



Archaeological fieldwork on sites discovered by metal detectorists on arable land: Selli, Seliküla, Tarva and Kabila

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INTRODUCTION

Every year, hundreds of archaeological finds are reported to the National Heritage Board (MA) from sites discovered by hobby searchers using metal detectors. The majority of these finds originate from arable land that has been ploughed for decades, or even centuries. Some of these find spots are ‘rediscovered’ repeatedly by different individuals each year (e.g. Kurisoo *et al.* 2022, 270), raising questions about the archaeological information these sites still possess and whether any identifiable structures or boundaries have still remained in place. The fieldwork of the KUM-TA 4¹ project, financed by the Ministry of Culture, focuses on such heritage and related topics. Due to the large number of sites discovered in ploughed fields each year and the limitations imposed by time and financial resources, the project aims to identify efficient methods of documenting and studying archaeological sites located by hobbyists. The ultimate goal is to incorporate the information obtained from these locations into our broader understanding of Estonian history.

In 2024, four sites were examined: in contemporary villages of Selli (Jõgeva County, historical Simuna parish), Seliküla (Järva County, historical Järva-Jaani parish), Tarva (Pärnu

¹ ‘Kaotatud ja leitud minevik: arheoloogiline informatsioon maastikul, andmekogudes ning inimeste kasutuses’ (‘Lost and Found Past: Archaeological Information on the Landscape, in Datasets, and in Use’).



Fig. 1. Fieldwork sites of the KUM-TA-4 project in 2024.

Jn 1. KUM-TA-4 projekti välitööpaigad 2024. aastal.

Drawing / Joonis: Martti Veldi

County, historical Pärnu-Jaagupi parish), and Kabila (Viljandi County, historical Suure-Jaani parish) (Fig. 1). On the basis of the finds, all the sites had previously been assessed by experts as potential Late Iron Age burial grounds, except for Selli, where the finds also indicated a settlement site. Archaeological sites were selected based on their diversity in soil types, landscape settings, and the ways in which they were initially discovered and the finds recorded. This variety enabled the testing of different field methods and the evaluation of their potential for investigating sites discovered by hob-

by searchers. Wherever possible, the detectorists who originally discovered the sites were involved in the fieldwork. The recovered bone material was analysed by Anu Lillak, ceramic finds were assessed by Arvi Haak.

INVESTIGATED SITES

Selli

The Selli site is located on the crest and slopes of a north-west to south-east oriented esker on the western bank of the Onga River (Fig. 2). Most detector finds have been recovered from an area measuring approximately 500 by 500 metres, located on farmland between a row of farmsteads. Although some pottery fragments were found during field surveys in 1979 (AI 5013) and 2011 (TÜ 1887), the true scale of the site only became apparent once it was discovered by hobbyists in 2020. Over the following four years, the site was repeatedly searched, yielding a significant number of artefacts from the plough zone dating from the Roman Iron Age to the Modern Period. These finds, along with the relevant documentation, were submitted to the MA (see Kurisoo *et al.* 2024, 291; 2023, 227–228; 2022, 278–279; 2021, 279). Some of the find locations were recorded by the hobbyists using precise coordinates, while others were marked as general search areas up to 150 by 150 metres in size. The metal detector finds, some of which have been assessed by archaeologists, suggest the existence of a long-term settlement and possible burial areas.

The aim of the fieldwork was twofold: to determine the possibility to pinpoint the locations of presumed burial sites and identify the extent of the settlement site, and to assess whether any *in situ* layers might still be preserved beneath the ploughed soil. As part of the fieldwork, 86 test pits (0.5 × 0.5 m) and one trench (0.6 × 71 m) were excavated. Most of the soil from the test pits was sieved, while soil from the trench was screened selectively. Across the study area, the plough zone contained stones and gravel and appeared mixed down to the natural soil due to long-term cultivation. However, at the bottom of the slopes, thick erosion deposits prevented access to the natural soil using the employed methods, leaving the stratigraphy there unknown.

