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The Diversity of Birds in and around Heti Lake in Dhanora Taluka, Gadchiroli District, Maharashtra, India

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ABSTRACT: The Heti Lake is located in the Gadchiroli district's near Heti village, Dhanora Taluka. There are agricultural lands and forests all around this lake. There are 46 species of birds from 12 orders and 28 families that have been identified during the survey in Heti Lake. Some of these species are terrestrial, while others are aquatic. There are various qualitative differences in the lake's avifauna. Among the 12 order are Passeriformes, Charadriiformes, Pelicaniformes, Coraciiformes, Anseriformes, Suliformes, Columbiformes, Psittaciformes, Ciconiiformes, Cuculiformes, Gruiformes, Accipitriformes and consist total families 28 & it including Ciconiidae, Recurvirostridae, Estrildidae, Pycnonotidae, Laniidae, Threskiornithidae, Threskionithidae, Alcedinidae, Campephagidae, Jacanidae, Rallidae, Dicruridae, Upupidae, Coraciidae, Laridae, Accipitridae, Psittaculidae, Meropidae, Charadriidae, Cuculidae, Phalacrocoracidae, Anatidae, Ardeidae, Sturnidae, Motacillidae, Corvidae, Columbidae, and Muscicapidae.

I. INTRODUCTION

Around the world, birds may be found in almost every climate and at almost every elevation. They are an all-natural method of managing pests in farms, gardens, and other locations. They facilitate plant pollination. A bird performs the function often performed by bees by landing on a plant or drinking nectar from a bloom before moving on to the next. Birds have a good seed-spreading system as well. They consume berries, and the berry seeds are thrown out with their excrement when they "dispose of" it. When seeds are sprinkled alongside bird droppings, the feces fertilize the seeds well, creating ideal growing conditions.

The birds are very important to man's economy. They are crucial in regulating the number of certain pests. They aid in seed distribution and act as pollinators and scavengers. They have long been known to humans and offer a wealth of food. In 1996, Chitampally and Bhatkhande established the groundwork for economic ornithology. Birds are the most important markers of balanced living systems and a highly vital part of biodiversity. Seasonal variation, environmental conditions, and ecosystem composition all affect the number of birds in a given ecosystem. Birds are among the most beautiful animals in nature, and it is undeniable that climatic changes and direct human influence have a significant impact on bird habitat, especially around lakes.

II. STUDY AREA

Heti lake is located at **80.319652°** N and **20.260785°** E near village Heti, which is 6 km away from subdistrict headquarter Dhanora and 41 km away from district headquarter Gadchiroli, along nation highway No. 930. The border of this lake is surrounded by Agriculture fields, forest area and village.

III. MATERIAL AND METHODS

The present work was carried out from January 2023 to May 2023. The observation were carried out by using a field Camera Canon. EOS 1500 D using 70/300 telescopic lens. During morning (6am to 8am) and the evening (4pm to 6pm). The identification of species was done by standard available literature of Ali and Ripley (1995) and Grimmet et al., (1999). Find the data was tabulated and analysed.

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IV. RESULT AND CHECKLIST

Checklist of birds in and around Heti lake

Sr. no.	Order	Family	Scientific name	Common name	Habit	Abundance Status	Feeding on
1.	Accipitriformes	Accipitridae	*Accipiter badius*	Shikra	R	C	Rodents, insects
2.	Anseriformes	Anatidae	*Dendrocygna Javanica*	Lesser whistling duck	R/S	H	Aquatic plant, grains,
3.	Anseriformes	Anatidae	*Nettapus coromandelianus*	Cotton teal	M	O	Small fish, molluscs
4.	Charadriiformes	Recurvirostridae	*Himantopus himantopus*	Black winged stilt	R	C	Insect
5.	Charadriiformes	Charadiidae	*Vanellus indicus*	Red watted lapwing	R/C	I	Insect, Snails
6.	Charadriiformes	Jacanidae	*Metopidius India*	Bronze-winged jacana	R	A	Seeds, roots,
7.	Charadriiformes	Charadriidae	*Charadrius dubius*	Little ringed plover	RM	O	Molluscs worms
8.	Charadriiformes	Laridae	*Sternal aurantia*	River tern	R	P	Fish, tadpole
9.	Ciconiiformes	Ciconiidae	*Anastomus Oscitanus*	Asian Openbill	R	C	Snails, crabs
10.	Columbiformes	Colubidae	*Thero3 a Phaenicoptera*	Yellow-footed green pigeon	R	F	Fallen grains, seeds
11.	Columbiformes	Columbidae	*Columba livia domestica*	Homing pigeon	R	O	Seeds, grains
12.	Columbiformes	Columbidae	*Spilopelia chinensis*	Spotted dove	R	G	Seed, shoots of plants

