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TARTU ÜLIKOOLI
RAAMATUKOGU
SUNDEKSEMPLAR

EXCAVATIONS ON THE HILLFORTS OF SOUTH-EASTERN ESTONIA: LUHTÕ, SANGASTE AND ROSMA

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In 2007 the University of Tartu continued fieldwork on the hillforts of south-eastern Estonia with the aim to date the sites and to determine those of the Latest Iron Age use. Excavations took place on the hillforts of Luhtõ, Sangaste, Rosma and also on the hillfort of Korneti in north-eastern Latvia (see Valk & Vilcāne, this volume).

The hillfort of **Luhtõ** lies *ca.* 8 km SW of Vastseliina, 400–500 m east of Kündja–Pari road, 400–500 m SE of the centre of Luhtõ village. The oval hill with the approximate measures of 120 × 70 m is *ca.* 15 m high; it is located in swampy forest and has probably been surrounded by water or a swamp. The plateau of the hillfort is edged by a 3–4 m wide terrace, which is located on the slope 2–3 m below the edge of the plateau.

The excavation plot (Fig. 1) was made in the south-eastern edge of the stronghold, *ca.* 5 m south of the site of the former horse-way to the hill. The trench (1 × 16 m) cut the edge of the hillfort plateau and the upper part of the slope, including the terrace area where, probably due to the vicinity of the presumed former entrance, also a shallow moat-like depression with a low rampart on its outer side could be observed.



Fig. 1. Luhtõ hillfort. General view of the trench. View from SE.

Jn 1. Luhtõ linnamägi. Üldvaade tranšeele. Vaade kagust.

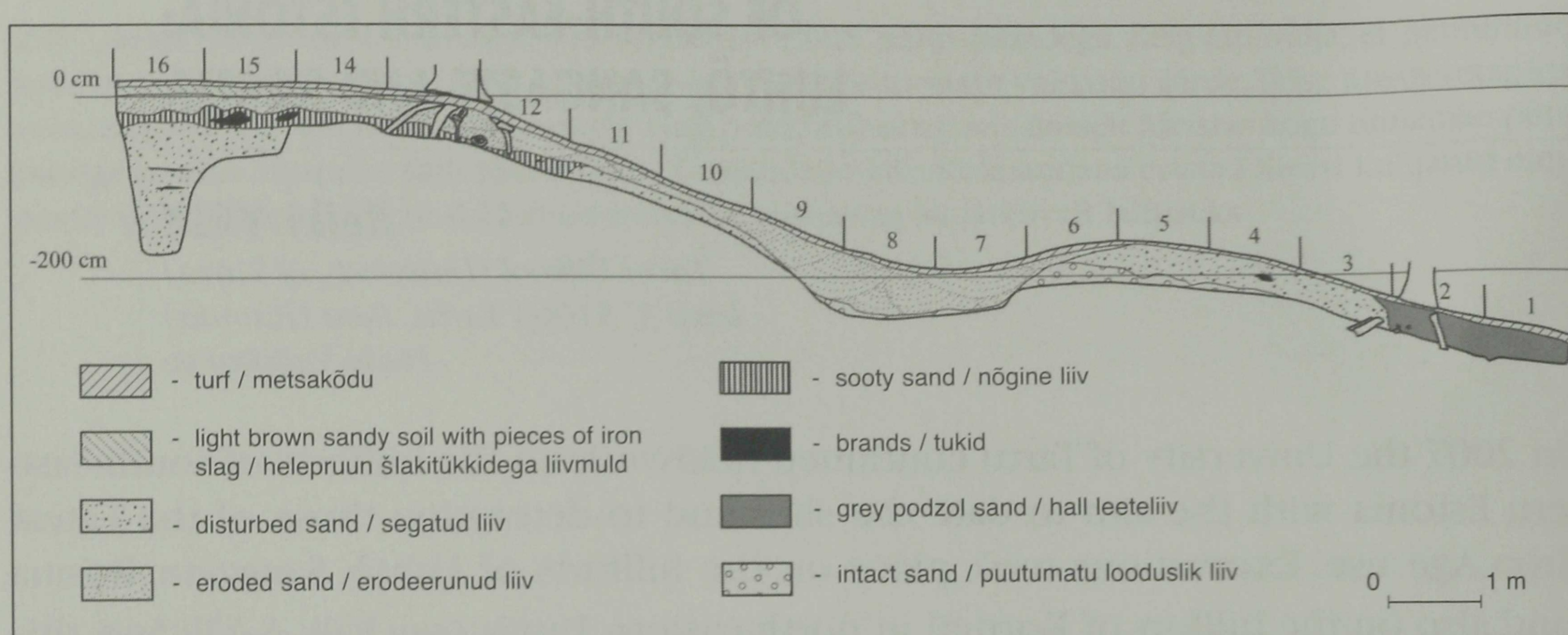


Fig. 2. Luhtõ hillfort. Profile of the trench.
Jn 2. Luhtõ linnamägi. Tranšee profiil.

It appeared in the profile of the trench (Fig. 2) that the moat had initially been 2.3 m wide and was deepened for 0.4 m into intact natural ground; its almost flat bottom was *ca.* 0.8 m deeper than the present-day top of the rampart on its outer side. The top of the *ca.* 3 m wide rampart, made of fine sand, was, however, presently only *ca.* 0.4 m higher from the bottom of the “moat”. A ^{14}C -sample from a 40 cm long brand found in disturbed sand in the outer edge of the rampart in the depth of 25–30 cm gave the result 1926 ± 55 BP (cal. 95.4% 41–9 BC; 3 BC – 219 AD).¹

On the edge of the plateau a brand with the length of 2.2 m, lying along the trench, i.e. perpendicular to the edge of the plateau was found. A ^{14}C -analysis from it gave the result 1912 ± 55 BP (cal. 95.4% 37–31 BC; 21–11 BC; 1–235 AD).² In hope to find remains of burnt fortifications, the plot was extended for 3×4 m to the west of the trench. From the light brown forest soil, which had probably been disturbed by ploughing a lot of iron slag (*ca.* 5 kg from 16 m^2) was found in the depth of up to 20 cm from the ground. It included forging slag but also pieces probably formed in the process of iron-smelting from local bog ore.³ A ^{14}C -sample from the charcoal particles from a thin burning layer, which covered brown soil with slag gave the result 411 ± 50 BP (cal. 95.4% 1421–1527 AD; 1549–1635 AD).⁴ Under the light brown soil orange-yellow sand with burning remains, i.e. intensively dark patches of sooty sand of different thickness in the depth of 30–40 cm was revealed (Fig. 3), but no more definite construction remains were found. The

¹ Tln-2995.

² Tln-2996.

³ Identified by Jüri Peets (Al).

⁴ Tln-2994.

layer of soot and fine charcoal particles was lying on light, evidently podzol sand. A test pit made in the end of the trench showed, however, that in the depth of 1.05 and 1.25–1.45 cm there were patches of sand with tiny charcoal particles. This evidently refers to disturbances, and probably to filling the edge of the hillfort plateau with sand. When digging deeper, however, no traces of original soil were discovered and the sand seemed intact.



Fig. 3. Sooty layer at the edge of the Luhtõ hillfort. View from S.
Jn 3. Põlemiskiht Luhtõ linnamäe serval. Vaade lõunast.

