

1 An archaeological reconnaissance trip to the Karelian Isthmus

Excursion diary 28 September–2 October 1998

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Ari Siiriäinen: Introduction

The aim of the trip was to explore opportunities for carrying out archaeological surveys and excavations in the Karelian Isthmus as a continuation of the projects already realised by the Department of Archaeology at the University of Helsinki and other institutions on the Finnish side of the border (The Ancient Lake Saimaa project and other minor research projects). The trip was sponsored by Karjalan Säätiö (The Karelian Foundation), which we gratefully acknowledge. Our team included Christian Carpelan, Petri Halinen, Tuija Kirkinen, Mika Lavento, and Ari Siiriäinen from the Department of Archaeology, University of Helsinki. Pirjo Uino, an expert in Karelian archaeology from the National Board of Antiquities, acted as our guide. Vladimir I. Timofeev and Aleksandr I. Saksa from the Institute for the History of Material Culture of the Russian Academy of Sciences (hence IIMK/RAN) accompanied us as local hosts. Matti Eronen from the Department of Geology, University of Helsinki and Eloni Sonninen from the Dating Laboratory of the University of Helsinki joined us for the first days of the trip in order to help us take sediment samples at the location of the ‘Antrea Net Find’ in Korpilahti, in the former municipality of Vuoksenranta. This find also included Early



Figure 1.1 The two leading figures in the launching of the project, Dr. Vladimir I. Timofeev and prof. Ari Siiriäinen. (Photos: M. Lavento 1998)

Mesolithic artefacts. The team travelled in two 4WD cars.

Several important, previously known and at least partially investigated sites were visited in order to evaluate their present condition and potential for further research. We also talked about the possibilities of future co-operation with Russian colleagues (Fig. 1.1). In the following report, presented in the form of a diary, the sites visited are described and put into a wider archaeological context. Their value as objects of further research is also briefly evaluated. Most of the sites visited date to the Stone Age, as our main purpose is to conduct research on the Stone Age, but some Iron Age sites were also inspected. To gain some control over the environmental

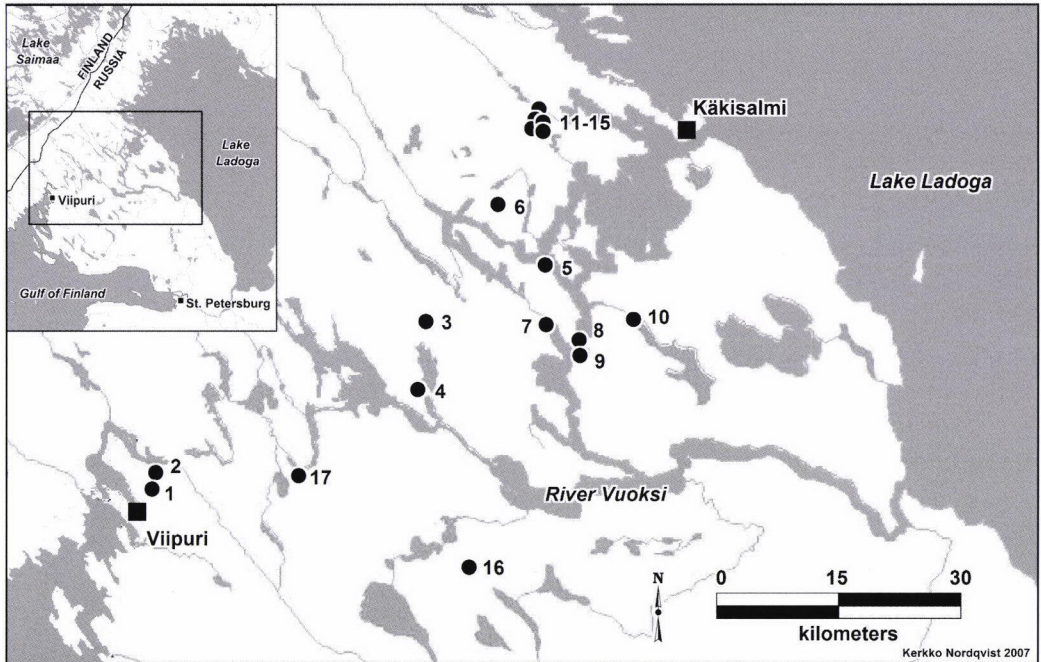


Figure 1.2 The archaeological and geological sites visited by the Finnish-Russian archaeologist group in September–October 1998. 1 – Viipuri Häyrynmäki; 2 – Viipuri Selänkangas; 3 – Vuoksenranta (Antrea) Korpilahti; 4 – Vuoksenranta Sintola; 5 – Räisälä Hovi Kalmistomäki; 6 – Räisälä Pitkäjärvi; 7 – Räisälä Papinkangas; 8 – Räisälä Tiurinlinna; 9 – Räisälä Teperinaho; 10 – Pyhäjärvi Konnitsa Äijö; 11–15 – the sites in Kaukola Riukjärvi and Piiskunsalmi area; 16 – Muolaa Kuusaa Kannilanjoki; 17 – Heinjoki Vetokallio. (Map: K. Nordqvist)

issues (this aspect is of central importance in all the projects carried out by the Department of Archaeology) we visited the ancient Vetokallio overflow channel of Lake Ladoga, located in the former municipality of Heinjoki, and the shores of Lake Riukjärvi and Piiskunsalmi Inlet in the former municipality of Kaukola, where Sakari Pälsi had made extensive investigations already in the first decades of the 20th century. In both areas, observations on shoreline displacement proved interesting.