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Sr. no.	Order	Family	Scientific name	Common name	Habit	Abundance Status	Feeding on
13.	Coraciiformes	Meropidae	*Merops orientalis*	Green bee-eater	R	I	Flying insects, moths
14.	Coraciiformes	Upupidae	*Upupa epops*	Common hoopoe	R	I	Insect, reptiles, seeds
15.	Coraciiformes	Coraciidae	*Coracias benghalensis*	Indian roller	R	I	Insect, small, animals
16.	Coraciiformes	Meropidae	*Alcedo atthis*	Common kingfisher	R	P	Small fish, frogs,
17.	Coraciiformes	Alcedinidae	*Halcyon smyrnensis*	White-throated kingfisher	R	C	Insect, snakes,
18.	Cuculiformes	Cuculidae	*Psittacula krameri*	Rose Ringed Parakeet	R	F	Fruits, nectar
19.	Gruiformes	Rallidae	*Porphyrio*	Grey-headed swamphen	R	O	Insect, molluscs
20.	Passeriformes	Estrildidae	*Copsychus saularis*	Oriental Magpie Robin	R	I	Insect
21.	Passeriformes	Sturnidae	*Acridotheres tristis*	Common myna	R/U	O	Insect, seeds
22.	Passeriformes	Motacillidae	*Motacilla cinerea*	Grey Wagtail	W/V	C	Ants, snails,
23.	Passeriformes	Pycnonotidae	*Pycnonotus cafer*	Red vented bulbul	R	O	Small insects, moths
24.	Passeriformes	Sturnidae	*Sturnus coritra*	Indian Pied myna	R	O	Fruits, eggs, insects

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Sr. no.	Order	Family	Scientific name	Common name	Habit	Abundance Status	Feeding on
25.	Passeriformes	Corvidae	*Dicrurus macrocercus*	Black drongo	R	I	Flying insects, nectar
26.	Passeriformes	Laniidae	*Lanius schach*	Long tailed shrike	R	C	Lizards, small birds
27.	Passeriformes	Campephagidae	*Pericrocotus cinnamomeus*	Small minivet	R	I	Insect
28.	Passeriformes	Corvidae	*Corvus corax*	Common raven	R	O	Carrion,, insects
29.	Passeriformes	Corvidae	*Corpus macrorhynchus*	Long-billed crow	R	O	Small birds, eggs
30.	Passeriformes	Muscicapidae	*Phoenicurus ochruros*	Black redstart	M	O	Insect_ worms
31.	Passeriformes	Dicruridae	*Dicrurus annectens*	Crow-billed drongo	M	C	Insect, small animals
32.	Passeriformes	Muscicapidae	*Saxicoloides fulicatus*	Indian robin	R/C	I	Insect, small frogs
33.	Passeriformes	Muscicapidae	*Saxicola caprata*	Pied bushchat	R	I	Pyramid, moths
34.	Passeriformes	Muscicapidae	*Turdoides strait*	Jungle babbler	R	O	Grains, insects
35.	Passeriformes	Motacillidae	*Anthus richardi*	Richards pipit	R	C	Insects, larvae

