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Distribution and abundance of the avifauna in selected habitats of the Oliyagankele Forest Reserve, Wilpita, Matara

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Oliyagankele forest reserve is a lowland wet zone forest, situated between Akuressa and Kamburupitiya, which covers an area of 482.9 ha. Its fauna has not been thoroughly investigated. This study was carried out to enhance the taxonomic knowledge of its avifauna. The objectives of the study were to find out the bird distribution, abundance and the evenness of avifauna in selected habitats. The survey was conducted during a period of five months (from April to August) in 2004. The study was based on the **point scan line transect technique**. Six different habitats were studied and a checklist of recorded bird species was prepared. Results indicated that the avifauna of Oliyagankele represented 10 orders, 24 families 35 genera, 42 species and 13 sub species including approximately 1/5 of endemic birds of Sri Lanka. There was no significant difference in the vertical vegetation distribution pattern among six selected habitats. However, there was a significant difference in the Index of Horizontal Heterogeneity (IHH) between selected habitats. Analysis of total bird count made during mornings and evenings as well as rainy days and sunny days revealed that there were no significant differences in the species diversity and evenness. However, there was a significant positive correlation between the species diversity in the mornings and evenings. There were also significant differences in the abundance of bird (absolute number recorded) in the selected habitats during the mornings and the evenings and as well as during rainy days and sunny days. Similarity of all bird species was highest between the site 1 and site 3; lowest between site 2 and site 4. The IHH and Index of Vertical Heterogeneity (IVH) for selected habitats were not shown to be significantly correlated with overall species diversity, abundance and evenness. However there was a significant difference between the distribution of bird community in different vegetation strata and among selected habitats.