



Archaeological investigations at a settlement site of different periods – Põllukivi plot in Kurna village, Harjumaa

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INTRODUCTION

In spring 2019, archaeological preliminary investigations were carried out in the village of Kurna in Rae municipality, Harju county. The object of the study was Põllukivi plot, located in the north-eastern part of the village, where two major highways – the Tallinn – Tartu highway and the ring road of Tallinn, cross (Fig. 1; Vedru 2019). At present Põllukivi borders with the market town of Jüri in the north-east, but previously these lands belonged to the historical Lehmja village. From the latter, the study area is separated by a modern high road running on an embankment that obstructs the view and also creates a sense of different spaces and areas. Thus the Põllukivi plot seems to be standing separately from the wider environment, but disregarding the present borders – both administrative and physical, the study area fits into its historical surroundings and becomes an integral part with its wider environment. The investigated area was not entirely a peripheral area but belonged to a larger settlement unit of Lehmja. The intensive cultural layer of the large settlement site of Lehmja, inhabited from the 1st millennium BC to the 18th century and extensively investigated (Lavi & Niinre 1990), is located just to the east-northeast and to the east-southeast of the Põllukivi plot. Considering the location of the study area and the

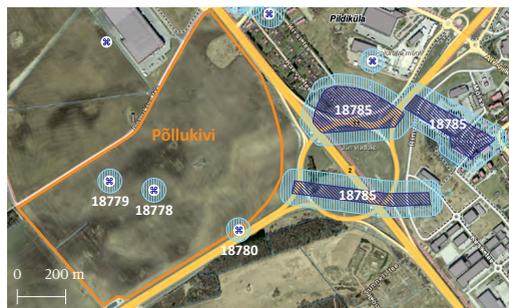


Fig. 1. Põllukivi plot with its surroundings before the investigations of 2019. Archaeological objects in the figure: 18778, 18779, 18780 – cup-marked stones, 18785 – settlement site of Lehmja. The old road is visible as a lighter stripe. The darker brown spots mark the former damp area with a turf layer.

Jn 1. Põllukivi kinnistu koos ümbrusega enne 2019. a väliuuringuid. Arheoloogiamälestised joonisel: 18778, 18779, 18780 – lohukivid, 18785 – Lehmja asulakoht. Vana teekoht on nähtav heledama joonena. Tumedamad pruunid kohad tähistavad turbalaukudega varasemat niisket ala.

Map / Kaart: Estonian Land Board / Maa-amet, additions / täiendused Reet Maldre

peripheral area but belonged to a larger settlement unit of Lehmja. The intensive cultural layer of the large settlement site of Lehmja, inhabited from the 1st millennium BC to the 18th century and extensively investigated (Lavi & Niinre 1990), is located just to the east-northeast and to the east-southeast of the Põllukivi plot. Considering the location of the study area and the

distance between the settlement site of Lehmja, it was assumed that the Põllukivi plot might have been a border area to the Lehmja settlement site, but it was not known how it was used by its settlers.

The Lehmja–Kurna area is rich in archaeological finds, and the Põllukivi plot is no exception. The buffer zone of the Lehmja settlement site extends to the eastern edge of the study area, and a large number of stone graves and cup-marked stones are known from the surrounding territory. Three cup-marked stones are located in this particular plot, and some information regarding the existence of a possible Early Metal Age settlement site has been obtained there previously (Fig. 2: 1). The cup-marked stones (Fig. 2: 18778, 18779, 18780) probably bore several layers of meaning and they have been explained differently by different researchers. They can also be found in various natural conditions – some of them are in damp places, others on fertile soils. Sometimes they are located in the vicinity of the Bronze and Pre-Roman Iron Age settlement sites. In North Estonia such associations can be found in Soodevahe (Paavel *et al.* 2016), Jõelähtme, Joa, Muuksi and Kalamäe (Vedru 2010). Thus the cup-marked stones of the study area might indicate the existence of a settlement site of the period.

Põllukivi property has been used so far for agricultural activities, but in the future it will be taken into use as a technology park. Hence the need to study the area with the main aim to locate the cultural layer of the settlement site and to determine any other archaeological objects yet unknown.

THE LOCATION OF THE RESEARCH OBJECT, ITS NATURAL CONDITIONS AND HISTORY OF USE

Põllukivi plot – the study object – is divided into two relatively diverse areas: its west-south-western part is low-lying and somewhat damp and its north-northeastern part is higher and drier. The height difference between these parts of the property reaches up to 5.6 metres and the higher part of the study area is almost on the same level as part of the Lehmja settlement site.

