

ARHEOLOOGILISED  
VÄLITÖÖD  
EESTIS

ARCHAEOLOGICAL  
FIELDWORK  
IN ESTONIA

2007

Koostanud ja toimetanud  
*Ülle Tamla*

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*Esikaas: 13.–14. sajandist pärit ribiline väike klaaspudel Tartu vanalinnast.*

*Cover: Fragment of a 13.-14 cc small glass bottle (Ribbenflasche) from Old Tartu.*

*Tagakaas: Tervena säilinud keskaegne nahkjalats Tartu vanalinnast.*

*Back cover: Well preserved leather shoe from Old Tartu.*

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# NEW ARCHAEOLOGICAL DATA FROM THE SKI-JUMPING HILL IN VILJANDI

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In July 2007 excavations on ski-jumping hill in Viljandi continued. The work was financed by the town of Viljandi and was carried out by the University of Tartu and the Learned Estonian Society. Earlier excavations on the hill took place in 1999, 2002, 2005 and 2006 (see Valk 2000, 2003, 2006; Juurik *et al.* 2007). As previously, the goal of the excavations was to get complementary information about the site.

The size of the excavation plot was 28 m<sup>2</sup> and it was situated on the western side of the hill, also reaching the western and northern slope. From the east it was bordered by the plots of 2002 and 2006. The soil was removed in 10 cm horizons, whereas different layers of soil were treated separately and sieved out.

## CULTURAL LAYER

Most of the cultural layer consisted of mixed soil. Two main layers were distinguished: grayish-brown and reddish-brown, which were evidently brought from another location. The same strata were discovered in previous years. In addition to these two, there was also a layer of yellow sand, but its origin was not clear. Sporadically a very thin, (1–2 cm) blackish-yellow stratum of presumable Late Iron Age cultural layer occurred in the very bottom of the plot, on intact natural mineral soil.

The grayish-brown layer was found all over the excavation area. It was everywhere approximately 40 cm thick, except in the eastern part of the plot where it ended at the depth of 10 cm and the underlying reddish-brown 30 cm thick horizon started. In the middle part of the plot under the grayish-brown horizon there was the layer of yellow sand which was about 2–3 cm thick. In the western part of the excavation area the grayish brown layer continued until the intact mineral ground.

As in the last two years, an extensive cluster of granite stones was unearthed. It



was the thickest in the eastern part of the plot. At the depth of 20 cm it was obvious that the cluster started to separate the grayish-brown and the reddish-brown horizons. The size of the stones varied from 10 to 40 cm, except for one huge acerate stone that was situated on the steep slope in the west. The stone was over a meter long and reached into the southern profile.

Four postholes were discovered (Fig. 1: A–D). Two of them, A (diameter 32 cm) and B (30 cm) were wedged with numerous stones (sized 15–25 cm) and were probably related to the stone cluster. The bottom of the posthole A was paved with stones about 10–25 cm in diameter. The other holes C (24 cm) and D (42 cm) were located a bit farther away from the stone cluster and contained only a few stones. Posthole D was about twice the depth of the other holes, reaching roughly 80 cm into the natural soil. These postholes along with the stone cluster might have been a part of the constructions supporting the besieging machines used by the crusaders in 1223 (Valk 2006, 119–121).

