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2000. aasta välitööde tulemused

**ARHEOLOOGILISED
VÄLITÖÖD
EESTIS**

**ARCHAEOLOGICAL
FIELD WORKS
IN ESTONIA**

2000

Koostanud ja toimetanud
Ülle Tamla

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ARCHAEOLOGICAL FIELD WORK ON STONE AGE SETTLEMENT SITES OF SW ESTONIA

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INTRODUCTION

SW Estonia is the region which has several times influenced the Stone Age studies in Estonia. It started already at the beginning of the 20th century when several members of the Pärnu Society for Antiquities took active interest in collecting stray finds, published the material and developed scientific contacts with the researchers in neighbouring countries (Kriiska 1997). A new surge in the research of the Stone Age of this region took place in late 1960s and the first half of the 1970s in connection with the discovery and excavation of the Early Mesolithic settlement site of Pulli (Jaanits, L. & Jaanits, K. 1975; 1978). Since the middle of 1990s the author of the present paper has carried out archaeological field work in SW Estonia. Eight Stone Age settlement sites have been discovered (Lemmetsa I, II and Malda on the lower reaches of the Audru River, Metsääre I, II and III on the middle reaches of the Reiu River, and Sindi-Lodja I and II on the lower reaches of the Pärnu River (Fig. 1). In 2000 field work was carried out in all these regions, and though barely inventory trips or small-scale excavations, they provided valuable information. In the present paper the results of the investigation of the sites of Sindi-Lodja and Metsääre are published.

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MOUTH OF THE REIU RIVER ON THE LOWER REACHES OF THE PÄRNU RIVER

The Stone Age of the lower reaches of the Pärnu River, especially the mouth area of the Reiu River has been intermittently studied for a hundred years already. Eduard Glück (1866–1918), the member of the Pärnu Society for Antiquities and later an active amateur archaeologist, was the man who found the first Stone Age artefacts on the banks of the Pärnu River near the mouth of the Reiu River in 1901. A couple of years later another large collection was started at the same place by the amateur archaeologist and undertaker Friedrich Rambach

(1853–1916) (Indreko 1932, 283). These two Baltic Germans founded the rich collection consisting mainly of bone and antler artefacts (PäMu 1/A 1–501, PäMu 4/A 811–1487). Most of the finds were described and published in the publications of the Society (see Kriiska 1997). In the vicinity of the main location of the finds, at the mouth of the Reiu River, excavations were carried out in 1905 – without any success (Frank 1906). Later, until the World War II, Eduard Bliebernicht (1902–1943), the brewer and the member of the Society for Antiquities continued the collecting of artefacts (PäMu 5/A 1488–1804).

In 1920s–1930s Richard Indreko also interested himself in the discussed area. Still a student, he catalogued the finds of the Rambach collection (Indreko 1926) and later also the Stone Age finds collected by Johan Pajo on the lower reaches of the Pärnu River (Indreko 1932). In 1929, 1938 and 1939 Indreko carried out brief

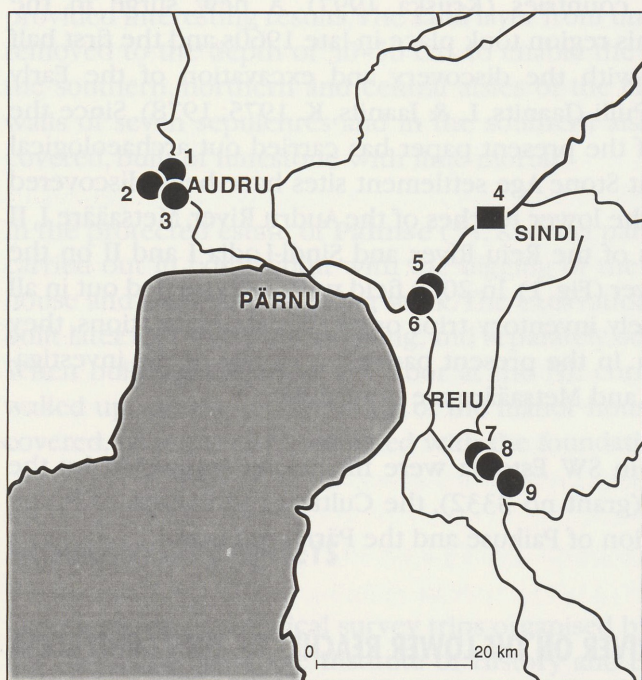


Fig. 1. Stone Age settlement sites of SW Estonia. Rectangle – found before 1996, circle – found after 1996. Settlement sites: 1 - Lemmetsa II, 2 - Malda, 3 - Lemmetsa I, 4 - Pulli, 5 - Sindi-Lodja II, 6 - Sindi-Lodja I, 7 - Metsaääre I, 8 - Metsaääre II, 9 - Metsaääre III.

Joon. 1. Edela-Eesti kiviaja asulakohad. Ristkülik – leitud enne 1996. aastat, ring – leitud peale 1996. aastat. Asulakohad: 1 - Lemmetsa II, 2 - Malda, 3 - Lemmetsa I, 4 - Pulli, 5 - Sindi-Lodja II, 6 - Sindi-Lodja I, 7 - Metsaääre I, 8 - Metsaääre II, 9 - Metsaääre III.

archaeological inventories and small-scale trial excavations. While the first trip yielded no discoveries (Indreko 1929), several finds (AI 3662: 1–6) were discovered in the mixed layers near the river during the second trip (Indreko 1939). His last trip took him, together with Bliebernicht, to the new site of discovery on the Reiu River, about 400 m upstream from the mouth (finds AI 3802: 2), but no cultural layer was discovered yet (Bliebernicht 1939b). Stray finds (AI 3801: 1–10) were collected from the region in question, this time from the banks of the Pärnu River, also the next year (Bliebernicht 1939a).

