), I. S. (1897) *The Domesday of Inclosures 1517-18*., 314. Beresford, M. (1954) *The Lost Villages of England*., 369.

Settlement:
Very fine detail on the Boughton source map allowed accurate mapping of settlement detail.
Township boundary:
Boughton map 1736.

Wadenhoe
RAF aerial photographs consulted
541/602 frames 4058-62.Archaeology

Open fields.
Wadenhoe furlongs form a rectangular pattern with groups lying one under the other sloping down to the Nene.

Enclosed fields. Enclosed 1793.
Maps consulted: NRO Map 4037 (Enclosure award & Map 1793).
Enclosure of 160 acres in 1630 (references in Hall 1995, 354) is probably represented by the block of closes at the NW marked on the enclosure map.
Settlement:
Map 4073.
Township boundary:
Map 4037.

Wakerley
RAF aerial photographs consulted
CPE/UK/1925, frames 4128 &38 for N; fr. 2132-38 main; SW is fr. 3140

Archaeology
Wakerley yielded prehistoric flint scatters and slag patches. In the wood are two cairns believed to be Bronze Age and the footings of a (medieval) lodge for its emparked phase.

Open fields
The furlong pattern is very simple with long blocks of lands lying under each other and draining to the Welland.
In c.1570 there were three fields Wood, East and West, with a dispersed farm lying in a very regular tenurial order (Exeter Muniments 28/55). The glebe of 1632 also laid in three fields then called Wood Field, Halldale Field, and East Field alias Windmill Field. Most of the meadow was in Windmill Field, including leys at Finshed Gate (Glebe). Four fields are named in 1720, the Windmill Field being split into two; there was likely still a threefold tilth. Small tithes included a composition for wood £13 13 4d; 1 dole wood, 2 loads of thorns and tithe wood. In 1723-39 there were three named fields.

Enclosed fields. Enclosed 1748.
Maps consulted: NRO Map 4124 (estate Map 1772); BEO M89 (1772, original of NRO 4124).

Enclosed in 1748 with Wittering by an agreement ratified by an Act in 1749 (335P/117). There was no award as the Exeters were sole proprietors and paid £100 to the rector of Wakerley for a dispersed glebe of 60 acres and tithes.
Settlement:
BEO M89.
Township boundary:
BEO M89.

Warkton
RAF aerial photographs consulted
541/256 frame 3376 N; fr. 4105-9; central & S, F22 82_865 fr. 329-333 and 401-404.

Archaeology
Only one Roman site was found at Warkton (NGR SP 8945 8026), ground and crop conditions being unsuitable at the time.

Open fields.
Warkton furlongs form a linear plan with three furlongs reaching towards the woods at the north.
The fields were mapped in 1715 (NRO Map 2834) and again in full detail in 1730 with a fieldbook (Map NRO 1383 and Buccleuch Terriers, Map 5732), which agrees with the surveyed plan. By 1730 much of the north had been converted to cow pasture, called Warkton Wold, and details are not marked on the open-field map. Some of the Wold has been destroyed by Grafton aerodrome, so it was not possible to establish whether all of it had been open field. Most likely it had been, since the present wooded Warkton Common lies ridge and furrow. At the S of the common on the map is an area that was never ploughed and survives as rough pasture hemmed in by ridge and furrow (SP 8010 7985).

Enclosed fields. Enclosed 1807.
Maps consulted: NRO Enclosure Plan 32 (1808); Boughton House Maps:
Manors of Boughton, Warkton, Weekley & Geddington (Nunns 1714, Booth 1715);
Common Fields of Warkton (Booth undated c.1730).
Mapped from the enclosure plan as it is the clearer and the features are unchanged.
Settlement:
Virtually no change from 1716 map to enclosure plan but there has been encroachment on open area to the east of the village.
Township boundary:
The township boundary changes at enclosure taking in part of Boughton. A variety of sources has been used to establish the earliest likely boundary for Warkton. NRO Maps 1411 (Kettering), 1372 (Grafton Underwood), NRO T185 (Barton Seagrave); Boughton House map Warkton Fields 1716.

