



AVIFAUNAL DIVERSITY IN AND AROUND TAHSILPOMBHURNA OF DIST. CHANDRAPUR (M.S.) INDIA

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ABSTRACT:

Pombhurna is a tahsil place located in district Chandrapur of Maharashtra State, India. Pombhurna is covered with dense forest in and around and having rich faunal diversity spread in its vicinity. It harbors several kinds of birds in most of rainy and winter season as grassland area, rice fields, herbs, shrubs and various trees located in the vicinity provides essential required food and shelter to these birds. As the area is free from all anthropological activities, the environment is most suitable for the fauna to sustain without any disturbance. About 62 different birds were recorded in the present study report. The details of reported avifaunal diversity were reported in the given study.

Keywords: Avifauna, biodiversity, forest, Pombhurna

INTRODUCTION:

It is very essential to monitor the bird diversity in any divine natural habitat, ecological area so as to observe their ability to respond on various environmental factors like disturbances, damage created for human development against the destruction of natural habitat. The quality of any natural habitat or environment is reflected by presence or disappearance of any avifaunal animals in there vicinity, which may reflect the impact of development on their habitat. Birds are always amazing to all due to their long and constant journey to overcome the unfavorable conditions and to find and reach the suitable feeding and breeding grounds. Birds are always fighting against the environmental factors since long time and adapted themselves against environmental as well as anthropological disturbances in the recent years is something remarkable. As compare to all other habitats, like water bodies with vegetation, hydrophytes and surrounding scrub, tree cover was most suitable for congregating diversity of bird species (Newton, 1995; Islam and Rahmani, 2004). Water bodies also support wide range of biodiversity hence most suitable for birds to get variety of food, good and safe shelter to lay the eggs (Islam and Rahmani, 2004).

It is being suggested that avifauna are important for the ecosystem as they play various roles as a Scavenger, Pollinator and predators of insect pest (Padmavati *et al.*, 2010). The developmental projects, Industrialization, Urbanization disturbs avian fauna (Bhattacharjee and Hazarika; Sharma and Saini, 1985).

There are more than about thousands species of birds in the world. India harbors 1318 species of which 57 are endemic, 03 breeding endemic and 85 species are threatened (Bird life International, 2014). AVIBASE (2015) reported the existence of 616 species of birds in Maharashtra State of which 33 are threatened and 01 is introduced species (Birdlife International, 2010).

Pombhurna tahsil is surrounded by Multahsil on one side and by Ballarpur and Chandrapur city on other. It is placed between known Mul and Ballarpur tahsil and shows dense forest covering various trees specially bamboo. The studied area is well nourished and shows feasible nutrition in rainy and winter season but during spring and summer the water level drops its maximum and the small and large plants are unable to get there water requirement and nutrition too.

In the rainy season due to availability of sufficient water shrubs and other small plants, trees can

easily grow at the maturity and are naturally available shelter for the resident/migrating birds. The flooded water contains small phytoplankton, insect larvae, worms and small plants which serve as food for various resident and migrating birds. In the winter season as the rice fields are at their flowering stage the paddy areas also serve as shelter during winter with fresh food and nutrition for birds. The paddy and flowering rice field attracts the most of migrating birds so the season sighted diverse bird counting.

METHOD AND MATERIAL:

The present work was carried out from July 2016 to July 2017. The observation were carried out by using a field binocular (7X25X magnification) during the morning (6 to 10 AM) and in the evening (4 to 7 PM) and identification of species was done with the help of standard literature of Woodcock (1980), Ali, S. and Ripley, S.D. (1995) and Grimmet *et al.*, (1999).

