

# SOME SPATIAL AND TEMPORAL ASPECTS OF ANIMAL UTILISATION IN VILJANDI, MEDIEVAL LIVONIA

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## Abstract

Viljandi (Fellin), a small town in medieval Livonia, was founded in the second quarter of the 13th century, soon after the Estonian Crusades. The Estonians' prehistoric hill-fort was replaced by a castle of the Livonian branch of the Teutonic Order, the prehistoric settlement was abandoned, and the location for the new town was chosen on the site of a former field more suitable for fortification. In this paper, zooarchaeological material from three sites, the prehistoric settlement, the Order's castle and the early medieval town, will be discussed. Despite the presumed changes in Estonian society associated with the Crusades, the analyses reveal no profound differences in meat consumption in the transitional period from prehistory to the Middle Ages.

Key words: zooarchaeology, Late Iron Age, Middle Ages, Teutonic Order's castle, medieval town, meat consumption.

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## Introduction

The transition from the Late Iron Age to the Middle Ages brought changes to the whole of society in the area of medieval Livonia. The aim of this paper is to determine if and how these changes are reflected in the zooarchaeological material from different time periods in the area of the modern town of Viljandi (Fellin in German) in southern Estonia. This article discusses from a comparative perspective the animal bone material from the late prehistoric occupation layers, the area of the early town, and the newly constructed castle of Viljandi. The main research questions are: What changes occurred in animal consumption during the transition to the Middle Ages? And does the zooarchaeological material from these assemblages reveal differences in animal consumption that could be linked to the social background? Although the nature of the zooarchaeological material is hardly clear-cut, there are aspects which should be more characteristic of different cultural and social spaces, and therefore allow us to tackle these issues.

## Context and background:

### Viljandi and the excavation areas

Viljandi is located in the northern part of southwest Estonia (Fig. 1). The central meaning of the place is greatly caused by natural conditions: it was founded close to the intersection of important land and water routes. The waterway that passed Viljandi, and was

navigable in prehistoric, and also partly in medieval, times, connected the Baltic Sea with Lake Võrtsjärv, and further on with Lake Peipsi. Beside that, one of the three main overland routes that connected southern Estonia with the northern part of the country passed Viljandi. The crossing of these two important communication routes, and the presence of favourable natural conditions for constructing a hill-fort on the high shore of the lake valley, were the main reasons for the emergence of Viljandi in the Viking Age. It is only from this period that the archaeological material provides evidence of the formation of an important centre. The hill-fort of Viljandi was the strongest of the strongholds in the late prehistoric Saccala district, and the siege of it is described in some detail in the Chronicle of Henry of Livonia, even twice, in 1211 and 1223 (HCL XIV: 11; XXVII: 2). Henry of Livonia mentions the presence of German merchants in the Viljandi stronghold as early as 1223 (HCL XXVI: 5). During the Crusades, the late prehistoric hill-fort was gradually replaced by the castle of the Order of the Sword Brothers. When the Sword Brothers were defeated at the Battle of Saulė by Lithuanian troops in 1236, their remnants were merged with and its possessions were given to the Teutonic Order in 1237. Viljandi was the strongest and most important castle of the Livonian branch of the Teutonic Order in the southern part of Estonia. Soon after the conquest, a medieval town was founded in front of the castle.

The archaeological source material for this paper comes from three different parts of Viljandi: from the southern part of the medieval town area, from the Or-

