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## Avifaunal diversity of Dekinda Forest Reserve, Balana, Sri Lanka

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### Abstract

Dekinda Forest Reserve, located close to the historic town of Balana, Sri Lanka (N7°16', E80°29', 525-585m above sea level) consists of mixed evergreen tropical plant species spanning over an area of about 40 ha. The forest has been maintained since colonial times as a watershed area for nearby plantations, most of which comprise of tea and paddy. Despite its small size, the forest reserve is home to a large number of bird species, numbering over 90. Present study was conducted from March to June 2012, point counts with unlimited distance or variable circular plot method (VCPM) was used in conjunction with Distance software (Release 6) to document the abundance and density of bird species. Peak counting hours were between 0600-0900 h and 1600-1830 h. Counts were done on a weekly basis. Among the notable species were endemics such as the Sri Lanka wood pigeon (*Columba torringtoni*) (estimated density 8.22/km<sup>2</sup>), Layard's parakeet (*Psittacula calthorpae*) (19.102/km<sup>2</sup>), Sri Lanka lorikeet (*Loriculus beryllinus*) (70.03/km<sup>2</sup>), yellow-fronted barbet (*Megalaima flavifrons*) (79.47/km<sup>2</sup>), Sri Lanka scimitar babbler (*Pomatorhinus melanurus*) (11.77/km<sup>2</sup>), and brown-capped babbler (*Pellorneum fuscicapillum*) (10.92/km<sup>2</sup>). Several proposed endemic species, such as Sri Lanka green pigeon (*Treron pompadora*) (10.15/km<sup>2</sup>), Sri Lanka small barbet (*Megalaima rubricapillus*) (78.06/km<sup>2</sup>), crimson-backed flameback (*Chrysocolaptes stricklandi*) (5.08/km<sup>2</sup>), Sri Lanka wood shrike (*Tephrodornis affinis*) (17.27/km<sup>2</sup>), and Sri Lanka swallow (*Hirundo hyperythra*) (8.84/km<sup>2</sup>), were also recorded. Raptors such as the crested hawk-eagle (*Spizaetus cirrhatu*s), crested serpent eagle (*Spilornis cheela*), besra sparrow-hawk (*Accipiter virgatus*), and owls such as the brown wood-owl (*Strix leptogrammica*), brown hawk-owl (*Ninox scutulata*), collared scops-owl (*Otus bakkamoena*), and forest eagle-owl (*Bubo nipalensis*), the last of which is an exceedingly rare species, have also been recorded. The fact that the reserve supports a comparatively high number of raptors and owls indicates that it is rich in biodiversity since these species are at the top of the food chain in any ecosystem. Given the importance of this forest as a watershed area and the large number of vertebrate species it supports, Dekinda Forest Reserve is undoubtedly an important area for biodiversity conservation.

**Key words:** Avifauna, biodiversity, density