



Three recently discovered hill forts in south-eastern Estonia: Pühiküla, Luke, and Valgesoo

Heiki Valk and Andres Vindi

Tartu Ülikool, ajaloo ja arheoloogia instituut, arheoloogia osakond (University of Tartu, Institute of History and Archaeology, Department of Archaeology), Jakobi 2, 51005 Tartu, Estonia; heiki.valk@ut.ee

In 2024, trial excavations were carried out by the University of Tartu on two hill forts in the south-eastern part of Estonia – in the territories of Pühiküla and Valgesoo villages, and a new hill fort was found in the village of Luke, near Tartu. All the monuments were discovered on the basis of relief maps by Andres Vindi.

PÜHIKÜLA HILL FORT

The site

The hill fort of Pühiküla lies in the southern part of Tartumaa district, ca. 17 km south of Tartu. It is situated 2.5 km south-west of the centre of historical Kambja parish and present-day rural municipality, in the forested area between the cultivated lands of Pühiküla and Pulli villages. The site is located on the south-western tip of a ca. 2 km long ridge called Köstrimäed (Churchwarden's hills), named after the adjacent former small church manor (Fig. 1). Excavations were initiated by the National Heritage Board, because the moraine ridge was intended to be used for quarrying gravel.

The hill fort area is protected by ca. 25–30 m high slopes in the north, west and south, but in the east, its plateau is located on the same level as the flat ridge top, providing a 60-metres-long easy access to the stronghold area. The fortifications are very atypical for the hill forts of Estonia. The flat hill fort plateau is surrounded by two low circular ramparts located on the upper part of the slope and having low ditches both on their outer and inner side (Fig. 2). At the edge of the plateau in some places also a man-made escarp

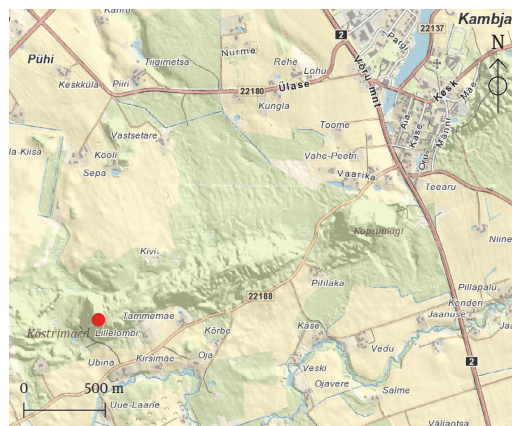


Fig. 1. The location of the Pühiküla hill fort.

Jn 1. Pühiküla linnamäe asukoht.

Map base / Alusplaan: Estonian Land and Spatial Development Board / Maa- ja Ruumiamet

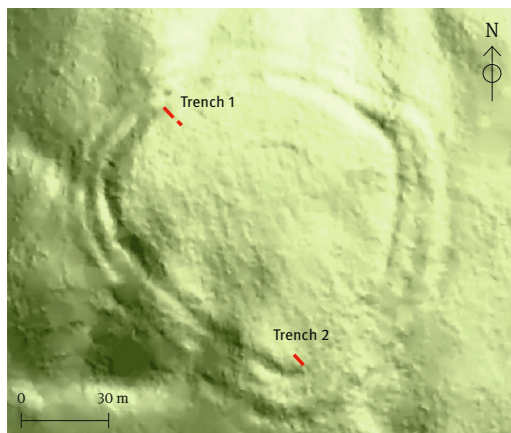


Fig. 2. The Pühiküla hill fort and the location of trenches.

Jn 2. Pühiküla linnamägi ja kaevandid.

Map base / Alusplaan: Estonian Land and Spatial
Development Board / Maa- ja Ruumiamet

can be observed. The fortifications are missing on the south-eastern side of the plateau, but they may have been destroyed there by recent forest-cutting activities. Since the fortifications are not bigger and stronger on the side of easy access, the system of ramparts and ditches might also be of ritual character.

The ca. 2.5–3 m wide ramparts are only up to ca. 0.3–0.5 m high when measured from the current bottoms of the moats or ditches. Drilling the bottom of the ditches added 0.3–0.4 m of depth until their original bottom. It seems that the ramparts were made of soil taken from the ditches.