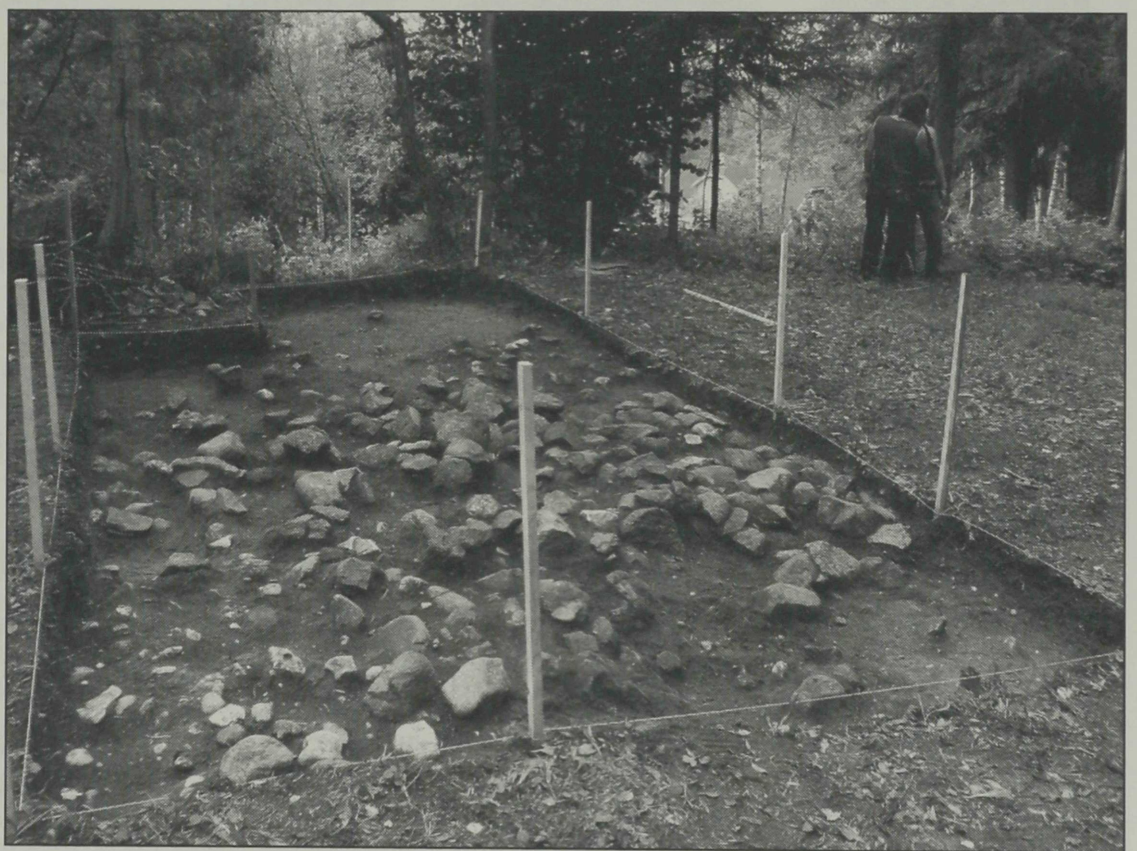


Fig. 4. Sangaste hillfort. Excavation plot A with the heap of stones. View from NE.

Jn 4. Sangaste linnamägi. Kaevand A koos kivivarega. Vaade kirdest.

The hillfort dates, judging by ¹⁴C-datings from the later part of the Pre-Roman Iron Age and is evidently of short-time use. In this context the persistence of the toponym *Liinamägi* must especially be noted. Its existence can only be explained by the preservation of the meaning of the site in popular memory, i.e. by settlement continuity.

The hillfort of **Sangaste** is located 13 km SW of the Otepää hillfort, the central site of Ugandi district in the Latest Iron Age. The hill is surrounded by an artificial 5–6 m wide terrace, located on the slope at about 2/3 of its full height. On the ter-

race there is a rampart with the height of 0.4–1.5 m, measured from the bottom of the depression (or moat) on its inner side. The edges of the hillfort plateau were flat, evidently levelled, but the plateau itself was uneven and even some former small sand carriers could be distinguished there. Thus the fortification works seem to have remained unfinished. The large amount of earthworks enabled to date the fort preliminarily to the Latest Iron Age.

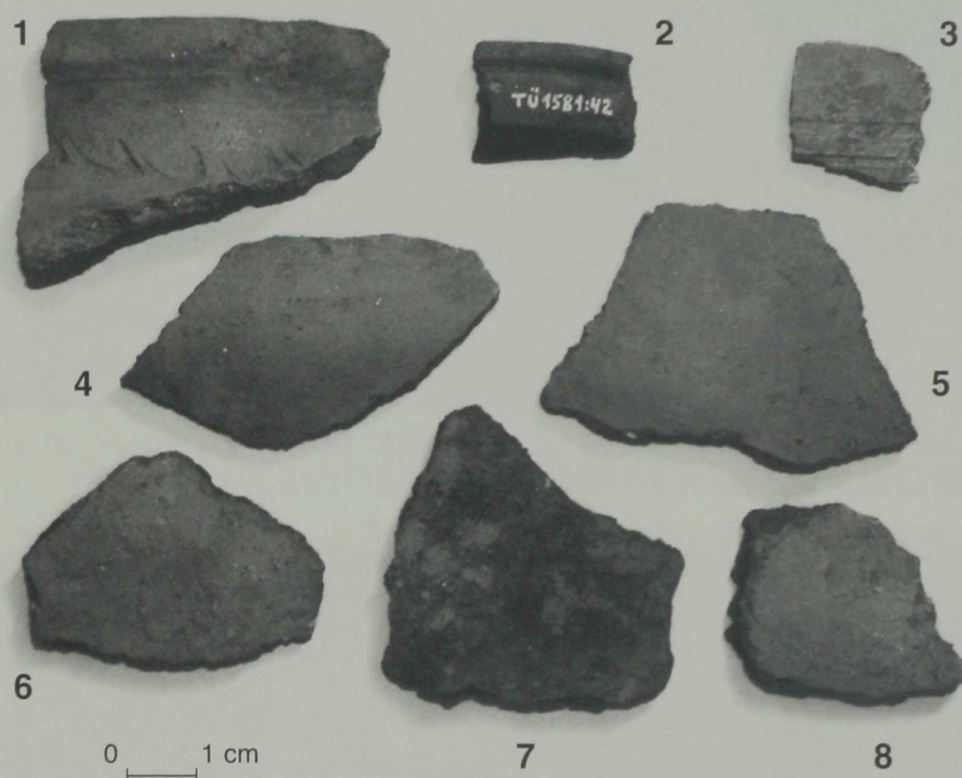


Fig. 5. Sangaste hillfort. Pottery from excavation plot A.
Jn 5. Sangaste linnamägi. Keraamikat kaevandist A.
(TÜ 1581: 12, 42, 61, 76a, 76b, 18, 44, 35.)

On Sangaste hillfort three trial plots were made – two on the edge of the plateau and one on the slope, cutting the slope terrace and the rampart. Plot A (Fig. 4) was made on the flat, evidently levelled plateau at the southern end of the hillfort. Excavations were started with a 1 m wide and 9 m long trench on the edge of the plateau, perpendicular to its edge, and with an excavation area attached to its upper end. After the plot was repeatedly extended due to finding a stone heap, it formed 19 m² in total.

The cultural layer consisted of light brown soil, which transformed into disturbed fine gravel at the depth of *ca.* 15 cm. Stones were spread unevenly, occurring mainly in the upper end of the excavation plot, stretching from the turf until the depth of 20–30 cm.⁵ At the edge of the plateau they were totally missing but in the upper end of the plot they formed an irregular low heap with the diameter of 3–3.5 m. The diameter of the stones was mostly 15–25 (30) cm in the core area of the heap. In the same layers with stones fragments of wheel-thrown pottery⁶ were found (Fig. 5) whereby some profile fragments, one due to its ornamentation (Fig. 5: 1), indicate to the 13th century. Although almost all the stones had evident traces of fire, no fragments of charcoal were discovered between them. Under the stones a layer of disturbed gravel began.

