



CURRENT OCCURRENCE AND STATUS OF BIRDS OF ASNA RIVER NANDED, MAHARASHTRA

¹Jayvardhan V Balkhande and Shaikh Azeem Issak

¹Department of Zoology, Digambarrao Bindu College, Bhokar, Dist. Nanded

Department of Zoology, Mohekar College Kalamb Dist. Osmanabad.

Corresponding Author Email :- cageculture2014@gmail.com

Communicated : 09.08.2023

Revision : 26.08.2023 & 13.09.2023
Accepted : 22.09.2023

Published : 30.10.2023

ABSTRACT:

In addition to acting as pollinators, dispersers, scavengers, and predators, birds are crucial to the upkeep of the ecosystem. A baseline avifauna survey was conducted on the Asna River, close to Nanded City in Nanded (MS), from August 2022 to September 2023, taking into account the biological significance of birds in the environment. 47 species of birds belonging to 27 families were recorded during one year study.

Keywords:- Asna, Avifauna, Nanded, Birds.

INTRODUCTION :

Birds have a significant economic impact on human society. They are crucial in managing the populations of various pests and insects. They serve as pollinating and scavengers in addition to aiding in the dispersal of various plant seeds. They were known since ages by humans and are help to provide rich food for mankind (Chitampally and Bhatkhande, 1993). The effects of environmental change on biodiversity are indicated by theoretical data, and biodiversity indicators are significant part of sets of indicators for biodiversity and habitats. The diversity of bird species in ecosystems reflects the health of their habitat. Birds are utilized for environmental impact assessments and conservation because they are environmental indicators (Gregory et al., 2003). One of the most crucial ecological indicators to assess the quality of habitats is the diversity of avifauna. (Bhadja and Vaghela, 2013). Wetlands are important and form an integral ecosystem that provides many benefits. Wetlands are known to be home to a wide variety of plants and animal species, particularly endemic and migratory birds. Nutrient cycling and ecological

balance also maintained by wetlands (Donar et al., 2012).

Asna is a tributary river of godavari river, it joins Godavrai at Trikut.

However very little information is available about avifauna of Asna river. This work has therefore undertaken of document the avifaunal diversity of Asna river. Results of this study are useful as baseline of avifaunal diversity of Asna river.

MATERIALS AND METHODS:

Study area: Asna river 19°11'39"N 77°20'27"E located in Hingoli and Nanded districts in Marathwada region of Maharashtra. It is tributary river of Godavari meets at Trikut in Nanded.

The present report is based on the observation made from August 2022 to September 2023. Regular monthly visits were made to the study station. Survey of avian fauna was carried out by using line transect method (Gaston, 1973) birds were sighted by using binoculars of 7X and 8X magnification and spot identification was done as per Ali & Ripley (1983); Ali (1996). The sighted birds were photographed by using DSLR camera Canon D1300 with lens EF-S 55-250 mm F4 5.6 IS II. . The scientific and local

names were given as per Manakadan and Pittie (2001). A check list is prepared as per Abdulali (1981).

The status of bird is categorized as Resident Common (RC), Resident Migrant Common (RMC), Winter Migrant Common (WMC), Resident rare (Rr), Resident Uncommon (RU), Migrant (Mr), Resident Migrant (RMr), Winter Migrant Uncommon (WMU), Resident Migrant Uncommon (RMU).

RESULT AND DISCUSSION:

As per the study total 47 species of birds belonging to 27 families were recorded from August 2022 to September 2023. Table 1 depicts details about the Scientific and Common Names, Status and Occurrence of birds. Out of 47 species 30 species were of Resident Common (RC), 01 species was Resident Migrant (RMr), 01 Species was Residential rare (Rr), 06 Residential Migrant Common (RMC), 03 species are Resident Uncommon (RU) and 02 species are Winter Migrant Common (WMC) recorded.

