



Archaeological excavations at the Riigiküla IV settlement site in north-eastern Estonia

Aivar Kriiska

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

Kerkko Nordqvist

Tartu Ülikool, ajaloo ja arheoloogia instituut, arheoloogia osakond (University of Tartu, Institute of History and Archaeology, Department of Archaeology), Jakobi 2, 51005 Tartu, Estonia

Helsingi Ülikool, kultuuride osakond (University of Helsinki, Department of Cultures), Unioninkatu 38F, 00014 Helsingin yliopisto, Finland

Aija Macāne

Göteborgi Ülikool, ajaloouringute osakond (University of Gothenburg, Department of Historical Studies), Renströmsgatan 6, 41255 Göteborg, Sweden

Helsingi Ülikool, kultuuride osakond (University of Helsinki, Department of Cultures), Unioninkatu 38F, 00014 Helsingin yliopisto, Finland

Irina Khrustaleva

Tartu Ülikool, ajaloo ja arheoloogia instituut, arheoloogia osakond (University of Tartu, Institute of History and Archaeology, Department of Archaeology), Jakobi 2, 51005 Tartu, Estonia

Riiklik Ermitaaž (State Hermitage Museum), Dvortsovaya Naberezhnaya 34, 191181 St Petersburg, Russia

INTRODUCTION

Dozens of Stone Age settlement sites are currently known in the lower reaches of the Narva and Luga Rivers on the Estonian–Russian border (Fig. 1). Seventeen of them are located in the area of the former Riigiküla village, on a sandy ridge that was a spit that separated the lagoon from the sea during the middle of the Littorina Sea phase (7850–2550 calBC; Kriiska 1999, 74; Rosentau *et al.* 2013; dating after Hang *et al.* 2020, fig. 1) and coincided with the Narva culture (5200–3900 calBC; typo-chronological dates here and later after Kriiska *et al.* 2020).

The Riigiküla IV site was found in 1991 during an archaeological field survey related to the planned construction of a new bridge over the Narva River, which, fortunately, was never built (Jaanius *et al.* 1991; Kriiska 1995b, 449). Archaeological excavations at the site took place in 1995 (Kriiska 1996a; 1996b), and ten years later archaeological monitoring was carried out during the dredging of the River Tõrvajõgi and the demolition of a temporary rubble road that passed through the Riigiküla IV site (Kriiska 2006).

Most of the finds excavated at that time from the Riigiküla IV settlement site are related to Narva culture (Kriiska 1996a). According to radiocarbon dates obtained from charcoal pieces collected from fireplaces excavated in 1995, the area was inhabited between about

5000–4500 calBC.¹ Moreover, some fragments of Comb and Corded Ware, as well as a few fragments of pre-Roman Iron Age pottery indicate that the site was also used in the 4th, 3rd and 1st millennia calBC. In addition to prehistoric finds, some artefacts dating from the 16th–19th centuries AD have been recovered from the site (Kriiska 1996a).

In May and June 2020, preliminary field surveys were carried out at the archaeological sites of Riigiküla in connection with the reconstruction of the Narva – Narva-Jõesuu – Hiimetsa

