

Northern Water Problems Institute
Karelian Research Centre
Russian Academy of Sciences
Russian Foundation for Basic Research
Paleolimnological Commission of the Russian Geographical Society

PALEOLIMNOLOGY OF NORTHERN EURASIA

Proceedings of the International Conference

Petrozavodsk
21–25 September 2014

Petrozavodsk
2014

УДК 56:556.55(4/5)
ББК 28.1 + 26.222.6(0)
P17

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P17 **Paleolimnology of Northern Eurasia. Proceedings of the International Conference.** Petrozavodsk, 21–25 September, 2014 / Eds. Dmitry Subetto, Tatyana Regerand, Anastasiya Sidorova. Petrozavodsk: Karelian Research Centre RAS, 2014. 136 p.
ISBN 978-5-9274-0638-8

The «Paleolimnology of Northern Eurasia» conference is the first conference in Russia to deal with the reconstruction of North Eurasian paleogeographical and paleoclimatic environments relying on interdisciplinary studies of bottom sediment cores from lakes of different types. The conference aims to analyze the state-of-the-art in paleolimnological research in Russia and abroad, to share latest expertise and experiences in paleolimnology, to offer training workshops to young scientists, PhD, BSc and MSc students, to determine the prospects for paleolimnological research, and to work out plans for further studies. In the 1960s-1980s, conferences on lake history used to be regular (triennially) in Russia. One of the challenges for this conference is to reinvigorate paleolimnological studies in Russia as a promising scientific speciality addressing a wide range of issues in paleogeography, paleoclimatology, evolution of aquatic ecosystems, geocology and some other fields.

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**The conference is sponsored by the Russian Foundation for Basic Research (14-05-20300_r),
Northern Water Problems Institute KRC RAS,
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ISBN 978-5-9274-0638-8

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GEOARCHAEOLOGY OF ONEGA LAKE: CURRENT STATE OF RESEARCH AND PROSPECTIONS FOR FUTURE WORK

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The connections between geological processes and history of human habitation on the coasts of Onega Lake have been studied for almost 100 years, beginning with the works of K. Markov and B. Zemlyakov in the 1930-th. Karelian archaeologists A. Bryusov, N. Gurina, and especially G. Pankrushev paid close attention to this line of investigation, though their conclusions are not always supported by the current evidence. The most profound research was conducted by E. Devyatova in the 1970-s and 1980-s in collaboration with Karelian archaeologists. In the beginning of XXI century, geoarchaeological investigations up to the moment were not very active. Minor investigations were conducted in the vicinity of Kizhi island (mainly I. Demidov) and close to Orovnavolok cape on the eastern coast (M. Saarnisto and I. Vuorela).

Correlation of results obtained by different researchers is complicated by the fact that Holocene tectonic movements had different directions in the northern and southern parts of the lake. Because of this coastal formations of the same age can be found at different heights above the sea level. At the moment detailed reconstruction of the shoreline displacement in connection to human habitation of the area has been made only for several microregions, while reconstruction of the paleogeographical situation along the whole coast is lacking.

E. Devyatova proposed such reconstructions for a number of locations with important agglomerations of archaeological sites: the area between outfalls of Vodla and Chernaya Rivers on the mid-eastern coast, capes Orovnavolok and Chernaya Guba on the north-eastern coast, Pindushi on the northern coast, area of Pegrema and Palajguba in Zaonezh'e Peninsula, and Sheltozero on the south-western coast. Dozens of archaeological sites have been found in each of these localities, as well as in the area close to Kizhi island. The available reconstructions definitely help to clarify the question of interconnection between geological processes and human habitation, but their extrapolation to wider areas is not possible. A very important agglomeration of archaeological sites in the outfall of Shuya River close to Petrozavodsk on the mid-western coast still awaits geomorphological and geoarchaeological investigation. The agglomeration contains at the moment nearly one hundred sites, the majority of which were found and partly excavated during the last twenty years.

Holocene water levels and corresponding shorelines have been defined in the abovementioned micro-regions, including shorelines of the Preboreal period. Despite a big series of sites with late Preboreal – early Boreal datings that have been discovered in the Ladoga Lake area and in Finland, especially in the recent decades, none site that can be certainly dated to such an early period is known from the Onega Lake. Because of growing evidence of late Preboreal habitation of Eastern Fennoscandia, finding sites belonging to the earliest stage of human colonization of the coasts of Onega Lake is on the agenda of current research. Thorough surveying at Preboreal levels in the coastal zone may help to solve this problem.

The study is financially supported by the Russian Scientific Foundation (14-17-00766)