DOI 10.21685/2500-0578-2025-3-3

BIOTOPIC DISTRIBUTION OF MOLLUSKS IN THE SURA RIVER BASIN BELOW THE CITY OF PENZA

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Abstract. For the development of scientifically sound approaches to the sustainable management of water resources, it is necessary to study the structural components of aquatic communities, including mollusks. The aim of this work is to study the malacofauna of the Sura River basin downstream of the city of Penza, with an analysis of the spatial distribution of species depending on the type of water body. Samples of mollusks were collected in various types of water bodies: the channel of the Sura River (11 stations), its tributaries (4), and oxbow lakes (7). The collection was carried out manually from the substrate, vegetation, and using a hydrobiological net, with the geographical coordinates recorded. A total of 38 species from 10 families were identified. The greatest diversity was noted in the families: Lymnaeidae – 8, Planorbidae – 8, Sphaeridae – 6, and Unionidae – 5. Species preferences for specific biotopes were established: rivers, tributaries, or oxbow lakes. The invasive species *Ph. acuta* was recorded near populated areas. Both eurybiontic and stenotopic species were discovered (e.g., *S. saridalensis* and *Pl. planorbis* – stagnant water bodies; *R. auricularia* – areas with slow water flow). The presence of the invasive species *Ph. acuta* indicates anthropogenic influence on the river ecosystem.

Keywords: mollusks, Sura River, tributaries, oxbow lake, Penza

Financing: this research was funded by Russian Science Foundation, grant number 22-14-00026-П.

For citation: Stojko T.G., Lobachev E.A., Komarova E.V., Komarov A.A. Biotopic distribution of mollusks in the Sura river basin below the city of Penza. Russian Journal of Ecosystem Ecology. 2025;10(3). (In Russ.). Available from: https://doi.org/10.21685/2500-0578-2025-3-5