⁵ In one irregular pit (*ca.* 1.7 x 0.7 m; depth up to 0.9 m; probably a secondary disturbance) the stones stretched also deeper.

⁶ The finds: TÜ 1581.

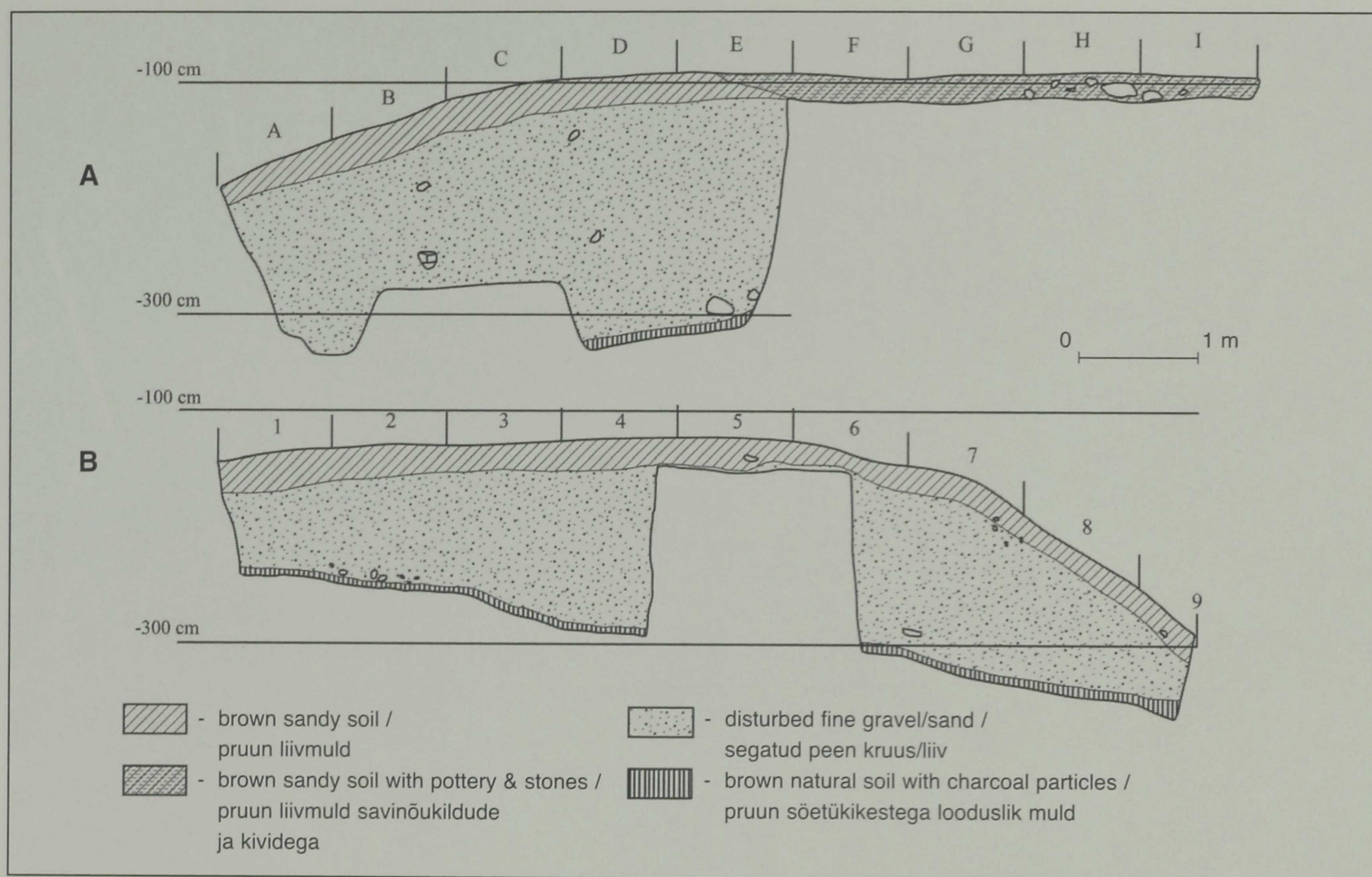


Fig. 6. Sangaste hillfort. Profiles of excavation plots A and B.

Jn 6. Sangaste linnamägi. A ja B kaevandi profiilid.

To find out the original shape of the hill, the lower end of the trench (5 m) was dug deeper with two test pits. In the depth of *ca.* 2.0–2.25 m from the ground under the disturbed gravel a 12 cm layer of intact natural brown virgin soil with tiny charcoal fragments, designating the original ground level appeared (Fig. 6:A).

Excavation plot B was made on the south-western edge of the hill plateau. Also here a trench perpendicular to the edge of the plateau (1 × 8.5 m) and an attached excavation plot, in total 17.5 m² were opened. The situation and stratigraphy were similar to plot A. Also here a heap of stones, beginning *ca.* 2.5 m from the edge of the plateau and stretching up to a layer of disturbed gravel, which began at the depth of *ca.* 15 cm was found under the turf (Fig. 7). The heap was smaller (*ca.* 2 × 2 m; not totally excavated) and more compact here and consisted of somewhat smaller (diameter 10–20 cm) stones. Although all the stones were burnt, some of them strongly, and some bigger stones had sooty surfaces, no charcoal particles were found from the heap. Differently from plot A, no fragments of pottery were found from the soil above the disturbed gravel. However, a ¹⁴C-sample from charcoal particles was collected at the depth of 10–20 cm in the distance of 2 m from the stone heap; its analysis gave the result 784±50 BP (cal. 95.4% 1131–1133 AD; 1159–1297 AD).⁷

⁷ Tln-3006.

