

THE MORPHOLOGICAL CHARACTERISTIC OF THE SPOTTED STONE LOACH NOEMACHEILUS STRAUCHI STRAUCHI (KESSLER) FROM THE WESTERN PART OF THE LAKE ALAKOL

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The modern native ichthyofauna of separate Kazakhstan water systems was formed as a result of the long process of evolution and relocation of fishes of different faunistic complexes. First of all, Alakol is the closed lake and it differs by the structured relief of the bottom due to numerous islands and shallows.

While studying a fish fauna of Alakol lake, loaches are one of the dominating groups and constitute 60% of a fish fauna's total number (Kairova of N., 1972). Spotted stone loach *Noemacheilus strauchi strauchi* (Kessler) which belongs to family Nemacheilidae (Kottelat M. 2012) the great interest for studying phenotype variability of native fish fauna of Kazakhstan. Is the of typical form of spotted stone loach is meet along the area, forming ecological morphs, first of all lacustrine forms (Fishes of Kazakhstan 1989).

The purpose of our research is study of the current state and morphological characteristics of population the spotted stone loach's from the Lake Alakol's western part.

Collecting of material was prosecuted in 2014. For catch of fishes we used fine-meshed fishing nets of various sizes (12, 16, 20, 24 mm). The caught fish was fixed in 10% formaldehyde.

In this work we used methods of the biological and morphological analysis of fishes. Classification of species, biological and the morphometrical characteristics of the fishes was performed in laboratory. The morphological analysis was prosecuted on 22 individuals. Measurements were implemented according to reference ichthyological parameters which were offered by I.F.Pravdin (Pravdin I.F., 1966). The morphometric analysis consisted of 4 meristic and 21 plastic characteristics. We analysed also the biological characteristics such as total weight, weight without entrails, sex. Statistical processing of the received results was prosecuted by the standard methods of variation statistics using «Microsoft Office Excel 2010» software.

The morphological analysis showed the considerable variability of majority of the studied characteristics in comparison with other populations from different basins. The frequent sizes of a spotted stone loach in river drains comprise about 156-160 mm. The maximal length of the analysed individuals composed 276 mm., and minimum 144 mm. By results of a statistical analysis, the maximal total weight was 126 gram., and minimum 19 gram. The sex ratio from the total number of individuals is 13 females and 9 males. The sexual dimorphism was analysed. Between females and males of the spotted stone loach some differences were founded, therefore, in such characteristics as body length and total weight, the analysis showed that females are much larger, than males. Such morphological differences are observed for the first time, in case of comparison to literary data. The studying the morfo-biological features of a spotted stone loach from the Lake Alakol western part showed that population exists in the favourable conditions of habitat.

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