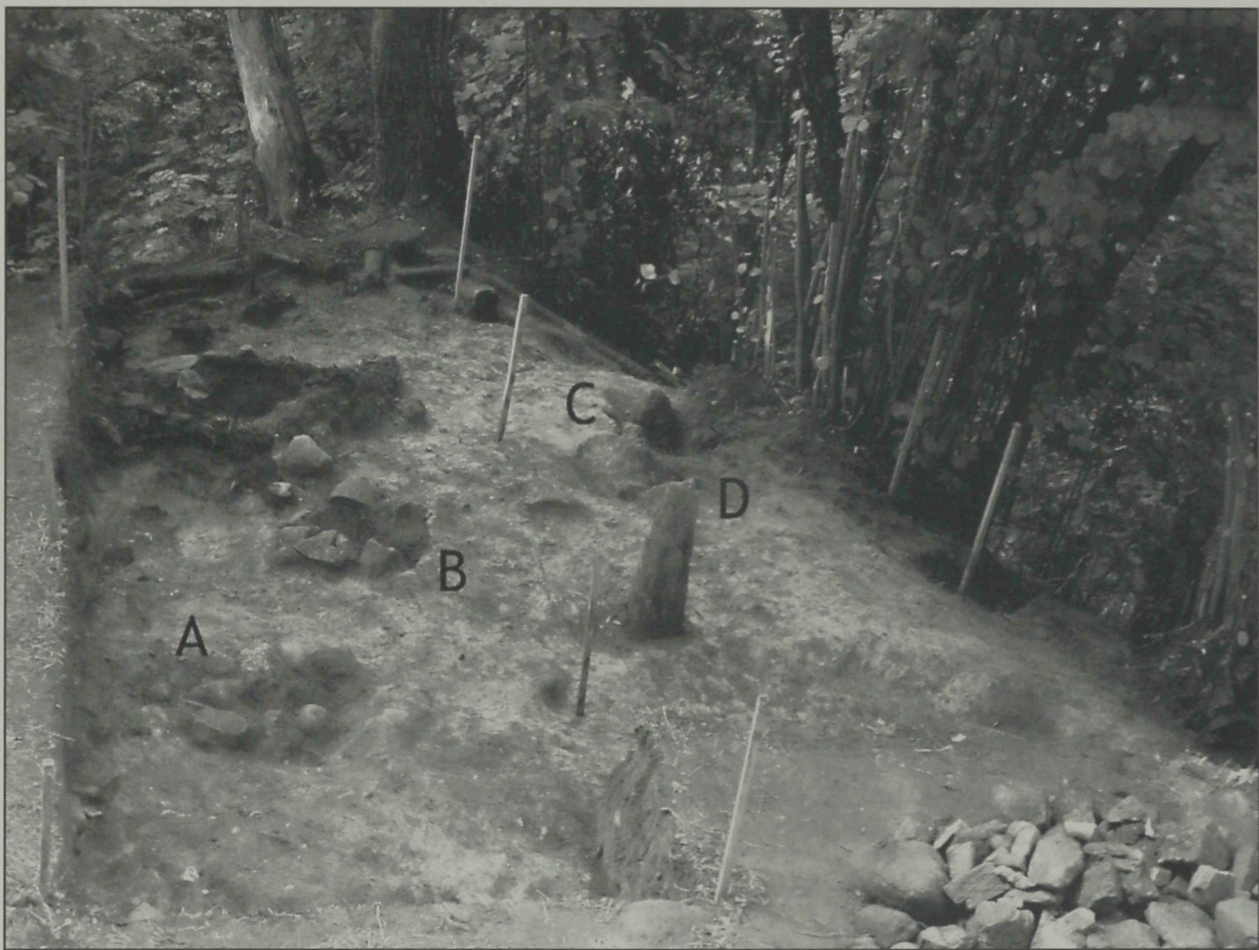


Fig. 1. View on the excavation plot from the east. A–D – postholes.  
Jn 1. Vaade kaevandile idast. A–D – postiaugud.

In the grayish-brown layer also some firebrands came to light. Altogether there were seven examples, the smallest being 20 cm and the longest about 1 m long. This is however not the brand's total length, as it reached into the southern profile. The firebrands were situated irregularly close to each other and approximately on

the same level. Around the firebrands there were several stones sized 10–40 cm; however a connection between the stones and the stone cluster could not be determined. One of the firebrands was dated  $689 \pm 50$  BP; cal. 95.4% 1245–1247, 1253–1331, 1339–1399 AD.<sup>1</sup>

<sup>1</sup> Tln-3007.



## FINDS

The finds<sup>2</sup> mostly consisted of pottery, whereas the grayish-brown horizon, compared to the reddish-brown, contained not only more ceramics but also other types of finds. The thin horizon of yellow sand included much less finds. From the blackish-yellow presumable Late Iron Age horizon only a few potsherds and fragments of clay daubs were found.