To sum up the results of the trip, several previously known sites were rediscovered and considered to warrant further investigation (the Riukjärvi and Piiskunsalmi sites in Kaukola, the Pitkäjärvi and Teperinaho sites in Räisälä, and the Sintola site in Vuoksenranta), while other sites turned out to be either completely destroyed (Viipuri Häyrynmäki), poorly preserved, or oth-

erwise difficult to evaluate (Selänkangas in Viipuri, Papinkangas in Räisälä, Äijö in Pyhäjärvi and Kannilanjoki in Muolaa) (Fig. 1.2). These sites were removed from the list of potential research objects. It also became evident that in some areas detailed surveys with modern methods might reveal additional sites or other information, and it was agreed that a survey team will work in these areas in May 1999. Funds for this have been obtained from Karjalaisen Kulttuurin Edistämissäätiö (The Foundation for the Promotion of the Karelian Culture).

As a result of World War II, the Karelian Isthmus was ceded to the Soviet Union. The new administration implemented a renaming of the population centres, lakes, rivers, etc. In the following, the current Russian names known to us are given in brackets.

Petri Halinen: Monday, 28 September 1998

On Monday we travelled in two cars from Helsinki to Viipuri (Ru. Vyborg). Some of us crossed the Finnish-Russian border for the first time, and the experience was not as unwelcome as was expected. The Finnish border guard wanted some papers that we did not have with us. However, the Russian border system provided us with an experience that taught us how to behave in the border area. This experience would help us many times in the future. In the afternoon, the expedition visited two Stone Age dwelling sites in the neighbourhood of the city of Viipuri.

Viipuri Häyrynmäki. – Topogr. map sheet: 402206 Viipuri; nat. grid: x = 6736 82, y = 4436 88, z = 13–21 m asl – Excavations by Julius Ailio (1909), Kaarle Soikkeli (1910, 1912). – Refs.: Uino (1997); Huurre (2003); Seitsonen (2004).

This ‘classical’ Stone Age dwelling site close to the city was our first object of interest. The site was excavated during 1909–1912 by Julius Ailio and Kaarle Soikkeli because of the threat of destruction posed by the building of the Karelian railroad. The total size of the excavated area was almost 8000 m². A large amount of material was collected from the dwelling site; especially the ceramic material is versatile and amounts to more than 70 000 sherds. According to the

ceramics, settlement at the site began during the Early Subneolithic Sperrings 1 period and ended in the Early Metal Period. Some artefacts can be dated to the Late Mesolithic. Remains of dwellings and red ochre burials were discovered. Finds could be collected from the profiles of the sand pit at the site as late as 1934, but in the 1950s the Häyrynmäki settlement site has been destroyed completely – a factory and other buildings have been built in the area. There was nothing left to see (Fig. 1.3).

It was very educational to visit Häyrynmäki, which has been counted among the key sites of Finnish prehistory, even though its find material or nature have never been thoroughly studied. It is obvious that dwelling sites inside town areas will disappear totally and their environmental character will be destroyed. If we do not have maps or other information from the time before the destruction, we can never reconstruct the environmental conditions around the site. If the environment is destroyed, the data available in the future depends on the documentation carried out during archaeological excavation, as well as on environmental background data. In many cases, the data have disappeared, but luckily this concerns only a few sites discovered during the early period of Finnish archaeology.

Figure 1.3 Viipuri Häyrynmäki. The survey team inspecting the nowadays totally destroyed site that staged the largest Stone Age excavations conducted in the Karelian Isthmus up to this day in 1909–1912. (Photo: C. Carpelan 1998)



Viipuri Selänkangas. – Topogr. map sheet: 402206 Viipuri; nat. grid: x = 6737 72, y = 4434 92, z = 17 m asl – Excavation by Kaarle Soikkeli (1912). – Refs.: Huurre (2003); Seitsonen (2004).

At Selänkangas, the dwelling site and its environment were better preserved than at Häyrynmäki, although a road was built through the site. 'Better' means that Häyrynmäki was destroyed totally, whereas the road had destroyed only a part of the Selänkangas site. There is beautiful forest at the site, which is much smaller than Häyrynmäki. It was once situated on both sides of an inlet between two small islands. The current site is partly situated on a cape of the northern island. Small-scale excavations were carried out in the summer of 1912 and a rather limited amount of material was collected. The Early Subneolithic finds resemble the corresponding finds from Häyrynmäki. In addition to Sperrings 1 ware, the ceramics include Combed Ware Style 3 and Corded Ware.

Both the Finns and the Russians have destroyed these sites, which have been excavated before World War II. Because of limited resources, the forthcoming investigations have to focus on other parts of the Karelian Isthmus instead of on the destroyed sites. Perhaps there are still some 'untouched' sites in the countryside.

Christian Carpelan: Tuesday, 29 September 1998

Starting from Viipuri, the expedition headed for the location where an Early Mesolithic fishing net and other artefacts were discovered in Korpilahti (currently unpopulated) in the former Finnish municipality of Vuoksenranta (the administrative centre is now Ozërskoe). After inspecting the place and taking sediment samples, the expedition split into two groups. Mika Lavento took Matti Eronen and Eloni Sonninen to the railway station in Viipuri in order to catch

the train back to Finland. The rest of us, in the other car, headed for the Combed Ware dwelling site discovered near the former village of Sintola, now deserted. This site is also situated within the former municipality of Vuoksenranta. The weather was cloudy and damp all day.

