

Cultural and natural heritage of the Białowieża Forest - popular science project summary

The aim of the project titled *Cultural and natural heritage of the Białowieża Forest* is to present the information about the cultural and natural resources associated with past human activity throughout the Polish part of the Białowieża Forest complex in the form of a compact set. The study of forest areas in the past was not very popular because of the dense vegetation and the inability to acquire artifacts from surface prospecting. Today, however, a new, non-invasive tool called ALS (Airborne Laser Scanning) allows to reject the theory of forests being "deserted areas." This is confirmed by the results of previous excavations, surveys, and observations of all the places where the forest floor was breached, as well as dust-bathing places (the so-called "paprzyska") of bisons, foxes, badger burrows, molehills, and wild boar rootings. Similarly used are the hollows that occur numerously in a natural forest, thanks to which ceramics and flints, which indicate the presence of settlements or cemeteries, can be found between the roots of fallen trees on archaeological sites. Not without significance is also the observation of places exposed during maintenance work in the forest and on dirt roads. Materials collected so far indicate that human activity in the Białowieża Forest dates back to the Early Stone Age. The project will also include other non-invasive methods like the surface-verification research generated on DTM (Digital Terrain Model) or DSM (Digital Surface Model) maps of archaeological sites and geophysical surveys of selected settlement objects. These data will be complemented by elaborations of archival and contemporary environmental GIS (Geographic Information System) maps, a developed geomorphology of the land, archival and source query connected with the history of research and the history of the Białowieża Forest. The research will be complemented invasive methods: drillings of selected objects, surveys, small excavations of selected, newly discovered sites in order to establish their chronology. The samples taken will be subjected to multi-faceted laboratory research and, together with the elaborated historic material, will form the basis for further interpretation.

Dealing with the history of man in forest areas is closely related to discovering and reconstructing the natural environment, researching its changes under the influence of the interfering "culture." Therefore, only the cooperation of archeology and natural sciences will permit the full documentation and understanding of the history of the Forest.

The result of this study will be a monograph outlining a catalog of anthropogenic and natural changes of the Białowieża Forest from the Stone Age to the modern era (late 18th century). On the other hand, the presented data will be used for the presentation of research results at conferences and the development of a number of articles (published in Polish and international periodicals) regarding past human impact on the environment in a specific area, which is the Białowieża Forest. The information obtained and then transferred to the Podlaskie Voivodeship Conservator of Monuments, the employees of the Białowieża National Park, and the Forest Services will be the basis to developing a plan to protect the archaeological sites of the Białowieża Forest.