The southwestern boundary of the property runs along the Kurna stream, which in this place is oriented to the northwest–southeast direction. The original streambed of the Kurna stream has been completely straightened by ditching, thus losing its natural appearance. At present, there is a ditch in the southeastern part of the real estate that takes its waters into the Kurna stream. That artificial body of water collects the waters from the surrounding areas that used to be damp. The topographical map of the Soviet Union, compiled in 1959, shows three long ditches in the southwestern part of the property, indicating a wet area (data taken from the map server of the Estonian Land Board: map application of historical maps, see <https://xgis.maaamet.ee/xgis2/page/app/ajalooline>). In addition, the whole area including its higher northern and east-northeastern parts, is covered by a system of drainage pipes for land improvement (Fig. 2), installed in the depth of one metre and at intervals of 12–15 metres. Therefore, the possibility that the drainage system may have completely destroyed the cultural layer of the Early Metal Age settlement site was taken into consideration.

The current Põllukivi property remained on the border of Lehmja and Kurna manors in earlier times, though belonging to Lehmja (Germ. *Rosenhagen*) manor. The border of the two manors ran along the Kurna stream at least in the 19th century. At that time, the study area was mostly used as a meadow and to some extent as a field (RA, EAA.854.4.790, sheet 1).

As mentioned, there are several archaeological objects in Põllukivi land unit. The three cup-marked stones remain on the low and somewhat damp part of it. In 2014, archaeological

investigations were carried out in the vicinity of the one located in the east-southeastern side of the property. Hearths with sherds of Iron Age pottery, and burnt animal bones were found (Russow *et al.* 2014, 14). The archaeological heritage passports of these stones, i.e. their official descriptions archived in the National Heritage Board, indicate that the settlement site dates from the Early Metal Age (Lavi 1993a–c), but the location of the settlement site differs in each passport. The only common feature in these descriptions was that the settlement site was located somewhere on a higher and dryer part of the property. As the settlement site was not registered as archaeological monument upon its discovery, it can be assumed that it was of limited size and very low intensity.