Vuoksenranta Korpilahti. – Topogr. map sheet: 411305 Vuoksenranta; nat. grid: x = 6754 48, y = 4470 60, z = 14 m asl – Excavations by Theodor Schvindt (1914) and Sakari Pälsi (1914). – Refs.: Lindberg (1916; 1920); Pälsi (1920); Hyypä (1934); Kujala (1948); Sauramo (1951); Äyräpää (1951); Luho (1967); Taavitsainen (1995); Uino (1997); Dolukhanov & Timofeyev (1998).

In 1914, some archaeological artefacts, discovered the previous autumn in connection with the digging of a draining trench in a bog, were handed over to Theodor Schvindt of the Finnish State Historical Museum, who immediately carried out a small test excavation. It was directly understood that these finds represented a unique context and that the site had to be excavated before it was completely destroyed. The task was assigned to Sakari Pälsi, who carried out an excavation at the find location in late July 1914.

Pälsi's excavation uncovered the remains of a fishing net made of willow bast and floats of pine shield bark, as well as sinkers of untreated natural stones the size of a fist and fastened with willow bast. In addition, the finds included a number of bone, antler, and stone implements. It has been proposed that the find, consisting of 108 items that were probably packed in a container, accidentally fell into the water from a boat or through a crack in the ice and sank to the bottom.

Pälsi cut a sediment sample column from the profile of his excavation for diatom and pollen analyses. Such analyses, carried out and published by Harald Lindberg, Esa Hyypä, and Matti Sauramo, have repeatedly led to the same result: the collection of artefacts landed on the bottom during the culmination of the *Ancylus* transgression on the one hand and the transition



Figure 1.4 Sampling trip to the 'Antrea (Vuoksenranta) Net Find' location. In the picture (from left to right) Tuija Kirkinen, Vladimir Timofeev, Ari Siiriäinen, Matti Eronen, Christian Carpelan (in front), Eloni Sonninen, Mika Lavento and Aleksandr Saksa (behind the memorial plaque marking the find spot). (Photo: P. Uino 1998)

from Preboreal to Boreal environmental conditions on the other. These events are approximately simultaneous and dated to about 9200 BP, or 8400 calBC.

The radiocarbon dates from two of the bark floats correspond with the results of the pollen analysis and the diatom analysis: 9230±210 BP (Hel-269) and 9310±140 BP (Hel-1303). The calibrated value of the weighted mean of the two dates (9285±115 BP) is 8450 (8300) 8170 calBC according to the 'Original Groningen Method' based on cumulative probability analysis and included in the Cal20 computer program to correspond approximately with calendar dates BC (see Plicht 1993). The results may be affected by the 'old wood factor' of the shield bark used for dating.

The bone and antler artefacts, including a dagger, connect the find with the Early and Middle Mesolithic Kunda, Butovo, and Veret'e cultures. These cultures extend from Lithuania

to the Onega River (Fi. Äänisjoki, Ru. reka Onega) and probably represent the pioneering settlers of eastern Fennoscandia.

The Korpilahti net find is still of crucial importance for the study of the initial postglacial settlement of Finland. Since the investigations referred to above, scientific and archaeological methods have improved and the amount of comparable material has increased. Therefore a new multidisciplinary research project is launched in order to examine the precise position of the find in the sequence of the environmental development, as well as in the archaeological framework. For this purpose, a number of sediment samples were taken and brought back to Helsinki for analysis and radiocarbon dating employing the AMS method. AMS dating will also be carried out on objects belonging to the original find and made of materials with a short lifespan (see Carpelan 2008, this volume; Miettinen *et al.* 2008, this volume).



Figure 1.5 Scenery from Antrea (Vuoksenranta) Korpilahti. No buildings of the former village stand up till this day, the only landmarks being the stone foundations of these houses. The 'Antrea Net Find' location is situated in the middle of the picture, by the bushes growing along the ditch. Picture taken from the location of Pien-Anttila farm house, towards south-southwest (cf. Fig. 5.3. in Carpelan 2008, this volume). (Photo: P. Uino 2002)

During our visit we learned that, in September 1997, P. M. Doluhanov of the University of Newcastle upon Tyne, United Kingdom, and V. I. Timofeev, IIMK/RAN, had taken sediment samples in a place identified by them as the site of the net find described above. It turned out that their sampling site was more than 1 km south of the correct location, which is indicated in the field by a memorial plaque installed by members of 'Vuoksenrannan pitäjäseura' (the society of former residents of the Vuoksenranta municipality) (Figs. 1.4 and 1.5).

Vuoksenranta Sintola. – Topogr. map sheet: 411301 Sintola; nat. grid: x = 6742 26, y = 4469 82, z = 20 m asl – Excavation by Sakari Pälsi (1944). – Refs.: Pälsi (1944); Huurre (2003).

Prehistoric potsherds were found on the western slope of a long esker running in the north-northwest – south-southeast direction during the digging of military trenches, shelters, and bunkers during World War II. Sakari Pälsi carried out a small excavation at this location in August 1944. In his report he writes that the investigations had to be more or less superficial because of the heavy artillery fire and air attacks of the enemy. The excavators had to take shelter behind a huge boulder (Fig. 1.6). However, he concluded that he had been able to investigate part of the northern

periphery of a rather large Subneolithic dwelling site, most of which was in a mined area. The excavated plot was situated at 22–23 m asl.

In 1998, 54 years later, the boulder is in place and traces of the earthworks described by Pälsi are still visible. However, the mines are cleared. The site is indicated in the field by a memorial plaque installed by members of 'Vuoksenrannan pitäjäseura'.

