

A study on the impact of anthropogenic activities on the sustainability, habitat preference and distribution of bird fauna associated with mangrove reserve in Kadolkele, Negombo, Sri Lanka

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Abstract

Habitat preference of birds in a disturbed mangrove ecosystem was investigated for a period of four months in seven different habitats dominated by *Excoecaria* spp., *Avicennia* spp., *Rhizophora* spp., *Lumnitzera* spp., Grasses, mangrove associates, garden vegetation and pond habitats. Bird counts were taken three times a day; morning, afternoon and evening at each site 2 days per week for 6 weeks. Sixty species of birds were identified and composed of re- resident birds (80%), re-vagrants 8.33%. No winter visitors were observed. A significant proportion of the birds are Resident (80%) and Common (90%) birds and the House Crow, *Corvus splendens* was the most abundant species (50.53%). Only one endemic bird (Sri Lanka Junglefowl- *Gallus lafayettii*) was found in the area. Order Passeriformes was the most prominent (33.3% of species) and highly abundant (75.60%) order of birds. Highest abundance and species richness were recorded from *Avicennia* zone followed by the pond habitat. The closeness to the human inhabited area could have an impact on the distribution pattern and abundance of birds in this habitat. *Avicennia* zone was the most preferred area by the birds followed by pond habitats while least preferred habitat was the grass and *Lumnitzera* zone. The study revealed that the disturbed mangrove environment is dominated by common resident birds.

Keywords

mangrove birds, Negombo estuary, habitat preference, sustainability, anthropogenic