BIRD DIVERSITY IN SIMBHORA RESERVOIR, MORSHI DI-AMRAVATI (M.S.) INDIA

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Abstract: 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 that area. Birds are found throughout the world, at approximately all altitudes and in almost every climate. Birds have great efficiency to fly. The diversity of birds in Simbhora Reservoir, Morshi, Di-Amravati was studied for a period of two years from June 2012 to May 2014. The study was based on visual observation. Simbhora lake inhabits several local and migratory bird species. Reduction in water retention in this lake in summer has affected the Avifauna diversity in the study area. This habitat attracted 41 species of birds which are residential common, winter visitor common and uncommon including aquatic birds, waders and others. Among total 41 species of birds, 38 were Residential common, 02 were Winter Visitor Common and 01 was Residential Uncommon. In the present study the good congregation of *Egretta garzetta*, *Bulbulous idis*, *Acipeter badius*, *Ardeola grayii*, *Alcedo atthis* and *Acridotheres tristis* was observed during day time and regularly found on lake, *Actitis hypoleucos* and *Pycnonotus luteolus* were noticed during winter season during the survey period.

Keywords: Avifauna, Simbhora reservoir, Residential common, Winter visitor common, Uncommon.

Introduction:

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 that area. Birds are found throughout the world, at approximately all altitudes and in almost every climate. Birds have great efficiency to fly.

The main threat to water birds is habitat loss and degradation, overexploitation of wetlands diversity and pollution. Wetlands are one of the most threatened habitats because of their vulnerability and attractiveness for their development (Hollis *et al.*, 1988). So objective of the present study was to assess the diversity and status of wetlands Avifauna in Amravati District over a two year period.

Study Area

Simbhora reservoir is constructed on the river Wardha. Total Catchment area of reservoir is 9,729 hector. This reservoir is divided into Upper Wardha and Lower Wardha. Its Water storing capacity is 762000000cubic litre.

Total water being used per year is 680000000 cubic liter. Height of simbhora reservoir is 43.5meter and its total length is 5600 meter. Lowest level of water in the Reservoir is 335 liter and highest level is 352.50 liter. Simbhora reservoir has two canals right canals is 132km long while left canal is 61 km long. Left canal covers about 84 villages including Arvi and Ashti. The water supply area of left canal is 13020 hectors. while right canal covers the area of about 45000hectores including 20 towns such as Amravati, Morshi and Chandur Railway etc. Total number of villages under water supply from the reservoir is 285.

Material and Methods:

The water bird census was being conducted at the lake between 7 am and 10 am. The number of these birds were counted using binocular. Waterfowls were identified by the referring the classical text books authored by Salim Ali (2002), Bhat Harish and Pramod Subbarao (2006) and Satish Pande *et.al.* (2003). This work was carried out for the period of two years from June 2012 to May 2014 during morning and evening hours.

Result and Discussion:

In the present investigation, 41 species of birds were observed in and around the Simbhora reservoir. The birds have been categorized in various groups based on their habitat residential, Common, winter visitor and Uncommon. Similarly, Thakor *et al.*, (2010) observed a total 104 species of birds on and around the two reservoir of Kheda, Gorghate *et al.*, (2012) observed 25 species of birds in Siregoan lake.

In present investigation, the maximum bird species were recorded during winter season, early monsoon while less number of species was observed during late summer. Keeping in view the varied avifauna recorded, steps should take for proper maintenance and beautification of the reservoir, so as to preserve the biodiversity of this reservoir.

The studies of such kind can be utilized for assessing the biological wealth of the specific region.

The large number of species of birds indicates that the reservoir is rich in aquatic insects and other large larvae, tadpoles, worms, crustaceans, flies midges, beetles, snails, zooplankton and phytoplankton. The migratory birds like common teals, common Poachard Wegion, Gargeny Prefer Shoots, Tubers and Seeds of aquatic plants, aquatic weeds indicating their abundance. (Ali, 1996).

Simbhora Reservoir area was found to be good spot for bird community. As like other lakes Simbhora Reservoir is rich in avian diversity and represented in Table 11.

