

## FISH FAUNA OF CHANDRAMPALLI DAM, CHINCHOLI TALUK, GULBARGA DISTRICT

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### ABSTRACT

The present study deals with the biodiversity of fish fauna of Chandrampalli dam in Chincholi taluk, Taluka Gulbarga district, Karnataka. The study was undertaken for a period of one year and monthly collections were made from February-2014 to June-2014. In the Chandrampalli dam. The results of present investigation reveals the occurrence of fifteen fish (15) species belonging to 3 orders. Order **Siluriformes** was dominant with 8 species, *Mystus krishnenis*, *Proeutropi ichthys taakree taakree*, *Ompak bimaculatus*, *Wallago attu*, *Amblypharygodon mola*, *Xenentodon cancila*, *Channa striatus*, *Mastacembelus armatus* followed by **Cypriniformes** order with 6 species *Cirrihinus reba*, *Labeo rohita*, *Catla Catla*, *Puntius sophore*, *Puntius sarana sarana*, *Tor Mussullah* and **Osteoglossiformes** with one species *Notopterus notopterus*

**KEYWORDS:** Fish, Fauna, Chandrampalli Dam

### INTRODUCTION

Fishes form one of the most important groups of vertebrates, influencing its life in various ways. Millions of human beings suffer from hunger and malnutrition and fishes form a rich source of food and provide a meal to tide over the nutritional difficulties of man. In addition to serving as an important item of food, fishes provide several by-products to us. Fishes have formed an important item of human diet from time immemorial and are primarily caught for this purpose. Fish diet provides proteins, fat and vitamins A and D. A large amount of phosphorous and other elements are also present in it. They have a good taste and are easily digestible.

Ichthyofaunal diversity refers to variety of fish species depending on context and scale; it could refer to alleles or genotypes within of life forms within a fish community and to species or life forms across aqua regimes (Burton *et al.*, 1992). About 21,723 living species of fish have been recorded in the world of these 8,411 are freshwater species and 11,650 are marine forms. India is one of the mega biodiversity countries in the world and occupies the ninth position in terms of freshwater mega biodiversity (Mittermeier and Mitemeir, 1997). In India there are 2,500 species of fishes of which 930 live in freshwater and 1,570 are marine (Kar *et al.*, 2003). Studies of spatial and temporal patterns of diversity, distribution and species composition of freshwater fishes are useful to examine factors influencing the structure of the fish community (Galactos *et al.*, 2004). The distribution and composition of the fish species in each habitat were closely associated with various factors such as the availability of food, breeding sites, water current, depth, topography and physic-chemical properties of water (Harris, 1995).

## MATERIALS AND METHODS

The study region include Chandrampalli dam (Chincholi taluk). Chincholi Forest has finally been declared as a dry land wildlife sanctuary in 2011 with an area of 134.88 sq.km. With Chincholi, the state now has a total of 24 wildlife sanctuaries, which is home to hyena and wolves. This sanctuary is the only area in Hyderabad-Karnataka region with features of Western Ghats and is therefore of importance from a biodiversity point. The large Chandrampalli dam, Chincholi taluk includes four small dams. Chandrampalli Dam has area of 108 acres (reservoir area 2.75 km<sup>2</sup>) along with average rainfall is 887 mm, Dam height is 26.21 m. Chandrampalli village is 12 km away from Chincholi. Just 0.5 km away from this Village dam is constructed which is very beautiful and located between the two mountains. This provides the major irrigations to many villages in Chincholi taluk.

The fishes collected and fixed were labeled giving serial numbers exact locality from where collected, date of the collection spots where ever possible. The common local name of fish used in this region was labeled in each jar. Identification was done based on keys for fishes of the Indian subcontinent (Day 1958; Jayarma; 1981; Jayaram 1999; Talwar and Jhingram 1991). Classification was carried on outlines of day (1889), Jayram (1961), Nelson (1976) and Jayaram (1981). The identification of the species was done mainly on the basis of the colour pattern, specific spots or marks on the surface of the body shape of the body, structure of various fins etc and also with the help of Dr. Arunachalam, Dept of Environmental sciences, M.S. university, Thirunaveli, Tamilnadu for his valuable suggestions and identifying the fish fauna of Chandrampalli dam.



