Axes and chisels made of elk antler from the Mesolithic - Early Neolithic sites of Russia and Belarus: technologies and functions.

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Abstract

Our report will present the results of experimental and traceological analysis of the chisels and axes made of antler (Alces alces L.) from the site near the village of Michnievičy (North-Western Belarus) and settlement Zamostje 2 (Russia). The largest part of the collection refers to the period of Mesolithic – Neolithic. At the first stage of work, the most expressive and numerous group of artifacts made of antler were selected for a techno-morphological analysis. Analysis of the technological traces recorded on the items allowed us to highlight the differences in the manufacturing processes of the tools. According to technological and morphological features, the whole of the analyzed material was divided into conditional categories of instruments. In addition, on the basis of the macro signs of utilitarian wear observations on the functional using of objects were obtained. A series of experiments were conducted to reliably verify the traces of use recorded on artifacts. It was found that the choice of raw materials, a specific part of the elk antler, was deliberate for the manufacture of tools of different type. Established standards for the manufacture of tools with a set of certain functional characteristics indicate a strict specialization of this category of tools. It can be assumed that the functional specialization of the antler chisels and axes of special types were preserved in other territories where these items were found (for example, in the Baltic States and Western Russia), which may indicate a wide spread of elk antler processing skills in communities of the Late Mesolithic - Early Neolithic period.

Keywords: Mesolithic, Early Neolithic, Belarus, Russia, Zamostje 2, elk, antler, traceological analysis, functional analysis, experiment

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