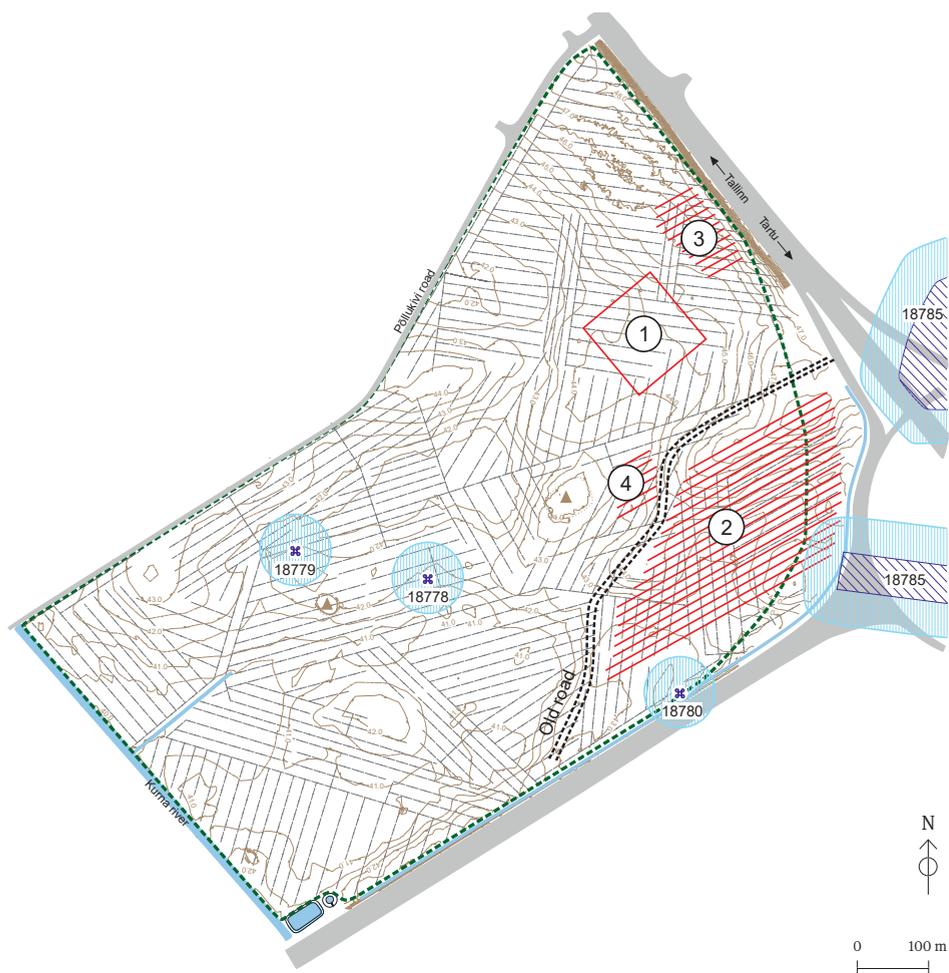


Fig. 2. Archaeological objects localized on Põllukivi plot. 1 – settlement site of the Early Metal Age, 2 – peripheral area of Lehmja settlement site, 3, 4 – areas indicating a settlement site as suggested by testing with the metal detector.

Jn 2. Põllukivi kinnistul lokaliseeritud arheoloogilised objektid. 1 – varase metalliaja asulakoht, 2 – Lehmja asulakoha servaala, 3, 4 – metallidetektoriga lokaliseeritud asulalaigud.

Drawing / Joonis: Kadri Randoja, Reet Maldre

Another interesting object in Põllukivi property is an old road, visible both on landscape and on the map of the Land Board (Fig. 2). It is oriented mainly to east-northeast–south-south-west directions and runs through the east-northeastern, eastern and east-southeastern part of the study area on a higher area with dryer soils. The total length of that road in the property is about 750 metres and it rises up to one metre above the surrounding ground.

The road comes from the direction of the Kurna manor and a preceding settlement site, and in the east-northeast it ends at the Lehmja settlement site. The same road is marked on the map depicting the villages of Kurna and Lehmja in 1873. It can be supposed that this road may originate from much earlier times since the manor of Kurna, established at the end of the 14th century must have had a connection to the medieval parish church in Jüri (Vaskjala), located ca. 4.7 km to the east-northeast. Considering that most of the local villages (Kurna, Lehmja, Karla etc.) date back to prehistoric times, it is intriguing to assume that the road in discussion may also originate from prehistory.

THE FIELDWORK AND ITS RESULTS

Three different study methods were used in Põllukivi: surface observation, metal detector studies and digging test pits. As the investigation area was large, the first aim was to determine areas for more thorough study. Natural conditions were taken into account, but also surface observation and testing by metal detector were carried out in the whole area. Every find spot of a metal object was dug into the natural base layer, investigated and described as a test pit. Although the damp lower area was empty of finds, a number of test pits were dug also there for mapping the soil and possible changes in it. A large number of test pits were dug in the surroundings of the cup-marked stones to find out possible traces of usage of those areas.

In the dry and higher part of the study area, also the concentration areas of surface finds were first determined. The next step was testing by metal detector, followed by digging test pits. When the probable area of the Early Metal Age settlement was located, test pits were dug to find out whether the cultural layer there has preserved melioration and decades of ploughing. When a thin dark cultural layer was found, next test pits were dug to determine its borders, avoiding to disturb the cultural layer itself.

Altogether 145 test pits were dug on the study area, the majority of them to the higher part. In addition to the Early Metal Age settlement site, the old road and its vicinity was also an area of higher interest.

The surveys revealed that the Early Metal Age settlement site was located in a limited area in the northeastern part of the property (Fig. 2: 1). Based on that, it seems that the earliest settlement of the area was more widespread than previously thought (Lavi 1997, 94). But it was not an intensive settlement site, more likely a place of a small size farmstead. Some pot sherds were collected from that area as surface finds. The test pits revealed that a dark cultural layer measuring up to 5 cm was preserved beneath the plough layer only in a very restricted area. Surveys also revealed that the cultural layer of Lehmja settlement site spreads in the east-northeastern, eastern and southeastern parts of the property (Fig. 2: 2–4; Fig. 3). It was strongly disturbed by ploughing and land improvement, and no intact cultural layer was detected. The oldest finds gathered from that area belong to the Roman Iron Age and the youngest to the beginning of the 20th century. In addition, pieces of slag and iron ore were found by the old road site where at least some of it was probably used as a filling for the road. It is possible that they originate from a smithy located in the same area.



Fig. 3. View to the Early Metal Age settlement site from the south-southwest.

Jn 3. Vaade varase metalliaja asulakohale lõunakagu poolt.

