CZU: 597.556.11(478)

ATHERINA (*ATHERINA BOYERI* RISSO, 1810) FROM THE KUCHURGAN RESERVOIR

Mustya Mikhail, PhD student
Moldova State University, Chisinau, Republic of Moldova
E - mail: mustya91@mail.ru

The Kuchurgan reservoir is a reservoir subject to high anthropogenic pressure. This is due to the construction and commissioning of a thermal power plant - Moldavskaya GRES. Before the construction of the power plant and the transformation of the natural estuary into a reservoir - the cooler of the MGRES, the same species of fish were found in it as in the reservoirs of the Lower Dniester. On the territory of Moldova, this is the only body of water that is fundamentally different from other aquatic ecosystems in the region, mainly by a moderate degree of thermofication and increased mineralization - about 2500 mg/l.

Aterina appeared in the Kuchurgan reservoir-cooler of the Moldavskaya GRES in the early 1990s. Atherina got into the reservoir, most likely together with the pumped water from the river. Turunchuk. Due to the high potential of reproduction, as well as eurybiontism, sinter in a short time took a dominant position in terms of numbers in the ichthyocenosis of the Kuchurgan reservoir. Due to the high mineralization and increased thermofication of the reservoir, atherina has found a favorable ecological niche for itself here. Due to the fact that the mineralization of the water in the reservoir is lower than that of the sea, as well as competitive trophic relations with native species, the smelt has formed a local herd with slowed down, almost 2 times compared to the sea, growth, earlier puberty and shortened, almost two times, life cycle. According to the results of control catches in 2019-2022. atherine is the absolute dominant in abundance in the ichthyocenosis of the reservoir.

Currently, it is the most massive species of fish in the reservoir. According to the dominance index, it belongs to the D5 category, according to the constancy index - C2 and C3, according to the environmental significance index - to the W5 category. The maximum dimensions and weight of males are 9.4 cm and 3.9 g, and females are 9.8 cm and 4.3 g, which is lower in comparison with the marine form.

In the Kuchurgan Reservoir, the atherina migrates en masse twice to the coastal part of the reservoir - in spring from early March to early April and in autumn from early October to early November. Being heat-loving, in the autumn-winter periods it migrates to the warm channels of the Moldavskaya GRES, forming large accumulations, which is associated with a higher temperature in comparison with the open water area of the reservoir by about 5 degrees or more. Due to the high concentration of atherine in the warm channels in the autumn-winter period, the number of predators increases here, in particular, asp, which actively feeds on atherine. In addition to predators, carp also feeds on smelt, so in early spring, anglers use smelt as bait and catch carps of impressive size (about 10 kg).

Acknowledgments: Research was carried out within the framework of the project №.20.80009.7007.06 AQUABIO

Keywords: ahterina, aquatic ecosystems, ichthyocenosis, predators, potential of reproduction, eurybiontism.