

2

Archaeological map of the Karelian Isthmus Stone Age – twenty years later

Dmitriy V. Gerasimov

Abstract

Creation and development of the archaeological map of the Karelian Isthmus Stone Age should be highlighted among the main achievements of the Finnish-Russian projects of the years 2000. The projects were initiated by Professor Mika Lavento together with Finnish and Russian colleagues. The archaeological map is a developing research tool, and exploiting of its potentiality for research synthesis is still in the very beginning.

Keywords: archaeological map, Karelian Isthmus, Stone Age.

The last twenty years have brought great advances in the Stone Age studies of the Eastern Fennoscandia, and particularly of the eastern part of the Gulf of Finland region. Amount of discovered Stone Age sites has grown dramatically, and many of them have been excavated using the precise up-to-date methodology. Growing possibilities and also accessibility of analytic methods sufficiently enlarged the volume and diversity of data obtained from excavations; also from excavations that had been done many decades ago.

This development of the Stone Age studies can be very well traced in the modern history of archaeological research in the Karelian Isthmus, north-western Russia (Fig. 2.1). This territory is a well-distinguished geographical region between the Gulf of Finland and the Ladoga Lake, which provided extremely favorable conditions for the Mesolithic and Neolithic hunter-gatherers.

During the first half of the 20th cent. this territory was well-studied archaeologically because of developing agricultural activity, high interest in national prehistory in the Finnish society, and systematical fieldworks by leading Finnish archaeologists – Aarne M. Tallgren, Theodor Schvindt, Sakari Pälsi, and Aarne Europaeus-Äyräpää. Data obtained in that period were synthesized in publications that became classics (Ailio 1909; Pälsi 1915; Äyräpää 1930). But later, due to sad circumstances, the northern part of the Karelian Isthmus became a hardly accessible border zone. Some fieldwork focused on the Stone Age studies was conducted in the southern part of the Karelian Isthmus in 1960th–1980th by Nina N. Gurina, Vladimir I. Timofeyev and Vitaliy A. Sokolov (Gurina 1961; Nordqvist & Mökkönen 2006; Timofeev 1993).

