



MANGALORE UNIVERSITY

Best practice successfully implemented by the Institution

Title of the Practice

Campus Bird Count conducted as part of Bird Count India's 'Great Backyard Bird Count':
Documenting biodiversity and creating awareness

Objectives of the Practice

- To conduct campus-wide bird count
- To create awareness on habitat sustainability and conservation
- To assess ecosystem health with bio-indicator bird species

The Context

Mangalore University has been conducting CBC since 2016 on the specified date given by the Bird Count India during February to gather information about diversity, distribution and frequency of bird species. Birds are bio-indicators of ecosystem health. Mangalore University situated between the West coast and Western Ghats provides stop-over habitat for migratory and foraging and nesting habitats for resident birds.

The Practice

During 2021, CBC was held from 12th-15th February. Point-count surveys and Trials (area searches) at representative habitats were randomly conducted. The data gathered on diversity, abundance and behavior indicate supportive sustainable methods on campus. More than 50 students, staff and research scholars and other bird enthusiasts took part in the survey.

Evidence of Success

Of 108 bird species, migratory - Ashy Drongo, Booted Eagle, Grey Wagtail, Indian Pitta; nocturnal - Barn Owl, Spotted Owlet, Nightjars (Savanna, Indian and Jerdon's) and Sri Lanka Frogmouth; new/rare - Yellow-billed Babbler, Green Sandpiper and Grey-necked Buntings were recorded. Nest and nestlings of House Crow, Bronzed Drongo, and prey catching by Shikra, Indian Nightjar were observed.

Problems Encountered and Resources Required

Collected data to be uploaded on *ebird.org*. after obtaining expert opinion. Needs to be undertaken systematically at regular intervals. Expert help is required to learn about distribution, status and behavior. Sufficient equipment and fund are required.

Notes (Optional)

The participants are trained in bird watching practices and documentation supported by basic identification keys. The children of the adopted village schools were taught about recording the bird species.

Scope

- It is a best practice to document change outside protected areas, reach out to the general public and create awareness on the need of conservation of bio-indicator species through sustainable utilization of natural resources.
- The campus supports 11 species of birds included in Schedule I, 138 species included in Schedule IV and one species in Schedule V of the Wildlife (Protection) Act (1972). As per IUCN red list (IUCN, 2021) data, Woolly-necked Stork, Black-headed Ibis and Grey-headed Bulbul are the Near Threatened species and 146 species are belonging to the Least Concern categories. Nilgiri Flowerpecker, Grey-headed Bulbul and Rufous Babbler, Flame-throated Bulbul the endemic birds of the Western Ghats were also recorded in the area during the study period.
- Overall 150 species were recorded in and around the campus till date. In 2018 Mangalore University stood 2nd place in the country in recording the highest number of 110 species of birds and the total number of birds checklists uploaded.
- Analysis of diversity, abundance and behavior reveals how the campus landscape provides essential habitat.
- However, due to progressive changes in the overall development of the campus through infrastructural facilities and other amenities the diversity of organisms including birds are being disturbed.
- The indicator bird species assessment will provide eco-friendly approach and implementation of management strategies through proper landscape designing.
- The study indicates that the bird species abundance are increasing due to overall supporting factors in their habitat for feeding and breeding activities.
- However, there are incidences of wildfire which has disturbed the bird populations in the lateritic grassland and needs special attention to save these birds.
- Future bird monitoring studies are recommended to quantify trends linking campus environmental health with bird species richness.