

ICHTHYOFAUNAL DIVERSITY OF KOLLAR DAM, DIST. NAGPUR, MAHARASHTRA STATE

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ABSTRACT: The ichthyofaunal diversity of Kollar Dam, Village Junawani, Taluka Saoner, Dist. Nagpur was explored during February 2010 to March 2011. Fishing site of the dam and local fish market was selected for investigation. Fishes were collected with the help of local fisherman using different types of nets viz. gill net, cast net, drag net and bhor jal. The present investigation reveals 41 species, 26 genera, 14 families and 7 orders in the Kollar dam.

Key words: Kollar Dam, Ichthyofaunal Diversity, Gill net, Cast net, Drag net.

INTRODUCTION:

Indian subcontinent has considerable ichthyofaunal diversity and Indian fish population represents 11% of species 24% genera and 57% families (NBSAP, 2005). Fish resources of India prove to be a rich source of income and play a vital role in augmenting food supply and raising nutritional level of the rural population. In spite of rich ichthyofaunal diversity in India, studies on fish fauna of Kollar Dam, Village Junawani, Taluka Saoner, District Nagpur, Maharashtra State, is yet to be explored. Looking at this an attempt has been made to explore and study fish diversity and to prepare the check list of fishes from Kollar Dam. The studies on fish diversity in freshwater wetlands in India are made by Pawar *et al.* (2003), Jayabhaye *et al.* (2006), Kadam and Gayakwad, (2006), Kamble and Mudkhede, (2009), Shinde *et al.*, (2009), Thirupathiah *et al.* (2010) and Sharma and Dutta (2012).

MATERIALS AND METHODS:

For the present investigation, fishing sites of Kollar Dam, Village Junawani, Taluka Saoner, District Nagpur, Maharashtra State, was selected for fish collection. Fishes were collected with the help of local fisherman by using different types of nets specifically gill net, cast net, drag net and Bhor Jal and also from local fish market. Sampling and data collection was carried out during February 2010 to March 2011. Photographs of the collected specimens were taken with the help of digital camera immediately after collection. Fishes were brought to the laboratory and preserved in 10% formalin solution in separate specimen jar according to the size. Fishes were identified up to the specimen level with the help of standard keys and literature (Day, 1967; Jhingran, 1991; Daniels, 2002 and Gupta and Gupta, 2006).

RESULTS AND DISCUSSIONS :

Piscine wealth of Kollar Dam is composed of carps, minnows, loaches, stone loaches, catfishes and perches, which are grouped into food fishes, game fishes, larvivorous fishes, bait fishes and wild fishes. The present investigation reveals an inventory of ichthyofaunal diversity consist of 38 species 24 genera and 14 families belonging to 7 orders (Table 1). Order Cypriniformes form major bulk of ichthyofauna with 17 species and contributes 47% of the total fish catch, followed by

order Siluriformes and Perciformes (8 species, i.e. 21%), and miscellaneous orders 12.8% (Table 2, Figure 1). The present investigation is in corroborate with the findings of Battul *et al.*, (2007), Parvate *et al.*, (2012) and Kadam *et al.*, (2012).

Since the study was mainly undertaken with the help of local fisherman using only gill net, drag net and bhor jal, other sampling methods such as angling and utilization of different types of traps would certainly increase the species list from the Kollar dam.

Table 2: Diversity of Species from different Orders of fishes

Order	Number of species	Percentage
Osteoglosiformes	02	5.26
Anguiliformes	01	2.63
Cypriniformes	17	44.47
Siluriformes	08	21.00
Cyprinodontiformes	01	2.63
Perciformes	08	21.00
Synbranchiformes	01	3.63
Total Number of Species	38	

Fig1: Fish diversity in percentage from different orders of fishes.

