



# Archaeological investigations on the cremation cemetery and settlement site of Alasoo Varajemägi

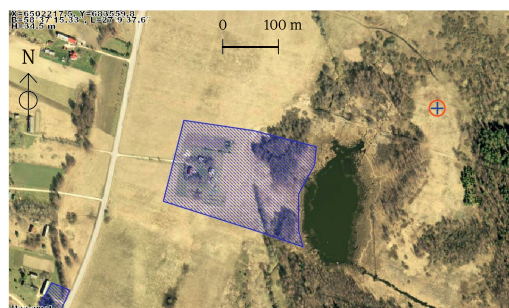
**Pikne Kama and Marge Konsa**

*Tartu Ülikool, ajaloo ja arheoloogia instituut, arheoloogia osakond* (University of Tartu, Institute of History and Archaeology, Department of Archaeology), Jakobi 2, 51014 Tartu, Estonia; pikne.kama@gmail.com

## INTRODUCTION

Varajemägi is a bog islet at Alasoo village in Kodavere parish in east Estonia near Lake Peipsi. The site is situated on the other shore of Lake Vilajärv looking from the centre of Alasoo village. The previously unknown archaeological site consists of a Viking Age cremation cemetery<sup>1</sup> and a 16th – 17th century settlement site together with an unearthened coin hoard from the same period (Kama *et al.* 2015). Nearby in the village side of Lake Vilajärv is a previously known settlement site which was inhabited also in the Viking Age (Kriiska 1990; Karro 2013), presumably contemporaneous with the burial place (Fig. 1). There are some jewellery finds from Alasoo village which have made it to the archaeological collection in the recent past.<sup>2</sup> These could have been found from the site of Varajemägi, but we cannot be certain, because their exact find location and the find context were not documented.

The site of Alasoo Varajemägi was discovered by metal detectorists Peeter Kiuru and Veikko Vulf at the end of the year 2014. As a matter of fact, they were looking for a household of a soldier of Varajemägi, because according to a story known among the locals, on the other side of Vilajärv once lived a soldier, who got this land for his military service. Probably this place-lore emerged from the memory of the Early Modern Age settlement at the site. Another place-lore is telling a story about an old man, who was digging in Varajemäe and found a boat with coins (Grenzsteini kirjakogu IV, 133 (132)). This story can be connected with the place-name *Varajemägi*, which may be understood as ‘treasure hill’. After the site was discovered,



**Fig. 1.** Map of surroundings of Lake Vilajärv. The blue area designates the settlement site under state protection (the actual area of the cultural layer needs to be confirmed). The red ring with the blue cross marks the centre of the cremation cemetery.

**Jn 1.** Kaart Vilajärve ümbrusest. Sinine ala märgib kaitsealust asulakohta (tegelikud kultuurikihi piirid on tõenäoliselt erinevad). Punase ringi ja sinise ristiga on märgitud kalmeala kese.

Map / Kaart: Estonian Land Board / Maa-amet

<sup>1</sup> There is one stone grave in the centre of village Alasoo that could also have been used during the Viking Age (Tvauri 2012, 252).

<sup>2</sup> AI 2712: 92–95; AI 3090: 1–4.



**Fig. 2.** *Alasoo Varajemägi in the beginning of May 2015.*  
**Jn 2.** *Alasoo Varajemägi 2015. aasta mai alguses.*  
 Photo / Foto: Pikne Kama

it appeared that the locals knew the area also as a burial place. An elderly man from the closest farm recalled that his father had once told him that instead of burying him in Alatskivi (the nearest churchyard), he would rather like to be taken to the grassland over the lake, as people have been buried there before. A local resident also told us that the Soviet time land melioration made the upper layer of the bog islet recede by half a metre. After that, the land was cultivated, but crop was sown there only once. Maybe the exact scale of earthwork is exaggerated, but most of the finds came from the upper mixed layer, which in some parts was quite thick. At the same time, there are also finds that are in their original context. Nowadays the area is a grassland out of active use (Fig. 2).

