

## Quantitative alterations of the Ob Bay's macrobenthos between 2019 and 2021

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In the last few years, annual dredging operations have been carried out in the Ob river in the region of the sea channel located between 72°10'N and 72°40'N, which significantly affect the functioning of the bottom community in this area. In this regard, the main goal of our study was detailed benthic research of the sea channel in the Ob Bay to identify quantitative changes associated with the regular anthropogenic influence on this community.

According to the 2019 results, the average abundance of macrobenthos in the studied Ob Bay area was  $2.740 \pm 1.858$  ind/m<sup>2</sup> (mean  $\pm$  SD), whereas in 2021 it was  $1.596 \pm 549$  ind/m<sup>2</sup>. At the same time, the average biomass in 2021 almost doubled ( $234 \pm 170$  g/m<sup>2</sup>) compared to 2019 ( $132 \pm 111$  g/m<sup>2</sup>). A comparison of the macrobenthos abundance between 2019 and 2021 showed that the density of macrobenthos at stations located geographically outside the channel remained at the same level, while the abundance at stations in the area of the sea channel has four-time decreased. Despite the decrease in macrobenthos abundance, the mean biomass at the sea channel stations remained at the same level due to a greater number of large crustaceans.