

ROLE OF AVIAN BIODIVERSITY IN ENHANCING ECOTOURISM INITIATIVES IN ANURADHAPURA SRI LANKA

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Abstract: Avian biodiversity and bird watching play key roles in enhancing ecotourism initiatives in Sri Lanka. This study investigated the significance of largely unexplored avian richness as an ecotourism attraction, based on four large tanks in Anuradhapura district, which celebrate for their historical and cultural heritage, but present untapped potential for ecotourism. Continuous field surveys were carried out in the tanks: Nuwara Wewa, Abhaya Wewa, Bulankulama, and Tisa Wewa, 18 years from 2000 to 2018. The data collection is composed with species composition, abundance, and habitat utilization. A total of 181 avian species from 72 families were recorded, including both migratory and resident species. Some of the prominent species were Lesser Whistling-duck (*Dendrocygna javanica*), Black-headed Ibis (*Threskiornis melanocephalus*), Cattle Egret (*Bubulcus ibis*), and Rose-ringed Parakeet (*Psittacula krameri*). A comparison of avian diversity among tanks was carried out using geospatial analysis techniques in GIS. The study emphasizes the diversity of habitat preferences of avian species including reedbeds, submerged macrophytes, open water, and terrestrial environments etc. A comprehensive understanding of the dynamics of these habitats are crucial for the development of bird watching facilities ensuring that visitors can appreciate avian diversity while preserving their habitats. Involvement of local community in habitat restoration like invasive species removal, native plant propagation, and soil conservation techniques through proper education, raising awareness, monitoring and responsible ecotourism practices are recommended to ensure long-term sustainability of ecotourism management and avian biodiversity conservation in the region. The coexistence of historical heritage and avian biodiversity enhances the potential for a unique ecotourism destination in Anuradhapura district benefiting the local economy and raising awareness of avian conservation's importance in Sri Lanka.

Keywords: Avian biodiversity; Birdwatching; Conservation; Ecotourism; Sustainable management;