## FIELDWORK

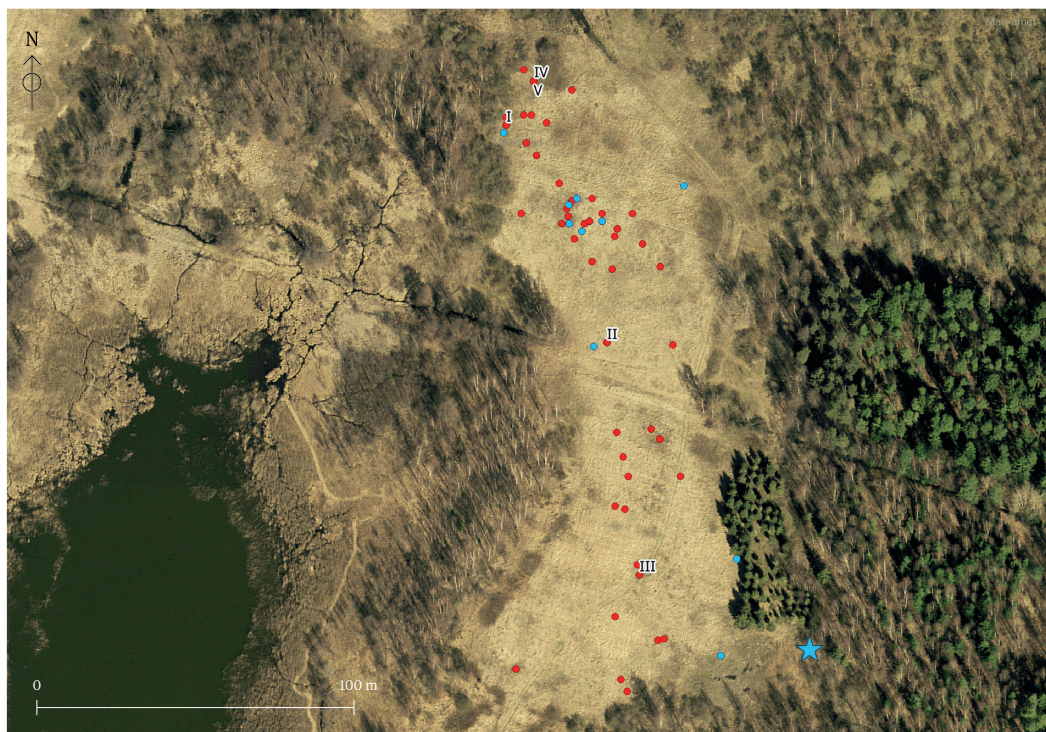
Licensed metal detectorists visited the site several times. At first they removed finds from the surface, but soon after they dug as little as necessary to confirm the presence of archaeological finds, and then refilled the pits. Archaeologists from the University of Tartu were involved in taking up the artefacts.<sup>3</sup>

Artefacts were distributed all over the bog islet on an area 270 m long and *ca.* 92 m wide (Fig. 3). Most of the artefacts were found from the mixed layer, which also contained pieces of brick and glass from the recent past. The density of archaeological finds was highest in the northern side of the islet (Fig. 3), where the layer of finds was dark and contained pieces of pottery and burned bones. It indicates that the original centre of the cemetery was situated in this area. Unfortunately it seems that the 16th – 17th century household was also in the same area. That most likely damaged the Viking Age burial site already in the recent past. The site of the farm is also visible on the map from the year 1684 (EAA 308-2-68, sheet 1). The household may have been abandoned or destroyed during the plague and famine at the end of the 17th century or the beginning of the 18th century because of the Great Northern War. Nowadays there are no visible stones on the ground at the site, although some stones were revealed in one test-pit, but these seemed to belong to the foundation of a house. It cannot be ruled out that stones from cremation grave were used to build this foundation.

## TRIAL EXCAVATION

During the fieldwork, five find complexes were discovered *in situ*, three of them were unexpectedly unearthed from a wetland next to the mineral ground in the northwest edge of the burial place. Metal detectorists Peeter Kiuru and Veikko Vulf together with the technician-conservator of the Department of Archaeology Andres Vindi, unearthed one find complex (no. I).

<sup>3</sup> The finds: TÕ 2496, 2497, 2498, 2499.



**Fig. 3.** Distribution map of finds in Alasoo Varajemägi. The red dots mark the finds dating from the Late Iron Age, the blue dots mark the finds from the 16th – 17th century (a precise date could not be provided for each find). Dots with Roman numerals indicate the find complexes and the coin hoard is marked with a blue star.

