

BIOTOPICAL DISTRIBUTION OF EARTHWORMS (OLIGOCHAETA, LUMBRICIDAE) IN SMALL RIVER VALLEYS OF THE FOREST-STEPPE OB REGION

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Abstract. *Background.* The landscape heterogeneity of river valleys is very interesting from the point of view of assessing the distribution of soil invertebrates. In early studies of the fauna of earthworms (Lumbricidae) of Siberia, it was shown that the greatest diversity of lumbricide is confined mainly to these biotopes. The goal of this work is to search for patterns of biotopic distribution of earthworms in small river valleys of the forest-steppe Ob region. *Material and methods.* The field work was carried out in six river valleys of the forest-steppe Ob region in the summer-autumn seasons of 2015–2017. In the river valleys, three types of habitats are distinguished: the lower terrace, the slope and the upper floodplain. Records of earthworms are made by standard soil-zoological methods: layered excavation and manual analysis of soil samples. The species composition of earthworms was determined, the demographic structure of the dominant species populations was estimated. The selection of biotopic confinement of earthworms was carried out by cluster analysis. *Results.* Data were obtained on species composition, population density and demographic structure of the dominant species of earthworms in three types of habitats of small river valleys. In the valley of the Inya River the analysis of the interannual dynamics of the worms number for the period of 2016–2017 was carried out. Based on the clustering of habitats, the biotopic confinedness of four dominant species of earthworms was revealed: *E. nordenskioldi nordenskioldi*, *A. caliginosa caliginosa*, *L. rubellus*, *O. lacteum*. *Conclusions.* It was established that the species composition of earthworms in small river valleys of the forest-steppe Ob region is represented mainly by cosmopolitan species: *L. rubellus*, *O. lacteum* and *A. caliginosa caliginosa*. The widespread Siberian subspecies *E. nordenskioldi nordenskioldi* and *E. nordenskioldi pallida* are few in number. In the demographic structure of the most species of earthworms was dominant juveniles worms; population with dominant adult worms and even-aged populations were extremely rare.

Keywords: earthworms, forest-steppe Ob region, river valley, habitat, interannual dynamics, population age composition