BIO-ETHOLOGY OF BREEDING OF THE GANGETIC MAHSEER TOR PUTITORA (PISCES: CYPRINIDAE) FROM GARHWAL, CENTRAL HIMALAYA, INDIA

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ABSTRACT
Present study is an attempt to analyse the maturity conditions and spawning ethos of a potamodromous migratory fish Tor putitora (Hamilton). The study was conducted in the lower reaches of the river Ganga (Feeding and rearing ground) and its two nearby spring-fed tributaries (Song and Suswa streams) which is its one of the closest breeding ground). On the basis of macroscopic and microscopic study, the fish was categorized into five maturity stages as immature, maturing, mature, spawning and spent. Observations on the ova diameter frequency polygons of the ovaries in mature and spawning stage, fluctuation in the gonado-somatic index, and occurrence of fish of various maturity stages during different months along with the presence of juveniles, it was concluded that the fish is a prolong breeder which spawns intermittently during September - October. On the hypothesis of 50 % level in maturity it was concluded that the male and female fish matures almost simultaneously at a size of about 57-59 cm. Viewing the locations of occurrence of fry and fingerlings, it was assessed that the fish prefers spawning in a substratum which has a bed of pebbles, cobbles and gravels. The temperature and pH of the breeding site was recorded in a range of 23-26°C and 7.4-7.5 respectively. It was observed that a consortium of the factors like flooded and turbid water along with maturation pressure, and lowering down of pH stimulated migration in the fish which lasted at the act of spawning when they reach at a proper place.

Key Words: Golden mahseer, Maturation, Spawning frequency, Spawning season

REFERENCES


