



# Archaeological studies on Puritse Taramägi hill fort, Ida-Virumaa County

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## INTRODUCTION

Purtse Taramägi (Fig. 1) is a hill fort situated in northeastern Estonia, in the historical parish of Lügänuuse, on the left bank of the River Puritse, ca. 500 m south of the Puritse estuary and harbour (Fig. 2). The surrounding ancient settlement area is packed with notable archaeological monuments (e.g. four Iron Age hill forts and a medieval castle in a 10 km radius, see Tõnisson 2008, 230–233) and has yielded several Viking Age hoards which have been connected to an ancient harbour at the mouth of the River Puritse (see Kiudsoo 2016, 135–147), a stopping point on the *Austrvegr* trade route from Scandinavia to Byzantium and the Middle East (Mägi 2018, 91–140).

The estuary of the River Puritse remained the main harbour of the parish throughout the Medieval and Early Modern Periods. Probably already in the 18th century, the Russian Empire established a coast guard cordon near the harbour. In the beginning of the Great Northern War, in October 1700, according to written records, a small group of Swedish troops had taken positions near the River Puritse, anticipating the advance of Russian troops from the east but left before the Russians arrived because the river was too dry for effective defence (Kelch 1875, 143–144). According to local folklore, during the Crimean War, two sailing ships and a small steamboat of the British Fleet landed at Puritse harbour in the summer of 1855, burnt down the Russian cordon and bombed the buildings in the vicinity from the ships; soldiers of the cordon fled to hide behind the Taramägi hill (Liiv 1924, 358–359).

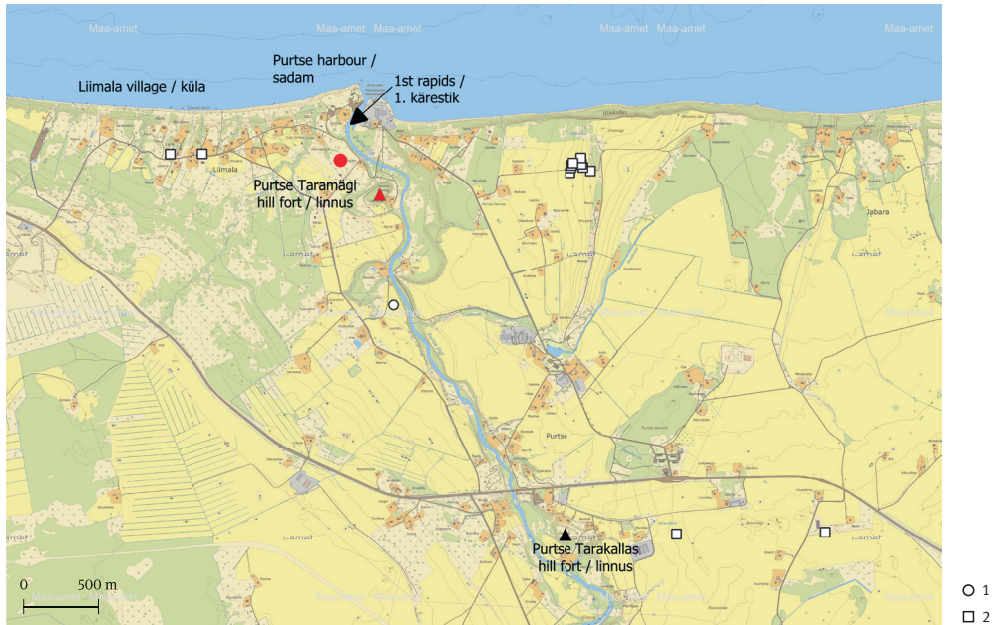
The hill of Taramägi is formed by an ancient cutoff of the River Puritse. The hill plateau is mostly flat, with an area of 7800 m<sup>2</sup> and rising 15–20 m above the surrounding



**Fig. 1.** Taramägi, aerial view from the west in 2023.

**Jn 1.** Taramägi, aerofoto läänest 2023. aastal.

Photo / Foto: Estonian Land Board / Maa-amet



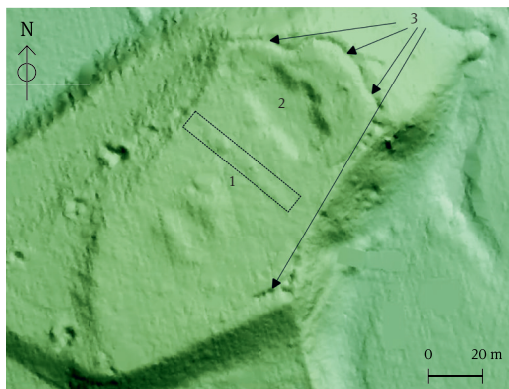
**Fig. 2.** The location of Puritse Taramägi hill fort. 1 – cup-marked stone, 2 – prehistoric burial mound or cemetery.

