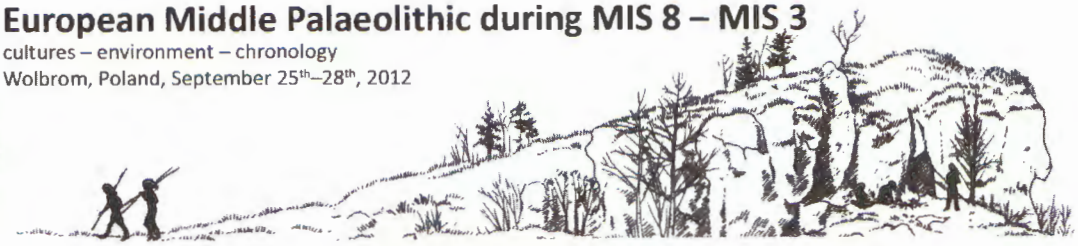
International Conference
European Middle Palaeolithic during MIS 8 – MIS 3
cultures – environment – chronology
Wolbrom, Poland, September 25th–28th, 2012

Guidebook
&
Book of Abstracts

Toruń 2012



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The intact sediments with layers 3, 4 and 5 (both Epimagdalenian and Magdalenian) have been presented only in the entrance of the cave. Older Magdalenian layer 6 has been detected also in the centre of the cave. The Gravettian finds have been concentrated only in the sectors J and G1. Micoquian layers that have been expected to be datable (layers 7a+7a1 and 6a+6b) are spread out over all sectors of the Kůlna Cave but the density of finds differs. We take into account also finds from layers 7c (7c+7α) mostly distributed in the entrance and in the sector E (on the left part of the cave).

Results of data: The most recent Palaeolithic stratum in the Kůlna Cave is represented by layer 3. One date correlates with the Neolithic and is in conformity with this. The second date (OxA-25283) can be considered acceptable because of its agreement with the assumed position of Epimagdalenian.

The dating of Epimagdalenian layer 4 was carried out using three samples. The first two (OxA-25284 and OxA-25285) are older than the overlying layer 3; the third sample (OxA-25286) is more recent and can be correlated with layer 3.

Located in the substratum was the younger layer of Magdalenian (layer 5), out of which four samples were analysed although only two were successfully dated. One of the dates corresponds to Epimagdalenian layer 3 (OxA-25287), while the other more likely correlates with the chronologic position of the Magdalenian layer 6 (OxA-25288).

A relatively close dataset is available for the older Magdalenian layer 6 (OxA-25289-25291). According to these data the occupation of the cave can be rather reliably dated to the period around 12 500 BP.

The samples taken off from finds associated with Gravettian cultural horizon provides a problematic group of data, because the Gravettian and Magdalenian artefacts were found in macroscopically identical sediment – thus possible contaminations cannot be dismissed.

The key question of the project was the chronological position of the most recent Micoquian horizon represented by layer 6a (in the entrance and the centre of the cave) and layer 6b (inside of the cave; cf. Neruda et al 2011). Fourteen samples were sent for analysis, and absolute dates were acquired for 12 of these. Seven samples yielded a general datum testifying that the Micoquian occupation is not younger than the obtained value, which oscillates between 45 900 and 50 500 years BP. The OxA-25308 sample, which provided the absolute date of 47 300±2 800 BP, falls within this framework as well. It is important that the prevalence of data fall within the Middle Palaeolithic period (older phase of MIS 3).

From the underlying Micoquian layer 7a also fourteen samples were analysed, out of which thirteen provided some data on the age of osteological material. Only one datum can be calibrated (OxA-25315), and its age comes near the absolute data obtained earlier (Valoch, 1988). The remaining data place the occupation into an older period than the 45 800–50 300 BP interval.

In view of our assumption that the age of the finds from layer 7c would be beyond the limits of the ^{14}C method, only two samples were analysed (OxA-25324-25325) to indicate that the occupation of the cave was not younger than 49 300 BP.

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New geoarcheological studies at the Middle Paleolithic sites of the Upper Desna basin, Russia

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The stratified Middle Paleolithic sites were discovered on the right bank of the Desna river in the 1950's–1970's, and excavated by F.M. Zavernyaev's and L.M. Tarasov's expeditions in the 1960's–1980's. In 2009 the field works were resumed by the Upper Desna Expedition of the Institute for the History of Material Culture of the Russian Academy of Sciences. The newly obtained results allow to reconsider some of the previous notions about both chronology and techno-typological particularities of the Middle Paleolithic assemblages of Khotylevo I and the Betovo group.

