

FAUNAL STUDIES IN THE SINHARAJA RAIN FOREST
II. STUDY OF MIXED-SPECIES FORAGING BIRD FLOCKS

S W Kotagama, P B Karunaratne, A Ratnayeke
and N D de Zoysa

March for Conservation, University of Colombo

A study of mixed-species bird flocks in Sinharaja during the period of September 1981 to June 1982, revealed that of a total of 141 species of birds including 19 endemics of Sri Lanka recorded in Sinharaja, 42 species and 12 endemics of Sri Lanka participated in flocks.

Among 104 such bird flocks subjected to systematic observation, the contribution of each participant species to the composition of the flock was determined based on the relative frequency of their occurrence within the flock. Six, nuclear species were identified (occurrence 50%). There were the Rufous Babbler, the Yellow-browed Bulbul, the Crested Drongo, the Yellow-fronted Barbet, the Hill White-eye and the White-headed Starling. The remaining species were further classified as follows: Eleven regular-species (30% 50%), five occasional species (20% 30%), six rare species (10% 20%) and fourteen very rare species (10%).

With regard to feeding habits, totally insectivorous bird species were best represented, comprising 58% of the total number of individual birds in the flocks, while insect and fruit feeders, and fruit and nectar feeders were equally represented with 21% each. The birds also showed stratification of feeding habitats with different groups of species occupying the forest floor, the undergrowth the mid-canopy and the high-canopy.

Flocking of animal species in nature serves several purposes simultaneously. In Sinharaja the mixed species bird flocks appear to aggregate primarily for foraging efficiency. Security from predators may provide a secondary consideration.

This work was funded by WWF Grant 1733.

Reference

1. Diamond, J.M. (1981) Mixed species foraging groups. Nature 292