



AVIFAUNAL DIVERSITY OF PITICHUA LAKE IN AND AROUND CHIMUR TALUKA OF CHANDRAPURDISTRICT, M.S. INDIA

S. K. Waware

Department of Zoology, Gramgeeta Mahavidyalaya, Chimur. Dist-Chandrapur, M.S. India
Corresponding Email: meghabhambri2003@gmail.com

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ABSTRACT:

The present investigation was carried out to document the avifauna in and around the Pitichua Lake near Chimur taluka located in the Chandrapur district of Maharashtra State from Oct. 2021 to Sept. 2022 in which 35 species of birds were recorded of 8 different Orders and 19 families during the study. Among the recorded species 25 were residential, 9 were residential migratory and 1 is residential migratory common. Chimur taluka have immense variety of avifaunal diversity due to because of availability of abundance of food as well as various stagnant freshwater bodies respectively. Near PitichuaLake of Chimur Taluka have found various species of birds due to availability of food and favorable environmental conditions for breeding purpose so far. Various migratory and residential birds have been visited to Pitichua Lake and nearby areas of Tadoba National Park which is famous for Conservation of Tiger. In Chimur Taluka farmers mainly take paddy crop during kharip season and birds are easily located in flocks on paddy fields to eat insects and crops especially. During winter season, many migratory birds visited to Pitichua Lake in search of their food and breeding purpose. The present study was commenced to travel around avifaunal diversity, seasonal abundance of birds and their migratory pattern in and around the study area. There are abundant species of birds found in a variety of surroundings all around the world. Birds are one of the most prosperous clusters of animals on the planet earth as they generally have their habitat (the atmospheres) to themselves. Birds are crucial animal assemblage of an environment and maintain a trophic level. Therefore, detail study on avifaunal diversity and their natural balance is important to guard them.

Keywords: - Avifauna, breeding, season, Habitat and avifaunal diversity.

INTRODUCTION :

Birds are originate all over the world, at around all height above sea level and in closely all type of weather. They are a regular way to control pests in gardens, on farms, and other places. They support in the pollination of plants. By landing on a plant or sucking the nectar from a flower, and then moving on to the next, a bird does the job usually associated with bees. Birds also have a good system for dispersal seeds. They eat berries and then when they "dispose of" their waste, the berry seeds are disposed along with it. Bird feces provide good fertilization for the seeds with which they are dropped, giving seeds very good conditions with which to grow. Birds serve as one of the best environmental indicators. Their presence anywhere speaks

volumes of the environment as to whether all is well or there is something amiss. The presence of birds also shows the biological importance or going technical, the biodiversity significance of an area.

During the last few decades significant studies on avifauna diversity from different freshwater bodies of India have been carried out by researchers like, Osmatston (1922), Singh (1929), Ali (1932), Kannon (1980), Davidar (1985), Jhingram (1988), Ghazi (1962), Mujumdar (1984), Newton *et al.*, (1986), Ghosal (1995), Kulkarni *et al.*, (2005), Yardiet *al.*, (2004) and Wadatkar and Kasambe (2002). However very little information is available about avifauna of central India. This work has therefore undertaken to document the avifauna of water

bodies located in Pitichua Lake near the town Chimur which lies in the central region of the country.

The lake harbor a large number of fauna which attract the birds shown that the entire lake basin is highly dynamic and conducive to all kinds of birds. The Pitichua Lake is harbors a number of aquatic unwanted plant in the underwater as well as fluctuating state on which increase a large number of organisms. The bank of this lake is infested with weed *Ipomea aquatica* which provide appropriate latent place for the birds. Apart from this, lakes boundary is covered with bushes and trees which provide suitable surroundings for many birds. Due to abundant food available during the course of the year in Pitichua Lake in the form of aquatic crustaceans, insects, molluscs etc. the lake always attracts a large number of birds throughout year.

MATERIAL AND METHODS :

Pitichua village is located in Chimur tehsil of Chandrapur district in Maharashtra, India. It is situated 10km away from sub-district headquarter Chimur (tehsildar office) and 105km away from district headquarter Chandrapur. As per 2009 stats, Gadagaon is the gram panchayat of Pitichua village. The present work was carried out from Oct. 2021 to Sep. 2022. The observation were carried out by using a field binocular (7x25x magnification) during the morning (6 to 7 AM) and in the evening (4 to 6 PM) and identification of species was done with the help of standard literature of Woodcock (1980), Ali, S. and Ripley, S.D. (1995) and Grimmett *et al.*, (1999).