**Jn 2.** Puritse Taramäe linnuse asukoht. 1 – lohukivi, 2 – muinasaegne kalme või kalmistu.

Map / Kaart: Estonian Land Board / Maa-amet

old river bend. The northern coast of Estonia is dominated by a continuous limestone klint, but in the estuary of the River Puritse, there is a 2 km wide valley. Therefore, the hill fort is situated more than a kilometre from the nearest section of the klint.

Taramägi was recognised as a hill fort already more than a hundred years ago (Jung 1910, 144), but has since not been excavated. Early descriptions of the site (Jung 1910, 144; Liiv 1922; Suurväli 1932) note four structures visible on the ground (see Fig. 3): a row of large granite boulders extending across the middle of the hill in the NW–SE direction, the base of a limestone wall surrounding the western part of the hill, a large depression in the NE part, and ditches in the east side of the hill.



**Fig. 3.** Subsurface features and structures on Taramägi. 1 – line of boulders, 2 – depression, 3 – trenches.

**Jn 3.** Maapinnal nähtavad vormid ja struktuurid Taramäel. 1 – maakivide rida, 2 – nõgu, 3 – kaevikud.

Map / Kaart: Estonian Land Board / Maa-amet

It has been supposed that the trenches had been dug by the Russian troops in 1700 (Liiv 1924, 349). Of these four structures, the limestone wall was not visible by 2022 and at the start of the fieldwork it seemed uncertain whether it was an ancient hill fort at all. New trenches and bunkers were dug during WW II, their remnants were later observed by archaeologist Marta Schmiedehelm (Kalvi & Schmiedehelm 1948), who described a possible 30 cm thick cultural layer in one trench profile. According to Evald Tõnisson (2008,

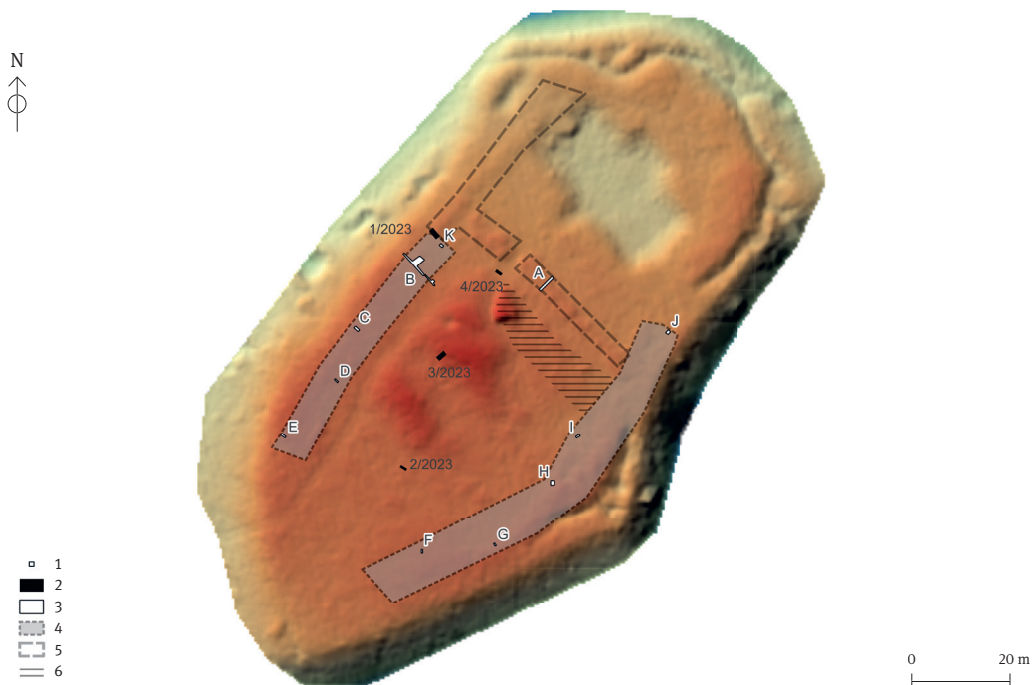
230), the entire courtyard should be covered by a 30–40 cm thick intensive sooty cultural layer. Tõnisson's claim seems to have inspired the interpretation that Taramägi might have been used as a watchpost where beacons warning of attacks from the sea were lit (Kiudsoo 2016, 136).

The field studies of 2022–2023 (for a summary in Estonian, see Siig & Kadakas 2023) took place in connection with the NIDAROD project that targeted four Late Iron Age and medieval sites in coastal Estonia (Taramägi, Purtse Tarakallas, Lihula castle and Saastna chapel) with archaeo-geophysical methods (for a summary in Estonian, see Siig *et al.* 2023). Small-scale excavations were conducted on Taramägi to validate its suitability for the survey by determining the chronology of the site and the existence of a cultural layer and ancient fortifications. The first stage of excavations was conducted in October 2022, revealing the existence of the base of the limestone wall. The second stage took place concurrently with the archaeo-geophysical survey on the site in June 2023.