Photo / Foto: Gurly Vedru

FINDS

Only four pottery fragments have been found from Kurna. Three on them are sherds of hand-made pottery, presumably belonging to the Pre-Roman Iron Age (AI 8104: 2, 19, 21). One ceramic fragment is from a handle of medieval or Early Modern redware tripod pipkin (Russow 2007, 78).

The earliest metal object is a fragment of a bronze cross-ribbed fibula. The only preserved rib has two knobs at both ends, the foot of the fibula ends with a stylized animal head shaped knob (Fig. 4: 1). Cross-ribbed fibulae were used mostly during the 3rd–4th centuries (Laul 2001, 98–108; Lang 2007, 207). Quite similar fibula has been found from the Linnakse stone grave in Harju county (Tamla *et al.* 2011, 77, fig. 5: 5). Cross-ribbed fibulae with knobs are known also from south-eastern Estonia, northern and eastern Latvia and Finland (Laul 2001, 107, figs 38–39). A fragmentary head of a double cross-headed pin which had been



Fig. 4. Finds from Kurna: 1 – fragment of a cross-ribbed fibula, 2 – head of a cross-headed pin, 3 – chain holder from a belt ornament.

Jn 4. Leiud Kurnast. 1 – kärbissõle katke, 2 – kaksikristpeaga rinnanõela katke, 3 – trapetsikujulise keekandja katke. (AI 8104: 15, 12, 14.)

Photo / Foto: Heidi Luik

silver-plated (Fig. 4: 2) can be dated to the end of the 10th century – 11th century (Mägi 1997, 44–49, pls X–XI; Tvauri 2012, 143, fig. 109). Two horse crampons possibly belong to the end of the Late Iron Age, although they may also be medieval (Tvauri 2001, 160).

Most of the finds belong to the Middle Ages and modern times. A trapezoid chain holder made of copper alloy (Fig. 4: 3) comes from a belt ornament. Copper chains hanging from a woman's belt were used mostly in the 16th–18th centuries (Kaarma & Voolmaa 1981, 224–225,



Fig. 5. *Fragment of a horseshoe with a jagged groove.*
Jn 5. *Sakilise naelasoonega hobuseraua katke*
 (AI 8104: 17.)
 Photo / Foto: Heidi Luik

fig. 150; Kirme 2002, 179; Tamla & Kiudsoo 2005, 76–77). Some other copper alloy items – a narrow closed ring, a thimble, two pipe cleaners and two coins – belong to the Early and Late Modern Period. Iron objects include a fragmentary knife and an axe, some nails and two broken horseshoes. A fragment of a fullered horseshoe has a jagged groove near its outer edge (Fig. 5), possibly to prevent slipping (Fitzwygram 1886, 677–678). Some slag pieces and a piece of iron referring to blacksmithing were found, and also a fragmentary whetstone, a piece of clay from a house wall and a small tin bullet.

CONCLUSION

Archaeological excavations revealed that the higher north-northeastern, northeastern, eastern and east-southeastern part of the Põllukivi property has been repeatedly inhabited and/or used by people. The oldest traces of human settlement here date back to the Early Metal Age, when only a small area in the north-northeastern part of the study area was used. From previous investigations it is known that the Lehmja settlement site was inhabited at the same time, but it remained unclear whether the present Põllukivi plot was a dwelling place or a place used for some other purpose. The number of finds was scarce and no animal bones, charcoal and burnt stones characteristic of the settlements were found. At the same time, it must be taken into account that the area has undergone thorough land improvement, where the previous cultural layer is largely destroyed and disturbed. There are a number of stone graves, located about 500 metres to the northwest and north from the settlement site discovered in 2019. Some of them may have been established and used by the people living in the settlement site at Põllukivi. In any case it is the closest settlement site to these graves.

As the Early Metal Age – the period that includes both the Bronze Age and the Pre-Roman Iron Age – is often characterized by settlement units consisting of individual farms in northern Estonia, the settlement site discovered at Kurna Põllukivi could be considered a trace left by one household. Thus there would be at least two nearby farms in the earlier stage of Lehmja settlement sites.

From the Roman Iron Age to Modern Age, a larger area was used on the east-northeastern, eastern and east-southeastern sides of the study area. Also the road that crosses this territory was probably used for centuries, connecting the villages of Kurna–Lehmja area with the parish church and further areas. That can be considered as the edge of the larger Lehmja settlement site. It is possible that a smithy was located further from the core of the settlement, since pieces of slag and natural iron ore were found in that area.

