Fish Diversity around Cooch Behar: A brief account

Dr. Rahul Kumar Datta

Assistant Professor, PG Dept. of Zoology, Bethune College

Abstract

An observation regarding diversity of fishes in the different water bodies around Cooch Behar is presented here. A Survey of three fish markets and six rivers around Cooch Behar was conducted during the study. A total 48 fishes have been reported from the regions.

Key Words
Cooch Behar, Fish diversity, Rivers

Introduction
The "terai region" of West Bengal is characterized by some of its native fish fauna including various edible as well as ornamental species. The area is almost plain land immediate below the Eastern Himalaya range with abundance of aquatic ecosystem that includes good number of rivers and reservoirs. The region includes some ancient towns including Cooch Behar (24°25' N and 89°44') which is the district headquarter also.

Barrage and dams are known to act as barrier to fish migration (Jhingran, 1991). Thus, the availability of fish species is also getting smaller amount. Destruction of natural habitat and over exploitation problem has made the crisis more sensitive. There is few documentation regarding the present fishes available at Cooch Behar, although some records have been given by Jha et al. (2005), Das (2006), Sarkar and Pal (2008) and others. This study is an attempt to document the fish diversity of Cooch Behar and its surroundings.

Objectives

The objectives of the present study are-

i. Field study, which includes survey from the river as well as local markets.
ii. Identification and study of fish diversity.

Materials and Methods
A Survey of three fish markets of Cooch Behar was conducted during April 2014 to March 2015. Study of water samples and collection of fishes with the help of local fishermen were also done from six rivers of the study area, namely Torsa, Ghargharia, Bauti, Kaljani, Nonai and Gadadhar. Although majority of the fishes were mainly collected from local markets, some fishes were also collected from rivers directly. The collected fishes were preserved in 4% Formaldehyde solution. Most of the fishes were identified by standard literature available like Hora (1945), Jayram (1999), Jhingran (1991), Dutta Munshi and Srivastav (1988), and others.

Results
The study reveals, there are 48 species of fishes belonging to 21 families and 9 orders (Table I). Maximum fishes are found in river Torsa (44) followed by Kaljani (43), Ghargharia (37) Nonai (22), Bauti (16) and Gadadhar (13). Four species are found confined to only one river- they are Meni in Gadadhar, Bethrongi in Ghargharia, Napte and Kalbous in river Torsa. The river Gadadhar although houses minimum species, still presence of Meni fish (*Nandus nandus*) only in this river may be due to less competition in the river. On the other hand, the fish species may not be very successful while competing with other species. Whether it is due to habitat destruction or niche overlap offers a scope of further study in this area. Not only that, this study provides an overview of fish diversity and an extensive further study may be done to find out the status of different endangered species.