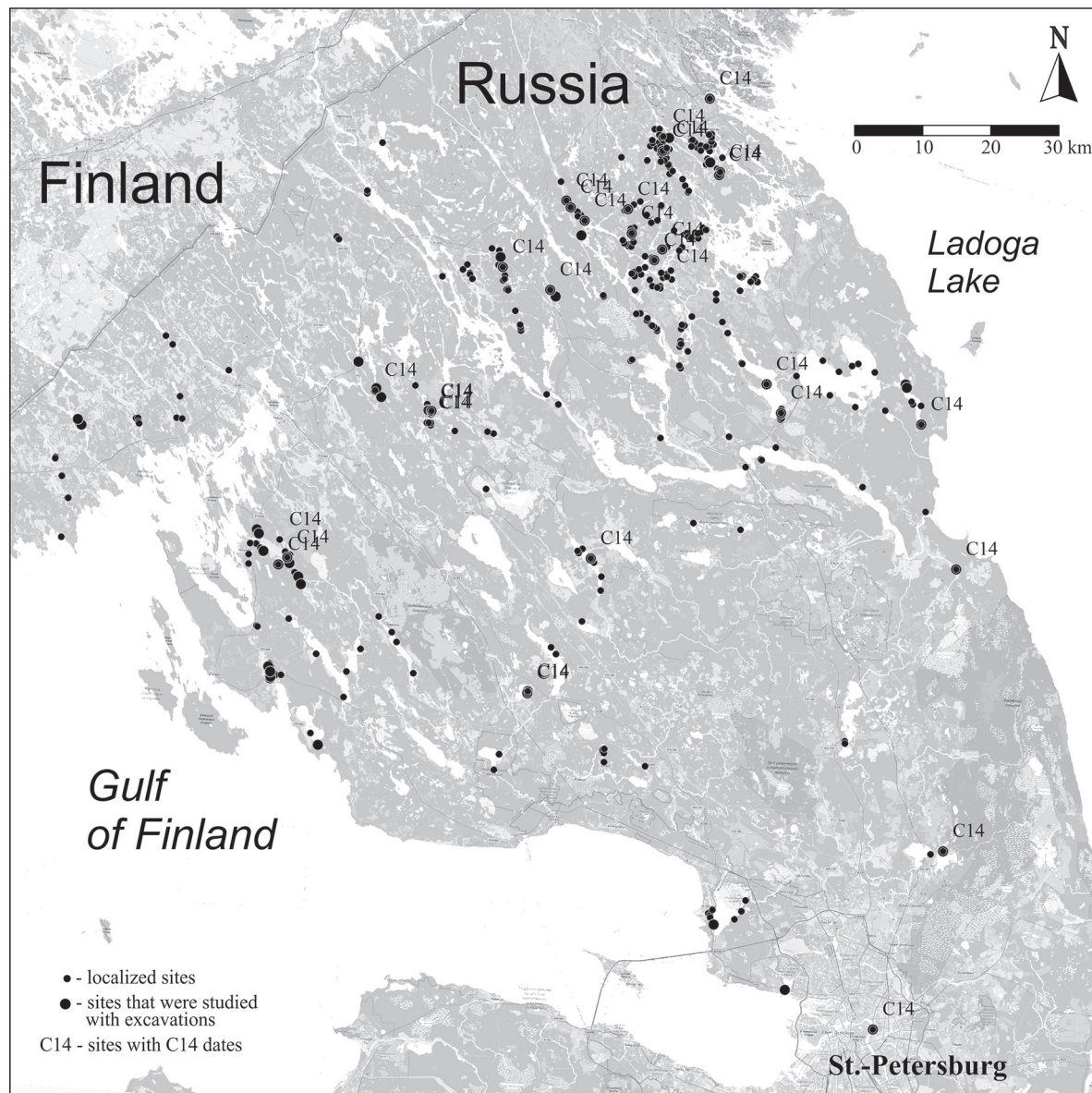


Figure 2.1. Stone Age archaeological sites documented in the Karelian Isthmus by 2020. Map D. Gerasimov.

At the turn of the millennium, efforts of Finnish and Russian archaeologists were combined in a series of international research projects which provided a “Reconnaissance” of the Stone Age studies on the Karelian Isthmus (Lavento 2008). Professor Mika Lavento was an initiator and a leader of this research program from the Finnish side, together with Pirjo Uino, Petri Halinen and Christian Carpelan; from the Russian side, the projects were led by Dr. Vladimir I. Timofeev and Dr. Alexander I. Saksa.

A series of research projects conducted in 2000th already has a great outcome in papers published and dissertations/PhD theses defended (Halinen & Mökkönen 2009; Lavento 2008; Mökkönen 2011; Nordqvist 2018; Nordqvist et al. 2009); and the data obtained with no doubt are of huge potential for the continuing studies. Bringing together the research and field methodologies of Finnish and Russian research schools, recruiting a group of students for Stone Age studies on the Karelian Isthmus and creating an international research team consolidated by friendly relations should be

pointed out as the main achievements of the initial projects. These achievements have also ensured continuation of active studies of the Stone Age in the Karelian Isthmus and neighboring territories for many decades in the future.

Creation and development of the archaeological map of the Stone Age of the Karelian Isthmus should be highlighted among the main achievements of the Finnish-Russian projects of the years 2000. The research strategy developed by Professor Mika Lavento with colleagues was implemented in a sequence of microregional studies. This strategy was easily accepted by all parties, as in Russia microregional approach to Stone Age archaeological studies was developed by Alexander M. Miklayev in his studies of Stone Age of the Dnepr and Western Dvina rivers interfluvies (Miklayev 1995). The idea was to trace changes in material culture in the context of environmental transformations in a certain limited territory through a long time period. A microregion in this context can be defined as a geographically distinguished area of relatively small size (15 x 10 km on average), usually united (or which was united in the past) by a single water system.

Survey routes of the field surveys in the 2000s were planned according to the modeled ancient shorelines for particular periods of Baltic and Ladoga ancient history. During the fieldwork the ancient shorelines were identified and intensively checked for any signs of archaeological sites with searching the spots with disturbed natural surface and making testpits. Studies by Finnish colleagues in the archive of the National Board of Antiquities (the Finnish Heritage Agency) in Helsinki always brought the initial understanding of possible locations of the Stone Age sites in a particular area. Acquaintance with a microregion began with localization of the sites that were discovered by Finnish archaeologists in the first half of the 20th cent. The model of location of Stone Age sites with pre-defined characteristics (e.g. chronological, cultural or structural) was tested this way in different microregions via field archaeological surveys. The results, in turn, were later used for developing the created model, and so on in a chain sequence.

