

114**Buffer zone restoration and development in Knuckles conservation area, Sri Lanka: An overview of Darwin Initiative Project****B Dhakal¹ and M A Pinard²**¹Darwin Initiative Project, Post graduate Institute of Science (PGIS), University of Peradeniya, Sri Lanka²Department of Plant and Soil Science, University of Aberdeen, United Kingdom

The Knuckles Conservation Area, which extends to an area about 17,500 ha of central uplands of Sri Lanka, is famous for its highly diverse species of flora and fauna, endemism and many unique habitats. Over few decades, much of the forest in the area was cleared for the cultivation of coffee, tea and then cardamom. The buffer zone, therefore, consists of a mosaic of anthropogenically derived vegetation types that vary in habitat quality, including degraded grasslands and natural forest fragments underplanted with Cardamom. In this context, a project primarily focussed on research, training and knowledge dissemination, funded by Darwin Initiative of the government of UK is jointly launched in Knuckles region by University of Aberdeen, UK and University of Peradeniya, Sri Lanka along with other partner organisations for three years. It has already passed the first six months of its implementation. The project aims to enhance the sustainable conservation of biological diversity and ecosystem services in the Knuckles by addressing the main threats to environmental protection through the development of options for buffer zone management that improve the livelihoods of local communities. This paper is, therefore, supported with ideas and information gathered from preliminary project workshop and field observation at Knuckles, assess the relevancy of this project in the context and explore the conservation related issues in Knuckles. Beyond that, in addition to the experience with the project so far, this paper examines the approach adopted for the restoration and development of Knuckles and its surrounding buffer zone.

115**On the relationships of birds and their habitat requirements: Insights from a tropical rain forest in Silent Valley National Park, Western Ghats, India****A Das and L Vijayan**

Division of Conservation Ecology, Salim Ali Centre for Ornithology and Natural History, Tamil Nadu, India

At Silent Valley National Park, (SVNP) the habitat associations for birds and the effects of environmental variables, seasonality at various altitudes have been studied. We used bird count data collected from 60 plots during 2002-2005 at 30-m fixed radius point count stations. A total of 5,253 individuals belonging to 108 species were recorded which includes 14 species endemic to Western Ghats. Breeding of 32 species were recorded with 517 nests. Highest species richness was found in the wet evergreen forest sites. Species richness was significantly lower in broad-leaved hill forest followed by montane wet temperate forest compared to the other habitat types. Both total bird abundance and species richness were highest within the evergreen habitat of SVNP, which offered distinctive vegetation. Bird diversity followed the same pattern, evergreen followed by grasslands and montane wet temperate forest and then by broad-leaved hill forest. Our analysis showed that altitude appears to be the primary environmental variable responsible for the distribution of species. We examined nest-site characteristics and degree of partitioning among 12 major co-existing bird species breeding in SVNP. Habitat characteristics of nest sites differed significantly among species, indicating strong nest-site partitioning. The 12 variables for all 442 nest sites were collectively subjected to PCA to determine the relationships of the 12 species in the "habitat space" of SVNP. To summarize the differences in the nest site "gestalts" of the species, and to identify the best contributors of their statistical separation, Stepwise Discriminant Function Analysis was performed on the entire set of 12 variables.