A 71-metre-long trench was excavated next to one of the test pit lines, extending from the crest of the esker to the base of the slope. The purpose of the trench excavation was to determine whether any anthropogenic cut features were preserved in the underlying natural soil. Due to the moraine-rich soil, it was not possible to determine solely from the test pits

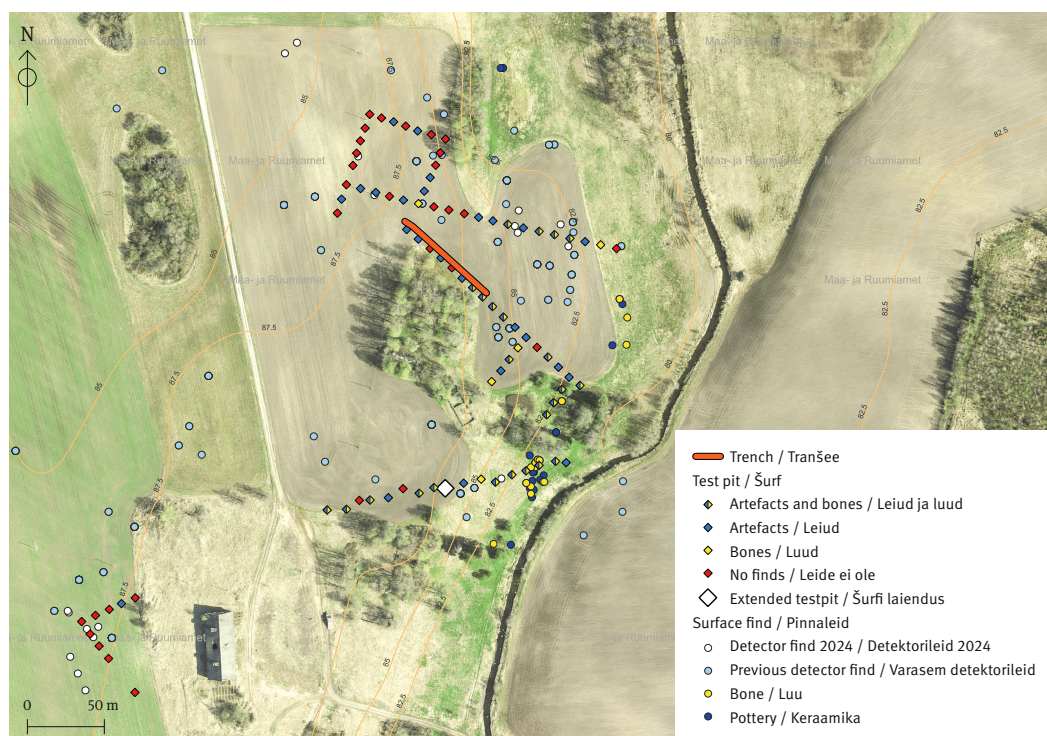


Fig. 2. Investigations in Selli village, Jõgeva County.

Jn 2. Uuringud Jõgeva maakonnas Selli külas.

Drawing / Joonis: Martti Veldi, *Base map / Aluskaart:* Estonian Land and Spatial Development Board / Maa- ja Ruumiamet

whether any *in situ* archaeological deposits, such as depressions, were preserved beneath the ploughsoil. The ploughsoil was removed to the depth of 20–30 cm. For the first 58 metres, this roughly corresponded to the thickness of the ploughed layer; however, the final 12 metres of the trench were situated at the lower end of the slope, and the natural soil was not reached. In the upper part of the trench, three depressions, all approximately one metre in length, were documented beneath the ploughed soil and left intact.

One of the test pits was extended to 1 by 1 metres to investigate the discovered stone structure. The extended test pit was located on the crest of the esker, just before the slope, where a deposit of granite and limestone was uncovered. The stones were arranged irregularly in three layers; some were burnt and brittle. The function and full extent of this structure remain unclear.

The majority of the sieved finds, primarily consisting of animal bones and pottery fragments, were discovered in the southernmost test pit line and in test pits positioned on the riverside slope of the esker. In contrast, test pits located on top of the esker were shallow and yielded almost no finds.

The current investigation could not confirm whether the find distribution pattern indicates that the original settlement units were located on the relatively flat terrace midway down the slope, closer to the river, or whether the finds have gradually shifted downslope over time due to erosion and long-term cultivation.

Among the finds, pottery sherds were the most numerous type, totalling 192 mostly rather small pieces. The assemblage includes both hand-made and wheel-thrown pottery. Both fine and coarse ware were identified among hand-made vessels. Preliminary analysis identified Viking Age, Final Iron Age, and Medieval pottery. Small fragments of glazed redware and two fragments of faience could be distinguished, indicating post-medieval activities.

In addition to pottery and animal bones, fieldwork yielded 70 metal and stone finds. Most of the metal objects, discovered with a detector, are iron items that are difficult to date, such as horseshoe nails and ice nails. The oldest finds from the fieldwork are a Silurian flint scrap-er (TÜ 3195: 85) and a flint fragment (TÜ 3195: 75).

