



AVIFAUNAL COMPOSITION, DIVERSITY, AND FORAGING GUILDS IN THE KALLAI ESTUARY OF KOZHIKODE DT. KERALA, INDIA

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ABSTRACT

Avian populations are excellent indicators of the health of any environment. Despite the grave repercussions of growing urbanization, there are few studies of bird diversity in India's human-dominated settings. As a result, the bird composition of the Kallai estuary was investigated, whose avifauna had hitherto been unknown. From June 2018 to May 2019, bird surveys were conducted using a fixed-radius (25 m) point count approach combined with serendipitous observations. A total of 123 avian species from 59 families were observed. Ardeidae (RD_i = 5.882) was the most varied bird family in the studied region. 90 species were native, 26 species were wintertime visitors, 6 species were summertime visitors, and 1 species was a transit migrant among the avifauna observed. The native and passage migratory species' species richness did not fluctuate seasonally, however, the cold and warm visitors showed considerable seasonal fluctuation. The species composition of feeding guilds varies considerably in this estuarine environment. The majority of birds (43.2%) were insectivorous, followed by carnivorous (19.4%), omnivorous (19.6%), granivorous (6.9%), frugivorous (4.8%), nectarivorous (2.4%), and herbivorous species (3.7 %). The highest species richness was reported in November, while the lowest species richness was found in May. Two near-threatened species found in this region are the Black-headed Ibis (*Threskiornis melanocephalus*) and Alexandrine Parakeet (*Psittacula eupatria*). Surprisingly, six species that are on the decline internationally are still prevalent in the study region. Long-term research is needed to track any changes in this estuarine areas' bird populations as a result of urbanization.

Keywords: Avifauna, Bird Community, Diversity, Feeding Guild, Estuary