At the time of our visit, we concluded that Pälsi's report appeared to be correct. In addition, we observed an ancient shoreline approximately following the 20-m asl contour line of the topographic map. This shoreline, corresponding with the altitude of Lake Ladoga (Fi. Laatokka, Ru. Ladožskoe ozero) prior to the formation of the River Neva (Ru. reka Neva), probably represents the actual shoreline of the Subneolithic settlement. The pottery discovered by Pälsi represents Combed Ware Style 2.

The location of this Combed Ware settlement is interesting. It is situated on the western slope of an esker which, at the time, was a long and narrow island in the westernmost bay of Lake Ladoga. Running from the north-northwest to the south-southeast, the island was probably an important 'bridge' on the route along the Karelian Isthmus from south to north.



Figure 1.6 Ari Siiriäinen standing in front of the same large boulder, which sheltered Sakari Pälsi while he was conducting archaeological excavation at the Vuoksenranta Sintola site in the summer 1944. (Photo: P. Uino 1998)

From Sintola we returned to Viipuri and picked up Lavento. After dinner we left the town and drove to Käkisalmi (Ru. Priozersk), some 80 km east-northeast of Viipuri as the crow flies. This town is situated on the eastern side of the Karelian Isthmus on the coast of Lake Ladoga at the mouth of the River Vuoksi (Ru. reka Vuoksa). Käkisalmi was the base for our later excursions.

Pirjo Uino: Wednesday, 30 September 1998

The day dawned bright and clear and cold. The day's programme included visits to Stone Age and Early Metal Period dwelling sites in the former municipality of Räisälä. Our first stop was in the municipal centre (Ru. Mel'nikovo). There we first visited the grey stone church (architect J. Stenbäck), which now serves as a centre for cultural activities, and then the Hovi manor (more or less repaired) on our way to Kalmistomäki.

From there we headed for Lake Pitkäjärvi (now dried up and without a Russian name) along a narrow and stony old road that became worse the further we drove. We could not have

managed without our four-wheel drives. We did not even try to go as far as the dwelling site by Lake Juoksemajärvi (Ru. ozero Bol'soe Zavetnoe). The road leading to the dwelling site at Papinkangas was partly in very bad condition, but otherwise the roads were good enough and easy to drive on. We returned to Käkisalmi via Konnitsa (Ru. Torfjanoe) in the former municipality of Pyhäjärvi (present centre Plodovoe) and the Stone Age site located there. Aleksandr Saksa left us for duties in St. Petersburg.

Räisälä Hovi Kalmistomäki. – Topogr. map sheet: 411308 Räisälä; nat. grid: x = 6757 18, y = 4487 68, z = 18.5 m asl – Excavations by Theodor Schvindt (1885, 1887, 1892), A. M. Tallgren (1914), Sakari Pälsi (1935) and C. F. Meinander (1939). – Refs.: Tallgren (1914); Meinander (1954); Saarnisto & Siiriäinen (1970); Koçkurkina (1981); Uino (1997); Lavento (2001).

The site is located by the shore at the brink of a hillock facing the Husunsaari Island on the lands previously owned by the Räisälän Hovi manor. The greater part of the hillock called Kalmistomäki ('Cemetery Hill') was destroyed by sand hauling already before the archaeological excavations began. "Thousands of horse loads" of sand may have been taken from the hill and obviously used for road building.

At the site, both a cemetery of the Medieval Crusade Period (16 investigated burials) and a



Figure 1.7 Pirjo Uino writing down notes at Räisälä Pitkäjärvi site in late September 1998. Pälsi's 1915 excavation place is located in the middle of the picture near the forest edge behind the birches (cf. Fig. 7.3 in Nordqvist & Lavento 2008, this volume). (Photo: M. Lavento 1998)

dwelling site of the Early Metal Period were discovered, the latter mainly in the east and south-east part of the hillock and probably extending outside the cemetery area. It was A. M. Tallgren, since 1920 the first professor of archaeology at the University of Helsinki, who first observed Epineolithic ceramics at Kalmistomäki. Later C. F. Meinander gave the name Kalmistomäki Ware to a part of the Textile-impressed Ware from the site.

The finds from the Early Metal Period consist of a fragment of a mould for an Anan'ino type bronze axe (NM 2845: 8), fragments of a mould for a necklace (NM 6675: 5, 7 etc.) and ceramics (Kalmistomäki and Luukonsaari Ware as well as Textile-impressed Ware belonging to the Sarsa-Tomitsa group). A radiocarbon date (Hela-8) from charred crust from a potsherd of Luukonsaari Ware provided the following result: 2360±70 BP (450–370 calBC). Further finds included handmade Iron Age Ware (Ru.

Lepnaja) and Medieval wheel-thrown ceramics. Stray finds date to AD 500–1000.

An old sand pit on the slope towards the River Vuoksi may still be seen. The main building of Hovi has been renovated. In front of it, the road is paved and there are many buildings on the top of the hill west of the sand pit. The stone base of a large cowshed still survives; it was there that young C. F. Meinander carried out excavations without finding any traces of graves or habitation. Eventually, Meinander became the third professor of archaeology at the University of Helsinki.

Räisälä Pitkäjärvi. – Topogr. map sheet: 411309 Hyttinlahti; nat. grid: x = 6764 14, y = 4482 54, z = 21 m asl – Survey (1912) and excavation (1915) by Sakari Pälsi. – Refs.: Pälsi (1918); Saarnisto & Siiriäinen (1970); Seitsonen (2006).

