

## **The Diversity and abundance of butterflies in selected edge habitats of Dandeniya Aparekka reserved forest, Sri Lanka**

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Dandeniya Aparakka reserved forest is a lowland rainforest situated in the Matara district of Southern Province, Sri Lanka. No Comprehensive study has been previously conducted there to study its butterfly fauna. The present study investigates the diversity and abundance of butterflies in the Dandeniya reservoir area (N 5<sup>o</sup> 59' 19'' and E 80<sup>o</sup> 39' 14''). Four Transects of 100 meters (Trails 1 to 4) were selected and the Pollard walk method was used to study butterflies. Butterflies were identified with the help of a field guide to confirm identification. The active time of butterflies along with the vegetational strata they were present was recorded. Abundance, Shannon Weiner Species diversity index (H'), and Species richness was calculated. During the period of the survey, a total of 33 species of butterflies belonging to, Lycaenidae (6 species), Nymphalidae (17 species), Papilionidae (7 species), and Pieridae (3 species) were found to be present in the area. The endemic *Troides darsius*, *Cethosia nietneri*, and *Idea Iasonia* were recorded. *Jamides celeno* (79) showed the highest abundance while the highest percentage abundance (55%) was shown by the butterfly species who show activity in all three vegetational strata. Trail 4 showed the highest diversity (2.7781), followed by Trail 1 (2.6144), Trail 2,(2.3782), while Trail 3 (2.2406) showed the lowest diversity. This result indicates the presence of diverse butterfly fauna in the Dandeniya reservoir area, but surveys must be continued for a longer period to study trends in butterfly abundance.

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