

LATE ASHGILLIAN BENTHIC ASSOCIATIONS OF WESTERN-URAL PALEOBASIN

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The great diversity of benthic fauna in the end of late Ashgillian is connected mainly with Late Ashgillian-Early Llandoveryan transgression. Three benthic associations - brachiopod, tabulate-stromatoporoid and tabulate are observed in Upper Ashgillian (Yaptykshor layers) section. They appear at the basis of dolomite unit, formed in the beginning of transgression and reflecting various sedimentation conditions of Early Paleozoic shelf margin at the Western-Ural paleobasin. These associations replace each other in the section and are represented, as a rule, by cosmopolitical genera and species widely distributed outside the basin (Kazakhstan, Baltic countries, Siberia, Timyr, Arctic islands of Russia and Canada). The interesting peculiarity of Western-Uralian *Holorhynchus giganteus* was established. Their shells have combined morphological features of three geographical morphotypes known earlier: Norwegian (large wide shells), Central Asian (large longitudinal shells) and Kazakhstani (small shells with sinuses). This peculiarity of Uralian *H. giganteus* is important for establishing a group origin place and paleobiogeography. Diversity of benthic fauna - stromatoporoid, tabulate, rugose, heliolitid, brachiopod, crinoid, gastropod, bryozoa is sharply increased in a beginning of Yaptykshor time. Low taxonomic diversity and low population density are characteristic for all of these groups. Only stromatoporoid, tabulate and brachiopod have survived by the end of Ashgillian. Biotic crisis in the end of Ashgillian and changes in content of associations were caused by biotic and abiotic factors. The most important among them were facies and paleogeography changes in Western-Ural paleobasin.