Eight new Late Pleistocene-Early Holocene AMS dates from South-Eastern Baltic

Livija Ivanovaite*,†, Bente Philippsen*,2, Kirill Makhotka3, and Felix Riede1

1Department of Archaeology and Heritage Studies, Aarhus University – Moesgård Allé 20, 8270 Højbjerg, Denmark
2Aarhus AMS Centre, Department of Physics and Astronomy, Aarhus University – Ny Munkegade 120, building 1522, 8000 Aarhus C, Denmark
3The Kaliningrad Regional Museum of History and Art – Klinicheskaya Str. 21, Kaliningrad 236016, Russia

Abstract

Only a limited number of radiometric dates for the Final Palaeolithic and the first half of the Mesolithic are available from the south-eastern Baltic. This paper presents eight new Late Pleistocene/Early Holocene AMS dates obtained by dating osseous artefacts housed at the Kaliningrad Regional Museum of History and Art: One piece of worked reindeer (Rangifer tarandus) antler, three axes of the (problematically named) ‘Lyngby’ type, one bone point, one uniserial harpoon, one so-called "baton percé" antler tool, and one slotted bone point were sampled. Two of the specimens were further subjected to subsequent protein-based species analysis for taxonomic identification. All dating attempts were successful and have provided five Late Pleistocene and three Early Holocene dates, including the hitherto earliest date for human occupation in the Eastern Baltic, a surprisingly early date for a bone point, but also dates that strongly contradict expected ages based on the traditional typological assessment. In sum, these new dates increase the existing radiometrically dated artefact database significantly and stimulate new ways of viewing the Final Palaeolithic and Early Mesolithic chronology in the region.

Keywords: New AMS dates, South, Eastern Baltic, Late Pleistocene, Early Holocene, osseous artefacts

*Speaker
†Corresponding author: livija.ivanovaite@gmail.com