

Assessment of Weaver Birds and Their Allies Within and Around Ngel-Nyaki Forest Reserve, Yelwa, Sardauna LGA, Taraba State, Nigeria

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Abstract : Birds are among the key components of the earth's biodiversity and the most diverse and evolutionarily successful groups of animals. The weaverbirds are a large family of birds found mostly in Africa, with a few species found in southern Asia and the West Indian Ocean islands. This study assessed the diversity and abundance of weaver birds and their allies within and around Ngel-Nyaki Forest Reserve in Yelwa, Sardauna Local Government Area of Taraba State, Nigeria. A total of 602 weaver birds and allies' bird species were recorded using the Point Count Line Transect. The data collected during the research period were analyzed using simple percentages, and diversity was calculated using the Shannon Wiener Diversity Index. The fenced (ungrazed area) was more abundant with 351 individuals while the unfenced (grazed area) was less abundant with 251 individuals recorded. In the fenced (ungrazed area), Yellow Bishop (*Euplectes capensis*) had the highest abundance of (102; 29.01%), followed by Village Weaver (*Ploceus cucullatus*) (80; 22.79%), then Vieillot's Black Weaver (*Ploceus nigerrimus*) (40; 11.42%), Red-collard Widowbird (*Ploceus ardens*) (6; 1.71%), Dark-backed Weaver (5; 1.42%) and the least was Hartlaub Marsh Widowbird (1; 0.28%) while in the unfenced (grazed area), the Village weaver (*Ploceus cucullatus*) (85; 33.86%) was the most abundant, followed by Spectacled Weaver (*Ploceus ocularis*) (36; 14.34%), then Yellow Bishop (*Euplectes capensis*) (30; 11.95%), Baglefecht Weaver (*Ploceus baglafecht*) (23; 9.16%), Bannerman's Weaver (*Ploceus bannermani*) (17; 6.77%) and the least was Yellow-mantled Widowbird (*Euplectes macroura*) (5; 1.99%). In terms of diversity, there were more weaver bird species in the fenced area with a Shannon Wiener Diversity Index of ($H' 2.03417$) than in the unfenced area with a Shannon Wiener Diversity Index of ($H' 1.862671$). The Shannon Wiener Diversity Index in both fenced and unfenced areas is significant. There was more abundance of bird species in the fenced area than in the unfenced area of the Forest Reserve. Thorough research should be conducted on the abundance and diversity of weavers and their allies because we were only able to access 4 km² out of 46 km² of land available, according to the Annual Report of Ngel-Nyaki Forest Reserve of 2020. It shows that there are many species of weaver birds and their allies, such as the Black-billed Weaver (*Ploceus melanogaster*) and the Red-billed Quelea (*Quelea quelea*), which are available within the reserve.

Keywords : abundance, diversity, weaver birds, allies, Ngel-Nyaki

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