Excavations confirmed that the Selli site had been inhabited since the Viking Age, although the boundaries of the settlement could not be determined based on the distribution of finds or the stratigraphy observed in the test pits and the trench. Despite the soil being heavily mixed and disturbed by ploughing, the trench revealed that, to some extent, the original structural remains and *in situ* cultural layers are preserved beneath the plough zone and remain available for further study. Although the detector finds, discovered by hobbyists, indicated possible burial sites, no evidence of such sites was identified during the fieldwork. While such features may have been destroyed or might lie outside the studied pits and trench, further analysis of artefacts traditionally interpreted as burial markers may reveal whether these could also have been deposited in settlements, trading sites or other non-burial contexts.

Seliküla

The Seliküla archaeological site is located in a ploughed field on relatively flat terrain, around 300 metres from the former farmsteads of the abandoned Elli village (Fig. 3), which was deserted in the second half of the 20th century. The metal-detected artefacts were discovered in 2020; prior to this, no archaeological information about the site was known. After finding some burnt and broken artefacts, the hobbyist contacted the MA and received permission to continue searching the ploughed layer, on the condition that the coordinates of each find were recorded. A total of 76 artefacts were collected and submitted for assessment. These finds suggest the presence of a Late Iron Age cremation burial site and a settlement dating from the Middle Ages and/or the Modern Period (Kurisoo *et al.* 2022, 283; Luik 2021; Niinesalu 2023).

The objective of the fieldwork was to assess the potential for locating cremation burials within ploughed soil based on the recorded findspots of artefacts recovered earlier. During the fieldwork, 56 test pits, each measuring 0.5 by 0.5 metres, were excavated, and the soil was sieved. The pits were arranged in lines that aligned with concentrations of previously discovered finds. Only one-third of the pits contained finds, such as the occasional bone fragments or pottery sherds.

About 200 m southwest of the main concentration of detector finds, the soil appeared slightly darker, suggesting a faint cultural layer that had been ploughed through. A pottery fragment (AI 8887: 51), dated to the 8th–10th centuries, was discovered from the test pit in this area. A slightly higher concentration of finds and bone fragments was observed in one of the pits, which was then expanded into a 1 by 1 metre trench. The pit and the subsequent trench yielded approximately half of the finds and about 70% of the bone fragments recovered during the fieldwork. The ground had been ploughed down to the natural soil, and no intact cultural layers were located in the trench or in any of the test pits.

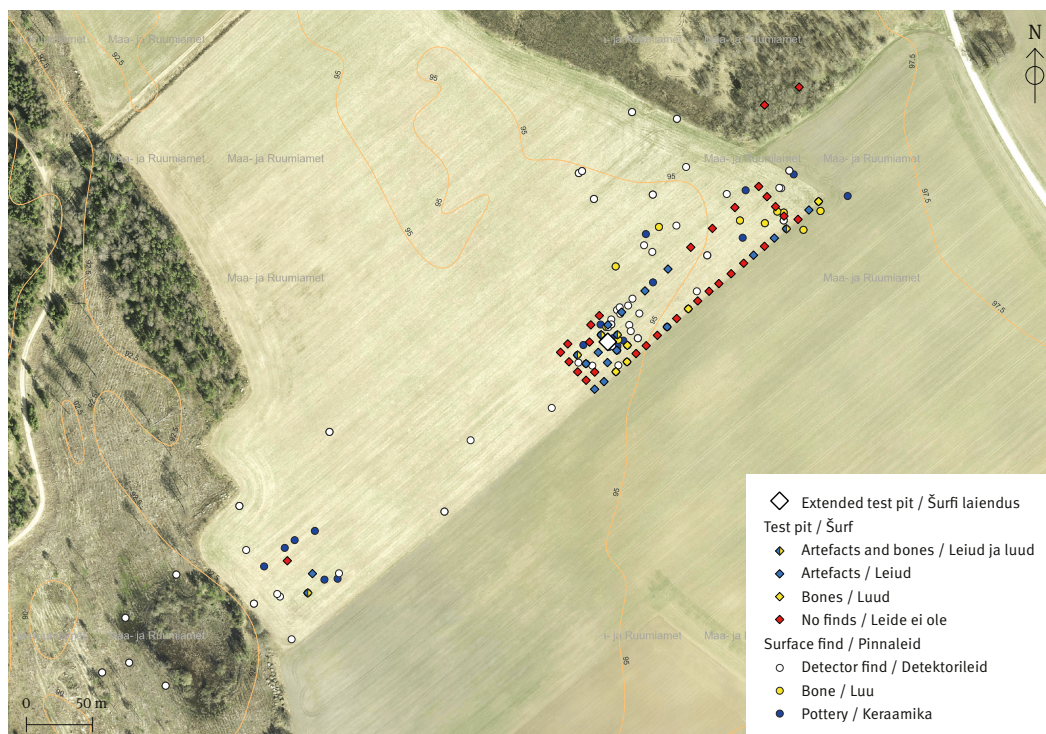


Fig. 3. Investigations in Seliküla village, Järva County.

