

Parasitofauna of sea trout (*Salmo trutta trutta* Linnaeus, 1758) from the Słupia River (Pomorskie Voivodeship) – pilot study

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Sea trout (*Salmo trutta trutta* Linnaeus, 1758) is a salmonid fish found in the seas and rivers of the eastern North Atlantic. Due to the two-environmental life cycle (an anadromous species), it migrates to the upper parts of the rivers where it was born during the spawning period. For reproduction, it needs well-oxygenated, cold water and a rocky or gravel ground.

Sea trout takes an important place in the Polish fishing economy, being valued as much as salmon. Apart from catches carried out by professional fishermen, it is also of interest to commercial fishing. In the past, in Poland, the spawning grounds of sea trout were recorded in the upper tributaries of the Vistula River and the Odra River. As a result of environmental deterioration, an increase in water pollution, the partitioning of watercourses and a strong anthropopressure there is a limitation of the range of occurrence of this valuable species mainly to the rivers of Pomerania and Western Pomerania. Nowadays, numerous restitution treatments of sea trout are undertaken, including, among others, on the construction of spawning grounds and stocking rivers. Until 2013, over a million smolts were released into the Słupia River (Bartel et al. 2016).

To determine the condition of the animals and their health condition in November 2019, control catches of sea trout were carried out on the Słupia River. For the pilot study 5 adult individuals (3 females and 2 males) were selected, with weight

range 1044.20–4003.48 g and length range 34.5–70.0 cm. The parasitological section of the fish was conducted, during which the skin, mouth, gills, eyes, heart, gonads, stomach, intestine, pyloric caeca, liver, spleen and muscles were examined. Based on the results of the measurements of body weight, animal length and liver weight, the values of the condition index (Fulton's index and hepatosomatic index) were calculated.

As a result of the research the tapeworm *Eubothrium crassum* (Bloch, 1779) Nybelin, 1922, was found. This species is a typical representative of the parasitofauna of sea trout and other species of salmonids. The intensity range of infection was from 7 to 105 individuals. Tapeworms were mostly identified in pyloric caeca but they were also present in the stomach and intestine. The lack of ectoparasites was most likely due to the change of from environmental condition (migration from the salt sea to freshwater) acting as a natural disinfectant. The values of Fulton's index and hepatosomatic index were 0.89–9.75 and 0.96–1.65, respectively. The extremely high value of the Fulton's index in one of the fish (9.75) was a consequence of the small size of the individual (34.5 cm) and significant body weight (4003.48 g) caused most probably by the presence of numerous tapeworms (105 individuals).

References available from authors.