Weekley
RAF aerial photographs consulted
82_865 F22 frames 327-9; 541/256 fr. 3368-70.

Archaeology
Weekley has suffered much quarry damage and has urban development at the SW. Boughton Park covers much of the east. The only site was the earthwork remains of Boughton medieval village lying NE of the House.

Open fields.
The furlong pattern is dissected by slades on the east. At the west the lack of rectangularity is probably explained by more slades now quarried away. The plan conforms with an open-field map of 1719 showing details (NRO Map 1382 & Buccleuch Terriers, Map 5732). The 1719 map has been used to supply data for the quarried area. By that date there was a complicated reversion of arable to pieces of common on the west. Where not quarried, as at the present Bolt Wood Coppice (SP 880 821), the commons of 1719 were proved to be former ridge and furrow.

Enclosed fields. Enclosed 1808.
Maps consulted: NRO Enclosure Plan 18 (with Geddington 1808); Boughton House Maps: Weekley Fields (1719); Manors of Boughton, Warkton, Weekley & Geddington (Nunns 1714, Booth 1715).
Mapped from enclosure plan as the features are unchanged from the earlier maps and it is the clearer.
Settlement:
From enclosure plan.
Township boundary:
The township boundary between Weekley and Boughton was particularly problematic due to Boughton Park encroaching into Weekley (for a full discussion see Boughton). Boundary from the original maps at Boughton House of Weekley Fields map of 1719; Geddington Fields map of 1717; Boughton, Warkton, Weekley and Geddington map of 1715 and the enclosure plan. Township boundary was altered at enclosure.

<u>Weldon, Great</u>
RAF aerial photographs consulted
CPE UK 2109 4251-55; Far E, F21 82_865 fr. 336-8.

Archaeology
Most of Great Weldon has been quarried apart from the SE. A single lithic site was discovered, but not all of the land was searched for early remains.

Open fields
The very incomplete furlong plan has gaps at the SE where the pasture of Weldon Plain used to lie. North of the central slade the pattern is one of simple linear furlongs draining to it. At the SE the pattern is more dissected by slades. It may be possible to reconstruct Weldon furlongs from a fieldbook of 1648/81 (NRO FH 298).
The 1648/81 fieldbook shows there were four fields grouped into three unequal areas. The same four fields, grouped into three tilths, were used in the 18th century (NRO glebe). The fieldbook also describe the woods, meadows and the commons called Weldon Plain, Broad Lane and a riding to the upper end of Cowthick.

Enclosed fields. Enclosed 1792.
Maps consulted: NRO FH272 (c.1585)
Enclosed in 1792 (Act BSL 31; Award (1794) Vol. K p.1; Map 2661 (1792)). The area of 2305 acres, for both Weldons, did not include woods except to extinguish common right. The enclosure map could be reconstructed using the 1794 Award and an estate map of 1813 (NRO Map 5337).
Settlement:
FH272
Township boundary:
FH272

Weldon, Little
RAF aerial photographs consulted
See Great Weldon

Archaeology
Little Weldon has been entirely quarried away apart from a small area at the NE that lies waste and covered with scrub.

Open fields
A small area of furlongs was mapped in the scrub and some were visible on the 1947 APs.
The pattern is one of simple linear furlongs draining to the central slade. There was another strip of open-field to the north, lying in the slade near Kirby and separated from the main block by woodland.
No terriers have yet been studied to discover the field arrangements.
It may be possible to reconstruct the furlongs of Little Weldon from a fieldbook of 1731 (NRO FH 300).

Enclosed fields. Enclosed 1792.
Maps consulted: NRO FH272 (c.1585); NRO BRU Map 1 (1612).
Enclosed in 1792 (Act BSL 31; Award (1794) Vol. K p.1; Map 2661 (1792)). The area of 2305 acres, for both Weldons, did not include woods except to extinguish common right. The enclosure map could be reconstructed using the 1794 Award and an estate map of 1813 (Map 5337).
Settlement:
FH272. Remarkable degree of consistency in Little Weldon settlement over the three hundred years between the 1585 map and the 1st edition Ordnance Survey 1:10560. Closes that were there in 1585 are almost unchanged in 1880 with some long narrow plots to the west of Bridge Street being combined into larger plots and absorbing a short back lane in the process. The number of buildings has increased substantially but are still largely confined to the early closes with less than a dozen being in later enclosures along the western end of Corby Road.
Township boundary:

FH272 and BRU Map 1. Little Weldon township is in two parts. The north being separated by woods which are shown on both source maps and labelled on the 1612 map as ‘part of Rockingham Forest’.