Jn 3. Uuringud Järva maakonnas Selikülas.

Drawing / Joonis: Martti Veldi, Base map / Aluskaart: Estonian Land and Spatial Development Board / Maa- ja Ruumiamet

Approximately one hundred human bone fragments were recovered during the fieldwork. The bones were burned at high temperatures and cremated shortly after death. Although the quantity of bone material was limited, it was sufficient to determine that at least one young adult and likely a child had been buried at the site. The minimum number of individuals is two, but more may have been buried in the field, as the preliminary analysis of the osteological material does not allow for a more precise determination.

In total, 71 fragments of pottery were collected. The ceramic material was fragmented, with most recovered pieces being hand-made and only a smaller portion wheel-made. Some of the ornamentation, e.g. impressions of a bracelet (AI 8887: 68), were in use during the Viking Age and the Final Iron Age (cf. Tvauri 2005, 107–109). Overall, the rather fragmented pottery, nevertheless originating from several coarseware and fineware vessels, was more typical of a settlement than a burial site, suggesting that the area near the site may have been inhabited during the Late Iron Age.

Although the bones and artefacts were not found in their original context due to intensive ploughing, the combination of sieving and extensive trial pitting made it possible to identify the location of at least one burial in or near the trench. The Seliküla case emphasises the importance of accurately recording the locations of artefacts discovered by metal detecting, as this information can be used to identify archaeological features that have been affected by land use.

Tarva

The third investigated site, located in Tarva, lies approximately 100 metres west of the nearest farms in the village (Fig. 4), on a flat field that has been in use at least since the 17th century (RA, EAA.308.2.13 p. 1). Based on aerial photos, large-scale stone clearing took place on the field in 1977 or 1978; however, the pre-amelioration landscape is visible in aerial photos from 1959 and 1976.²

Following its discovery in 2017, archaeologists from the MA, together with the hobbyist finders, conducted a metal detector survey documenting numerous finds within the plough layer (AI 7815), recording coordinates and revealing an area rich in artefacts. The distribution and nature of these finds suggested that the site might be a Late Iron Age burial ground, heavily disturbed by ploughing (Luik 2017; Rammo & Kangert 2018, 210). The 2024 investigation aimed to assess whether any structural elements associated with a Late Iron Age cemetery, such as cut features, stone constructions, or other subsurface remains, had survived beneath the plough soil in the artefact-rich area.

Ten test pits, each measuring 0.6 by 0.6 metres, were excavated to determine the composition and layering of the soil. The soil was sandy with few stones, and all soil from the test pits was fully sieved. In order to discover possible structures beneath the ploughed soil, the excavator dug two intersecting trenches, each measuring between 0.6 and 0.7 metres in width.



Fig. 4. Investigations in Tarva village, Pärnu County.

Jn 4. Uuringud Pärnu maakonnas Tarva külas.

Drawing / Joonis: Martti Veldi, Base map / Aluskaart: Estonian Land and Spatial Development Board / Maa- ja Ruumiamet

² Available at web service Fotoladu. Fotoarhiiv (<http://fotoladu.maaamet.ee>, last visited 17.09.2025).

The north-south trench was 96 metres long, while the east-west trench measured 28 metres. Based on the MA survey, the intersection point of the trenches was planned at the location with the highest concentration of finds. Only the plough layer, averaging 20–30 cm in depth, was removed from the trenches. Apart from undateable plough marks, no other features were found. The plough soil from the trenches was partially sieved, except within a 10-metre radius of the trench intersection, where it was entirely sieved. The excavated soil, as well as the trench walls and base, were surveyed with a detector.

A total of 146 artefacts were found during the fieldwork. The majority of these (105) were obtained through systematic metal detector surveying of the study area. Mainly hand-made pottery sherds (39) were recovered by sieving from the trenches and test pits that crossed the find concentration area, along with a few fragments of other objects, such as a rectangular ornament link (AI 9019: 91) and a couple of bronze chain links (AI 9019: 108–109). Half of the artefacts (71) are fragments of copper alloy objects, many of which had melted due to exposure to heat; the finds included a bloated pottery sherd (AI 9019: 133), which may be the result of secondary exposure to heat. Despite extensive sieving, only 18 bone fragments were recovered, of which only four are likely to be human remains.