## I

LIFE AT THE FRONTIER: THE ECOLOGICAL SIGNATURES OF HUMAN COLONISATION IN THE NORTH

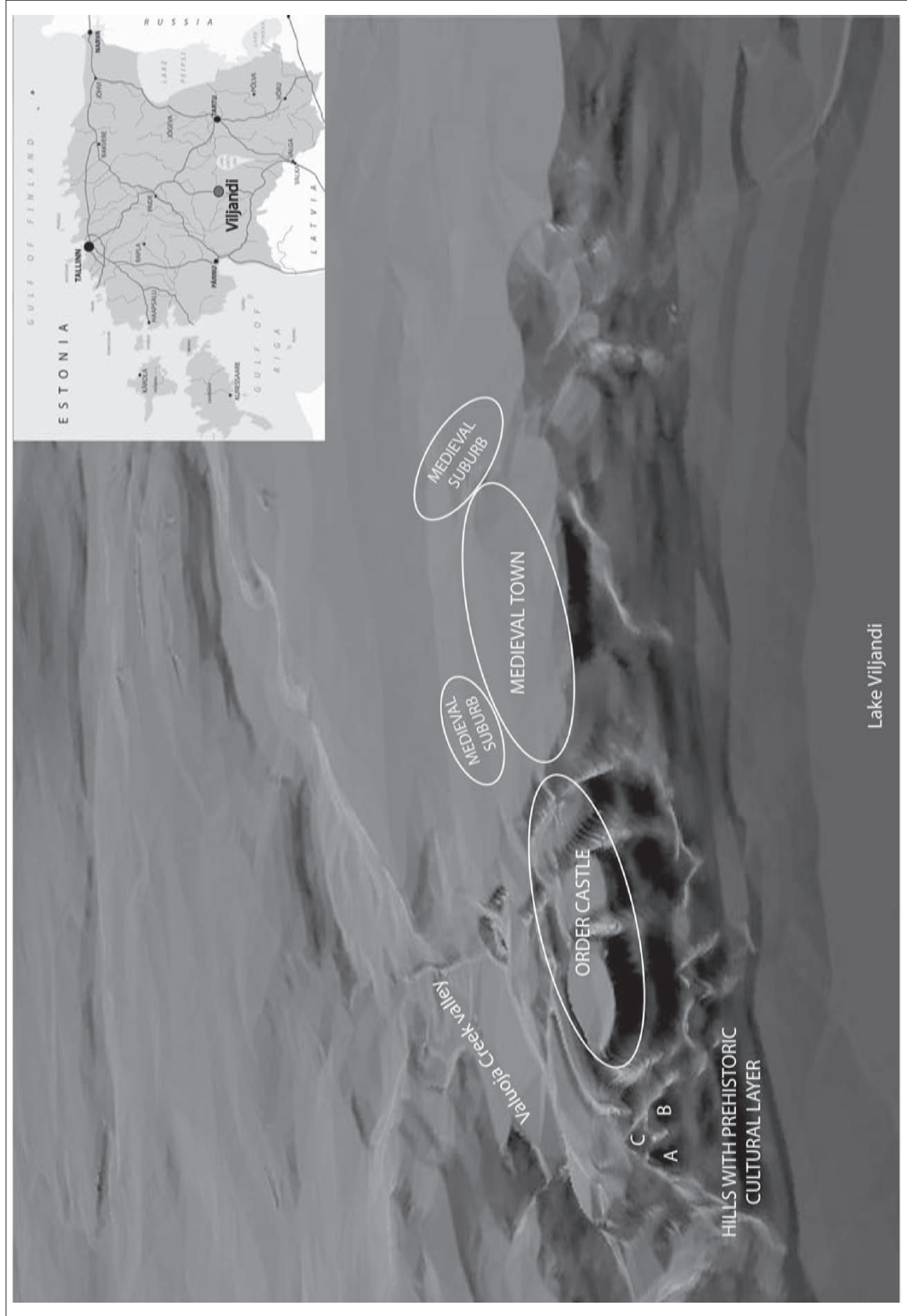


Fig. 1. Location of Viljandi and 3-D landscape model with investigation areas (prepared by authors).

der's castle, and from the hills 100 to 140 metres south of the castle, where the remains of occupation layers from the time preceding the Crusades have been found (Figs. 1, 2).

### The hills

The earliest traces of an open settlement in Viljandi are located south of the hill-fort and the main castle site, between it and the deep valley of the Valuoja creek. There, in the present-day green area, hills of different shapes and sizes rise above the flat plateau of the lake's valley. The landscape is quite complicated, for the plateau is cross-cut by deep valleys, evidently of glacial origin, and probably significantly deepened in medieval times to form part of the moat system. The hills rising above the plateau of the lake valley's bank, designated as A, B, C and D (Figs. 1, 2), are of man-made origin, consisting of heaped-up disturbed soil and occupation layers to make platforms for siege engines, the trebuchets mentioned by Henry in the description of the siege of the hill-fort in 1223 (HCL XXVII: 2). Excavations on hills A and B, initiated by the discovery of stray finds on the surface of the ground, were carried out in 1999, 2002, 2005–2007 (Valk 2000; Valk 2003; Valk 2006; Juurik *et al.* 2007; Smirnova *et al.* 2008), and 1999–2001 (Valk 2000; Valk 2001; Vaba, Valk 2002) respectively. The zooarchaeological data analysed in the current study derives from the excavations in 1999 (hills A and B), 2001 (hill B), and 2002 (hill A) (Fig. 2). The disturbed soil on hill A contained a large number of finds and bones. In addition, on that hill, foundation logs from two buildings which were destroyed by fire were discovered. The fire can be directly connected with the Crusades, thanks to a cross-bow bolt which had landed in the interior wall of the burning house. The charred logs were preserved, as they were covered by soil carried to the hill to form the trebuchet platforms. The added soil partly originated, as in the case of hill B, from disturbed settlement layers. Below the added soil, there was a thin occupation layer, no more than four centimetres thick, which had been deposited on the spot, and which belonged to the same period as the houses destroyed by fire. This layer was also extremely rich in finds and bone fragments. The occupation layers on hill B were especially concentrated and rich in different finds and animal bones. Judging by the finds and the presence of both hand-thrown and wheel-thrown pottery, the disturbed settlement layers, used for constructing the trebuchet platforms, originate from the Late Iron Age, that is, the Viking Age and the following pre-Crusade period. The presence of some fragments of brick shows that the settlement also existed after the beginning of the

Crusades, that is, in the German period (from 1215). The top of hill C (Rammo *et al.* 2004; Rammo, Veldi 2005) was covered by a fill of soil over three metres thick. This soil was mainly of natural origin, and contained relatively few artefacts and bone finds. Below the fill, however, a probable section of a stone circle was found, presumably part of a structure of a ritual character.

### The castle

The Chronicle of Henry of Livonia mentions the joint occupation of the Estonian hill-fort by the Germans and Estonians between 1215 and 1223. After defeating the Estonian uprising, Henry notes that the Order of Sword Brothers began to fortify the site very strongly (HCL XXVIII: 9; XXIX: 3). This is the only written data concerning the early history of the castle, which took on its later basic form probably in the early 14th century, when the large convent was constructed (Altoa 2003). Extensive archaeological excavations in the castle area took place in the late 1870s (Kodar 1998), when fallen debris, caused by damage from the wars of the 16th and 17th centuries, and the demolition of most of the walls in the early 19th century, was removed from the ruins. In the course of this work, the cellars of the convent house and other buildings were cleaned down to the medieval floor levels; also, the courtyard pavements were partly cleaned, with soil and debris being removed. Within the framework of the ruin's conservation projects, several small trial pits and trenches were opened close to the walls of the south, east and north wings of the convent between 1998 and 2007.<sup>1</sup> In the course of these works, it appeared that in most cases the late prehistoric and 13th-century occupation layers had been totally removed when constructing the convent house. In the very bottom of the trial pits were partial fragments of the original pre-stronghold soil; in some pits there were also the remains of the Viking Age occupation layer, where hand-thrown pottery was found. These layers had a very clearly truncated upper surface, and they were covered by a 50 to 60-centimetre-thick layer of disturbed loam that evidently originated from the cellars of the convent. Obviously, the earlier occupation layers were cleaned out from the area and levelled before the extensive construction works began. Only in the excavation trench of 2003 (Haak 2004), which was extended in 2004 (Haak 2005), out-

<sup>1</sup> The works were directed in 1998 by Andres Tvauri, in 1999–2006 by Arvi Haak, and in 2007 by Riina Juurik and Anti Lillak. Publications of the fieldwork results can be found in *Viljandi Muuseumi Aastaraamat* (Yearbook of Viljandi Museum) 1999–2006 and *Arheoloogilised Välitööd Eestis / Archaeological Fieldwork in Estonia*, 1998–2007.