Weston-by-Welland
RAF aerial photographs consulted
CPE/UK 1925 frames 1182-3.

Archaeology
No sites were discovered at Weston; there is much pasture.

Open fields
The furlong pattern is dominated by the topography, being dissected by slades descending to the vill and by a ‘free-standing’ hill at the west. The steep slopes have unploughed pasture at the east. There was a high percentage of arable and much ridge and furrow survives.

The glebe (X602) of 1631 refers to 4 fields grouped into three tilths: Sydeholme Field (51 arable items and 10 of ley); Brigge Feilde (36 arable) with Little Field (15 arable and 15 leys in both these); Longdale or Mill Field (37 and 7); plus meadow. There was therefore 19% ley. Neighbours in part of Sydeholme Field; 10 people held 48 positions of whom 3 occupied 66%, suggesting a regular order. In 1684 the fields were called Sydeholme Field, Brigg Field and Little Field, and Lundale or Mill field. There were commons for 14 kine and 80 sheep in 1705.

Enclosed fields. Enclosed 1802.
Maps consulted: NRO Map 2999 (enclosure with Sutton Bassett 1802).
There were no ancient enclosures outside the settlement core.
Settlement:
There is a remarkable degree of survival in the plan form of Weston by the 1880s and very few additional buildings. There is a small amount of encroachment onto the green.
Township boundary:
NRO Map 2999.

Wilbarston
RAF aerial photographs consulted
CPE UK 2109 frames 4134-5 for N; 3134-6 central; far S (Pipewel)l 4271-3 & 3277.

Archaeology
Only the northern part of Wilbarston was searched for pre-medieval sites. There were one lithic and two Saxon sites.

Open fields
The furlong pattern at the N has linear blocks, the S is more dissected by slades.
The glebe terriers of 1612 record three fields in Wilbarston, North, East and South. In 1684, the glebe in the same fields was unevenly distributed with 33, 31 and 26 parcels

respectively. The same names were used until 1720 but by 1752 the South Field was called Wood Field. The North Field of 1684 had 10 people sharing 42 positions of which 69 percent were held by two people, indicating a regular order.

Enclosed fields. Enclosed 1798.
Maps consulted:
No map has been identified for Wilbarston.
Wilbarston was enclosed in 1798 (Act NRO BSL 35; Award (1801 no plan) Inc 70). There was opposition and troops of yeomanry were brought in (NRO J. W. Anscomb notes, p.143).
Settlement:
OS 1st edition 1:10560.
Township boundary:
PRO MPE 1/457, MPE 1/459; NRO Map 704; OS 1st edition 1:10560.

Wittering
RAF aerial photographs consulted
CPE/UK/1925 frames 4112-16; CPE/UK/1932 fr.1067; 106G/UK/982 fr. 3028; CPE UK fr. 2109, 4198.

Archaeology
Much of Wittering lies under an aerodrome and was not searched, but this part was mainly former heathland.
Nine sites were discovered ranging from a Mesolithic flint scatter, to Iron Age and Roman sites and areas of iron slag.

Open fields
The furlong pattern has rectangular elements, but the whole cannot be viewed because of loss by the aerodrome.
The glebe of c.1631 refers to three fields: Church Field, 4 items of 4-9 lands plus a 5-gore piece with pasture around it 1a, 20 acres in all; Conygere Field, 10 items of 2-6 lands being 20 acres; North Field, 10 items being 21 acres. In 1736 there were North Field plus a small Quaill Field, with Nether Field and Church Field.