Although a stray find of a boat-shaped stone axe (AI

4152) was discovered in Sindi-Lodja in the 1950s, the next field work was carried out in the region only in 1969. Then Lembit Jaanits undertook a short inventory trip to Sindi-Lodja during his excavations at Pulli. He collected stray finds from several sites on the Pärnu River (AI 6168: 1–4; Kriiska 1999). In 1974 schoolboys from Pärnu found fragments of comb-marked pottery (AI 4753) about 1 km from the mouth of the Reiu River, but unfortunately Kaarel Jaanits could not locate any cultural layer during his inventory trip in the same year (Jaanits 1974).

Since 1995 several inventory trips have been undertaken in the region and stray finds (PäMu 15132/A 2530) have been collected from the site which, on the basis of the results of the fieldwork in 2000, has been determined as the site of discovery B (Fig. 2). In autumn 2000 Lauri Mikkelsaar, the student of the Sätevaka Humanitarian Gymnasium, helped to discover two Stone Age cultural layers which were named Sindi-Lodja I and II, according to the order of their discovery. Finds were also collected from three more sites on the banks of the Pärnu River (sites A–C, Fig. 2).

SINDI-LODJA I

The site is located on the left bank of the Pärnu River, some 20 or 30 m from the mouth of the Reiu River (Fig. 2). There the river has washed a cavity in the bank. From the sediments in the cavity the first stray finds came to light when cleaning the bank, and a 20 cm buried layer of organic matter was discovered. Below that was a 17–18 cm layer of sand upon thick blue clay. Upon the layer of organic matter was a thin vein of beige sandy loam below grayish sands with thin veins of organic matter in the lower part. A trial excavation was made, measuring 2 × 1.5 m, and traces of human activity were established in the buried layer of the organic matter. It contained flint, animal bones and pieces of charcoal. The cultural layer becomes thinner towards the river and is, at least partly, gradually sunk, but not mixed. In the lower end of the trial excavation it was located at the absolute altitude of 0.7 m and in the higher part at 1.7 m. The C¹⁴ analysis of the charcoal screened from the layer gave the result 8070±70 C¹⁴ years (Ua-17013), which is, with the probability of 95.4 %, 7350–6700 cal BC (calibrated into solar years with the computer programme CAL40DATA OxCal v.2.18 cub r:4 sd:12 prob[chron]). Besides that river sediments (mainly sand but also some clay below it) were removed from an area 8 m long and 1.4 m (at the steep bank) to 2.5 m wide. Most of the finds (besides Stone Age finds also fragments of glass and bricks) were collected from the sand, one artefact and a bone were also discovered in the clay.