Out of 47 bird species 19 birds namely Indian pond heron, Cattle egret, Little egret, Asian koel, Indian robin, Oriental magpie robin, Ring dove, Spotted dove, Blue rock pigeon, Black drongo, Indian peafowl, Painted stork, Black winged stilt, White breasted water hen, Indian moorhen, Baya weaver, Red vented bulbul, Small bee eater, Red-wattled lapwing were found abundant on the Asna river. Interestingly Painted stork (Near threatened by IUCN, 2011) was recorded in huge quantity Fig. 1, this bird found in flocks at the birding site. Painted stork flocks usually recorded in the winter months i.e. from October 2022 to February 2023. An Eurasian spoonbills also seen in pairs along with painted stork. Common hoopoe was seen in the rare bird category on Asna river. It was observed very less on the site. As far as the occurrence percentage, the 41% birds were found abundant, in the very few category there

was 38%, 19% birds were categorized into few and only 2% birds are recorded in rare category. Many researchers done their work on bird diversity in their areas in that, 53 different species of birds were recorded by Balkhande et al. (2012) on the Godavari River near Dhangar Takli Tq. Purna Dist Parbhani; Balkhande et al., (2012) also recorded 50 species of birds near river Purna Dist. Parbhani. Balkhande, et. al., (2014) recorded 69 bird species in Satapur water body, Renjal Mandal Dist. Nizamabad, Telangana. V. Jalander et al., (2015) reported 65 species of birds in Nizam Sagar Project, Dist. Nizamabad, Telangana State.

CONCLUSION:

On the basis of present work it was concluded that, though Asna is a small river but it has great diversity of birds. Because of surrounding farms number of birds attracted to this place. This is baseline work for future researchers.

REFERENCES:

- Abdulali. H. (1981). Check list of Birds of Maharashtra. BNHS, Mumbai. pp-1-16.
- Ali. S and S. D. Ripley. (1983). A Pictorial Guide to the Birds of the Indian Sub-Continent. BNHS. Pp- 1-354.
- Ali. S. (1996). The Book of Indian Birds. BNHS Mumbai. Pp- 1-354.
- Balkhande J. V; Balkhande, S. V; Bhowate, C. S and Kulkarni, A. N. (2012). A Check list of Birds near the river Purna, Dist. Parbhani, Maharashtra. Bionotes 14 (4): 110-112.
- Balkhande, J. V., Bhowate, C. S. and Kulkarni, A. N. (2012). Check List of birds of river Godavari, Dhangar Takli near Purna, Dist. Parbhani Maharashtra. Bionano Frontier 5 (2): 266-268.
- Chittampalli M and BPN Bhatkhande (1993). Hansdev's Mrigpakeshi Shastra. M.S. Board of literature and culture, Mumbai Pp 1-279.



