Forests as refuges for birds in the Eastern Ghats of Tamil Nadu

A recently concluded study supported by the Ministry of Environment and Forests, Government of India, assessed the distribution and species richness of birds in different habitats of the Eastern Ghats of Tamil Nadu (TN). The study spread over 3 years resulted in a dataset of 8455 observations of 271 species of birds covering 9 districts of northern TN, viz. Tiruchirapalli, Salem, Namakkal, Erode, Dharmapuri, Krishnagiri, Tiruvannamalai, Vellore and Villupuram. These districts have within their boundaries hills traditionally treated as the Eastern Ghats. These hills sustain forests that are predominantly deciduous and in various stages of degradation. Some of the most common birds within the study area are the Red-vented Bulbul, Red-whiskered Bulbul, White-browed Bulbul, Common Iora, Purple-rumped Sunbird, Indian Robin, Spotted Dove, Common Tailorbird, Purple Sunbird, Rufous Treepie and Rose-ringed Parakeet. These are among the most common birds in India and species that do not show any habitat preference[1].

Preliminary analysis of the data suggests that the species richness of birds in dense forests is 152. A smaller set of 141 species was found each in open forests and riparian habitats and 100 species in cultivation. Plantations supported 82 species and the rocky hillocks only 54 species.

That dense forests support the highest species richness of birds in the Eastern Ghats of TN is an interesting observation. Studies in the Western Ghats have shown that while dense forests are rich in birds, open forests often locally support a greater richness of birds[2]. It has also been shown that plantations in the Western Ghats may support equal, if not greater, species richness of birds compared to dense forests[3,4].

The results are interesting because the Western Ghats and the Eastern Ghats of TN are geologically similar[5,6] and share many species of endemic plants and animals[7]. Differences in the ecology between the two hill ranges have been attributed to relatively recent changes in the climate[7].

The Eastern Ghats of TN is much drier than the adjoining Western Ghats; the average annual rainfall of the study area is around 1000 mm. It appears that drier conditions may locally drive more bird species to use dense forests as their habitats. The preliminary results may have implications for understanding the impacts of climate change on birds.

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