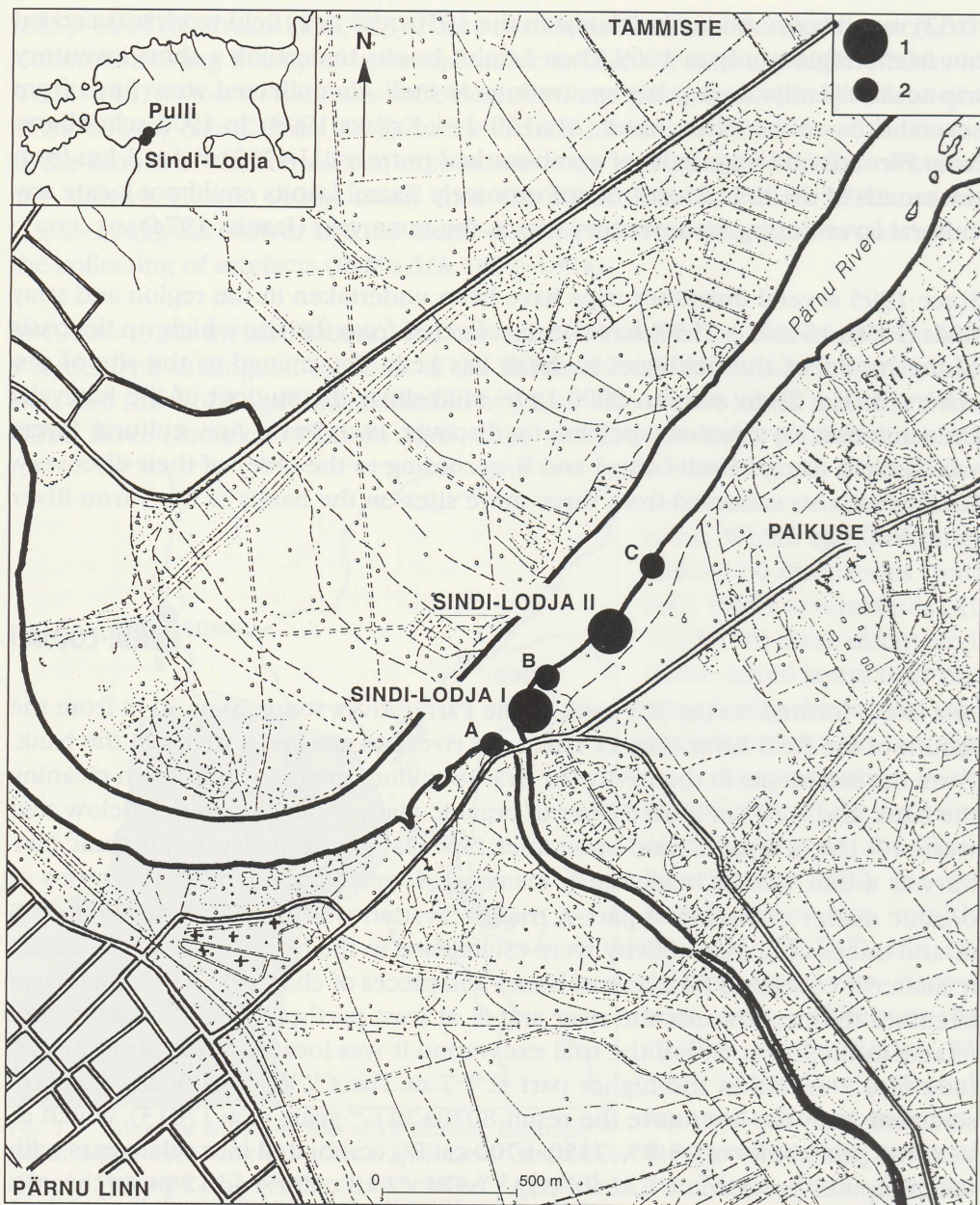


Fig. 2. The Stone Age settlement sites of Sindi-Lodja (1) and areas with high concentration of finds (2) in the riverbank sediments.

Joon. 2. Sindi-Lodja kiviaja asulakohad (1) ja leiukontsentratsioonialad (2) jõe kaldasetetes.

In total, 42 artefacts and 8 animal bone and antler fragments were found from the I settlement. Five flint fragments (1.2×1.0 cm up to 4.3×3.6 cm), and one processed and one plain animal bone come from the in situ cultural layer. The rest were found from the layers redeposited by the river. Besides Stone Age artefacts, a Swedish $\frac{1}{4}$ öre from 1632 (identified by M. Kiudsoo) was found from the sediment layer, and a potsherd, presumably hand-moulded, from the topmost modern humus layer. Alongside with the bone point (Fig. 4: 2), a pierced disc of antler (Fig. 4: 1), a polished stone axe (Fig. 5: 2), an adze (Fig. 5: 1) and few other artefacts (Tab. 1), the majority of finds consists of flint. Among the latter, flakes (17 in total, 1.4×1.2 up to 4.3×3.6 cm) prevail, but one blade and two flake cores (with the height of 2.5, 2.6 and 4.0 cm) of flint were also found. The flint is mainly beige and gray, of local origin. In seven cases (two cores, two scrapers, two flakes and one blade), the material is imported black flint of good quality. Most

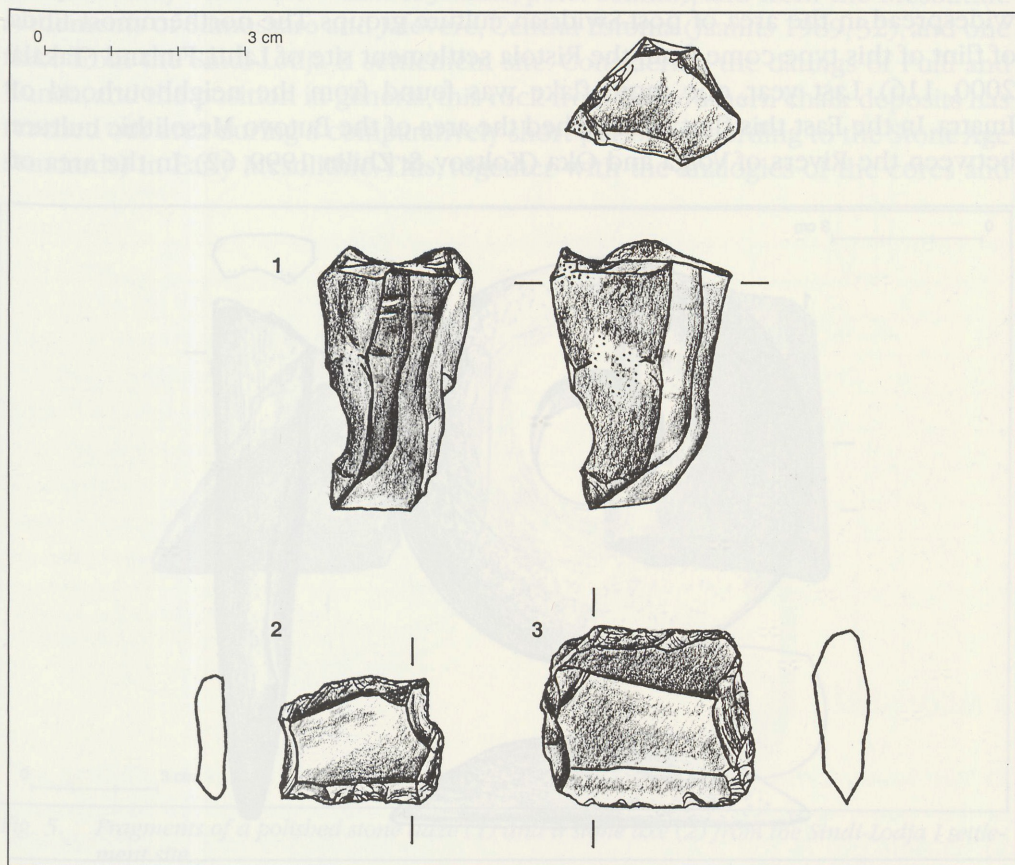


Fig. 3. Flint core (1) and scrapers (2-3) from the Sindi-Lodja I settlement site.
 Joon. 3. Tulekivist nukleus (1) ja kõõvitsad (2-3) Sindi-Lodja I asulakobalt (PäMu 15260/
 A 2553:1, 5, 6).

interesting of these is the blade core of black flint, with one striking platform (Fig. 3: 1). Only one such core has been previously found in Estonia. This core (AM 323, height 8.7 cm) was discovered accidentally in 1931 when excavating gravel from the place where later the Early Mesolithic settlement site of Pulli was discovered. There are three scrapers: two of them are of black and one is of gray flint ($2.5 \times 2.0 \times 0.5$ cm, $4.6 \times 2.7 \times 1.5$ cm, $3.2 \times 2.9 \times 1.1$ cm). The triangular specimen has the scraping edge on the longer side, and the two trapezoid scrapers have scraping edge over the whole perimeter (Fig. 3: 2-3). The closest similarities to the trapezoid scrapers can be found among the finds from the settlement site of Pulli.

