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Research Article

Diversity of butterflies across three land use types of Chebera Churchura National Park and its surroundings, Southwestern Ethiopia

Gebreegziabher Hailay[1*], Emana Getu[2]

[1]*Animal Biodiversity Directorate, Ethiopian Biodiversity Institute, Addis Ababa, Ethiopia, P.O. Box 30726, Addis Ababa, Ethiopia.*
[2]*Department of Zoological Sciences, College of Natural and Computational Sciences; Addis Ababa University, Addis Ababa, Ethiopia.*
[*]*Corresponding Author's E-mail: gere31280@gmail.com*

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ABSTRACT

Understanding and identifying butterfly species in various land uses serves a crucial eco-logical function in protecting biodiversity and improving environmental policy decisions. However, such a study on the diversity of butterflies from different land use types in and around Chebera Churchura Na-tional Park, southwestern Ethiopia, is extremely lacking. Thus, the present study aimed to quantify the species richness and abundance of butterflies in the Chebera Churchura National Park and its surroundings, which are prioritized for their conservation. Data was collected from January 2021 to June 2021 following the line transect method in the three habitat types using a standard insect net. In total, 2118 individuals representing 79 species and 38 genera belonging to five families were recorded. The Nymphalidae were the most dominant butterfly family, accounting for 45 species (57%) of the total butterflies observed, while the Heaspariidae contributed the least. Among the 79 species, 9 were very common, 32 were common, 37 were rare, and 1 was very rare. Based on butterfly species richness and composition, riverine forest had the greatest diversity and abundance with 65 species and 1028 individuals, and the least species composition was recorded in mosaic habitat with 26 species and 350 individuals, and the difference in diversity was significant. The study region was generally found to be rich in the diversity and abundance of butterflies in all three forms of land use. However, the study area is currently becoming an investment hub, and many road development projects are being planned. Ongoing human activities will devastate and harm the richness, abundance, and diversity of butterfly species. As a result, such human-induced activities need to be carefully studied to protect biodiversity.

Key words: Mosaic habitat, Nymphalidae, riverine forest, wooded grassland