

The Archaeology-Palaeobotany-Palynology Database on the Palaeolithic, Mesolithic and early Neolithic sites of the Former USSR Area

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Abstract: The Database of Paleobotanical (charcoals, woods, seeds etc.) and Palynological finds from the archaeological sites of the former USSR area contains some data on the early and middle Palaeolithic (BARPP-A), six archaeological and ecological stages of the upper Palaeolithic – Mesolithic (BARPP-B1–BARPP-B6) periods and the first information on the early Neolithic period.

The Internet address of the database is following: <http://www.peterlink.ru/~stepanov/gml>.

Key words: Database, Palynology, Palaeobotany, Pollen, Charcoal, Palaeolithic, Mesolithic, Neolithic

Introduction

The Database concentrates the Palaeobotanical and Palynological information on Stone Age sites from different regions of the former USSR area that is dispersed in a large number of mainly small articles, published in the issues on different sciences (archaeology, botany, geology, palaeogeography, palaeoclimatology, palaeopedology, geophysics, etc.) and often in unknown publisher houses of small towns, museums, etc. This information was accumulated through the joint work of palaeobotanist and palynologist (Levkovskaya), the specialists on Internet or computer technologies who for some years were involved in archaeological expeditions (Stepanov, Bogolubova, Stegantzeva, Stegantzev), and specialists on the Palaeolithic (Anikovitch, Anisutkin, Beliaeva) and Mesolithic–Neolithic–Bronze ages (Shumkin, Sinitzina, Timofeev) archaeology of different FSU areas. The database is located in St.-Petersburg: partly in some personal computers of scientists at the Institute of History of Material Culture Russian Academy of Science and partly on the Peterlink web server: <http://www.gml.spb.ru/BARPP-C/>.

The general characteristics of the Database materials

The Archaeology-Palaeobotany-Palynology Database includes materials on the early and middle Palaeolithic (BARPP-A), on six chronological, archaeological and palaeogeographical periods of the upper Palaeolithic and Mesolithic (BARPP-B) and on the Neolithic (BARPP-C). The upper Palaeolithic–Mesolithic database contains data on the following chronological, archaeological and palaeoecological periods: BARPP-B1 (43,000–37,000 BP) — the initial upper Palaeolithic, extremely dry and cold climatic stage; BARPP-B2 (36,000–25,000 BP) — the early upper Palaeolithic, the late Valdai megainterstadial; BARPP-B3 (24,000–20,000 BP) — the middle upper Palaeolithic, the period between megainterstadial and maximum of late Pleistocene glaciation in Europe and Siberia; BARPP-B4 (19,000–15,000 BP) — the late upper Palaeolithic, maximum of late Pleistocene glaciation in Europe and Siberia; BARPP-B5 (14,000–10,000 BP) — the final upper Palaeolithic, late glacial climatic period; BARPP-B6 — the Mesolithic (early Holocene). BARPP-C contains some data on the early Neolithic (the development of this part of BARPP is scheduled for the year 2001).

The general principles of the BARPP organization have been published (Levkovskaya et al. 2000; 2001). Part of the databases A, B and C information is placed on the Peterlink web-server. The system has the following technical characteristics: Intel — based PC; Free BSD 4.2 stable; Russian Apache 1.3.17; programming language — Perl 5.00503.

13 maps presented in the BARPP show the geographical location of all early Palaeolithic (18), middle Palaeolithic (51) and some upper Palaeolithic (111), Mesolithic (85) and early Neolithic sites with palaeobotanical or palynological information that are known in the FSU. Parts of these maps are published (Levkovskaya et al. 1999). Data not only on archaeological layers but on archaeologically sterile sediments of the geological sections and sites are presented in the BARPP. The palynological

information dominates the information about the finds of the macro remains of the plants. The database includes palaeobotanical and palynological information in the form of author's pollen diagrams, floristic tables and SEM-micrographs. It contains geological profiles, palaeoclimatic curves, different dating (palaeomagnetic, C14, ESR, TL), European Pollen Database (EPD) text forms with about 90 items describing each key site (geographical location, bibliography, addresses of the researches, etc.) and the additional text forms with information on archaeological complexes, climatic stratigraphy, information about the plant macro-remain finds, etc.

An especially important part of BARPP presents the data (partly not yet published) on the best stratified archaeological sites such as the key early and middle Palaeolithic group sites of Korolevo (Transcarpathia) and Kudaro (South Osetia), the middle and late Palaeolithic group sites of the Middle Dniestr basin (Ketrosy, Korman 4, Molodova 1, 5) and Anuj river at Altai (Denisova, Anuj 2, Ust-Karakol 1), the upper Palaeolithic group from the Don river (Kostenki group sites), Mesolithic–Neolithic group from Eastern Latvia (Lubana lowland) and from Upper Volga (with tens of archaeological sites), etc. The correlation of Palaeolithic archaeological sites with global climatic stages (with the Greenland Pleistocene isotope O16/O18 curve) based on palynological data is given in the BARPP. Such correlation transforms local archaeological sites or local key archaeological areas to the world standard geoarchaeological territories. The BARPP contains some new data (Levkovskaya 1999; 2000) on palaeoecology of transition periods (middle/upper Palaeolithic, Mesolithic/Neolithic) and some new SEM-information on plant-gathering.

The information from the openly accessed (Internet) and closed parts of the BARPP-A, BARPP-B and BARPP-C could be sent in English or in Russian to interested persons. Requests should be sent to the following address: info@gml.spb.ru

Conclusion

The BARPP needs international financial support that will permit its improvement (to translate all materials in English, to improve some graphs, etc.). It is important to organize the European Archaeology-Palaeobotany-Palynology Database by the International group of Scientists. The international database will be useful for European archaeologists, palaeobotanists and palaeoecologists.

Acknowledgements

BARPP-A, BARPP-B and BARPP-C have been organized thanks to the Russian Foundation for Humanitarian Research financial support (grants: N 96-00-00425a of 1996–1997, 98-01-0031a of 1998–2000 and 01-01-00269a of 2001–2003).

The materials of the present article were presented at the CAA 2001 conference on Gotland thanks to the CAA Organization Committee grant. One of the co-authors (A. Stegantzev) visited Gotland thanks to this grant. The co-authors are grateful to CAA Organization Committee for financial support and are

especially grateful to Professor Göran Burenhult and coordinator Johan Arvidsson for their practical help in the organization of this important scientific contact.

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