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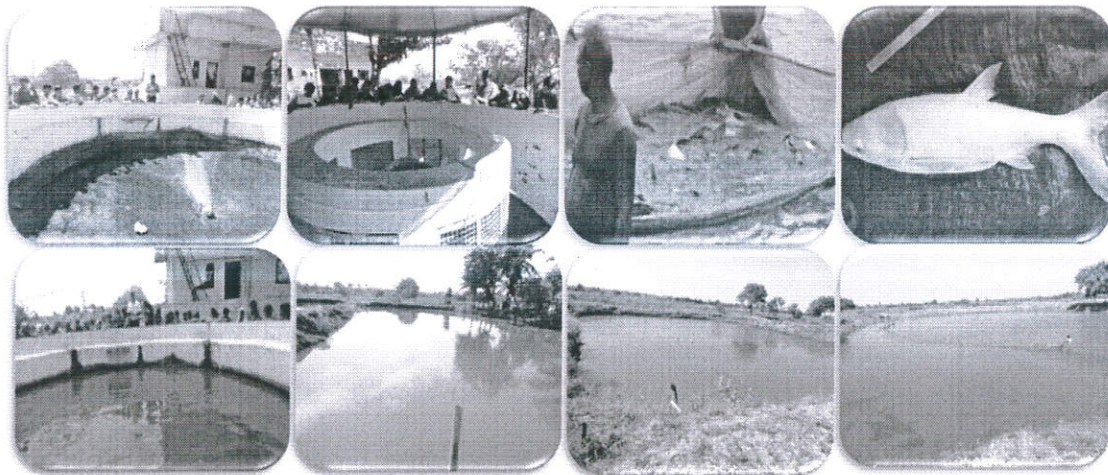
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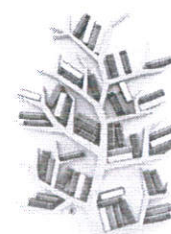
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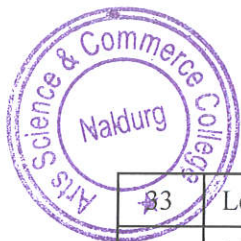


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Preliminary Survey of Birds in Terna Reservoir of Osmanabad In Maharashtra



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Abstract: The present study was environmental change are now a day to day increase in temperature shortage of rainfall to explore species diversity birds seasonal abundance of birds & global warming has set in motion & is affecting the time of migration of birds the field survey was made –to assess the recovery for the avian fauna by conducting daily observation during field survey the about 41 species of their birds record 7 11 family found 24 species of common residence out of some they are 15 species of migrant & hence the residence occasionally seen 6 species migrant occasionally are 2 species the study was carried out for 2 years from may 2018 to April 2020 the changes occurring in climate like air temp rainfall were binocular taken in to facts seen observation with the help of camera photography were taken to study the effect on migrating birds hence in the present study data on biodiversity bird have been collected to understand how climate change effects are more frequently observed in winter in starting of rain season the area is having rich diversity of avian fauna from this point of view the present study is carried out

Key Words: biodiversity of bird common residence migration etc.

Introduction:

The present study is carried out two years from may 2018 to april 2020 to identify the birds internal reservoir at osmanabad district of Maharashtra state The reservoir has a variety of birds of birds to prepare of avifauna of this reservoir this type of study is useful to natural habitat of this reservoir stated has also been carried by some workers in certain fresh water reservoir in india (rather & Sharma 1999, kumar 2006) all birds are not aquatic but few of them reside on the bank of reservoir birds are important group of aquatic food chain they feed on vegetation fishes and other animal of the reservoir the birds like kingfisher stork cormorant and herons feed on fishes frog tadpoles and similar aquatic animals where as the birds like common teal feed on aquatic vegetation snipe stint sand –sand piper jaena and lapwings feed on the bank of reservoir while cormorants terns feed in deeper waters.

Study area: -

The administrative district of the marathwadi region in osmanabad located at 18.40°N & 78.40° E in the India state of Maharashtra

Material and Methods:

During the investigation study is based on observation made two years birds were observed at four stations of east, west, north, south in reservoir side it self birds were observed twice a day at morning time and evening time for 2-3 hrs with daily observation made birds behaviors were studied by observing their movement and habits by list method (Kodarkaret et al 2006) The identification of birds was based on the standard data as by ali & ripley 2001. All observation of birds was done by Olympus 11876010X 0 dpsi wide angle binocular and where ever possible photographed by digital camera Canon Eos 200D. Grimmett et al 1999 v.mtiwari 2005 ali & fatherly 2003 and after confirmation of identity those species are reported in this paper guidelines as per the given in the check list of birds given by (Abdulla H .1981)

Kulkarni et., al: 2005 after checklist paper.