## ARCHAEOLOGICAL FIELDWORK

### Investigations in the courtyard

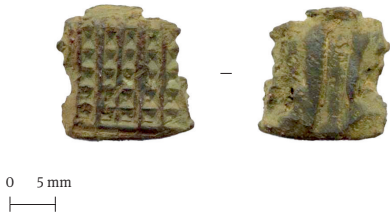
In October 2022, the flat areas of the courtyard were investigated by 11 small (approximately 25 × 40 cm) trial pits (see Fig. 4). The trial pits featured a dark brown organic topsoil layer stretching 25 to 60 cm from the ground level, followed by an orange-yellow sandy leached subsoil layer. One trial pit (no. 11) was dug in the middle of the depression in the NE part of the hill, revealing a clayey soil layer. No finds nor traces of a cultural layer were found.



**Fig. 4.** Excavation areas on Taramägi. 1 – trial pits in the courtyard (2022), 2 – excavation trenches in the courtyard and at the confluence of two walls (2023), 3 – excavation trenches examining the limestone wall (2022), 4 – limestone wall, 5 – boulder wall, 6 – area with limestones.

**Jn 4.** Kaevandid Taramäel. 1 – šurfid õuel (2022), 2 – kaevandid õuel ja kahe müüri kokkupuutekohas (2023), 3 – kaevandid paekivimüüri juures (2022), 4 – paekivimüür, 5 – maakivimüür, 6 – paekividega ala.

Map / Kaart: Kristo Siig



**Fig. 5.** Tin-copper alloy object featuring a waffle pattern (belt stud?) found from Taramägi.

**Jn 5.** Tina-vase sulamist vahvlimumstriga esemekatke (vöönaast?) Taramäelt.

(AI 8645: 1.)

Photo / Foto: Villu Kadakas

On the last day of the fieldwork, the plateau was investigated with a metal detector. From the middle of the plateau, a small sheet metal object made of a tin-copper alloy and featuring a waffle pattern (Fig. 5) was found. According to Ülle Tamla (TLÜ AT, pers. comm.), a similar pattern can be observed on a chain splitter from Järvamaa (AI 8522: 17) that can only be dated roughly to the later part of the Iron Age. However, the object found from Taramägi has a different shape and might rather be a fragment of a belt stud.

In June 2023, three small trenches (two 50 × 150 cm and one 75 × 200 cm, see trench-

es 2–4/2023 in Fig. 4) were dug in locations where either ground-penetrating radar (GPR) raw data showed possible structures that required validation or which were considered the most likely places to exhibit a cultural layer. Again, none of the trenches yielded any finds or cultural layer.

The larger trench was dug on top of a large mound with an irregular shape in the middle of the hill plateau, sticking out of its otherwise more or less horizontal surface. It appeared to consist only of sand, which has been laid on the topsoil of the hill probably rather recently. The structure of the sand is different from the sand under the topsoil, it includes sherds of cast iron, probably from explosive devices. This sand may have been brought to the hill by the soldiers during WW II, to construct ramparts for the trenches.

During the geophysical review in June 2023, another round of metal detecting was done to map possible recent metal trash influencing the magnetometer signal. This revealed tens of pieces of shrapnel as well as some cartridges covering the plateau, likely connected to the events of WW II. A coat button with the Russian Imperial coat of arms was found below the northern edge of the plateau, possibly testifying to the presence of Russian soldiers during the Crimean War. In 2024, a lump of slag and a piece of burnt clay found from mole holes on the northern side of the hill were reported to archaeologists.

The analysis of the data from the archaeo-geophysical survey is under way as of the submission of this article and will be presented in a separate article. However, the preliminary analysis does not point to any significant subsurface archaeological features (e.g. house remains) on the plateau.

### Limestone wall

The base of the limestone wall described by Jung (1910, 144) was not visible on the ground at the start of the excavations. However, using a metal rod (8 mm) to probe the soil, an area 7 m wide and 130 m long following the perimeter of the southwestern part of the hill was delineated where the rod did not penetrate deep into the soil, but gave a strong response immediately after going through the turf layer, at a depth of 10–13 cm. In the southwestern end, where the modern-day path leads to the hill plateau, a 24 m break in this stony area was detected (see Fig. 4). The stony zone was opened in 11 small trenches (A–K), confirming that the zone constitutes a structure made of 1–2 layers of (mostly) horizontally laid limestone slabs, and was interpreted as a base for a drystone wall (see Fig. 3). One of the trenches (B) was

selected for a more thorough investigation, while in others the slabs were left untouched and covered again. Another area of probably such limestone slabs was detected in the middle of the hill, stretching from the south-eastern almost to the northwestern edge and partitioning the plateau into two (Fig. 4: 6).

Trench B (Fig. 6) was opened as a 9 m-long ditch perpendicular to the wall. In both ends and in a hole in the middle, the profile of the soil underneath the limestone slabs could be observed. It became apparent that the wall was lying on top of the natural soil layer, with no sign of a cultural layer or burning remains underneath or between the stones. In the middle of the trench, the stone setting was cleaned of turf and soil in an additional  $1.5 \times 3$  m rectangle, which enabled us to confirm that the stones have not been randomly scattered, but systematically laid next to each other. Within the trench the wall had irregular inner and outer edges. The layout of the uncovered stone structure was documented using photogrammetry, but the stones were left *in situ* and re-covered.