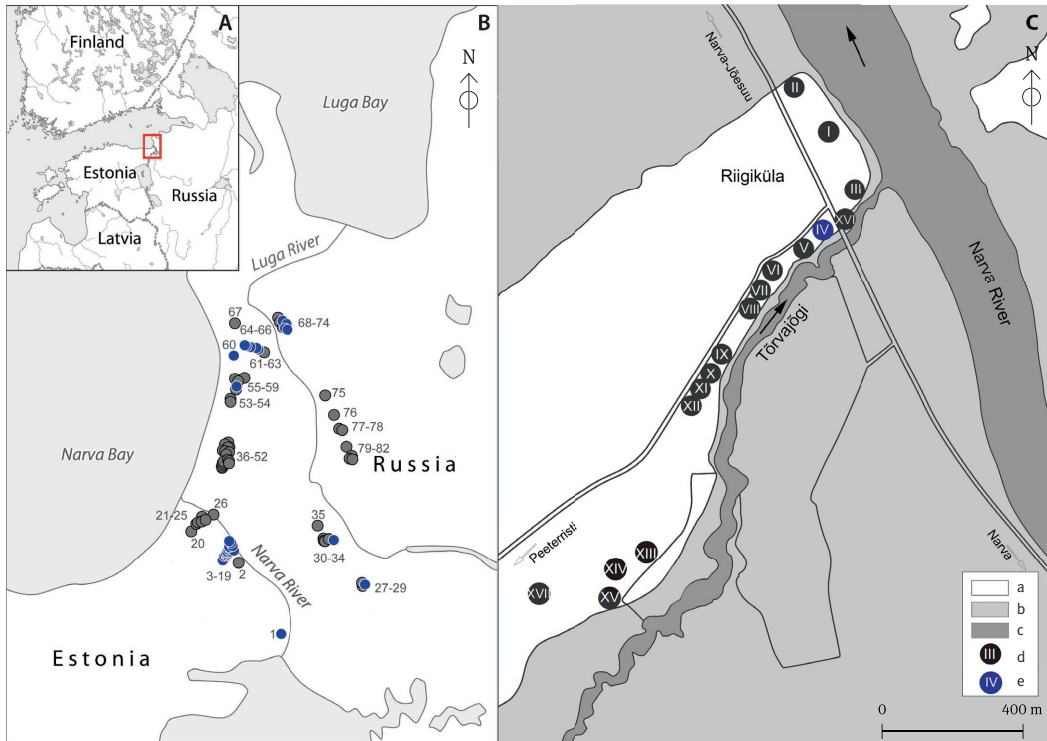


Fig. 1. Location of the research area. A – Narva–Luga interfluvium (red rectangle) on the map of the Eastern Baltic area. B – Stone Age sites known in the Narva-Luga interfluvium (after: Kriiska et al. 2016; Gerasimov 2019; amended by the authors), blue dots mark the settlement sites of the Narva culture. Sites: 1 – Narva Joaorg, 2 – Vasa, 3–19 – Riigiküla I–XVII, 20 – Viljapea, 21–25 – Narva-Jõesuu I–IV, 26 – Venkul (Väiküla), 27–29 – Lommi I–III, 30–34 – Izvoz 2–6, 35 – Keykino, 36–52 – Rosson 1–16, 53–54 – Väike-Ropsu 6–7, 55–59 – Väike-Ropsu 1–5, 60 – Kuzemkino 3, 61–63 – Kuzemkino 5–7, 64–66 – Kuzemkino 1, 2 and 4, 67 – Strupovo, 68–74 – Galik 3, 4 and 6–10, 75 – Kurovitsy 7, 76 – Kurovitsy 1, 77–78 – Kurovitsy 4 and 8, 79–82 – Kurovitsy 2, 3, 5 and 6. C – Location of the Riigiküla settlement sites. a – land at the beginning of the 5th millennium BC, b – sea at the beginning of the 5th millennium BC, c – modern river, d – Stone Age settlement site, e – Riigiküla IV settlement site.

Jn 1. Uurimisala asukoht. A – Narva–Lauga jõgede vaheline piirkond (punane ristkülik) Ida-Baltikumi kaardil. B – Narva–Lauga jõgede vahelisest piirkonnast teadaolevad kiviaegsed asulakohtad (alus: Kriiska et al. 2016; Gerasimov 2019; täiendatud autorite poolt), sinised punktid markeerivad Narva kultuuri asulakohti. Asulakohtad: 1 – Narva Joaorg, 2 – Vasa, 3–19 – Riigiküla I–XVII, 20 – Viljapea, 21–25 – Narva-Jõesuu I–IV, 26 – Venkul (Väiküla), 27–29 – Lommi I–III, 30–34 – Izvoz 2–6, 35 – Keykino, 36–52 – Rosson 1–16, 53–54 – Väike-Ropsu 6–7, 55–59 – Väike-Ropsu 1–5, 60 – Kuzemkino 3, 61–63 – Kuzemkino 5–7, 64–66 – Kuzemkino 1, 2 ja 4, 67 – Strupovo, 68–74 – Galik 3, 4 ja 6–10, 75 – Kurovitsy 7, 76 – Kurovitsy 1, 77–78 – Kurovitsy 4 ja 8, 79–82 – Kurovitsy 2, 3, 5 ja 6. C – Riigiküla asulakohtade paiknemine. a – maismaa V aastatuhande algul eKr, b – meri V aastatuhande algul eKr, c – tänapäevane jõgi, d – kiviaegne asulakoht, e – Riigiküla IV asulakoht.

Maps / Plans: Kerkko Nordqvist, Aivar Kriiska, Irina Khrustaleva

¹ Tln-1989, 6023±95 BP and Tln-1990, 5624±115 BP.

and Peeterristi – Kudruküla intersections. The purpose of these studies was to determine the possible need for archaeological excavations, as well as the size of the area affected by road construction. Based on the results of these surveys, a 47 m² trench was set up in the part of the settlement that was to be disturbed by the extension of the road later that summer (Figs 2–3). The aim of this article is to present the results of these excavations.

The area was excavated in about 5 cm thick technical layers and the soil was sieved through individual hand sieves with a mesh size of 0.4–0.5 cm. All finds were documented in three-dimensional positions with a horizontal accuracy of ± 5 –10 cm. The undisturbed Stone Age cultural layer with the thickness of up to 1 m was covered by a dark brownish-grey soil layer up to 25 cm thick, rich in humus and charcoal pieces and mixed during later human activities. Over it lay various modern sandy filling layers up to half a metre thick. The natural

