

Chatterjee A., Adhikari S., Barik A., Mukhopadhyay S.K. 2013. *The mid-winter assemblage and diversity of bird populations at Patlakhawa Protected Forest, Coochbehar, West Bengal, India*. Ring 35: 31-53

We compared avian community structure of six contrasting habitat types at Patlakhawa Protected Forest of Dooars of West Bengal. During three weeks of the mid-winter studies 154 bird species representing 41 families were recorded. Of the 154 recorded species, 22 were observed in grasslands, 22 in swamp forest, 46 in riverine forest, 52 at miscellaneous plantation areas, 43 at forest edges and 51 at wetlands. The Shannon-Wiener general diversity indices varied among the habitats and ranged from 2.323 to 3.458. Richness (5.813–11.410), evenness (0.406–0.641) and dominance (0.042–0.128) indices also varied considerably among the study locations. The highest diversity, the lowest dominance and a very high evenness were characteristics of miscellaneous plantations. Grasslands showed highest evenness and considerably high species diversity. The lowest avian evenness and diversity were recorded in wetlands and swamp forests. Insectivorous birds were most numerous (53), followed by carnivorous (40), omnivorous (29) and frugivorous (15) birds. Winter appeared to be the best time for niche occupancy at the Himalayan foothills for assemblages of either winter migrants and visitors or altitudinal and passage migrants, as about 30% of all encountered species were migrants. 96 bird species were observed to occur at any one of these habitat types showing high habitat fidelity. Mixed avian foraging assemblages that varied in species number and compositions were observed and they contain 11 to 17 species. Avifaunal niche diversity and richness in different habitats of Patlakhawa Protected Forest during mid-winter envisaged its importance from conservation point of view.

**Key words:** Sub-Himalayan forests, West Bengal birds, IBA 131, NWCP, foraging guild, Palaearctic-Asian migrant species