

The earliest pioneer settlement in Eastern Finland The Sarvinki-project and the Jokivarsi 1 site

First pioneers in Eastern Finland

The earliest postglacial sites in eastern Finland have been discovered in the Sarvinki area in Eastern Finland. So far, the earliest radiocarbon evidence comes from Jokivarsi 1 and Rahakangas 1 settlement sites, which were excavated by the Sarvinki-project team in 2009–2012.

These sites are crucial for understanding the colonization of Finland and North Europe in postglacial times.



Figure 1. Paleogeography in North Karelia approximately 9000–8900 calBC. First radiocarbon evidence of human activity in the Sarvinki area (red dot) coincides with the final Yoldia phase of the Baltic Sea basin. Lake Sarvinki was connected to the Yoldia Sea and the Pielinen Ice Lake via a narrow outlet in the northwest. The shorelines and the position of the ice-margin are according to Tikkanen & Oksanen (in *Fennia*, 2002).



Figure 2. Paleogeography and Stone Age sites in the Sarvinki area. Jokivarsi 1 and Rahakangas 1 have yielded Early Mesolithic dates (c. 9000–8500 calBC) and Kaiskunsärkkä 1 as well as Rahakangas 1 later Mesolithic dates (c. 7000–6500 calBC). Lake Sarvinki was drained in 1743 and Lake Jakojärvi was silted during the same event. Lake Keskimmäinen was drained later in the 19th century.

Excavations at Jokivarsi 1

The Jokivarsi 1 settlement site is located in a sheltered position between two low hills by an ancient lake. Only a modest c. 50 m² area was excavated, still revealing most of the activity area. The find material consists of quartz, flint, stone, burnt bone and pieces of birch bark tar used for hafting blades.

Figure 3. Ongoing excavations at the Jokivarsi 1 site. The valley of the former Lake Sarvinki is in the background.

A short-term hunting camp

The find distribution forms an almost oval pattern indicating a limited use of space. Most probably there were walls surrounding this space, and it can be interpreted as a hut. The exact nature of the structure is not possible to reconstruct due to lack of actual remains of the dwelling.

With a limited amount of find material and a weak cultural layer, the most viable interpretation for the site is a short-term hunting camp.

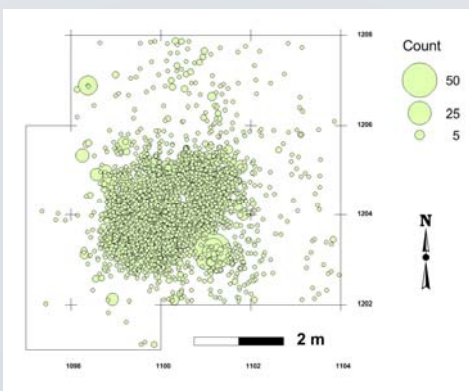


Figure 4. The find distribution in the main excavation area of the Jokivarsi 1 site.

Radiocarbon dates

There are four radiocarbon dates from the Jokivarsi 1 site. The dates are consistent with each other and have an average of 8836±124 calBC.

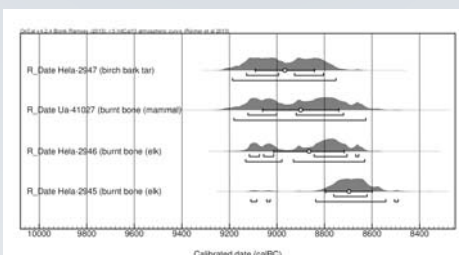


Figure 5. The calibration of the radiocarbon dates from the Jokivarsi 1 site.



Imported flint and local quartz

Quartz flakes and tool fragments dominate the find material. However, other lithic raw materials have also been used. Flint, probably deriving from a carboniferous formation in Northwest Russia and a black lidite-like raw material, probably from the Lake Onega region, also in Northwest Russia, are exotic to the area. The flint blade technology and the raw materials refer to Late Preboreal hunter-gatherer groups in Northwest Russia.



Figure 6. Flint, quartz and black, lidite-like raw material from the Jokivarsi 1 site. Top row: flint; middle row: lidite-like stone; bottom row: quartz.

Moose hunters in the pioneer landscape

The osteological collection from the Jokivarsi 1 excavation is rather homogenous. All the identified bone fragments belong to moose (*Alces alces*) or large ruminants. This perhaps implies a specialized moose hunting trip in the newly emerged postglacial area which provided high-quality nourishment for moose.



Figure 7. Moose is the largest land mammal in eastern Fennoscandia and has always been a desired prey for its high nutrition and raw material value. Photo: Bold Stock.