Habitat Use of Urban and Periurban Birds in a densely populated City of Eastern India

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ABSTRACT

The rapid growth in residential development in urban areas is the primary cause of habitat change that is affecting avian communities. Bhubaneswar is the capital city and the most urbanized area in state of Odisha, India. We have conducted avian surveys in 30 different sampling sites with 5 from each habitat type in the city. In total, we detected 222 species in 19 orders and 65 families. Agricultural areas were the most preferred habitat with over 52% of the total diversity followed by forest patches with 50%, parks and gardens 39%, wetlands 32%, grasslands 11% and human habitations 8%. Five species were globally nearly threatened, three vulnerable and one endangered according to the IUCN Red List. The cluster analysis shows that the avian community diversity shows positive correlation between forest patch and park and garden habitats (r = 0.52, p < 0.05), park and garden and human habitations habitats (r = 0.29, p < 0.05). Our findings describe high avian species richness as forest and wetland dwelling species are found in these urban habitats. Hence general conservation plan may be suggested to keep these species diversity and richness stable from being lessen.

Key words: Abundance, Bird Diversity, Species richness, Urban Habitats

