



Fresh water fish diversity of Gharni Dam, Dist. Latur (M.S.)

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Abstract

An Attempt has been made to study the fish diversity of Gharni Dam. The study was carried out during the month of June 2019 to Feb. 2020. The fish species was collected and identified during the study. A total 19 fish species belongs to 08 orders and 10 families were recorded. out of 08 orders cypriniformes was most dominant group represented by 8 species, followed by order Siluriformes with 3 species, Perciformes with 3 species, Anguilliformes, Cichliformes, Gobiiformes, Synbranchiformes, Osteoglossiformes each with 1 species. Thus the Gharni dam has more potential for fish fauna. The main aim of study is to know diversity of fish species of the dam. It is useful for researcher as well as fisherman to get idea about diversity of fishes. It is helpful to select exact variety of fish species for the culture so as to obtain maximum fish production.

Keywords: fish diversity, Gharni dam

Introduction

The diversity of fishes is larger than any other vertebrate groups. Fish culture in the dams is one of the fish production systems. It indicates rearing of fishes for commercial purpose. Maharashtra has great potential of fresh water resources including dams and rivers used for fish culture. The number of dams has increased in last few years. Therefore Maharashtra is one of the important state of India for fish production and has great scope for culture and capture fisheries.

Fish diversity was studied by many workers which include. Sharma "etal" as (2007) ^[13], Devi Prasad "etal" (2009) ^[2], Goswami and landmankodi (2010), Jadhav "etal" (2011) ^[5], Islam "etal" (2013) ^[4], Lodhane and Sathe (2015).

The present investigation was undertaken to study fish diversity of Gharni dam. The main aim of the study was to validate existing distributional data of fish with collection and identification of indigenous and exotic commercially important fish species from the Gharni dam.

Materials and Methods

The Gharni dam is earth fill dam. constructed on river Gharni of latur district. The dam is located at altitude 18°22'30" and longitude 76°49'15". Total water spread area is 949 hq. at FRL. The height of dam is 15.24 m. and length 956 m. fishes was collected monthly from June 2019 to Feb. 2020. Fishes was collected with the help of local fishermen using different types of nets such as gillnet, cast net Fishes were preserved in 10 % formalin solution in the jars. The identification of species were carried out by using standard literature of day (1878), Jhingran (1992) ^[7] and Talwar and Jhingran (2001) ^[16], Khanna (1980) ^[10] and Jayaram (2010) ^[6].

Result and Discussion:

During the investigation a total of 19 species of fresh water fishes belonging to 10 families were recorded from the Gharni dam. on the basis of species richness, order cypriniformes was most dominant group represented by 08 species followed by order siluriformes with 03 species.

Perciformes with 03 species, Anguilliformes with 01 species, Anabantiformes 01species, Cichliformes with 01 species, Gobiiformes with 01species, Synbranchiformes 01species and Osteoglossiformes with 01species shown in table no. 1.

Table 1: List of fresh water fishes of Gharni dam, Dist. Latur

Sr. No.	Species	Order	Family
1.	Labeo rohita	Cypriniformes	Cyprinidae
2.	Catla catla	Cypriniformes	Cyprinidae
3.	Cirrhinus mrigala	Cypriniformes	Cyprinidae
4.	Cirrhinus reba	Cypriniformes	Cyprinidae
5.	Ctenopharyngodon idella	Cypriniformes	Cyprinidae
6.	Hypophthalmichthys molitrix	Cypriniformes	Cyprinidae
7.	labeo fimbriatus	Cypriniformes	Cyprinidae

8.	Channa striatus	Perciformes	Channidae
9.	Channa punctata	Perciformes	Channidae
10.	Clarias batrachus	Siluriformes	Clariidae
11.	Wallago attu	Siluriformes	Siluridae
12.	Anguilla bengalensis	Anguilliformes	Anguillidae
13.	Anabas testudineus	Perciformes	Anabantidae
14.	Mystus seenghala	Siluriformes	Bagridae
15.	Tilapia mosembica	Cichliformes	Cichlidae
16.	Glossogobius giuris	Gobiiformes	Gobiidae
17.	Mastacembellus armatus	Synbranchiformes	Mastacembelidae
18.	Notopterus notopterus	Osteoglossiformes	Notopteridae
19.	Cyprinus carpio.	Cypriniformes	Cyprinidae

The cyprinidae family represented 08 species, Labeo rohita, Catla catla, Cirrhinus mrigala, cirrhinus reba, Ctenopharyngodon idella, hpophthalmichthys molitrix, Cyprinus carpio and labeo fimbriatus. Out of which labeo rohita, catla-catla, cirrhinus mrigala were found more abundant. Cirrhinus reba, Labeo fimbriatus Cyprinus carpio, Ctenopharyngodon idella and Hppophthalmichthys molitrix, were found modrate.

The family Channidae was represented by two species Channa striatus and Channa punctata was found to be modrate. Family Clariidae was represented by single specices Clarias batrachus was found rare.

Family Siluridae represented by 1 species, Wallago attu and was found to moderate. Family anguillidae was represented 1 species Anguilla bengalensis was found to be rare. Family Anabantidae was represented Anabas testiudineus was found modrate. The family Bagridae represented single species, Mystus seenghala was found to be rare. Family cichlidae contribute single species, tilapia mosembica was found rare. The Family Gobiidae consist of single species glossogobius giuris found to be rare. The family Mastacembelidae represented one species, Mastacembelus armatus was also found rare. The family Notopteridae contribute single species, was found rare. Pawar "etal" (2003) ^[12] Recoreded 11 species of fishes belonging to 5 order from Shirur dam of Nanded district. Kalbande "etal" (2007) ^[9] noticed 29 fish species from Rawanwadi lake in Bandara district, Shinde "etal" (2009) ^[14] recorded that the order cypriniformes was found to be dominant with 11 species followed by perciformes 3 species and siluriformes with 1 species from Harsool Savangi dam Aurangabad Supugade "etal" (2009) ^[15] recorded 20 species from 13 genera and 7 famillies included 4 order from Ghogaon reservoir Satra district.

Joshi "etal" (2012) ^[8] recorded 20 species belonging to 7 families from Purna river of Buldhana district.

Conclusion

Maharashtra is leading state for fish production and species diversity. Study of fish diversity is useful for fish species conservation. For conservation of fish species people should be aware of water pollution, fisherman need to aware of fishing, breeding season of fishes and mesh size used for fishing. To adopt strategies for development of capture and culture fisheries in responsible and sustainable manner.

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