

STATUS OF THE MIGRATORY WATERFOWLS IN WETLANDS OF NWFP (CHASHMA BARRAGE, TARBELA RESERVOIR AND THANADAR WALA)

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Abstract

A waterfowl survey of Chashma Barrage, Tarbela Reservoir and Thanadar Wala was conducted during 24th January to 6th February, 2002 to determine the status of migratory waterfowls visiting these wetlands. Direct sighting and counting of birds technique was adapted from dawn to dusk to assess the status of waterfowls. In areas adjoining the Chashma Barrage and Tarbela Reservoir the agriculture practices and cattle grazing were moderate while in Thanadar Wala these were on large scale. In Tarbela Reservoir the fishing activities and hunting were common which cause disturbance to the migratory waterfowls. During the survey it was also observed that in Chashma Barrage Mallard, Northern Pintail, Common Pochard, Common Teal, Wigeon, Shoveller are more while the number of migratory water hen are less. Similarly the number of birds in this wetland is more than Tarbela and Thanadar wala because of less disturbance and protection by both the NWFP and Punjab Wildlife departments, while in Tarbela reservoir the disturbance caused by the tourists and fishing activities waterfowls get disturbed. Similarly in Thanadar Wala the live catching of cranes make disturbance for waterfowls as well.

Introduction

The wetlands in Pakistan are scattered throughout the country in the form of natural as well as artificial water-bodies. These are either used as wintering grounds by the migratory bird species or resting sites during migration. Some wetlands are used as breeding ground by the resident duck species which are rare and endangered. These birds are important not only from aesthetic, recreational, and economic point of view but also have tremendous educational and scientific values. No less important are the great economic values of wetlands for water purification, flood control, recreation and nurseries for fisheries (Khurshid, 1991).

Keeping the importance of wetlands in view, a waterfowl survey, on important wetlands of NWFP including Chashma Barrage, Tarbela reservoir and Thanadar Wala were conducted to determine current status of the migratory waterfowls visiting these wetlands. The Chashma Barrage is located at 32°25'N and 71° 22'E, covering the area of 33109 ha. The Tarbela reservoir is located near Topi, in Haripur district at 34°15'N and 72° 36'59"E. This reservoir has an area of

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25090 ha Thanadar Wala is located in Lakki Marwat district at 32° 37'N and 71° 05'E and covers an area of 4047 ha. All these wetlands are permanent fresh water bodies having moderate agriculture and cattle grazing in their proximity. Many waterfowls visit these wetlands during their migration season (IUCN, 2000).

Material and Methods

The area was visited from 24th January to 6th February, 2002 when waterfowls start migrating from North to South i.e. from breeding grounds to wintering grounds. Different observation points on each reservoir were selected and two teams were deputed for survey/census. Direct sighting technique was adopted. The counting/census of birds were conducted by using sampling method. The whole area/reservoir was divided into different sections and the flocks of birds on the lake were counted with the help of binoculars, spotting scope, field guide and counter. Birds in each flock were identified and recounted and recorded in the field notebook.

Results and Discussion

The Chashma Barrage and Thanadar Wala are the important wetlands and are Ramsar sites. According to the data it was observed that in Chashma Barrage the number of birds was more than the number of birds in Terbela and Thanadar Wala.

In Chashma barrage the numbers of Ducks was more i.e. Mallard (8000), Northern Pintail (7060), Common Pochard (7000), Common Teal (6000), Wigeon (6000), and Shoveller (4000), While in Tarbela Reservoir their numbers are less i.e. Wigeon (160), Common Teal (90), Mallard (210), and Shoveller (25). Similarly the number of ducks in Thanadar Wala are less i.e. Wigeon (43), Common Teal (72) and Mallard (140).

The number of birds in Chashma was more than the other two sites because of less disturbance and the protection given by the NWFP and Punjab Wildlife departments. Moreover, the presence of aquatic vegetation. While in the Tarbela and Thanadar Wala the number of waterfowls are less. The main reason is the disturbance caused by the fishermen and tourist activities in Tarbela reservoir and hunting/live catching of cranes in the Thanadar Wala.