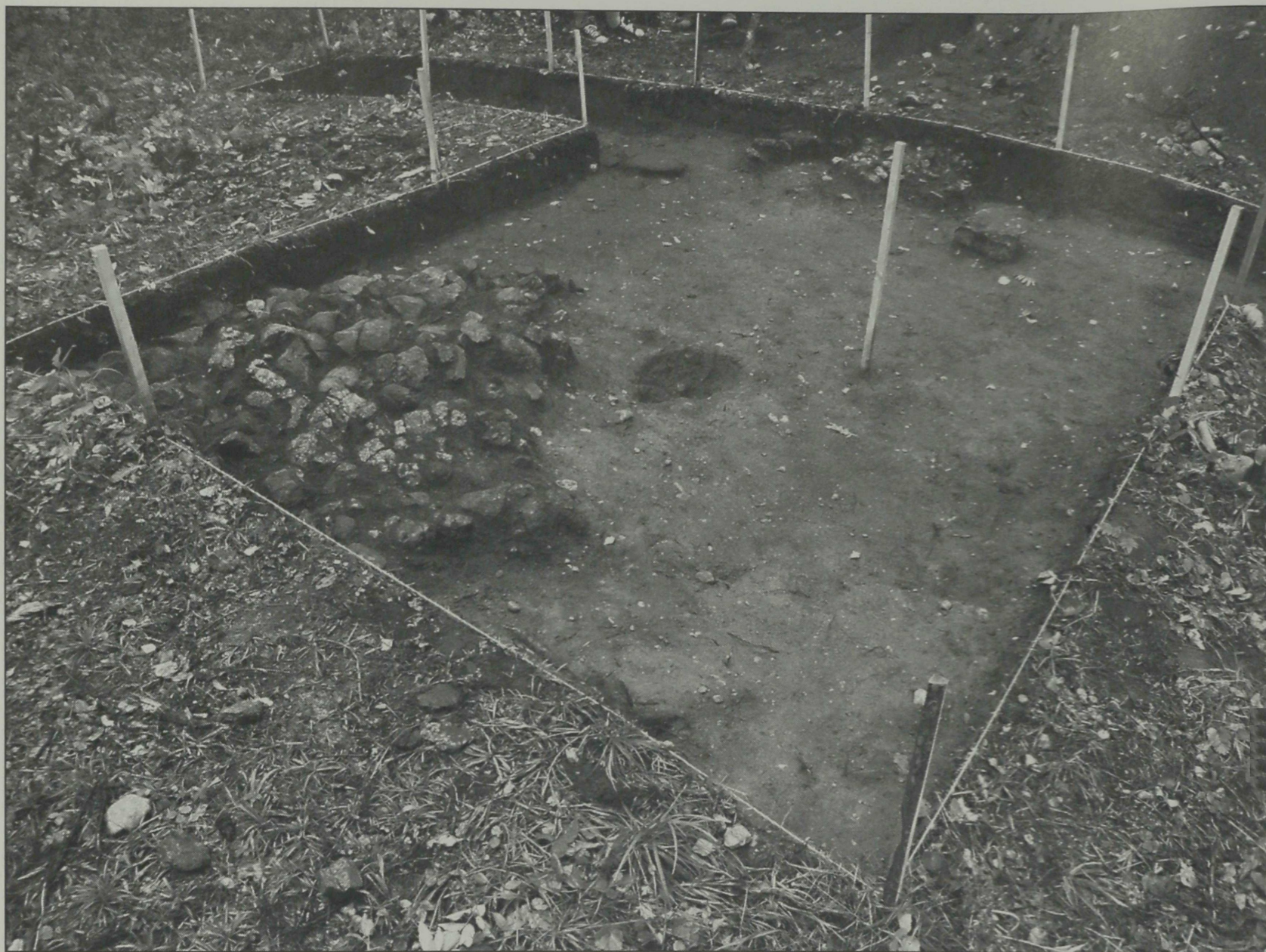


Fig. 7. Sangaste hillfort. Excavation plot B with its stone heap. View from NW.
 Jn 7. Sangaste linnamägi. Kaevand B koos kivivarega. Vaade loodest.

As in plot A, also here the edge of the plateau turned out to have been raised with sand and gravel (Fig. 6: B). The original ground surface was in the depth of 1.1 m in the upper end of the trench and 1.7 m at the edge of the horizontal plateau; the layer of brown soil under the disturbed gravel continued on the slope. Also in this plot tiny charcoal particles, which seemed to originate from the burning of branches were found in the brown original virgin soil, mostly above it and in its higher part. A ^{14}C -analyses made of those gave the result 938 ± 50 BP (cal. 95.4% 1019–1193 AD; 1195–1213 AD).⁸ It seems that the charcoal fragments originate from burning branches and bushes when the area was cleansed for making a hillfort. Although, differently from plot A, the area contained no pottery above the fill, a wheel-thrown fragment was found from it. Evidently, it was brought there together with soil taken from the upper part of the hill.

Plot C (7 × 1 m), which cut the rampart on the slope terrace (Figs. 9, 10) was made on the same line with the edge of excavation plot B (Fig. 8). The rampart, which

⁸ Tln-3002. Another ^{14}C -sample from the same layer (Ta 2904) gave an unlikely result: 700 ± 50 BP (cal. 95.4% 1222–1394; cal. 68.2% 1263–1385) with main likelihood concentrations in the last third of the 13th and 14th centuries.

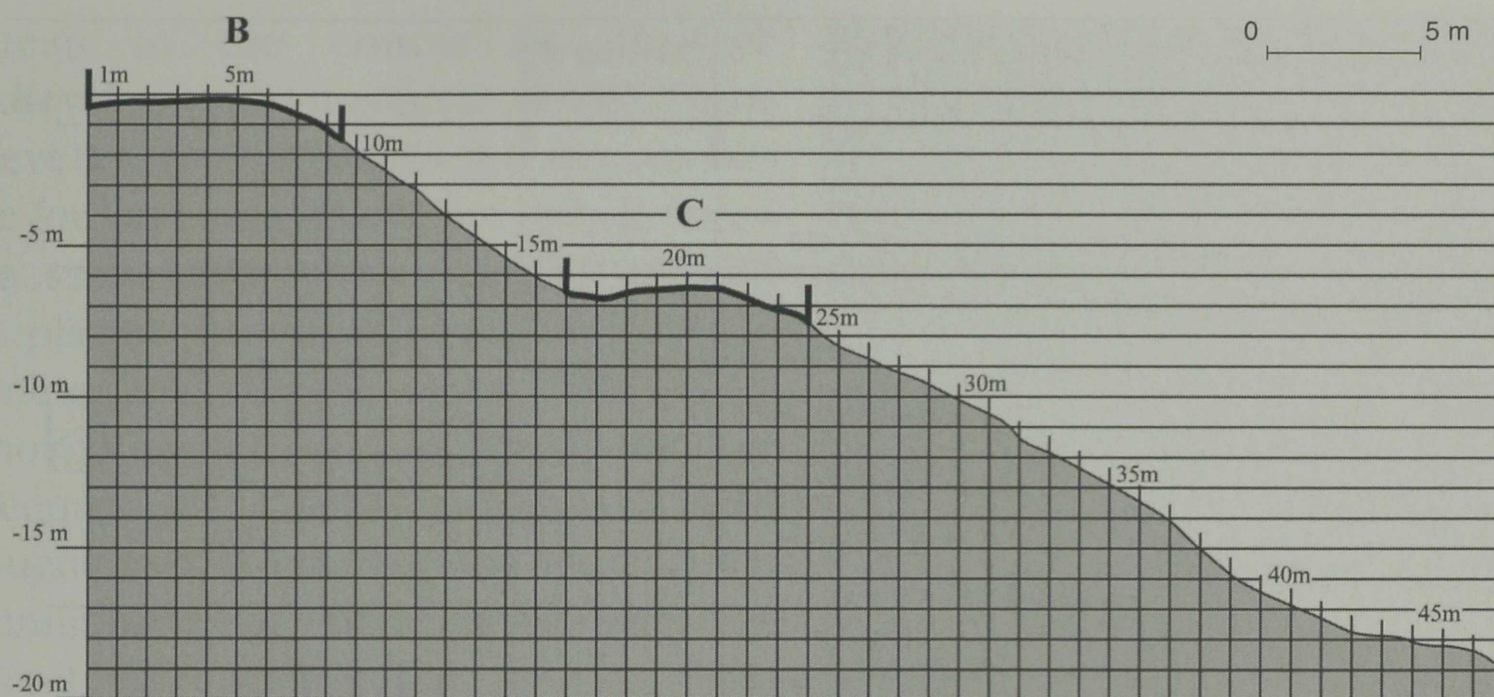


Fig. 8. Sangaste hillfort. Profile of the hillfort at the line of excavation plots B and C.

Fig. 8. Sangaste linnamägi. Mäenõlva profiil kaevandite B ja C joonel.

consisted of sand and gravel was *ca.* 2 m wide on its flat top. On its outer side it had a core of big granite stones of different size (Fig. 11) the upper edges of which were visible before excavations. The stone core was 0.6–1.3 m wide and it stretched unevenly for up to *ca.* 0.9 m below the ground level; the biggest stone measured 70 × 45 × 38 cm. A ^{14}C -sample from a brand in dark grey soil under the lowest stones gave the dating 905 ± 50 BP (cal. 95.4% 1023–1221 AD).⁹ The moat with the width of *ca.* 1.3 m was filled with disturbed erosion soil (*ca.* 45 cm), under which a thin layer of dark sooty soil and *ca.* 20 cm disturbed sand followed.