The size of the flat hillfort plateau can be estimated as 4800 m². In total, including the whole area of ramparts, ditches, and escarps, the size of the fortified territory is

about 10,600 m². Drilling revealed no traces of cultural layer on the plateau, only in two areas a dark and sooty soil was discovered at its edge. These areas were chosen for digging trial trenches. All the excavated soil was sieved by using meshes of 6 mm eye diameter.

Trenches

Trench 1 was made on the northern edge of the plateau – in the area where a ca. 1.3 m high escarp had protected the stronghold (Fig. 2: 1). The sooty area was located in the region where a 15–20 m wide natural promontory with a rather gentle slope stretching out of the hill fort plateau offered good natural preconditions for access. Within the distance of 15–40 metres from the escarp the promontory was cross-cut by two shallow ditches and low ramparts.

The trench of 3 × 1 m was made perpendicularly to the plateau edge. Its lower end was located at the beginning of the steep escarp slope. From the grey top soil which had formed as a result of erosion caused by ploughing six tiny fragments of greyish hand-made ware were found (TÜ 3228). At the depth of 30–45 cm the sooty area which had been discovered by drilling came to light, forming a 1–1.5 m wide zone with a clear and straight upper edge (Fig. 3A). A radiocarbon analysis from one of the two small brands in that layer, taken from outer tree rings, gave the result 2073±32 BP,¹ with the calibrated date range (95.4%) of 172 BC – 9 AD.² Just beside this edge, a post hole with the bottom diameter of ca. 25–30 cm, stretching into the depth of 70 cm from the present-day ground surface, and until 38 cm into intact mineral ground was discovered (Fig. 3B). Evidently, the post has supported a wooden defence wall. On the original mineral ground surface, where turf and soil had been removed in the past, a semi-charred piece of birch bark was found in the bottom of the trench. A radiocarbon analysis from it gave the result 2048±30 BP,³ cal. (95.4%) 155 BC–27AD or 49–56 AD (0.9%).

A 1 × 1 m area was also opened 1 m south of Trench 1, in the hope of finding traces of cultural layers. Intact mineral gravel without any signs of human activities appeared there at the depth of 15–20 cm already.

¹ FTMC-YE69-2.

² For all calibrations in this paper OxCal 4.4.4 calibration program (Bronk Ramsey 2009) and IntCal20 calibration curve were used.

³ FTMC-YE69-1.



Fig. 3. Trench 1 on the Pühiküla hill fort. A – sooty layer at the depth of 40 cm, B – bottom with a post hole.

Jn 3. Kaevand 1 Pühiküla linnamäel. A – põlengukiht 40 cm sügavusel, B – postiauguga põhi.

Photo / Foto: Heiki Valk

Trench 2 was made on the opposite side of the stronghold on a slanting surface (Fig. 2: 2), where a similar sooty layer had been discovered by drilling. The lower ramparts and ditches could hardly be distinguished in that region.

A similar sooty layer as in Trench 1 was discovered at the depth of 25–35 cm, but also four smaller, 10–25 cm long brands were found within it on intact natural soil. In the lower end of the trench, a ca. 30–35 cm diameter granite stone with a fire-cracked surface came to light. The stone, which had rolled down from the higher part of the plateau, might originate from a primitive stove. Sieving the trench yielded no finds, except for a piece of imported flint. A radiocarbon analysis was made from one of the brands lying on intact mineral soil. The result was 1957 ± 30 BP, with calibrated (95.4%) date of 172 BC – 9 AD.⁴

The radiocarbon analyses from the two trenches gave almost identical results, with the overlapping part in the time range from 41 BC to 9 AD. This date, also considering the lack of cultural layers on top of the plateau, indicates a very short-lived existence of the stronghold in the final stage of the Pre-Roman Iron Age.

LUKE HILL FORT

The Luke hill fort lies at Luke village in Nõo parish, ca. 18 km south-west of Tartu and 8 km west of Pühiküla hill fort. The stronghold is located ca. 1.7 km SSW of the Luke historical village centre, on the southern tip of Ugumägi Hill. While the relative height of Ugumägi is ca. 15 metres, its southern, fortified tip is ca. 3–5 metres higher than the hill plateau north of it. Similarly to the Pühiküla hill fort, the stronghold had concentric fortifications on the upper part of the slope. Fortifications on the northern and north-eastern, i.e. the land side

⁴ FTMC-YE69-3.