RESULT AND DISCUSSION :

During the present investigation, a total of 35 bird's species belonging to 8 different orders and 19 families were recorded from the Pitichua Lake. Among the recorded species of birds, 9 species belongs to Passeriformes, 4 species belongs to Charadriiformes, 8 species belongs to

Ciconiformes, 3 species belongs to Coraciiformes, 2 species belongs to Columbiformes and 4 species belongs to Galliformes, 1 species belongs to Anseriformes and one species belongs to Podicipediformes, Pelecaniformes, Apodiformes, Cuculiformes, Piciformes and Pelecaniformes each. Among the recorded species of birds, 2 species belongs to Scolopacidae families, 2 species belongs to Columbidae, 2 species belongs to Ardeidae and Sturnidae families and 2 species belongs to Gruidae family, 1 species belongs to Corvidae, Muscicapidae, Ciconidae, Anatidae, Psittacidae, Cuculidae, and Muscicapidae families and 1 species belongs to Coraciidae, Lanidae, Dicrodidae, Passeridae, Hirudinidae, Laniidae, Phalacrocoracidae, Passeridae, Picidae, Cuculidae, Apodidae, Podicipedidae, Threskiornithidae, Scolopacidae, Phasianidae, Phalacrocoracidae, Recurvirostridae and Charadriidae families each. Out of total 35 species, 25 were resident, 09 were resident migrant and 1 is resident migrant common respectively.

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.), Kukadee *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.), Hippargiet *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 Habitats of Agricultural Ecosystem of Pollachi(T.N.) The birds present in and around the PitichuaLake are affected by many factors such as organic pollution, distribution by human activities and lack of maintenance of lake, yet the avifauna of PitichuaLake is diverse. Keeping in view the varied avifauna recorded, steps should be taken to do proper maintenance and beautification of the lakes.

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Table 1. Bird species in Pitichua Lake during Oct. 2021 to Sept. 2022.

Sr. No.	Order/Family	Scientific Name	Common Name	Habit
1	Passeriformes Sturnidae	<i>Acridotherestrictis</i>	Common Myna	R
2	Passeriformes Pycnonotidae	<i>Pycnonotuscafer</i>	Red Vented Bulbul	R
3	Passeriformes Muscicapidae	<i>Turdoidesstriat</i>	Jungle Babbler	R
4	Passeriformes Muscicapidae	<i>Saxicolodiesfulicatus</i>	Indian Robin	R
5	Passeriformes Hirudinidae	<i>Hirundorustica</i>	Common Swallow	RMC
6	Passeriformes Laniidae	<i>Laniusvittatus</i>	Bay Backed Shrike	R
7	Passeriformes Corvidae	<i>Corvussplendens</i>	House Crow	R
8	Passeriformes Campephagidae	<i>Tephrodornis pondicerianus</i>	Common Wood shrike	R
9	Passeriformes Passeridae	<i>Anthusrufulus</i>	Paddy field Pipit	R
10	Piciformes Picidae	<i>Dendrocopus mahrattensis</i>	Yellow-Crowned Woodpecker	R
11	Cuculiformes Cuculidae	<i>Cuculuscanorus</i>	Common Cuckoo	R
12	Apodiformes Apodidae	<i>Apus affinis</i>	House swift	R
13	Pelecaniformes Phalacrocoracidae	<i>Phalacrocoraxfuscicollis</i>	Indian Cormorant	R
14	Charadriiformes Scolopacidae	<i>Actitishypoleucos</i>	Common Sandpiper	RM
15	Galliformes Gruidae	<i>Fulicaatra</i>	Common Coot	RM
16	Pelecaniformes Phalacrocoracidae	<i>Phalacrocoraxniger</i>	Little Cormorant	RM
17	Anciriformes Anatidae	<i>Anaspoecilorhyncha</i>	Spot Bill Duck	RM
18	Ciconiformes Ciconiidae	<i>Mycterialeucocephala</i>	Painted Stork	RM
19	Ciconiformes Ardeidae	<i>Casmerodiusalbus</i>	Large Egret	RM
20	Ciconiformes Ciconidae	<i>Anastomusosciatans</i>	Asian Open Bill Stork	RM
21	Ciconiformes Threskiornithidae	<i>Pseudibispapillosa</i>	Black Ibis	RM
22	Podicipediformes Podicipedidae	<i>Tachybaptusruficollis</i>	Little Grebe	R
23	Ciconiformes Ardeidae	<i>Aredeolagrayii</i>	Indian Pond Heron	R
24	Ciconiformes Ardeidae	<i>Bubulcus ibis</i>	Cattle Egret	R
25	Ciconiformes Scolopacidae	<i>Gallinagegallinago</i>	Common Snipe	R
26	Ciconiformes Ardeidae	<i>Egrettaazarzetta</i>	Little Egret	R
27	Anciriformes Anatidae	<i>Nettapus coromandelianus</i>	Cotton Teal	R
28	Galliformes Phasianidae	<i>Fracolinus pondicerianus</i>	Grey Francolin	R
29	Galliformes Gruidae	<i>Amauromisphoenicurus</i>	White-Breasted Water Hen	R
30	Galliformes	<i>Porphyrioporphyrus</i>	Purple Moorhen	R