As no remains of fortifications were found at the edge of the hillfort plateau and as the central area of the plateau was higher than its edges and not levelled, the construction works of the fort have remained evidently unfinished. The cultural layer, of weak intensity and containing few pottery fragments (Fig. 5), was found at digging only in plot A on



Fig. 9. Sangaste hillfort. General view of excavation plot C from E.

Jn 9. Sangaste linnamägi. Üldvaade kaevandile C idast.

⁹ Tln-3003.

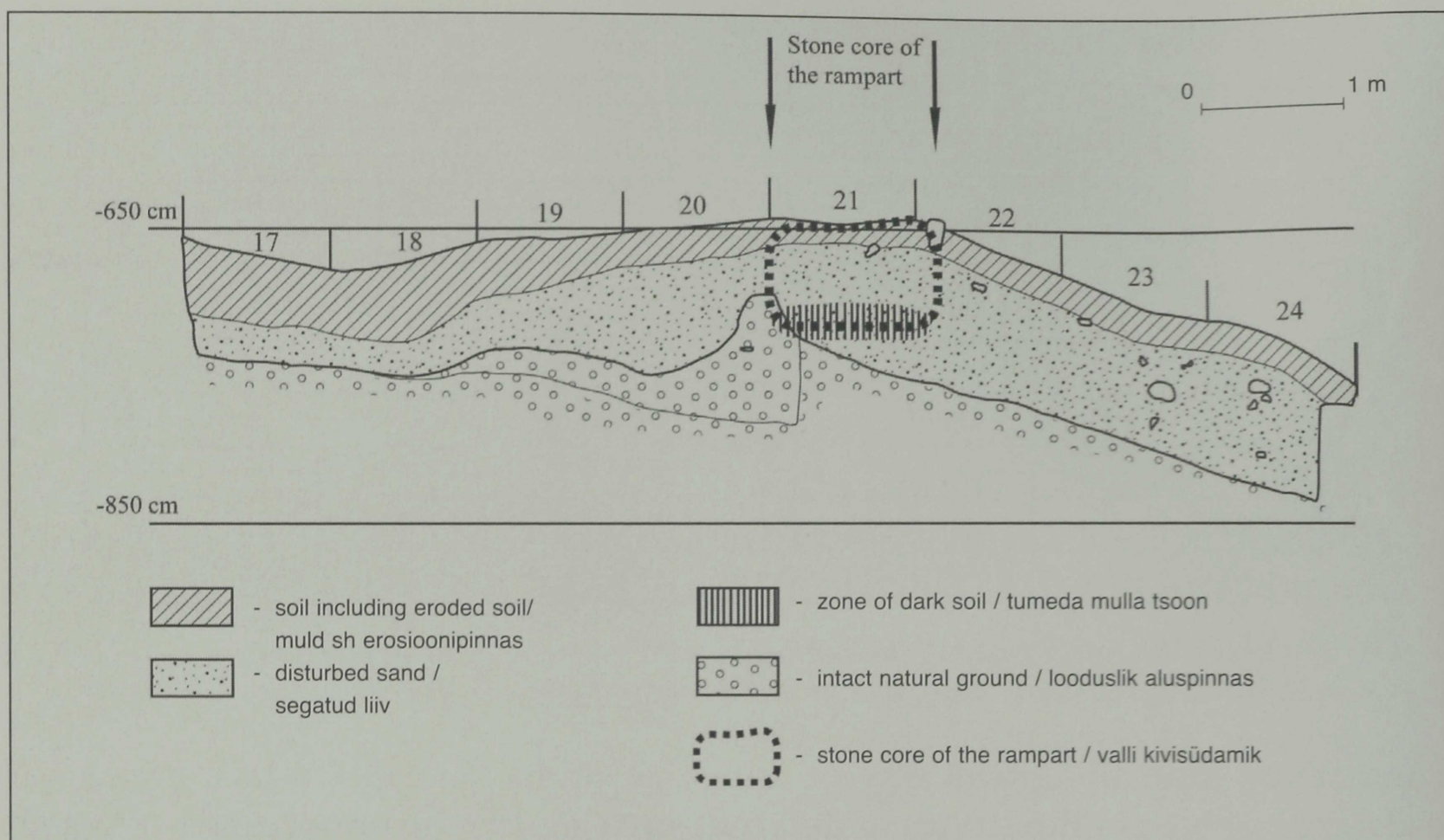


Fig. 10. Sangaste hillfort. Profile of excavation plot C.
Jn 10. Sangaste linnamägi. Kaevand C profiil.



Fig. 11. Sangaste hillfort. Stone core of the rampart in excavation plot C.
Jn 11. Sangaste linnamägi. Valli kivisüdamik kaevandis C.

the levelled edge of the plateau, above the fill of gravel. This layer may have been formed during a short time-span – the period of construction works. Probably, the area of this plot, located close to the presumed entrance to the fort (the lower rampart has a gateway-like break there), may have served for organizational and logistical activities related to the fortification work.

How to explain the presence of the heaps of stones on the edge of the plateau? The absence of ash or charcoal does not enable us to regard them as stove remains. The use of “worn-out”, i.e. fragmented in heat stones as construction material (e.g. for new stoves), cannot be considered likely due to the existing micro-cracks. The stones cannot also be regarded as collected from the hillfort

plateau in the course of possible medieval or post-medieval tillage, since unlevelled ground makes the area unsuitable for land cultivation. The only levelled area, suitable for tillage was the edge of the plateau but from there, in case of farming, the stones would have been removed in the course of such activities. It seems that the stones might have been brought to the edge of the plateau for “ammunition” in battle activities – to defend the unfinished hillfort. The cracked character of the stones can be explained by the seasonal factor: evidently, they were collected in the time when natural field stones were not available, i.e. in winter, when the ground was frozen and covered by snow. Thus, the stones meant for defending the hillfort might originate from definite accumulation places where they were available also in winter – from the ruins of burnt houses

in adjacent villages or from stone heaps consisting of stones originating from old stoves. In the Estonian ethnographic tradition, the cracked stones from sauna stoves were not cast away, but were rather collected in a heap close to the building. Respective data exist from Ruusmäe, Antsla and Tsooru in the Võrumaa County and also from the Harjumaa County.¹⁰ The ancient origin of the tradition is shown by its presence also in Ingermanland: there the heap of cracked stoves from a sauna stood close to the entrance of the building.¹¹ In Latgale stones of such origin were also cast on a limited area close to the sauna,¹² among the “Ludza Estonians” (*Lutsi maarahvas*) in south-eastern Latgale they were put in a heap left of the sauna entrance.¹³

The identical stratigraphy in both plots on the plateau enables to limit the construction work to a certain definite time-span. When considering the 13th century dating of the pottery and the dating of the ¹⁴C-sample from above the fill on the



Fig. 12. Rosma hillfort. General view of the excavation plot from SE.

Jn 12. Rosma linnamägi. Üldvaade kaevandile kagust.

¹⁰ Data from the librarians of Võrumaa from a lecture at Võru Central Library on Dec. 12, 2007; concerning Harjumaa – from Villu Kadakas during the excavations.

¹¹ Data from Aleksanteri Saksa (St. Petersburg; Institute of History of Material Culture) concerning Korka (Gorki) village, Kupanitsa parish (Gubanitsa county) in Ingermanland (Volossovo district).

¹² Data from Antonija Vilcāne (Riga; Institute of History).

