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EARLY PALEOLITHIC SITES IN THE AZOV SEA REGION: STRATIGRAPHIC POSITION, STONE ASSOCIATIONS, AND NEW DISCOVERIES

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The Asov Sea region (Azov-Black Sea area, Russia) is one of the major areas for Pleistocene studies in Eastern Europe. This region hosts important localities of small and large mammals, reference sections of Quaternary deposits of various origins, and numerous clearly stratified Paleolithic sites of different age.

Of special interest are the recent discoveries of Early Paleolitic sites in the Taman Peninsula near Za Rodinu settlement (Krasnodar Region, Russia). These finds have been done in Early Pleistocene (Eopleistocene) deposits in the area of the type locality of the Taman faunal unit, Sinyaya Balka. The early Paleolithic sites were called Bogatyri/Sinyaya Balka and Rodniki. The preliminary results of their multidisciplinary study were published in materials of international conferences on Early Paleolithic (Shchelinsky et al., 2008a, 2008b; Dodonov et al., 2008a, 2008b; Bajgusheva, Titov, 2008). The Tamanian type fauna includes *Archidiskodon meridionalis tamanensis* Dubrovo, *Elasmotherium caucasicum* Borissiak, *Mimomys savini* Hinton, *Lagurodon arankae* Kretzoi and other forms. Combined biostratigraphic and structural geological data permit dating of these sites in the range of 1.6–1.1 Ma, and correlation of the enclosing off-shore marine and continental deposits to the mid Apsheronian (Gurian) of the Ponto-Caspian regional scheme (Shchelinski et al, in press).

Associations of stone artifacts in Bogatyri/Sinyaya Balka and Rodniki are quite similar. They are archaic in stone processing techniques and shape of the objects. The initial preparation was associated with sporadic use of nuclei and common use of side fragmentation and disintegration of slabs and plates to obtain blanks for tool manufacture. Though the studied assemblages contain numerous, occasionally processed flakes, most tools were manufactured with the use of platy slabs of the source stone material. The association includes characteristic variable choppers, picks-like tools, high massive sidescrapers, core-like endscrapers, beaked tools, thorned tools, small thick points, notches, and denticulates. This industry belongs to the Tamanian variety of the Oldowan. Specific features of the industry are determined by the local stone non-flint material including platy silicified clastic rocks of Tertiary and Mesozoic age.

The above reviewed sites occur in the eastern limb of the Tizdar brachyanticline exposed in the coastal cliff of the Sea of Azov. The underlying deposits of this structure are characterized by late Kujalnik brackish and fresh-water mollusks and earliest Biharian small mammal faunas Tizdar 1 and Tizdar 2 with *Allophaiomys*

deucalion paleomagnetically and biostratigraphically dated in the range of 2.1–2.0 Ma (Tesakov, 2004). This part of the sequence is associated with a ca. 40 m thick sandy member. Recently these deposits yielded an association of Early Paleolithic stone tools (the site Kermek) similar in source material and typological features to materials from Bogatyri/Sinyaya Balka and Rodniki. The Kermek site is associated with a bed of sand with rubble and shells of freshwater mollusks in approximately 5 m above the base of the member and the site Tizdar 1, and in ca. 25 m below the site Tizdar 2. The molluskan assemblage of Kermek includes *Margaritifera* sp., *Unio* (*Pseudosturia*) sp., *Potomida sublitoralis* Tschepalyga, *Dreissena polymorpha* Pallas, *Viviparus* sp., *Valvata* sp., *Fagotia* sp. (determinations of T.A. Yanina and A.L. Tchepalyga). Judging by the geological position, this site has an estimated age of 2.0 Ma.

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