The majority of the pottery was wheel-made and dated to the Latest Iron Age (Fig. 2), but hand-made pottery (Fig. 3), including a *Rõuge*-type potsherd (Fig. 3: 1) was present as well. As opposed to the plot of 2006 where a massive amount of clay daubs were found, this year only a small number of them was discovered. Similar to the previous years, also some 18<sup>th</sup> to 20<sup>th</sup> century finds were collected. The fact that later material occurred as deep as 40 cm suggests that the soil on the hill has been mixed several times after it was deposited (see also Juurik *et al.* 2007, 105–106).

The excavation plot revealed many coins most of which were Soviet time *kopeks* and Estonian coins from the 1920s–30s, but also a silver coin of the Livonian Order – a *lübische pfennig*, minted in Tallinn about 1406/7? –1415.<sup>3</sup> Two bone needles (Fig. 4: 1, 2) might date back to the Late Iron Age and were probably used as dress accessories (Luik 2004, 160). Also a bronze spiral (Fig. 5: 3), and fragments of bronze chains (including 3 tiny bronze rings) could be considered as parts of the costume accessories. In addition, five glass beads, a supposed ear ring (Fig. 5: 1) and a fragment of a sieve-shaped pendant made of tinbronze (Fig. 5: 2) were found. Such pendants were characteristic for the 12<sup>th</sup> and 13<sup>th</sup> centuries (Valk 2004, 233).

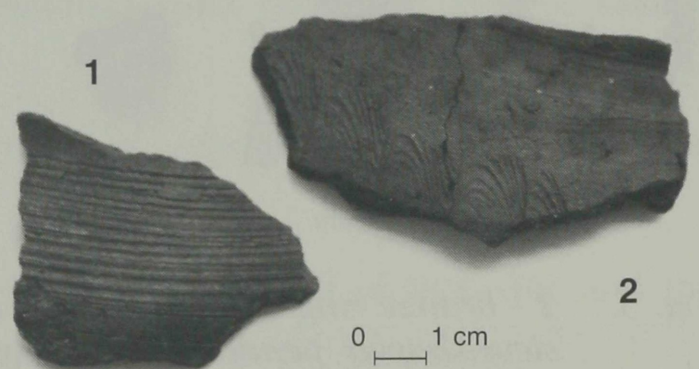


Fig. 2. Late Iron Age sherds of wheel-thrown pottery.

Jn 2. *Hilisrauaaegsed kedrakeraamika killud.*  
(VM 11173: 955, 585.)

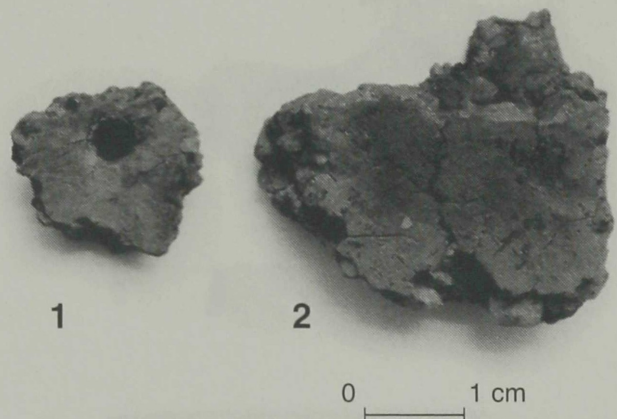


Fig. 3. Iron Age hand-made pottery.

Jn 3. *Rauaaegne käsikeraamika.*  
(VM 11173: 339, 617.)

<sup>2</sup> VM 11173: 1–1035.

<sup>3</sup> Identification by Mauri Kiudsoo (AI).



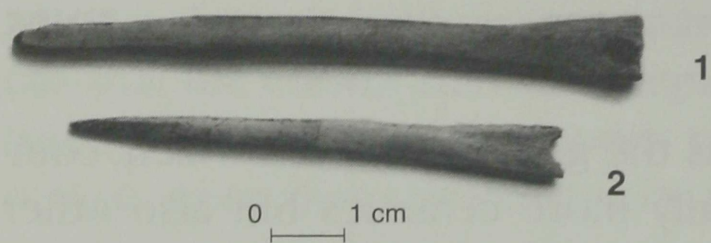


Fig. 4. Bone needles.  
Jn 4. Luunõelad.  
(VM 11173: 143, 204.)