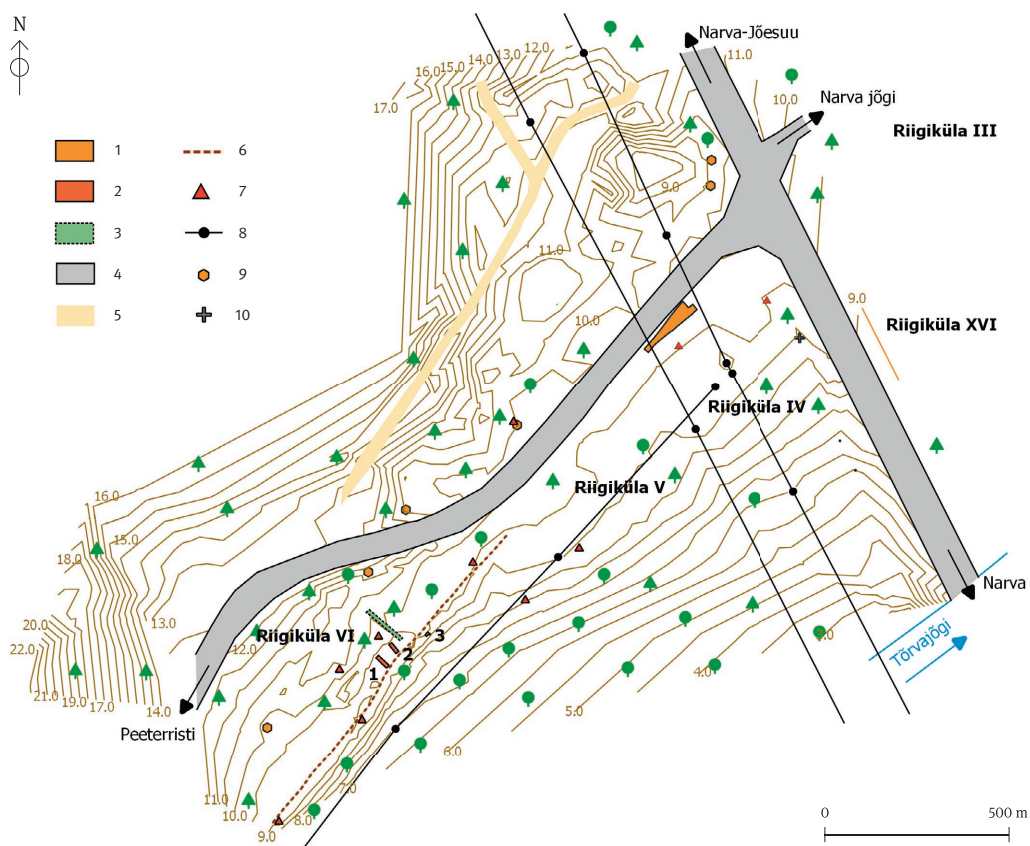


Fig. 2. General map of the archaeological fieldwork carried out at the Riigiküla IV settlement site. 1 – trench at the Riigiküla IV settlement site and a profile documented at the Riigiküla XVI settlement site (2020), 2 – trench at the Riigiküla VI settlement site (2019 and 2021), 3 – trench at the Riigiküla VI settlement site (2007–2008), 4 – asphalt road, 5 – gravel road, 6 – footpath, 7 – geodetic benchmark, 8 – electric line, 9 – gas pipeline, 10 – geodetic point.

Jn 2. Uuringuala üldpilaan Riigiküla IV asulakohal. 1 – 2020. a kaevand Riigiküla IV asulakohal ja dokumenteeritud profiil Riigiküla XVI asulakohal, 2 – 2019. ja 2021. a kaevandid Riigiküla VI asulakohal, 3 – 2007.–2008. a kaevand Riigiküla VI asulakohal, 4 – asfalttee, 5 – kruusatee, 6 – jalgrada, 7 – reeper, 8 – elektriliin, 9 – gaasitrass, 10 – geodeetiline kinnispunkt.

Map / Pilaan: Kerkko Nordqvist



Fig. 3. Archaeological excavations at the Riigiküla IV settlement site.

Jn 3. Väljakaevamised Riigiküla IV asulakohal.

Photo / Foto: Aivar Kriiska

base soil consisted of sand and pebbles. The total of 2111 artefacts, 1563 fragments of animal bones and seven burnt nutshell pieces were collected from the trench. A piece of wood charcoal and a fragment of burnt bone were analysed in the Poznań Radiocarbon Laboratory. The obtained dates were calibrated using the OxCal 4.4.2 programme (Bronk Ramsey 2020) with the IntCal 20 atmospheric curve (Reimer *et al.* 2020); all calibrated radiocarbon dates are given in this article with a 95.4% probability.

TRACES OF HUMAN ACTIVITY FROM THE IRON AGE AND HISTORICAL TIMES

Although most of the finds collected during the excavations are from the Stone Age, the site has also been used sporadically from the Iron Age until the second half of the 20th century. The northwestern wall of the excavation area showed the edge of a limestone road built in the middle of the 20th century, which runs under the current asphalt-paved Peeterristi – Kudruküla road (Fig. 4). In connection with the construction of this road and its repeated repair and other works, numerous layers of (mostly) sand had been spread over the site. Below them, the layer of dark brownish-grey, humus- and charcoal-rich soil was mixed by ploughing and contained both prehistoric and historical artefacts. The long period of ploughing



Fig. 4. A section of the north-western wall of the trench. 1 – mixed gravel, 2 – asphalt, 3 – sand filling, 4 – southern edge of the limestone road, 5 – sandy fillings, 6 – cultural layer of the Iron Age and historical period settlement site / layer mixed by ploughing (brownish-gray sand mixed with humus and pieces of charcoal), 7 – undisturbed Stone Age cultural layer (mostly reddish sand with pieces of charcoal), 8 – natural soil (reddish sand and pebbles).