Table I Fish diversity in different rivers of Cooch Behar

Sl. No.	Local name	Scientific name	Order	Family	Source					
					Gadadhar	Bauti	Gharg haria	Kaljani	Torsa	Nonai
1	Chapila/ Khoira	*Gudusia chapra*	Clupiformes	Clupeidae			+	+	+	+
2	Loach/ Poia	*Nemacheilus botia*	Cypriniformes	Balitoridae			+	+	+	
3	Beth Rongi	*Botia dario*	Cypriniformes	Cobitidae			+			
4	Ghutum	*Nemacheilus arunachalensis*	Cypriniformes	Balitoridae			+	+	+	+
5	Kukur botia	*Somileptes gongota*	Cypriniformes	Cobitidae			+	+	+	+
6	Mowa/ Maurala	*Ambylopharyngodon mola*	Cypriniformes	Cobitidae	+	+	+	+	+	+
7	Boroli	*Barilus barna*	Cypriniformes	Cyprinidae			+	+	+	
8	Boroli	*Barilius barila*	Cypriniformes	Cyprinidae	+	+	+	+	+	+
9	Darangi	*Barilius bola*	Cypriniformes	Cyprinidae				+	+	
10	Patharc hata	*Garra gotyla*	Cypriniformes	Cyprinidae		+	+	+	+	
11	Katla	*Catla catla*	Cypriniformes	Cyprinidae	+	+	+	+	+	+
12	Mrigel	*Cirrhinus mrigala*	Cypriniformes	Cyprinidae		+			+	
13	Rohu	*Labeo rohita*	Cypriniformes	Cyprinidae	+	+	+	+	+	+
14	Bata	*Labeo bata*	Cypriniformes	Cyprinidae	+	+	+	+	+	+
15	Khursa	*Labeo dero*	Cypriniformes	Cyprinidae	+	+	+	+		
16	Kalbous	*Labeo calbasu*	Cypriniformes	Cyprinidae					+	
17	Devario puthi	*Danio devario*	Cypriniformes	Cyprinidae			+	+	+	-
18	Darikana	*Esomus danricus*	Cypriniformes	Cyprinidae		+	+	+	+	+
19	Dankuni	*Rasbora daniconius*	Cypriniformes	Cyprinidae				+	+	
20	Puti	*Puntius sophore*	Cypriniformes	Cyprinidae		+	+	+	+	+
21	Puti/ Tit punti	*Punitius ticto*	Cypriniformes	Cyprinidae	+	+	+	+	+	+
22	Kancha n puti	*Puntius conchonius*	Cypriniformes	Cyprinidae				+	+	
23	Balitora	*Psilorhynchus balitora*	Cypriniformes	Psilorhync hidae			+	+	+	
24	Chang	*Ophiocephalus gachua*	Channiformes	Channidae			+	+	+	+
25	Lata/ Sati	*Ophiocephalus punctatus*	Channiformes	Channidae	+		+	+	+	+
26	Shol	*Ophiocephalus striatus*	Channiformes	Channidae			+	+	+	+
27	Kholse	*Colisa fasciatus*	Cyprinodonti formes	Belontidae			+	+	+	+
28	Kholse	*Colisa lalia*	Cyprinodonti formes	Belontidae			+	+	+	+
29	Kakila	*Xenentodon cancila*	Beloniformis	Belonidae			+	+	+	
30	Chanda	*Chanda nama*	Perciformes	Chandidae			+	+	+	
31	Chanda	*Chanda ranga*	Perciformes	Chandidae			+	+	+	
32	Balia/ Bele	*Glossogobius guris*	Perciformes	Gobiidae		+	+	+	+	+

Sl No	Local name	Scientific name	Order	Family	Source					
					Gadadhar	Bauti	Gharg haria	Kaljani	Torsa	Nonai
33	Meni/ Nyadosh	*Nandus nandus*	Perciformes	Nandidae	+					
34	Napte	*Badis badis*	Perciformes	Nandidae					+	
35	Koi	*Anabus testudineus*	Perciformes	Anabantidae	+			+		
36	Tilapia	*Oreochromis nilotica*	Perciformes	Cichlidae	+	+	+	+	+	+
37	Gochi	*Macrognathus aculeatus*	Perciformes	Mastacembelidae			+	+	+	+
38	Gota/ Pankal	*Mastacembelus pancalus*	Perciformes	Mastacembelidae		+	+	+	+	+
39	Tangra	*Mystus seenghala*	Siluriformes	Bagridae			+	+	+	
40	Tangra	*Mystus vittatus*	Siluriformes	Bagridae			+	+	+	+
41	Batasi	*Pseudeutropius atherenoides*	Siluriformes	Schilbeidae			+	+	+	
42	Magur	*Clarius batrachus*	Siluriformes	Claridae	+	+	+	+	+	
43	Singhi	*Heteropneustes fossilis*	Siluriformes	Heteropneustidae	+	+	+	+	+	
44	Boal	*Wallago attu*	Siluriformes	Siluridae				+	+	
45	Pabda	*Ompok pabda*	Siluriformes	Siluridae				+	+	
46	Bacha	*Eutropichthys vacha*	Siluriformes	Schilbbeidae				+	+	
47	Pholi	*Notopterus notopterus*	Osteoglossiformes	Notopteridae			+	+	+	+
48	Cutcutia	*Tetraodon cutcutia*	Tetraodontiformes	Tetraodontidae			+	+	+	

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