A set of sites was chosen in each surveyed microregion for more precise studying. Small-scale excavations were conducted on those sites with precise documenting of artifact position, peculiarities of stratigraphy and structure of cultural layers. Usually excavated areas did not exceed 20 sq.m. Although limited excavated areas do not allow for proper understanding of the studied remains of prehistoric human activity, such excavations provide representative archaeological material that is diagnostic for cultural and chronological attribution of the site by typological method, and samples for radiocarbon dating and different kinds of analyses. Paleo-geographic studies of the lake bottom sediments were also conducted in the microregions explored.

The developed strategy appeared to be very effective. Intensive systematic field surveys were conducted during a field season in one or several microregions. It usually took one or two weeks for a team of 5–6 surveyors per microregion. Some 20–30 km of ancient shorelines could be checked during one survey. Each survey brought several dozens of new discovered Stone Age sites, and also a list of localized sites that were discovered in previous decades. In several years quite a number of microregions were intensively surveyed in different parts of the Karelian Isthmus: Räisälä and Kaukola (Ru. Mel'nikovo and Sevastyanovo) in 1999, 2002–2005; Koivisto and Johannes (Ru. Primorsk and Vysotsk) in 2002–2003; Antrea and Jääski (Ru. Kamennogorsk and Lesogorsk) in 2001–2004; Heinijoki (Ru. Veschevo) in 2001–2003; Pyhäjärvi (Ru. Otradnoye) in 2004–2007.

In the 2020, twenty years after the beginning of Finnish-Russian field research projects in the Karelian Isthmus, the number of properly localized and documented Stone Age sites is about 400. Some recently discovered sites can be not in the list yet, as every year construction archaeology surveys reveal new points. Also this estimation does not include more than 50 Stone Age sites that were found and localized in 2001 in the Kurkijoki area, as formally this territory is outside of the Karelian Isthmus. The catalog was published (Nordqvist et al. 2008).

Excavations (mainly small-scale excavations) were conducted on at least 60 sites, i.e. on about 15% of all the documented sites on the territory. More than half of them (at least 35) were studied with excavations in the last two decades, which means that the work was done in accordance with the current field methodology and documented accurately. Again, most excavated areas do not exceed 20 sq.m. In 2002 a dwelling depression was studied under the supervision of Professor Mika Lavento together with Vladimir I. Timofeev and Petri Halinen at the western shore of the Bolshoje Zavetnoje (Fi. Juoksemajärvi) Lake (Halinen et al. 2008), excavation area was over 50 sq.m. After Sakari Pälä's study of the famous "Pitkäjärvi hut" (Pälä 1918; Seitsonen 2006), it was the first properly made excavation of Stone Age dwelling remains in the Karelian Isthmus.

Intensive surveys and small-scale excavations allowed to discover multilayer archaeological sites where cultural contexts were separated by sediments of Baltic or Ladoga transgressions. Such kind of archaeological sites, where a sequence of cultural layers that are separated by archaeologically clean sediments can exceed two meters, was not known in the Karelian Isthmus before. Between 2000 and 2010, excavations were conducted on several of multilayer sites jointly by Finnish and Russian research organizations (the University of Helsinki, Lahti Historical Museum, Institute for Hist. of Material Culture and Museum of Anthropology and Ethnography Rus.Acad.Sci.): Muolaa Telkkälä (Ru. Silino), 2000–2001; Ozeroye 3, 2006; Puhjärvi Kunnianiemi 1 (Ru. Komsomolskoye 3), 2006–2007 (Sapelko et al. 2008; Seitsonen et al. 2009; Takala & Sirvio 2003).

Another important achievement of the intensive microregional surveys of 2000s was discovering and studying of several Early Mesolithic sites in the Karelian Isthmus – Borovskoye 1 and 2; Veschevo 11 and 12, Rupunkangas 1a, and Juhola 2 (Halinen & Mökkönen 2009; Lisitsyn et al 2015; Mökkönen et al. 2007; Takala 2004). Previously the only known Early Mesolithic site in this territory was the famous Antrea Korpilahti fishing net find place (Carpelan 2008; Pälä 1920).

Large-scale excavations following the up-to-date methodology and precise documenting were made in the last decade in the Karelian Isthmus owing to construction projects. In 2008–2010, about 8000 (!) sq.m of Stone Age cultural layer were studied on Okhta 1 site in the center of Saint-Petersburg city (Gusenova & Sorokin 2017). A part of the cultural layer still remains unstudied. In 2018, 1700 sq.m were excavated in Berezovo 2 site. The excavated area included almost the whole extension of the cultural layer of the site (Gerasimov et al. 2018).