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Sr. no.	Order	Family	Scientific name	Common name	Habit	Abundance Status	Feeding on
36.	Passeriformes	Sturnidae	*Sturnus pagodarum*	Asian pied starling	R	O	Fruits
37.	Passeriformes	Motacillidae	*Motacillia citreola*	Citrine wagtail	RM	I	Aquatic larvae, spiders
38.	Pelecaniiformes	Ardeidae	*Ardea herodias*	Blue heron	WV	C	Fish, insects
39.	Pelecaniiformes	Ardeidae	*Ardea alba*	Great egret	R	C	Fish, frogs
40.	Pelecaniiformes	Threskionithidae	*Threskiornis melanocephalus*	Black headed ibis	R	C	Fish, frog, crabs, reptiles
41.	Pelecaniiformes	Ardeidae	*Ardeola grayii*	Indian pond heron	R	C	Aquatic insects, fish
42.	Pelecaniiformes	Threskiornithidae	*Pseudibis papillosa*	Red naped ibis	R	C	Fish, frog
43.	Psittaciformes	Cuculidae	*Centropus sinensis*	Greater coucal	R	C	Insect, lizard, mice
44.	Psittaciformes	Psittaculidae	*Psittacula eupatria*	Alexandrine Parakeet	R	F/G	Fruits, seeds
45.	Suliformes	Phalacrocoracidae	*Phalacrocorax Fuscicollis*	Little black cormorant	WV	P	Fish
46.	Suliformes	Phalacrocoracidae	*Phalacrocorax carbo*	Great cormorant	R	P	Fish

V.

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V. DISCUSSION

The Heti lake is situated in Heti village of Dhanora Taluka, district Gadchiroli. This lake is surrounded by forest and Agricultural fields. During the survey in Heti lake 46 species of birds belonging to 12 order and 28 families have been identified out of 46 species some are Water birds and some Terrestrial Birds. The lake exhibits several qualitative variations in Avifauna. Among the 12 order are Passeriformes, Charadriiformes, Pelicaniformes, Coraciiformes, Anseriformes, Suliformes, Columbiformes, Psittaciformes, Ciconiiformes, Cuculiformes, Gruiformes, Accipitriformes and consist total families 28 & it including Ciconiidae, Recurvirostridae, Estrildidae, Pycnonotidae, Laniidae, Threskiornithidae, Threskionithidae, Alcedinidae, Campephagidae, Jacanidae, Rallidae, Dicruridae, Upupidae, Coraciidae, Laridae, Accipitridae, Psittaculidae, Meropidae, Charadriidae, Cuculidae, Phalacrocoracidae, Anatidae, Ardeidae, Sturnidae, Motacillidae, Corvidae, Columbidae, and Muscicapidae.

Harney, (2012), seen the 95 species of the birds from Moharli lake district Chandrapur, He observed 13 different orders and 37 families during the study. Among the recorded species 48 were resident, 6 were resident migrant and is resident migrant common.

Chilke, A.M, (2014) study Avian diversity in an around Bamanwada lake of Rajura, District Chandrapur, Maharashtra, India. They observed this lake is perennial lake, rich in aquatic vegetation and harbours several kind of birds in all the seasons. He found total 58 bird species of belonging to 9 orders and 29 families were recorded but the future of this Avifauna in danger due to industrial progress of the city.

Khinchi et al., (2009) reported that total 19 species of birds belonging to 7 orders and 13 families from Junona lake of Chandrapur District, Maharashtra.

In the present investigation the migratory birds and Resident migrant birds are oftenly seen during study period along with residential birds. Which is due to availability of ample of water and food in agricultural field and forest along with scattered grains after harvesting throughout the year. Also, suitable nesting site and climatic condition is important

factor for good diversity of birds in Heti Lake. Also, there is need to aware the people about conservation of birds and waterbodies which have an important role in ecosystem and also to prevent the future interference of anthropogenic activities.

VI. CONCLUSION

In the present survey higher diversity of bird was found in and around of the Heti lake. The weather is suitable for birds body the diversity of bird was due to surrounding forest and fields which gives more choice for the food preference of the bird species as well as nesting and breeding place. The climate condition of that place is good to all type of Bird. High wetland area and food is easily available for birds, so we observed and prepare a checklist of birds.

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