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ERIAEGSE ASULAKOHA ARHEOLOOGILISED UURINGUD HARJUMAAL KURNA KÜLA PÖLLUKIVI KINNISTUL

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2019. a kevadel toimusid arheoloogilised eeluuringud Kurna külas (Rae vald/Jüri kihelkond, Harjumaa) Põllukivi kinnistul (jn 1). Uurimisala jääb ulatuslikult Lehmja asulakohast – omaaegsest keskusest – lääne ja lääneloode poole, olles sellest praegu eraldatud suurte teedega. Neist Tallinn–Tartu maantee kulgeb kõrgel maanteetammil ning takistab ajaloolise Lehmja küla poolt nii juurdepääsu kui ka visuaalset seost. Tegelikult haakub Põllukivi idakirdepoolne osa maastikuliselt hästi Lehmja asulakoha ülejäänud osaga.

Kurna küla kirdepoolest servas paiknev Põllukivi kinnistu jaguneb maastikuliselt kaheks: lääneedela-

poolne osa on madal ja niiske, idakirdepoolne aga kõrgem ja kuivem. Kõrguste vahe kinnistu eelmainitud osade vahel ulatub kuni 5,6 meetrini.

Kinnistul asuvad kolm lohukivi ning sellelt on teateid varase metalliaja asulakoha olemasolust; samuti jääb lähedusse Lehmja pikaajaline asulakoht. Lisaks neile leiab kinnistu kesk- ja idakirdepoolest osast varasema teekoha (jn 2).

Arheoloogilised uuringud ajendas seni põllumaana kasutatava kinnistu kasutuselevõtt tehnopargina. Seetõttu taheti lokaliseerida mainitud varase metalliaja asulakoha kultuurkiht ja selgitada välja, kas kinnistul on veel seni teadmata muistiseid.

Šurfmise, maastikuvaatluse ja detektoriuuringutega tuvastati, et varase metalliaja asulakoht paikneb piiratud alal kinnistu kõrgemas kirdepoelses osas. Pinnaleidudena koguti selle alalt savinõukilde ja savitihendi katke. Leiuala šurfmisega selgus, et 3–5 cm paksune asulakoha kultuurkiht on säilinud vaid piiratud ulatusega alal. Leiumaterjal oli napp ning asulakoht väheintensiivne. Selgusetuks jäi, kas tegu oli elupaigaga või mingiks muuks otstarbeks kasutatud kohaga. Arvestades asjaolu, et kinnistul on tehtud ulatuslikke maaparandustöid, oli tulemus ootuspärane.

Uuringutega selgus ka, et kinnistu idakirde-, ida- ja idakagupoolses osas levib tõenäoliselt Lehmja asulakoha kultuurkiht (jn 2). Sellelt alalt kogutud leiud pärinesid pikast ajavahemikust, mis ulatub rooma rauaajast 20. saj alguseni. Lisaks leiti samalt alalt vana teekoha juures ka rohkelt šlakitükke, mis võivad pärineda samas paiknenud sepikojast.

Põllukivi kinnistut läbib selle idapoolses osas ka vana tee – omaaegne kihelkonnatee, mis tuli Kurna küla poolt ning viis edasi Jüri kiriku suunas. Arvesta-

des asjaolu, et siinsed külad pärinevad valdavalt muinasajast, siis võiks kõrgematel ja kuivematel kohtadel kulgenud ühendustee samuti kujuneda muinasajal.

Savinõukilde on leidude hulgas ainult neli. Neist kolm on käsitsikeraamika killud, mis võivad kuuluda eelrooma rauaajaga ning üks on kesk- või varauusaegse graapeni kandenäsa. Muinasaega kuuluvad kaks pronksehete katket: kärbissõle (jn 4: 1) võib dateerida 3.–4. sajandisse ja kaksikristpeaga rinnanõela (jn 4: 2) 10. sajandi lõppu – 11. sajandisse. Kaks jäänaela pärinevad muinasaja lõpust või keskajast. Leiumaterjali enamiku moodustavad kesk- ja uusaegsed esemed. Trapetsikujuline keekandja (jn 4: 3) on kuulunud naiste vööehete – rõhkude – juurde, mida kanti peamiselt 16.–18. sajandil. Uusaegsed leiud on kitsas vitssõrmus, sõrmkübar, kaks piibunõela ning kaks münti. Raudesemetest võib nimetada noa ja kirve katket, naelu ja kaht katkist hobuserauda, neist ühel on välisserva lähedal sakiline naelasoon (jn 5). Leidude hulgas on veel sepatööle viitavaid šlakitükke ja rauatükk, luisu ja savitihendi katke ning väike tinakuul.