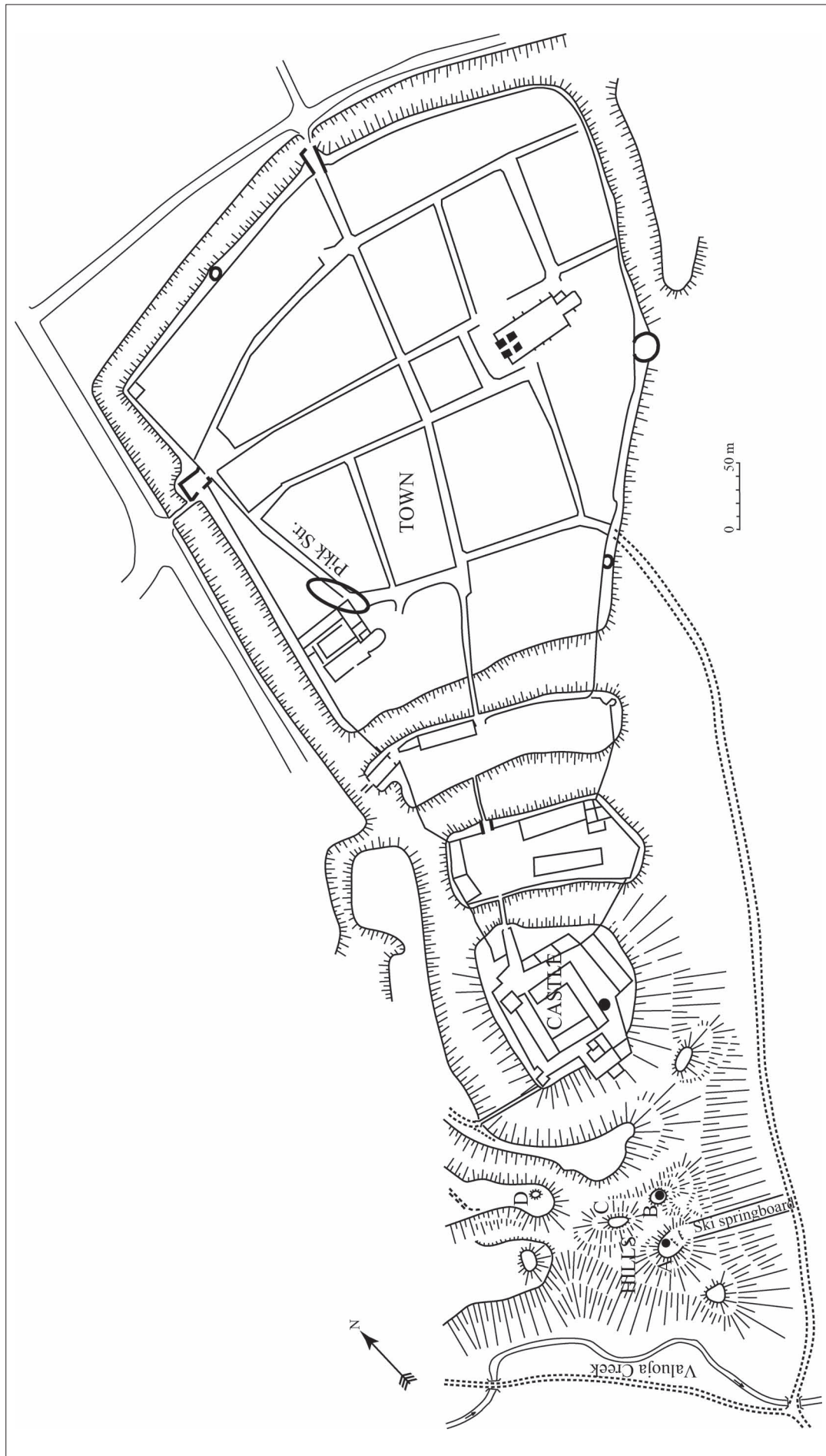


Fig. 2. Viljandi and the discussed excavation sites: 1) Late Prehistoric settlement layers on hills A, B and C, 2) trenches of 2003 and 2004 in the castle, and 3) investigation area of Pikk Street in Early Medieval town (prepared by authors).



side the southern end of the east wing of the convent (Fig. 2), were occupation layers from the 13th century preserved. This material begins, however, from the middle of the 13th century, and ends somewhere in the early 14th century. This is also the context of the analysed zooarchaeological material from the Order's castle in Viljandi.

### The town

The town of Viljandi was formed after the conquest and Crusades (Valk 1993a; 2005; Haak & Russow 2013). The prehistoric settlement in the area of the hills south of the castle was abandoned, and a new medieval town was founded north of the castle and its outer baileys, on the edge of high lake valley plateaus, where the smaller cross-valleys of glacial origin offered good conditions for constructing moats (Fig. 1). The logic of the street network shows that the bridges between the castle and the town area must have already existed before the medieval town was laid out. The town was first mentioned as a *civitas* in 1283, when the grand master of the Livonian branch of the Teutonic Order confirmed its formerly existing town rights. It was surrounded by a stone wall, and it functioned as the outermost, fourth outer bailey of the castle (Fig. 2). The town area was uninhabited before the Crusades: traces of ploughing, however, which are undatable, provide evidence of its function as a field (Tvauri 2000). The analysed zooarchaeological data comes from Pikk (Long) Street (Fig. 2). Judging by its topography, this street (Haak 2003, pp.78-79), which led from the Riga gates to the bridge between the town and the castle, is one of the oldest streets in Viljandi. According to archaeological data from 1990, the town's earliest marketplace, which operated until the early 14th century, was probably close to the excavation plot, in the vicinity of the present-day Church of St John (Valk 1991, pp.59-60). It cannot be excluded that the part of Pikk Street from where the analysed bones come merged directly with the market area. The analysed material originates from the rescue excavations of 1991, both from the street area and from the adjacent plot, when work was carried out with the purpose of preparing the ground for new central heating pipes (Valk 1993b). The bones come partly from a 13th-century potter's household. A waste pit with remains of over-burnt vessels was found just at the northern end of the trench with the analysed bones (Valk 1993b, p.8), and the remains of four kilns were unearthed 20 or 30 metres of it (Tvauri 1999; 2001). The analysed bones from Pikk Street date mainly from between 1225/1250 and ca. 1300/1325 AD.