Lake Pitkäjärvi is located about 12 km north-west of the centre of the former municipality of Räisälä. It drains into the River Vuoksi through

Lake Ahvenitsa (Ru. ozero Rudakovskoe). The settlement site is located in the fields of a farm previously owned by Mr. Antti Huppunen, which is situated on the north-west shore of the lake. In the autumn of 1911, Mr. Simo Iivonen sent a number of stone objects to the Finnish State Historical Museum. According to Iivonen, these objects had been found in the field of the Huppunen farm on the shore of Pitkäjärvi.

According to Pälsi, the site area, about 200 m in length, sloped gently to the south-east and south. The soil was homogenous and stoneless fine sand. The thickness of the cultural layer varied within the site and was obviously partly damaged by the recent cultivation. The thickness of the cultural layer was 20–30 cm in the northern and western parts of the site and 45–60 cm in the southern and eastern parts.

Among the fixed structures, Pälsi mentions several concentrations of stones, close to which traces of firing were noted and finds collected more frequently than elsewhere. Pälsi supposed that the stones were the remains of hearths and floor pavements of dwellings. In his report he mentions two true remains of dwellings. Pälsi used one of them as a model for his classical reconstruction of a Stone Age dwelling. About 7–20 post holes encircled the floor of the hut, in the middle of which sooty ground would indicate an open fireplace. The diameter of the floor would have measured about 6 metres.

Many stone implements, including a slate arrowhead of the Pyheensilta type, were discovered, as well as raw material and preforms. In addition, there were ceramics represented by Combed Ware of Styles 2 and 3, Pitted Ware and Pöljä Ware. Some artefacts of bone and amber were also found.

When the water level of Lake Ladoga was about 21 m above the present sea level, the basin of Lake Pitkäjärvi formed the end of a complicated fjord branching off the lake. After the

formation of a new outlet along the River Neva, the level of Lake Ladoga lowered rapidly, which led to the isolation of Lake Pitkäjärvi and a change in the nature of the whole region.

The location of Pälsi's excavation was easy to find (Fig. 1.7). The ruins of the Huppunen buildings still survive most notably the stone base of the large cowshed at the end of the road and the stone basement of the main building in the middle of aspen trees. On the map from 1938, Pitkäjärvi is marked as bog, but now it seemed to have dried up completely. The area seems to have been preserved well and has not been subject to any later land use. The place could be suitable for further investigations.

Räisälä Papinkangas. – Topogr. map sheet: 411308
Räisälä; nat. grid: x = 6750 62, y = 4485 02, z = 25.5 m
asl – Excavations by Theodor Schvindt (1905), Julius Ailio (1906), A. M. Tallgren & Aarne Europaeus (1907). – Refs.: Ailio (1909); Saarnisto & Siiriäinen (1970).

Papinkangas is located about 6 km south-west of the former municipal centre of Räisälä and about 600 m west of Nasarlahti Bay on the south-east slope of a ridge. In 1904, Schvindt was informed about potsherds found when hauling sand from the Papinkangas ridge. Excavations were then carried out during the three following summers.

There is no written report of Schvindt's excavations, but Ailio describes the site and gives an account of the excavation in his report from 1906. The sand hauling had formed a pit measuring about 20 x 60 m, and a large part of the dwelling site was damaged. In the bottom of the pit, Schvindt had collected a lot of potsherds. He had carried out excavations on the south-east slope of the pit within an area of 100 m². Several hearths were discovered in addition to unusual clay occurrences, which could indicate the manufacture of clay artefacts. Also ceramics and some stone objects were found.

Ailio excavated 30 m² as an extension of Sch-



Figure 1.8 Getting acquainted with the forested Räisälä Papinkangas site, from left to right Pirjo Uino, Mika Lavento, Tuija Kirkinen, Petri Halinen (with map), Ari Siiriäinen and Aleksandr Saks. The site was excavated in the early years of the 20th century, but due to the later land use, the exact location of the excavation places can not be determined anymore. (Photo: C. Carpelan 1998)

vindt's plot. The thickness of the cultural layer was about 30 cm at its deepest. One hearth and also other signs of fire were discovered. Close to the excavation, a depression of about 2.5 x 3 m could be seen, possibly the remains of a dwelling; a test pit made in the bottom of the depression revealed several potsherds. In 1907, Tallgren and Europaeus probably excavated an area of less than 20 m² as an extension of the earlier excavated areas. However, an indefinite map and three pictures are the only surviving documents from their excavation.

The ridge and the sand pit at which the excavations were carried out could be located, but the precise sites of the excavations could not. A wide sand pit was located on the west side of the road, and it appears that the road has been moved and improved. The area did not look promising for further research (Fig. 1.8). The ceramics found at Papinkangas represent Combed Ware Style 2.

Räisälä Tiurinlinna. – Topogr. map sheet: 411310 Humalainen; nat. grid: x = 6747 40, y = 4490 20, z = 15 m asl – Excavations by Theodor Schvindt (1888, 1891, 1914), Hjalmar Appelgren (1889), A. N. Kirpičnikov (1971), Svetlana Kočkurkina (1971–1974) and Sergej Popov (2000). – Refs.: Appelgren (1891); Kočkurkina (1981); Uino (1997); Saks (1998).

The Medieval fortress of Tiurinlinna (Ru. Tiversk) was located on an island in the Riv-

er Vuoksi between the rapids Välikoski and Tiurinkoski. In 1857, after the breakthrough of the Kiviniemi (Ru. Losevo) isthmus, the outlet of Vuoksi was changed and the water level in the original branch lowered to the extent that Välikoski dried up and also Tiurinkoski diminished and slowly began to dry up. After a rainy summer in 1998, there was more water than in a summer of less rain (e.g. 1993).

