



S3.10. First record of the species *Benthophilus nudus* (Berg, 1898) in the Prut River

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Nowadays an increasing interest is observed for the fauna of family *Gobiidae*, the representatives of which live in salty, brackish, as well as fresh waters. As scientific arguments can serve the following considerations: 1) it is a young phylogenetic group, numerous from taxonomic point of view, and not fully elucidated up to now; 2) it has demonstrated an evident biological progress in aquatic ecosystems of Republic of Moldova during last years; 3) some representatives may serve as objects in deciphering the mechanisms and strategies of biological invasion as phenomenon.

An eloquent example consists of recent penetration of *Benthophilus nudus* (Berg, 1898) – representative of ponto-caspian complex, not recorded previously – into the Prut River. It is assumed that *Benthophilus nudus* (Berg, 1898) adapted to live in fresh waters in upper tertiary (Morduhai-Boltovslii, 1960), but without going far away from estuary zones. Nowadays, an active expansion of this fish species upstream to the course of major rivers is observed, and some studies revealed the species adaptation to the lake and reservoir conditions (Resetnicova, 2003). *Benthophilus nudus* (Berg, 1898) is a representative of the genus *Benthophilus*, which comprises 20 species from ponto-caspic basin. Previously it was believed that only the species *Benthophilus stellatus* (Sauvage, 1874) populates the north-west region of the Black Sea and the lower parts of the Danube, Dniester, South Bug and Dnieper. Later some authors (Boldyrev, Bogutskaya, 2004, 2007) attributed some found in fresh waters specimens, taking in account their some distinctive morpho-metric peculiarities, to the species *Benthophilus nudus* (Berg, 1898) (Manilo, 2011). The information on biological characteristics of the taxon is ambiguous and full of unclear details. It is known that *Benthophilus nudus* (Berg, 1898) is a lithophilous, zoobenthophagous species. It reaches the sexual maturity at one year old, and reproduces in May-June. A female of 5-8 cm in length lays in average 1500 eggs (from 700 to 2500), and perish after the spawning. The male protect the clutch of eggs till the embryo hatching, and after that also perish. Thus, in fact the representatives of this species live up to one year. The fry feed with zooplankton, and later switch to worms, insect larvae, molluscs and fish fry. The feeding becomes more intense during night. The abstract authors recorded for the first time this species in the Prut River in spring of 2015, in the area of Cislita-Prut port, which was construction in 2014. The control fishing with dredge (1.0 x 0.5 m) revealed a quite high numerical abundance of this species in captures – 15 individuals. By repeating ten times control fishing, it was determined that *Benthophilus nudus* (Berg, 1898) belongs to the category of dominant (D4 – 5.7%), accessory (C2 – 50%) and satellite (W3 – 2.8%) species, which put in evidence the pronounced affinity of this fish for given habitat. The penetration of *Benthophilus nudus* (Berg, 1898) into the Prut River shall be considered as an inevitable process in current ecological conditions of increasing anthropogenic pressing, which facilitated the biological progression of this fish species and enlargement of its primary area of distribution. Previous studies (Bulat et al, 2014) revealed an increasing abundance of this species in Dniester River and its systematic occurrence in fish captures, collected in the Lower Danube during expeditions from autumn of 2014.

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