The total 41 species of birds have been recorded; among which 38 are Residential common, 02 was Winter Visitor Common and 01 Residential Uncommon. In the present study the good congregation of *Egretta garzetta*, *Bulbulous idis*, *Acipeter badius*, *Ardeola grayii*, *Alcedo atthis* and *Acridotheres tristis* was observed during day time and regularly found on lake, *Actitis hypoleucos* and *Pycnonotus luteolus* were noticed during winter season during the survey period.

Table-1.1 Avian diversity in Simbhora Reservoir during 2012 to 2014

Sr. No.	Name of the species	Common Name	Status
1	<i>Mesophoyx intermedia</i> (Wagler)	Median Egret	R,C
2	<i>Dendrocygna javanica</i> (Horsfield)	Lesser Whistling-Duck	R,C
3	<i>Phalacrocorax niger</i> (Vieillot)	Little Cormorant	R,C
4	<i>Streptopelia chinensis</i>	Spotted Dove	R,C
5	<i>Nettapus coromandelianus</i>	Cotton Teal	R,C
6	<i>Actitis hypoleucos</i> (Linnaeus)	Common Sandpiper	WV,C
7	<i>Amauromis phoenicurus</i> (Pennant)	White-breasted Waterhen	R,C
8	<i>Spilornis cheela</i> (Latham)	Lesser Crested Serpent-Eagle	R,C
9	<i>Tactybaptus ruficollis</i> (Pallas)	Little Grebe/Dabchick	R,C
10	<i>Charadrius dubius</i> Scopoli	Little Ringed Plover	R,C
11	<i>Bubulcus ibis</i> (Linnaeus)	Cattle Egret	R,C
12	<i>Ardeola grayii</i> (Sykes)	Indian Pond-Heron	R,C
13	<i>Columba linia</i> (Gmelin)	Blue Rock Pigeon	R,C
14	<i>Egretta garzetta</i>	Little egret	R,C
15	<i>Elanus caeruleus</i> (Desfontaines)	Black-shouldered Kite	R,C
16	<i>Amandava amandava</i> (Linnaeus)	Red Munia	R,C
17	<i>Accipiter badius</i> (Gmelin)	Shikra	R,C
18	<i>Coturnix coromandelica</i> (Gmelin)	Black-breasted or Rain Quail	R,C
19	<i>Alcedo atthis</i> (Linnaeus)	Small Blue Kingfisher	R,C
20	<i>Turdoides striatus</i>	Jungle Babbler	R,C
21	<i>Gallus sonneratii</i> (Temminck)	Grey Junglefowl	R,C
22	<i>Eudynamis scolopacea</i> (Linnaeus)	Asian Koel	R,C
23	<i>Fulica atra</i> (Linnaeus)	Common Coot	R,C
24	<i>Pycnonotus luteolus</i>	White-browed Bulbul	WV,
25	<i>Vanellus indicus</i> (Boddaert)	Red-wattled Lapwing	R,C
26	<i>Dicrurus macrocercus</i> Vieillot	Black Drongo	R,C
27	<i>Dinopium benghalense</i>	Black-rumped flameback	R,C
28	<i>Milvus migrans</i> (Boddaert)	Black Kite	R,
29	<i>Alcedo atthis</i> (Linnaeus)	Common Kingfisher	R,C
30	<i>Centropus sinensis</i> (Stephens)	Greater Cauca	R,C
31	<i>Lonchura malabarica</i>	Indian Silver bill	R,C
32	<i>Corvus splendens</i>	House Crow	R/WV
33	<i>Halcyon smymensis</i> (Linnaeus)	White-breasted Kingfisher	R,C
34	<i>Coracias benghalensis</i> (Linnaeus)	Indian Roller	R,C
35	<i>Anastomus oscitans</i> (Boddaert)	Asian Openbill-Stork	R,C
36	<i>Saxicoloides fulicata</i>	Indian Robin	R,C
37	<i>Acridotheres tristis</i> (Linnaeus)	Common Myna	R,C
38	<i>Copsychus saularis</i> (Linnaeus)	Oriental Magpie-Robin	R,C
39	<i>Gloriola Lactia</i>	Small Pratincole	R,C
40	<i>Himantopus himantopus</i>	Blackwinged stilt	R,C
41	<i>Gallinula Chloropus</i>	Indian moorhan	R,C

Avifauna Diversity of Simbhora Reservoir:

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