

Studies related to the activity of Neanderthals and the oldest anatomically modern humans are rare due to the small number of adequately preserved sites from older Stone Age periods. Each new information on the subject is an important element in expanding our knowledge of the oldest societies living on European area. The project involves the study of two unique sites associated with the existence of Stone Age societies – in Zwoleń and Góra Puławska. These are the northernmost sites where traces of Neanderthal and early *Homo sapiens sapiens* groupings have been found in modern Poland. Both sites are known from field works realized in the previous century. As a result of excavations carried out in Zwoleń in 1983-1990, flint tools, as well as waste from their production, and bones of Pleistocene animals, primarily horses, were recovered. The area of the site considered to be the site of killing and quartering of the game by Neanderthal societies. The site at Góra Puławska was discovered in the late 19th century, and was excavated in the 1920s and 1940s. As a result of field work, several assemblages were separated, including both Pleistocene faunal remains and flint artefacts, which were associated with and the oldest anatomically modern humans.

The aim of the project is to verify interpretations regarding previous research on the function and chronology of the sites, as well as to obtain new data on the activity of Neanderthals and the oldest anatomically modern humans living in central Poland tens of thousands of years ago. Field works are planned. At the Zwoleń site, small trenches will be excavated and a series of drillings using hand augers, will be carried out, these studies are aimed at determining the extent of the site and original area of Neanderthal activity. At Góra Puławska site, magnetic surveying, a series of drillings will be carried out and small trenches will be excavated with the aim of locating the area of activity of Paleolithic societies. It is planned to use developed methods of dating, sediment analysis, animal bone studies and flint finds.

On the basis of the research carried out, it will be possible to answer questions about the reasons for the arrival of human groups in the Stone Age to areas, being far to the north, outside the dense zone of their activity. In addition, it is planned to obtain information on ways of managing flint raw material, methods and techniques of processing flint nodules, including ways of making tools. Through use-wear studies of flint artifacts, it will be possible to show how they were used in the daily activities of Stone Age societies. Interpreting the bones of Pleistocene animals – determination of species affiliation, taphonomic, post-consumption character, will yield answers about the diet of Stone Age societies, among other things. The sedimentological studies carried out, will be the basis for inferring the genesis of the sites, but also for showing original location of the activity sites of Neanderthals and the oldest anatomically modern humans.

In conclusion, it will be possible to obtain answers as to what caused the groupings of Neanderthals and the oldest anatomically modern humans to reach the lowlands and what types of activities they undertook. All the information obtained will add to the current state of knowledge about some of the oldest societies living in Europe.