Fieldwork at the Tarva find spot confirmed that the concentration areas of finds recorded during detector surveys in 2017 and 2024 corresponded. This suggests that ploughing activities during this relatively short period have not significantly impacted the distribution of artefacts in the plough zone. Although finds dating from the Late Iron Age suggest that the site should be interpreted as a burial ground with cremations, no burial-related structures were identified during the investigation. It is possible that such features never existed, or that they have been entirely dispersed into the plough layer as a result of intensive cultivation.

Kabila

In 2015, archaeologists discovered a cultural layer characteristic of a Late Iron Age settlement in the core area of Kabila village (Rammo *et al.* 2016, 246). The following year, detectorists discovered a large number of finds (TÜ 2998) on a historical agricultural field located about 250 metres west of the village core (Fig. 5). The field is mostly flat, with a slight rise. These finds suggest the presence of a former burial site. Although the hobbyists did not record coordinates for every find, the main concentration area was marked in the search report.

As with the previously described sites, the fieldwork aimed to establish whether any structures related to burials might have survived beneath the ploughed soil. Both earlier finds and systematic fieldwalking and the detector survey conducted during the 2024 fieldwork – where precise coordinates were recorded for each object – indicated that the concentration of finds was located on the rise and at its base.

A total of nine test pits, each measuring approximately 0.6 by 0.6 metres, were excavated. No finds were recovered from the five pits dug at the top of the rise, but the four pits on the slope yielded bones and pottery sherds. A 1.1-metre-wide by 34-metre-long trench was opened with an excavator through the area on the slope with the most finds. The elevation difference along the trench was approximately 0.6 metres. In the higher section, over a stretch of approximately 18 metres, a roughly 10 cm-thick discoloured, mixed, sandy layer containing a few stones was found beneath the plough soil. In the lower part of the trench, the boundary between the plough layer and undisturbed sand was clearly visible, and plough marks could also be observed in this section. Small charcoal fragments could be seen during the cleaning of the sandy layer beneath the plough soil in both the test pits and the trench.



Fig. 5. Investigations in Kabila village, Viljandi County.

Jn 5. Uuringud Viljandi maakonnas Kabila külas.

Drawing / Joonis Martti Veldi, Base map / Aluskaart: Estonian Land and Spatial Development Board / Maa- ja Ruumiamet

Two areas where the cut features had survived beneath the plough layer were identified in the trench. These were depressions containing fragments of charcoal and small pieces of burnt bone. Both features extended beyond the trench and were only partially exposed. The length of the first depression was 3 metres, and that of the second 1.5 metres; these depressions were located seven metres apart. Due to the discolouration of the surrounding sand, the boundaries of both pits were indistinct and poorly defined.

The section of the second pit within the trench was excavated. Four granite stones with diameters of approximately 15–30 cm were exposed in the centre of the depression beneath the plough layer. During the excavation, it was not definitively determined whether the stones were related to the depression. Given that stones of this size were extremely rare in the area, it is unlikely that they were placed there by chance. The bottom of the pit was about 35 cm below ground level (Fig. 6). A pottery sherd, a flint fragment, three fragments of bronze objects and around 60 very small burnt bone fragments were found in the pit.

A total of 141 artefacts were recovered from Kabila, including 98 fragments of copper alloy objects, two-thirds of which had melted at high temperatures and are unidentifiable. 29 pottery sherds were collected, 22 of which were hand-made. The remainder were made on a potter's wheel and date either from the Final Iron Age or the historical period. As in Seliküla, the heavy fragmentation of pottery, presumably of several vessels, indicates that the majority of these originates from a settlement site rather than from a burial context.



Fig. 6. A depression containing bone fragments preserved under the plough layer at the Kabila site in the northwestern wall of the trench.

Jn 6. Kabila leiukohas künnikihi all säilinud luukilde sisaldanud lohk tranšee loodeseinas.

Photo / Foto: Ulla Kadakas

Despite intensive cultivation, the Kabila find spot demonstrated that subsurface features related to burial activity have been preserved beneath the plough layer. These features include *in situ* depressions containing bone finds, pottery and artefacts. This suggests that the impact of erosion and long-term cultivation on preserved archaeological remains may not always be as severe as generally assumed.

CONCLUDING REMARKS

On intensively cultivated land, the structural elements of archaeological sites are, understandably, poorly preserved. However, the identification of find concentrations enables an analysis of their spatial distribution, and the relationships of such clusters to other sites – for example, the distance between burial and settlement areas, or broader land use patterns. Analysing assemblages also allows researchers to assess the duration and continuity of site use, as well as to estimate the relative size of the associated community.