The island of Linnasaari measures about 240 m in length from north to south and about 80 m in width. According to Appelgren, the highest point of the island was 7 m above the surface of the river after the fall of the level of Vuoksi. Around the island there is a wall built of big rocks in the north part and of stones and earth in the south part. There are some niches in the wall, and at the south end there is the pit of an old ice cellar, where the famous 'Tiuri Silver Treasure' was found in 1890.

Inside the walls, more than ten square house foundations have been identified. Some of the foundations were excavated by Hj. Appelgren and S. I. Kočkurkina. In 1998, they are no longer distinguishable.

Recently, the road that runs through Linnasaari was widened and paved with asphalt, but no archaeological excavations were carried out before the work was done. The site has been

Figure 1.9 Räsälä Teperinaho, the site where the first Stone Age excavations took place in 1892 by Th. Schvindt. The dwelling site area is located on the right side of the road, picture taken from east. (Photo: P. Uino 1998)



vaguely marked, which does not do justice to such a remarkable object of cultural heritage. In the early 1970s, the area was used for military exercises and the tanks moving there damaged the cultural layer and the walls. Stones from the castle have also been taken for construction work. On the southern side of the road, there is a war memorial erected by the Russians.

During Appelgren's excavations, ceramics dating from the Early Metal Period (NM 2672: 1, 4–9) were discovered in the area of houses f and g. According to Christian Carpelan, these ceramics represent a later modification of the Luukonsaari ceramic tradition, probably dating to just before the Common Era. Other finds from Tiurinlinna date from the 10th century right up to the Medieval Period.

Räsälä Teperinaho. – Topogr. map sheet: 411310 Humalainen; nat. grid: x = 6744 30, y = 4490 10, z = 19 m asl
– Excavations by Theodor Schvindt (1892) and Julius Ailio (1902). – Refs.: Ailio (1909); Saarnisto & Siiriäinen (1970).

In 1891, the farm owner, Mr. P. Paavilainen, gave Schvindt some potsherds that he had found as a child. Schvindt then carried out excavations at Teperinaho in 1892, and Ailio continued his work in 1902.

The site is located on the eastern side of Lake Torhonjärvi (Ru. ozero Balahanovskoe), in the village of Haaparanta or Tiurinmäki, on the land

of the former Paavilainen farm, about 250 m west of the main building and 500 m south-east of the Teperinlahti Bay. Teperinlahti is a bend formed by the River Vuoksi, which extended about 100 m upstream before the fall of the river level in 1857. The dwelling site has been located on the shore of Vuoksi, on a sandy heath gently sloping towards the north. Right behind the dwelling site, in the south, there is a steep ridge (Fig. 1.9).

Schvindt carried out excavations at the site “collecting a lot of potsherds”. Later, Ailio carried out excavations at the site within an area of about 100 m². Several fireplaces were identified during the excavations, but it seems that there were no hearth stones. On the basis of test digs, Ailio came to the conclusion that the dwelling site extended far outside the excavated area, north of which a depression of 2–3 m was identified.

The finds consisted of a number of stone objects and ceramics representing Combed Ware Style 2 (according to Ailio, some of the pots may have had an ear and a foot like goblets). According to Saarnisto and Siiriäinen, the dwelling site had been covered by water during the transgression of Lake Ladoga.

At present, the site is untouched pine heath. The ruins of the Paavilainen house were found, but the precise location of Ailio's excavation site and the depression mentioned by him could



Figure 1.10 Flock of cows crossing the road at the site Pyhäjärvi Konnitsa Äijö. (Photo: C. Carpelan 1998)

not be identified. A depression measuring about 2 x 2 m on the north side of the road was apparently not the same feature. It would be useful to make test pits at the site in order to identify the dwelling site.

Pyhäjärvi Konnitsa Äijö. – Topogr. map sheet: 411310 Humalainen; nat. grid: x = 6749 24, y = 4496 98, z = 19.5 m asl – Survey (1934) and excavation (1936) by Sakari Pälsi. – Refs.: Saarnisto & Siiriäinen (1970); Nordqvist (2006).

The dwelling site is located in the village of Konnitsa, on the north side of the River Konnitsanjoki (Ru. reka Veselaja) flowing from Lake Kiimajärvi (Ru. ozero Komsomol'skoe) to the River Vuoksi, in the former fields of the farms of Antti Äijö (west side of the road) and Tyynelä (east side of the road), gently sloping towards the south on both sides of the road that runs through the village (Fig. 1.10). The site was discovered in 1933.

Pälsi excavated an area of 20 x 4 m (Äijö's field) on the west side of the road, but estimated that the find area could measure about 100 x 40

m. Ceramics found at the site (in the field layer) represent Combed Ware Style 2, Pitted Ware, and Asbestos Ware. The sand layer appeared uncoloured and was left untouched during the excavation.

It seemed like potatoes had recently been dug up at the site. The present owners allowed us to walk the field, which resulted in abundant finds of ceramics of the types mentioned above, as well as stone implements (e.g. adzes). The finds were collected both at a lower and a higher elevation (about 20 m asl). The landowner family told Saksä and Timofeev that they had also found some objects like this, but that they had not realised their value and had therefore disregarded them.

Saarnisto and Siiriäinen supposed that the finds on the soil originated at the upper end of the field and ended up at the lower end. This is possible, but further investigations are needed to confirm this notion as well as Pälsi's observation of the lack of a cultural layer.