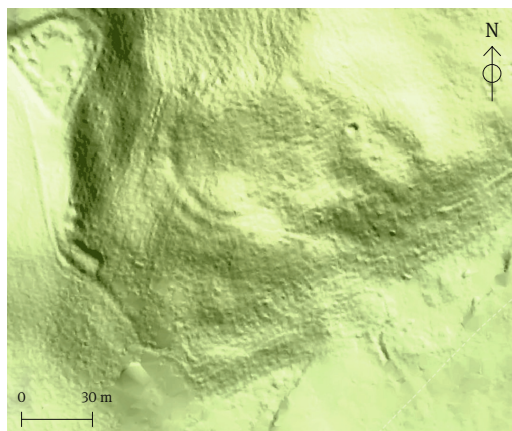


Fig. 4. The Luke hill fort and its fortifications.

Jn 4. Luke linnamägi ja selle kaitseehitised.

Map base / Alusplaan: Estonian Land and Spatial Development Board / Maa- ja Ruumiamet

have almost fully been destroyed, probably by recent forest cutting activities, but on the southern and south-western sides the escarped edge of the stronghold plateau and a low rampart between two shallow moats has survived (Fig. 4). The size of the hill fort plateau can be estimated as 1100–1200 m², and the total size of the fortified area as ca. 2800–3000 m². No cultural layer could be observed on most of the plateau, but a test pit made at its southern edge revealed a layer of charcoal and fire-cracked stones in the depth of ca. 45 cm. A radiocarbon date from the charcoal gave the result of 1515±30 BP, with calibrated (95.4%) ranges between 436–464 (4.7%), 476–500 (5.4%), 510–515 (0.5%), 531–610 (81.0%) and 618–640 AD (3.9%).⁵

VALGESOO HILL FORT

The site

The Valgesoo hill fort (Võnnu parish, presently Põlva rural municipality) is located in the northern part of the historical Võrumaa district, ca. 10 km NNW of Põlva, on the western shore of the deep valley of the Ahja River (Fig. 5). The site was discovered because of an anomaly on the relief maps of the Estonian Land Board: on the land side of a hillock beside the valley, a rampart-like elevation attracted attention. When checking the site in the landscape in 2020, drilling with a hand drill revealed a layer of charcoal at the edge of the hill plateau, and the elevation on its western edge was identified as a prehistoric rampart.

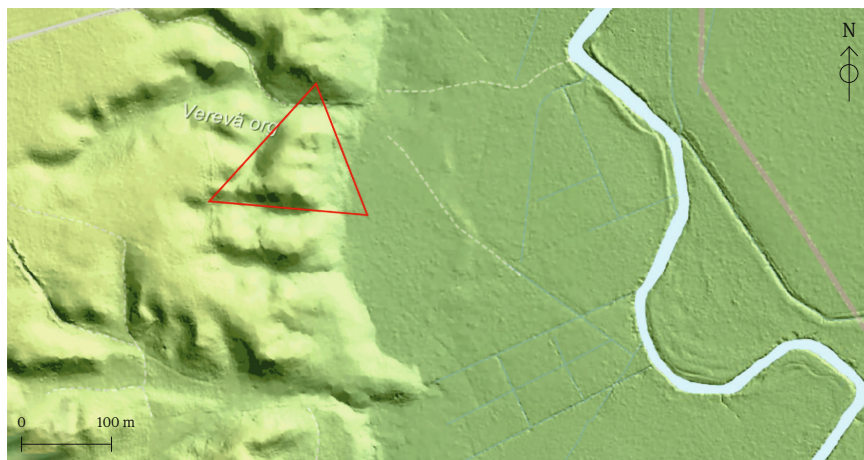


Fig. 5. The location of the Valgesoo hill fort.

Jn 5. Valgesoo linnamäe asukoht.

Map base / Alusplaan: Estonian Land and Spatial Development Board / Maa- ja Ruumiamet

⁵ FTMC-XK89-7.

