

Abstract No: BP-05

## Preliminary survey on avifaunal diversity at Bellanwila-Attidiya Sanctuary, Sri Lanka

D. M. D. S. M. Dissnayake<sup>1</sup>, V. Jayasinghe<sup>2</sup> and M. P. Gunawardena<sup>2\*</sup>

<sup>1</sup>Nature Beyond the horizon-the Environment Society of Horizon Campus, Malabe, Sri Lanka

<sup>2</sup>Faculty of Science, Horizon Campus, Malabe, Sri Lanka

\*medhisha@horizoncampus.edu.lk

Sri Lanka shelters a rich avifaunal diversity and the Bellanwila – Attidiya sanctuary (BAS) is of much importance as a habitat for birds. The diurnal avifaunal diversity was studied along the Nedimala canal of the Weras Ganga belonging to the BAS, from July 2016 to February 2017, using the fixed distance line transect method. All birds seen within one hundred meters on either side of the canal were recorded, at three different sessions of the day (morning 6:30-8:30 h, noon 11:30-1:30 h and evening 3:30-5:30 h). A total number of 2592 of individuals belonging to 62 bird species, 29 families and fifteen orders were recorded during the study period. These included the globally near-threatened (NT) Spot Billed Pelican (*Pelicanus philippensis*). Only migratory species recorded during the months of January and February was the Indian Paradise Flycatcher (*Terpsiphone paradisi*). Using the recorded data, the relative abundance of each bird species was calculated. The calculated relative abundance indicates that the House Crow (*Crows splendens*) was the most common bird (10.61) followed by Little Cormorant (*Microcarbo niger*) (5.86), Rose Ringed Parakeet (*Psittacula krameria*) (5.71) and Brahminy Kite (*Haliastur indus*) (5.02). The Brown Shrike (*Lanius seristatus*) was the least observed bird (0.04). Furthermore, the calculated diversity index values depict a relatively high diversity of 3.62 for the Shannon index and 0.9625 for Simpson's Index. According to the records, it was revealed that birds are more active during the morning hours. Even though the study site is in close proximity to densely populated residential areas; it still provides vital habitat to a large number of bird species. Although, due to the increasing number of invasive species and pollution around the canal, a decrease in the avifaunal composition, especially considering aquatic bird species, has been observed which ensures that measures to protect and conserve the Bellanwila – Attidiya Sanctuary should be taken.

**Keywords:** Avifauna, Bellanwila – Attidiya sanctuary, Relative abundance, Diversity