Sites investigated in 2024 demonstrated that on intensively cultivated agricultural land, artefacts may still be found in proximity to their original locations. This highlights the importance of hobbyists recording the precise coordinates of all finds.

In Seliküla and Kabila, by combining the coordinates of detector finds and field-walking finds with systematic test pitting/trenching and sieving, it was possible to identify the concentration area of the finds and bones. The test pit lines offer an efficient method for recording variations in find density and observing differences in stratigraphy across the site. However, it is not possible to assess solely based on test pits whether man-made structures have been preserved at the site. Long trenches proved to be effective for identifying cut features with original structures. The use of an excavator is generally most effective in areas where the soil contains few stones (Kabila, Tarva). In moraine-rich soils (Selli), it is difficult to ensure the precise removal of the plough layer, and cleaning the bottom of the trench

becomes extremely labour-intensive. Given the time and human resource constraints typical of most fieldwork projects, it is not feasible to sieve through the soil excavated from the trenches.

In our opinion, documentation of archaeological sites found by hobbyists can be effectively achieved through systematic metal detector surveys by professional archaeologists, combined with fieldwalking and an analysis of landscape and historical maps. These methods are sufficient for delineating with find concentration areas and, consequently, the boundaries of the archaeological sites discovered by hobbyists on agricultural land. Excavating test pits can provide additional information about soil characteristics, which is essential for planning more extensive archaeological investigations. Trenching may be considered a suitable method for problem-related research.

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ARHEOLOOGILISED VÄLITÖÖD HARITAVAL PÖLLUMAAL. HOBIOTSIJATE AVASTATUD SELLI, SELIKÜLA, TARVA JA KABILA MUISTISED

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Projekt KUM-TA 4 keskendub hobiotsijate avastatud arheoloogilistele leiukohtadele, mis paiknevad haritud põllumaadel. Projekti eesmärk on leida tõhusad meetodid nende muististe dokumenteerimiseks ja uurimiseks ning integreerida saadud andmed Eesti ajaloo laiemasse käsitlusse. 2024. aastal korraldasime välitööd neljal leiukohal, mis on saanud nime kaasaegsete külade järgi (jn 1).

Selli leiukoht (Jõgeva maakond, Simuna kihelkond) asub loode–kagu-suunalise oosi harjal ja nõlvadel (jn 2). Alates 2020. aastast on detektoristid sealt kogunud rohkelt leide, mis viitavad asulakohale ja võimalikele matmispaikadele. Osa esemete leiukoht on dokumenteeritud täpsete koordinaatidega, teiste puhul otsingualade täpsusega.

Välitööde eesmärk oli selgitada, kas on võimalik määratleda oletatavate matmispaikade asukohad, tuvastada asulakoha piirid ning hinnata, kas künnikihi all on säilinud *in situ* kihte. Kaevati 86 proovišurfi ($0,5 \times 0,5$ m) ja üks 71 m pikkune tranšee. Uuringualal oli pinnas pikaajalise maaharimise tõttu segatud loodusliku pinnani, vaid nõlvadel takistas paks erosioonikiht loodusliku pinnani jõudmist. Tranšee ülaosas dokumenteeriti kolm u 1 m läbimõõduga sissekaevet, milles arvatavasti on säilinud segamata kultuurikiht; need jäeti kaevamata. Välitööd näitasid, et Selli asulakoht oli kasutuses vähemalt viikingiajast alates, ent valitud metoodikaga ei õnnestunud asulakoha piire täpsustada. Enamik leide, millest suurem osa olid keraamika- ja loomaluukillud, pärinesid lõunapoolseimast šurfireast ning šurfidest, mis paiknesid oosi nõlval. Seevastu oosi laele kaevatud šurfid olid leiuvaesed. Välitöödel jäi ebaselgeks, kas leidude asukoht näitab, et asustus paiknes pigem nõlva plattoodel kui oosi harjal või on kultuurikiht erosiooni ja maaharimise tõttu nõlvadele kandunud. Välitööd ei kinnitanud, et leiukohal oleks olnud kalmeid.

Seliküla leiukoht (Järva maakond, Järva-Jaani kihelkond) asub tasasel põllumaal, umbes 300 m kaugusel ajaloolisest Elli külast (jn 3). Noorema rauaaja põletusmatustega kalmele viitavad leiud põllult kokku korjanud hobiotsija fikseeris iga leiu täpsed koordinaadid.