The hill fort area is protected from the east by the deep river valley. From all other sides it is separated from the shore plateau by natural valleys of glacial origin. The relative height of the hill is 11 m on the north and south sides and ca. 20 m from the bottom of the river valley in the east. On the land side, the hill is 6–7 m high. The size of its plateau is ca. 3500 m². From the direction of the river valley, two shallow valleys stretch into the hill fort plateau. Trial drilling in the northern one also indicated a sooty layer under the turf and eroded soil.

The hill fort area is connected with the rest of the shore plateau by a narrow and ca. 15 m long ‘neck’, only 4–5 m wide on its top (Fig. 6). Beside the hill fort plateau the ‘neck’ is cut by a 5–6 m wide and up to 1 m deep moat, to hinder access from the land side. A 10–15 m long rampart with a four metres wide and almost horizontal top has been heaped up on the plateau beside the moat. The width of the rampart is ca. 10 m at its foot, and its maximal height from the hill fort plateau is 1.3 m. The rampart has been damaged by bulldozer work: a ca. 2 m wide passage has been cut through it, to allow access to forest machines some 30 or 40 years ago. This activity, which resulted in making a ca. 1 m high, almost vertical profile, destroyed the northern end of the rampart. A narrower gateway must have existed in that area also in prehistoric times.

Trenches

In the autumn of 2024, two trenches were made on the hill (Fig. 6), and all removed soil was sieved, as in the case of the Pühiküla hill fort.

Trench 1 (4 × 1 m) was made on the southern edge of the plateau, perpendicularly to it, in a place where trial drilling had shown a buried layer of sooty soil. Although no cultural layers were discovered on the plateau by drilling, also here the remains of a burnt wooden defence wall were found (Fig. 7). In the distance of ca. 2.5 m from the hill slope the remains of a ca. 15 cm diameter charred log lay across the trench, with a ca. 10–12 cm thick sooty area on its outer side. Since traces of decayed wood could be observed on intact mineral soil on the lower side of the brand, it can be regarded as the lowest log of a defence wall. South of the log an area of intensively black sooty soil stretched for ca. 1.3–1.5 m towards the edge of the plateau. Within this dark

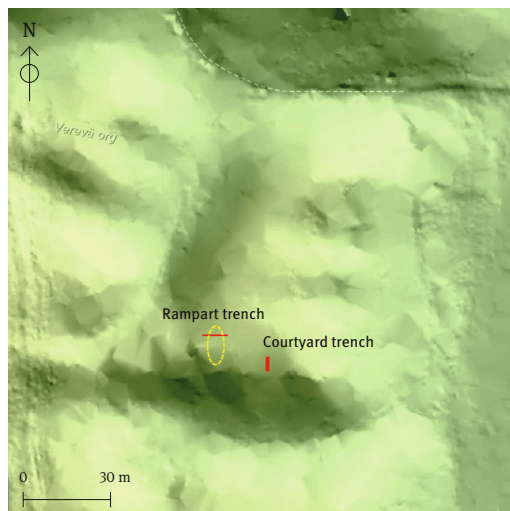


Fig. 6. The Valgesoo hill fort and the location of trenches.
Jn 6. Valgesoo linnamägi ja kaevandite asukohad.
 Map base / Alusplaan: Estonian Land and Spatial Development Board / Maa- ja Ruumiamet



Fig. 7. The plateau trench on the Valgesoo hill fort with remains of burnt fortifications.
Jn 7. Valgesoo linnamäe õukeaevand põlenud kaitseehitiste jäänustega.
 Photo / Foto: Heiki Valk

area, perpendicularly to the defence wall and the edge of the plateau, a charred brand from another log came to light. Judging by its direction, it might originate from a vertical post which supported the wall. A radiocarbon date from the outermost tree rings of that log gave the result of 1657 ± 31 BP,⁶ with calibrated (95.4%) ranges of 261–279 (5.7%), 339–441 (71.7%), 450–479 (6.6%) or 495–535 (11.5%) AD.

Ca. 30 cm north of the defence wall, a ca. 40 cm wide ditch filled with disturbed clayish loam was cut for 20–25 cm into intact mineral ground. On top of the ditch, an assemblage of stones with a diameter of 10–15/20 cm ran across the trench on the mineral soil surface.

