

A Checklist of Freshwater Fishes of Nara Game Reserve

Saadat Ali Khan

Zoological Survey Department, Karachi

Abstract

During survey of fishes of Nara Game Reserve 37 species of fishes belonging to 8 orders 14 families and 25 genera are recorded.

Keywords: Nara Game Reserve, freshwater fish fauna, checklist, over-exploitation

Introduction

Although a number of studies have been carried out on the freshwater fish fauna of Sindh Province (Ahmad, 1963a-e; Ahmed and Khan, 1974; Ahmed *et al*, 1976, 1984; Hussain, 1973; Jafri *et al*, 2000; Khan, 1946; Niazi and Moazzam, 1999; Siddiqui *et al*, 1976; Sufi, 1946 etc.) but no work has been done on the fauna of Nara Canal and associated ecosystem except Khan (1962) who studied the fish fauna of Nara Canal. A total of 8 species were reported by him from the Nara Canal and associated 'Dhands'.

Nara Canal starts from Sukkur Barrage and ends up in the tidal creek of Indus. The part of the Nara Canal and associated 'dhands' (ponds, lakes and marshes) with the limit of District Khairpur have been declared as Nara Game Reserve since 20th December, 1972. This game reserve has an area of 109,966 hectre. Nara Canal in the game reserve area is important fishing zone supporting a variety of fishes. There are marshes on either side of the canal. These have light or dense reed vegetation at margin which are known for dense population of fishes. The marshes directly connected with canal were known to have more fish varieties. There is a series of lakes in the depression between sand dune. They are mainly fed by seepage or directly from Nara. Some of these lakes have diversified fish population. Present paper enlists species of freshwater fishes found in the Nara Game Reserve.

Materials and Methods

For collection of fish different types of nets including castnets, fixed nets, gillnets and dip nets were used during present study of fish fauna of Nara Game Reserve. Fixed nets are rectangular nets made of cotton, nylon. These nets are usually fixed by wooden poles or bamboos. They are of varying mesh size, used in both streams as well as in stagnant water.

Results and Discussions

During present survey of fishes of Nara Game Reserve 37 species of fishes belonging to 8 orders 14 families and 25 genera are recorded which are listed in Table-I. Almost all the species recorded from Nara Game Reserves are known from Province of Sindh, however, with the exception of *Catla catla*, *Labeo calbasu*, *Labeo rohita*, *Labeo gonius*, *Cirrhinus mrigala*, *Puntius sophore*, *Notopterus chitala*, *Notopterus notopterus* and *Wallagu attu* which were recorded by Khan (1962) all the species are new records from the area.

Table-I. Checklist of freshwater fishes from Nara Game Reserve

Scientific Names	Local names
ORDER: Clupeiformes FAMILY: Clupeidae	
<i>Gadusia chapra</i>	Palora – Palli
ORDER: Osteoglossiformes FAMILY: Notopteridae	
<i>Notopterus notopterus</i> <i>Notopterus chitala</i>	Gandani Gandan
ORDER: Cypriniformes FAMILY: Cyprinidae	
<i>Securicola gora</i> <i>Salmostoma bacaila</i> <i>Chela laubca</i> <i>Chela cachiuis</i> <i>Aspidoparis morar</i> <i>Labeo rohita</i> <i>Labeo calbasu</i> <i>Labeo gonius</i> <i>Catla catla</i> <i>Cirrhinus mrigala</i> <i>Cirrhinus reba</i> <i>Puntius sophore</i> <i>Puntius ticto</i> <i>Puntius conchonius</i> <i>Osteobrama cotio</i>	Palri – Dachi Chal – Dahi Dannahrah Makhni Chal Rohu – Dambra Dahi Seereba Thaila Morakha Sunni Popri – Pottiah Chidu Chidu Dhambra
ORDER: Siluriformes FAMILY: Bagridae	
<i>Aorichthys aor</i> <i>Mystus cavasius</i> <i>Mystus bleekeri</i> <i>Rita rita</i>	Singharee Tengarah Tengra Khagga
FAMILY: Siluridae	
<i>Wallago attu</i> <i>Ompok bimaculatus</i>	Potki – Jerki Malirah – Dimmon
FAMILY: Heteropneustidae	
<i>Heteropneusteis fossilis</i>	Singhi

FAMILY:	Schilbeidae	
	<i>Eutropiichthys vacha</i>	Dongna
FAMILY:	Sisoridae	
	<i>Bagarius bagarius</i>	Faugi Khagga
ORDER:	Beloniformes	
FAMILY:	Balonidae	
	<i>Xenentodon cancila</i>	Kenga
ORDER:	Channiformes	
FAMILY:	Channidae	
	<i>Channa marulius</i>	Chitra
	<i>Channa striatus</i>	Daula
	<i>Channa punctatus</i>	
ORDER:	Perciformes	
FAMILY:	Chandidae	
	<i>Chanda nama</i>	Makhni
	<i>Chanda ranga</i>	Shisha
ORDER:	Perciformes	
FAMILY:	Gobiidae	
	<i>Glossogobius giuris</i>	Golo
FAMILY:	Osphronemidae	
	<i>Colisa fasciata</i>	Kangee
	<i>Colisa lalia</i>	Choti kangi
FAMILY:	Cichlidae	
	<i>Oreochromis mossambica</i>	Talpo

In the canal, *Netopterus notopterus*, *Labeo rohita*, *Cirrhinus mrigala*, *Catla catla*, *Rita rita*, *Wallago attu*, *Labeo gonius* and *Bagarius bagarius* were commonly found while *Channa marulius*, *Channa punctatus*. *Labeo calbasu* were rarely captured. In the marshes *Netopterus notopterus*, *Cirrhinus mrigala*, *Cirrhinus reba*, *Labeo rohita*, *Catla catla*, *Puntius sophore*, *Channa punctatus*, *Channa striatus*, *Ompok bimaculatus*, *Xenentodon cancila* and *Oreochromis mossambica* were found commonly while *Heteropneustes fossilis*, *Eutropiichthys vacha*, *Puntius ticto*, *Netopterus chitala*, *Mystus cavasius*, *Mystus bleekeri*, *Rita rita*, *Gadusia chapra* and *Aspidoparia morar* were rarely found. The ornamental fishes *Puntius conchoniuis*, *Colisa lalia*, *Colisa fasciata*, *Chanda nama* and *Chanda ranga* are also found in marshes. In the lakes connected to the canal major carp were common while in the isolated lakes these were rarely found. In these *Chauna punctatus*, *Netopterus notoptreus*, *Labeo gonious* and *Wallago attu* were rarely found.

The population of the fish in Nara Game reserve is threatened because of over-exploitation, changes in salinity regime and eutrophication etc. Commercial exploitation of fishes is increasing unabated resulting in declining catches of lucrative species. In addition population of non-target species specially juveniles are threatened due to over-exploitation. Some of the lakes have high salinity level due to which they are not able to support fish population. Growth of excessive vegetation is reported in some parts of the Nara Game Reserves which causes negative impact on ecology of marshes. In addition, decomposition of vegetation produces toxic elements which may fatal for fishes or may affect their growth.

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