### Zooarchaeological material

The zooarchaeological material from Viljandi is quite numerous and well preserved. Late Iron Age assemblages contain more fragmented material, but medieval assemblages usually consist of quite large and morphologically easily identifiable specimens. The preservation of bones is always affected by several taphonomic factors, including excavation methods. During the excavation of the castle and the hills the soil was sieved, but not during the rescue excavations in Pikk Street. This probably explains the absence of fish remains in the town assemblage and it might have affected the recovery of bones of small- and middle-sized animals as well (Tourunen 2008, p.47). Although fish were important in the diet of the inhabitants of late prehistoric and medieval Viljandi, in the present study the focus is on the analysis of mammal and bird bones.

### Methods

The analysis of the Late Iron Age material from the hills was based on previous identification reports that primarily included identified species and the number of identified specimens (NISP) (Järv, Saks 2000; Järv 2001; 2002). Taphonomic features such as cut and chop marks were not recorded and estimations for age were given briefly.

The assemblages from the town and the castle were analysed in more detail (identification by E. Rannamäe in 2011), applying methods widely used in zooarchaeological studies. The basic questions addressed for this material concerned features of the dietary structure, and evidence of activities that were secondary to alimentation, that is, utilising animals for different by-products. The main features which were recorded and analysed were NISP and the representation of species,<sup>2</sup> the distribution of anatomical elements, fragmentation, taphonomic features (cut and chop marks, gnawing, weathering, trampling, marrow fracturing, etc.), and age structure, that is, the age at death<sup>3</sup>. All measurements were taken according to the Driesch (1976) method.

<sup>2</sup> Bones were identified by morphological features with the help of anatomical collections of the Zoomedicum of the Estonian University of Life Sciences, and of the Department of Archaeology of the University of Tartu, and bone atlases by Schmid (1972) and Ernits and Saks (2004). For sheep and goat differentiation, work by Boessneck (1969) was used.

<sup>3</sup> For age estimation the methods of epiphyseal fusion by Silver (1969, pp.285-286), teeth eruption by Schmid (1972, p.77), and mandibular tooth wear by Grant (1982), were applied.

## Analysis

### Hills alongside the castle

The Late Iron Age occupation layers on the hills alongside the castle revealed quite outstanding finds. On hill A, the most exciting material is linked to the remains of housing that dates to the period circa 1150 to 1223, or even from a shorter time span in the early 13th century. The assemblage from hill A contained animal bones found just in the immediate surroundings of the remains of two discovered houses. This food waste included a wide range of species (Fig. 3; Table), but mostly there were bones from cattle (*Bos taurus*; 28.4%), sheep/goat (*Ovis aries/Capra hircus*; 21.4%), and pig (*Sus scrofa domesticus*; 13%). It is remarkable that bones of chicken (*Gallus gallus domesticus*) formed around one third of all the specimens (33.5%). There were also a few horse (*Equus caballus*; 0.7%) and dog (*Canis familiaris*; 0.6%) bones. Game animals were represented by roe deer (*Capreolus capreolus*), wolf (*Canis lupus*), white hare (*Lepus timidus*), and otter (*Lutra lutra*). Squirrel (*Sciurus vulgaris*) and rat (*Rattus rattus*) were also present. In addition to chicken, there were only 13 bird bones in the assemblage, among them specimens of goose (*Anser sp.*), pigeon (*Columba sp.*), and some passerines (order *Passeriformes*).

The soil on hill B, consisting of disturbed occupation layers, dates from the tenth to the early 13th century, and it also contained mostly cattle (34.9%), sheep/goat (32.9%), and pig (18.5%) bones (Fig. 3; Table). Again, there was a relatively large amount of chicken

specimens (7.1%), although notably less than on hill A. Among the material there were eight horse specimens (1.3%), relatively more dog bones compared to hill A (2.8%), and also one specimen of a cat (*Felis catus*). Game was represented by elk (*Alces alces*), lynx (*Lynx lynx*), and beaver (*Castor fiber*). Again, there were few bones of squirrel and rat, and even one bat (order *Chiroptera*) bone was found. Besides chicken, only one bird species, goose, was present. And among the artefacts, there was a pendant made from a wolf's canine.

Although the zooarchaeological material from hill C has not been included in the present study, the find of the cranium of a 15-year-old stallion at the very bottom of the excavation plot (Järv 2004) should especially be noted. It was probably related to an animal sacrifice, since it had been chopped off the back of the head (just at the location of the occipital condyles), and, based on the measurements, it is thought to have been of a local breed (Järv 2004). The find dates from the final centuries of prehistory (Rammo *et al.* 2004).