¹³ Data from Jānis Buls (Greči village, Ludza district) on June 16, 2008.



Fig. 13. Rosma hillfort. Profile of the excavation plot in the rampart and moat area. View from E.

Jn 13. Rosma linnamägi. Kaevandi profiil valli ja kraavi piirkonnas. Vaade idast.

plateau, as well as the chronicle of Henry of Livonia, the last attempt to defend the fort may have been undertaken during the Estonians' big uprising of 1223–1224 (HCL XXVI: 3 – XXVIII: 6). The dates of two ^{14}C -samples related to the construction work (i.e. from the rampart and from under the fill on the plateau) indicate, however, rather to the 12th (or 11th) than to the early 13th century, although also the last-named period remains in the probability limits.¹⁴ It is also possible that the construction of the fort was undertaken and stopped in the 12th century and the unfinished hillfort was taken into urgent re-use again in the time of the big uprising.

It is noteworthy that the besieging or conquest of the Otepää hillfort is not mentioned (differently from Viljandi and Tartu) by Henry in the context of suppressing the uprising. Probably, Otepää surrendered without battle and the same

can be suggested about the unfinished Sangaste hillfort, located close to it. The stone heaps at the edge of Sangaste hillfort enable to suggest that the surrender occurred in winter. In the beginning of 1224 Henry mentions a winter raid of the Germans from Riga. The raid, which was originally intended to be directed against Tartu went to Lohu in the County of Harjumaa instead (HCL XXVII: 6). As the Viljandi hillfort had been taken in August 1223 already, it seems likely that the raid did not go directly to the north from Lake Astigerwe in northern Latvia, but occurred via the Ugandi district – area of rebellion and apostate status. The fact that the Sakala district was totally plundered in autumn 1223 might have caused food and accommodation problems for the army; the fact of being subordinated and in ally status also deprived the army from the chance of getting booty in Sakala. Most likely, in fear of this army, both Otepää and Sangaste hillforts, the latter not finished but still somewhat prepared for defence, surrendered without a battle.

¹⁴ The 12th and 13th centuries are not a good period for calibration of ^{14}C -datings, due to the frequent fluctuations of ^{14}C level in the atmosphere in that period. Data from Enn Kaup (Radiocarbon laboratory of Tallinn University of Technology).

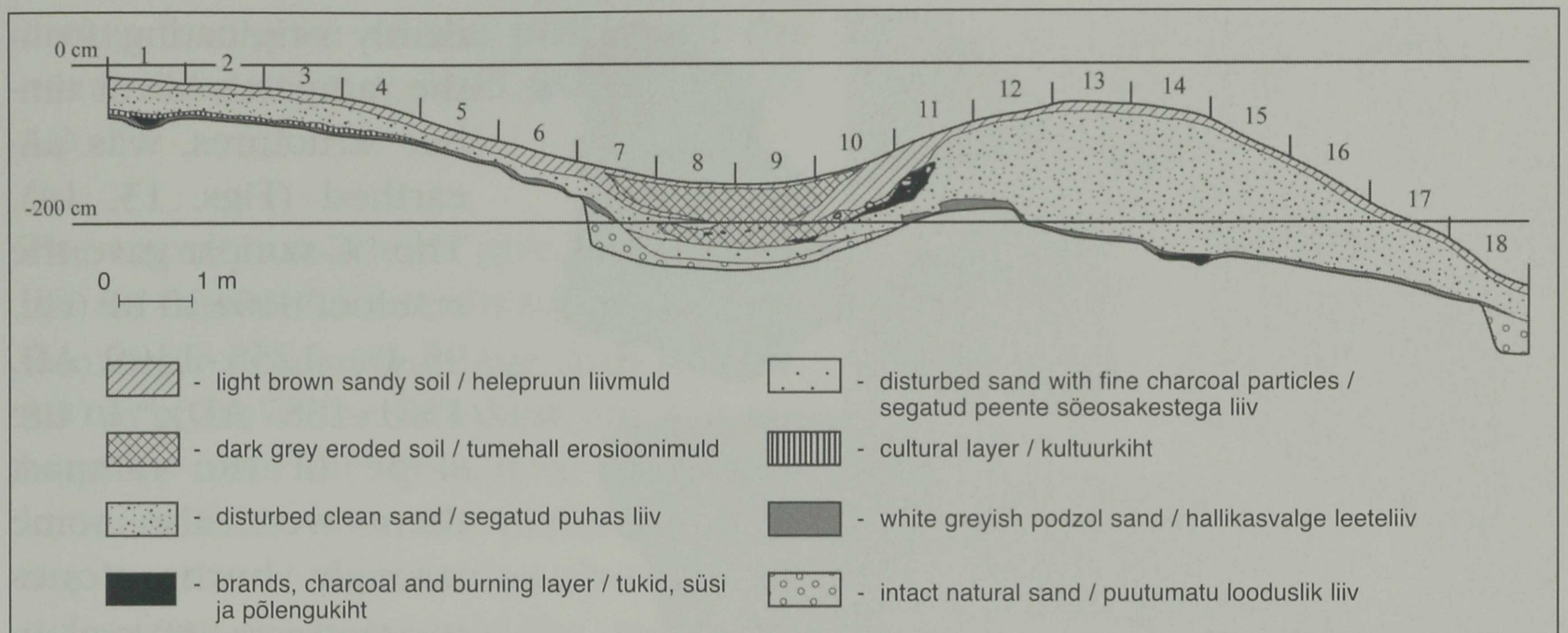


Fig. 14. Rosma hillfort. Profile of the excavation plot.

Jn 14. Rosma linnamägi. Kaevandi profiil.

The hillfort of **Rosma** is located *ca.* 2 km SE of the Põlva city centre, on the tip of a cape bordered by two natural valleys (one of them of Orajõgi stream that flows into the Võhandu River). The stronghold is surrounded by a 350 m long circular rampart with 2 gateways; the height of the rampart varies, depending on natural protection by the slopes, from 1 to 3–4 m. On the inner side of the rampart there is a moat-like depression, formed, evidently, when taking material for it. The large amount of earthworks made when constructing the rampart, as well as the large well (diameter *ca.* 12 m) allows to suggest that the hillfort dates from the Latest Iron Age. Also here the unlevelled plateau refers to the possibility that the work remained unfinished.

The excavation plot (17 m²) – a trench that cut the rampart – was made *ca.* 25 m SW of the north-western gateway (Figs. 12–14).¹⁵ On the plateau, for the first 6 metres its width was 0.5 m, in the area of the rampart and the “moat” on its inner side – 1 m. It appeared that the rampart, made of sand, was heaped on the slope of the original plateau, the original level of which was indicated by white podzol sand. The maximal height of the rampart (evidently originally higher) was 1.7 m from the surface of the podzol. The profile of the trench showed that the depression on the inner side of the moat stretched for *ca.* 0.5 m into intact natural sand and that the “moat” had really been formed when removing material for the rampart. The ditch-like depression was filled with dark brownish-grey soil, which contained charcoal fragments and some potsherds (Fig. 15: 6–8). The layer had formed as a result of erosion from both directions. On the inner side of the rampart and in the moat a black layer of sooty soil and charcoal with some small brands, evi-

¹⁵ The finds: TÜ 1585: 1–95.

