



## AVIAN DIVERSITY ASSEMBLAGE IN THE WETLANDS OF THE ELATHUR ESTUARY, KOZHIKODE COASTLINE, INDIA

**Vidya PADMAKUMAR**

Department of Zoology, Bangalore University, Bangalore, Karnataka, India

**ORCID:** 0000-0002-3830-4232

**Murugan S.**

Department of Zoology, Bangalore University, Bangalore, Karnataka, India

### ABSTRACT

Despite the fact that mangroves are under threat all around the world, they are home to a broad range of avifauna. The impact of habitat patch size and floristic composition on the organisation of mangrove bird assemblages was explored by looking at the variety, density, and habitat usage of birds in Elathur mangroves. In the region, birds were counted using line transects. There were 49 species found, with an average density of 8.2 individuals per hectare, of which 16 were recognised mangrove-dependent species. Many species were strongly related with, and suggestive of, a specific mangrove zone, highlighting the relevance of the number of zones to a site's bird diversity. The insectivores, followed by nectarivores, dominated the functional guilds. As a result, mangrove flowering phenology altered the organisation of avian assemblages. Large mangrove patches had fewer species than numerous smaller patches with the same aggregate area, and species richness was unaffected by size. There was also no density compensated or a density—area connection, showing that communities are not saturated with species and that species interactions do not influence assemblage structure. Avian assemblage structure in mangroves is governed by the kind and variety of mangrove zones, the timing of mangrove flowering, and the character of the matrix around mangroves, in order of increasing significance.

**Keywords:** Functional guilds; mangroves; species assemblage; Elathur; avifauna