In June 2023, the confluence of the limestone and boulder walls (see below) was investigated in trench 1/2023. It appeared that at that location, the limestone wall made a curved turn inward (coming from SW and turning SE; see Fig. 7). As the limestone wall touched upon the lower part of the boulder wall, it seemed possible that the base of the limestone wall continues under the boulder wall, but this could not be confirmed.

Due to the lack of datable artefact finds and organic remains that could be dated with the  $^{14}\text{C}$ -method, the only possible means for dating the site was to use OSL (optically stimulated luminescence). An unbleached soil sample was collected by inserting a 25 mm PVC tube duct taped from one end horizontally into a soil profile directly beneath the slabs of the limestone wall in trench B. The sample was sent to the Nordic Laboratory for Luminescence Dating at Aarhus University. The analysis resulted in an OSL age of  $330 \pm 20$  years (corresponding to 1673–1713 in absolute years), dating the event when the soil beneath the limestone wall was last exposed to sunlight (see Table). As two other samples collected differently – scraping the soil from underneath a limestone slab into a jar, done in darkness, using only a red light – showed a very similar result, it is unlikely that the sample was contaminated while taking the sample or that the soil was insufficiently bleached during deposition.



Fig. 6. Trench B top view, orthophoto based on photogrammetry.

Jn 6. Kaevand B pealtvaade, ortofoto fotogrammeetria põhjal.

Photo / Foto: Ragnar Saage



Fig. 7. Trench 1/2023 photographed from the west.

Jn 7. Kaevand 1/2023, pildistatud läänest.

Photo / Foto: Kristo Siig

**Table.** Report of the analysis of optically stimulated luminescence (OSL) samples

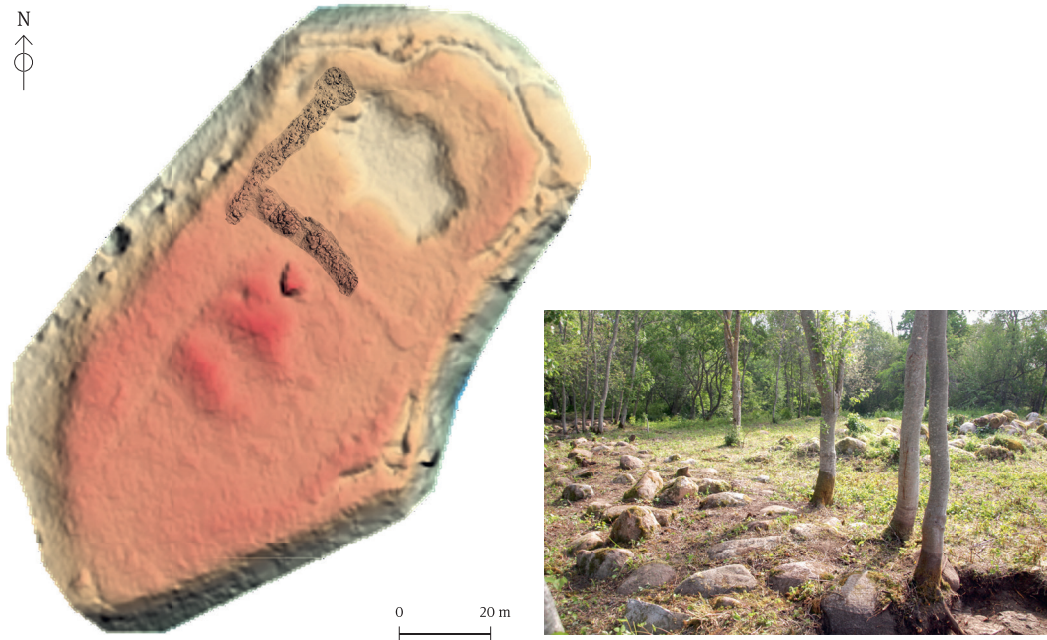
**Tabel.** Optiliselt stimuleeritud luminesentsi (OSL) proovide analüüside tulemused

Compiled by / Koostanud: Jan-Pieter Buylaert, Kristo Siig

Lab code/sample / laborikood ja proovi nr	OSL dose rate (Gy/a) / OSL doosi väärtus (Gy/a)	Quartz dose rate (Gy/a) / Kvartsi doos (Gy/a)	Age (years b. 2023) / Vanus (aastates enne 2023. a-t)	Age range (calendar years, CE) / Dateeringu vahemik (kalendriaastates, pKr)
23 51 01 / 1(1/5)	1120±20	3660±180	330±20	1673–1713
23 51 01 / OCT/6	1380±50	3630±210	380±30	1613–1673
23 51 01 / OCT/7	1220±30	3410±190	360±20	1643–1683