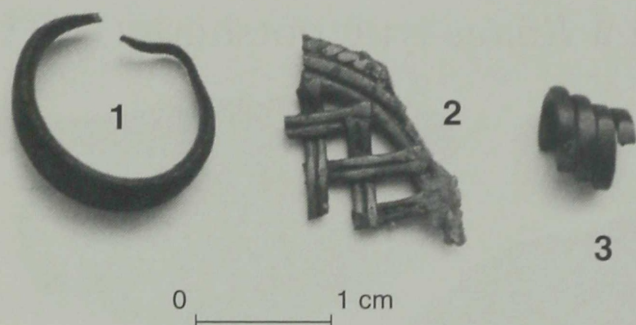


Fig. 5. 1 - bronze ring, 2 - fragment of a sieve-shaped pendant, 3 - fragment of a bronze spiral.  
Jn 5. 1 - pronksrõngas, 2 - võreripatsi katke, 3 - pronksspiraali katke.  
(VM 11173: 619, 792, 490.)

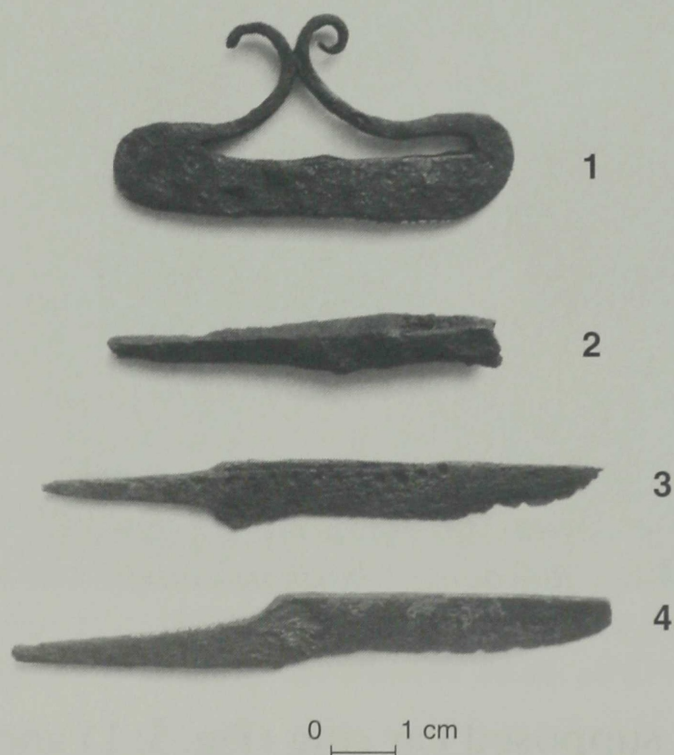


Fig. 6. 1 - fire steel, 2 - tip from a crossbow bolt, 3, 4 - knives.  
Jn 6. 1 - tuleraud, 2 - ammunooleotsa katke, 3, 4 - noad.  
(VM 11173: 984, 738, 982, 594.)

The household utensils were represented by two knives (Fig. 6: 3, 4), the first of them had a dot ornament on its blade part. From the posthole D, a fire steel with rolled ends (Fig. 6: 1) was uncovered. The finds included also a fragment of a spinning whorl. Pieces of similar items had been found from the hill also in previous excavations. A fragment of a crossbow bolt (Fig 6: 2) proves once again that hostilities took place around the present-day ski-jumping hill of Viljandi (Valk 2006; Juurik *et al.* 2007).

## CONCLUSIONS

In the excavation plot of 2007 the soil consisted mainly of two mixed horizons which originated from some other area. Also a horizon of yellow sand was discovered, but its origin is not clear. Finally there were traces of a very thin Late Iron Age cultural layer, which was likely of local origin (Valk 2003, 65)

The extensive stone cluster and several postholes, which were found also in the previous years may have been a part of the constructions supporting the besieging machines used in 1223. The firebrands found near the stone cluster and postholes cannot be, however, related to besieging activities as the <sup>14</sup>C-analyse dates them from the middle of the 13<sup>th</sup> century to the end of 14<sup>th</sup> century. This suggests that the hill could have been in use also after the crusade wars.



