

## Avian Diversity In And Around N.S.College Bhadrawati in Chandrapur District of Maharashtra State

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### Abstract

Avian diversity in and around N.S.Science and Arts College, Bhadrawati in Chandrapur district of Maharashtra state was studied for a year round span during morning and evening hours and a checklist of birds was prepared. Based on this checklist it was evident that many birds visit the area to feed on fruits and adjoining vicinity of local residents due to prevalence of food items present for birds. Also a small water body is formed in the back side of the college area which also harbors a lot of birds during all the seasons. Based on observations about 47 different bird species were recorded having 1 migratory, 7 resident migratory and 39 resident birds from this area.

**KEYWORDS :** Avian diversity, Bhadrawati, Chandrapur district, Water body.

### INTRODUCTION

The Bhadrawati is a tehsil place in Chandrapur district of Maharashtra state having a population of approximately 1.5 lacs. Nilkanthrao Shinde Science and Arts College is located in the heart of the city on main road having a botanical garden in its premises having herbs, shrubs, trees and various climbers.

The leftover garbage and food items are regularly dumped on backside on open ground behind the college premises wall in which drainage water of the localities also seeps and a very small water body is formed in the backside. A number of varied bird species are attracted towards the food items leftover in the whole area and so a study is conducted on them to record the presence of different birds in the vicinity our college campus during a year span during the year 2015 from January to December month.

Since no earlier reports are available regarding bird fauna of our college and adjoining area, hence present study is launched to investigate the avifaunal diversity around this site.

Birds are found throughout the world, at all altitudes and in nearly all the continents of the earth. Till date considerable studies on avifaunal diversity have been carried out by various researchers like Osmatson (1922), Singh (1929), Ali (1932), Kannon (1980), Davidar (1985), Ghazi (1962), Ghosal (1995), Kulkarni *et. al*, (2005), Sahu and Rout (2005), Pimpalpure and Sawaji (2009), Kurhade (2010), Thaokar et al (2010), Virani (2012), Harney (2015).

Since no earlier reports are available on this aspect of bird biodiversity hence present study is launched to investigate the avifaunal diversity and prepare a checklist around this beautiful site.

## **MATERIALS AND METHODS**

The botanical garden site was visited daily around the year and the types of birds in the area are identified during morning hours (6 to 8 A.M.) and in the evening (4 to 6 P.M.). Also for identification and confirmation of species standard literature of Woodcock (1980), Ali and Ripley (1995) and Grimmet *et al* (2010) is referred.

The observations were carried out by using a field binocular (7 x 25X) magnification and through visual observations.

## **RESULT AND DISCUSSION**

The checklist of birds is given in table no.1. In all 14 different orders of birds with 47 different species of birds which are visiting the area frequently are found out from the checklist prepared during a year long span covering the entire stretch of morning and evening hours.

House sparrow and House crow were recorded in huge number throughout the study period. Most abundance of the species of birds were seen in the month of July and August only, while less birds are seen in March and April i.e. summer months.

In our studies only one migratory bird i.e Black necked Stork is recorded, while 7 Resident Migratory Birds and 39 resident birds are recorded. Twelve different orders of birds were found visiting the area. Similar to our observations Harney (2015) reported 99 bird species belonging to 22 different orders and 54 families from Junona lake, while Osmatson (1922) studied 135 species of birds from Pachmarhi (M.P.), Salim Ali(1939) published a list of 278 species of birds from Central India, while Newton *et al* (1986) have recorded the birds of Kanha Tiger Reserve (M.P.) while Wadatkar and Kasambe (2002) reported 171 species of birds at Pohra-Malkhed forest reservoir of Amravati district.

The abundance of bird species decreased especially in the month of April and May due to less availability of water due to intense heat of sun. The abundance of left over food items were preferred by House crows and sparrows in all the seasons. The migratory birds were seen visiting the water body in the premises of bus stand in winter season only. In India, small water bodies are a distinctive feature which provides important feeding and nesting areas for a wide range of water bodies. The birds act as scavengers which clean up the environment. A large proportion of normal food of bird consists of insects and fishes especially in the pond ecosystem.

The birds in and around the site were affected by many factors such as organic pollution, distribution of human activities and climatic factors. Keeping in view the scanty studies on birds in such sites our attempt is an approach to qualitatively assess the types of birds in such habitat and prepare a checklist.

Through these Bird check list studies a base line is established for the future researchers in this direction to analyze the bird fauna of nearby sites easily.