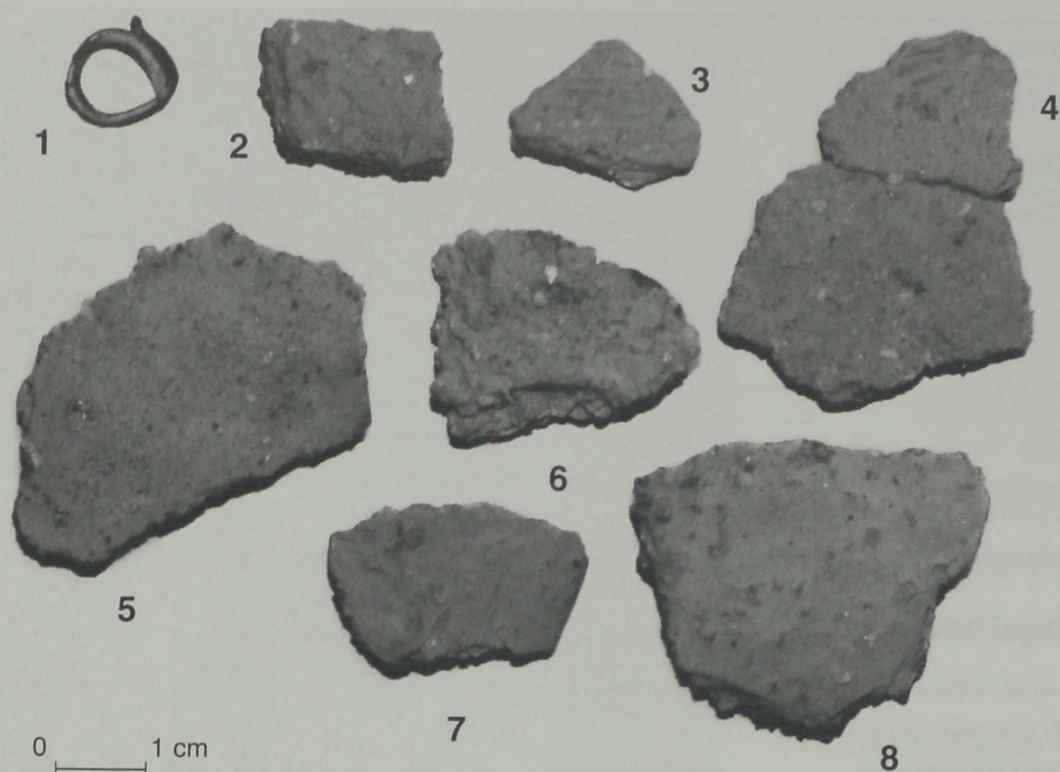


Fig. 15. Finds from Rosma hillfort. 1–5 - from cultural layer at the edge of the initial plateau, 6–8 - from the rampart and the eroded fill of the ditch. 1 - bronze ring; 2, 3 - textile-impressed pottery, 4–8 - hand-moulded pottery.

Jn 15. Leide Rosma linnamäht. 1–5 - kultuurkihist linnuseplatoo serval, 6–8 - valli täitepinnasest ja vallikraavi valgunud pinnasest. 1 - pronksrõngake (sõrmuse ots?), 2, 3 - tekstiilkeraamika, 4–8 - käsikeraamika. (TÜ 1585: 75, 57, 50, 59, 51, 87, 46, 95.)

dently originating from the rampart's burnt timber structures, was unearthed (Figs. 13, 14). The ^{14}C -sample gave the result of 810 ± 30 BP (cal. 95.4% 1255–1309 AD, 1361–1387 AD).¹⁶ In the slope of the rampart there were also some strongly burnt stones (diameter *ca.* 10 cm) in the black burnt layer. Another ^{14}C -sample taken from charcoal particles in the fine sand in the very bottom of the moat depression gave the result 1020 ± 50 BP (cal. 95.4% 895–925; 936–1155 AD).¹⁷

In the upper end of the trench on the hillfort plateau the top layer of brown sandy soil (up to 10 cm) was followed by 20 cm clean disturbed sand, which had probably fallen in the course of bringing material for the rampart from the inner areas of the plateau. Below it a 5–7 cm thick layer of dark brown cultural layer – original natural sandy soil influenced by settlement activities – with hand-moulded (Fig. 15: 2–5), including textile-impressed pottery (Fig. 15: 2, 3) followed. From the layer also a fragment of a bronze ring (Fig. 15: 1) was found. In the depth of 40 cm from the ground clean white podzol sand followed. In the upper end of the trench, in an extension of 1 m² a sooty oval fireplace (40 × 60 cm; deepened for 5–10 cm into white sand) was found from the cultural layer.

In the very end of the horizontal edge of the plateau also remains of a timber wall or fence running parallel to the rampart were unearthed under the layer of fallen sand: between the remains of two charred vertical posts with the diameter of *ca.* 10 cm there was a horizontal log with the thickness of *ca.* 7 cm (Fig. 16). A ^{14}C -

¹⁶ Ta-2902. Calibration: Oxcal.4.0; calibration curve IntCal 04 (Reimer et al. 2004; Bronk Ramsey 1995; Bronk Ramsey 2001).

¹⁷ Ta-2903. Calibration as in the footnote no. 16.

dating from one of the posts gave the result 880 ± 40 BP (cal. 95.4% 1035–1225 AD).¹⁸

The excavation results give evidence of life on Rosma hillfort already in the Pre-Roman or Roman Iron Age. Although *ca.* 300 m north of the fort there are 2 round barrows from the 2nd half of the 1st millennium, finds from that period are missing. In spite of the fact that charcoal particles from the bottom of the “moat”, i.e. from building material taken from somewhere in the hillfort area refer to human activities since Viking Age, it cannot also be excluded that the date is a “sum” or “average” of charcoal particles both from earlier and later times. Use of the site in the final stage of the Iron Age is shown by the sample from the fence at the edge of the hill plateau. Most unexpected and unexplained is, however, the ¹⁴C-dating gained from the burnt and fallen rampart constructions: the possible range is later than the era of crusade wars. The result is either erroneous or indicates to events unknown from the written sources, i.e. constructing a big hillfort in southern Estonia as late as in the 2nd half of the 13th century.



Fig. 16. Rosma hillfort. Remains of a fence from the Latest Iron Age at the border of the initial hill plateau.

Jn 16. Rosma linnamägi. Hilisrauaegse tara jäänus linnuse algse mäeplatoo äärel.

The excavations were financed by Estonian Science Foundation grant no. 6119.

¹⁸ Ta-2901. Calibration as in the footnote no. 16.

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KAEVAMISED KAGU-EESTI LINNAMÄGEDEL: LUHTÕ, SANGASTE JA ROSMA

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2007. a toimusid Kagu-Eestis kaevamised kolmel linnamäel. **Luhtõ** linnamäel tehti 1 m laiune proovi-tranšee (jn 1, 2) ja sellega mäeplatoo serval liituv kaevand (kokku 28 m²) linnuseplatoo idaserva, märke viivast teekohast veidi lõuna poole. Platoo serval paiknes sambla all u 20 cm paksune pruuni, nähtavasti läbiküntud liivmulla kiht, kust leiti rohkelt šlakitükke. Selle kihi peal leidunud põlen-gukihi söetükikestest võetud proov andis tulemuseks 411±50 BP (kalibreerituna 95.4% 1421–1527 pKr; 1549–1635 pKr). Pruuni liivmulla all paljandus kollakas-oranžis liivas nõe- ja tahmalaikudena jäl-gitav põlengukiht (jn 3); tranšee ülaotsas oli 2,2 m pikkune söestunud tukk, millest võetud söeproov andis tulemuseks 1912±55 BP (kalibreerituna 95.4% 37–31 eKr; 21–11 eKr; 1–235 pKr). Peale šlaki kaevandist leide ei saadud. Platoole tranšee otsa tehtud šurfis sisaldas kollane liiv maapinnast 1,25–1,45 m sügavuseni söekübemetega liiva laiike, mis viitab pinnase segatusele ja tõenäoliselt pla-tooserva tõstmisele. Tranšee lõikas ka linnuseplatoo äärest ligi 2 m madalamal olevat astangut, mille välisservas oli madal liivast vall koos selle siseküljel oleva madala kraaviga (enne kaevamisi oli valli-harja ja kraavipõhja kõrguste vahe ligi 40 cm). Valli välisserva alt leitud tukist saadud radiosüsiniku-dateering andis tulemuseks 1926±55 BP (kalibreerituna 95.4% 41–9 eKr; 3 eKr – 219 pKr). Kultuurkihi puudumine näitab, et linnus on olnud kasutusel lühiajaliselt.