### The Order's castle

The bone assemblage from the southeast corner of the Order's castle included both mammal and bird bones (Fig. 3; Table), but it consisted mostly of cattle (61.5%) and sheep or goat (33.6%). Pig bones formed only 1.1% of the material. All other species, dog, chicken, goose, elk and/or red deer (*Cervus elaphus*), brown bear (*Ursus arctos*) and white hare, were represented by only a few specimens. The dominant anatomical element was the cranium, forming up to 58%

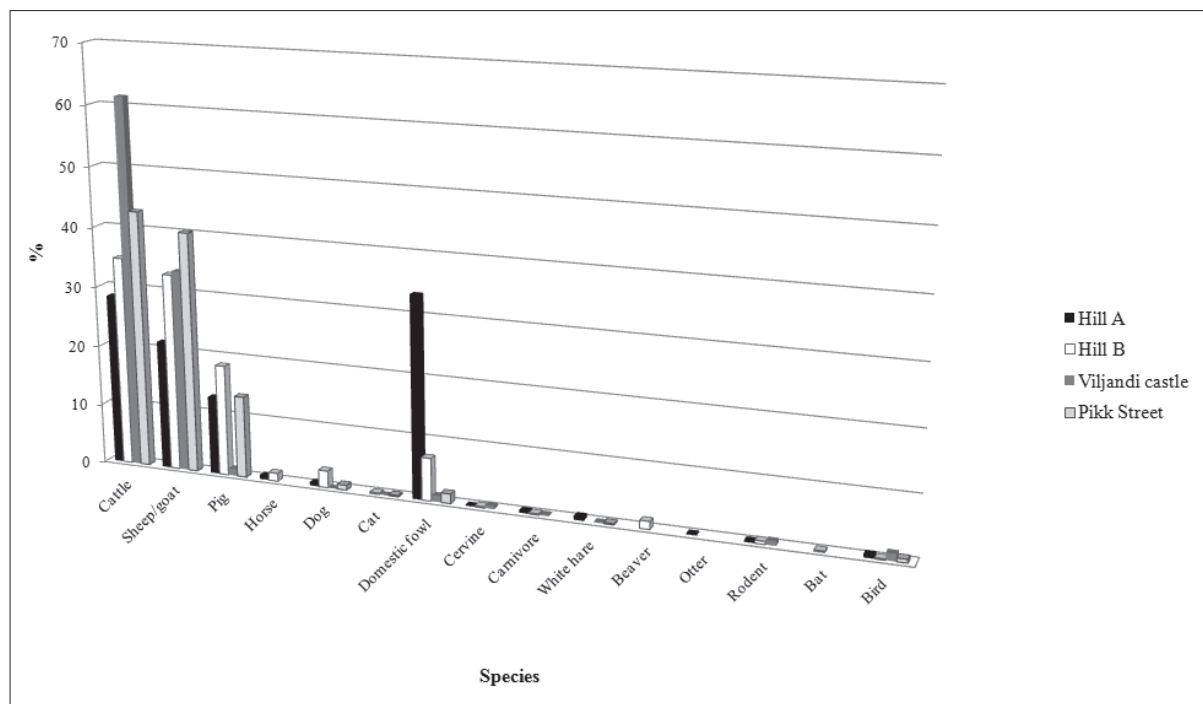


Fig. 3. The distribution of bone specimens from the hills A and B, the Viljandi castle and Pikk Street by species (prepared by authors).

of the whole assemblage (Figs. 4, 5). The large number of skull fragments could partly be caused by the easy fracturing of this bone element, but still the proportion was considerable, thus posing some questions. There is evidence for the extraction of brains: two cattle cranial fragments indicated that the skull had been split, and one cranial fragment had a cut mark on the internal surface. Sheep/goat skulls had also been butchered: 21 cranial fragments carried marks of splitting in half. Despite the overwhelming dominance of cranium fragments, horn cores were practically missing, a fact that suggests they were collected and taken to some other location for processing. Whether this raw material was processed inside the castle area or not is debatable. Yet the evidence for bone and antler work is obvious, because of the amount of processing remains found inside the castle (Haak *et al.* 2012). In addition to the cranium fragments, there was evidence of meat consumption: cut and chop marks, probable skinning marks, traces of marrow exploitation (mostly on cattle bones), and some poorly preserved specimens that might indicate cooking or boiling. However, the uppermost parts of adult animals' limbs, meatier shoulder-blades and buttocks were strongly underrepresented, thus reflecting the more specialised nature of the assemblage. Fragmented material from the castle included quite a few specimens of unidentifiable young animals, probably lambs and kids, but maybe also some piglets. Juveniles were most likely used for food because of their soft and high-quality meat. Even 40% of sheep/goat bones that were aged belonged to animals younger than ten months. Nonetheless, the majority of the bone speci-

mens derived from older animals: sheep and goats had been slaughtered mostly between the age of two and four years, and cattle between the age of three or five years. In the castle, in addition to goose and chicken, some larger and less common species, possibly swan (*Cygnus sp.*) and stork (*Ciconia sp.*) or crane (*Grus grus*), were present. Wild animals were very rare in the castle assemblage, consisting of only elk and possibly red deer, brown bear, white hare and an unidentifiable carnivore. In addition to the bones, working debris from elk and red deer antler were found (see Haak *et al.* 2012).

#### Pikk Street in the town area

The bone assemblage from Pikk Street in the town area had different traits compared to the contemporaneous material from the castle. The diversity of species represented was quite small (Fig 3; Table 1). Cattle and sheep/goat bones were represented by almost the same amount (42.9% and 40.1% respectively), and there were more pig remains (13.6%) compared to the castle. The town assemblage was a mixture of different body parts, and it did not reveal any specific character, like the castle assemblage (Figs. 4, 5). There was a slight tendency for slaughtering cattle a little younger, and sheep/goats a little older than in the castle, but otherwise the pattern was very similar: sheep and goats were slaughtered mostly after the age of two or three years, and cattle mostly between the age of three and five years. In the town assemblage, there were very few bird bones, only from chicken and probably wild

