

FISH DIVERSITY OF RAWANWADI LAKE OF BHANDARA DISTRICT MAHARASHTRA, INDIA

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ABSTRACT

The ichthyofauna of a reservoir basically represents the fish faunal diversity. Indian reservoirs preserve a rich variety of fish species. On the basis of studies conducted so far, large reservoirs on an average harbour 60 species of fishes, of which 40 species contribute to the commercial fisheries. Fishes are rich source of food and nutrition and became an important and delicious food of man. The present investigation deals with the fish diversity in Rawanwadi Lake, Bhandara during the year February 2006 to January 2007. The results of present study reveal the occurrence of total 29 species were identified among those, 19 were of Order Cypriniformes, 02 of Perciformes, 01 of Clupeiformes, 04 of Ophiocephaliformes, 02 of Siluriformes, 01 of Synbranchiformes.

Keywords: Rawanwadi Lake, Fish Diversity

INTRODUCTION

Fish is a valuable source of protein and occupied a significant position in the socio-economical fabric of South Asian countries. India has rich biological heritage that qualifies it, as one of the twelve-mega diversity nations of the world. The fishes alone contributing 2,546 species and the fishes of inland water bodies of Indian subcontinent have been subject of study since last century. The lack of information on the ichthyofauna is a big handicap for popularizing little known fish variety in a particular ecosystem. Thus there is need to survey fish fauna associated with different fresh water habitats, which will help in planning methods for their production and effective exploitation. Rawanwadi lake which is full of natural beauty is located 20 Kms. away from Bhandara District. Rawanwadi village is situated in the hills and forest. Near to the Rawanwadi lake lies Chandi hills. Various workers have studied fishes of India like Motwani and Saigal (1974), Day (1978), Jayaram (1994), Ghate and Wagh (1995) and Bhatnagar *et al.*, (2007).

MATERIALS AND METHODS

To study the fish fauna a fisherman was arranged for catching fish and collect from local market. The fishes were caught with netting, brought to laboratory, washed, cleaned,

observed and then identified up to species by referring standard literature of Day (1958), Talwar and Jhingran (1991) and Jayaram (1994).

RESULTS AND DISCUSSION

The natural fish population, though serve as an important general indicator of water quality, they are less suitable for providing a detailed scientific assessment of water quality and other sections of biota are preferred. The inherent disadvantage of fish as an indicator of water quality is the fact that water quality is not the only factor that limits their distribution (Jhingran, 2005).

Fishes were collected from all the sampling sites of study area during 2006-2007 and tabulated in 1. The fishes were collected from local fishermen.

Table 1. Ichthyofaunal diversity in Rawanwadi Lake during 2006-07

S.N.	FAMILY	GENUS	SPECIES
A]	ORDER : Cypriniformes		
1	Bagridae	<i>Mystus</i>	<i>vitatus</i>
2	Bagridae	<i>Mystus</i>	<i>Seenghala</i>
3	Bagridae	<i>Mystus</i>	<i>Cavasius</i>
4	Balitoridae	<i>Lepidocephalus</i>	<i>Guntea</i>
5	Ciluridae	<i>Ompok</i>	<i>Pabda</i>
6	Claridae	<i>Clarias</i>	<i>Batracus</i>
7	Cyprinidae	<i>Oxygaster</i>	<i>bacaila</i>
8	Cyprinidae	<i>Glassogobius</i>	<i>gyrus</i>
9	Cyprinidae	<i>Chela</i>	<i>bacilla</i>
10	Cyprinidae	<i>Catla</i>	<i>catla</i>
11	Cyprinidae	<i>Labeo</i>	<i>rohita</i>
12	Cyprinidae	<i>Cirrhinus</i>	<i>mrigala</i>
13	Cyprinidae	<i>Cyprinus</i>	<i>carpio</i>
14	Cyprinidae	<i>Rasbora</i>	<i>rasbora</i>
15	Cyprinidae	<i>Rassbora</i>	<i>daniconius</i>
16	Cyprinidae	<i>Puntius</i>	<i>amphibius</i>
17	Cyprinidae	<i>Puntius</i>	<i>ticto</i>
18	Cyprinidae	<i>Puntius</i>	<i>sophore</i>
19	Saccobranchidae	<i>Hetropneustus</i>	<i>fossilis</i>
B]	ORDER : Clupeiformes		
20	Notopteridae	<i>Notopterus</i>	<i>notopterus</i>
C]	ORDER : Ophiocephaliformes		
21	Ophiocephalidae	<i>Ophiocephalus</i>	<i>Punctatus</i>
22	Ophiocephalidae	<i>Ophiocephalus</i>	<i>striatus</i>
23	Ophiocephalidae	<i>Ophiocephalus</i>	<i>Orientalis</i>

Table 1. Ichthyofaunal diversity in Rawanwadi Lake during 2006-07 (Contd...)

S.N.	FAMILY	GENUS	SPECIES
24	Ophiocephalidae	<i>Ophiocephalus</i>	<i>murulus</i>
D]	ORDER : Siluriformes		
25	Siluridae	<i>Wallgo</i>	<i>attu</i>
26	Sisoridae	<i>Bagarius</i>	<i>bagarius</i>
E]	ORDER : Perciformes		
27	Nandidae	<i>Nandus</i>	<i>nandus</i>
28	Centropomidae	<i>Chanda</i>	<i>ranga</i>
F]	ORDER : Synbranchiformes		
29	Mastacembelidae	<i>Mastacembelus</i>	<i>Armatus</i>

In the present investigation, Total 29 species were identified among those, 19 were of Order Cypriniformes, 02 of Perciformes, 01 of Clupeiformes, 04 of Ophiocephaliformes, 02 of Siluriformes, 01of Synbranchiformes . Among the different species Labeo and Catla were observed dominant in Order Cypriniformes and least appearance of *Ompok pabda*.

Family wise distribution showed dominance of Cyprinidae with 12 species followed by Ophiocephalidae with 04, Bagridae with 03, each 01 of Balitoridae, Ciluridae, Clariidae, Saccobranchidae, Notopteridae, Siluridae, Sisoridae, Nandidae, Centropomidae and Mastacembelidae. Order Cypriniformes showed its dominance. Due to more fecundity of major carps and suitable environmental condition relatively higher population density of Cypriniformes was evident in the lake. Similar observations were earlier made by Talwar and Jhingran (1991), Devi (1997) reported ichthyofauna in Ibrahimbagh and Sathamraj reservoirs in Hyderabad. He also reported that Cypriniformes fishes dominated in these reservoirs.

Telkhade (2007) reported 39 species, belonging to 6 Order and 17 Families from the area of Tadoba National Park, Chandrapur. Sakhare and Joshi (2002) reported the ichthyofauna of Bori reservoir in Maharashtra. Total 21 species of fishes belonging to 14 genera falling under 4 Orders (Cyprinoformes, Perciformes, Siluriformes and Osteoglossiformes). Cyprinoformes Order dominated with seven species with genus Puntius was abundant. Channa species was the dominant in Order Perciformes. Kumar (1990) reported 51 ichthyofauna of 4 Families in Govindsagar reservoir, Himachal Pradesh, out of which 12 fishes were commercially important.

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