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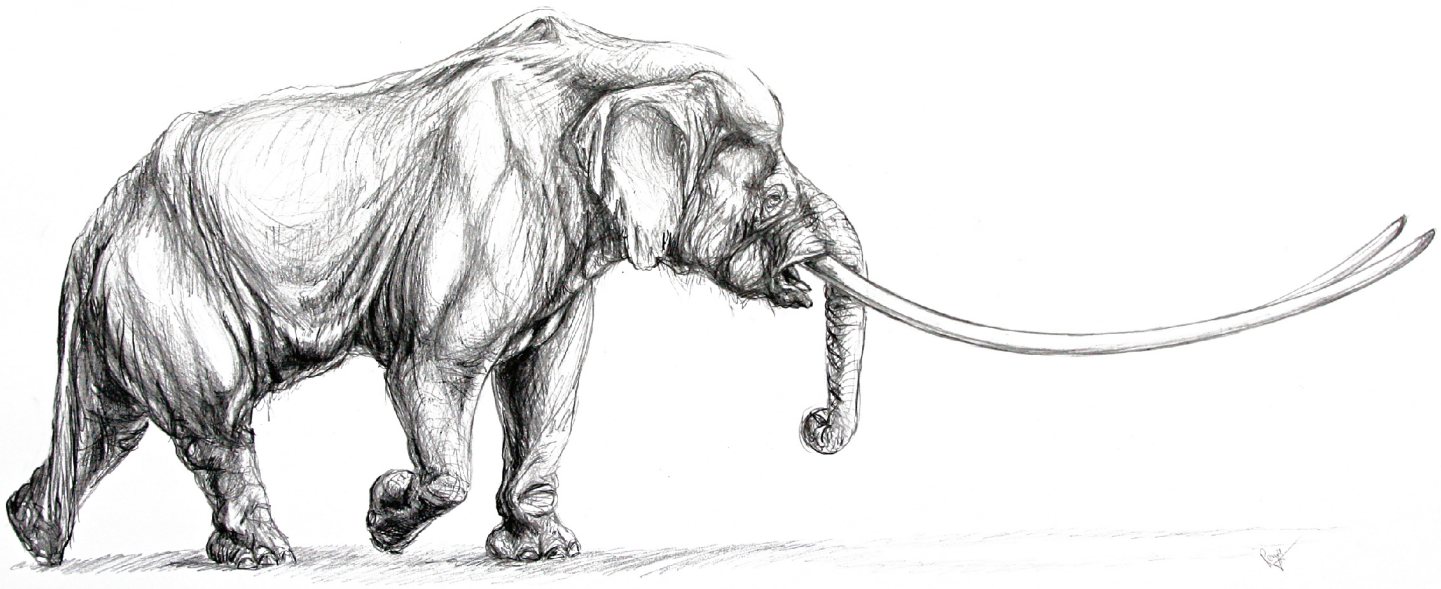

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ABSTRACT BOOK

Editors:
Dimitris S. KOSTOPOULOS, Evangelos VLACHOS, and Evangelia TSOUKALA

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Zooarchaeological study of an Upper Palaeolithic site with mammoth remains, Pushkari I - excavations VII (Chernigov oblast, Ukraine)

Laëtitia DEMAY ✉, Valentina I. BELYAEVA, Pavel VASSILIEV, Stephane PÉAN, and Marylène PATOU-MATHIS

Pushkari archaeological complex was discovered in 1930's by Rudinsky (1947), on the right bank of the Desna river. Our work focuses on Pushkari I, one of the sites of the complex of Pushkari. Stratigraphic and geographic studies showed that the archaeological layer is located -0.70 meter deep. As it is located above the Briansk soil (Pidoplichko, 1947 ; Boriskovsky, 1953; Velichko, Gribchenko, Kurenkova, 1997) it can be correlated to the beginning of the Upper Pleniglacial. The radiocarbon datings gave an age between 19 010 ± 220 BP (AA1389) and 21 100±40 BP (GIN3382). During the Upper Pleniglacial, between 23,000-20,000 years BP, the climate of the area got colder and more arid. In the region, the remains of human occupations recovered for this age are scarce, with less dense concentrations than during the other Upper Palaeolithic periods. Pushkari is one of the few archaeological complexes giving information about this time.

The lithic material is characterized by an unusual Gravettian assemblage including Pushkarian points. It is different from the contemporaneous lithic industries of Kostienki and other sites of the Dnieper region and corresponds to an original cultural type (Rudinsky, 1947; Boriskovsky, 1953; Otte et al., 1996; Belyaeva, 1997b, 2000, 2002; Nuzhnyi, 2009). Species of the local fauna, identified in different excavations, include mammoths, horses, reindeer, red deer, wolves, polar foxes, brown bears and lemmings (Boriskovski, 1953; Sablin, 1997).

In order to understand acquisition modalities and treatment of large mammals, and to test the hypothesis of the use of woolly mammoth as a source of food and building material, we studied the faunal remains from the subdivision VII of Pushkari I (42 m^2 excavated, Fig. 1). Our methodology includes paleontological, paleoenvironmental and taphonomical approaches.

The faunal spectrum is made of *Mammuthus primigenius*, the predominant species, *Equus* sp., Cervidae, *Canis lupus* and *Vulpes vulpes/Alopex lagopus*. Bones of the upper and lower extremities of canids are well preserved, and more or less in their anatomical position indicating that bone deposition is little disturbed. All anatomical parts of woolly mammoths are represented, suggesting that the individuals died near the site. The high representation of tusk material may indicate anthropogenic influence. Concerning the age classes of mammoths, we identified juveniles, young adults and a predominance of adults. This type of mortality profile does not result from a natural process. The taphonomic study allowed us to suggest that the bone remains lied in open-air for a long time before they were buried and affected by sandy deposits. Moreover alteration on bone surfaces allows implying a more humid climate than expected. Concerning biological agents, carnivores were in no case responsible for the origin of the assemblage. In contrast, we observed human cutmarks on bones of large mammals. Human groups came to Pushkari I to use local flint, to hunt, butcher large mammals, and get supplies of carnivore furs.

This study provides new data to understand the particular status of the woolly mammoth within the Upper Palaeolithic human groups in the russo-ukrainian plain.

Fig. 1. View of the excavations VII of Pushkari I, Ukraine.

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✉ laetitia.demay@student.ulg.ac.be | ldemay@mnhn.fr

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