The artefacts and refuse of black flint, found from the layers redeposited by the river near the Sindi-Lodja I settlement, and the few blades of black flint collected from the gravel excavated from the bottom of the Pärnu River rank this region third in Estonia by the number of Mesolithic finds of black flint. This rock is quite widespread in the area of post-Swidrian culture groups. The northernmost finds of flint of this type come from the Ristola settlement site of Lahti, Finland (Takala 2000, 116). Last year, one more flake was found from the neighbourhood of Imatra. In the East this flint has reached the area of the Butovo Mesolithic culture between the Rivers of Volga and Oka (Koltsov & Zhilin 1999, 62). In the area of

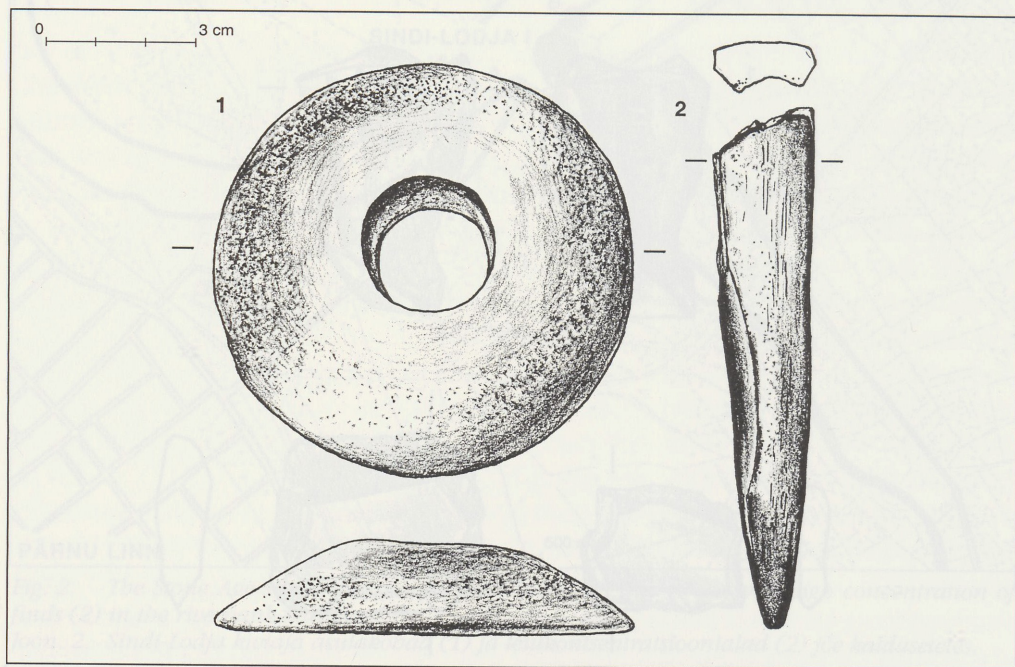


Fig. 4. Antler disc (1) and bone point (2) from the Sindi-Lodja I.

Joon. 4. Sarvest ketas (1) ja luuteravik (2) Sindi-Lodja I asulakobalt (PäMu 15260/ A 2553:4, 1).

the Kunda Culture black flint has been found, outside the limits of its original zone of occurrence, also in Latvia, from the Zvejnieki II settlement site (Jaanits 1989, 13). The precise source of this rock is not clear, though its natural zone of occurrence is supposed to be in South Lithuania, North Byelorussia and West Ukraine (Jaanits et al. 1982, 32; Koltsov & Zhilin 1999, 62).

In Estonia the finds of black flint have been most numerous (ca 1500 pieces) among the material from the Early Mesolithic settlement site of Pulli (Jaanits 1989, 32). Besides the mentioned two sites of discovery, artefacts and refuse of black flint have also been found in quite great numbers from the Mesolithic settlement site of Lepakose, Central Estonia, where it has been assumed to be Early Mesolithic (Jaanits 1989, 15). A few flakes and blades, but not any artefacts of secondary processing, have also been found from Kunda Lammasmägi, North Estonia (hitherto only one flake – Kaarel Jaanits, pers. comm.), and from the Mesolithic settlements of Siimusaare and Jälevere, Central Estonia (Jaanits 1989, 32), and one flake from the Sindi-Lodja II settlement site. Considering the datings of Pulli and Kunda, and the position in general, this rock from the southern chalk deposits has reached our area during a comparatively short period (according to the Stone Age standards) in Early Mesolithic. This, together with the analogies of the cores and