Age of the major part of the sites documented in the Karelian Isthmus can be assumed on the basis of the typology of artefacts and ancient shoreline chronology. More than 100 radiocarbon dates were obtained for at least 36 Stone Age sites, mostly published in Seitsonen et al., 2012. This estimation does not include more than a hundred dates from the Okhta 1 site in Saint-Petersburg (Kul'kova et al. 2014). Multidisciplinary studies of sediments have been conducted for the major part of the sites that were excavated in the last two decades.

The archaeological map of the Karelian Isthmus Stone Age is a product of all the results of studies of the last twenty years. It is not just a map of archaeological sites of a certain territory – as any specialized map, an archaeological map is a research tool and a subject of study at the same time. It contains information not only about location of sites, but also about cultural and chronological attribution, characteristics of cultural layers and other structural peculiarities, links to certain landscapes etc. An archaeological map is a way to structure data; and computers and advanced software in our time give a possibility to analyze in GIS large sets of data that were attributed with spatial coordinates. The archaeological map of the Karelian Isthmus Stone Age is a developing research tool, and exploiting of its potentiality for research synthesis is still in the very beginning.

Direct supervision by Professor Mika Lavento in Finnish-Russian archaeological field projects lasted till the mid 2000s, after which priority had to be given by Professor Mika Lavento to other professional obligations. But in these years the problematics and methodology of the Stone Age studies in the Karelian Isthmus were defined.

The possibility to contribute to this collection for the glorious jubilee is an honor for me and a great opportunity to express my deepest acknowledgements to Professor Mika Lavento for all I have learnt from him and for the impetus he gave to the Stone Age studies in the Karelian Isthmus for many decades to come.

References

- Ailio, J. 1909. Die Steinzeitlichen Wohnplätze in Finland. I–II. Helsingfors.
- Äyräpää-Europaeus, A. 1930. Die relative Chronologie der steinzeitlichen Keramik in Finland. *Acta Archaeologica*. Vol. 1, fasc. 2: 165–190; Vol. 1, fasc. 3: 205–220.
- Carpelan, C. 2008. On the history and recent studies of the “Antrea net find”. In Lavento, M. (ed.) *Karelian Isthmus. Stone Age studies in 1998–2003* Iskos 16: 88–127.
- Gerasimov, D. V., Tkach, E. S., Goncharova, E. N. 2018. Excavations at the Neolithic site Berezovo 2 in the North-West Ladoga region (field observations and preliminary interpretations). In N.F. Solovyova (Ed.), *Rescue Archaeology, Bulletin*, 8: 9–20. Saint-Petersburg: IHMC RAS.
- Gurina, N. N. 1961. *Drevnaya Istoriya Severo-zapada Evropejskoj Chasti SSSR*, vol. 87. *Materialy i issledovanija po arheologii SSSR*, Moscow - Leningrad (In Russian).
- Gusenova, T. & Sorokin, P. 2017. The wooden construction of the Okhta 1 site in St Petersburg. *Archaeologia Baltica*, No 24: 12–27.
- Halinen, P. & Mökkönen, T. 2009. Between Lake and Sea – Stone Age Settlement by Ancient Ladoga on the Karelian Isthmus. *Fennoscandia archaeologica* XXVI (2009): 107–132.
- Halinen, P., Seitsonen, O., Seitsonen, S. & Nordqvist, K. 2008. Excavations at the Juoksemajärvi Westend Stone Age dwelling site in 2002. In Lavento, M. (ed.) *Karelian Isthmus. Stone Age studies in 1998–2003*. Iskos 16: 235–265.
- Kul’kova, M. A., Gusentzova, T. M., Nesterov, E. M., Sorokin, P. E. & Sapelko, T. V. 2014. Chronology of Neolithic – Early Metal Age sites at the Okhta River mouth (Saint Petersburg, Russia). *Radiocarbon* 54: 3–4: 1049–1063.
- Lavento, M. 2008. (Ed.) *Karelian Isthmus. Stone Age studies in 1998–2003*. Iskos 16.
- Lisitsyn, S. N., Tarasov, A. Yu, Tsvetkova, N. A., Belsky, S. V. & Bessudnov, A. A. 2015. The early mesolithic sites near Borovskoye lake in the Karelian Isthmus. In: *Tver Archaeological Collection*, 10, vol. 1. Tver State United Museum, Tver: 248–253 (In Russian with English Abstract).
- Miklayev, A. M. 1995. The Stone – Iron Age between the West Dvina and the Lovat’. *Petersburg Archaeological Herald* 9, 7e39 (In Russian with English Abstract).
- Mökkönen, T. 2011. *Studies on Stone Age housepits in Fennoscandia (4000–2000 CAL BC). Changes in ground plan, site location, and degree of sedentism*. Helsinki: Unigrafia.
- Mökkönen, T., Nordqvist, K. & Bel’skij, S. 2007. The Rupunkangas 1a site in the archipelago of ancient lake Ladoga: a housepit with several rebuilding phases. *Fennoscandia archaeologica* XXIV (2007): 3–28.
- Nordqvist, K. 2018. *The Stone Age of North-Eastern Europe 5500–1800 cal. BC. Bridging the Gap between the East and the West*. University of Oulu, Oulu.
- Nordqvist, K. & Mökkönen, T. 2006. Opettaja Sokolovin kivikauden kokoelma Karjalankannakselta (Teacher Sokolov’s Stone Age Collection from Karelian Isthmus; in Finnish). *Muinastutkija* 2006, 2: 7–18.
- Nordqvist, K., Seitsonen, O. & Lavento, M. 2009. Waterways and the Stone Age and Early Metal Period studies on the Karelian Isthmus – The Pre-World War II studies and the research carried out by the University of Helsinki in 1998–2006 // *Quaternary International* 203(1–2): 25–32.