The recent fieldworks were aimed first of all at the study of the depositional history of the Middle Paleolithic culture-bearing strata and clarification of their stratigraphic and chronological position. With this purpose in mind in 2009 we cleaned the walls of L.M. Tarasov's trenches at Betovo, Korshevo I and Korshevo II, and in 2010 analogous works were conducted at Khotylevo I. The new sedimentological and stratigraphic observations made in the course of the fieldwork and supplemented with the results of palynological and paleomagnetic analyses, as well

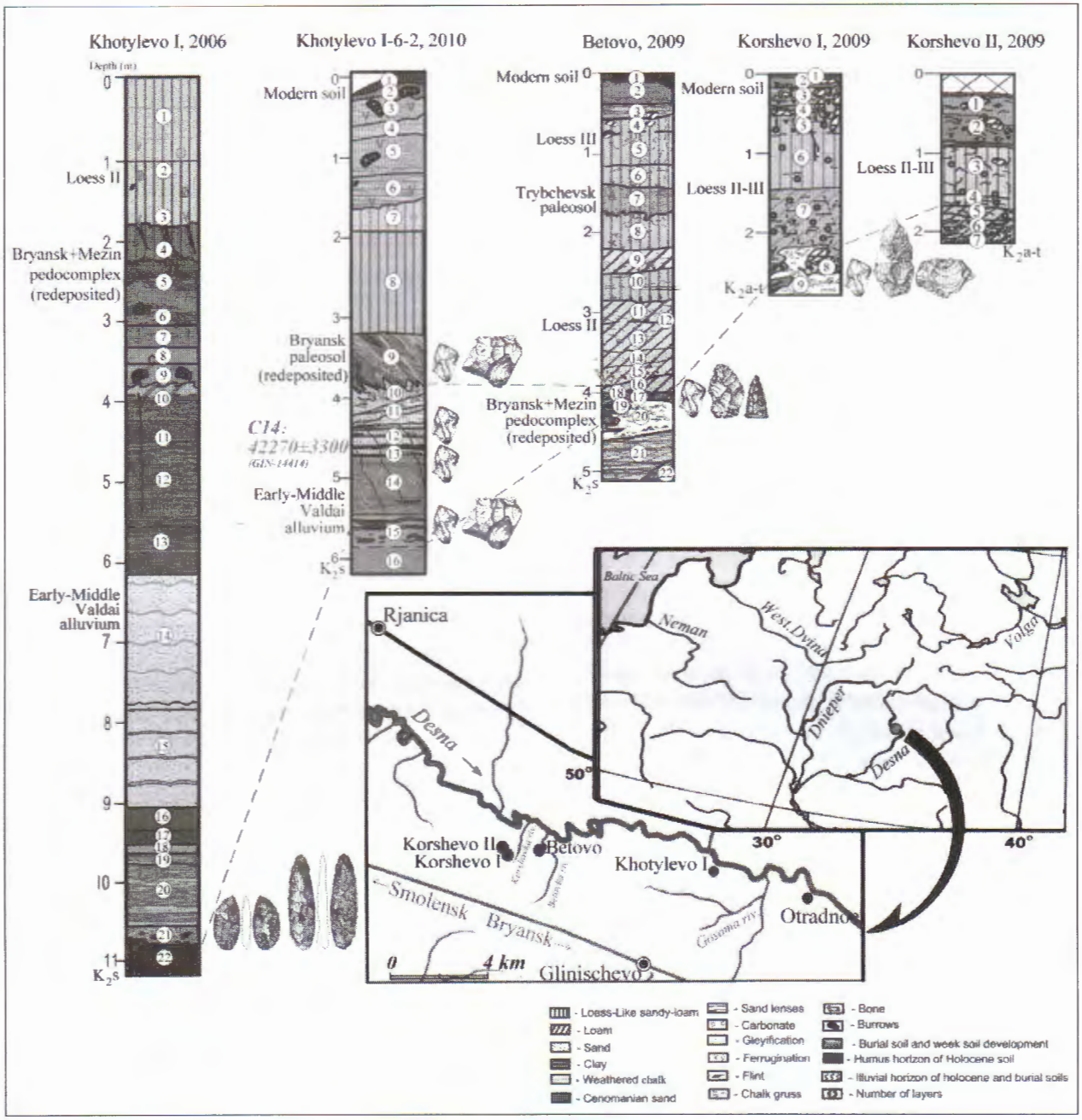

Fig. 1. A tentative correlation of the Middle Paleolithic sites in the Upper Desna region

as radiocarbon dating, make it possible to characterize the site formation process in much more detail than has been possible before.

Previously the Middle Paleolithic materials of Khotylevo I were thought to occur in a redeposited context in sandy-gravel sediments of the basal alluvium horizon of the Desna. The formation of the alluvium deposits was dated to the transitional stage between the Mikulino interglacial (OIS 5) and Early Valdai glacial (OIS 4). However, as was shown by the 2010 works, the culture bearing layers were associated with diluvium deposits with humus horizons. In addition, the works demonstrated the existence of several culture bearing layers differing in both the number and typological composition of artifacts and the degree of their post-depositional dislocation. In all likelihood, the formation of these deposits took place during the first half of the Middle Valdai megainterstadial (OIS 3). For the time being just one radiocarbon date obtained on a humus sample is available for Khotylevo I, and it falls within this time interval: 42270±3300 (GIN-14414).

The culture bearing layers of the Betovo group sites are associated with redeposited buried soils disturbed by cryogenic processes, resting on the Cenomanian (Upper Cretaceous) sands, and overlain with the Late Valdai loess-like sandy loams and loams.

The results obtained in 2009–2010 permit to hope that the continuation of field explorations at the Middle Paleolithic sites of the Upper Desna region will contribute to clarifying many questions related to the chronology, genesis, and variability of the Micoquian industries in the Russian Plain.