CZU: 639.12(478)

APPLICATION OF BIOTECHNICAL STRUCTURES TO IMPROVE BREEDING CONDITIONS OF WETLAND BIRDS IN THE YAGORLYK NATURE RESERVE

Romanovich N.A.
Moldova State University, Chisinau, Republic of Moldova Institute of Zoology, Chisinau, Republic of Moldova
E-mail: ecoterrapmr@mail.ru

In conditions of unstable hydrological regime of the Dniester River, which is expressed in frequent, non-cyclical fluctuations of the water level, of great importance is the improvement of nesting conditions for wetland birds. In 2021, in accordance with the recommendations of the Reconstruction and Management Plan for the Yagorlyk Nature Reserve 4 nesting rafts were created, the target species are Great Crested Grebe and Ferruginous Duck. Rafts about 1.5 m across are made of planks and wooden slats, or from plastic containers, wire mesh and turf. A load serving as an anchor is tied to the bottom of the rafts with a rope. In the spring of 2022, 15 closed-type platforms for nesting wetland birds were also manufactured and installed among the hydrophytes. The platforms were made of wooden pallets, for buoyancy, foam material "penoplex" and plastic containers were placed under the platform. A pipe made of metal mesh and meadow hay was fixed to the platform. The dimensions of the platforms are 100/60 cm, the size of the nest tube is 80 cm in length and 30 cm in inner diameter. When nesting sites are located in dense thickets of wetland vegetation, all plants around the nest are removed by 30-40cm. The nests were located in two groups at a distance of 10 – 20 meters from each other: 1 group of 5 nests in the area of the tract "Balta"; 2 group of 10 nests in the Goyan Bay near the village of Doybany. The platforms were installed in March, immediately after the ice meltdown.

In addition to the above target species, such artificial rafts will be used by Coots and other waterfowl. Using the experience of creating biotechnical structures in conditions of unstable hydrological regime of the Dniester River it will allow to preserve and improve habitats for a vulnerable group of birds of the middle and lower Dniester in the future. Monitoring of the ornithopopulation of limnophiles it will allow tracking the dynamics of changes in the fauna of birds of the middle and lower Dniester and to identify species that are particularly vulnerable to which it is urgently necessary to apply biotechnical methods.

***Acknowledgments**:* The studies were performed within the State Program project 20.80009.7007.02 and doctoral project «Ecological-ethological peculiarities of water birds and wader species from the Lower Dniester area»

References:

Грищенко В.Н. Биотехнические мероприятия по охране редких видов птиц. Черновцы, 1997. 143 с.

Заповедник «Ягорлык». План реконструкции и управления как путь сохранения биологического разнообразия /Шабанова Г.А., Изверская, Т.Д., Гендов В.С., Сыродоев Г.Н. [и др.], под науч. ред. Г.А. Шабановой. Дубоссары: Эсо-Тирас, 2011. 128 с.

Keywords: Middle and lower Dniester, nesting, water level fluctuations, wetland birds.