Since some of the firebrands and part of the stone cluster reached into the southwestern part of the hill that is still not excavated, investigations need to be continued.

## References

- Juurik, R., Lillak, A., Oras, E. & Valk, H. 2007.** Archaeological excavations on the ski-jumping hill in Viljandi. – AVE, 2006, 105–112.
- Luik, H. 2004.** Luuesemed hilisrauaaja linnamägedel Lõhavere, Soontagana, Varbola ja Valjala leide põhjal. – Linnusest ja linnast. Uurimusi Vilma Trummali auks. (MT, 14.). Tartu – Tallinn, 157–188.
- Valk, H. 2000.** Archaeological investigations in Late Prehistoric – Early Medieval Viljandi and in Pilistvere Churchyard. – AVE, 1999, 39–53.
- Valk, H. 2003.** Excavations in Viljandi: new data about the final period of Iron Age and the besieging of 1223. – AVE, 2002, 56–70.
- Valk, H. 2004.** Võre, sõel ja rist: võreripatsid ja nende tähendus. – Uurimusi Setumaa arheoloogiast, geograafiast, rahvakultuurist ja ajaloost. (SK, 2.). Tallinn, 233–314.
- Valk, H. 2006.** New data about besieging constructions from 1223 in Viljandi. – AVE, 2005, 119–126.



## UUSI ARHEOLOOGIAANDMEID VILJANDI SUUSAHÜPPEMÄELT

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2007. aastal jätkusid arheoloogilised uurimistööd Viljandi suusahüppemäel. Kaevandi suurus oli 28 m<sup>2</sup> ning see paiknes mäe lääneosas, ulatudes ka künka lääne- ja põhjanõlvale. Kaevandi idakülge piirnes 2002. ja 2006. a kaevanditega.

Kultuurkiht koosnes peamiselt segatud täitepinnasest, milles eristusid selgemini hallikaspruun ja punakaspruun mullakiht. Kohati oli hallikaspruuni mulla all teadmata päritoluga kollast liiva ning paiguti esines väikeste õhukeste laikudena ka kohapeal ladestunud eeldatavasti muinasaegset musta-kollasekirjut kihti. Nagu eelmistel aastatel, paljandus ka seekord ulatuslik raudkivilade, mis oli kõige tihedam kaevandi idapoolses osas. Umbes 20 cm sügavusel eraldas see hallikaspruuni ja punakaspruuni mulla kihte.

Kaevandi alalt puhastati välja neli postiauku (jn 1: A-D), millest kahes oli rohkesti kiilukive. Postiaugud koos kivilademega võisid olla osa konstruktsioonist, mis toestas kiviheitemasinaid 1223. aasta Viljandi piiramise ajal.

Segatud hallikaspruunist mullast leiti kogumina seitse tukki, mis asetsesid enam-vähem ühel tasapinnal. Neist väiksem oli 20 cm ja suurim 1 m pikkune. Tukkidest võetud radiosüsinikuproov andis nende vanuseks  $689 \pm 50$  radiosüsinikuaastat ja kalibreeritult kalendriaastad vahemikus 1245–1399.

Põhiliseks leiumaterjaliks oli keraamika, mille hulgas on nii kedral (jn 2) kui ka käsitsi valmistatud nõude kilde (jn 3). Leidudest väärivad nimetamist kaks luunõela (jn 4), võreripatsi katke (jn 5: 2), pronksspiraal (jn 5: 3) ning pronksrõngake (jn 5: 1). Leiti ka 15. sajandi alguses Tallinnas vermitud Liivi ordu penn, mõned tarberiistad, sh kaks nuga (jn 6: 3, 4), tuleraud (jn 6: 1) ja värtnakedra katke. Sõjalisele tegevusele viitab ammunooletsa tükk (jn 6: 2).