## Boulder wall

At the start of the excavations, only one 50 m long wall or barrier of large granite boulders (ca. 50 cm in diameter on average) with a 2.5 m wide ‘gate’ or break in the middle was visible on the ground (see Fig. 3). It was certainly man-made and had been described already at the end of the 19th century (Jung 1910, 144), but its antiquity seemed questionable. It does not overlap the limestone area, which partitions the plateau into two areas, but is situated directly to the north-east of it. However, during preparations for the archaeo-geophysical survey, most of the brush and underwood on the hill was removed, revealing a previously unknown second, 40 m long row of boulders, exactly perpendicular to the first one, forming a T-shape (Figs 4, 8). Moreover, the second row ended exactly where the limestone wall started (see Fig. 4), indicating that the boulder wall was possibly constructed as part of the same system of fortifications.



**Fig. 8.** The confluence of two arms of the boulder wall, digital elevation model of part of the boulder wall overlaid on the digital elevation model of the hill and photographed from the west.

**Jn 8.** Maakivimüüri kahe haara kohtumispaik, osaline digitaalne kõrgusmudel maakivimüürist asetatuna mäe digitaalsele kõrgusmudelile ja pildistatud läänest.

Map / Kaart: Kristo Siig, Ragnar Saage, photo / foto: Kristo Siig

Similar boulder walls might have existed on the N and E sides of the hill, around the depression, but could have been disrupted by the digging of trenches visible on these sides. Scattered boulders around the depression might be evidence of this. Some of these boulders have also been rolled down the hill and are visible around and within the constructions of Linnamäe farm. Rolling these boulders downhill has been described as a favoured pastime of local youth at the end of the 19th century (Liiv 1922).

The boulder wall was not excavated, but the structures visible on the ground were documented by photogrammetry.

### **Pits and craters around the hill**

Several pits with a diameter of 2–5 m could be observed on the upper part of all the slopes of the hill. Taking into consideration their size and shape, most of these could be remnants of small WW II bunkers with collapsed beam roofs. Similar trenches and bunkers were built by German soldiers during WW II on the hill of Purtse Tarakallas (Kalvi & Schmiedehelm 1948). According to the people living in Linnamäe farm, at least one lime kiln had been situated somewhere on the slope before WW II. One or more of these pits could have been lime kilns, but none have been excavated.

### **DISCUSSION**

Probably the most significant find of the fieldwork are the remnants of a possible limestone wall. Such a 1–2-layer stone setting could have been theoretically a pavement, but such an interpretation is extremely unlikely, considering its location parallel to a steep slope. If it was a wall, however, it could not have been originally just 1–2 layers of limestone slabs high. In all likelihood, most of the volume of the wall either was not built or has been removed later, leaving only a layer or two of slabs that were stuck inside the ground and could not be conveniently retrieved.

While previous studies have classified the site as a prehistoric hill fort, the OSL date shows that the bottom layer of limestone slabs were placed in their current location only in the 17th century or early 18th century. This raises the question whether the site is far more modern than previously thought.

While a non-military function such as a cattle fence cannot be excluded, such an interpretation lacks analogies and it is difficult to see reasons why such labour-intensive stonework was needed. Also, such a relatively prominent structure does not show up on a detailed 17th-century map (Thoring 1685), making it unlikely (although not impossible) that it was built in the second half of the 17th century.

A more likely explanation to the site and its date would be military fortifications. According to local oral tradition, the trenches on the hill were dug by Russian forces during the Great Northern War (Liiv 1922). Perhaps a defensive limestone and boulder structure was also constructed during the same event? However, it is hard to find justification for such an interpretation from other sources. There are no analogies in Early Modern period Estonia for stone forts being constructed without the use of mortar and mainly relying on the natural slope of the hill. Moreover, the hypothesis of Liiv that Russian forces moving westwards fortified the hill of Taramägi (situated on the western bank of the river) does not seem credible. It would make much more sense if the fort was built by the Swedish army to halt troops trying to cross the river from the east. Alternatively, the hill may have been fortified by any of these troops, to protect the harbour. Since limestone is not available in the bedrock of the hill but had to be

procured from outcrops of limestone several kilometres away, it is unlikely that the wall was a hastily built field fortification. Earthworks made of local soil would be more likely. It is also possible that the hill was fortified again after the attack of 1855 during the Crimean War in fear of the return of the British Fleet. The first war trenches may have been dug in this period. The depression in the eastern part of the hill would be a suitable place to hide a mortar from direct fire. It should be noted that the time from the end of the Great Northern War until WW I was a long period of peace in Estonia and war trenches from before the immediate preparations of WW I are very rare.