Trench 2 was made at the rampart: the profile cut through it by bulldozer work was cleaned, and a narrow ditch was dug at its foot, to obtain an overview of the stratigraphy (Fig. 8). The rampart was made of disturbed loam in one construction stage, and no traces of burnt fortifications were discovered. Under the rampart, some tiny charcoal particles were collected from the top and upper part of the natural white sand. Their radiocarbon date gave the result 2181 ± 32 BP, calibrated age (95.4%) 375–162 BC.⁷

Since no traces of cultural layers were found on the plateau, the excavation results give evidence of either a very short-lived hill fort or a stronghold used only temporarily as a refuge site. The monument dates from the time period from the late 3rd to early 6th century. Most likely, it originates from the early 5th century, i.e. from the final stage of the Roman Iron Age. Considering the big time difference of the radiocarbon dates, the charcoal particles from under the rampart cannot relate to the hill fort, but indicate another, probably an occasional fire on the hill some 500–600 years before constructing the stronghold.

It remains unclear whether there existed fortifications on top of the rampart. It cannot be excluded that constructing the site had remained unfinished by the time when the wall at the plateau edge was destroyed in fire.



Fig. 8. The rampart trench of the Valgesoo hill fort.

Jn 8. Valgesoo linnamäe vallikaevand.

Photo / Foto: Heiki Valk

⁶ FTMC-CK473.

⁷ FTMC-CK472.

DISCUSSION

The Pühiküla and Luke hill forts, protected by concentric low ramparts and shallow ditches, are unique in the historical province of Tartumaa, and for most of Estonia. However, two sites with a similar type of fortifications, probably representing the same social and cultural background, can be outlined in the south-eastern corner of the country (Fig. 9).

On the Luhte (Luhtõ) hill fort in Vastseliina parish (Valk 2008, 43–45)⁸, an escarp with a ca. 2 m wide circular lower terrace under it on the slope surrounds the top of the hill fort area.⁹ On this surrounding terrace, an almost buried ca. 0.5 m deep ditch with a low rampart on its outer side came to light during excavations. Brands from the plateau edge¹⁰ gave the calibrated (95.4%) time ranges of 39–11 BC or 2–233 AD and those from the ditch on the surrounding lower terrace 35–14 BC or 5–239 AD.¹¹

A similar escarp and a surrounding circular lower narrow terrace around the hilltop area also exists on the Kaloga Jaanimägi hill fort in Rõuge parish, 10 km NW of Luhte (Valk *et al.* 2011, 52–54). Although fully buried, a ca. 1 m deep moat also appeared there on the lower plateau during the excavations. Textile-impressed pottery indicates the use of the Kaloga stronghold in the Roman Iron Age, but somewhat earlier origins of the site cannot be excluded. Two radiocarbon samples from the bottom of the moat of the Kaloga hill fort, probably from brands fallen from a wooden fortification at the edge of the hill fort plateau¹², gave similar calibrated (95.4%) results, with their overlapping part of 1152–1253 AD. However, the relatively ‘late’ dates might not relate to making the surrounding terrace and digging the V-shaped ditch on it, but rather a secondary re-fortification of the site in the Final Iron Age, probably in the context of the early 13th-century crusades.

The principle of using circular structures – shallow ditches, low ramparts, escarps or terraces – for enclosing the hill fort plateau on the upper edge of the slopes is a common feature for the Pühiküla, Luhte, Luke and Kaloga hill forts. Thereby, in the first two cases, the radiocarbon dates indicate the overlapping time range of 35–11 BC or 5–9 AD. Certain parallels to the early hill forts with small and low circular ramparts can be found in the Early Iron Age enclosures of western Estonia (Tõnisson 2008, 57–60; Lang 2007, 74–81, fig. 17; Lang & Laneman 2012, 162–166) – structures built on flat land there. A definite parallel between them and the group of hill forts under discussion is expressed in enclosing an area with a circular structure or several structures, not very effective in terms of military defence, but maybe of ritual character, and the lack or most limited presence of occupation traces.



Fig. 9. Hill forts with multiple circular fortifications in Estonia.