Jn 4. Lõik kaevandi loodeseinast. 1 – killustik, 2 – asfalt, 3 – täiteliiv, 4 – paekividest tee lõunaserv, 5 – liivased tätekihid, 6 – raua- ja ajaloolise aja asulakoha kultuurkiht ja künnikiht (pruunikashall huumusega segatud söetükkidega liiv), 7 – algses asendis säilinud kiviaegse asulakoha kultuurkiht (enamasti punakas söetükikestega liiv), 8 – looduslik pinnas (punakas liiv ja veerised).

Photo / Foto: Aivar Kriiska

has created a clear boundary between the mixed layer and the undisturbed sandy Stone Age cultural layer, even if some plough-marks were detected on the surface of the latter. The abundance of finds, especially pieces of burnt clay and fragments of clay daub (281), suggests that in historical times there were buildings in the area of the Riigiküla IV site. Artefacts, such as pieces of white clay pipes (10), unglazed (17) and glazed (15) fragments of wheel-thrown pottery, fragments of industrial ware (four, including one with the stamp of the Kuznetsov factory) and pieces of tinder flint (one of Carboniferous and one of Cretaceous flint), as well as a bronze buckle can be dated to the 16th–19th century. The only dated burnt bone fragment (AI 8304: 135) also comes from the period 1474–1638 calAD.²

Some sherds of handmade pottery (at least three) can be dated to the Iron Age. However, they are too small to provide a more accurate date. In addition, a charcoal piece from a fireplace excavated (Fig. 5) in 2020 gave an age of 125–318 calAD.³ This information is compatible with that from the 1995 excavations, in which two fragments of striated and four other fragments of handmade pottery were found. Typo-chronologically, these fragments of striated pottery were dated to the pre-Roman Iron Age (Kriiska 1996a, 417).

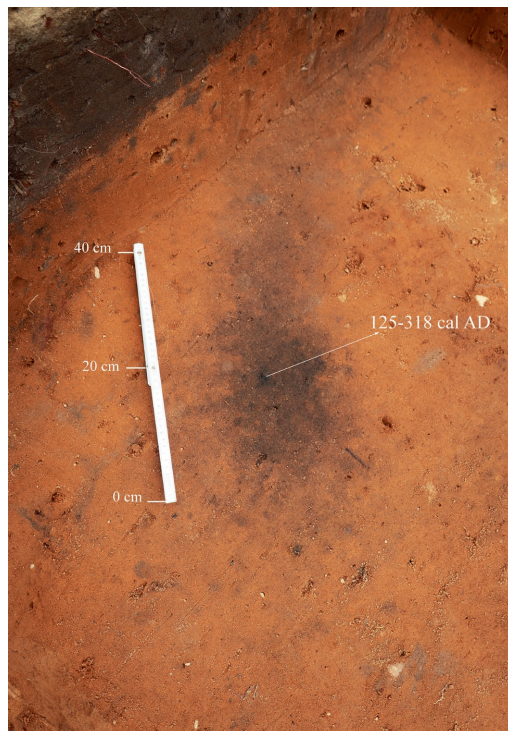


Fig. 5. Iron Age fireplace in the northeastern part of the excavation area.

Jn 5. Rauaaegne tulease kaevandi kirdeosas.

Photo / Foto: Aivar Kriiska

STONE AGE SETTLEMENT SITE

Of the 1550 Stone Age potsherds, 1548 can be classified as Narva Ware and two as Corded Ware; the basis for identifying the pottery types are published by Kriiska (1997) and Kriiska & Nordqvist (2021). Judging by the rim fragments, the potsherds of Narva Ware come from at least 23 different vessels, which mostly are made of clay mixed with crushed plants (1428 fragments) or shells (105 fragments). The proportion of crushed plant admixture can be slightly overestimated, since completely burnt out shell admixture is often difficult to distinguish from the traces left by crushed plants. In individual cases, crushed stone (3) and sand (1) were added to the molding mass. Crushed stone (3) as well as grog (9) can also be used with crushed plants. The degree of preservation of the shell admixture is an indicator of the firing temperature of the vessel: if the shell admixture is preserved in the composition of the potsherds, the firing temperature does not exceed 800–820 °C (Kalm 1996, 92). In many cases, however, the firing temperature was higher because only the imprints of the burned out shell admixture are visible.

² Poz-139148, 340±30 BP.

³ Poz-133224, 1835±30 BP.

The pottery was molded using the coiling technique, as coils and coil types can be determined in 177 cases. In 107 cases, N-coils (with an oblique connection, Fig. 6: 6) were registered, while in 69 cases U-coils (with a convex/concave connection, Fig. 6: 5) and in one case a U-H-coil (with a convex/concave and straight connection) were documented. The width of the U-coils is between 3.4 to 10.9 mm, with most coils being less than 10 mm wide. The N-coils are between 18.3 mm and 29.1 mm wide. Since the potsherds collected during the excavations of the Riigiküla IV settlement site are small and no bottom fragments of the vessels were found, it is impossible to reliably reconstruct their general shape. The vessels, however, were probably conical in shape with slightly curved walls, as seen in other cases where reconstruction was possible (e.g. Kriiska 1995a, 69). The wall thickness of the fragments varies between 2.7 and 13.5 mm, while most fragments are 6 to 8 mm thick. Differences in the wall thickness indicate that, in addition to large pots, smaller and thin-walled vessels were used. The thickness of the rims is usually smaller compared to wall fragments and the rim top is convex or round (18, Fig. 6: 1–3), only in rare cases is the rim top evenly thick and straight (1), thickened inward (1) or outward (3, Fig. 6: 4).