Mika Lavento: Thursday, 1 October 1988

On Thursday morning, on the way to Riukjärvi and Piiskunsalmi in the former municipality of Kaukola (current municipal centre: Sevast'janovo), the expedition visited the village of Koverila (Ru. Bogatyri), where two Crusade Period cemeteries, Kulhamäki and Kekomäki, are located. A new house had been built close to Kulhamäki, and unfortunately at least part of the cemetery may have been destroyed during the building process. The Kekomäki hillock, in the middle of the field, was well preserved.

The dwelling site complex around Lake Riukjärvi (Ru. ozero Uzlovoe) and the Piiskunsalmi Inlet is situated about 8 km from the railway station of Kaarlahti (Ru. Kuznečnoe), in the north-west part of Kaukola. The dwelling site complex belongs to the water system of River Vuoksi. During the Stone Age and even during the Early Metal Period, long and narrow straits connected it with Lake Ladoga. The site complex comprises over 20 separate dwelling sites in six clusters.

The area attracted archaeological attention in the early 1900s, because numerous stone artefacts were found there and sent to the Finnish State Historical Museum. Important excavations were carried out, and in 1915 Sakari Pälsi published his doctoral dissertation on the archaeology of the area. The large material indicates continuity of habitation in the area from the beginning of the Neolithic up to the Historical Period.

The team visited five of the most central dwelling site areas, namely Kyöstälänharju, Tiitunmäki, Nököpelto, Lavamäki, and Kankaanmäki. These areas are situated around Lake Riukjärvi and on the shores of Piiskunsalmi.

Kaukola Riukjärvi Kyöstälänharju. – Topogr. map

sheet: 411407 Kaukola; nat. grid: x = 6776 06, y = 4486 84, z = 20–24 m asl – Excavations by Julius Ailio (1908); Sakari Pälsi (1911). – Refs.: Pälsi (1915); Uino (1997); Lavento (2001).

Julius Ailio located the site in 1907, and the following year he conducted the first excavation there. Three years later, the second excavation at the site was carried out by Sakari Pälsi. The dwelling site of Kyöstälänharju includes two concentrations of habitation. Pälsi separated two 'subsites' in the area: 'Pekko Iivosen Rantapelto' and 'Simo Iivosen nummi'. According to Pälsi, the dwelling site area is over 300 m long and 30–60 m wide.

At least the following ceramic types are represented in the find material: Combed Ware of Styles 2 and 3, Pitted Ware, Sarsa-Tomitsa Ware (including the Kalmistomäki variant), Luukonsaari Ware, and Karelian-Slavonic Ware.

During the visit in 1998, the site was located on both sides of the Piiskunsalmi road, on the eastern side of Lake Riukjärvi. V. I. Timofeev, who had recently conducted trial excavations at the site, showed that it was possible to locate the most intensive habitation on the upper terrace of the slope, close by the road. During our inspection, we got the impression that the field had remained almost in the same condition as it was in the early 1900s.

Kaukola Riukjärvi Tiitunmäki. – At Tiitunmäki, Pälsi separated three sites: (1) 'Tiitunmäen kallionvieri', (2) 'Antti Varvan maa' and (3) 'Asuinpaikka Juho Iivosen ja Simo Lankisen perillisten mailla'.

(1) Topogr. map sheet: 411407 Kaukola; nat. grid: x = 6775 54, y = 4486 64, z = 21 m asl

(2) Topogr. map sheet: 411407 Kaukola; nat. grid: x = 6775 42, y = 4486 80, z = 21 m asl

(3) Topogr. map sheet: 411407 Kaukola; nat. grid: x = 6775 64, y = 4486 66, z = 17–21 m asl

– Excavations by Julius Ailio (1908); Sakari Pälsi (1911, 1912, 1915). – Refs.: Pälsi (1915); Uino (1997); Lavento (2001).



Figure 1.11 Piiskunsalmi area in Kaukola in autumn 1998. The picture is taken from the northern shore of the inlet (Lavamäki site) towards the Stone Age dwelling site area on the southern shore, where studies were conducted in the early 20th century (cf. Fig. 7.8 in Nordqvist & Lavento 2008, this volume). (Photo: P. Uino 1998)

The expedition visited site (1), where Sakari Pälsi excavated about 130 m² of the terrace in front of the steep cliff in 1911 and 1912. A large number of stone implements was found during the excavation. The ceramic material belongs to the Combed Ware Style 2, Early Asbestos Ware, and Sarsa-Tomitsa Ware. The site has remained undisturbed since Pälsi's excavations.

Kaukola Riukjärvi Nököpelto. – Topogr. map sheet: 411407 Kaukola; nat. grid: x = 6776 86, y = 4485 76, z = 20–24 m asl – Excavation by Julius Ailio (1908). – Refs.: Pälsi (1915); Uino (1997); Lavento (2001).

Nököpelto is situated c. 700 m north-northwest of the northern end of Lake Riukjärvi. During his excavation, Ailio discovered three fireplaces and collected a large number of stone objects in addition to a large quantity of ceramics. The latter includes plenty of Combed Ware Style 2, some asbestos tempered ware, and plenty of Sarsa-Tomitsa Ware (including the Kalmistomäki variant).

At present, the site consisted of meadow and pasture. It has very likely remained undisturbed since Ailio's excavation. The expedition team succeeded in locating Ailio's excavation area and the stone foundations of the buildings of the former farm.

Kaukola Piiskunsalmi Lavamäki. – Topogr. map sheet: 411407 Kaukola; nat. grid: x = 6777 76, y = 4486 16, z = 20–26 m asl – Excavations by Julius Ailio & Sakari Pälsi (1908); Sakari Pälsi (1911). – Refs.: Pälsi (1915); Uino (1997); Lavento (2001).