RESULT AND DISCUSSION:

During the present investigation, a total of 62 birds belonging to 15 different orders and 40 families were recorded from the study area. Among the recorded species of birds, 22 species belongs to Passeriformes, 8 species belongs to Charadriiformes, 8 species belongs to Ciconiformes, 6 species belongs to Coraciiformes, 4 species belongs to Psittaciformes, Columbiformes, 2 from Galliformes, one species belongs to Anciriformes, Podicipediformes, Passeridae, Pelecaniformes, Apodiformes, Cuculiformes, Piciformes each and 2 species from Pelecaniformes.

Among the recorded species of birds 7 species belongs to Scolopacidae families, 5 species belongs to Columbidae, 4 species belongs to Ardeidae and Sturnidae families and 5 from Muscicapidae, 2 from Passeridae and Phalacrocoracidae family single species belongs to Gruidae, Corvidae, Ciconidae, Anatidae, Psittacidae, Cuculidae, Alcedinidae, Muscicapidae, Meropidae, Coraciidae, Upupidae,

Alcedinidae, Lanidae, Dicuridae, Hirudinidae, Laniidae, Sylvidae, Campephagidae, Passeridae, Motacillidae, Estrildidae, Picidae, Cuculidae, Apodidae, Podicipedidae, Threskiornithidae, Scolopacidae, Pycnonotidae, Phasinidae, Phalacrocoracidae, and Charadriidae families each. Out of total 62 species, 53 were resident, 08 were resident migrant and 1 is resident migrant common. Similar findings were recorded as 95 species of birds were recorded of 13 different orders and 37 families during the study by Harney (2015) in Mohurly area of Chandrapur District, Osmaston (1922) studied 135 species of birds from Pachmari (M.P.), Ali (1939, 1940) published a list of 278 species of birds from central India, Mujumdar (1984) studied the collection from Baster district (M.P.), Newton *et al.*, (1986) have listed the birds of Kanha Tiger Reserve (M.P.), Ghosal (1995) have listed the birds of Kanha Tiger Reserve (M.P.), Wadtkar and Kasambe (2002) reported 171 species of birds at Pohara-Malkhed forest reservoir of Amravati district (M.S.), Yardi *et al.*, (2004) reported 64 species of birds in Salim Ali lake, Aurangabad (M.S.), Kedar and Patil (2005) recorded 60 birds species from Rishi lake Karanja (Lad) of Washim district (M.S.), Pawar *et al.*, (2005) reported 74 species of birds in and around Yedshi lake, Mangrulpir, Washim district (M.S.), Kulkarni *et al.*, (2005) reported 151 species of birds in and around Nanded city (M.S.), Kulkarni and Kanwate (2006) reported 18 species of birds in Dongarkhed irrigation of Hingoli district. (M.S.), Kulkarni *et al.*, (2006) reported 93 species of birds from Shikhachwadi reservoir of Nanded district (M.S.), Kedar *et al.*, (2008) recorded 74 species of birds in Rishi and Zedshi lake of Washim district (M.S.), Kanwate and Jadhao (2010) recorded 10 species of birds in Bhokartahsil of Nanded district (M.S.), Kulkarni and Kanwate (2010) reported 62 species of birds of Jaldhara forest of Kinwat of Nanded district (M.S.), Thakor *et al.*, (2010) reported 104 species of birds from two reservoirs of Khed district, Gujrat, India. Kurhade (2010) reported 208 species

of birds in Jaikwadi reservoirs near Ahmadnagar (M.S.), Narwade and Fartade (2011) recorded 165 species of birds of Osmanabad district (M.S.), Rasal and Chavan (2011) reported 61 species of birds in local ecosystem of Aurangabad (M.S.), Kukade et al., (2011) recorded 68 birds species of Chhatri lake of Amravati district (M.S.), Harney, *et al.*, (2012) recorded 37 species of birds from Kanhala pond of Bhadrawati, District Chandrapur (M.S.), Joshi and K. Shrivastava (2012) reported 64 species of birds in Tawa reservoir of Hoshangabad district (M.P.), Hippargi et al., (2012) recorded 65 species of birds in a highly fragmented grassland patch near Solapur, Maharashtra and Patel et al., (2012) recorded 70 species of birds of Mahi canal site of Nadiad (Gujrat state), Harney, et al., (2013) recorded 37 species of birds from Kanhala pond with preference to feeding habits of Bhadrawati, District Chandrapur (M.S.) and Natarajan Mariappan *et al.*, (2013) recorded 92 species of birds from Different Habitat of Agricultural Ecosystem of Pollachi (T.N.)