Considering the topographic position on the hilltop, the irregular-shaped stones and the lack of lime mortar, it seems more plausible that the site was (at least originally) a prehistoric hill fort. This hypothesis is supported by the find of a possible Iron Age belt stud and a piece of slag on the plateau. The original prehistoric fortifications might have been overhauled or rearranged during the Great Northern War, leading to the bleaching of the soil under the currently existing limestone wall. The current appearance of the site might have been further influenced by industrial activities – it is possible that higher layers of stone in the original drystone wall were dismantled and burnt in lime kilns after the Great Northern War. This hypothesis is reinforced by the proximity of the Purtse River and harbour, providing a suitable way to export the material with minimal costs. The building of two new cities on the coast of the Gulf of Finland – Saint Petersburg in the early 18th century or Helsinki in the early 19th century – could have been the destinations for exporting lime with virtually unlimited demand.

The absence of the limestone wall on the western end of the hill could be explained in various ways. It is possible that the wall once existed there as well, but for some reason has been fully removed. Alternatively, the narrow western end of the hill with a relatively gentle slope may have been fortified with an earth rampart in an earlier phase, before the construction of the limestone wall. Later it either remained in use or survived partly under the limestone wall, which was therefore laid somewhat higher compared to the surviving parts.

If prehistoric fortifications on the hill are assumed, their rearrangement in the Early Modern period must have been quite thorough, making it difficult to conclude anything about the prehistoric building stage based on the current layout of the fortifications. Therefore, it is hardly surprising that the design of the fortifications of Purtse Taramägi does not have a good analogy among Estonian prehistoric hill forts. Taramägi seems to be divided into two parts. Although there are other multi-part forts, especially from Virumaa (e.g. Neeruti Sadulamägi and Äntu Punamägi, see Tõnisson 2008, 64–68, 213, 219), they are usually located on several small hillocks separated by ditches and with a narrow access route from the outer bailey to the inner one. In the case of Taramägi, it is unclear which part of the fort is ‘inner’ and which is ‘outer’, but they are on the same plateau and separated only by a low barrier of boulders that constitutes no credible military hindrance. Furthermore, at least at one point, the wall sections at Taramägi are joined at a right angle, while ramparts of other hill forts tend to follow natural contours.

Another unique trait is the combination of two types of walls – boulder and limestone. There are a few Iron Age forts and enclosures in Estonia with walls or ramparts consisting primarily of boulders (e.g. Ehmja Kuradimägi, Keava Võnnumägi, Lipa ring-fort, see Tõnisson 2008, 205–208, 258–259) and in some forts, boulders have been used as filling while the outer edges have been laid of limestone, but separate wall sections of limestone and boulders are not known. The problem is that irregularly shaped boulders cannot be used to build a steep and high drystone wall. It is possible that the boulders were used only as filling material,



as a core of a thicker limestone wall, which has later been removed, e.g. for burning lime. However, no limestones were found between or near the boulder wall. It cannot be ruled out that the rows of boulders were constructed at a later time, but it is unclear when and why this could have been done.

The width of the limestone wall – 7 metres – is remarkable. A drystone wall of good quality limestone can be at least as high as it is wide. With such a massive wall Taramägi would have been the most powerful prehistoric stronghold in the eastern part of Virumaa. Furthermore, taking into consideration its location, Taramägi would have been one of the very few strongholds in Estonia which could have been clearly visible from the sea, especially with its prominent limestone walls. The wall at Purtse Tarakallas, a fort just 2.5 km to the south that likely served as a centre for the entire Lügánuse parish at the end of the Iron Age, was also constructed of limestone slabs and was of similar width, but only at the main gate (see Mäesalu & Tamla 1983). In another section of the wall, the rampart of Tarakallas had been only 2.5 m wide, made mostly of sand, only covered by limestone slabs from the outside (AI 4-116-4). Naturally, it must be stressed that the current layout of the fortifications at Taramägi has been rearranged to an unknown extent in the 17th century.

In order to consider this structure to be a prehistoric hill fort, a more precise date is required. The fact that man-made fortifications are not just on one edge of the plateau, but around the perimeter, indicates similarity to Final Iron Age hill forts (see Tönisson 2008, 63). While this group of forts is often seen as centres for their surrounding areas (see e.g. Lang 2002; Valk 2014), Taramägi is located somewhat peripherally in relation to the Final Iron Age settlement: the nearest villages documented in the Danish Census Book in the 1220s (Purtse, Kestla, Moldova) are all located on the higher klint, in agriculturally more suitable areas several kilometres inland (see Johansen 1933). This is in contrast with the location of the Final Iron Age fort of Purtse Tarakallas a few kilometres upstream (Fig. 2; see also Siig 2022). Based on grave finds, there might have been some Iron Age settlement in the village of Liimala ca. 1 km from Taramägi, but this was probably a fishing village that did not constitute sufficient hinterland for a proper stronghold. However, it cannot be ruled out that the fort was initially planned as a stronghold (maybe a successor to Tarakallas), but for some reason was left uncompleted.

