

Comparative study of bird community structure and function in two different forest types of Corbett National Park, Uttarakhand, India

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ABSTRACT

Point count method was used to estimate the population structure of avian fauna in two different forest types in Bijrani, Serpdulli and Dhikala ranges of Corbett national Park, Uttarakhand, India. A total of 38 plots were randomly laid by four teams of two each in a period of ten days covering both mixed and Sal forests equally. DISTANCE 6.0 was used to determine density of birds and various bird guilds. Richness and diversity was estimated through SPECIDIVERS. A total of 47 species were recorded from mixed and 27 species from Sal forest. Highest and lowest densities (\pm SE) in Sal forest were of Plum headed parakeet ($11.63 \pm 2.30/\text{km}^2$) and blue whistling thrush ($0.06 \pm 0.01/\text{km}^2$) respectively. Whereas, in mixed forest, the highest density was of chestnut headed bee eater ($13.84 \pm 3.25/\text{km}^2$) and lowest density was of Hoopoe ($0.09 \pm 0.01/\text{km}^2$). In mixed forest, density, diversity and richness of insectivorous birds was found to be highest ($42.91 \pm 6.27/\text{km}^2$, 0.89 ± 0.08 and 3.57 ± 0.53 respectively), while, in Sal forests, omnivorous birds had highest density ($76.73 \pm 4.22/\text{km}^2$) and insectivorous birds had highest diversity (\pm SE) and richness (\pm SE) (0.88 ± 0.14 and 3.15 ± 0.49 respectively). Carnivorous birds showed least density in both Sal ($0.19 \pm 0.08/\text{km}^2$) and mixed forests ($0.32 \pm 0.12/\text{km}^2$).

Key words: Birds; Corbett; density; diversity; richness