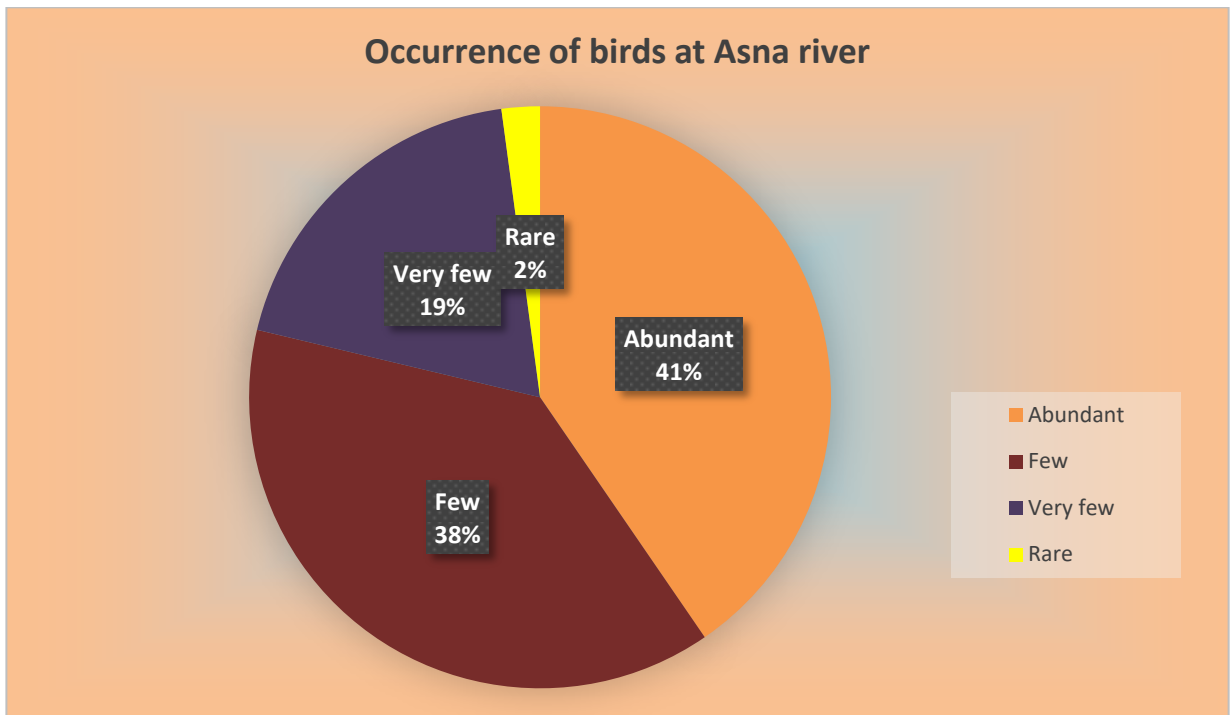
- Donar, A. S., Reddy, K. R. and Deshpande, D. P. (2012). Avifaunal Diversity of Nipani Reservoir, Belgaum District Karnataka. The Ecoscan. (1) 27-33.
- Gaston A. J (1973). Methods for estimating bird population. Jrl. of BNHS. 72(2):272-281.
- Gregory R. D; Noble D; Field R; Marchant J; Raven M and Gibbons D. W (2003). Using birds as indicators of biodiversity. Ornis Hung., 12-13: 11-24
- IUCN 2011. Red List of Threatened Species. Version 2011.2. <http://www.iucnredlist.org>.
- Jalander V., Balkhande J. V. and G. Sainath. (2015). Avifaunal Diversity of Nizam Sagar Project, Dist. Nizamabad, Telangana State. International Journal of Pure and Applied Bioscience 3 (2):487-491.
- Manakadan, R. and Pittie, A.(2001). Standardized Common and Scientific Names of Birds of the Indian Subcontinent. Buceros 6 (1): 1-37.
- Poonam Bhadja and Ashok Kumar V. (2013). Study on Avifaunal Diversity from Two Freshwater Reservoirs of Rajkot, Gujarat, India. International Journal of Research in Zoology, 3(2): 16-20.



Table 1. Avifaunal diversity of Asna River during August 2022 to September 2023 along with their status and occurrence.