Another possibility is that Taramägi was connected to a Viking Age harbour, which has been suggested for several Iron Age forts in northern Estonia (Mägi 2018). A prominent harbour site on the *Austrvegr* way has been suggested in the lower reaches of the River Purtse based on coin hoards and considering logistical reasons (Kiudsoo 2016, 135–147; Mägi 2018, 91–140). The first small rapids in the river are at the modern bridge, just under the watch of Taramägi (see Fig. 2). As ships probably could not have gone upstream from here, this would have been an optimal location for unloading cargo – a landing and seasonal trading site, with sufficient shelter from sea winds and a possible ford over the river created by the rapids. In this case, Taramägi might have been used as a seasonal shelter against sea raids, for protecting the goods of the locals, as well as of foreign merchants stopping in the estuary. This does not, however, explain the size of the fortifications. The exact location of the presumed Iron Age harbour settlement has not yet been established.

Although we cannot draw conclusions based on the current layout of the fort, it shares some similarities with other Early Iron Age forts that have been regarded not so much as fortifications but rather as ritual enclosures (Lang 2007, 55–83): the walls (especially the boulder wall and the row of boulders across the middle of the plateau) are impractical from a defence

point of view. Still, they can be seen as separating different spaces symbolically (Lang 2007, 55–83). Considering that the surrounding landscape features many Bronze Age and Early Iron Age grave mounds and cup-marked stones (Fig. 2), Taramägi might be seen as a place of communal gatherings that formed a part of a wider ritual landscape. However, the practice of building wall sections made of different materials has not been typical to ritual sites in Estonia either.

In conclusion, the data gathered during the fieldwork does neither allow to confirm nor exclude a prehistoric origin for the site, let alone narrow the date down to a specific period of the Iron Age. Further studies are required to achieve a better understanding of the site. These could focus on three aspects: dating the boulder wall and other sections of the limestone wall (probably using the OSL method), dating the piece of slag (if it contains carbon for  $^{14}\text{C}$  dating) and examining the area around the hill for possible settlement sites.

A final note has to be made regarding the lack of a cultural layer. This finding contradicts previous studies that claimed its existence on either a part (Kalvi & Schmiedehelm 1948) or across the entire plateau (Tõnisson 2008, 230; Kiudsoo 2016, 136). This might be explained by the fact that Kalvi and Schmiedehelm only observed the profiles of military trenches and were unsure of their observations, but in the absence of proper excavations this report was mistakenly interpreted as guaranteed information and was circulated in other works. In any case, the results of the current excavations enable us to put this claim to rest. The absence of a prehistoric cultural layer does not rule out the possibility that the site is a prehistoric hill fort – thin or absent cultural layers are quite typical of prehistoric forts in Virumaa (Tamla 1996, 235).

## CONCLUSION

The first archaeological excavations at Purtse Taramägi confirmed and extended our knowledge about fortifications on the hill. The base of an extensive drystone wall made of limestone and a T-shaped boulder wall were found and documented. The two structures are connected, but their contemporaneity could neither be confirmed nor rejected. The combination of limestone and boulder wall sections is unique in Estonian archaeology and deserves further studies.

Based on several trial pits and small excavation trenches, previous information about the existence of a cultural layer on top of the hill was rejected. Due to the lack of datable finds and organic remains, OSL-dating was used to establish the date of building the limestone wall.

The stones of the limestone wall seem to have been placed in their current location at the end of the 17th century, possibly during the events of 1700, in connection with the Great Northern War. Nevertheless, structural features and scarce finds indicate that the origins of the site might go back to prehistory. Whether this stage represents a Final Iron Age stronghold, a Viking Age refuge for the harbour, an Early Iron Age enclosure or something else, cannot be determined without further research.

The limestone wall, if it was ever completed, was probably dismantled and burnt in lime kilns in the 18th or 19th century, leaving only a 1–2-layer subsurface structure that exists nowadays. The topography of the hill has also been transformed during later wars, at least during WW II (trenches, craters and sand heaps). Supposedly the hill was also used and shaped by troops already during the Great Northern War and the Crimean War. Material traces of these Modern wars on the landscape of Estonia are rare and could contribute significantly also to the archaeology of war.

## ACKNOWLEDGEMENTS

The authors are most grateful to Kersti Markus and Else Berit Eikeland as the initiators of the study project, to Arne A. Stamnes, Carmen Cuenca-Garcia and Krzysztof Kiersnowski (NTNU) and Ülle Tamla (Tallinn University) for advice and discussions regarding the site and its finds, to Mihkel Tammet for the metal detecting survey on the hill, to Markku Kivine for reporting stray finds, to Kärt Metsoja for drone surveying the hill, to the landowner Raivo Paavo for generous assistance during fieldwork and to Kalle Merilai (National Heritage Board), Ulla Kadakas and MA and BA students of the University of Tartu for assisting in the excavation of the site. We are thankful to the Nordic Laboratory for Luminescence Dating in Aarhus University and Jan-Pieter Buylaert for dating the sample as well as their advice on sampling and interpretation of the results. This article was supported by TAU21161 ('From Nidaros to Novgorod: Cultures along the historic routes of St. Olav. An Estonian-Norwegian cooperation project in humanities research') and personal research funding team grants PRG1931 and PRG1276 of the Estonian Research Council.

