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**Avian Nesting Patterns and Preferences in Urban Road Median Trees: A Case Study
from Galle Road, Sri Lanka**

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Abstract

Urbanization affects the nesting patterns of birds and causes limited selection of nesting trees. Road medians serve as potential nesting sites, to help this issue. The objective of this study is to determine how different trees in the road median islands are utilized by different bird species. The study was conducted from August 2024 to December 2024, involving surveys on the 5 km median island of the Galle Road from Borupana Junction to Kurusa Junction, covering 107 trees. Avifaunal observations were conducted while traveling along the road median between 0700h and 1000h. Birds were observed directly and with the aid of a 10 × 50 binocular. Active nests were located by searching the vegetation and following parent birds carrying nesting materials. Tree species were identified, and tree height, canopy diameter, diameter at breast height and number of branches were recorded. Nest type, concealment, canopy cover, distance from the nest tree to the adjacent tree and distance to the nearest road were measured. Disturbances for the nests were seen and recorded. There were 361 birds observed, representing 21 species from 18 families. The highest number of individuals (251) were recorded from house crow (*Corvus splendens*). Spot-billed pelicans belonging to the near threatened category (NT) was recorded. A total of 281 nests were recorded during the study period (271 open cup nests and 10 cavity nests) in 46 trees belonging to eight species in four families. Maximum numbers of nests (265) were recorded from house crow and 28% of these nests were in active stage. Highest number of nests were constructed in trees belonging to Family Moraceae: *Ficus benghalensis* and *Ficus religiosa* (85 for each species). Nests were constructed utilizing trees belonging to the Fabaceae, Sapotaceae, and Bignoniaceae families. Most of the nests were observed in larger trees characterized by broad canopies and high number of branches. The heights of the nesting trees and nests varied from 18.8 to 3.0m and 18.0 to 2.0m, respectively. The nests were exposed to open spaces characterized by minimal concealment (12%) and limited canopy cover (21%). The trees were found at a distance of 5±1.2 m close to adjacent trees and 2±4.2 m from the nearest road. There were no apex predators, therefore house crows preyed on the majority of the other bird species' nests. The present study reveals that the nests were utilized by *Corvus splendens* due to their adaptive success in urban environments. To enhance the bird diversity in this habitat, urban development should emphasize the significance of densely foliated trees in attracting and preserving nest sites of native bird populations.

Keywords: *Avian nesting, Urban ecology, Road median trees, Nesting preferences, Galle road*
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