

The main objective of the project is to construct comprehensive knowledge of the manufacturing of products made of osseous raw materials (bone, antler and animal teeth) and the ways in which they were used among hunter-gatherer-fisher communities (Mesolithic and Subneolithic=Ceramic Mesolithic), inhabiting the area of the East Baltic Plain (territories of Lithuania, Latvia, Estonia and the north-eastern part of Poland) in the Early and Middle Holocene. The limit date that closes the chronological scope of the project is the end of the 4th century cal BC, when as a result of the expansion of the GAC and CWC peoples, Subneolithic communities started to disappear. The area to be analysed is unique not only due to archaeological sites discovered there, with perfectly preserved Stone Age artefacts made of organic raw materials. Its significance lies also in the fact that throughout the Early and Middle Holocene (i.e. from about 11.6 to 4-5 thousand years ago), it was situated as if on the borderline between two realms, namely, the Eastern European and the Western European, not only allowing ideas of each of these worlds to be transferred to the other, but also absorbing them. Therefore, it is a perfect place for studying the intensity, characteristics and the profile of cultural changes occurring in the early- and mid-Holocene hunter-gatherer communities, whereas the use of sources made of osseous materials to this end will allow us to obtain previously unattainable information in this regard. The following detailed studies will be carried out under the project:

1. Studies on the scope of changes occurring in osseous raw material processing techniques and in the ways in which osseous products were used at specific developmental stages of hunter-gatherer communities of the analysed region, with particular emphasis on the role impulses from external environments played in these changes.
2. Studies on the possibility to identify and interpret technological and functional discrepancies between collections of products that come from various sites/regions/archaeological cultures (research on regional organization and stratification of studied communities).
3. Comparative studies on the ways in which the products found in the settlement/household contexts and those deposited in graves were manufactured and used (research on the function of camps and rituals).
4. Technological and functional studies on the figurative art and ornaments of osseous objects.

The project analyses collections of osseous products from the most important sites in this part of Europe, the vast majority of which have so far not been available for this type of research. It includes materials from such sites as: Kunda Lammasmägi and Pulli in Estonia, cemetery in Zviejnieki in Latvia, complex of sites in Šventoji, cemeteries in Donkalis and Spiginas and sites Žemaitiškė II, Kretuonas 1C, Kaltanėnai and Garnys in Lithuania (the last two are underwater sites), as well as the Giżycko-Perkunowo and Kamińskie 1 cemeteries in Poland.

The basic research tool used in the research conducted as part of the project will be the traceological method, which allows for interpretation of the ways of production and functions of prehistoric products, thanks to the microscopic analysis of the traces of processing and use preserved on them. We will also conduct physico-chemical studies of organic residues preserved on the edges of the analysed tools, which will allow us to make a more reliable interpretation of their purpose.

The implementation of the project will be of great importance for the development of research on the prehistory of Europe. Since it covers virtually all major Mesolithic and Subneolithic collections of osseous products from the area of the East Baltic Plain and owing to the use of the traceological method as the basic research tool, the information that will be obtained will be completely new and of key importance for many aspects of research on hunter-gatherer communities of the early and mid-Holocene Europe. The acquired knowledge will allow verification to what extent these people have adapted external ideas and how they have transmitted them to other areas. We will obtain completely new information about the everyday life of these people, e.g. belonging to separate ethnic, family and social groups, funeral rituals and spiritual culture, art and even the way of dressing. Knowledge about some of the most important Stone Age sites in Europe will enter the common scientific circulation (as well as general knowledge).