Jn 9. Mitmekordsete kontsentriliste kaitseehitistega linnamäed Eestis.

Map base / Alusplaan: Estonian Land and Spatial Development Board / Maa- ja Ruumiamet

⁸ Presently the official name of the village is Luhte. The name was changed to avoid duplicate toponyms within the same rural municipality in the State Register of Place Names.

⁹ <https://sketchfab.com/3d-models/luhto-linnamagi-estonia-11871f9d144a44b3b35ea58dd865b3b8>.

¹⁰ 1912±55 BP (Tln-2296).

¹¹ 1926±55 BP (Tln-2295).

¹² 892±60 BP (Tln-3270) and 820±50 BP (Tln-3492).

Although hill forts with circular fortifications on the slopes are alien to Estonia, similar strongholds are numerous in the eastern part of Latvia. This can be observed on 3D models of several hill forts of the region made by Gatis Kalniņš.¹³ Hill forts with multiple circular ramparts, ditches and escarps can be found in eastern Vidzeme, Latgale and Selonia. It seems likely that the appearance of such fortification systems indicates the immigration of population from the territory of present-day Latvia to south-eastern Estonia at the end of the Pre-Roman Iron Age. The one-time use of the hill forts and the destruction of fortifications in fire might indicate conflicts between immigrant and local communities. The fact that the short-lived sites were deserted and not re-constructed after perishing also gives an indication on the fate of the communities behind them. The date from Luke hill fort indicates, however, that such fortifications may have existed also between the 5th and the early 7th century.

The hill forts of Pühiküla, Luhte and maybe Kaloga can also be regarded in a broader context. The last centuries of the pre-Roman Iron Age are a period when other hill forts emerged in southern and eastern Estonia. Although representing different types of fortifications, the strongholds of Aakre, Kauksi and Mõrgi were taken into use in that time (Valk *et al.* 2012, 36–42; Valk *et al.* 2014, 67–75). A radiocarbon date from Pangodi Palumägi hill, located 6 km south-west of Pühiküla, also indicates a contemporaneous hill fort or hill top settlement. A charcoal sample from a test pit at the edge of the flat plateau (ca. 5000 m²) gave the result of 2022±31 BP, with calibrated (95.4%) date ranges of 102–66 BC (7.1%), 61 BC – 79 AD (87.5%) and 100–108 (0.8%) AD. A similar process can be observed in the northern part of Tartumaa, where the hill fort of Saadjärve was founded at the turn of the millennia (Lavi 2002, 238–242). Building hill forts gives evidence of increasing population, as well as of increasing tensions within the society.

CONCLUSIONS

The study of relief maps of the Estonian Land and Spatial Development Board has opened new perspectives for finding hill forts not reflected in toponyms and oral lore, and formerly unknown for archaeological research. Excavation results of the Pühiküla and Valgesoo hill forts and the discovery of the Luke hill fort have shed new light upon the early history of Estonian strongholds, referring also to social instability both in the Late Pre-Roman and Late Roman Iron Age or Migration period.

ACKNOWLEDGEMENTS

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¹³ https://opendata.latvijas-pilskalnu.lv/Pilskalnu_3D_modelji (last accessed 26 September 2025).

REFERENCES

- Bronk Ramsey, C. 2009.** Bayesian analysis of radiocarbon dates. – *Radiocarbon*, 51: 1, 337–360.
- Lang, V. 2007.** The Bronze and Early Iron Ages in Estonia. *Estonian Archaeology*, 3. Tartu.
- Lang, V. & Laneman, M. 2012.** Hilltop site at Võnnuägi. – Keava – “the Hand of the Sun”. EJA, Supplementary Series, 1, 148–167.
- Lavi, A. 2002.** Kesk-Eesti idaosa linnamägedest. – Keskus – tagamaa – ääreala. Uurimusi asustushierarhia ja võimukeskuste kujunemisest Eestis. Ed. by V. Lang. MT, 11. Tallinn–Tartu, 233–272.
- Tõnisson, E. 2008.** Eesti muinaslinnad. Ed. and complemented by A. Mäesalu & H. Valk. MT, 20. Tartu–Tallinn.
- Valk, H. 2008.** Excavations on the hillforts of south-eastern Estonia: Luhtõ, Sangaste and Rosma. – AVE, 2007, 43–58.
- Valk, H., Ulst, I., Metssalu, J. & Lillak, A. 2011.** Excavations on the hill forts of south-eastern Estonia: Nooska, Kaloga, Karula, Võuküla and Lääniste. – AVE, 2010, 49–72.
- Valk, H., Kama, P., Olli, M. & Rannamäe, E. 2012.** Excavations on the hill forts of south-eastern Estonia: Kõivuküla, Märdi, Truuta and Aakre. – AVE, 2011, 27–46.
- Valk, H., Kama, P., Olli, M. & Lillak, A. 2014.** Archaeological excavations on the hill forts of south-eastern Estonia: Kauksi, Mõrgi, Alt-Laari, Paloveere and Uandimägi. – AVE, 2013, 67–86.