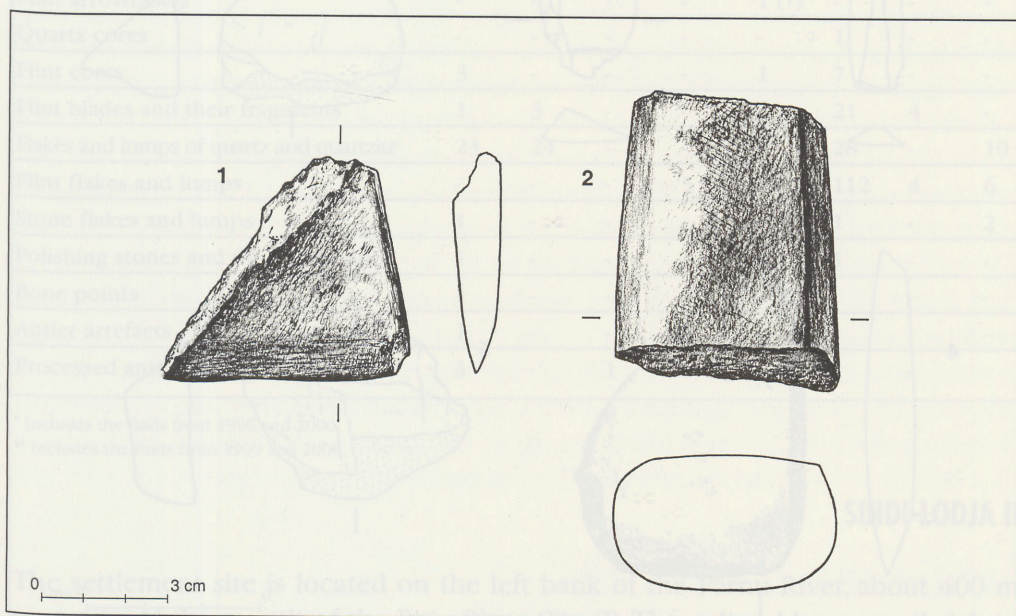


Fig. 5. Fragments of a polished stone adze (1) and a stone axe (2) from the Sindi-Lodja I settlement site.

Joon. 5. Libvitud kivitalva (1) ja kivikirve (2) katkendid Sindi-Lodja I asulakobalt (PäMu 15260/ A 2553:2, 5).

scrapers, is the basis for the opinion that an Early Mesolithic settlement site has been located near the mouth of the present-day Reiu River. Being 5 km westwards from Pulli, Sindi-Lodja became uninhabitable still earlier, owing to the transgression of the Ancylus Lake. The more accurate dating of the find complex and its connection with the mouth of the Reiu River require further archaeological field work.

While the finds from the layer were dated, by the C^{14} method, to the end of Early Mesolithic, the dating of the material collected from the river sediments, both this year and earlier, is quite complicated. Deciding by the typology of the artefacts, several stages of the Stone Age are represented here: Late Mesolithic as well as the Neolithic cultures of Typical and Late Comb Ware and Corded Ware (Äyräpää 1952, 84; Indreko 1956; Jaanits 1977; Kivimäe et al. 1998, 34–35). We hope to find the solution to these problems during the excavations in 2001. According to

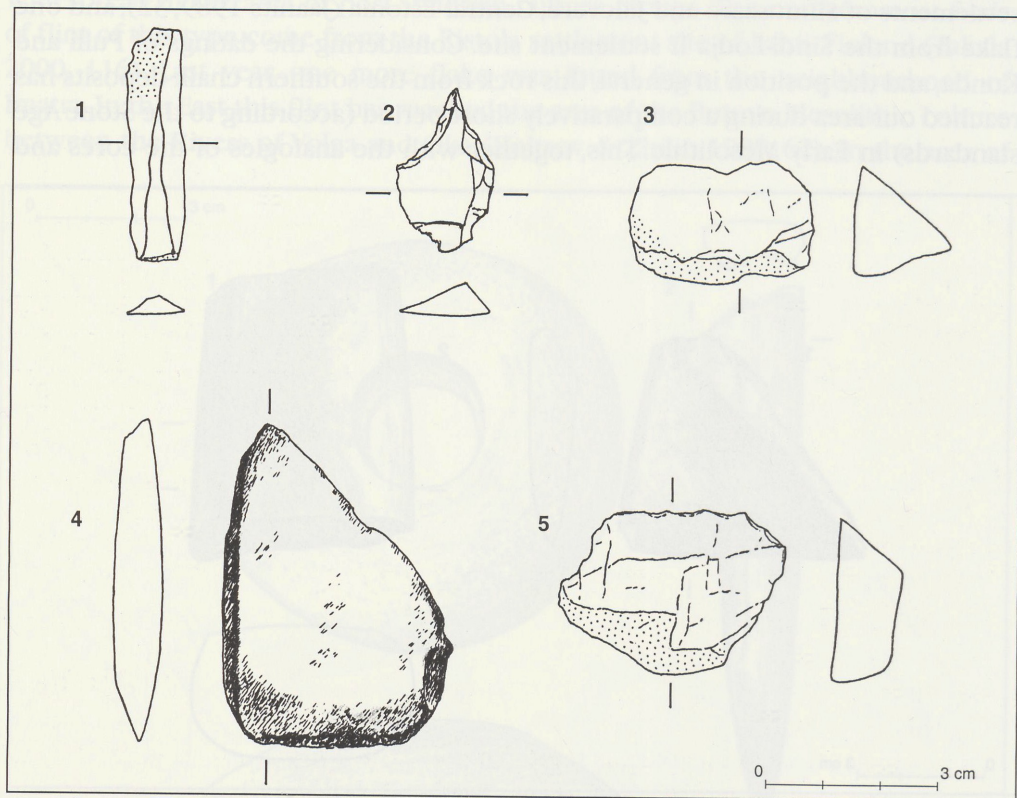


Fig. 6. Finds from the Metsäaäre I settlement site. 1 - flint blade, 2 - scraper burin of flint, 3 - flint scraper, 4 - stone adze, 5 - quartz core.

Joon. 6. Leide Metsäaäre I asulakohalt: 1 - tulekivilaast, 2 - tulekivist kõõvits-uurits, 3 - tulekivist kõõvits, 4 - kivitalb, 5 - kvartsist nukleus (PäMu 15211/ A 2537:2, 2, 1, 1, 2).

Lembi Lõugas, the animal bones belong to elk, beaver and dog. From site A bones of wild boar and pike were also found.

Table 1. Finds from the settlement sites of SW Estonia, investigated in 2000.