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**Table 1 : Checklist of Birds – Botanical Garden N.S.College Bhadrawati and Adjoining Region**

Sr.No.	Order & Family	Scientific Name Of Birds	Common name	Habit
1.	Ciconiformes Ardeidae	<i>Ardea cinerea</i>	Grey Heron	RM
2.	Ciconiformes Ardeidae	<i>Ardeola grayii</i>	Indian Pond Heron	R
3.	Ciconiformes Ardeidae	<i>Bubulcus ibis</i>	Cattle Egret	R
4.	Ciconiformes Ciconidae	<i>Ephippiorhyrchos asiaticus</i>	Black Necked Stork	M
5.	Ciconiformes Scolopacidae	<i>Gallinago gallinago</i>	Common Snipe	R
6.	Ciconiformes Ardeidae	<i>Egretta garzetta</i>	Little Egret	R
7.	Falconiformes Anatidae	<i>Elanus Caeruleus</i>	Black Winged Kite	R
8.	Galliformes Phasianidae	<i>Francolinus pondicerianus</i>	Grey Francolin	R
9.	Pelecaniformes Phalacrocoracidae	<i>Phalacrocorax niger</i>	Little Cormorant	RM
10.	Charadriiformes Scolopacidae	<i>Actitis hypoleucos</i>	Common Sandpiper	RM
11.	Charadriiformes Charadriidae	<i>Vanellus indicus</i>	Red Wattled Lapwing	R
12.	Columbiformes Columbidae	<i>Streptopelia chiensis</i>	Spotted Dove	R
13.	Columbiformes Columbidae	<i>Streptopelia decaocto</i>	Eurasian Collared Dove (Ring Dove)	R
14.	Columbiformes Columbidae	<i>Stigmatopelia senegalensis</i>	Little Brown Dove	R

15.	Columbiformes Columbidae	<i>Treron phoenicopterus</i>	Yellow Footed Green Pigeon	R
16.	Columbiformes Columbidae	<i>Columba livia</i>	Rock Pigeon (Blue)	R
17.	Psittaciformis Psittacidae	<i>Psittacula krameri</i>	Rose Ringed Parakeet	R
18.	Psittaciformes Cuculidae	<i>Centropus sinensis</i>	Greater Coucal	R
19.	Psittaciformes Cuculidae	<i>Eudynamis Scolopaceus</i>	Asian Koel	R
20.	Coraciformes Alcedinidae	<i>Alcedo atthis</i>	Small Blue Kingfisher	RM
21.	Coraciformes Meropidae	<i>Merops orientalis</i>	Small Green Bee Eater	R
22.	Coraciformes Coraciidae	<i>Coracias bengalensis</i>	Indian roller	RM
23.	Coraciiformes Coracidae	<i>Upupa epops</i>	Common Hoopoe	RM
24.	Passeriformes Lanidae	<i>Lanius schach</i>	Rufousbacked Shrike	R
25.	Passeriformes Dicrudidae	<i>Dicrurus macrocerus</i>	Black Drongo	R
26.	Passeriformes Sturnidae	<i>Acridotheres tristis</i>	Common Myna	R
27.	Passeriformes Pycnonotidae	<i>Pycnonotus cafer</i>	Red Vented Bulbul	R
28.	Passeriformes Muscicapidae	<i>Turdoides striata</i>	Jungla Babbler	R
29.	Passeriformes Muscicapidae	<i>Saxicolocoides fulicatus</i>	Indian Robin	R
30.	Passeriformes NEcatarinidae	<i>Cinnyris asiaticus</i>	Purple sunbird	R
31.	Passeriformes Hirudinidae	<i>Hirundo rustica</i>	Comon Swallow	RM
32.	Passeriformes Sturnidae	<i>Sturnus pagodarum</i>	Brahminy Myna	R
33.	Passeriformes Sturnidae	<i>Sturnus contra</i>	Pied Myna	R
34.	Passeriformes Corvidae	<i>Corvus splendens</i>	House Crow	R
35.	Passeriformes Corvidae	<i>Corvus macrorhynchus</i>	Jungle Crow	R
36.	Passeriformes Muscicapidae	<i>Copsychus saularis</i>	Oriental Magpie robin	R
37.	Passeriformes Campephagidae	<i>Pericrocotus cinnaeus</i>	Small Minivet	R

38.	Passeriformes Cisticolidae	<i>Orthotomus sutorus</i>	Common Tailorbird	R
39.	Passeriformes Passeridae	<i>Anthus rufulus</i>	Paddy Field Pipit	R
40.	Cuculiformes Cuculidae	<i>Cuculus canorus</i>	Common Cuckoo	R
41.	Strigiformes Strigidae	<i>Athene brama</i>	Spotted Owlet	R
42.	Apodiformes Apodidae	<i>Apus affinis</i>	House Swift	R
43.	PElecaniformes Phalacrocoracidae	<i>Phalacrocorax fuscicollis</i>	Indian Cormorant	R
44.	Motacillidae Oriolidae	<i>Oriolus oriolus</i>	Eurasian Golden Oriole	R
45.	Passeridae Corvidae	<i>Dendrocitta vagabunda</i>	Rufous Tree pie	R
46.	Passerinae Ploceinae	<i>Ploceus philipinus</i>	Baya weaver	R
47.	Passeridae Passerinae	<i>Passer domesticus</i>	House Sparrow	R

**RM – Resident Migratory Birds of the area**

**M-Migratory Birds**

**R –Resident**