Enclosed fields. Enclosed 1748.
Maps consulted: BEO maps M91 (1804); M90 (copy of M91 undated c. 19C); M70 (c.1770); M390 (Wittering & Thornhaugh C18).
Enclosed in 1748 with Wakerley by an agreement ratified by an Act in 1749 (NRO 335P/117). There was no award as the Exeters were sole proprietors and paid £90 to the rector of Wittering for tithes and a dispersed glebe of 100 acres.
BEO M70 used as base map, as it appears to be the original, with BEO M90 as guide as this is by far the clearer copy. Typical distortions in early maps, quite difficult to map in parts especially around the settlement. BEO M390 incomplete and torn, shows heath. Digitised for extent of heath, unenclosed roads on heath also digitised. The wood in the SW corner of Wittering is excluded from the later maps but is shown on this one. It has

therefore been digitised to show the full extent of woods within the township and to complete the township boundary.
Settlement:
BEO M70.
Township boundary:
BEO M70 & M390.

Woodnewton
RAF aerial photographs consulted.
CPE/UK/1925 frames 3107-20; 3116-20.

Archaeology
Woodnewton was not searched for pre-medieval remains.

Open fields. The furlongs are divided into two parts by the Willow Brook. On both sides long blocks of strips drain towards the brook, with a few interrupting cross furlongs as demanded by the topography.

Enclosed fields. Enclosed 1777.
Maps consulted: NRO Enclosure Plan 15 (1778, copy made 1914 includes Nassington, Yarwell, Apethorpe & Woodnewton).
Ancient enclosure difficult to distinguish from map. Colour coded but colour of ancient virtually the same as 'new enclosures copyhold of the Earl of Westmorland' both yellow. Not helped by the fact that the map is discoloured and the background is also yellow.
Settlement:
Regular linear plan form with long narrow plots. Survives very well into the 1880s with the addition of many orchards. Substantial infilling by 2000 but very little development outside of the settlement core.
Township boundary:
Enclosure Plan 15.

Wothorpe
RAF aerial photograph consulted.
CPE/UK/1932 frame 2062.

Archaeology
Wothorpe yielded four sites, three of them producing Neolithic flints, and the others Iron Age and Roman.

Open fields.
The furlong pattern is affected by slades near the vill. There is heath at the south without evidence of furlongs. There were three fields in 1553 (Allison et al 1966, 48).

Enclosed fields. Enclosed *b.*1615.
Maps consulted: BEO M92 (1772) & NRO copy, Map 4123; BEO uncatalogued estate map (1615).

A map of 1615 shows a cow pasture, Wothorpe Leys, 65 acres, given for use to St Martin's township in 1598 in return for St Martin's land taken into Burghley Park (Exeter Mun. 31/44)). There were also a few closes near the manor-house, a conygear, ground higher up called the 'oute feildes' and the heath marked as a sheepwalk. It was probably all pasture since the 'oute fieldes' and sheep walk were tenanted by one man and therefore were not part of an open-field system with intermixed strips. A fully enclosed township is shown in 1772.
Mapped from 1772. BEO M92 is a fine map with detail of the sheep walks and closes and Park and in the south of the township the last stretch of 'Stamford horse course' complete with winning post.
Settlement:
There is no nucleated settlement at Wothorpe in the post-medieval period.
Township:
BEO Estate Map 1615.

Yarwell
RAF aerial photographs consulted
CPE/UK/1925 frames 4106-10; 2106-12.

Archaeology
Yarwell was not fully searched for ancient remains, but two Roman sites and a slag area were identified.

Open fields.
The furlong pattern is rectangular with an outlier beyond Sulehay Wood. A survey of 1735 could be used to identify the furlongs (W(A) Misc. Vol. 42).

Enclosed fields. Enclosed 1777.
Maps consulted: NRO enclosure Plan 15 (1778, copy made 1914, includes Nassington, Yarwell, Apethorpe & Woodnewton).
Ancient enclosure difficult to distinguish from map. Colour coded but colour of ancient virtually the same as 'new enclosures copyhold of the Earl of Westmorland' both yellow. Not helped by the fact that the map is discoloured and the background is also yellow. There was a group of ancient enclosures to the north of Sulehay wood.
Settlement:
Enclosure plan 15.
Township boundary:
Enclosure plan 15.

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