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## ARHEOLOOGILISED UURINGUD PURTSE TARAMÄEL

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Purtse Taramäe linnamägi asub Kirde-Eestis, Lüganeuse kihelkonnas, Purtse jõe vasakul kaldal, umbes 500 meetri kaugusel Purtse sadamast (jn 1, 2). Taramäe 7800 m<sup>2</sup> suurune platoo on suhteliselt tasane ning tõuseb 15–20 m kõrgusele mäe ümber olevast vanast jõelookest. Linnamäena on paika määratletud juba rohkem kui sada aastat, kuid arheoloogilisi kaevamisi polnud seni toimunud. Mäe varajased kirjeldused mainivad nelja maapinnal nähtavat struktuuri: suurt maakivide rida, lubjakivist müüri alust ning suurt lohku ja kraave mäe idaosas (jn 3). Neist struktuuridest ei olnud lubjakivist müür uuringute ajaks enam maa peal nähtav.

2022.–2023. aasta välitööd toimusid seoses projektiga NIDAROD, mille käigus uuriti arheogeofüüsikaliste meetoditega nelja hilisrauaaja ja varakeskaja muistist Ranniku-Eestis. Väiksemahulised kaevamised Taramäel aitasid määratleda paiga kronoloogiat ning kultuurkihi ja kaitserajatiste olemasolu. Kaevamiste esimene etapp toimus 2022. aasta oktoobris ja teine 2023. aasta juunis.

Oktoobris 2022 tehti mäe õuealale 11 prooviauku (jn 4), kust kultuurkihti ega leide ei tulnud. See võimaldas ümber lükata varem levinud väite, et mäge katab intensiivne kultuurkiht. Metallidetektoriga leiti õuealalt tina-vase sulamist ruuduke, mida katab võremuster ning mida võiks pidada mõne vöönaastu katteks, kuid mida ei ole võimalik dateerida täpsemalt kui rauaaja teise poolde.

Metallvardaga sondeerides selgus, et mäe edelapoolse osa ümber kulgeb kivine ala. Selle lähemaks uurimiseks avati platoo servades 11 šurfi, millega tuvastati umbes 7 m laiuses kulgev ühe-kahekihiline paekivilaotis, mille kogupikkus on u 130 m. Mäe edelapoolses nurgas, kust jookseb tänapäeval üles ka rada linnusele, on paekivilaotises umbes 24 m pikkune katkestus. Kaevandis B uuriti paekivilaotist põhjalikumalt ning selgitati välja, et tegemist on hoolikalt laotud müüritisega, mis on ehitatud loodusli-

kule pinnasele ning kus puuduvad põlemisjäänused või kultuurkiht. Leitud paekivilaotis on tõenäoliselt kunagise müüri alus. Arvatavasti oli selles kohas algselt märkimisväärse kõrgusega müür, mis on uusajal lubjaks põletatud ning alles on jäänud ainult alumised kiviplaadid, mida oli maa seest raske kätte saada. Paemüüri rajamine dateeriti OSL-meetodiga 17. sajandi lõppu (tabel).

Mäe puhastamine võsast paljastas lisaks juba teadaolevale maakivivallile valli teise, piki mäe põhjakülge kulgeva haara, mis liitus esimesega täisnurga all ning puutus ühes otsas kokku paemüüri alusega. Nende ühenduskoha uurimisel (jn 7, 8) jäi 2023. aastal ebaselgeks, kas kaks eri tüüpi müüri olid sama- või eriaegsed, kuid igal juhul on need ehitatud üksteist arvestades.

Paemüüri dateeringust nähtub, et 17. sajandi lõpus toimusid mäel ehitustööd, mille käigus jõudsid paekivid oma praegusesse asupaika ning kivide alune muld nägi sel ajal viimati päevavalgust. Ehitustöid võib ettevaatlikult seostada Põhjasõja sündmustega, millele on viiteid ka kohapärimuses ja kaudsemal kujul ka kirjalikes allikates. Samas näib kaitserajatiste iseloomu ning mäelt leitud oletatavat naastukatket ja šlakitükki silmas pidades tõenäoline, et mäel asus varem muinaslinn. Võib-olla tõsteti muinaslinnuse valli materjali Põhjasõja ajal millegi jaoks ümber ning hiljem põletati ka maapealne osa paekividest lubjaks. Täpsemalt pole oletatavat muinaslinnust hetkel siiski võimalik dateerida.

Pärast Põhjasõda on mäe topograafiat muudetud kaevikute ja liivakuhjatistega II maailmasõja ajal ning tõenäoliselt rajati kaevikuid ka Krimmi sõja ajal seoses Briti laevastiku maabumisega Purtse rannas. 18.–19. sajandi sõdadega seotud materiaalsed jäänused on Eestis väljaspool linnu väga haruldased ning Taramäe leiud pakuvad uut allikmaterjali militaararheoloogia jaoks.