

Section 2. Fauna of aquatic and terrestrial ecosystems

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FOUNDING OF *CHROMIS CHROMIS* (LINNAEUS, 1758) AND *SARDA SARDA* (BLOCH, 1793) IN THE AREA OF THE ZMIINYI ISLAND

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Diversity of life conditions in the coastal waters near Zmiinyi Island creates the possibilities for forming and functioning of the island ichthyocoenoses which are notable for their species diversity. More than one-half of fish species living in the North-Western Black Sea were found in the vicinity of the island.

Methods of the work are described in details in the monograph. Visual observations have been carried out according to standard methods using lightweight diving outfit.

In summer 2010 two rare species in the Black Sea had been found near Zmiinyi Island: *Chromis chromis* (Linnaeus, 1758) (Red Data Book of Ukraine) and *Sarda sarda* (Bloch, 1793) (Black Sea Red Data Book). Two specimens of *Chromis chromis* were observed visually in the South-Eastern part of the water area near the island, at the 11 meters depth during benthos survey. *Sarda sarda* (total length 30,0 cm, weight - 240 g) had been caught on the eastern part of the island.

Founding of the new species, *Chromis chromis* and *Sarda sarda*, is an evidence of continuing 'mediterrization' of the Black Sea. Distribution of thermophilic Mediterranean species in the North-Western Black Sea might be connected with climatic changes, namely, with increase of water temperature.

Thus, during eight years of surveys in the water area around the island 52 fish species have been found, belonging to 12 orders, 32 families and 43 genera. 12 of them are included into the Red Book of Ukraine. That is why ecological status of the coastal waters of the island is still quite significant. One of the main conditions of the unique diversity of the island coastal area conservation is the prohibition of any economic activities in the coastal waters and on the island itself.