

# A Viking Age silver hoard and new sites from Kukruse, North-East Estonia

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### INTRODUCTION AND BACKGROUND

In May 2010, after the excavations at a 12th-13th century cemetery in Kukruse, North-East Estonia (Lõhmus et al. 2011) a field survey was conducted in the vicinity to localise new archaeological sites. Together with dozens of participants from the Estonian Metal Detectorist Club the main focus was concentrated on the immediate vicinity of the cemetery to determine its borders; minor studies were also conducted to find possible settlements a little further. As a result four new sites were localised. One was found at the Edise manor (finds: TÜ 1815), two sites – Revino I and II (TÜ 1816) - were localised further to the north; and most importantly a settlement site was found beside the Kukruse manor (TÜ 1814), just a few hundred metres north-west from the cemetery (Fig. 1).

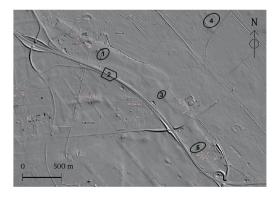


Fig. 1. Map of localised archaeological sites. 1 – Kukruse settlement, 2 – Kukruse cemetery, 3 – Revino I settlement, 4 – Revino II settlement, 5 – Edise settlement.

Jn 1. Artiklis mainitud muistised. 1 – Kukruse asulakoht, 2 – Kukruse kalmistu, 3 – Revino I asulakoht, 4 – Revino II asulakoht, 5 – Edise asulakoht.

Base map / Alusplaan: Estonian Land Board / Maa-amet Drawing / Teostus: Martti Veldi Occupation layers of all sites revealed dozens of pottery sherds and single metal objects. Sherds from the Kukruse settlement included both hand-moulded and wheel-thrown samples, although clearly Medieval sherds were missing. Some sherds from the Kukruse settlement represented the same kind of pottery that was found from the cemetery (e.g. TÜ 1814: 4, 6, 9), but the different profile of rims (e.g. TÜ 1814: 3, 5, 13) implied a higher variation of different vessels in the settlement. Some sherds of stoneware from the Kukruse manor site (TÜ 1814: 48–52) associate with the medieval and modern age manor.



**Fig. 2.** Fragment of a sharp-oval battle-axe from the Kukruse settlement.

Jn 2. Teravovaalse kivikirve katke Kukruse asulakohast. (TÜ 1814: 1.)

Photo / Foto: Kristiina Johanson

As a unique find a butt fragment of a stone axe (Fig. 2) was found from the occupation layer beside the Kukruse manor. The axe belongs to the sharp-oval battle-axes that were produced during the Late Neolithic Corded Ware period. Sharp-oval axes are not very common among Estonian shaft-hole axes. They amount to 20 among approximately 250 battle-axes or about 830 shaft-hole axes from Estonia. One fifth of the axes have been found from North-East Estonia, but single sharp-oval axes have been found from all parts of the country.

Among dozens of potsherds, just a single very thin piece (TÜ 1814: 29) from the site very likely belongs to the corded pottery suggesting that the site has been occupied also during the Late Neolithic. Kukruse settlement is situated at the edge of a buried glint and the location of present ponds and springs implies that fresh water supplies were probably naturally available, thus making the site tempting during different time periods. There are two possible explanations for the shaft-hole axe find at Kukruse. Firstly, the butt fragment from Kukruse might derive from a Late Neolithic settlement site. Altogether five sites with corded pottery have previously yielded one or several fragments of shaft-hole axes: Kääpa, Kullamäe, Lemmetsa, Kunda Lammasmägi and Valma. No intact axes have been found from settlement sites in Estonia and a similar pattern has been recorded also in e.g. Latvia and Sweden (see Johanson 2006, 65ff and the references). Secondly, there is a possibility that the axe was found from a Late Neolithic site and re-used in Kukruse during the Late Iron Age. Shaft-hole axes and their fragments have been found from several Late Iron Age and medieval rural settlement sites, e.g. Lehmja, Pada, Viru-Nigula, Proosa, as well as towns. In these contexts the axes might be connected to the belief in magical thunderbolts (Carelli 1997; Johanson 2009).

