

Ichthyological Survey of Darwazai Dam Tehsil Lachi District Kohat, KPK, Pakistan

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Abstract: Darwazai dam is a small reservoir located to the north of Kohat, KPK, Pakistan. The estimated territory elevation above sea level is 442 meters. Its geographical coordinates are 34° 5' 35" North, 72° 57' 3" East. The objective of the present work was to find out the ichthyological fauna of Darwazai dam Tehsil Lachi district Kohat. In the present study, about seven species were identified upto species level. In these seven species *Labeorohita*, *Hypophthalmichthys molitrix*, *Cirrhinus mrigala*, *Ctenopharyngodon idella*, *Catla catla* were belonging with Cyprinidae family order Cypriniformes class Actinopterygii and *Anguilla Anguilla* belong from order Anguilliformes family Anguillidae the *Ompok pabda* belong with order Siluriformes and family Siluridae. From the obtained results it may be concluded that Darwazai dam having best environmental condition for the survival of cyprinidae species.

Key words: Darwazai Dam • Ichthyological Fauna

INTRODUCTION

Darwazai dam is a small reservoir located to the north of Kohat, KPK, Pakistan. The estimated territory elevation above sea level is 442 meters. Its geographical coordinates are 34° 5' 35" North, 72° 57' 3" East and its novel name (With diacritics) is Darwazai dam as shown in Figure 1. SodalAlgada River of Darwazai dam. Dams are

not only important source of water but they play vital role for energy production. Besides this these are the component with multiple usages i.e. for domestic purpose, for irrigation as well as for fish production [1, 2].

Fish faunal diversity refer to the variety of fish species depending on the scale and context, it could refer to alleles or genotypes within fish population to species of life forms within a fish community and species or life



Fig. 1: Map showing Darwazai dam.

forms across aqua regimes [3]. Biodiversity is essential for stabilization of ecosystem, protection of overall environmental quality for understanding intrinsic worth of all species on Earth [4]. Fishes have declined at a faster rate from the last decades due to habit degradation, diminishing water quality and over exploitation. Conservation of water bodies and their quality is the conservation of fishes and all other aquatic organisms [5]. Many scientists like Russell; Heckel; and Jayaram [6-8] also worked on fish taxonomy and other aspects of fishes and made valuable contribution to fisheries in different parts of the world. The aim of the present work was to find out biodiversity of fish fauna of Darwazai dam Tehsil Lachi district Kohat, KPK, Pakistan.

MATERIALS AND METHODS

Fish samples were collected from the different regions of Darwazai Dam, i.e., middle, southern, eastern and western sides of the dam by using small meshed cast nets, hooks and scoop nets. Samples were collected during the month of July 2014 to June 2015.

Fish Identification and Preservation: After collection, samples were preserved and then transfer to the Laboratory for proper identification. Fishes were properly identified in laboratory by using keys of fish identification Jayaram [8], Mirza and sadhu [9] and Mirza [10]. All the samples were preserved for long term preservation in separate plastic jar by using 10% formalin solution.

RESULTS AND DISCUSSION

For the first time study was conducted in July 2014 to June 2015 on diversity of fish fauna of Darwazai dam tehsil lachi district kohat. During the dam survey about seven species were identified upto species level. In the present study, about seven species were identified and there detail systematic representation was recorded in

the Table 1, respectively. These seven species were belonging to three orders, three family and seven genera, as shown in Table 1. In these seven *Labeo rohita*, *Hypophthalmichthys molitrix*, *Cirrhinus mrigala*, *Ctenopharyngodon idella*, *Catla catla* were belonging with Cyprinidae family, order Cypriniformes class Actinopterygii and *Anguilla anguilla* belong from order Anguilliformes family Anguillidae the *Ompok pabda* belong with order Siluriformes and family Siluridae. Hence the present studies revealed that huge amount of fish diversity belong from cyprinidae species only single species belong from Anguillidae and Siluridae respectively. Hence, the members of the family Cyprinidae were found to be highly abundant in Darwazai dam tehsil lachi of district kohat. Such wide distribution might be related to substrate of the dam that could provide suitable environment for nest building or environmental and glacial history of study area. In list displayed by IUCN *Cyprinus carpio* was considered as vulnerable.

Species [11]. Climatic factor such as droughts could also effect on the distribution of cyprinid fishes as described by Lachner and Jenkins [12]. A total of eleven species were identified, which were belonging to four orders, five families and eleven genera. Among them, seven species were belonging to family Cyprinidae, while the remaining four species were belonging to families Anguillidae, Belonidae, Cobitidae and Siluridae, respectively. Therefore, from the results of our present study, it had been concluded that the Tanda Lake of Kohat district contain favorable condition to more support the diverse of fish fauna by Hasseb *et al.* [13]. Hence, the results indicate that environment suit for cyprinidae family.

CONCLUSION

From the obtained result it may be concluded that Darwazai dam having abundant fauna of cyprinidae family and the Darwazai dam environmental condition were more suitable for cyprinidae family.

Table 1: Showing the Systematic representation of Darwazai dam fishes

Local Name.	Class	Order	Family	Genus	Specie
Rohu	Actinopterygii	Cypriniformes	Cyprinidae	Labeo	L. rohita
Silver carp	Actinopterygii	Cypriniformes	Cyprinidae	Hypophthalmichthys	H. molitrix
Mori	Actinopterygii	Cypriniformes	Cyprinidae	Cirrhinus	C. mrigala
Eel fish	Actinopterygii	Anguilliformes	Anguillidae	Anguilla	A. anguilla
Theila	Actinopterygii	Cypriniformes	Cyprinidae	Catla	C. catla
Grass carp	Actinopterygii	Cypriniformes	Cyprinidae	Ctenopharyngodon	C. idella
Papta	Actinopterygii	Siluriformes	Siluridae	Ompok	O. pabda

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