*Proceedings of the Annual Research Sessions, University of Peradeniya, Sri Lanka. Vol. 7. October 30, 2002*

# PLANT SPECIES USED BY AVIFAUNA IN SELECTED HABITATS OF LOWER HANTANA (CAMPUS AREA), SRI LANKA

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The nature of the vegetation is one of the factors that determines the avifaunal diversity since all birds depend on plants directly or indirectly as their source of food in any ecosystem. Birds play an important role in a plant's life cycle as pollinating agents, seed dispersal agents, vectors of diseases and as biological control agents. The study identified the tree species used by birds in a grassland, a pine stand and a riverine site in lower Hantana within the University of Peradeniya.

Twenty seven bird counts were made for each habitat type and the activity of birds seen in each habitat type was recorded, in relation to the associated vegetation. A total of 67 species of birds including five species of endemics and six migrant species were recorded in the survey carried out from January to September 2001.

The species richness of birds was highest in the riverine habitat. The abundance of bird species in the grassland and the riverine habitats follows log series curves. Those in the pine stand follows a geometric series curve. The most encountered bird species in the grassland, riverine site and the pine stand were Scaly-breasted Munia, Yellow-fronted Barbet and Large-billed Crow respectively. The dead as well as living rubber trees were the most frequently used tree species by birds in these selected habitats of lower Hantana. Forty eight percent of the total number of observed birds used tree species for perching while 29% depended on plant species as their source of food. Insectivorous birds formed the majority of the feeding guilds.

Some interesting plant-bird interactions recorded during the study include, the Pale-billed Flowerpecker selecting only the ripe red berries of *Wikstroemia indica*, the Twany- bellied Babbler using strands of *Panicum maxicum* leaves to build its nest, the Red-vented Bulbul feeding on insects associated with young shoots of *Pinus caribaea*, the Black-rumped Flameback feeding on bark insects of *P. caribaea* and the Asian Brown Flycatcher often perching on *Acacia caesia*.

Formerly, clothed in dense forests, much of these habitats now have been degraded due to human impact. These include exotic plant cultivation, man-made fires, usage of *P. maxicum* as fodder, collecting fire wood, garbage disposal and sound pollution by picnickers and hikers. All these factors may threaten the existence of bird species which in turn will lead to their ultimate extinction in these habitats. Therefore it is high time to act on the conservation of plant species as well as the bird species in lower Hantana.