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**Avian diversity in some human-altered landscapes in the Gampaha district,
Sri Lanka**

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Although diversity and distribution of avifauna have been mostly studied in and around undisturbed and protected areas in Sri Lanka, there is a dearth of studies in human-altered landscapes. The present study, therefore, was carried out to investigate the variation of avifaunal diversity in some human-altered landscapes viz garbage dump site (Manelgama village), town area (Kiribathgoda town), coconut cultivation (Gonahena village), paddy field (Weboda village), rubber cultivation (Embaraluwa village), and a fish landing site and market (Negombo town) in the Gampaha district in Sri Lanka. Birds present at each selected landscape were identified and counted following the fixed-radius point count method (n=4 each) between 0700 hrs – 0800 hrs from August 2020 to March 2021. The degree of landscape alteration of each site was measured in terms of the number of buildings, tall trees (5m<), fruit trees, power line posts, TV antennas/disks and sound level concurrent to bird counting. The species richness (SR), species heterogeneity (H') and species evenness (J) of the avifaunal communities in each landscape were calculated. Data on the avifaunal abundance and the degree of landscape alteration were analysed using ANOVA and PCA as appropriate. Altogether, a total of 1126 bird counts were recorded, and the birds belonged into 26 different species. Although characterized by low avian heterogeneity and low species richness, the total abundance of birds was high at highly altered landscapes viz garbage dumpsite (n=566; SR=9; H'=1.23), fish market (n=276; SR=8; H'=0.90), and the town area (n=119; SR=5; H'=0.96). The house crow (*Corvus splendens*), intermediate egret (*Mesophoyx intermedia*) and the rock pigeon (*Columba livia*) dominated the six sites with the relative abundances of 33.04%, 28.69% and 18.65%, respectively. It was also found that the abundance of these three bird species were significantly high in the above highly altered landscapes (p<0.05). In contrast, the paddy field recorded the highest H' (2.5), SR (16) and the J (0.90) values. The H', J and the SR of the avian communities were also found to be negatively correlated with the degree of habitat alterations in a way that the avifaunal diversity measures decreased with the increasing habitat alterations by anthropogenic activities. Further, the more tolerant and generalist avian feeders such as house crow, intermediate egret, and rock pigeon can be regarded as bio-indicator species in human-altered landscapes.

Keywords: Avian diversity, *House crow*, Human-altered landscapes, Intermediate egret, Rock pigeon