**Jn 3.** Alasoo Varajemäe leiuplaan. Punaste tähistega on märgitud noorema rauaaja leiud ja siniste punktidega leiud, mis pärinevad 16.–17. sajandist (kuigi kõiki leide ei õnnestunud täpselt dateerida). Rooma numbritega on tähistatud leiukogumid ja sinine täheke märgib mündiaaret.

Map / Kaart: Estonian Land Board / Maa-amet, Pikne Kama

The metal detector also showed another signal nearby and the second find complex (no. IV) from the wet soil was discovered. It was unearthed partially, but when the finders realised that it contained more items and as the metal detector gave signals elsewhere at this site, the pit was refilled with soil.

A small-scaled trench (2 × 2 m) was opened at the beginning of May (Fig. 4) around the find spot of the IV find complex (Kama 2016).<sup>4</sup> The main aims of the excavation were: 1) to carefully unearth the whole find complex and thoroughly document it; 2) to study the environment and stratigraphy of the finds; 3) to see if it is a singular deposition



**Fig. 4.** Trial excavation on the edge of the swamp.

**Jn 4.** Proovikaevand soo servas.

Photo / Foto: Maarja Olli

<sup>4</sup> Finds from the excavations: TÕ 2499: 8–112.



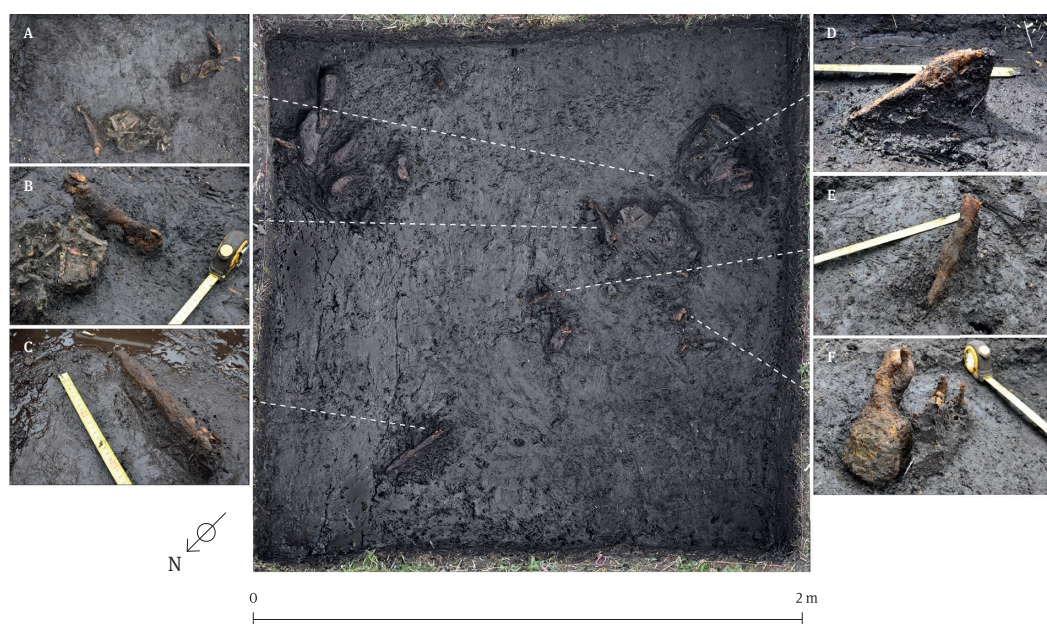
or if there are more finds; 4) to clarify the borders and nature of the site. The upper part of the soil (ca. 30 cm) was mixed, as it contained pieces of bricks and drainage pipes. It seems that this layer originates from the site and has not been moved there from somewhere else, as the soil contained decomposed peat mixed with mineral soil. The mixed layer could be the result of some earthwork and cultivation at the site during the Soviet period. The mineral component probably originates from the mineral heap next to the trench, also some finds could have been shifted there by erosion. The upper layer contained fragmented burned bones, pottery sherds, some bronze artefacts and a few glass beads. Just underneath the mixed layer, two deposits of finds were discovered (find complexes IV and V). It is possible that these find complexes are not complete due to earthworks. Both contained mostly remains of bronze items. The identifiable finds were parts of jewellery, but most items were so deformed in fire that it was not possible to determine the original artefacts. Additionally, a few glass beads and burned human bones were found from the find complexes. The most remarkable finds were a sickle or a sickle-knife, a half of a bracelet with a snake-shaped head and half of a remarkable bronze bracelet or neck ring. Pieces of the latter were found from both find complexes, meaning that artefacts in nearby find complexes (IV and V) originate probably from the same context. This artefact, and also a few others showed marks of intentional damaging of the grave goods before placing on a pyre.

