



## **Bird species –habitat association in different land uses and land covers in Sri Palabaddala Grama Niladari Division**

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### **Abstract**

Bird diversity contributes to the balance of an ecosystem. Land use and land cover of an area are one of the determining factors highly impacted on bird diversity. An attempt was made to analyze the diversity changes of bird species from the human-dominated landscape towards the natural forest area in the present study. Part of the Sri Pada Sanctuary belonging to the Sri Palabaddala Grama Niladhari Division in Ratnapura District and 3 villages named Andirikelle, Pawanella, and Mahawatta were selected as the study area. The study area considered a dense forest, forest, tea, cinnamon, scrubland, and home gardens. The observations were carried out during the period from September to November 2019, using 20 samples. Observations are scheduled From 5.00-8.00am in the morning and from 4.00-7.00pm in the evening. Quadrant with a 50m radius was considered as the area of a sample. GPS coordinate of each sample was recorded for mapping purposes. Observations were repeated for three consecutive days for each sample. A total of 1081 individual bird species were enumerated about 49 species of birds. Among them were 32 resident species, 15 endemic species, and two migrant species. The most common avifaunal species in the area were Red-vented bulbul, Yellow-billed babbler and Spotted dove. In terms of land uses, 24 birds species from dense forests, 12 birds species from forest, 18 birds species from tea plantation, 19 bird species from cinnamon cultivation, 15 birds species from scrubland and 28 birds species from home gardens were observed. Accordingly, the very distinctive species composition of bird species was identified in home gardens. The reason behind the highest species richness is the availability of food in home gardens.

*Keywords - Bird species, endemic species, migrant species, and species richness*

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