

ORIGINAL RESEARCH ARTICLE

Study on Fish Species Diversity of Mahendranath pond, Siwan, Bihar

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ABSTRACT

The present study has been carried from January 2010 to December 2011 for Mahendranath Pond, Siwan. Fish diversity on this lentic water body has been studied in detail with its food value and commercial status. Twenty eight Fish species of fishes were recorded, which belonged to 20 genera and 14 families. A classified list of fishes has been given. The Indian major carps and few fresh species are commercially important groups in the Mahendranath pond.

**Key words:** Fish species, diversity, food value, commercially important.

INTRODUCTION

Fishes constitute the most diverse and Protean group of vertebrates. They are aquatic gill-breathing and fin-bearing cold-blooded organism going back to the Devonian Period. Mahendranath pond is one of the most important Ponds for the capture fishery of the district. Very little information is available on the fish species diversity of this pond and in order to fill up this lacuna, an intensive survey was made to draw a picture of fish biodiversity.

Materials and Methods

The Research work was carried out between Jan 2010 to Dec. 2011. Fish samples were collected through experimental fishing using caste nets (diameter 3.7m and 1.0m) gill nets drag nets and variety of traps. Fishes have been preserved at first in concentrated formaldehyde in the field itself and then 40% formalin. Fishes have been identified after standard literature (Day, 1878; Menon 1999; Talwar and Jhingram 1991; and Jayram (1999)).

RESULTS AND DISCUSSION

Each aquatic habitat has a variety of species, which differ in their relative abundance. No community consists of species of equal abundance.

A total of 28 species belonging to 14 Families were observed in Mahendranath pond, siwan.

*Catla catla, cirrhinus mrigala, labeo rohita, Puntius sarana Heteropneustes fossilis, xenentodon cancila and Chana striatus (Table 1)*

Table 1: List of Fishes occurred in Mahendranath Pond during Jan 2010 – Dec. 2011

S. No	Family Status	Fish Species	Status
1	Notopteridae	<i>Notopterus notopterus (Pallas)</i>	+,0
2	Clupeidae	<i>Gudusia chapra (Ham.)</i>	+
3	Cyprinidae	<i>Rasbora doniconius (Ham.)</i>	-
		<i>Osteobrama cotio (Ham.)</i>	-
		<i>Puntius sarana (Ham.)</i>	-
		<i>Puntius ticto (Ham.)</i>	-
		<i>Catla catla (Ham.)</i>	+,0
		<i>Labeo rohita (Ham.)</i>	+,0
		<i>Labeo gonius (Ham.)</i>	-
		<i>Labeo calbasu (Ham.)</i>	+,0
		<i>Cirrhinus mrigala (Ham.)</i>	+,0
		<i>Cyprinus carpio (Ham.)</i>	
4	Bagridae	<i>Mystus seenghala (Sykes)</i>	+,0
		<i>Mystus cavasius (Ham-Buch)</i>	-
5	Siluridae	<i>Wallago attu (Bloch and schneider)</i>	-,0
6	Poecillidae	<i>Gambusia affinis (Baird and Girad)</i>	-
7	Heteropneustidae	<i>H. fossilis (Bloch)</i>	+,0
8	Claridae	<i>Clarias batrachus (Lim.)</i>	+,0
9	Nandidae	<i>Nandus nand us (Ham.)</i>	✓
10	Ambarsidae	<i>Chanda ranga (Ham.)</i>	✓
		<i>Chanda nama (Ham.)</i>	✓
11	Gobidae	<i>Glossogobius gluris (Ham.)</i>	
12	Belonidae	<i>Xenentodon cancila (Ham-Buch)</i>	X
13	Ophiocephalidae	<i>Chana punctatus (Ham.)</i>	+,0
		<i>Chana striatus (Ham.)</i>	+
		<i>Chana marulius (Ham.)</i>	+
14	Masta Cembalidae	<i>Mustacembalus armatus (Lec.)</i>	-
		<i>Mustacembalus puncalus (Lec.)</i>	-

+ = Food fish; ✓ = Ornamental fish; 0 = commercially important; \* = Exotic species.

### Food Value

Almost all fish species found in the Mahendranath pond exhibit food value except *Xenentodon cancila*. However, out of 28 fish species only 10 species are commercially important (Table 1). Among them *Calta catla*, *H. fossilis*, *C. batrachus* are the most prized ones.

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