

D-27 A preliminary investigation on the environmental impacts on the distribution of fish in two tributaries of Kelani river

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Habitat modification caused by human intervention in aquatic ecosystems has adversely affected the freshwater fish population in Sri Lanka, but the magnitude of these effects are poorly known. The present study is an attempt to study the environmental impact on freshwater fish fauna of 2 main tributaries of Kelani river, viz. Wak Oya and Pusali Oya which originate in the rain forest of southwestern Ichthyological province of Sri Lanka.

Monthly sampling was carried out from March 1992 - March 1994. Twenty six species of fish were recorded in the 2 streams of which, 14 species are of ornamental value, 6 are endemic and 3 are threatened. The study of longitudinal distribution, species diversity, evenness and the biological and chemical parameters reveals that the 2 streams, which are rich in ornamental fish species are affected by habitat changes caused by human intervention such as, gem and sand mining, deforestation, discharge of agricultural and industrial effluents, impounding of the stream and collection of fish for ornamental fish trade. These factors have contributed to the decline of some species and the distribution of the others.