During the survey Grebe species and Cormorant were not seen in Thanadar Wala. Similarly Pintail, Shoveller, Common Pochard, Ferruginous Duck, Tufted Duck, Waterhen, Moorhen and Coots were not observed in Tarbela and

Thanbadar Wala. These species were only seen in Chashma barrage in good number. The presence of these birds in Chashma and however, absent in Tarbela and Thanadar Wala because of the time of migration, disturbance and less aquatic vegetation (food) for the waterfowls.

Following birds were observed and recorded in these three water bodies.

Common Name	Scientific Name	No's		
		Chashma Barrage	Tarbella Reservoir	Thanadar Wala
Mallard	<i>Anas platyrhynchos</i>	8000	120	140
Common Pochard	<i>Aythya ferina</i>	7000	-	-
Northern Pintail	<i>Anas acuta</i>	7060	-	-
Northern Shoveller	<i>Anas Clypeata</i>	4000	25	-
Common Teal	<i>Anas crecca</i>	6000	90	72
Gadwall	<i>Anas strepera</i>	3100	-	-
Tufted Duck	<i>Aythya fuligula</i>	80	-	-
Eurasian Wigeon	<i>Anas penelope</i>	6000	160	43
Ferruginous Duck	<i>Aythya nyroca</i>	180	-	-
Ruddy Shelduck	<i>Tadorna ferruginea</i>	11	-	-
Common Coot	<i>Fulica atra</i>	5000	-	-
Black-necked Grebe	<i>Podiceps nigricollis</i>	58	3	-
Little Grebe	<i>Tachybaptus ruficollis</i>	37	9	-
Little Cormorant	<i>Phalacrocorax niger</i>	1200	-	-
Great Cormorant	<i>Phalacrocorax carbo</i>	2000	23	-
Moorhen	<i>Gallinula chloropus</i>	47	-	-
White breasted Waterhen	<i>Amauromis phoenicurus</i>	23	-	-
Black crowned Night Heron	<i>Nycticorax nycticorax</i>	90	-	-
Indian Pond Heron	<i>Ardeola grayii</i>	64	-	8
Little Egret	<i>Egretta garzetta</i>	700	13	7

Intermediate Egret	<i>Eretta intermedia</i>	360	9	7
Great Egret	<i>Egretta alba</i>	310	19	5
Grey Heron	<i>Ardea cinerea</i>	280	9	9
Herring Gull	<i>Largentatus</i>	112	-	-
Great Black-headed Gull	<i>Larus ichthyaetus</i>	560	9	-
Black headed Gull	<i>Larus ridibundus</i>	460	29	9
Indian River Tern	<i>Sterna aurantia</i>	130	18	-
Black bellied Tern	<i>Sterna melanogaster</i>	143	-	-
Little Tern	<i>Sterna albifrons</i>	79	27	3
Black-winged Stilt	<i>Himantopus himantopus</i>	147	-	-
Common Sandpiper	<i>Actitis hypoleucos</i>	360	38	19
Green Sandpiper	<i>Tringa ochropus</i>	141	-	-
Common Snipe	<i>Gallinago gallinago</i>	260	53	70
Kentish Plover	<i>Charadrius alexandrinus</i>	410	17	19
Little Stint	<i>Calidris minuta</i>	1200	32	27
Total:		55602	703	438

During the survey, it was observed that in Chashma Barrage the agriculture practice were moderate and cattle grazing was less. The main threats to this water body was disturbance by the fishermen. In Tarbela reservoir the agriculture practices and cattle grazing was moderate, while fishing was done on large scale. Hunting of birds and tourism also cause disturbance to the migratory waterfowls.

In Thanadar Wala the maximum flooding months were July and August. Agriculture and cattle grazing was on large scale, while fishing was very low.

Conclusion

It is concluded that in Chashma Barrage the number of waterfowl was more because of protection and also the time of migration. Contrary to this in Tarbela reservoir the disturbance by the tourists and the fishing activities make the resting

of waterfowls uneasy. Similarly in Thanadar Wala the live catching of cranes cause great disturbances.

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