
The function of early ceramic container and subsistence strategies in Zamostje 2, Central Russia, during the early Holocene

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Abstract

In north-eastern Europe, resource-rich aquatic and boreal ecotopes were created with the stabilization of climate during the early Holocene, with a climatic optimum from ca. 8ka cal BP. During this period, pottery technology also dispersed across the continent and was taken up by a broad range of hunter-gatherer societies. We aim to explore how early pottery-producing hunter-gatherers adapted to these new conditions and the relationship between pottery and their subsistence economy. This study focuses on the site of Zamostje 2, located 110 km north of Moscow in Russia, along the Dubna River, one of the most important sites in this region due to its remarkably preserved, uninterrupted stratigraphic sequence from Mesolithic to Middle Neolithic (Lozovski and Chaix, 1996). The site was occupied during the Atlantic period from around 7,000 to 5,500 cal BC. The site has produced a very significant collection of well-preserved artefacts and ecofacts. Faunal remains at Zamostje 2 site suggest a broad subsistence economy based on hunting/gathering/fishing throughout the late Mesolithic and Neolithic (Losovski and al. 2013), the latter period defined by the introduction of pottery. In order to examine the motivation for its introduction, we aimed to test whether pottery had a specific function or alternatively were used for processing a broad range of foodstuffs. To do this, we undertook molecular and isotope analysis of lipids extracted from 135 samples of absorbed and superficial organic residues on ceramics from Zamostje 2, using GC/MS and GC-c-IRMS. The results are compared to the use of other food-processing technologies (lithic, wooden artefacts, basketry) which are exceptionally preserved at this site, and to the botanical and faunal records.

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