Välitööde eesmärk oli täpsetele leiuandmetele tuginedes hinnata, kas on võimalik leida kalme kunagine asukoht. Selleks kaevati 56 šurfi ($0,5 \times 0,5$ m), mille pinnas sõeluti läbi. Kolmandik šurfidest sisaldas üksikuid leide, peamiselt põlenud luid ja keraamikakilde. Üks šurf, mis oli teistest leiurikkam, laiendati 1×1 m kaevandiks, millest leiti suurem osa välitöödel avastatud (inim)luu- ja keraamikaleidudest. Nii kaevandi kui ka šurfide kaevamisel ilmnis, et maapind oli loodusliku pinnani läbi küntud.

Ehkki uuringutel avastatud inimluude kogus oli võrdlemisi väike (ligikaudu 100 fragmenti), võimaldas osteoloogiline materjal järeldada, et leiukohta oli maetud vähemalt kaks indiviidi ja luud kremeeriti vahetult pärast surma kõrgetel temperatuuridel. Kogutud 71 keraamikakillu hulgas oli rohkem käsitsikui kedrakeraamikat. Leidus nii peen- kui ka jäme-keraamikat, millest valdav osa oli täpsemaks määramiseks liiga katkendlik, kuid vähemalt ühel killul (AI 8887: 68) oli käevõruvajutusega tehtud ornament, mis ajaldab leiu viikingi- või hilisrauaaega. Kogutud keraamikaleiud on pigem omased asulakohale kui kalmele, mis viitab, et piirkond oli nooremal rauaajal asustatud.

Kuigi avastatud inimluude ja esemeleidude algsed asukohad olid intensiivse põlluharimisega segatud,

võimaldas ulatuslik šurfide kaevamine ja sõelumine tuvastada vähemalt ühe põletusmatuse algse asukoha, mis tõestab metallidetektoriga avastatud leidude täpsete koordinaatide määramise olulisust.

Tarva külas (Pärnu maakond, Pärnu-Jaagupi kihelkond) leidsid hobiotsijad 2017. aastal arheoloogilisi leide lähimatest taludest umbes 100 m läänes asuvalt tasasel põllult (jn 4). Toona tegid MA arheoloogid koos hobiotsijatega alal metallidetektoriseiret ning dokumenteerisid künnikihis arvukalt leide (AI 7815). Leidude levik ja tüübid viitasid hilisrauaaja matmispaigale. 2024. aasta uurimise eesmärk oli hinnata, kas leidude kontsentratsioonialal on künnikihi all säilinud kalme struktuure või kihte. Kaevati kümme šurfi ($0,6 \times 0,6$ m), mille liivane ja väheste kividega pinnas sõeluti. Ekskavaatoriga rajati kaks ristuvat $0,6\text{--}0,7$ m laiust tranšeed (96 ja 28 m). Tranšeeist eemaldati vaid keskmiselt $20\text{--}30$ cm paksune künnikiht. Peale dateerimatute adrajälgede muid struktuure tranšee põhjalt ei leitud. Välja tõstetud pinnas sõeluti osaliselt, kuid 10 meetri raadiuses tranšeede ristumiskohast täielikult. Väljakaevatud pinnas, samuti šurfide ja tranšee seinad ning põhi kontrolliti üle ka detektoriga.

Välitöödel koguti 146 arheoloogilist leidu. Suurem osa neist (105) saadi süstemaatilise metallidetektoriuuringuga. Sõelumisel leiti peamiselt käsitsi valmistatud savinõude kilde (39), aga ka näiteks kuudisekujuline vahelüli (AI 9019: 91) ja paar pronksist ketilüli (AI 9019: $108\text{--}109$). Pooled leidudest (71) on vasesulamist esemete fragmendid, millest paljud olid sulanud. Vaatamata ulatuslikule sõelumisele leiti vaid 18 luufragmenti, millest ainult neli on tõenäoliselt inimjäänused.

Tarva leiukoha 2017. ja 2024. aasta detektoriuuringutel registreeritud leidude kontsentratsioonialad kattusid, mis näitab, et künnitegevus ei mõjuta oluliselt esemete paiknemist. Hilisrauaajast pärinevad leiud viitavad põletusmatustega kalmistule, kuid välitöödel inimluid ja kalmestruktuure ei leitud.

Kabilas (Viljandi maakond, Suure-Jaani kihelkond) avastasid arheoloogid 2015. aastal küla tuumikualal hilisrauaaja asulale iseloomuliku kultuurikihi. Järgmisel aastal leidsid detektoristid külasüdamest umbes 250 m läänes asuvalt põllult (jn 5) suure hulga matmispaigale iseloomulikke leide (TÜ 2998). Kuigi harrastajad ei registreerinud iga leiu koordinaate, märgiti otsinguaruandesse peamine kontsentratsioonipiirkond.