KOLM AVASTATUD LINNUSEKOHTA KAGU-EESTIS: PÜHIKÜLA, LUKE JA VALGESOO

Heiki Valk ja Andres Vindi

2024. aastal uuris Tartu Ülikool kahte linnusekohta – Võnnu kihelkonnas Valgesoo ja Akste külade ning Kambja kihelkonnas Pühi ja Pulli külade piiri lähedal. Uus linnamägi õnnestus leida ka Luke küla lähedal Nõo kihelkonnas. Kõigi muististe asukohad tuvastas Maas-amenti reljeefikaartidelt Andres Vindi.

Pühiküla linnamägi asub Kõstrimägede nime kandva pika seljandiku tipus ja on kolmest küljest ümbritsetud järskude nõlvadega (jn 1). Linnusekoha u 4800 m² suurune õueala on piiratud kahe madala ringvalli ja nende mõlemal küljel asuva kraaviga (jn 2), kusjuures valliharja ja kraavipõhja kõrguste vahe ei olnud suurem kui 0,5 m. Mäeplatoo ääred on kohati järsuks kaevatud. Kuna kindlustused ei ole kerge ligipääsu võimaldaval seljakupoolsel küljel tugevamad kui mujal ning vallid ja kraavid on ülimadalad, võib neil olla niihästi kaitseotstarbeline kui ka rituaalne tähendus.

Proovikaevandid (3 × 1 m) tehti mäeplatoo põhja- ja lõunaserva – kohtadesse, kus mullapuuri näitas mattunud nõgist pinnast. Põhjapoolsel kaevandist (jn 3) leiti pealmisest erosioonikihist kuus väikest käsitsikeraamika kildu ja maapinnast ligi 70 cm sügavusele ulatuv postiauk, millest nõlva pool algas kaitsetara põlemisel tekkinud sõese mulla kiht. Kaevandi põhjast leitud tukist ja poolsõestunud kasetohutükist saadud kalibreeritud radiosüsinikudateeringute (tõenäosus 95,4%) ühisosa jäi aastate 41 eKr ja 56 pKr vahemikku.

Lõunapoolses kaevandis paljandus erosioonipinnase all must väiksemaid tukke sisaldanud põlengu-kiht, neist tehtud radiosüsinikuproovi kalibreeri-

tud tulemus jäi aastate 172 eKr – 9 pKr vahemikku. Kaevandi alumisest otsast leiti 30–35 cm lähimõõduga lõhki põlenud ümar raudkivi, mis võiks olla kõrgemalt alla veerenud ja pärineda seal asunud ahjust.

Luke linnamägi Luke külast u 1,5 km lõunakagus, Uigumäe lõunatipus (jn 4) sarnaneb oma kaitseehitiste poolest Pühiküla linnamäele, kuid on palju väiksem (õueala u 2800–3000 m²). Sealsed kontsentrilised kaitseehitised – nõlval ülaosas olev madal, u 0,5 m kõrguselt jälgitav ringvall koos vallikraaviga selle sise- ja välisküljel – on suuresti hävinud. Säilinud on need vaid mäe lõuna- ja edelaküljel. Õueplatoo keskelt kultuurikihti ei leitud, kuid mäeserva tehtud šurfi põhjas olnud sõest tehtud radiosüsinikudateering andis vanusemäärangu aastate 436 ja 640 vahemikust.