	Gruidae			
31	Charadriformes Recurvirostridae	<i>Himantopus himantopus</i>	Black Winged Stilt	R
32	Charadriformes Charadriidae	<i>Vanellus indicus</i>	Red watted Lapwing	R
33	Charadriformes Scolopacidae	<i>Tringanebularia</i>	Common Greenshank	R
34	Columbiformes Columbidae	<i>Stigmatopelia senegalensis</i>	Little Brown Dove	R
35	Columbiformes Columbidae	<i>Treron phoenicopterus</i>	Yellow Footed Green Pigeon	R

R = Resident, M = Migrant, RM = Resident Migratory and RMC = Resident Migrant Common.

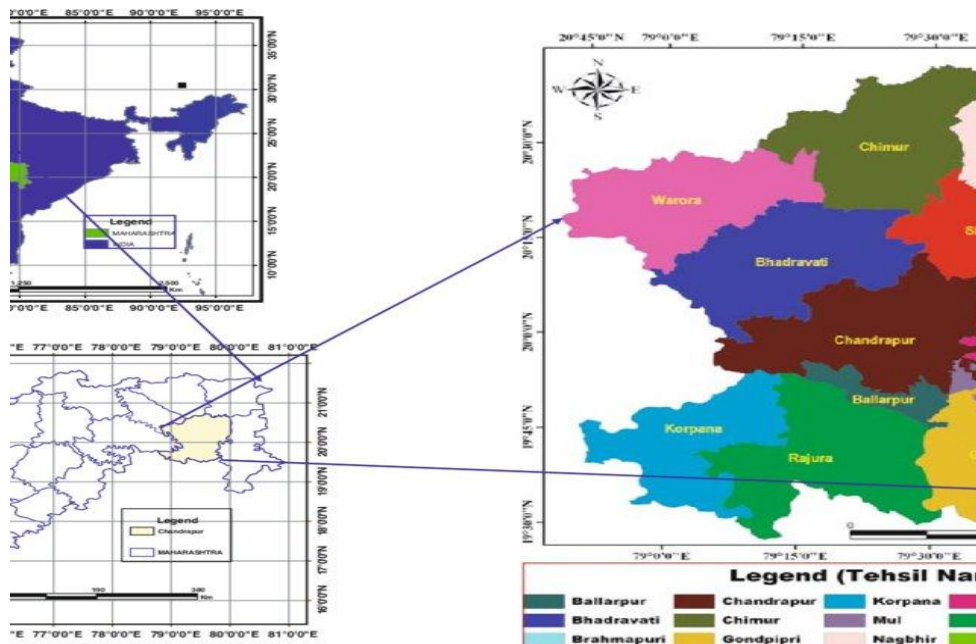


Fig.1. Map of Chandrapur District which shows Chimur Taluka.

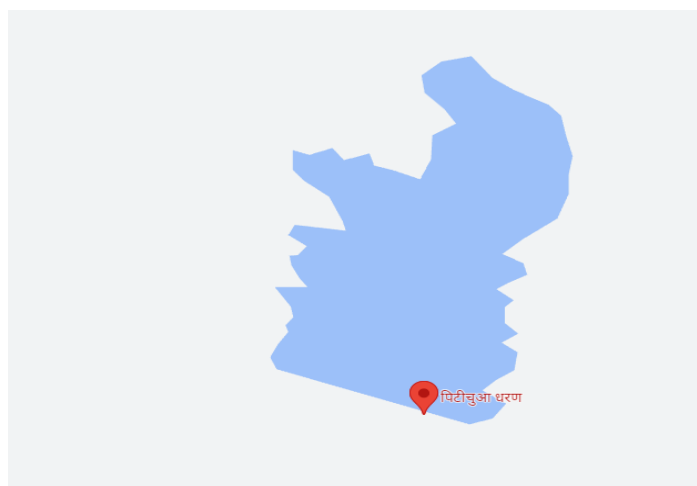


Fig.2. Satellite Map of Pitichua Lake in Chimur Taluka.