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The density and the biomass of bryozoans in the cooling reservoir of the Bereza Electric Power Plant (BSSR). The All'Union Conference on the Problems of Animal Cadastre and Account, Ufa, 1989, vol.4, pp.45-46.

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The continental bryozoans of l'USSR, included Belarus, is poorly studied group of animals, regarding the ecological and energetic aspects.

The mass development of the bryozoans *Plumatella fungosa* in the cooling reservoir of the Electric Power Plant (EPP) have been noted from 1980. In the 1982 the bryozoans colonies have been noted in the lake Narotch, on the stems of the *Potamogeton*. On the water reservoir Chizhovsky, from 1984 the bryozoans have been covered the gratings of water supply well. The bryozoans have been found on the water reservoirs Minsky, Ptich, and in the 1987 on the lake Drysviaty.

The density, biomass, distribution, species composition, mechanism of the growth, nutrition, respiration and reproduction, in dependence of the environmental factors, the function of the bryozoans in the water ecological systems are until now unexplored.

From 1980, we have been started the systematic ecological and energetic study of the bryozoans in the cooling reservoir of the Bereza EPP. The data of the density and the biomass determined during the years 1987-1988, were the basic data for the estimation of the role of the bryozoans *P.fungosa* in this ecologic system. The vegetation of the bryozoans starts in the early spring (Mars) when the temperature in the warm channel reach about 20 °C and finishes in the late autumn (November-December) when the temperature decies to about 12 °C. During the summer when the temperature in the channel reach about 30-35 °C, the bryozoans biomass can reach several kg/m². However, the high temperature (35-36 °C) can oppress the colonies growth. In the warm channel in the fish ponds the bryozoans biomass can reach 1,5-2,5 kg/m².

The bryozoans role in the reservoirs is, probably, of two kinds: from one side, the bryozoans can create the significance difficulties, growing on the pipes of the water supply systems or in the fishponds, and from other side, the bryozoans can be the indicator of the water purity, the biological filter of the water reservoirs and food for fish. In the cooling reservoir of the Bereza EPP bryozoans form the powerful biological filter. The type of the nutrition of the bryozoans is sedimentation. The bryozoan's funnel precipitate the blue-green alga dominated in the cooling reservoir. In this reservoir bryozoans *P.fungosa* is the dominant species in the multilevel consortium with complex trophic, topic and fabric connections. The number of species in the periphyton depends from the bryozoan's density. With maximum of bryozoans biomass the numbers of associated species can reach about 25. Abundant food and possibility for refuge create the favorable conditions for accumulation of *hydra*, *oligochaeta*, *nematode*, *protozoa*, *larvae of chironomida*, *ostracoda*. For this reason, the study of the density and biomass of the bryozoans is necessary for the prognosis and regulated formation of its growth in the reservoirs.