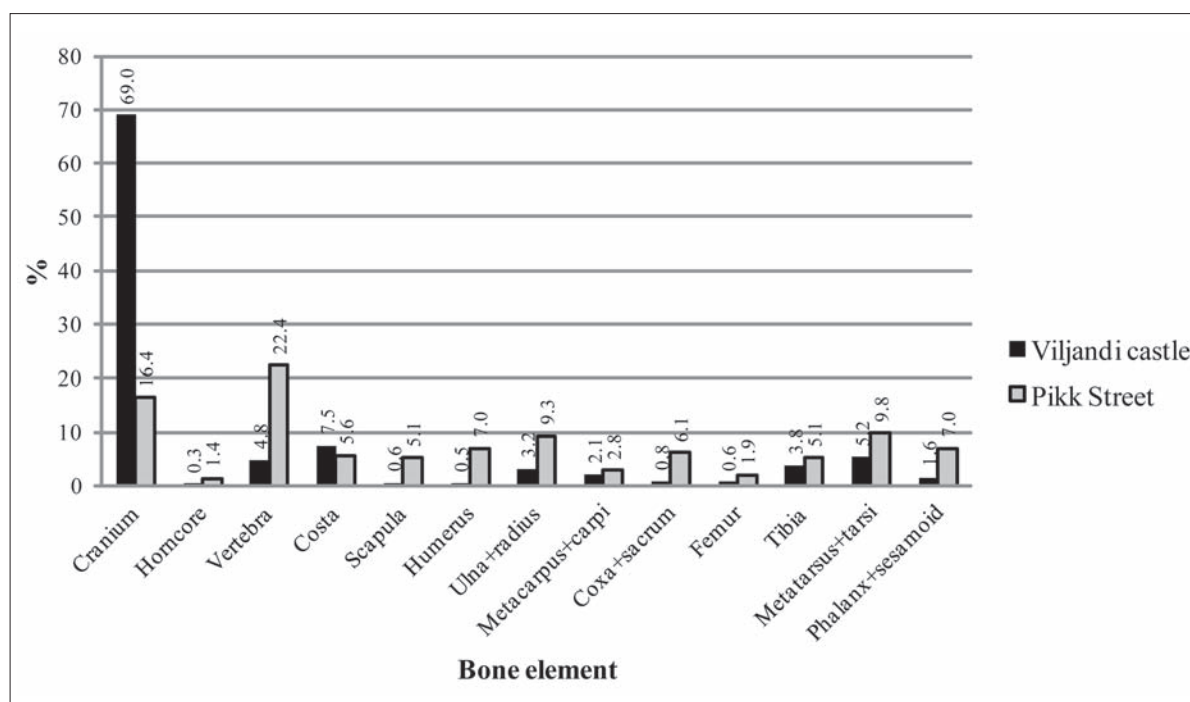


Fig. 4. Distribution of cattle (prepared by authors).

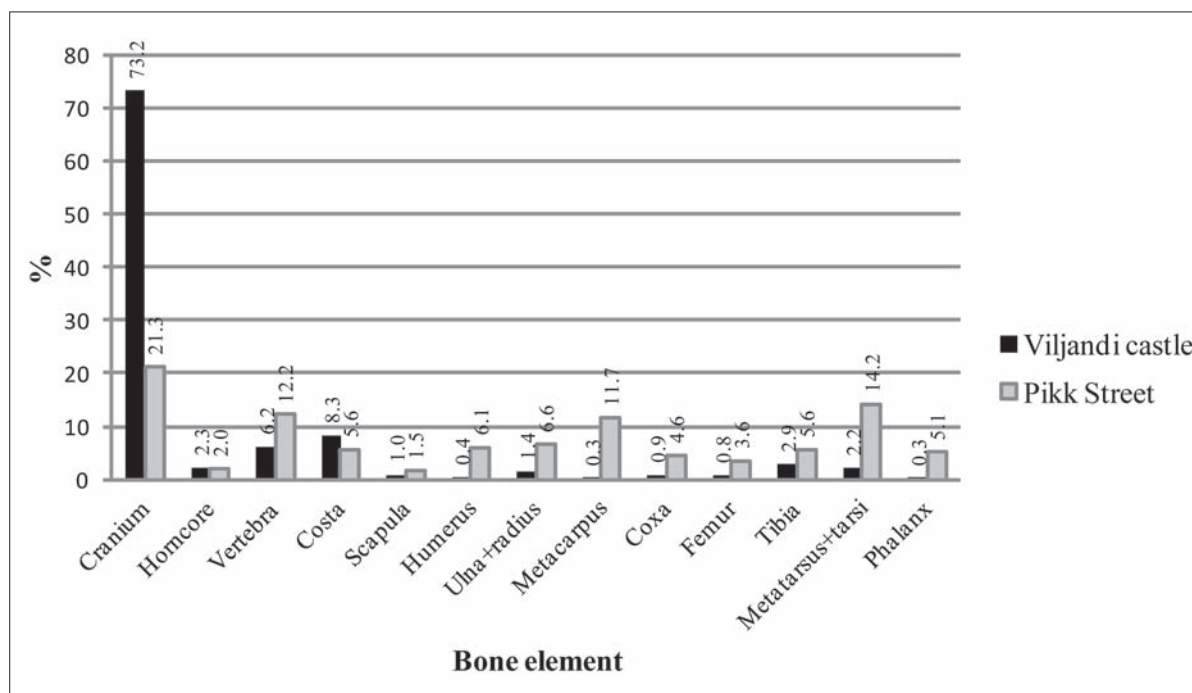


Fig. 5. The distribution of sheep/goat (*Ovis aries*/*Capra hircus*) bone specimens from the Viljandi castle and Pikk Street assemblages by bone element (prepared by authors).

goose. Game was represented by only a single humerus from a white hare.

## Discussion

The three bone assemblages analysed in this article derive from different areas, and represent different periods and cultural backgrounds. However, in general, the bone material did not reveal any conceptual distinction between them. Beef was probably more valuable than mutton and pork, and it was most commonly consumed in medieval urban sites (Albarella 2007, p.134). This general rule is also expressed in early medieval Viljandi: the dominance of cattle bones was seen both in the castle and the medieval town layers, but also in the assemblage from hill B. The exception is material from hill A: there, chicken bones were most numerous, followed by cattle, sheep/goat and pig. The paucity of pig bones in the castle assemblage was also unusual, but this certainly does not mean that pigs were not consumed there at all. However, based on the results of other excavations, cattle and sheep/goat seem to sustain their majority presence in the castle (see Rannamäe 2010). The dominance of cattle and sheep/goat, and the scarcity of other species in the castle, might be connected to this particular assemblage, because it revealed a rather specialised distribution of body parts, that is, it contained a large number of cranial fragments. One possible interpretation could be that the high number of fragmented and split skulls could indicate the

location of primary butchery, where animal carcasses were skinned and dismembered (see also Rackham 1994, p.56). However, a more reliable interpretation is that the area was used for dumping rubbish, including butcher's waste, perhaps in order to raise the ground level (Haak *et al.* 2012).