Välitööde eesmärk oli välja selgitada, kas küntud pinnase all on säilinud kalme struktuure. Nii varasemad leiud kui ka 2024. aasta välitööde süstemaatiline põllukõnd ja detektoriuuring näitasid, et leidude kontsentratsioon on kõige suurem põllu lõunaosas

oleva künka ühel nõlval. Kaevati üheksa šurfi (u 0,6 × 0,6 m). Viiest künka laele tehtud šurfist leide ei saadud, kuid nõlva neljast šurfist leiti nii luutükke kui ka keraamikakilde. Ekskavaatoriga kaevati 1,1 m laiune ja 34 m pikkune tranšee piki künka nõlva. Selle kõrgemas osas leiti künnikihi alt u 10 cm paksune segatud ilmega liivakiht. Tranšee alumises osas ilmnes künnikihi ja inimtegevusest puutumata liiva vaheline piir ning viimases adrajäljed. Nii šurfides kui ka tranšees leiti künnikihi all oleva liiva puhastamisel väikeseid sõetükikesi.

Tranšees leiti kaks künnikihi all säilinud inimtekkelist süvendit (3 ja 1,5 m pikkuses), mis sisaldasid sõetükke ja väikseid põlenud luukilde. Väiksem lohk kaevati tranšeesse ulatuvas osas läbi. Künnikihi alaosas, lohu keskel oli neli 15–30 cm suurust maakivi, kuid üheselt ei selgunud, kas need olid lohuga seotud, siiski on see tõenäoline. Lohu põhi asus vaid 35 cm sügavusel maapinnast (jn 6). Lohust leiti keraamikakild, tulekivikatke, kolm pronkseseme katket ja umbes 60 väga väikest põlenud luufragmenti.

Kokku leiti Kabilast 141 arheoloogilist leidu. Neist on 98 vasesulamist, millest kaks kolmandikku olid kõrges kuumuses üles sulanud ja määramatud. Leitud 29 keraamikakillust pärinesid 22 kätsi valmistatud nõudest, ülejäänud olid hilisrauaaja või ajaloolise aja kedrakeraamika killud. Nagu Selikülas, on ka Kabila väikesed ja paljudest eri savinõudest pärinevad katked pigem pärit asulakoha kui matmispaiga kontekstist. Vaatamata intensiivsele maaharimisele olid Kabilas kalmistule iseloomulikud põletusmatus-tega lohud künnikihi all säilinud. Seega erosioon ja sajanditepikkune maaharimine ei pruugi hävitada kõiki arheoloogilisi struktuure.

Kokkuvõtvalt võib kinnitada, et intensiivselt haritud põllumaal on arheoloogiliste leiukohtade kultuurikiht pigem halvasti säilinud, kuid isegi vaid leidude kontsentratsioonialade abil on võimalik analüüsida näiteks matmis- ja asustusala omavahelist kaugust ning teisi maastikukasutusmustreid. Leiukogumite analüüsimine võimaldab hinnata koha kasutamise kestust ja järjepidevust, samuti muistise kunagist võimalikku suurust.

2024. aastal uuritud leiukohad näitasid, et põllumaal võib esemeid leida nende algsetest asukohtadest või nende vahetust lähedusest. See näitab, kui oluline on, et hobiotsijad registreeriks iga leiu koordinaadid. Selikülas ja Kabilas avaldusid väga ilmekalt detektori abil ja põllukõnniga kogutud leidude kontsentratsioonialad. Šurfiridade kaevamine oli tõhus meetod leiutiheduse variatsioonide ja stratigraafia erinevuste registreerimiseks. Inimtekkeliste struktuuride tuvastamiseks kaevati pikemad tranšeed. Ekskavaatori kasutamine oli tõhusam piirkondades, kus pinnases oli vähe kive (nt Kabila, Tarva). Moreenirikas mullas (Selli) oli ekskavaatoriga künnikihti täpselt eemaldada raske. Aja- ja inimressursi piiratuse tõttu polnud võimalik tranšeedest välja tõstetud pinnast täielikult läbi sõeluda.

Meie hinnangul piisab hobiotsijate poolt põllumaadelt avastatud arheoloogiliste leiukohtade ulatuse määramiseks süstemaatilise metallidetektori uuringust koos põllukõnni ning maastiku- ja ajalooliste kaartide analüüsiga. Šurfide kaevamine annab lisateavet pinnase omaduste kohta, mis on hädavajalik ulatuslikumate arheoloogiliste uuringute kavandamiseks. Tranšeede kaevamist võib pidada juba probleemuringu meetodiks.