The surfaces of the vessels were either smoothed (Fig. 6: 1, 3, 6–9) or striated (Fig. 6: 2, 4–5). Of the 298 fragments in which both surfaces were preserved, 233 (78.2%) were smoothed and 20 striated on both sides, 29 smoothed on the outer surface and striated on the inside, and six striated on the outside and smoothed on the inner surface. Only 57 fragments were decorated (3.7% of all Narva pottery fragments). Most often, ornaments are found on the outer surface (52 fragments; Fig. 6: 2, 4, 6–7, 9) and/or on the rim (9; Fig. 6: 3–4), in one case decoration was found both on the outer and inner surfaces (Fig. 6: 8). Four decorative elements occurred: comb impressions (28; 45.9% of all decorative elements; Fig. 6: 6–7, 9), notches (20; Fig. 6: 2), pits (7; Fig. 6: 8) and grooves (6; Fig. 6: 3). Only in two cases two decorative elements were used on the same fragment (grooves and notches). The comb impressions were applied on the vessel in horizontal rows of vertical or diagonal stamps (Fig. 6: 6–7) and in two cases the so-called ‘stepping comb motif’ was used, which was made by holding one end of the comb stamp in place and moving the other forward (Fig. 6: 9). Only one fragment has a more complex ornament with notches arranged in two diagonal and one vertical row (Fig. 6: 2). On some potsherds (e.g. AI 8304: 2409, 2478, 2555) a layer of charred crust could be found on the inner surface, indicating that the vessel was used for cooking.

Altogether 108 Stone Age flint artefacts with the total weight of 53.9 g (Fig. 7) were obtained during the excavations. Three different raw materials – Carboniferous (99), Silurian (8) and Cretaceous (1) flint – were visually identified based on the authors’ personal experience with comparative material (including the reference collections of Silurian and Carboniferous flint at the Department of Archaeology of the University of Tartu). While Silurian flint is beige in colour, grey (39), beige (25), purple (20), pink (5), brown (4) and orange (1) were detected in Carboniferous flint. However, there are finds that combine beige and purple (1), grey and beige (1), grey and brown (1), brown and red (1) and beige, purple and pink (1). Some flint finds (10) are burnt, which is indicated by their ‘cratered’ surfaces and specific changes in colour and gloss (e.g. AI 8304: 2472). Of the flint finds, 92 are flakes (Fig. 7: 3) and 11 blades or blade fragments (10.7% of flakes and blades; Fig. 7: 4). Knapping technique could be determined for 41 artefacts (38% of flint finds): in 40 cases platform technique was used and in one case knapping was bipolar. In 22 cases a more precise analysis of the used technique could be performed: soft hammer percussion was detected in 19 cases (Fig. 7: 3) and hard hammer percussion in three cases. A total of five tools were found (4.6% of all flint finds),

all scrapers made of Carboniferous flint (Fig. 7: 1–2, 5). Of the four better preserved scrapers, three are side-end scrapers and one end scraper; the blades are both flat (3) and high (2) and either convex (4) or straight (1).

Altogether 69 quartz finds with a total weight of 85.9 g were found. Small quartz pebbles were often used for knapping (Fig. 8: 1). Of all quartz finds, 60 were flakes (Fig. 8: 1, 3–5) and 9 blades (Fig. 8: 2). Knapping technique could only be determined in 16 cases (23.2% of quartz finds) and was exclusively bipolar (Fig. 8).



Fig 6. Narva pottery sherds from the Riigiküla IV settlement site.

Jn 6. Riigiküla IV asulakohast leitud Narva tüüpi keraamika killud.

(AI 8304: 2343, 2401, 2627, 1784, 2498, 1877, 2430, 1795, 1909.)

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Fig. 7. Scrapers of Carboniferous flint (1–2, 5), a Carboniferous flint flake made in soft hammer technique (3) and a distal end of a Carboniferous flint blade (4).

Jn 7. Karboni tulekivist kōõvitsad (1–2, 5), pehmes lõhestustehnikas Karboni tulekivikild (3) ja Karboni tulekivist laastu distaalots (4).

(AI 8304: 2456, 1400, 1527, 1381, 1612.)

Photo / Foto: Aivar Kriiska, Irina Khrustaleva

Other lithic material (11) included three fragments of polished stone tools (possibly wood-chopping tools), two whetstones made of sandstone (Fig. 9: 2), two stone flakes, one hammerstone and three sandstone slabs with holes or deepenings (Fig. 9: 1, 3–4). Seven round or oval holes with a diameter of 3 to 5 mm were counted on the best preserved sandstone slab. Processing traces inside the holes and around their edges show that the holes were ground rather than drilled into the slab (Fig. 9: 5). So far there are no analogues for this group of finds in Estonia.