Sangaste linnamäele tehti kolm proovikaevandit – kaks platoo servadesse (19 ja 17,5 m²) (jn 4, 7) ning kolmas (1 × 7 m) mäenõlvale, kus astangul paikneb 0,4–1,5 kõrgune ringvall selle siseküljel oleva madala kraaviga. Mõlemast platooserva tehtud kaevandist avastati segatud liiva-kruusakihi pealt põlenud raudkividest vare (A-kaevandis 3–3,5 m, B-kaevandis u 1,5–2 m läbimõõduga); A-kae-vandis leidis kamaraaluses ja kruusapealses õhukeses mullakihis ning varekivide vahel 13. sajandi kedranõude kilde (jn 5). Ilmnes, et mõlemas kaevandis on algset mäeserva liiva ning kruusaga tuge-vasti täidetud ja tõstetud: A-kaevandis kuni 2,15–2,25 m, B-kaevandis 1,2–1,7 m võrra (jn 6: I, II). Pinnast selle jaoks on ilmselt võetud linnuseala keskelt, kus maapind tõusis, kuid oli silmapaistvalt ebatasane. Täitekruusa all oli linnuse-eelset maapinda markeeriv mullakiht, milles, eriti pealispinnal, leidis väikseid söekübemeid, sh okste või hagude põlemisel tekkinud söetükikesi. B-kaevandis sel-lest söest võetud proov andis tulemuseks 938±50 BP (kalibreerituna 95.4% 1019–1193 pKr; 1195–1213 pKr). Samas kaevandis kivivarest ligi 2 m kaugusel täitekruusa pealt kogutud söeproovi dateering oli 938±50 BP (kalibreerituna 95.4% 1019–1193, 1195–1213 pKr).

Nõlvaastangule tehtud C-kaevandi (jn 9, 10) üks serv oli samal joonel B-kaevandi servaga (jn 8). Kaevamisel ilmnes, et valli välisservas on kuni 1,3 m paksune ja maapinnast kuni 0,9 m sügavuseni ulatuv suurtest raudkividest ebaühtlase paksuse, kõrguse ja tihedusega südamik (jn 11). Kivisüda-miku alt tumeda mulla viirust võetud söeproov andis tulemuse 905±50 BP (kalibreerituna 95.4% 1023–1221 pKr). Valli siseküljel olev kraav oli täidetud 40–45 cm paksuselt erosioonimullaga, mille all oli nõgene viir ja selle all omakorda 20 cm paksune segatud liiva kiht.

Kuna linnuseplatoo serval kaitseehitiste jäljed puudusid ja platoo on tasandamata, on ilmselt tegemist pooleli jäänud ehitisega. Kivilasusid mäeserva lähedal võib tõlgendada kohaletoodud, kuid kasutamata jäänud heitekividenä. Asjaolu, et varede leidis vaid põlemisjälgedega kive, on seletatav aastaajaga: oli talv ja tavalisi põllukive polnud kusagilt võtta. Ilmselt toodi mäeservale heitemoona sealt, kus seda talvel saada oli – kas põlenud hoonete ahjurusudest või eluhoonete ja saunade lähe-duses olevatest läbipõlenud ahjukivide varedest. Tava, et läbipõlenud kerisekivid kogutakse konkreetseesse hunnikusse, mäletatakse tänapäevalgi nii Võru- kui Harjumaal; komme on tuntud ka ingerisoomlaste ja lutsi maarahva seas. Katse Sangaste linnamäge kaitsta võiks seostuda eestlaste

1223. a ülestõusuga. Viimaseks vastupanuks valmistumine toimus ilmselt järgneval talvel, võimalik et seoses Tartu linnuse vastu kavandatud sakslaste sõjaretkega 1224. a alguses. Kasutamata jäänud heidekivid kinnitavad, et vastupanu siiski ei osutatud. Samas ei lase radiosüsinikudateeringud välistada võimalust, et linnamäel pooleli jäänud ehitustööd toimusid juba 12. (või isegi 11.) sajandil ja et 13. sajandi alguse hädaolukorras asuti kindlustama vahepeal mahajäetult ja kasutamata seisnud linnusekohta.

Rosma linnamäel tehti proovitranšee (laius linnusplatoo poolses otsas 0,5 m; valli ja selle siseküljel oleva kraavi piirkonnas 1 m) loodeväravast u 25 m lõuna poole (jn 12–14). Ilmnes, et vall koosneb algsele, valge leeteliivakihiiga markeeritud maapinnale toodud täiteliivast; valliharja kõrgus sellest pinnasekihist oli 1,7 m. Valli siseküljel olev, valli ehitusmaterjali võtmiseks kaevatud kraav ulatus leeteliivast 0,5 m võrra sügavamale looduslikku alusliiva. Kraavi põhjas olnud peaaegu puhtast, kuid söekübemetega liivakihist korjatud ^{14}C -proov andis tulemuseks 1020 ± 50 BP (kalibreerituna 95.4% 895–925 pKr; 936–1155 pKr). Ilmselt kujutab söepurune liiv endast linnuseõuelt valli ehitamiseks toodud, kuid maha pudenenud pinnast. Kraav oli suures osas täitunud kahelt poolt alla valgunud, huumusest tumeda erosioonipinnasega, millest leiti ka savinõukilde (jn 15: 6–8). Valli sisenõlval ja kraavi täitvas erosioonipinnases paljandus sissepoole varisenud kaitserajatistest põlengukiht, kust võetud ^{14}C -proov andis tulemuse 810 ± 30 BP (kalibreerituna 95.4% 1255–1309 pKr, 1361–1387 pKr).

Linnuseplatoo tasasel serval, tranšee kitsenevas otsas paljandus metsamulla all oleva u 20 cm paksuse puhta liiva, ilmselt valli ehitamiseks linnuseõuelt toodud pinnase, all 5–7 cm paksune tume, leeteliival olev kultuurikiht, kust leiti pronksrõngake (sõrmuse ots?) (jn 15: 1), käsi- (jn 15: 2–5), sh tekstiilke-raamikat (jn 15: 2–3) ning kergelt liivasse süvendatud nõgine tulease mõõtudega 40×60 cm. Täiteliiva kihi alt leiti tasase mäeplatoo välisäärelt valliga paralleelse tara jäänused: kaks kõrvuti olevat u 10 cm läbimõõduga söestunud postijäänust, mille vahel oli horisontaalne, u 7 cm paksune valliga paralleelne tukk (jn 16). Ühest postist võetud söeproov andis tulemuseks 880 ± 40 BP (kalibreerituna 95.4% 1035–1225 pKr). Keraamika ja söeproovid viitavad Rosma linnuse eriaegsele kasutusele (eelrooma või rooma rauaaeg; viikingiaeg, hilisrauaaeg). Valli kaitseehitustest saadud söeproov andis oodatust hilisema tulemuse, mis ei haaku seniste teadmistega Kagu-Eesti ajaloost 13. sajandi teisel poolel – 14. sajandil.