Finds	Sindi-Lodja I	Sindi-Lodja II site A	Sindi-Lodja, site B*	Sindi-Lodja, site C	Sindi-Lodja,	Metsaääre I **	Metsaääre II	Metsaääre III
Typical Comb Ware	-	-	-	1	-	-	-	-
Comb Ware (?)	-	-	-	-	-	-	-	5
Stone axes and their fragments	1	-	-	-	-	-	-	-
Stone adzes and their fragments	1	-	-	-	-	2	1	-
Fragments of polished stone artefacts	1	1	-	-	-	-	-	-
Scrapers of quartz	-	-	-	-	1	-	-	-
Flint scrapers	3	-	-	-	1	10	1	-
Scraper burins of flint	-	-	-	-	-	1	-	-
Flint arrowheads	-	-	-	-	1 (?)	-	-	-
Quartz cores	-	-	-	-	-	1	-	-
Flint cores	3	-	-	-	1	7	-	-
Flint blades and their fragments	1	3	-	-	3	21	4	-
Flakes and lumps of quartz and quartzite	23	24	-	-	-	28	-	10
Flint flakes and lumps	-	-	-	5	44	112	4	6
Stone flakes and lumps	1	-	-	-	-	1	-	2
Polishing stones and their fragments	1	-	-	-	-	1	-	-
Bone points	1	-	-	-	-	-	-	-
Antler artefacts	1	-	-	-	-	-	-	-
Processed animal bones	3	-	1	1	-	-	-	-

* Includes the finds from 1996 and 2000.

** Includes the finds from 1999 and 2000.

SINDI-LODJA II

The settlement site is located on the left bank of the Pärnu River, about 400 m upstream of the mouth of the Reiu River (Fig. 2). The cultural layer – soil rich in organic matter and containing finds and animal bones – lies at the altitude of 4.5 m, below more than 5 m of sands. We succeeded in finding this cultural layer, up to 20 cm thick, in two places in the profile of the riverbank. In November 2000

Tanel Moora carried out borings and established the presence of a cultural layer, ca 5 cm thick, also at the distance of 10–15 m from the bank. There it lay at the depth of about 5.5 m from the surface, buried by sand layers of different origin (Tanel Moora, pers. comm., 17.11.2000). Below the mentioned cultural layer, marine sands extended to the depth of 8.2 m, followed by layered sediments, 40–50 cm thick; varved clay was not reached in this boring.

25 artefacts were found from the cultural layer: 22 flint flakes (0.6×0.4 cm up to 2.2×1.5 cm), two flint blades (length 1.4 cm and 1.6 cm and width 0.7 cm and 0.6 cm, respectively) and one fragment of a flint blade, as well as 8 fragments of animal bones and a nutshell. Abreast with the settlement site, two flint flakes and a fragment of a polished stone artefact were found from the sediments of the riverbank. Deciding by the finds and the location of the cultural layer, the settlement belongs to the Mesolithic, either to the final stage of the Ancylus Lake or the beginning of the Litorina Sea.

SITES A – C

Lauri Mikkelsaar collected finds from three more sites on the banks of the Pärnu River (Fig. 2). A processed bone and two animal bones were found at the mouth of the Reiu River, on the Pärnu side (site A). Two flint flakes, two lumps of flint and a processed animal bone were found on the bank of the Pärnu River, 150 m NE of the Sindi-Lodja I settlement site (site B). From the latter the author of the present paper found in 1996 also a flint flake and a potsherd of the Typical Comb Ware (PäMu 15132/A 2530). Most numerous were the artefacts from the site C, 250 m NE of the Sindi-Lodja II settlement. 50 finds were collected there, mostly flint flakes (0.7×0.7 cm up to 4.1×4.0 cm) and flint blades. Two of the blades are single-ridged and one is three-ridged (length 2.2–3.7 cm, width 0.8–1.2 cm). A small flake core with several striking platforms (1.8 cm high) and a side scraper of a flake of irregular shape ($2.1 \times 1.9 \times 0.5$ cm) were also found. Among the finds there is a blade fragment with slight traces of retouch, which might be the tang part of a post-Swidrian arrowhead. The flint is gray, of local origin.

MIDDLE REACHERS OF THE REIU RIVER

The inventory trips in the district started in 1999. In spring 1999 Ulla Saluäär, the archaeologist of the Pärnu Museum and the author of the present article discovered three Stone Age settlement sites in the ploughed fields of the village of

Metsaääre. Later, and also in 2000, material suitable for dating and comparison has been collected from the settlement sites on several occasions.

METSAÄÄRE I

The settlement site is located in the fields of the Ülejõe farm of Metsaääre village, on the higher terrace on the bank of the Reiu River. The extent of the cultural layer has not been established yet but finds have been collected from a 100 m long and 20 m wide field strip. Since the area is being cultivated, the cultural layer has been mostly (down to 45 cm) mixed by ploughing. 151 finds of flint, 29 of quartz and 3 finds of other rocks, as well as 8 animal bones (Tab. 1) have been collected in the course of inventory trips. The flint is of local origin, medium quality and gray or beige colour. Flint flakes (112; 0.6×0.6 cm up to 4.0×3.7 cm) and quartz flakes (28; 1.0×0.4 up to 3.1×2.5 cm) prevail among the finds. Flint blades are also quite numerous (17; length 1.1–3.0 cm, width 0.5–1.1 cm) as well as the fragments of blades (4). Ten of the blades (Fig. 6: 1) are single-ridged, four are ridgeless, two are double-ridged and one is even four-ridged. Among the rest of the finds cores are quite numerous. Of the seven flint specimens five are flake cores and one is blade core (height 2.5–4.0 cm). The flake cores are of irregular shape and with several striking platforms, while the blade cores have a single platform each. One fragment of a bipolar flake core (Fig. 6: 5) is of quartz (height 3.7 cm).