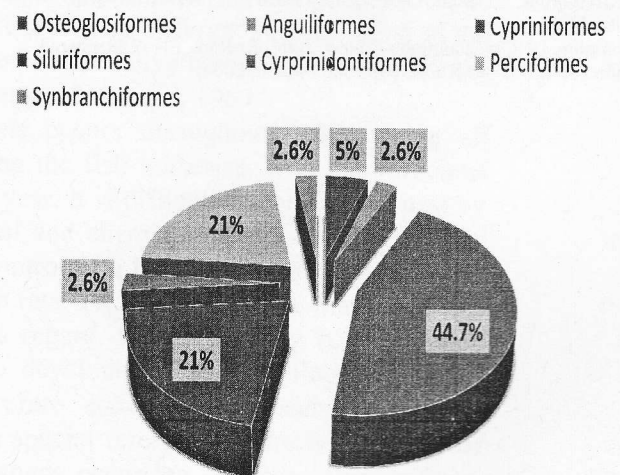


Table 1: Fish diversity in Kollar Dam

Order	Family	Scientific Name	Local Name	Common Name	Economic Value	Status		
Osteoglossiformes	Notopteridae	<i>Notopterus notopterus</i>	Patola	Feather backfin fish	PF,FD	++C		
		<i>Notopterus chitala</i>		Moy/Chital	FD	+V		
Anguilliformes	Anguillidae	<i>Anguilla bengalensis</i>	Tambu	Indian long-fin Eel	FD	-UNC		
Cypriniformes	Cyprinidae	<i>Salmostoma bacalia</i>	Chal	Large razor belly minnow, Dental	WF	++C		
		<i>Rasbora daniconius</i>	Gana	Black line Rasbora	LV	++C		
		<i>Rasbora rasbora</i>	Gana	Gangetic Scissor tail rasbora	LV	++C		
		<i>Cyprinus mola</i>	Nawari	Mola	FD	+++C		
		<i>Cyprinus carpio</i>	Cypnar	Cipla	FD	+++C		
		<i>Osteobrama cotio</i>	Bhondu	Cotio			++C	
		<i>Punctius dorsalis</i>	Kodsi	Long snouted barb	BT,LV,WF		++	
		<i>Punctius sarana</i>	Karwadi	Olive barb	BT,LV,WF		++C	
		<i>Punctius sophore</i>	Karwadi	Spot fin barb	BT,LV,WF		++C	
		<i>Punctius ficto</i>	Teprri	Fire fin barb	BT,LV,WF		++C	
		<i>Punctius curmuca</i>	Bhurangi	Kolas (Buchanan's carp)	BT,LV,WF		++C	
		<i>Punctius amphibus</i>	Ghuruti	Scarlet-banded barb	BT,LV,WF		++C	
		<i>Garra mullaya</i>	Mahir	Stone sucker	FD		++C	
		<i>Cirrhinus mrigala</i>	Mrigal	Mrigal	FD		+++C	
		<i>Catla catla</i>	Katla	Catla	FD		+++C	
		<i>Labeo kalbasu</i>	Karoti	Kalbasu	FD		+C	
		<i>Labeo rohita</i>	Rohu	Rohu	FD		+++C	
		Siluriformes	Bagridae	<i>Rita rita</i>	Bhokhi	Rita	FD,PF	+UNC
				<i>Mystus cavasius</i>	Katwa	Gangetic mystus	FD,PF	++C
				<i>Mystus seenghala</i>	Singat	Giant River Cat fish	FD,PF	+UNC
<i>Ompok binaculatus</i>	Barangi			Indian butter cat- fish	FD,PF	++C		
	Siluridae	<i>Ompok pobo</i>	Waddi	Pabda	FD,PF	+UNC		
		<i>Wallago attu</i>	Sawda	Shark cat-fish	FD,PF	++UNC		
	Charidae	<i>Clarias batrachus</i>	Mangur	Magur	FD,PF	++EN		
		<i>Heteropneustidae</i>	<i>Heteropneustes fossilis</i>	Ingur, Singur	Stinging cat-fish	LV,FD	-UNC	
Cyprinodontiformes	Belontiidae	<i>Xenentodon cancilla</i>	Chocha	Needle fish	WF	+UNC		
Perciformes	Ambassidae	<i>Ambassis nama</i>	Zanjad	Indian glassy fish	WF	++C		
		<i>Ambassis ranga</i>	Zanjad	Indian glass fish	WF	++C		
	Nandidae	<i>Nandus nandus</i>	Dukkar	Leaf fish	WF	+++C		
	Cichlidae	<i>Tilapia mossambicus</i>	Telabi	Egyptian mouth breeder	FD	+++C		
		<i>Glossogobius aureus</i>	Kaddu	Tank gobi	PF	+C		
	Channidae	<i>Channa punctatus</i>	Botri,	Spotted snake head	FD	+++C		
		<i>Channa striatus</i>	Dadak		FD	++UNC		
		<i>Channa marulius</i>	Maral	Banded snake head	FD	++C		
	Synbranchiformes	Mastacembelidae	<i>Mastacembelus armatus</i>	Bamb	Spiny Eel	FD,PF	++C	

+++ Most abundant, ++ Abundant, + Less abundant, - Rare.
 LV=Larvivorous, BT=Bait, PF=Predatory Food Fish, WF=Weed Fish,
 FD=Food Fish
 C=Common, UNC=Uncommon (Yadav, 2004) R=Rare, EN=Endangered,
 V=Vulnerable. (As per IUCN, 1988 and Menon, 2004)

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