In the same layer as the find complexes, there were singular metal artefacts (Fig. 5). The iron items were generally in a very bad condition due to corrosion. Three or four spearheads (one fragmented artefact had a socket, but it was quite small for a throwing spearhead which it reminded) were found blade down in peat at ca. 45° angle. Two spearheads were facing north (the opposite direction from the dry land) and two metal items next to the two find complexes were facing east. The direction of the blades indicates that these weapons were hit or thrown from the dry land into the peat. In addition to spearheads, an axe, a knife, fragments of horse snaffle bit and an unidentifiable iron artefact were found from the same layer. The poor condition of iron artefacts indicates that they have not been in fire, except the axe that was rather well preserved. No heat treatment structures were detected in the metallographic analysis of the artefact, although there were areas where the carbon content was sufficiently high for their formation (Saage 2016). Therefore, after the axe's initial hardening by the smith it has been in a fire (probably in a pyre) and cooled down slowly. The spearheads, on the contrary, do not seem to have been in the fire, firstly they were poorly preserved and secondly their position in the peat suggests that they were thrown into the peat and therefore had to have wooden handles. Thus, both items that have been in a pyre and those that have not seem to be present in the wet context, giving evidence of different rituals at the site. During the excavations 89 fragments of bone were collected, in addition, some human bones that were melted together with bronze or glass. The osteological analysis (Kivirüüt 2016) showed that most of the bone fragments belonged to humans, but there were also some animal bones. The collected human bones were found mostly from the upper mixed layer and therefore may originate from the dry land. Among the very fragmented osteological material, the remains of at least one adult and one child could be identified. One bone was unburned, but others were burned rather strongly and evenly.

The find complexes and single iron objects were found in the same level that smoothly lowered in the opposite direction from the dry land. The *in situ* finds were between two layers of peat and it seems very likely that the items connected to the Viking Age burial practices were originally deposited into open water, which later was overgrown with peat. Identification of

plant and wood remains (Hiie 2016), collected from the same context as the find complexes, show that around the time of deposits, pine(s) (*Pinus sylvestris*), birch(es) (*Betula alba*) and alder(s) (*Alnus* sp.) were growing there. Unfortunately, it is not possible to know whether these tree species were growing directly on wetland or the wood remains originate from the dry land by the site. If these trees were growing on the little mineral heap, it offers some knowledge about the natural appearance of the Viking Age burial place.

In the case of plant remains, it is more certain that those plants were growing on the site of deposits. The find complex also displayed remains of sedges (*Carex* spp.) and common reed (*Phragmites australis*), which indicates that the area was either a fen or covered with shallow water. It could be that in the Viking Age, the water level of the nearby lake Vilajärv reached to the bottom of the burial place and items were deposited into its water.



**Fig. 5.** Plan of the find complexes and singular iron artefacts in the trench, based on a 3D model. Items in close-ups: A – IV and V find complexes, B – a spearhead next to the IV find complex, C – a spearhead, D – a throwing spearhead or an arrowhead next to the V find complex, E – a spearhead, F – an axe together with a knife and horse snaffle bit.

**Jn 5.** 3D-mudeli põhjal tehtud plaan leiukogumite ja üksikute raudesemete paiknemisest kaevandis. Esemed lähivaate fotodel: A – IV ja V leiukogum, B – IV leiukogumiga külgnenud odaots, C – odaots, D – V leiukogumiga külgnev viskeodaots või nooleots, E – odaots, F – kirves koos noa ja suitsetega.

Drawing / Joonis: Pikne Kama

## FINDS FROM DRY LAND

The Alasoo hoard (TÜ 2498) contained 20 silver coins, from which the oldest coin is a farthing minted by the Livonian Order in Tallinn in 1554. The youngest coin is a 3 Gros minted in Riga in 1599 during the reign of Sigismund III Vasa. One of the coins (Sigismund III Vasa, 3 Gros of Vilnius, 1598) is rare because of the touch mark with the image of a swan.<sup>5</sup>

<sup>5</sup> The coins were identified by Andres Tvauri (Kama *et al.* 2015).

