

## Fish Species Diversity and Abundance of Gubi Dam, Bauchi State of Nigeria

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### ABSTRACT

This study investigated the fish species diversity and abundance of Gubi dam in Bauchi State, Nigeria. The fish fauna of Gubi Dam was assessed using the fisheries dependent method to evaluate fish species composition. The dam had a total of 18 species of fish belonging to six families. Diversity indices estimated include Shannon's diversity index ( $H'$ ) with a monthly range of 1.811 to 2.366, Simpson's index ( $D$ ); 0.130 to 0.313, Species heterogeneity ( $1 - D$ ) index ranging from 0.687 to 0.870, species richness index ( $d$ ); 2.003 to 2.371, and equitability index ( $J$ ) ranging from 0.639 to 0.833. The most abundant family was Cichlidae (61.51%) with the species *S. galilaeus* being the most abundant (34.88%) while the family Mochokidae was least abundant (1.45%) and is represented by only one species. There is a low Species richness index in the dam. Species equitability index across the sites as well as months reveals an even distribution of species. There is great sample diversity from Gubi dam since  $1 - D$  is close to 1 for the months studied. Anthropogenic activities are prominent on the lake and this can affect species diversity. Management measures are encouraged.

**Key words:** abundance, diversity, fish, Gubi dam, heterogeneity