As the borders of the site had remained unclear, the process of adding the Kukruse settlement to the list of national monuments was not yet started. Therefore, the landowner was not aware of any archaeology-related restrictions on this estate while repairing and reinstalling geothermal heating pipes in September 2016. During a brief field survey at the site a single silver coin dated to the Viking Age was spotted with a naked eye by Tiina Äikäs (University of Oulu). In order to test if more coins could be found, National Heritage Board sent Kalle Kartau, a licensed metal detectorist to survey the area. On September 21st, the metal detectorist found more than a hundred Viking Age coins and determined the central area of the hoard (Fig. 3). As the landowner had to dig the trench deeper for the heating pipeline to function, it was decided to document and supervise the excavation of the untouched soil on the following days.

Archaeological fieldwork was conducted on September 23rd and October 4th. A one metre wide trench had already been excavated to the depth of the existing geothermal heating pipeline (about 80 cm). The eastern profile of the *ca*. 150 metres long trench was cleaned and the visible pits documented by photos and GPS-coordinates. Subsequently the trench was deepened to the depth of one metre and the bottoms of the pits, which had not been visible at the level of 80 cm, were cleaned, documented and finds were collected (AI 7651). Unfortunately, none of the pits could be connected solely with the Late Iron Age habitation. Even if potsherds were found from the pit, these were always accompanied by recent materials (plastic, green-house glass etc.).



Fig. 3. The location of the trench for the geothermal heating pipes (blue). Dark line marks the area where the coin hoard was found.

Jn 3. Maakütte torustiku asendiplaan (sinine). Tume joon tähistab mündiaarde leiukohta.

Base map / Alusplaan: Estonian Land Board / Maa-amet Drawing / Teostus: Martti Veldi

#### SILVER HOARD

All of the silver artefacts were collected as one find context because the soil had been disturbed several times and finds were not in their original location. Therefore, the original context of the hoard (if it was buried into the occupation layer or deeper, whether some sort of container was used, *etc.*) is unknown. As a result, a Late Viking Age hoard consisting of some non-monetary silver and 374 coins was collected. 318 coins (85%) were German, 36 (1.9%) English pennies, 8 (2.1%) Islamic dirhams, 7 (1.9%) Danish and 4 (1.1%) Swedish deniers and one (0.3%) was a Norwegian coin. The youngest datable coin of the find was the Norwegian one, struck by King Magnus Berrføtt (1093–1103) (Fig. 4). Thus the hoard cannot have been deposited before 1093.

Such a composition is typical for the Estonian and Baltic hoards of the period. However, the chronological distribution of coins in it is a bit untypical. One can quite clearly discern two chronological 'layers' (Fig. 5), whereby a number of late 11th century coins has been added onto the older basis that comes from the first half of the century. However, the hoard has most likely been buried as a single episode in the end of the 11th century. The same phenomenon can be ob-



Fig. 4. Norwegian coin, struck by King Magnus Berrføtt (1093–1103).

**Jn 4.** Kuningas Magnus Berrføtt (1093–1103), Norra münt. Photo / Foto: Ivar Leimus

served also in some other deposits, e.g. in Estonian hoards of Kose (tpq 1121) and Kohtla-Käva (tpq 1113), in the Swedish hoard of Johannishus (tpq 1120), and in the Danish hoard of Store Frigård (tpq 1106) (Leimus 1986, 60–62; CNS 4.1.5; Galster 1980, no. 48).

Strikingly, the English coins seem to have mostly been obtained shortly before the depositing of the hoard. Whereas normally the Anglo-Saxon pennies form the overwhelming majority in hoards of the given period, in this case we only have 13 pre-Norman coins *contra* 23 items



Fig. 5. A diagram showing the chronological distribution of German and English coins of the Kukruse hoard.

Jn 5. Kukruse leiu Saksa ja Inglise müntide ajalise jaotuse diagramm.

Compiler / Koostaja: Ivar Leimus



**Fig. 6.** Anglo-Norman penny, William II, type BMC III, Salisbury, mint master Edwold.

Jn 6. Anglonormanni penn, William II, tüüp BMC III, Salisbury, müntmeister Edwold.

Photo / Foto: Ivar Leimus

of William I and II. The fact that there are as much as 15 pennies of William II of type II and only one of type III (Fig. 6) indicates that the English part of the hoard was put together just in the beginning of the distribution of type III coins. Traditionally, type III is dated from 1092 to 1095, but recent studies have moved this to 1095–1097. In brief, according to general understanding type III may have been minted in the mid-1090s (Allen 2014, 91–92). There is not a single penny of King Henry I (1100–1135) in the hoard, which means that in any case the English part of it has reached Estonia before 1100.

