

RESEARCH ARTICLE

Avian fauna of Aundha dam in Aundha Nagnath dist- Hingoli

Katore DP

Department of Zoology Nagnath Arts, Commerce & Science College, Aundha (Nagnath) Dist- Hingoli
Email: katoredeepak@gmail.com

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ABSTRACT

The Avian fauna of Aundha dam was studied for four months from November 2016 to Feb 2017 which is 09 km away from Pimpaldari. Avian fauna total 50 bird species are detected out of which 25 were resident, 20 were winter migrant, 08 were resident migrant, out of which 17 were omnivorous, 15 were carnivorous, 10 were insectivores, 5 were herbivorous and 2 were granivorous.

Key words: Avian fauna, Aundha dam water birds.

INTRODUCTION

Aundha dam supplies the water to the city of Aundha (Nagnath). It is 20°13'54.57"N and 77°16'20.25" E. Elevation 1550ft. There is rich food and nesting conditions available for birds. It is oligotrophic in nature having rich floral and faunal diversity. Many phytoplanktons are present. The fauna of the dam includes worms, insects, larvae, molluscs, zooplankton, fishes, amphibians, reptiles and some mammals.

MATERIALS AND METHODS

To study the avian faunal diversity off Aundha Dam, "Complete Census Method" (Whitworth et al., 2007) was used. During surveys birds were observed while walking around the dam with the help of Olympus Binocular (10×50) and identified up to species level using physical features with the help of guide and reference books, Ali, Salim (1996) and Grimmett et al. (2000), Bhat et al. (2009), Ali, Salim (1979). The species of the birds encountered during each visit were enlisted and other details like abundance of birds, their food and feeding habits were also recorded.

The observations were made twice in a week during four months from November 2016 to February 2017 from 6 AM to 100 AM. The observed birds were categorized as, C-common, A-abundant, R-rare, U-uncommon. The feeding activities of birds were observed and accordingly they were grouped as insectivorous, omnivorous, herbivorous, granivorous and carnivorous.

Status of the birds was classified as:-

BM – Breeding migrant, species found in the study area for breeding purpose only.

R- Resident, species founds in the study area throughout the year.

WM- Winter migrant, species found in the study area during winter only.

LM- Local migrant, species found in the study area irregularly, but are resident of India.

V- Vagrants, species that are not regular breeding migrants or winter migrants and hence a stray birds were sighted. The abundance and status of species are based on the list of Birds of Maharashtra (Abdul Ali, 1972)

RESULTS AND DISCUSSION

During the study period, 50 species belonging to 30 families were documented. Birds namely purple moorhen and common Moorhen are not seen however these birds are included by Wadatkar and Kasambe (2002) in check list of Pohara-Malkhed Reserved forest. Absence of these birds shows that there are decreases in weed infestation.

In the morning, most of the water birds swam about in small flocks, all over the dam. Red Crested Pochard, Cotton Teal, northern Shoveller were found to be concentrated at north end of dam, which is less disturbed part of the dam and having deep water Ali, Salim(1996).

The total population of the migratory waterfowl peaked during the last quarter of December and first quarter of January. The birds began departing from last week of January, when Lesser Whistling Ducks left in large number and later, from the middle February Gadwall, Northern Pintail began to leave. Similar trend in population of migratory waterfowl was observed by Muzumdar et al. (2005)

Birds like Bronze winged Jacana, Pheasant tailed Jacana, Black winged stilt and Common coot were found on south side of dam. This is due to availability of shallow water, which allows these birds to eat tubers and shoots of plants, insect, worms etc. of aquatic plants. Ferruginous Pochard and Tufted were generally found at middle of dam in deep water. Finding was stated with Muzumdar et al, (2005).

Open billed storks were seen during month of January and February when water shrinks excessively and exposed of snails. Similar observations were made by Kedar et al. (2005).

Red wattled Lapwing, common sandpiper: little ringed Plover were seen in abundance on the banks during last week of January. Their arrival coincides with reduction in water level, where they can avail the food easily by probing in to mud.

Congregation of water birds on dam is due to abundance of food such as macrophytes, microphytes free swimming organism, benthic organism etc. and accessibility to food resources due to shallowness of water as well as availability of exposed banks for roosting Gupta (2004)

The dam is under threat due to siltation, pollution and indiscriminate development of aquaculture. The combined threat of these factors has given rise to problems such as decrease in biological diversity, deterioration of water quality, sedimentation and shrinkage area. It has led to decrease in migratory bird population and fish, faunal productivity. According to Choudhari et al (2001) Chhatri Lake is fastly receding and become shallow due to heavy sedimentation. It was also pointed out that low sodium and potassium content and reduction of planktonic zone due to high turbidity resulted in low phytoplankton in dam.

Intensive fishing in dam exerts an unsustainable pressure on the fish population which adversely affecting the birds, which feed on them. Hunting is also a major problem to the birds. The main pollution source is insecticide and fertilizers use in agricultural area by farmers.

CONCLUSION

The study provides that present ecological characteristic of the dam made the bird unable to inhabit the dam through the year. Siltation, pollution and shrinkage are the major threats to the avian fauna. The present in or near the dam are also affected by factors such as pollution, or human disturbances and extra use of fertilizers. Hence it is required to restore the original ecological features of dam and full protection to existing habitat should be given with special attention in migratory period

Conflicts of interest: The authors stated that no conflicts of interest.

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