Artefacts from the 16th – 17th century household included a silver bead, two signet rings made of bronze, one of them decorated with a bird figure, and two Swedish *klippe* coins, minted during the reign of Gustav II Adolf in 1625 and 1626.

Two find complexes were discovered from the dry land. Find complex II consisted of horse bits, two axes including an axe of Petersen's type M, two knives, two fire steels, a penannular brooch with prism-shaped terminals, and fragments of iron and bronze items. The artefacts lay in the ground horizontally; some of them on top of each other. The complex can be dated to the end of the Viking Age from the 10th century to the first half of the 11th century based on the dating of the brooch (Tvauri 2012, 136). Find complex III was a bunch of items put vertically into the pit. The complex contained a thick-backed seax with a narrow blade, horse bits, whetstone with a hole, a tanged spearhead with a pointed-oval-shaped blade and a stepwise tapering tang. Spearheads of this type have been dated to the 8th – 11th century (Tvauri 2012, 193). Whereat, one spearhead of this type occurred as a grave good in the nearby cemetery at Raatvere from the early 11th century (*ibid.*).

The composition of the Viking Age find complexes from dry land compared with those from the wetland seem to differ greatly. Wetland complexes I, IV and V mainly consisted of fragments of jewellery, while complexes II and III from the dry land included rather weapons and horse equipment (Fig. 6).

There were no human bones or fragments of pottery together with the complexes from dry land. Nevertheless, the find complexes can be related to the cremation rituals as most of the artefacts had been in fire.

## DISCUSSION

What could be the actions resulting in depositing the find complexes and reasons for that? Most or even all the finds showed marks of being in fire, they had possibly been collected from a pyre and then poured into water or deposited in dry land. The question is why no, or only a small amount of human bones were found together with the items?

There may be several explanations. One possible interpretation is that the body of the deceased was not actually present in the burial rites. Such cenotaphs, i.e. symbolic burials are well known in Latvia during the Viking Age. Researchers interpret this as a result of increasing military activities in the Viking Age. Cenotaphs were interpreted as burials of faraway fallen warriors or burials of the deceased, whose bodies could not be actually buried (Šnē 2002, 275, 457). In Estonia, such Viking Age cenotaph has been found at Väike-Maarja, where weapons and iron tools bearing marks of fire have been buried without bones and charcoal (Mägi 1999, 33).

In that case, the bones found from the find complexes have been accidentally collected from a pyre and belong to previously cremated deceased (especially if bones were melted together with bronze artefacts).

Another explanation is that the human bones were treated differently, for example human remains were buried somewhere else. Dividing the human remains from the items after cremation and burying artefacts, bones and charcoal separately is a custom followed by several Viking Age and Final Iron Age cremation cemeteries in Estonia (Mandel 2003; Konsa 2013; Valk & Laul 2014).

In case pyre remains were scattered into water, the deposition of the bones could have been different from the items, or their preservation could also be different in this environment. The overall amount of burned human remains tends to be quite small anyway at the

1



2



**Fig. 6.** Items of the third find complex (marked with no. 1) found from the dry land compared with items of the first find complex (marked with no. 2), unearthed from the wetland.

**Jn 6.** Kolmanda leiukogumi esemed (tähistatud nr-ga 1), mis leiti mineraalpinnasest võrdluses esimese leiukogumi esemetega (tähistatud nr-ga 2), mis leiti märgalalt.

Photo / Foto: Pikne Kama, Ragnar Saage

Late Iron Age cremation burial sites in Estonia (Tvauri 2014, 247–248 and the literature cited therein). In Lithuania, the situation is different and cremation burials in the water environment include plenty of both human or animal bones together with burned items (e.g. Vaitkevičius 2012, 150).

Alasoo Varajemäe is in many aspects a very remarkable burial place. This is the first time in Estonia when finds of burned items from pyre are archaeologically documented in a water environment, connecting elements of fire and water during cremation burials. Previously the deposits from water environments in Estonia have not been associated with burial customs,



except for a hoard from Paluküla. The Paluküla find consisted of fragmented items with traces of fire. The items together with the deposited weapons were found in the 1920s during the cultivation of a former wetland (Lõugas & Selirand 1988, 314). This 8th – 9th century deposit was first connected with cremation burials, but has later been interpreted as grave robbery or/and deposit of scrap metal (Oras 2015, 118; Tvauri 2014, 200; and the literature cited therein). The Paluküla find spot and finds need further archaeological studies before anything more certain can be said about the origin of the finds. It is difficult to find analogues to depositing items from a pyre to water also from the neighbouring countries. In Scandinavia, where water deposits are more common, the items have not been in fire and therefore cannot be connected to cremation burials. Alasoo Varajemäe rituals seem to concur with the tradition of cremation burials in water environment known among the Balts. There are four such sites known from Lithuania and also reports about similar finds in the territory of Latvia (Petrauskas 2015, 119–220). Alasoo Varajemägi is still somewhat different compared to cremation burials in water environment among the Balts, where the burials have been dated from the end of the 12th to the 15th century (Petrauskas 2015, 119–220).