Lavamäenpelto belongs to the dwelling site cluster of Piiskunsalmi and is situated on the northern bank of the Piiskunsalmi Inlet (Fig. 1.11).

During Ailio's and Pälsi's excavations, several fireplaces and one structure that Pälsi interpreted as a hut floor were discovered. The finds include a large number of stone objects and ceramics. Combed Ware Style 2 represents the most common ceramic type at the site, but also Late Combed Ware, Sarsa-Tomitsa Ware, Sirnihta Ware, and Iron Age ceramics were found.

The team located the site and observed that it was partly destroyed by a tractor road and the demolition of a building. Timofeev promised to take care of the site and inform authorities in order to spare the site from further damages.

Kaukola Riukjärvi Kankaanmäki. – Topogr. map sheet: 411407 Kaukola; nat. grid: x = 6775 60, y = 4486 20, z = 21–26 m asl – Excavations by Julius Ailio (1906, 1908); Sakari Pälsi (1911, 1912). – Refs.: Pälsi (1915); Uino (1997); Lavento (2001).

The dwelling site area of Kankaanmäki comprises seven 'subsites' (1–7), which Pälsi distin-

guished in his dissertation. The 'subsites' are in fact concentrations of finds, reflecting areas of intensive occupation within the excavated area.

The finds from the excavations, as well as stray finds from the area, show that the majority of the ceramic material belongs to the Combed Ware Style 2, but also Pöljä Ware and Sarsa-Tomitsa Ware are present. In addition, Timofeev has located a Mesolithic site within the area, which was not known to Pälsi.

The expedition team walked the fields and collected finds over a large area. The densest find concentrations were observed on the southern slope of the Kankaanmäki hillock. The site area has remained almost undisturbed.

Tuija Kirkinen: Friday, 2 October 1998

On Friday morning, we left the Käkisalmi district and turned back towards Viipuri and Helsinki. On the way we visited interesting cultural-historical places. In the former municipality of Muolaa (current municipal centre Pravdino) we saw the manor of Kuusaa (Ru. Klimovo), where Alexandra Kollontai stayed in her childhood. We also visited the municipal centres of Heinjoki (Ru. Veščevo) and Äyräpää (Ru. Baryševo), where we saw the monuments of World War II. The main archaeological site of the day was Kannilanjoki in the former municipality of Muolaa, while Vetokallio in the former municipality of Heinjoki was an important geological site. In Viipuri, the team visited a city excavation conducted by Aleksandr Saksa. After dining in the Round Tower of Viipuri, we started our trip back to Helsinki, where we arrived after midnight.

Muolaa Kuusaa Kannilanjoki. – Topogr. map sheet: 402405 Salmenkaita; nat. grid: $x = 6723\ 00$, $y = 4473\ 00$ (accuracy $x, y = \pm 100\ m$), $z = 18.5\ m\ asl$ – Excavations by Julius Ailio (1932); Sakari Pälsi (1933). – Refs.: Saarnisto & Siiriäinen (1970); Uino (1997); Uino (1998); Takala (2005).

The site is situated on the eastern shore of the River Kannilanjoki (Ru. reka Pčelinka), 0.5 km south of the Kuusaa bridge. The first artefacts, including ceramics, were found on the banks of the River Kannilanjoki in 1931 during construction works in order to lower the water level of the Lakes Kirkkojärvi (Ru. ozero Pravdinskoe), Punnusjärvi (Ru. ozero Krasnoe), and Vuotjärvi (Ru. ozero Voločevskoe). According to Pirjo Uino, Ailio excavated the remaining part of the badly destroyed site. The following year Pälsi did not find any remains of a cultural layer.

The ceramics represent Combed Ware Style 2. In addition to the Stone Age finds, a Crusade Period oval tortoise brooch and a ski ¹⁴C-dated to the Crusade Period are connected to the site.

During our visit in 1998 we walked along the riverside. Detailed observations could not be made easily because of the vegetation. However, we managed to find some fragments of burnt bone and quartz flakes, which we gave to Timofeev. The banks of the river have been partly destroyed by erosion and by the above-mentioned construction works in 1931. The remaining land area near the river is partly cultivated and partly undisturbed. Without more detailed investigations, it is difficult to estimate the width of the original settlement area and the possibility of finding undisturbed areas.

Heinjoki Vetokallio. – Topogr. map sheet: 402212 Heinjoki; nat. grid: $x = 6735\ 50$, $y = 4534\ 60$, $z = 15\ m\ asl$ – Refs.: Ailio (1915); Saarnisto (1970); Saarnisto & Grönlund (1996); Uino (1997); Takala (2005).

Before the formation of the River Neva, Lake Ladoga discharged itself into the Gulf of Finland near Jääski (Ru. Lesogorskij) via the ancient Vetokallio overflow channel. During our visit, we located this impressive formation and observed the undisturbed forested character of the area (Fig. 1.12). According to map analysis by Christian Carpelan, the river was more than 300 m wide with several small islands.



Figure 1.12 The boat-pulling location at Heinjoki Vetokallio, Christian Carpelan standing in the middle. Picture taken from south. (Photo: P. Uino 1998)

As shown by Ailio, there is a second discharge channel running some kilometres north of Vetokallio. It seems quite obvious that an area like this might have attracted Neolithic hunters and fishers. This is supported by the fact that several stray finds are known from this area, although no dwelling sites are known yet. The Heinjoki Vetokallio district would be one of the most interesting areas for surveying and offers good opportunities for finding undestroyed sites.

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