
Olga Druzhinina,1,2,* Anatoly Molodkov,3 Albertas Bitinas,4 and Enno Bregman5,6

1Vyshtynets Museum of Nature and History, Kaliningrad Oblast, Russia
2Kant Baltic Federal University, Kaliningrad, Russia
3Research Laboratory for Quaternary Geochronology, Institute of Geology, Tallinn University of Technology, Tallinn, Estonia
4Marine Science and Technology Center, Department of Geophysical Sciences, Klaipėda University, Klaipėda, Lithuania
5Province of Drenthe, Assen, the Netherlands
6Utrecht University, Utrecht, the Netherlands

Correspondence
*Corresponding author; E-mail: olga.alex.druzhinina@gmail.com

Received
15 February 2015
Revised
23 August 2015
Accepted
24 August 2015

Scientific editing by Jamie Woodward

Published online in Wiley Online Library (wileyonlinelibrary.com).

doi 10.1002/gea.21553

INTRODUCTION

Recent decades have seen significant progress in understanding the first human habitation of North Eurasia in the Middle and Upper Paleolithic (Pavlov et al., 2004, 2009). A number of archaeological sites have been found widely scattered across Europe up to latitude 68° north. However, while evidence from southern and western Europe confirms the widespread distribution of ancient populations during MIS 5 and MIS 3, the presence of humans in Central Europe (CE) and northeastern Europe (NEE) seems to have been sporadic and concentrated within relatively small areas (Pavlov, 2004; Wiśniewski et al., 2013; Djindjian, 2012; Groucutt & Scerri 2014; Hublin, 2015). The territory of the Baltic region (Lithuania, Latvia, Estonia, and Kaliningrad Oblast of the Russian Federation) is located on the margins of the classical Paleolithic world. To date, no Middle and Upper Paleolithic sites have been found in this part of Europe, which has lead to the general belief that the Baltic territory was not colonized by humans until the final stage of the late Weichselian glaciation (MIS 2). On the basis of available data, the initial habitation of the region has been related to the Bolling warming (Ostrowskas, 2005; Stančikaite et al., 2011) or Greenland interstadial substage GI-1e, which started in northern Europe at about 14.7 cal. ka B.P. (Björck et al., 1998). Recent archaeological discoveries of Middle and Upper Paleolithic sites—and an increasing body of chronological data from CE and NEE—suggest that there was no hiatus in colonization in these territories during MIS 3. According to the results of paleogeographic studies carried out in Poland (Vistula River valley), the southeastern Baltic environment during the middle Weichselian was characterized by a long ice-free period, between 65 ka and 30 ka (Wysota et al., 2002). Reconstructions of paleoclimate for CE (Poland, Odra River valley) demonstrate that the mean annual temperature (MAT) in this region at the beginning of MIS 3 was 6.3°C. In a modern context, this paleotemperature is higher than the current MAT in Stockholm/Sweden (5.8°C) or Riga/Latvia (6.0°C) (Skrzypek et al., 2011). The data obtained suggest that the climate in the warm