Fish Diversity and Conservation of Two Lacustrine Wetlands of the Upper Benue Basin, Nigeria

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Abstract : A study was conducted at River Mayo Ranewo and River Lau, Taraba State Nigeria. The two rivers empty into the Upper Benue Basin. A visual encounter survey was conducted within the two wetlands from June to August, 2014. The fish record was based entirely on landings of fishermen, number of canoes that land fish was counted, types of nets and baits used on each sampling day. Fish were sorted into taxonomic groups, identified to family/species level, counted and weighed in groups. The relative species abundance was determined by dividing the number of species from a site by the total number of species from all tributaries/sites. Fish was preserved in 2% formaldehyde solution and taken to the laboratory, where they were identified. Shannon-Weiner index of species diversity indicated that the diversity was highest at River Mayo Ranewo than River Lau. In the result showed at River Mayo Ranewo, the family Mochokidae recorded the highest (23.15%), followed by Mormyridae (2.64%) and the least was the family Lepidosirenidae (0.04%). While at River Lau the family Mochokidae recorded the highest occurrence of (24.1%), followed by Bagridae (20.20%), and then Mormyridae, which also was the second highest in River Lau, with 18.46% occurrence. There was no occurrence of Malapteruridae and Osteoglossidae (0%) in River Lau, but the least occurrence was the family Gymnarchidae (0.04%). These results indicated that the fish composition were not significantly ($p \le 0.05$) different based on t-test.

Keywords : conservation, diversity index, Lau, Mayo Ranewo, wetlands

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