

TAXONOMIC COMPOSITION AND QUANTITATIVE CHARACTERISTICS OF THE ZOOPLANKTON AND ZOOBENTHOS COMMUNITIES OF THE KHATANGA RIVER

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Abstract. *Background.* The study of the fish feed base of the Khatanga River is necessary due to the fact that the river is used for commercial fishing of valuable fish species. The last description of the communities of zooplankton and zoobenthos of the Khatanga River was carried out according to the data of 1946, respectively, there is no more up-to-date information about the state of hydrobiological communities. The aim of this work is to establish the taxonomic composition and quantitative characteristics of zooplankton and zoobenthos communities, as well as to assess the trophic status of the Khatanga River. *Materials and methods.* Studies of the river were conducted at 5 stations: in 2014-in the areas of the settlements of Novorybnoye and Kresty, in 2015-at 25 km, 45 km and 67 km from the mouth of the river, in 2018-2020-in the area of the settlement of Khatanga. Samples of zooplankton and zoobenthos were collected and processed according to the methods generally accepted in Russian hydrobiology. All samples were taken in three repetitions. *Results, conclusions.* During the 2014–2015 and 2018–2020 studies, 33 taxa were identified in zooplankton, and 37 in zoobenthos. The average values of zooplankton abundance and biomass ranged from 57 ± 57 to 477 ± 441 ind./m³ and from 0.52 ± 0.52 to 3.12 ± 0.64 mg/m³, respectively, and zoobenthos – from 260 to 2642 ind./m² and from 0.65 to 4.04 g/m², respectively. Rotifers were dominant in the zooplankton community in terms of quantitative parameters, while chironomids, oligochaetes, and mollusks were dominant in the zoobenthos. According to the development of zooplankton and zoobenthos, the river belongs to the "low-feed" fishing facilities. The trophic category of the Khatanga River is defined as "ultra – oligotrophic" by zooplankton, and "α-mesotrophic" by zoobenthos.

Keywords: Khatanga river, zooplankton, zoobenthos, taxonomic composition, abundance, biomass, feed resources

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