Fig. 8. Quartz flakes (1, 3–5) and a blade (2) made in bipolar technique.

Jn 8. Bipolaarselt lõhestatud kvartsist killud (1, 3–5) ja laast (2).

(AI 8304: 2104, 1100, 1332, 900, 765.)

Photo / Foto: Aivar Kriiska, Irina Khrustaleva

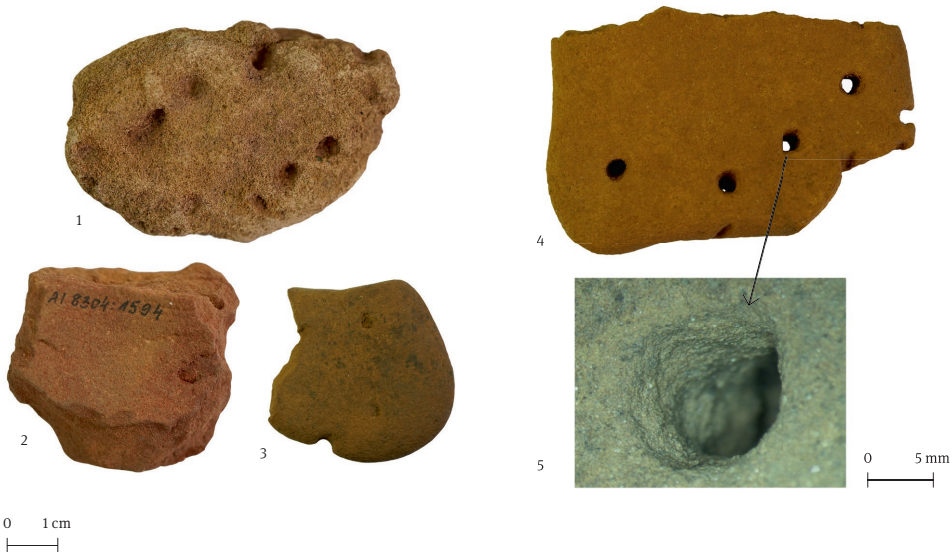


Fig. 9. Sandstone slabs with holes and pits (1, 3–4), a closeup (5) and a fragment of a whetstone (2).

Jn 9. Aukude ja lohkudega liivakivitükid (1, 3–4), suurendus (5) ja lihvimiskivi katke (2).

(AI 8304: 1482, 1594, 2557/2, 2557/1.)

Photo: / Foto: Aivar Kriiska, Irina Khrustaleva and Riina Rammo

DISCUSSION AND CONCLUSION

During the excavations of Riigiküla IV settlement site in July 2020, traces of activity from different prehistoric and historical periods were discovered. In the 16th–19th centuries buildings were located on or near the trench, and the site was repeatedly used as arable land. In addition, the finds indicate that a (peripheral) part of an Iron Age (ca. the 2rd–3rd century calAD according to radiocarbon dating), as well as a Corded Ware culture (2800–2000 calBC) settlement site overlaps with the excavation. However, most of the finds are associated with a settlement of Narva culture, which, in the absence of radiocarbon dates, can only be preliminarily dated to 5200–3900 calBC by typo-chronological dating.

The finds from the Narva period consist mainly of pottery fragments that are ‘ordinary’ in all parameters and are within the normal variation of the Narva Ware group of northern Estonia (Gurina 1967; Kriiska 1995a, 65–75; 1997). Even if some fragments (0.3%) contained mineral admixture, which is rare for the Narva pottery of this region, there is no reason to doubt their identification as Narva Ware, since the vessels are made of narrow clay coils with U-type connections and show a distinct similarity in the rim shape of the vessels. The presence of mineral admixtures in Narva Ware from the lower reaches of the Narva River has been documented earlier, although this is primarily a characteristic of the Narva Ware of the West Estonian islands (Kriiska 1997, 18). Potsherds with mineral admixture made up only 0.9% of the Narva Ware collected during the excavations of the Riigiküla IV settlement site in 1995 (Kriiska 1996a, 412) and the percentage of such fragments in other settlements is also very low (Gurina 1967, 72).

