

THE RESIDENT BIRDS OF THE PERADENIYA UNIVERSITY CAMPUS, SRI LANKA

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The campus of the University of Peradeniya, situated in the hill country of Sri Lanka, is one of the areas of high avifaunal diversity in the island. Of the 231 species of *resident* birds that have been recorded from the island, more than 80 have been observed in the Campus. In the present study that was conducted from April to October 1999, it was found that at least 67 species were present, excluding the nocturnal species. This amounts to 29% of the total number of residents in Sri Lanka. Weekly roadside counts of birds along a fixed route transect passing through the main habitat types in the campus (e.g. woodland, grassland, home garden, and pine forest) indicate that the commonest birds in the campus are the Common Mynah (*Acridotheres tristis*), Black Crow (*Corvus macrorhynchos*), Common Babbler (*Turdoides affinis*), White-rumped Swift (*Apus affinis*), and the Spotted Dove (*Streptopelia chinensis*). It is interesting to note that despite the common perception that the Black Crow is the commonest bird in the campus, it is in fact second to the Common Mynah. The presence of the Red-wattled Lapwing (*Vanellus indicus*) and the Indian Roller (*Coracias benghalensis*) in the campus is significant. These two species, which were typical of the Low Country Dry Zone of Sri Lanka only a few decades ago, have now established in the lower hills of the island, including the University Campus.

Birds of prey are good indicators of ecological richness and species richness of an area. Their occurrence carries the implications of a larger ecological community. They are at the top of the food chains, and are vulnerable to the fluctuations of their prey species. The study shows that the campus is well represented by both nocturnal as well as diurnal species of predatory birds. The most commonly observed species are the Crested Serpent Eagle (*Spilornis cheela*) and the Shikra (*Accipiter badius*). The Collared Scops Owl (*Otus bakkamoena*), though not often seen in the daytime given its nocturnal habits, is nevertheless common. The campus also supports a number of species that are endemic to Sri Lanka, of which the two most common species are the Sri Lanka Lorikeet (*Loriculus beryllinus*) and the Yellow-fronted Barbet (*Megalaima flavifrons*).

The species richness and species evenness indices (Shannon Index and Shannon Evenness Index) indicate that the woodlands have the highest number of avian species (54 species, with a Shannon Index of 3.24), while grasslands though slightly low in avian species richness (52), are more diverse (with a Shannon Index of 3.26). The dominance indices (Berger-Parker Index and its reciprocal form) show that grasslands have the lowest dominance (0.11) and hence the highest evenness (8.86) (and so more diverse). According to the similarity indices (Sorenson Quantitative), the woodland and grassland habitats are the most similar (0.99) in terms of avian species richness. The study shows those natural forests, or forests with indigenous plant species, are the habitats with very high bird diversity, whereas plantations of exotics such as Pine (*Pinus caribaea*) are extremely poor habitats for birds. This study underlines the importance of maintaining natural vegetation in the conservation of birds and other species of wildlife.