Remarkable is the share of the artefacts with secondary processing (6.1%). Their number is 11–10 scrapers and one scraper burin. The flake scrapers ($1.4 \times 1.1 \times 0.5$ cm up to $3.5 \times 2.1 \times 2.0$ cm; Fig. 6: 3) are trapezoid (4), triangular (2), oval (1) or irregular-shaped (3). Six specimens are side scrapers and four are end scrapers. Scraper burin (Fig. 6: 2) is made of a flake of irregular shape. The convex side scraper is combined with a retouched dihedral burin. Besides these, one stone adze and a presumable fragment of a stone adze. The first is double-edged and polished on the whole surface ($5.8 \times 4.2 \times 1.1$ cm). The finds and the absence of pottery date the site to the Mesolithic, most likely its second half.

METSAÄÄRE II

This settlement site lies in the field of Vabriku farm of Metsaääre village, on the riverbank terrace, a couple of hundreds of metres NE of the I settlement site. The extent of the cultural layer is not established yet but the finds were collected

from a narrow strip of a field about 100 m long. The finds are few (Tab. 1): a stone adze, flint flakes (up to 3.0×1.5 cm) and blades, and one flint scraper. The latter is of a flint flake, oval side and end scraper ($1.9 \times 1.7 \times 0.6$ cm). The finds, and the absence of pottery date the site to the Mesolithic, and we may presume that, likewise the I settlement, it belongs to the second half of the period.

The find complex of the Mesolithic settlement sites of Metsaääre is clearly discernible from other coastal Stone Age settlements where quartz dominates over flint in the material used for tools. In West Estonian Neolithic settlements with most representative finds, the share of quartz in all quartz and flint finds is 53.9–87.6% (Kriiska & Saluäär 2000, 36), unlike the inland find complexes, where in Central Estonian Mesolithic settlements at the Navesti River and the northern coast of ancient Võrtsjärv the share of flint is over 99% (Jaanits 1989, Tab. 1). In the material of the Mesolithic settlements of Metsaääre (as well as Sindi-Lodja I and II) flint clearly dominates over quartz. Among the finds of the most representative Metsaääre I settlement site the share of quartz is only 16.1% of all quartz and flint finds. Similar tendency can be observed in the share of blades and their fragments among the flint finds, which is 13.9% in Metsaääre I settlement. It resembles, again, rather the Central Estonian Mesolithic settlements (9.57–18.51%; Jaanits & Ilomets 1988) than coastal settlements (in the Mesolithic finds of the islands the share of blades is up to 4.5% and in coastal Neolithic settlements it is 3.7–11.8% of flint finds). Whether this phenomenon is chronological or regional, it is not possible yet to decide.

METSAÄÄRE III

The settlement site lies in the field of Vabriku farm of Metsaääre village, on the bank of the Reiu River, about 500 m NE of the II settlement site. The extent of the cultural layer is not established yet but finds have been collected in an area about 200 m long, from the ploughed field as well as trial pits around it. Quartz and flint flakes and small potsherds were found. Potsherds belong probably to comb marked pottery though it cannot be determined more accurately. Compared to the other settlement sites of Metsaääre, the III settlement site demonstrates a remarkably great share of quartz (62.5%). On the basis of pottery the site can be dated to the Neolithic and connected with the Comb Ware Culture.

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ARHEOLOOGILISED VÄLITÖÖD EDELA-EESTI KIVIAJA ASULAKOHTADEL

Aivar Kriiska

1990. aastate keskpaigast alates on Edela-Eestis avastatud kaheksa kiviaja asulakohta kolmes piirkonnas: Lemmetsa I, II ja Malda Audru jõe alamjooksul, Metsääre I, II ja III Reiu jõe keskjooksul ning Sindi-Lodja I ja II Pärnu jõe alamjooksul (joon.1). Artiklis tutvustatakse Sindi-Lodja ja Metsääre asulakohtadel 2000. aastal tehtud uurimistööde tulemusi.

Pärnu jõe alamjooksult, Reiu jõe suudme lähedalt, on saadud rohkesti juhuleide juba alates 20. sajandi algusest. Kuni 1930. aastate lõpuni kogusid Pärnu Muinasuurimise Seltsi liikmed Eduard Glück, Friedrich Rambach ja Eduard Bliebernicht sealt peamiselt luu- ja sarvesemetest koosneva rikkaliku kollektsiooni. Sama ala on mitmeid kordi inspekteerinud ka Richard Indreko, Lembit ja Kaarel Jaanits ning alates 1995. aastast käesoleva artikli autor, kuid kinnismuistiseid pole seni õnnestunud avastada. 2000. aastal leidis artikli autor koos Lauri Mikkelsaarega kaks kiviaegset kultuurkihti Sindi-Lodjas (I ja II) ning kogus leide veel kolmest kohast Pärnu jõe kaldalt (joon. 2, leiukohad A, B ja C). **Sindi-Lodja I asula** paikneb Pärnu jõe vasakkaldal, mõnekümne meetri kaugusel Reiu suudmest (joon. 2). Kaldaseina puhastamisel leiti siit kuni 20 cm paksune mattunud huumusekiht (kõrgus merepinnast 0,7–1,7 m), mis avati 2 × 1,5 m proovikaevandiga. Kihist saadi väheseid tulekivikilde ja loomaluid, mis osteoloog Lembi Lõugase määrangul kuuluvad põdrale, koprle ja koerale. Pinnasest väljasõelutud sõe C¹⁴ analüüs andis proovi vanuseks 8070±70 radiosüsiniku aastat (Ua-17013), mis on 95,4% tõenäosusega 7350–6700 cal BC (kalibreeritud päikeseaastateks arvutiprogrammiga CAL40DATA OxCal v2.18 cub r:4 sd:12 prob[chron]). Proovikaevandi lähedalt teiseldata ka jõesetteid, millest saadud leiud kuulusid valdavalt kiviaega: luust teravik (joon. 4: 2), sarveset auguga ketas (joon. 4: 1), lihvitud silmata kivikirves (joon. 5: 2), talb (joon. 5:1) ja tulekivileid. Viimaste hulgas domineerivad killud (17), kuid on ka üks laast- (joon. 3: 1) ja kaks kildnukleust (joon. 3: 2, 3) ning kolm kõõvitsat. Tulekivi on värvilt valdavalt beež või hall ja kohapealse päritoluga. Seitsmel juhul on tegemist võõramaise, musta värvi kvaliteetse tulekiviga. Nende hulgas on kaks nukleust ja kaks kõõvitsat, millel on nii kivimi kui ka morfoloogiliste tunnuste poolest parimad vasted Pulli varamesoliitilises leiuvaines. Kuna Sindi-Lodja I on Eestis kolmas mesoliitiline leiukoht, kust on saadud mustast tulekivist esemeid, on alust oletada, et praeguse Reiu jõe suudme läheduses oli varamesoliitikumis asulakoht. Paiknedes viis kilomeetrit Pullist lääne pool, muutus see ala pealetungiva Antsülusjärve veetaseme tõttu Pullist veelgi varem asustuskõlbmatuks. Selle leiukompleksi täpsem vanusemäärang ja seos Reiu suudmealaga eeldab põhjalikke arheoloogilisi välitöid.

