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Research Article

Butterfly diversity and abundance in a sub-tropical wetland environment of Shyamlatal, Western Himalaya

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ABSTRACT

Shyamlatal, a natural rain-fed wetland located at an elevation of 1300m in Champawat District, owes its prime conservation value in the Himalayan state of Uttarakhand, India. Because there is a scarcity of data on bio-resources that are critical to ecological functioning, the present study documented the species composition and seasonal patterns in richness and abundance of butterflies for their future management and conservation in a wetland environment of the Shyamlatal. A record of 64 species and 45 genera under six butterfly families was made from the catchment area of watershed and surrounding forests surveyed during 2016 to 2018. Nymphalidae with 28 species over 45.84% of the total individuals was the most dominant taxonomic group of butterflies. Species on conservation priority were rare (17.18% species), habitat specific (18.75% species), legally protected (7.81% species) and endemic (20.31% species) butterflies of the Himalaya. The overall species richness and diversity of butterflies varied across seasons and the high similarity in butterfly composition was observed during summer and autumn. Results provided baseline information on the importance of mosaic of vegetation in sustaining rich butterfly diversity around the wetland, which must be managed and conserved for maintaining ecological health and integrity of the region. The results also revealed that human activities have negative consequences on butterfly diversity in the study area.

Key words: endemic, hill garden, Himalaya, mixed forest, seasonal index, wetland