Research Article

Species diversity and distribution pattern of avifauna from Thane creek, Maharashtra, India

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ABSTRACT

Bird survey in Thane creek was conducted during winter season in 2015-2016. Total 69 species of birds were encountered belonging to 11 orders and 17 families in the entire creek. As per the IUCN Red list, of the 69 bird species, six near threatened and one vulnerable species were recorded. 60.87 percent birds were migratory winter visitors, 36.23 percent birds were residents and local migrants, and the remaining 2.89 percent birds were residents as well as winter visitors. Scolopacidae family had the highest representation with 14 bird species. Order Phoenicopteriformes had the highest number of individuals (N = 20539) with lesser flamingo contributing 80.22 percent. The Shannon-Weiner diversity indices revealed higher diversity upstream (2.56) followed by midstream (1.78) and downstream (1.12). Similarly, the evenness index showed the species were more evenly distributed upstream (0.219) followed by midstream (0.110) and downstream region (0.060). On the contrary, the dominance was higher downstream (0.501) followed by midstream (0.319) and upstream region (0.124). Order Phoenicopteriformes had the highest percent encounter rate with majority encountered in downstream followed by midstream region and sporadically distributed in the upstream region of the creek. The family with moderate to less number of individuals are majorly encountered in the upstream region of the creek. The birds showed a specific distribution pattern primarily because of food availability and also because of other biotic and abiotic factors.

Key words: Foraging habitat, Pollution, Shore birds, Thane creek, West coast of India