Sindi-Lodja II asulakoht on Pärnu jõe vasakkaldal, u. 400 m Reiu suudmest ülesvoolu (joon. 2). Kultuurkiht – leide ja loomaluud sisaldav kuni 20 cm paksune orgaanikarikas pinnas – paikneb enam kui 5 m paksuste liivade all, u. 4,5 m merepinnast kõrgemal. Kultuurkihist saadi peamiselt tulekivikilde, kokku 25 leidu. Mõni ese, sh. lihvitud kivieseme katke, leiti jõe kaldalt. Leiuväinse ja kultuurkihi asendi järgi kuulub see asulakoht mesoliitikumi, oletatavasti kas Antsülusjärve lõppfaasi või Litoriinamere algusesse.

Pärnu jõe äärest koguti juhuleide veel kolmest kohast (joon. 2). Arvestades, et nii Sindi-Lodja I kui ka II asulaga liituvad leiutihedad alad Pärnu jõe kaldal, võiks asulakohtade paiknemist (tänapäev ei pruugi need olla säilinud) oletada mujalgi, eriti aga rikkaliku leiukoha C lähedal. Viimane paikneb Sindi-Lodja II asulakohast 250 m kirdes ja sealt on kogutud 50 leidu: enamasti tulekivikillud, kuid on ka laaste, üks nukleus ja külgkõõvits, samuti oletatav nooleotsa katke.

Reiu jõe keskjooksu ala (joon. 1) inspekteerimine algas artikli autori juhatusel 1999. aastal. Sama aasta kevadel leiti koos Ulla Saluäärega kolm kiviaja asulakohta Metsaääre küla ülesküntud põldudel. Hiljem, sealhulgas 2000. aastal, on sealt saadud leide veel mitmel korral. **Metsaääre I asulakoht** asetseb Metsaääre külas, Ülejõe talu maal, Reiu jõe kõrgemal kaldaterrassil, kust korjati pinnaleide 100 m pikkuselt ja 20 m laiselt põllulapilt. Siinne kultuurkiht on põlluharimisega suuremas osas segamini künatud. Inspeksioonidega on saadud 151 tulekivist, 29 kvartsist ja 3 muudest kivimitest leidu ning 8 loomaluud (vt. tabel 1). Halli või beeži värvi tulekivi on kohalikku päritolu ja keskmise kvaliteediga. Valdava osa leiuainest moodustavad tulekivi- (112) ja kvartsikillud (28). Võrreldes muu leiuainesega on küllaltki arvukalt saadud nukleusi (8) ja laaste (17). Teisese töötlemisega esemeid on 11 (6,1 % leidudest), sealhulgas 10 kõõvitsat ja 1 kõõvits-uurits. Lisaks saadi kivitalb ja oletatav kivitalva tükk. Leiuaine ja savinõukildude puudumine lubavad Metsaääre I asula dateerida mesoliitikumi, tõenäoliselt selle teise poolde. **Metsaääre II asulakoht** asetseb I asulast paarsada meetrit kirdes, Vabriku talu maal Reiu jõe kaldaterrassil. Künatud kitsalt põlluribalt on seni korjatud tulekivikilde ja laaste, üks tulekivist kõõvits ja kivitalb (tabel 1). Analoogselt I asulaga võib selle muistise dateerida leiuainse ja savinõukildude puudumise põhjal mesoliitikumi ning oletada, et ta pärineb perioodi teisest poolest. Metsaääre mesoliitilise leiuainse hulgas on tulekivi osakaal silmapaistvalt suur (83,9 % kvarti- ja tulekivileidudest). See asjaolu eristab teda teistest Eesti rannikuala kiviaja muististest ja seob pigem Kesk-Eesti asulatele omase leiumaterjaliga. **Metsaääre III asulakoht** paikneb Reiu jõe kaldal, eelmisest u. 500 m kirdes, Vabriku talu maal. Künatud põllulapilt ja selle ümbrusesse kaevatud prooviaukudest leiti kvarti- ja tulekivikilde ning väiksemaid savinõukilde. Keraamika järgi võib muistise dateerida neoliitikumi ja siduda selle päritolu kammkeraamika kultuuriga.