CONCLUSION:

From the present study it can be concluded that Pombhurna region is preferred by variety of migrating and resident birds during their journey as the rainy and winter season satisfy their essential requirement to survive in this region for feeding and breeding purpose.

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Table 1 Birds species observed in and around study area Pombhurna, District Chandrapur, Maharashtra State, India

Sr. No.	Order/Family	Scientific name	Common name	Habit
1.	AnciriformesAnatidae	<i>Anaspoecilorhyncha</i>	Spot Bill Duck	RM
2.	ApodiformesApodidae	<i>Apusaffinis</i>	House swift	R
3.	CharadriformesCharadriidae	<i>Vanellusindicus</i>	Red wattled Lapwing	R
4.	CharadriformesScolopacidae	<i>Actitishypoleucos</i>	Common Sandpiper	RM
5.	CharadriformesScolopacidae	<i>Tringanebularia</i>	Common Greenshank	R
6.	CharadriformesScolopacidae	<i>Tringaochropus</i>	Green Sandpiper	R
7.	CharadriformesScolopacidae	<i>Tringa tetanus</i>	Common Redshank	R
8.	CharadriformesScolopacidae	<i>Limosalimosa</i>	Black Tailed Godwit	R
9.	CharadriformesScolopacidae	<i>Philomachuspugnax</i>	Ruff	R
10.	CharadriiformesScolopacidae	<i>Tringaglareola</i>	Wood Sandpiper	R
11.	Ciconiformes Ciconidae	<i>Anastomusosciantans</i>	Asian Open Bill Stork	RM
12.	CiconiformesArdeidae	<i>Aredeolagrayii</i>	Indian Pond Heron	R
13.	CiconiformesArdeidae	<i>Bubulcus ibis</i>	Cattle Egret	R
14.	CiconiformesArdeidae	<i>Casmerodiusalbus</i>	Large Egret	RM
15.	CiconiformesArdeidae	<i>Egrettazarzetta</i>	Little Egret	R
16.	CiconiformesCiconiidae	<i>Mycterialeucocephala</i>	Painted Stork	RM
17.	CiconiformesScolopacidae	<i>Gallinagagallinago</i>	Common Snipe	R
18.	CiconiformesThreskiornithidae	<i>Pseudibispapillosa</i>	Black Ibis	RM
19.	ColumbiformesColumbidae	<i>Stigmatopeliasenegalensis</i>	Little Brown Dove	R
20.	ColumbiformesColumbidae	<i>Treronphoenicopterus</i>	Yellow Footed Green Pigeon	R
21.	ColumbiformesColumbidae	<i>Columba livia</i>	Rock (Blue) Pigeon	R
22.	ColumbiformesColumbidae	<i>Streptopeliachinensis</i>	Spotted Dove	R
23.	CoraciformesAlcedinidae	<i>Cerylerudis</i>	Pied Kingfisher	R
24.	CoraciformesAlcedinidae	<i>Alcedoatthis</i>	Small Blue Kingfisher	R
25.	CoraciformesAlcedinidae	<i>Halyconsmyrnesis</i>	White Breasted Kingfisher	R
26.	CoraciformesCoraciidae	<i>Coraciasbenghalensis</i>	Indian Roller	R
27.	CoraciformesMeropidae	<i>Meropsorientalis</i>	Small Green Bee Eater	R
28.	CoraciformesUpupidae	<i>Upupaepops</i>	Common Hoopoe	R
29.	CuculiformesCuculidae	<i>Cuculuscanorus</i>	Common Cuckoo	R
30.	GalliformesGruidae	<i>Amauromisphoenicurus</i>	White-Breasted Water Hen	R
31.	GalliformesGruidae	<i>Fulicaatra</i>	Common Coot	RM
32.	GalliformesPhasinidae	<i>Fracolinuspondicerianus</i>	Grey Francolin	R
33.	PasseridaeCorvidae	<i>Dendrocittavagabunda</i>	Rufous (Indian) Treepie	R
34.	Passeriformes Campephagidae	<i>Tephrodornispondicerianus</i>	Common Woodshrike	R
35.	Passeriformes Corvidae	<i>Corvussplendens</i>	House Crow	R
36.	Passeriformes Corvidae	<i>Corvusmacrorhynchos</i>	Jungal Crow	R
37.	Passeriformes Dicrudidae	<i>Dicrurusmacrocercus</i>	Black Drongo	R
38.	Passeriformes Estrildidae	<i>Amandavaamandava</i>	Red Aavadavat	R
39.	Passeriformes Hirudinidae	<i>Hirundorustica</i>	Common Swallow	RMC
40.	Passeriformes Lanidae	<i>Laniusschach</i>	Rufousbacked Shrike	R
41.	Passeriformes Laniidae	<i>Laniusvittatus</i>	Bay Backed Shrike	R