An influx of newly minted English coins a couple of decades before and after 1100 can be considered a special phenomenon of Estonian and Gotlandic hoards of the period (Molvõgin 1990; Allen 2014). Also, a number of Anglo-Norman pennies have been recorded in some deposits from the North-West of Russia that obviously benefitted from the Baltic trade (Potin 1993, 278; Mikhel'son & Trost'yanskiy 2016, 243–248).

As to the German deniers a lot of them also originate from the 1090s, e.g. these of Archbishop of Mainz Ruthard (1089–1106)

and Bishop of Worms Eppo (1090–1105). Also the coins minted by Emperor Henry IV (1084–1106) in Duisburg, Bishop Otbert and Emperor Henry IV (1091–1106) jointly in Liége and Bailiff Dietrich III (1085–1106) in Gittelde most certainly belong to that later group. On the other hand, the chronological frames of the mentioned issues are relatively wide. The deniers of Archbishop of Cologne Hermann III (1089–1099) can be dated somewhat more accurately. During his reign Hermann III issued four types of coins. In the find of Kukruse 12 exemplars belong to type I, 4 exemplars to type III and just one specimen to the last, type IV. Although the coin types of Hermann III cannot be dated precisely, one may assume that the last type was minted at some time in the end of his lordship. Dividing the reign of 10–11 years conditionally to four, the last coin type could have been initiated around 1096–1097.

One of the indicators helping us to date the late 11th century hoards is either the presence or absence of coins of Bishops of Utrecht Conrad (1076–1099) and Burchard (1099–1112). The present deposit includes six coins of Conrad but none of Burchard, which means that the German coins, most probably, have been collected before 1099. Thus the English and German parts of the hoard are more or less contemporaneous when it comes to the youngest coins of the find. Consequently, the treasure was put together sometime in the mid-1090s or slightly later.

The non-monetary part of the silver hoard comprises a pendant that imitates Islamic dirhams, four pieces of silver sheet and half of a silver bead (Figs 7–8). The presence of barbaric imitations of dirhams has been observed in Estonian finds several times before (e.g. in

the hoards from South-Estonia and Kõue I) and most probably they were manufactured locally (Anderson 1937, 3, Tafel 3; Tamla & Kiudsoo 2014, 213, fig. 4: 5-6, 217). The 'Cufic' pendant of the Kukruse hoard (weight 2.24 g) differs from the others found in Estonia so far, but obviously also represents a sample of local production. Remains of a bronze suspension loop confirms the ornamental character of the piece. The same phenomenon has been also noticed in Finland where at least 11 primitive bracteates, which imitate dirhams, as well as a couple of two-sided 'coins' combining Byzantine and Islamic types were found, all of them used as pendants (Talvio 1978, 31-32, 35-36; Talvio 2002, 175). They are also known from Latvia, where five bracteate-like dirham imitations have been discovered, although mostly of a different style (except one primitive imitation from Daugmale; see Berga 2007). Like in Estonia, the Finnish and Latvian imitations may have been fabricated locally at various times during the 11th century. Cufic coins were popular as ornaments because of their larger diameter, but in the absence of dirhams (which disappeared during the early 11th c.) their barbarous copies were widely produced.



Fig. 7. Bracteate imitation of an Islamic coin. Jn 7. Islami mündi brakteaatjas imitatsioon. Photo / Foto: Ivar Leimus

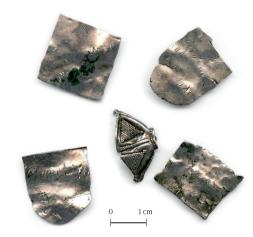


Fig. 8. Non-monetary silver. Jn 8. Mittemonetaarne hõbe. Photo / Foto: Ivar Leimus

Three of the four pieces of silver sheet have been cut off from hammered silver strips (Potin 1960, 61–79). They usually had rounded ends, similarly to the two pieces from Kukruse. This kind of silver pieces are quite common in Estonian finds (Leimus 1979, 77; Leimus 1986, 71). On both sides of the fourth silver piece there are remains of some uncertain ornamentation and one edge of the piece has been perforated and broken. Thus, most probably it must be a fragment of some dish or jewellery.

The fragment of a granulated bead may originate either from the East Slavic or, and more probably, from the West Slavic lands, where such pieces of jewellery seem to have been quite common (FMP III, 10: 12; 205: 828, 890; FMP IV/2, 10: 11; 31: 1586; Gushchin 1936, Tab. IV, VI; Duczko 1985, 75–77). Predominantly, they belong to the 11th century.