The significance of the water body in the burial customs at the Alasoo site was marked also by the location of the settlement site and the cemetery at the opposite side of lake. The lake could be interpreted both as a separator and a connector of realms of the living and the dead. Carrying the deceased by boat to the other side of the lake could have been an important part of the burial procession.

## CONCLUSIONS

The recently discovered Viking Age burial site and the 16th – 17th-century settlement together with the coin hoard in Alasoo Varajemägi is a remarkable archaeological monument in many aspects. Although most of the finds were not in their original context due to the Soviet time land cultivation, the fieldwork unearthed five complexes of intact finds, of which three were discovered from wetland next to the mineral hill. A small trench in the wetland area uncovered also a singular iron object from the peat, in the area that once could have been shallow water or fen. Cremation burial finds from water shed light on previously undocumented rituals in the Viking Age.

## ACKNOWLEDGEMENTS

This research was funded by the Estonian National Heritage Board with support from the European Union through the European Regional Development Fund (Centre of Excellence CECT), and by institutional research funding (IUT20-7) of the Estonian Ministry of Education and Research. We thank everyone who participated in the fieldwork.



## REFERENCES

- EAA 308-2-68, sheet 1.** Fempte deels transporterad charta öfwer tredie deelen aff Dörpts lähn. (Map in RA.)
- Grenzsteini kirjakogu** = Ado Grenzsteini kirjakogu. EKLA f. 38 (Archival collection in EKM.)
- Hiie, S. 2016.** Lisa 5. Alasoo Varajemäe mikrojäanuste määrangud. – P. Kama, Aruanne arheoloogilistest uuringutest Alasoo Varajemäe kalmel 11.05.–14.05.2015. Tartu. (Manuscript in TÜAK.)
- Kama, P., Konsa, M. & Tvauri, A. 2015.** Alasoo Varajemäe kalme, mündiaarde ja juhuleiu ekspert-hinnang. Tartu. (Manuscript in TÜAK.)
- Kama, P. 2016.** Aruanne arheoloogilistest uuringutest Alasoo Varajemäe kalmel 11.05.–14.05.2015. Tartu. (Manuscript in TÜAK.)
- Karro, K. 2013.** Proovikaevamised Alasool, Kodavere kihelkonnas. Tallinn. (Manuscript in MA.)
- Kivirüüt, A. 2016.** Lisa 6. Alasoo Varajemäe 2015. aasta arheoloogilistel väljakaevamistel kogutud luude analüüs. – P. Kama, Aruanne arheoloogilistest uuringutest Alasoo Varajemäe kalmel 11.05.–14.05.2015. Tartu. (Manuscript in TÜAK.)
- Konsa, M. 2013.** Intrasite spatial analysis of the cemeteries with dispersed cremation burials. – Archaeology in the Digital Era, II: 40th Conference on Computer Applications and Quantitative Methods in Archaeology, Southampton, 26–30 March 2012. Ed. by E. Graeme, T. Sly, A. Chrysanthi, P. Murrieta-Flores, C. Papadopoulos, I. Romanowska & D. Wheatley. Amsterdam, 570–574.
- Kriiska, A. 1990.** Alasoo asulakoht (Kodavere kihelkond). (Manuscript in TÜAK.)
- Lõugas, V. & Selirand, J. 1988.** Arheoloogiga Eestimaa teedel. Teine, parandatud ja täiendatud trükk. Tallinn.
- Mägi, M. 1999.** Viking Age inhumations in Estonia – new interpretations. – Fenno-Ugri et Slavi 1997. Cultural Contacts in the Area of the Gulf of Finland in the 9th–13th Centuries. *Museoviraston Arkeologian Osaston Julkaisuja*, 8. Helsinki, 29–43.
- Mandel, M. 2003.** Läänemaa 5.–13. sajandi kalmed. Eesti Ajaloomuuseum. *Töid ajaloo alalt*, 5. Tallinn.
- Oras, E. 2015.** Practices of Wealth Depositing in the 1st–9th Century AD Eastern Baltic. Leiden.
- Petrauskas, G. 2015.** Prie Lietuvos valstybės sudarymo klausimo sugrįžtant: laidojimo papročių aspektas. – *Res Humanitariae*, Vol. XVII, 114–136.
- Saage, R. 2016.** Alasoo Varajemäe kalmest pärit kirve (TÜ 2499:107) metallograafiline analüüs. Tartu Ülikool. Materjaliuuringu aruanne. (Manuscript in TÜAK.)
- Šnē, A. 2002.** Sabiedriba un vara: sociālās attiecības Austrumlatvijā aizvēstures beigās. Rīga.
- Tvauri, A. 2012.** The Migration Period, Pre-Viking Age, and Viking Age in Estonia. *Estonian Archaeology*, 4. Tartu.
- Tvauri, A. 2014.** Rahvasterännuaeg, eelviikingiaeg ja viikingiaeg Eestis. Tartu.
- Vaitkevičius, V. 2012.** The Excavations in Bajorai Cemetery during 2006–2009. – Archaeological Investigations in Independent Lithuania 1990–2010. Ed. by G. Zabiela, Z. Baubonis & E. Marcinkevičiūtė. Vilnius, 145–151.
- Valk, H. & Laul, S. 2014.** Siksälä kalme. I osa. Muistis ja ajalugu. Tartu.

