

## Diurnal Avifaunal Diversity at Pallemalala, Bundala, Sri Lanka

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In a world of rapid development influences such as anthropogenic land use, effects of invasive fauna and flora, suburbanization, and pollution are major causes for declining of biodiversity and it is needed to understand the state of biodiversity to aid management and conservation. To successfully manage land use in ways that are least harmful to biodiversity it is vital to be able to identify habitats that are of most important for biodiversity beyond the protected areas. In this study diurnal avifaunal diversity was studied at unprotected natural habitat (Pallemalala, Bundala) adjacent to Bundala National Park, during two months (from March to April 2018), using the fixed distance line transect method. A total number of 2540 of individuals belonging to 52 species, 34 families and 13 orders were recorded during the study period. The relative abundance of each bird species indicates that the Black-winged stilt (*Himantopus himantopus*) was the most common bird (7.40) followed by Yellow wattled lapwing (*Vanellus malabaricus*) (7.25) and Yellow billed Babbler (*Turdoides affinis*) (6.50). Yellow Bittern (*Ixobrychus sinensis*), Pied kingfisher (*Ceryle rudis*), Indian paradise flycatcher (*Terpsiphone paradisi*), Grey heron (*Ardea cinerea*) and White-bellied Sea Eagle (*Haliastur leucogaster*) were the least observed birds. The Shannon diversity index was 3.5106. Even though the study site is close to populated residential areas; it still provides vital habitat to a large number of bird species. However, due to the increasing number of invasive species and pollution around the area, there is a potential increasing threat to the avifaunal composition in the non-protected area natural habitats outside the Bundala National Park. In conclusion, the unprotected habitat at Pallemalala, Bundala can be considered as an important habitat for avifaunal diversity thus suitable integrated measurements should be implemented with the help of residents to conserve biodiversity in the area.

**Keywords:** Avifauna, Bundala, Diversity