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SOME ASPECTS OF BIOLOGY AND FISHERY OF *EHIRAVA FLUVIATILIS* (CLUPEIDAE) IN BOLGODA LAKE, SRI LANKA

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The morphometrics, feeding habits, reproductive biology, population dynamics and fishery of *Ehirava fluviatilis* Deraniyagala, an indigenous clupeid food fish in Bolgoda lake, were studied from November 1997 to May 1998. The condition factor of *E. fluviatilis* in Bolgoda lake is higher than that recorded from a Sri Lankan irrigation reservoir, Parakrama Samudra. The theoretical weight of a given size of fish, calculated from length weight relationship also showed the same. Copepods formed the most important component of food although cladocerans, rotifers, and mollusc were also ingested. The mean sizes of maturity for males (3.9 cm) and females (4.1cm) were not appreciably different. Sex ratio of 1:1 indicates the efficient reproductive potential of these fish in Bolgoda lake.

E. fluviatilis fishery in Bolgoda lake is seasonal. It took place from December 1997 to July 1998 in the 1997-98 season. During this period, the highest monthly production of 4.5 tonnes was registered in March 1998. Asymptotic total length and growth constant of *E. fluviatilis* were determined as 52.5 mm and 4.7 $year^{-1}$ respectively. The total mortality rate estimated by means of length-converted catch curve method was 11.9 and the exploitation rate was 0.33. The mean selection length was estimated to be 42.2 mm. Relative yield-per-recruit analysis performed by incorporating probabilities of capture indicated that the *E. fluviatilis* stock in the Bolgoda lake is under-exploited. As *E. fluviatilis* stock in Bolgoda lake has a high turnover rate, it can withstand heavy fishing mortalities.