

PRELIMINARY SURVEY OF FISH FAUNA AT SELECTED STREAM MOUTH OF THE BAKUN DAM RESERVOIR

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ABSTRACT

*Freshwater fishes play an important role in food supply, nature stability and ecological abundance. Over 600 freshwater fish species have been documented throughout Malaysia, with over 250 species reported in Sarawak alone. Fish species in Sarawak facing local threat due to overfished and overconsumption. This research aims to investigate fish diversity at selected stream mouths in the Bakun Reservoir. Five sampling stations were randomly chosen at stream mouths in the surrounding area of the Bakun Reservoir. The fish were caught using three-layered gill nets, rod and line and casts net. Dominant species included *Hemibagrus fortis* (27%), followed by *Mystus singaringan* (19%) and *Neolissochilus soroides* (15%). Additionally, families Cyprinidae, Bagridae and Xenocyprididae were represented by seven, two and one species, respectively. Station 3 and 4 exhibited high fish species richness with each station hosting four different species. The Shannon diversity index was 1.302 (H') at station 3 and 1.153 (H') at station 4, indicating moderate diversity levels. Overall, diversity value ($H'=2.031$) indicates that the Bakun Reservoir is highly diverse with native fish species. The data obtained from this study useful in updating information for better conservation and management strategies of fisheries industries such as captured and recreational fisheries towards the sustainable ecotourism management.*

Keywords: fish diversity; ecotourism; conservation; freshwater fisheries; Bakun Reservoir; Sarawak