- Nordqvist, K., Seitsonen, O. & Uino, P. 2008. Appendix 1. Stone Age and Early Metal Period sites in the studied municipalities. In Lavento, M. (ed.) *Karelian Isthmus. Stone Age studies in 1998–2003*. Iskos 16: 291–328.
- Pälsi, S., 1915. Riukjärven ja Piiskunsalmen kivikautiset asuinpaikat Kaukolassa. *SMYA* Bd. XXVIII: 1: 7–181.
- Pälsi, S. 1918: Kaivaus Pitkäljärven kivikautisella asuinpaikalla Räisälässä v. 1915. *Suomen Museo* 1918.
- Pälsi, S., 1920. Ein steinzeitlicher Moorfund bei Korpilahti im Kirchspiel Antrea, Län Viborg. *SMYA* Bd. XXVIII, 2.
- Sapelko, T. V., Ludikova, A. V., Kul'kova, M. A., Kuznetsov, D. D., Gerasimov, D. V., Subetto & D. A., 2008. Rekonstruksija sredy obitanija cheloveka na territorii Karel'skogo pereshejka (po materialam issledovanija mnogoslojnogo poselenija Ozerneje 3). In: Khlopachev, G.A. (Ed.), *Hronologija, Periodizatsija I Krosskul'-turnyje Svjazi V Kamennom Veke (Zamjatsninskij Sbornik, Vyp. 1)*. Nauka, Saint-Petersburg: 149–164 (In Russian).
- Seitsonen, O. 2006. Räisälä Pitkäljärvi revisited – reinterpretations of the dwelling remains. *Arkeologipäivät* 2005: 138–145.
- Seitsonen, O., Nordqvist, K., Gerasimov, D. 2009. Recent archaeological research in Lake Pyhäjärvi micro-region, Karelian Isthmus, Russia: The multi-period site of Pyhäjärvi Kunnianniemi and new Early Combed Ware period finds. *Fennoscandia archaeologica* XVI (2009): 163–171.
- Seitsonen, O., Nordqvist, K., Gerasimov, D. V. & Lisitsyn, S. N. 2012. “The good, the bad, the weird”: Stone Age and Early Metal Period radiocarbon dates and chronology from the Karelian Isthmus, North-West Russia. *Geochronometria*. Volume 39, Number 2: 101–121.
- Takala, H. 2004. *The Ristola Site in Lahti and the Earliest Postglacial Settlement of South Finland*. Jyväskylä.
- Takala, H. & Sirviö, T. 2003. Telkkälä, Muolaa – a multi-period dwelling site on the Karelian Isthmus. *Fennoscandia archaeologica* XX (2003): 55–77.
- Timofeev, V. I. 1993. Pamyatniki mesolita i neolita regiona Peterburga i ih mesto v sisteme baltijskih kultur kamennogo veka. St.-Petersburg. In: *Drevnosti Severozapada*: 8–33 (In Russian).