
Dissertations

Zoobenthos of the sandy littoral of the Gulf of Gdańsk

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The thesis presents data collected monthly from Jurata, Osłonino and Mikoszewo in the Gulf of Gdańsk in 1993. The aim of the study was to describe the seasonal changes in abundance, biomass and composition of the sandy littoral fauna within 0–10 m of the shoreline. Represented by 14 higher taxa, the meiofauna was present in numbers up to 4000 indiv. 10^{-1} cm^{-2} and up to a biomass of 2.5 mg d.w. 10^{-1} cm^{-2} . The respective figures for the macrofauna were 22 taxa, 15 000 indiv. m^{-2} and 52 g d.w. m^{-2} . The macrofauna was dominated by Polychaeta (*Nereis diversicolor* made up the bulk of the biomass), while the meiofauna, dominated by Oligochaeta and Nematoda, was similar to that of other temperate shallow-water localities. Distinct peaks in the zoobenthos biomass and abundance were observed in May and September. Sampling between 0 and 10 m from the shoreline revealed no significant differences between the sampling points – hence the zoobenthos inhabiting this coastal belt can be regarded as a single ecological unit.

In general, the littoral zoobenthos of the Gulf of Gdańsk is faunistically similar to that of the adjacent shallow sublittoral. It differs, however, in the predominance of juvenile specimens in the macrobenthos, and in the lower macrobenthos biomass. The littoral meiobenthos biomass is higher than in the neighbouring sublittoral. Both the macro- and meiofauna from the littoral, unlike that of the sublittoral, show distinct seasonality in density and biomass.

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