All the non-monetary silver was repeatedly tested (pecked) and as such obviously used in every-day transactions as means of payment according to their weight, which roughly corresponded to the weight of a coin.

#### CONCLUDING REMARKS

A large number of coin hoards has been found from the Ida-Viru County, from the Kohtla-Järve–Jõhvi area. The most notable of them are Kohtla I (tpq 837/8), Erra-Liiva I (tpq 977/8) and II (tpq 996), Kohtla II (tpq 1054), Edise (tpq 1060), Kohtla-Käva (tpq 1113), Puru III (tpq 1068),

several finds from Varja (see Leimus 2007, nos 2, 22, 29; Molvõgin 1994, nos 34, 75; Leimus & Molvõgin 1998; Leimus & Kiudsoo 2015; Leimus & Kiudsoo 2016; Kiudsoo 2016) and now also Kukruse. Such a large number of coin hoards indicates at an important and powerful centre. Most of the hoards belong to the Viking Age and the 11th–12th century, thus predating the Kukruse late 12th – early 13th century cemetery. However, quite a few exceptionally rich inhumations from there suggest that the central position of this area preserved at least until the 13th century and was later followed by the establishment of a church parish centre (Jõhvi) and several manors in the area. In this respect it is interesting to note that no prehistoric or medieval harbour has been localised yet, which would have been so important for a community by the sea. In fact, due to the straight coastline and steep cliff, the only possible location for a harbour could have been the estuary of the River Pühajõe. We also do not know any hill forts in this region, which contrasts with the Purtse area, some 15–20 kilometres westwards, where at least two hill forts are localised. The only possible remains of a hill fort in the surroundings of Kukruse, known so far, is a heavily eroded and reworked hill at the estuary of the River Pühajõe, arguing also for the possibility of harbour in this region.

Several research questions but also exceptional finds suggest a need for a specific study about this region, originally clearly surrounded by wetlands and forming a suitable island for the flourishing society during the late Prehistory in Estonia.

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## VIIKINGIAEGNE MÜNDIAARE JA UUED MUISTISED KUKRUSELT, IDA-VIRUMAAL

Tõnno Jonuks, Ivar Leimus, Kristiina Johanson, Anu Kivirüüt ja Mari Tõrv

2010. aasta kevadel, pärast suuremahulisi arheoloogilisi uuringuid Kukruse hilisrauaaja kalmistul, avastati praeguse Kukruse mõisa ümbruses kalmistuga samaaegne asula (jn 1). Noorema rauaaja savinõukildude kõrval leiti küntud põllult hilisneoliitilise teravovaalse kivikirve kannakatke (jn 2). Kuna kogutud savinõukildude hulgas leidus üks kild nöörkeraamilisest nõust, on tõenäoline, et Kukrusel võis olla asula ka hiliskiviaial.

2016. aasta sügisel leiti Kukruse asulast kaevetööde käigus viikingiaegne münt ning Muinsuskaitseameti poolt organiseeritud välitöödel avastati lõpuks 374 mündist, neljast hõbeplekitükist, hõbehelmest ja ühest hõbedast araabia dirhemi imitatsioonist koosnev aare (jn 3, 4, 6–8). 85% müntidest on pärit Saksamaalt, aga esindatud on ka dirhemid, Inglise, Taani, Rootsi ja Norra mündid. Aarde peitmise *tpq* on 1093. Sarnase koostisega viikingiaegseid mündi-

aardeid on Põhja-Eestist teada teisigi. Kukruse aardele on aga iseloomulik kaks kronoloogilist kihistust: 11. sajandi esimesest poolest pärit müntidele järgneb paarikümne aasta pikkune paus ja seejärel on aardesse lisatud suur osa sajandi lõpust pärit münte (jn 5). Põhiosa aardest koosneb tuntud müntidest, kuid aardes leidub münte, millest seni on teada vaid üksikuid näiteid või mis on varem erialakirjanduses hoopis avaldamata.

Kukruse ümbruse viikingiaegsed aardeleiud, hilisrauaaegne rikkalike hauapanustega kalmistu ja mitmed avastatud asulad osutavad olulisele asustuskeskusele. Ilmselt kuulus selle asustusüksuse juurde ka sadam. Ida-Virumaa eripärase ranniku tõttu paistab sadamaks sobivat üksnes Pühajõe suue Toilas. Toila oru pargis asub tugevasti erodeerunud ja hilisemate pinnasetöödega peaaegu hävinud linnusekoht.