Valgesoo linnamägi (õueala u 3500 m²) asub Ahja jõe ürgoru läänekaldal riigimetsas (jn 5). Linnust, mille rajamiseks löid eeldused ürgoruse loikuvad uhtorud, ühendas kaldaplatooga kitsas vähemalt ühe tehisluku vallikraaviga maakaal (jn 5). Ligipääsu linnuseplatoole kaitseks ligi 20 m pikkune ja kuni 1,3 m kõrgune vall maakaala otsas. Selles olnud väravakoht polnud säilinud, sest vallioots on mäele metsa väljaveo võimaldamiseks buldooseriga ära lükatud.

Linnamäele tehti kaks kaevandit (jn 6). Esimene kaevand (jn 7) rajati õueala lõunaserva, kus mullapuuri oli näidanud mattunud nõgise mulla kihti. Kaevandist ei saadud ühtegi leidu, kuid u 20 cm paksuse, nähtavasti künnierosiooni toimel tekkinud pealmise pinnasekihi alt tulid nähtavale põlenud kaitseehitise jäänused. Looduslikult mineraalpinna- selt leiti rõhtpalkidest kaitsetara alumisest palgist

säilinud tukk ning sellega ristisuunas olev, võib-olla pikali kukkunud postist pärinev tukk. Aluspalgi ja mäenõlva vahel paljandus 1–1,5 m pikkusel alal 10 cm paksune intensiivselt must nõgine ladestus. Tukist tehtud radiosüsinikuproov näitas dateeringuid aastate 261–535 pKr vahemikust. Kaitsetara aluspalgist õue pool oli looduslikku pinnasesse kaevatud kraavi-taoline süvend, mis oli mineraalpinnase paljandumise tasandil kaetud kividega.

Valliprofiili puhastamisel selgus, et liivast kuhjatud vall oli rajatud ühekorraga, põlenud kaitseehitiste jäänuseid ei leitud (jn 8). Valli all leeteliivas ja selle pinnal olnud söekübemetest tehtud radiosüsinikuproov andis õuekaevandist 500–700 aastat varasema tulemuse, mis ei seostu ilmselt valli rajamisega, vaid mingi varasema, arvatavasti inimtegevuse-eelse põlenguga.

Pühiküla ja Luke linnamägi on Tartumaa piires ainulaadsed oma kontsentriliste madalate vallide ja kraavide poolest. Samalaadseid kaitseehitisi on Eestis varem tõdetud Luhte (Luhtõ) ja Kaloga linnamäel maa kagunurgas (jn 9). Nii Luhte kui ka Pühiküla dateeringud viitavad selliste linnamägede pärinemisele hilisest eelrooma rauaajast, kuid sõeproov Luke linna-

mäelt näitab, et selliseid kaitseehitisi võidi ehitada ka rahvasterändamisajal ja veidi hiljemgi. Kontsentriliste piiretega linnamägede vallide väike kubatuur ja kõrgus võimaldab näha teatavaid paralleele Eesti lääneosast teadaolevate vanema rauaaja sulendikega, mida samuti piirab madal ringikujuline vall.

Mitmekordsete kontsentriliste kaitseehitistega mägilinnustele võib leida arvukalt paralleele Läti idaosast. Seda tüüpi linnuste ilmumine Kagu-Eestisse annab märku rahvastiku sissevoolust lõuna poolt. Eelrooma rauaaja linnamägede kontekstis väärrib märkimist ka radiosüsinikuproov Pangodi Palumäelt, mis asub Pühiküla linnamäest 6 km edela pool. Tasase, nähtavate kaitseehitisteta mäelato serva tehtud prooviaugust leitud tukk pärineb ajavahemikust 102 eKr kuni 108 pKr. Valgesoo linnamägi kuulub hilisesse rooma rauaaga või rahvasterännuaaga – ajajärku, kust on teada mitmeid teisigi Kagu-Eesti linnamägesid. Pühiküla, Valgesoo ja Luke linnamägede nähtavasti lühikeseks jäänud kasutusaeg ja kaitseehitiste hävimine tules viitab pingetele rauaaja algupoole ühiskonnas ja vastuoludele eri kogukondade vahel.