Figure 1: Bird Eye View of Chandrampalli Dam

## RESULTS AND DISCUSSIONS

The following fish fauna of Chandrampalli Dam, Gulbarga District.

Table 1

	Order:	CYPRINIFORMES
I	Family:	<i>Cyprinidae</i>
	Species:	<i>Cirrihinus reba</i>
		<i>Labeo rohita</i>
		<i>Catla Catla</i>
		<i>Puntius sophore</i>
		<i>Puntius sarana sarana</i>
		<i>Tor Mussullah</i>

Table 1: Contd.,			
II	<b>Order:</b>	<b>SILUROFORMS</b>	
	Family:	Bagridae	
	Species:	<i>Mystus krishnenis</i>	
	Family:	Schilbeidae	
	Species:	<i>Proeutropi ichthys taakree taakree,</i>	
		<i>Ompak bimaculatus</i>	
		<i>Wallago attu</i>	
		<i>Amblypharygodon mola</i>	
	Family:	Belonidae	
	Species:	<i>Xenentodon cancila</i>	
	Family:	Channidae	
	Species:	<i>Channa striatus</i>	
Family:	Mastacembelidae		
Species:	<i>Mastacembelus armatus</i>		
III	<b>Order:</b>	<b>Osrtioglossiformes</b>	
	Family:	Notopteridae	
	Species:	<i>Notopterus notopterus</i>	

The results of present investigation confirmed the occurrence of 15 fifteen fish species in Chandrampalli dam during Feb to June 2014. The distribution of fish species is quite variable because of geographical and geological conditions.

The fish species found in Chandrampalli dam are Order **Siluriformes** family Bagridae with (1) species, *Mystus krishnenis*, family schilbeidae with (4) spices *Proeutropi ichthys taakree taakree*, *Ompak bimaculatus*, *Wallago attu*, *Amblypharygodon mola*, family Belonidae with (1) spices *Xenentodon cancila*, family channidae with (1) *Channa striatus*, mastacembelidae with (1) species *Mastacembelus armatus* followed by **Cypriniformes** order, Cyprinidae family with (6) species *Cirrihinus reba*, *Labeo rohita*, *Catla Catla*, *Puntius sophore*, *Puntius sarana sarana*, *Tor Mussullah* and **Osteoglossiformes** order, Notopteridae with (1) species *Notopterus notopterus*. were found during sampling in Chandrampalli dam.

The results of present investigation confirmed the occurrence 15 (fifteen) species belongs to 3 orders Siluriformes order was dominant with 8 (eight) species, followed by Cypriniformes with 6 (six) spices, followed by order Osteoglossiformes with 1 (one) species.

Efforts have been made recently in bringing together the studies of the fish diversity in various parts of the southern Western Ghats. The Western Ghats while being extremely rich in fish biodiversity has been investigated with regards to species distribution (Bhat, 2003). The present study largely focuses on the fish spices richness in Chandrampalli dam. which is the part of Amarja river basin. During the study altogether 15 species of fishes were recorded.

Due to multiple uses of fisheries resources, fishing has become a major industry and a large number of these aquatic communities are under a big threat of extinction. Habitat loss of environmental degradation has seriously affected the fish fauna. Knowledge of available resources and the biological characters of species serve the base line information for further studies on resource conservation and maintenance. Further there is a need for survey of diversity of fish fauna in different types of habitats all over the country. Industries effluents and manmade pollutants also contribute towards the disruption in the balance on aquatic ecosystem. The work will provide further strategies for development and fish conservation. Conservation measures requires forestation in catchments and awareness on illegal fishing and killing of fishes.

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