The assemblage of lithic material found at the Riigiküla IV site is modest and accounts for only 10.8% of all Stone Age finds. At the same time, it has a strikingly high proportion of flint, 61% of all knapped lithics (flint and quartz). The proportion of flint was also high (55.6% from flint and quartz finds) in the lithic material collected in 1995 (Kriiska 1996a, 415). The settlement site itself is located in an area without natural sources of flint. A small part of the flint comes from Silurian deposits or nodules broken out of them and scattered by the continental glacier in Quaternary sediments. Even so, the closest possible place to procure Silurian flint is about 100 km away near Lake Peipsi in eastern Estonia (Johanson *et al.* 2021, fig. 18.1). Most of the flint comes even further away and is associated with Carboniferous sources in western European Russia. Purple flint, analogous to the finds of the Riigiküla IV settlement, was found in the slightly younger settlement Riigiküla II (Comb Ware culture, ca. 3900–1750 calBC) and, according to its chemical composition, originates from the Upper Volga region (Galibin & Timofeev 1999, 15). Although such flint is likely present in Quaternary sediments west of its primary source due to transportation by the continental glacier, the material in any case originated several hundred kilometres from the Riigiküla IV site. In this respect, the material from Riigiküla IV differs from other Narva culture settlement sites in Estonia, the material of which has been analysed in detail. At these settlements (Vihasso III and Kroodi in northern Estonia, Ruhnu II on Ruhnu and Kõpu IA and Kõpu VII/VIII on Hiiumaa), all of which are located in coastal areas without or only with poor sources of flint, the percentage of flint does not exceed 19.2% and Silurian flint predominates (Kriiska 1997, 9, 14; Kriiska & Lõugas 1999, tab. 2; Kriiska & Saluäär 2000, 22). The only parallel is the settlement of Kääpa in south-eastern Estonia, but the material was only superficially analysed and statistical data is not available. In any case, flint dominates over the quartz in Kääpa (Jaanits *et al.* 1982, 63) and includes material coming from Carboniferous deposits. Thus, it seems that the use of Carboniferous flint was characteristic of the people of the Narva culture in

eastern Estonia, but the existing data are insufficient to firmly establish how widespread this phenomenon was in space and time.

Only very superficial conclusions can be drawn about the use of the part of the site excavated in 2020. Even if pottery fragments outweigh the assemblage, it must be borne in mind that the low firing temperature and the use of organic admixture in the molding clay mass likely mean that only a part (perhaps even a smaller part) of pottery survived, mostly as very small fragments, and the rest of the material has disintegrated into indistinguishable clay particles due soil moisture and freeze-thaw cycles. A similar process was observed by the authors in the experimental manufacture of clay vessels: pots, fired in low temperature and left in the open air, crumbled within a year or two, and some fragments disintegrated completely under the influence of moisture. Regardless of this, a relatively large number of pottery sherds were found at the excavation area, indicating most probably a long period of use of this place.

The collected assemblage also includes very small finds, since the soil was sieved with hand-held sieves. Nevertheless, the proportion of small flint and quartz fragments remains small and they do not form clear areas of concentration. This leads us to the conclusion that stone knapping was not carried out in this part of the settlement site. Despite the relative thickness of the cultural layer, there were no Stone Age fireplaces or pits in the soil either. Supported by the lack of clear find concentrations, it can be concluded that there were no dwellings in this area. In this respect, the area studied in 2020 is very different from the adjacent Riigiküla I settlement site, where the remains of three Narva culture pit-houses were excavated (Khrustaleva *et al.* 2020, 13–14). It also differs from the part of the Riigiküla IV settlement site excavated in 1995, where one fireplace with stones and two stoneless hearths were discovered in an area of 50 m² (Kriiska 1996a, 411). This essentially leaves us two options. Either the areas excavated in 1995 and 2020 belong to two separate and non-contemporaneous settlement sites with different functions, or they represent parts of the same settlement site area, but were used for completely different purposes: while the area of 1995 represents the main living space with fireplaces, the area studied in 2020 had a different function and, possibly, was already located along the outer perimeter of the settlement.

ACKNOWLEDGEMENTS

This study was supported by the research project PRG243 of the Estonian Research Council, the base financed project PHVAJ20919 of the Institute of History and Archaeology of the University of Tartu and OÜ Arheograator. The authors are grateful to all participants of the Riigiküla 2020 expedition, and to Dmitry Suslov of OÜ N&V for pleasant collaboration.

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ARHEOLOOGILISED VÄLJAKAEVAMISED RIIGIKÜLA IV ASULAKOHAL KIRDE-EESTIS

Aivar Kriiska, Kerko Nordqvist, Aija Macāne ja Irina Khrustaleva

Narva jõe alamjooksul Kirde-Eestis (jn 1) paikneval Riigiküla IV asulakohal toimusid 2020. a suvel seoses Narva–Narva-Jõesuu–Hiiemetsa ja Peeterristi–Kudruküla tee ristmikute rekonstrueerimisega arheoloogilised päästekaevamised 47 m² suurusel alal (jn 2–3). Kaevati u 5 cm paksuste korristena ja pinnas sõeluti 4–5 mm silmaga individuaalsete käsisoeltega, kõik leiud dokumenteeriti kolmemõõtmeliselt horisontaaltäpsusega ±5–10 cm. Kuni 1 m paksune puutumatu kiviaegne kultuurkiht paiknes hilisema inimtegevuse käigus segatud kuni 25 cm paksuse tumeda sõese orgaanikarikka liiva ja sellel lasuvate kuni 50 cm paksuste liivaste täitepinnaste all. Koguti 2111 esemeleidu, 1563 loomalu fragmenti (enamus põlenud) ja 7 söestunud pähklikoore tükki.