## ARHEOLOOGILISED UURINGUD ALASOO VARAJEMÄE PÕLETUSMATUSTEGA KALMISTUL JA ASULAKOHAL

Pikne Kama ja Marge Konsa

2014. aasta detsembris leidsid hobiotsijad Peeter Kiuru ja Veikko Vulf Tartumaalt Kodavere kihelkonnast Alasoolt viikingiaegse matmispaiga, 16.–17. sajandi asulakoha ja samast perioodist pärineva mündiaarde. Alasoo Varajemägi on soosaar Vilajärve idakaldal, teisel pool järve paikneb eelnevalt teadaolev kaitsealune asulakoht (jn 1). Algupärast kalmet on lõhkunud hilisem inimasustus, lisaks nõukogudeaegne maaparandus, mistõttu enamik leide paiknes segatud kihis. Praegu on muistisel rohumaa (jn 2). 2015. aasta kevadel käisid Tartu Ülikooli arheoloogid kahel korral detektoristide leide üles võtmas. Selle käigus avastati neli leiukompleksi *in situ*. Kaks leiukogumit (II ja III) paiknesid mineraalpinnases, kaks ülejäänut (I ja IV) avastati üllatuslikult kalme põhjaosas mineraalmaal lähedalt turbast (jn 3), mis viikingiajal võis olla madal soo või madal vesi. IV leiukogumi asukohale rajati mai alguses väike kaevand ( $2 \times 2$  m (jn 4)). Kaevandi pealmine kiht oli ligi 30 cm paksune segatud pinnas, milles leidsid põlenud luid, keraamikat ja üksikuid muid leide. Vahetult segatud kihi all oli kaks leiukompleksi (IV ja V), millest üks oli eelnevalt šurfiga osaliselt avatud. Lisaks leiukompleksile leidsid samal tasapinnal raudesemeid: odaotsad, kirves, nuga ja hobuse suitsete fragment (jn 5). Leiukogumid näivad koosnevat tuleriida asemelt kokku korjatud esemetest, mis kallati vesikeskkonda või talletati kuival maal. Põlenud luude vähesus leiukogumite juures võib viidata kenotaafile või asjaolule, et enamiku inimjäänustega käituti teistmoodi kui põlenud esemetega. Mineraalmaalt pärit leiukogumid koosnevad peamiselt relvadest, aga turba seest leitud kompleksides domineerivad ehted (jn 6). Tuleriidalt pärinevate esemete ladestamist vesikeskkonda pole arheoloogiliselt enne Alasoo Varajemäe dokumenteeritud, kuigi niisugune tõlgendus on välja pakutud ka Paluküla leiukoha puhul. Võimalik, et traditsioon seostub baltide seas tuntud põletusmatustega vesises keskkonnas, mis on küll dateeritud hilisemasse aega.