42.	Passeriformes Motacillidae	<i>Motacillmaderaspatensis</i>	White Browed Wagtail	R
43.	Passeriformes Muscicapidae	<i>Turdoidesstriat</i>	Jungal Babbler	R
44.	Passeriformes Muscicapidae	<i>Saxicolodiesfulcatus</i>	Indian Robin	R
45.	Passeriformes Muscicapidae	<i>Copsychussaularis</i>	Oriental Magpie Robin	R
46.	Passeriformes Muscicapidae	<i>Saxicolacaprata</i>	Pied Bushchat	R
47.	Passeriformes Passeridae	<i>Hydrophasianuschirurgus</i>	Pheasant Tailed Jacana	R
48.	Passeriformes Passeridae	<i>Anthusrufulus</i>	Paddyfield Pipit	R
49.	Passeriformes Pycnonotidae	<i>Pycnonotuscafer</i>	Red Vented Bulbul	R
50.	Passeriformes Sturnidae	<i>Acridotherestrictis</i>	Common Myna	R
51.	Passeriformes Sturnidae	<i>Sturniapagodarum</i>	Brahminy Starling	R
52.	Passeriformes Sturnidae	<i>Sturnuspagodarum</i>	Brahminy	R
53.	Passeriformes Sturnidae	<i>Sturnus contra</i>	Pied Myna	R
54.	Passeriformes Sylviidae	<i>Chrysommasinense</i>	Yellow Eyed Babbler	R
55.	PelecaniformesPhalacrocoracidae	<i>Phalacrocoraxniger</i>	Little Cormorant	RM
56.	PelecaniformesPhalacrocoracidae	<i>Phalacrocoraxfuscicollis</i>	Indian Cormorant	R
57.	PiciformesPicidae	<i>Dendrocopusmahrattensis</i>	Yellow-Crowned Woodpecker	R
58.	PodicipediformesPodicipedidae	<i>Tachybaptusruficollis</i>	Little Grebe	R
59.	PsittaciformesCuculidae	<i>Eudynamysscolopaceus</i>	Asian Koel	R
60.	PsittaciformesCuculidae	<i>Centropussinensis</i>	Greater Coucal	R
61.	PsittaciformesPsittacidae	<i>Psittaculakrameri</i>	Rose Ringed Parakeet	R
62.	PsittaciformesPsittacidae	<i>Psittaculacyanocephala</i>	Plum Headed Parakeet	R

R = Resident M = Migrant

RM = Resident Migratory RMC = Resident Migrant Common