Sr. No	Family	Common Name	Scientific Name	Status	Occurrence
1	Anatidae	Comb duck	<i>Sarkidiornis melanotos</i>	WMU	+
2	Anatidae	Common pochard	<i>Aythya ferina</i>	WMU	++
3	Ardeidae	Indian pond Heron	<i>Ardeola grayii</i>	RC	++++
4	Ardeidae	Cattle Egret	<i>Bubulcus ibis</i>	RC	++++
5	Ardeidae	Little Egret	<i>Egretta garzetta</i>	RC	++++
6	Ardeidae	Grey Heron	<i>Ardea cinerea</i>	RMr	+++
7	Alcedinidae	White breasted kingfisher	<i>Halcyon smyrnensis</i>	RC	+++
8	Alcedinidae	Pied kingfisher	<i>Ceryle rudis</i>	RC	+++
9	Accipitridae	Pariah Kite	<i>Milvus migrans</i>	RC	+++
10	Cuculidae	Asian Koel	<i>Eudynamis scolopacea</i>	RC	++++
11	Cuculidae	Black winged Kite	<i>Elanus caeruleus</i>	RC	+++
12	Cuculidae	Indian Cuckoo	<i>Cuculus micropterus</i>	RM	++
13	Cuculidae	Shikra	<i>Accipiter badius</i>	RC	+++
14	Cisticolidae	Tailor Bird	<i>Orthotomus sutorius</i>	RC	+++
15	Corvidae	House Crow	<i>Corvus corax</i>	RC	+++
16	Muscicapidae	Indian Robin	<i>Saxicoloides fulicata</i>	RC	++++
17	Muscicapidae	Oriental Magpie Robin	<i>Copsychus saularis</i>	RC	++++
18	Passerinae	House Sparrow	<i>Passer domesticus</i>	RC	+++
19	Hirundinidae	Common Swallow	<i>Hirundo rustica</i>	RMC	++
20	Hirundinidae	Wire-tailed Swallow	<i>Hirundo smithii</i>	RMC	++
21	Phalacrocoracidae	Little Cormorant	<i>Phalacrocorax niger</i>	RMC	+++
22	Psittacidae	Rose ringed parakeet	<i>Psittacula krameri</i>	RC	+++
23	Columbidae	Ring Dove	<i>Streptopelia capicola</i>	RC	++++
24	Columbidae	Spotted Dove	<i>Streptopelia chinensis</i>	RC	++++
25	Columbidae	Blue rock Pigeon	<i>Columba livia</i>	RC	++++
26	Motacillidae	Grey Wagtail	<i>Motacilla cinerea</i>	RC	+++
27	Motacillidae	White Wagtail	<i>Motacilla alba</i>	RC	+++
28	Dicruridae	Black Drongo	<i>Dicrurus macrocer</i>	RC	++++
29	Phasianidae	Indian Peafowl	<i>Pava cristatus</i>	RC	++++
30	Upupidae	Common Hoopoe	<i>Upupa epops</i>	Rr	++
31	Ciconiidae	Painted stork, (Near threatened by IUCN, 2011)	<i>Mycteria leucocephala</i>	RMC	++++
32	Ciconiidae	White-necked stork	<i>Ciconia episcopus</i>	RU	+++
33	Recurvirostridae	Black winged stilt	<i>Himantopus himantopus</i>	WMC	++++
34	Laridae	Ruddy Shelduck	<i>Todorna ferruginea</i>	WMU	+++
35	Laridae	Indian river tern	<i>Sterna aurantia</i>	RMC	++
36	Rallidae	Common Coot	<i>Fulica atra</i>	WMC	++
37	Rallidae	White breasted water hen	<i>Amaurornis phoenicurus</i>	RC	++++
38	Rallidae	Indian moorhen	<i>Gallinula chloropus</i>	RC	++++
39	Sturnidae	Common Myna	<i>Acridotheres tristis</i>	RC	+++
40	Sturnidae	Brahminy Myna	<i>Sturnus pagodarum</i>	RC	+++
41	Ploceidae	Baya Weaver	<i>Ploceus philippinus</i>	RC	++++
42	Pyconotidae	Red vented Bulbul	<i>Pycnonotus</i>	RC	++++
43	Meropidae	Small Bee Eater	<i>Merops orientalis</i>	RC	++++
44	Charadriidae	Red- wattled Lapwing	<i>Vanellus indicus</i>	RC	++++
45	Threskiornithidae	Black ibis	<i>Pseudibis papillosa</i>	RU	++
46	Threskiornithidae	Oriental White ibis	<i>Threskiornis melanocephalus</i>	RU	++
47	Threskiornithidae	Eurasian Spoonbill	<i>Platalea leucorodia</i>	WMU	+++

Abundance (++++), Few (+++), Very few (++), Rare (+)



Graph 1 explained the occurrence of birds in the % at Asna river.



Fig. 1 Huge flocks of Painted stork along with spoonbill on Asna river.