Kuigi kaevamistel saadud leiuainesest valdav osa on kiviaegne, on sama kohta kasutatud korduvalt ka rauaaegast kuni 20. saj teise pooleni. Kaevandi loodeseinast oli näha praeguse asfalteeritud Peeterristi – Kudruküla maantee all tõenäoliselt 20. saj keskel rajatud paekividest tee serv (jn 4). Kiviaja kultuurkihil lasuv pruunikashall eriaegseid leide sisaldav kiht osutab, et ala oli pikka aega kasutusel põlluna, kuid seal (või läheduses) on mingil ajal paiknenud tõenäoliselt ka mingi ehitis. Leitud esemed, sh valged savist piipude tükid, glasuurimata ja glasuuritud kedra-keramikad, vabrikukeraamika killud, tulelõõmise tulekivid jne võib dateerida vahemikku 16. kuni 19. saj. Seda ajajärku dateerib ka üks põlenud luukild (AI 8304: 135), mis pärineb radiosüsiniku analüüsi alusel 95,4% tõenäosusega vahemikust 1474–1638 AD. Üksikud käsitsikeraamika killud on rauaaegsed. Rauaaegne vanus – 95,4% tõenäosusega 125–318 AD – saadi ka ainsast väljakaevatud tuleasemest (jn 5) kogutud söest.

Kiviaja asulakohaga seonduvaid 1550 savinõukildu, neist 1548 puhul on tegu Narva (jn 6) ja 2 juhul nõorkeraamika kildudega. Servatükkide järgi otsustades pärinevad Narva keraamika killud vähemalt 23 erinevast nõust. Need on olnud valmistatud linttehnikas enamasti taimse massiga, harvem teokarbiipuruga ja üksikjuhul liiva või kivipuruga segatud savist. Nõude pinnad on olnud kas silutud või riibitud. Ornamenteeritud on 3,7% kildudest. Esineb nelja ornamendi elementi: kammivajutised (sh nn „sammuva kamm motiiv“), täkked, lohud ja sooned. Kiviaegseid tulekivileide saadi 108, sh 92 kildu, 11 laastu või laastu katket ja 5 kõõvitsat (jn 7). Need on pärit enamasti Karboni (99), harvem Siluri (8) ja ühel juhul Kriidi lades-

tustest või sealt väljakantud kamakaid sisaldavatest Kvaternaari setetest. Tulekivi on lõhestatud enamasti pehmes, harvem kõvas ning ühel juhul ka bipolaarses tehnikas. Kvartsileide saadi 69, sh 60 kildu ja 9 laastu (jn 8), kõikidel määratud juhtudel on need lõõdud bipolaarses tehnikas. Muudest kiviesemetest leiti veel mõned lihvitud raieriistade tükid, lihvimiskivide katked ja kivikillud, üks löögikivi ning kolm aukude või lohudega liivakivi (jn 9).

Radiosüsiniku dateeringute puudumisel saab Narva kultuuri aegse asutusetapi esialgu dateerida vaid tüpokronoloogiliselt vahemikku 5200–3900 aastat eKr. Kivist leidude hulk on tagasihoidlik, vaid 10,8% kiviaegsest leiuainesest. Samas on selles silmatorkavalt suur tulekivi osakaal (61% tulekivi- ja kvartsileidudest). Asulakoht asub piirkonnas, kus looduslik tulekivi puudub. Lähim võimalik koht Siluri tulekivi hankimiseks on umbes saja kilomeetri kaugusel Ida-Eestis ja Karboni tulekivi hankimiseks rohkem kui paarisaja kilomeetri kaugusel Venemaal. Tulekivi, ja eriti Karboni tulekivi, rohkuselt erineb Riigiküla IV asulakoht kõigist seni Eesti alal uuritud Narva kultuuri asulakohtadest, mille leiud on üksikasjalikult analüüsitud. Neis on tulekivi osakaal tulekivi ja kvartsileidudest vaid kuni 19,2% ning tulekivist enamik on pärit Siluri ladestustest. Ainsa paralleeli Karboni tulekivi kasutamisele pakub Kagu-Eestis asuv Kääpa asulakoht, kuid selle leiuaines on kivimikasutuse võtmes seni analüüsimata. Niisiis tundub, et Karboni tulekivi kasutamine oli omane just idapoolses Eestis elanud Narva kultuuri inimestele, kuid selle ajalised ja ruumilised üksikasjad jäävad esialgu välja poole olemasoleva ainese seletusvõimetest.

Vaatamata kultuurkihi suhtelisele tüsedusele, ei paiknenud kaevandi alal ühtegi kiviaegset tuleaset ja selgemat pinnasesüvendit ning puudusid ka leidude kontsentratsioonialad. Seetõttu võib arvata, et sellel kohal ei ole paiknenud elamu. Nii eristub 2020. a uuritud ala väga selgelt naabruses asuvast Riigiküla I asulakohast, kust on välja kaevatud koguni kolm Narva kultuuri ajast pärit süvendpõhjalist elamujäänust. Kuid see eristub ka 1995. a avatud (kaevandite kogupindala 50 m²) Riigiküla IV asulakoha osast, kust kaevati välja üks kividega ja kaks kivideta tuleaset. Nii jääb üle kaks tõlgenduse võimalust. Esiteks võib tegemist olla 1995. a uuritud alast teistsuguse ja eriaegse elupaigaga; on ka teine võimalus, et see on samaaegne, tuleasemetega põhilise elutsooni tagune, kuid teistsuguse kasutusviisiga ala.