The presence of horse bones in Viljandi should be discussed separately. Horse flesh was often consumed in Europe during prehistoric times, but a decree of Pope Gregory III in 732 AD made the eating of horse flesh a taboo (Hillgarth 1986; Sherman 2002, p.57). The Pope called this pagan practice of eating horses a 'filthy and abominable custom' (Hillgarth 1986, p.174). For example, in Iceland, Christianisation in 1000 AD was achieved only when the Church promised that Icelanders could continue to eat horse meat, but once it had consolidated its power, the concession was discontinued (Jones 1986, pp.149-151). How the situation was in the area of present-day Estonia it is difficult to say, because the issue has not been dealt with. In the current study, horse was present only in the hill sites, although horse specimens have occasionally been found in other material from the medieval town and the castle as well. These, however, are not firmly designated as the remains of food waste (see Rannamäe 2010). Horse bones from the prehistoric settlement did not exhibit any cut or chop marks, except one metatarsal of a foal with a few strong cut marks, but this is not an evidence for the consumption of horse meat. Another issue is related to horse breeds: it seems likely that some new



horse breeds were introduced here alongside the local horses as a result of crusading activities. The assemblage from hill B included the femur of a much larger animal than the size of an indigenous horse breed. Therefore, it has been interpreted as originating from a non-local horse (Saks, Valk 2002, p.54). Nevertheless, this question, as well as the question of horse flesh consumption, must be studied further with supplementary material and analysis.

There are many factors that affect the frequency of a particular species in an animal bone assemblage. In the case of the small number of birds in Viljandi, the predominant factors are probably the level of preservation and the efficiency of recovering, but not only. The modest representation of bird bones can also be related to the social conditions of that time and the availability of fowl. The consumption of probable swan and stork/crane in the castle can be interpreted as the privilege of the higher social class (Albarella, Thomas 2002, p.23; Mänd 2004, p.332). A glance at other analysed assemblages from the castle area shows that duck, passerine and snipe were also consumed there during the Middle Ages (Rannamäe 2010). In addition, there were also relatively many (unidentifiable) juvenile bones in the castle assemblage that could be interpreted as part of the dietary regime of the nobility. The assemblage from the town also contained very few bird bones: only eight specimens of chicken, and three of probable goose. But in other sites from the medieval town area there is evidence of other species as well, among them several that might indicate high class consumption: duck, capercaillie, crane, swan and some passerines (see Rannamäe 2010). The numerous amounts of chicken bones in the prehistoric occupation layers on hill A also reflect the high social status of the inhabitants of the late prehistoric household located there. When compared to the other assemblages, the percentage of chicken is much higher (33.5%) than on hill B (7.1%), in the castle (1%), or in Pikk Street (1.6%).

Although the hills had a larger diversity of game species, it should be noted that the percentage of wild animals did not differ greatly in the assemblages from late prehistoric (1.6%) and early medieval times (0.8%). Because of the limited number of specimens from the hills, and also because of the current stage of the analysis, it is difficult to offer substantial conclusions. However, as the main meat providers in the Middle Ages were domestic mammals, hunting and the consumption of game were the privilege of the upper classes (Mänd 2004, p.298). Of course, it is questionable whether this argument is also transferable to the Late Iron Age, but traces of game are quite rare in the entire zooarchaeological material from Viljandi. In addition to the game species mentioned above, roe deer, beaver and lynx

bones have been found in the castle, but these belong partly to later times (Rannamäe 2010). One interesting point about the castle assemblage under study is the presence of red deer, although it was represented mostly by processing remains from antler. As red deer did not live in the wild in Estonia at that time (Paaver 1965, p.235ff, Fig. 37: IV), antler might have been brought to the castle specifically as a raw material for bone working (Haak *et al.* 2012). But it is also possible that the whole animal was brought there, because written sources from the later Middle Ages state that game animals like roe deer and red deer were brought to Tallinn from as far as Riga and Danzig/Gdańsk (Mänd 2004, p.344). It is also worth mentioning six distal phalanges (remains of claws) of a brown bear from the castle, which might be the remnants of a bear skin, a feature particularly suitable for the castle's inhabitants. The same interpretation, the remains of a skin, could also be used for a fibula and eight foot bones of a wolf from hill A. In the analysed assemblage from the town, however, game was very modestly represented, including only one specimen of a white hare. Nonetheless, archaeological evidence has also revealed roe deer, elk, brown bear, and maybe even wolf and wild boar from other parts of the medieval town (see Rannamäe 2010).

## Conclusions

The general character of animal consumption did not change much in Viljandi before and after the Crusades. The bones of domestic animals, large and small stock as well as pigs, form the overwhelming majority of the faunal assemblage.

However, zooarchaeological material from different contexts of Viljandi does provide evidence for certain differences in animal consumption, both temporal and spatial. The Late Iron Age Estonian settlement differs from the 13th-century German castle and the earliest occupation layers of the medieval town in terms of the greater diversity of game species and the presence of horse bones. However, the difference in the occurrence of game animals is not significant: the consumption of game was already of marginal importance in late prehistoric times. The bone assemblage from the castle, when compared to the medieval town, is characterised by a larger percentage of cattle bones and low numbers of pig bones, and a higher stage of bone fragmentation, but it remains unclear whether the assemblage is representative of the castle as a whole: the analysed data may come from an area related to slaughtering and butchery activities, or just from an area where butchered waste was disposed of.

The reflections of social differences in animal consumption between the three analysed contexts are also not particularly variable. In the Late Iron Age settlement, the high social status of its dwellers is expressed by the notably high percentage of chicken bones. The high status of the castle inhabitants, when compared to the medieval town, is reflected by the higher percentage of juvenile individuals, by the presence of some animal and bird species that can be interpreted as indicators of social status, and probably also by the lower occurrence of pig bones.

