

RESEARCH PAPER

# Linking *Cirrhinus mrigala* (Hamilton, 1822) size composition and exploitation structure to their restoration in the Yamuna river, India

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Fish size is an integral component of river and stream system and represents an evident of structure, function, depth and health of the river/stream. *Cirrhinus mrigala* is a member of Indian major carp group. The species is of commercial significance due to its aquaculture potential and high consumer preference. Studies were undertaken during the period August 2011 to July 2012 from the Yamuna river at Allahabad, India. The size composition of *C. mrigala* varied from 16.8 to 94.3 cm total length. The mostly large size fishes were recorded in the monsoon season. The maximum exploitation was recorded in 46.1-52.0 cm size group with 16.72 per cent and minimum in 94.0-100 cm with 0.30 per cent in pooled samples. In the stock, female fishes were more exploited (48.66%) compared to male fishes (51.34%). The size composition and exploitation structure of *C. mrigala* indicated that very necessary to restoration or enhancement through stocking of this species in the Yamuna river, India. Presently, there is no local or regional arrangement for reporting restoration.

**Key words** : Restoration, Size composition, Exploitation structure, *Cirrhinus mrigala*, Yamuna river

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