During the study 41 species of the birds recovered & different type of family belonging 11 family of class. the family number of birds observed are Accipitridae - 5, Aredeidae -5, Rallidae -3, Ciconidae -3, Scolopacidae -4, Laridae, Motacillidae -3, Threskiornithidae -3, Alcedinidae -3, Phalacrocoracidae - 2. Out of 18 species are residence common out of some they are bramny kite, Black winged kite, Black Kite, Shikra, Indian pond Heron, Large Egrent, Cattle Egrent, Little Egrent, Wooly necked stork, Common Sandpiper, River tern, White breasted waterhen, white browed

wagtail, Eurasian, Pied kingfisher, Little Cormorant, They migrant 15 species are oriental Honey Buzzard, Purple Heron Northern Shoveller, Garganey, Ruddy Shelduck, Black stork, Temmincks stint, common Greenshank, Common snipe, Caspian Tern, Black bellied tern, Whiskered tern, Gey wagtail, Yellow wagtail, Little Grebe. Hence the Resident occasionally seen 6 species are common duck, Lesser whistling duck, Asian openbill stork, Eurasian coot, Red-headed Ibis, during period migrant occasionally there 2 species are Intermediate Egret, Common snipe. They resident birds are observed in mostly of the months of during investing period but the migration birds were observed monthly in the winter months. In the investigation study, the population of migratory birds dominated at the Terna reservoir in winter, the climate condition because of northern hemisphere are averse to these birds during winter season, specially in getting food and shelter, while at the same time in India south-western Maharashtra this season is best for getting food and shelter. The migratory species were winter visitors (Pandey 1993) Manmohan and Saxena 2005, Malhotra et al 2005 - Kulkarni et al 2006)

The reservoir of water source in summer important stopover for migrant bird.

Sr No.	Common Name	Scientific Name	Local Status
1.	Oriental Honey Buzzard	<i>Pernis ptilorhynchus</i>	M
2.	Bramhiny Kite	<i>Haliastur Indus</i>	R
3.	Black winged kite	<i>Elanus Caeruleus</i>	R
4.	Black Kite	<i>Milvus Migrans</i>	R
5.	Shikra	<i>Accipiter Badius</i>	R
	Family Ardeidae		
6.	Indian Pond Heron	<i>Adeola Gravia</i>	R
7.	Large Egret	<i>Ardea Alba</i>	R
8.	Purple Heron	<i>Ardea Purpurea</i>	M
9.	Cattle Egret	<i>Bubulcus ibis</i>	R
10.	Little Egret	<i>Egretta Garzetta</i>	R
11.	Intermediate	<i>Ardea Intermedia</i>	M/O
	Family Ardeidae		
12.	Northern Shoveller	<i>Anas Clypeata</i>	M
13.	Lesser Whistling duck	<i>Dendrocygna Javanica</i>	R/O
14.	Garganey	<i>Anas Querquedula</i>	M
15.	Ruddy shelduck	<i>Tadorna Ferruginia</i>	M
16.	Common duck	<i>Shrki diornis Melanotos</i>	R/O
	Family Ciconiidae		
17.	Woolly necked stork	<i>Ciconia Episcopus</i>	R
18.	Asian Openbill stork	<i>Anastomus Oscitans</i>	R/O
19.	Black Stork	<i>Ciconia Nigra</i>	M
	Family Scolopacidae		
20.	Common sandiper	<i>Actitis Hypoleucos</i>	R
21.	Temmincks stint	<i>Actitis Hypoleucos</i>	R
22.	Common Greenshank	<i>Tringa Erebria</i>	M
23.	Common snipe	<i>Gallinago Gallinago</i>	M/O
	Family Laridae		
24.	River tern	<i>Sterna Aurantia</i>	R
25.	Caspian tern	<i>Sterna Caspia</i>	M
26.	Black bellied tern	<i>Sterna Acaticanda</i>	M/*
27.	Whiskered Tern	<i>Chlidonias Hybridus</i>	M/*
	Family Rallidae		
28.	Eurasian Coot	<i>Fulica atra</i>	R/O
29.	Whitebreasted waterhen	<i>Amaurornis Phoenicurus</i>	R
30.	Common Moorhen	<i>Gallinago Chloropus</i>	R
	Family - Motacillidae		
31.	Gey wagtail	<i>Motacilla Cinerea</i>	M
32.	Yellow Wagtail	<i>Motacilla Flava</i>	M

33.	White browed wagtail	<i>Motacilla Maderasfathensis</i>	R
	Family - Threskiornithidae		
34.	Red naped Ibis	<i>Pseudibis papillos</i>	R/O
35.	Black headed Ibis	<i>Threskiornis Melanocephalus</i>	R/O
36.	Eurasian Spoonbill	<i>Platalea leucorodia</i>	R
	Family - Alcedinidae		
37.	Common kingfisher	<i>Alcedo thais</i>	R
38.	White throated kingfisher	<i>Halcyon smyrnensis</i>	R
39.	Pied kingfisher	<i>Ceryle rudis</i>	R
	Family - Phalacrocoracidae		
40.	Little Grebe	<i>Circus aeryginosus</i>	M
41.	Little Cormorant	<i>Phalacrocorax nigripennis</i>	R

Indicator: - M-Migration, R Resident, M/O- Migration Occasionally, R/O- Resident Occasionally, * Observed for one or couple of day only.

References:

1. Salim Ali & Ripley S.D. 1983, a pictorial Guide to the Birds of the Indian Sub Continue Bombay. National Hist. Soc. Bombay P.177.
2. Rathore & Sharma 1999 Avifauna of a lake in district Etawah Uttar Pradesh, India, Zoos point 15(6) 275, 278.
3. Kumar, A.B. 2006, A check list of Avifauna of the Bharathapuzha river basin, Kerala Zoos point (21) 2350-2355.
4. Kodarkar M.S. Diwan A.D. Mishra S.M. Dhanpati M.V.S.S 2006, Methodology for water analysis physico - chemical) Biological & Microbiological IAAB Publication Hyderabad
5. Kulkarni A.N. V.S. Kanwate & V.D. Deshpande 2006 checklist of Birds Shikhiwadi Reservoir Dist- Nanded M.S. J. Aava Biol 21(10) 80-85pp.
6. Tiwari V.M. 2005 Joy of Birds watching National Book Trust India 2005.


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