As the analysed castle and town assemblages are rather small, and do not represent the whole areas, and as material from the hills has not been analysed in full from every perspective, all interpretations are preliminary, and will be supplemented with new findings and further analysis.

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## GYVŪNŲ VARTOJIMO MAISTUI ASPEKTAI PAGAL ZOOARCHEOLOGINĘ MEDŽIAGĄ ERDVĖS IR LAIKO ATŽVILGIU: PRELIMINARŪS DUOMENYS IŠ VILJANDI, VIDURAMŽIŲ LAIKŲ LIVONIJOS

**EVE RANNAMÄE, HEIKI VALK**

### Santrauka

Priešistorės laikais ant piliakalnio (Fellin) Viljandi, Saccala srityje (Estija), stovėjo stipriausia pilis. Šis piliakalnis Estijos karų su Ordinu pabaigoje (1208–1227) pamažu išaugo į Kalavijuočių ordino pilį; kuri nuo 1237 m. jau priklausė Kryžiuočių ordinui. Netrukus po Saccala srities užkariavimo priešais pilį, pradėjo formotis viduramžių miestas (1 pav.). Livonijoje nuo vėlyvojo geležies amžiaus iki ankstyvųjų viduramžių visose visuomenės srityse įvyko daug pokyčių. Šiuo darbu siekiama parodyti, kaip šiuos visuomeninius pokyčius atskleidžia zooarcheologinė medžiaga. Šiame straipsnyje vėlyvųjų priešistorės laikų zooarcheologinė medžiaga lyginama su analogiška medžiaga iš naujai susiformavusios Viljandi pilies, kurios kultūriniai sluoksniai lokalizuojami kalvų rajone, 100–140 metrų į pietus nuo pilies, buvusio ankstyvųjų viduramžių miesto ir pietiniame rajone (2 pav.). Mokslinių tyrimų duomenimis siekta nustatyti, kaip keitėsi gyvūnų vartojimas maistui nuo ankstyvųjų priešistorės laikų iki viduramžių; kaip tai atskleidžia zooarcheologinė medžiaga; ar ši medžiaga gali atskleisti žmonių socialinės padėties skirtumus? Pateikiami osteologiniai duomenys, datuojami vėlyvuojū geležies amžiumi (X–XIII a.), ir duomenys iš 1223 m. gyvenvietės kultūrinių sluoksnių, kurie buvo kalvų A ir C rajone. Taip pat publikuojami 1999, 2001 ir 2002 m. archeologinių kasinėjimų zooarcheologiniai duomenys (2 pav.). Kalvoje A aptikta nemaža radinių, įskaitant du pastatus, sudegusius Kryžiuočių ordino valdymo laikotarpiu. B kalvos kultūriniuose sluoksniuose buvo aptikta labai daug įvairių archeologinių radinių ir gyvūnų kaulų.

Zooarcheologinė medžiaga iš Kryžiuočių ordino pilies kiemo buvo aptikta 2003 ir 2004 m. tyrinėtoje tranšėjos vietoje (2 pav.), kuri datuojama XIII a. viduriu – XIV a. pradžia.

Viljandi miestas pradėjo formotis po šios vietovės Kryžiuočių ordino užkariavimo. Tirta zooarcheologinė medžiaga aptikta 1991 m. kasinėjant Pikk (t. y. Ilgoji)

gatvės teritorijoje, kuri yra viena seniausių ir ilgiausių šio miesto gatvių (2 pav.). Osteologinės medžiagos kolekcijos datuojamos jau po kryžiuočių atsikraustymo laikotarpio, t. y. XIII a. antrąja puse – XIV a. Dalis osteologinės medžiagos aptikta puodžiaus namų ūkio teritorijoje, datuojamoje XIII a.

Bendra naminių gyvulių rūšių struktūra prieš ateinant kryžiuočiams ir po jų užkariavimų mažai keitėsi. Osteologinėje medžiagoje galvijų, avių / ožkų ir kiaulių kaulų kiekis sudarė didžiąją dalį (3 pav.; Lentelė). Tačiau analizuojant zooarcheologinę medžiagą, pastebimi tam tikri, ypač gyvulių laikymo, skirtumai. Estijos geležies amžiaus gyvenviečių zooarcheologinė medžiaga skiriasi nuo XIII a. Vokietijos pilių medžiagos tuo, kad Estijos viduramžių miestų kultūriniuose sluoksniuose yra didesnė stambių gyvūnų įvairovė ir aptinkamas nemažas arklių kaulų kiekis. Vis dėlto stambių gyvūnų kaulų kiekio skirtumas nėra labai didelis, panašus stambiųjų gyvūnų kaulų kiekis randamas ir vėlyvaisiais priešistorės laikais. Viljandi pilyje rastos kaulų kolekcijos, lyginant su viduramžių miesto kaulais, rodo didesnę galvijų kaulų procentą ir mažesnę kiaulių kaulų skaičių, taip pat keičiasi kaulų skaldymo, kitaip tariant, skerdimo technologijų išsivystymo lygis, tačiau statistiškai patikimų skirtumų tarp šių kolekcijų nenustatyta. Tarp iškastos osteologinės medžiagos vyravo kaukolės fragmentai (4, 5 pav.), tai galima sieti su egzistavusiomis skirtingomis vietomis, kurios buvo skirtos gyvulių skerdienos atliekoms šalinti. Osteologinė medžiaga nerodo egzistavus didesnių socialinių skirtumų. Aukštą pilėnų socialinį statusą, lyginant su viduramžių miesto gyventojais, rodo tik tai, kad pilies teritorijoje aptinkamas didesnis jauno amžiaus gyvulių ir paukščių kaulų procentas ir mažesnis kiaulių kaulų kiekis.

Kadangi pilies ir miesto kolekcijos yra mažos ir nėra galutinai išanalizuotos, jų duomenys neatskleidžia viso Saccala regiono situacijos.

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