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# Avian fauna diversity of Purna river of Brahmanwadathadi, dist. Amravati, Maharashtra, MS, India

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#### **ABSTRACT**

Birds are the essential factors of ecosystem and having a great diversity among the world. So, Present investigation was carried out in and surrounding area of Purna river at Brahmanwadathadi. The Avian fauna of Purna River was studied for 14 months from August 2015 to September 2016. Most common 22 species of 10 families were recorded during the study. Among the recorded species 13 were resident,3 were resident migrant,2 were local migrant,1 winter migrant,3 were migrant.

Key words: Avian fauna, Purna River, Biodiversity, Birds.

#### INTRODUCTION

Avian fauna is an most important ecological indicators as essential factor of ecosystem. But now a days, they are affected by various factors such as destruction of tress, human interference, human disturbance, pollution, etc. so their numbers are decreasing.

From few decades avifaunal biodiversity was studied from different freshwater bodies of India have been carried out by researchers like, this work is carried out for the investigation of avian biodiversity around the Purna River. There is availability of rich food and nesting conditions for birds. The water body is oligotrophic in nature having rich floral and faunal diversity. The fauna of river includes worms, insects, larvae, molluscs, zooplankton, fishes, amphibians, reptiles and some mammals.

# **MATERIAL AND METHOD**

In the present study, the data of avian faunal diversity of Purna river is taken by "complete sensus" method (whiteworth *et al.*, 2007) was used. Birds were observed and identified upto the species level by their physical features with the help of guide and reference books, Ali and Ripley (1995), Grimmet *et al.* (1999), Bhatt *et al.* (2009). The species of these birds were enlisted according to their occurrence, abundance and

by their habitats and feeding habits. The observations were made by monthly throughout the year from August 2015 to September 2016 during the morning time 7 a.m. to 10 a.m.

The observed birds were catogorized as, R-Resident, RM-Resident migrant, LM-Local migrant, M-Migrant, WM-Winter migrant. The feeding activities of birds were observed and accordingly, they were grouped as herbivorous, carnivorous and insectivorous.

The birds which were found throughout the year around the Puna River referred as R-resident, RM-Resident migrant, species found on the river irregularly, but resident of India. LM-Local migrant found in that area, WM-Winter migrant, species found in the study area during winter only, M-Migrant.

## **RESULTS AND DISCUSSION**

Depending on different scientific classifications, still there were over 9000 bird's species and more than 1250 in India. Ali (1939) published a list of the 278 species of birds from central India, Mujumdar (1984) studied the collection from baster district (MP), Wadatkar and Kasambe (2002) reported 171 species of birds at Pohara-Malkhed forest reservoir of Amravati district.

Patil (2018) reported total 134 species of birds species in Ajanti reservoir region of Wena River, Hinganghat (Wardha). A total of 159 species of birds belonging to 17 orders and 60 families were recorded, of those 109 species of terrestrial birds and 50 species of water birds were observed in Urban Wetlands of Kolhapur (Patil, 2017).

**Table 1:** Avian faunal diversity inhabiting and visiting the Purna river during 2015-2016.

Sr.	Common Name	Zoological Name	Family	Status	Feeding Habit
No.					
1	Dabchick Little	Tachybaptus ruficollis	Ardeidae	RM	Aquatic insect and Larvae
	Grebe				
2	Little cormorant	Phalacrocorac nigher	Ardeidae	RM	Exclusively fish
3	Little egret	Egretta Garzella	Ardeidae	R	Insects fish, Frogs and small reptiles
4	Large Egret	Ardeae alba	Ardeidae	LM	Fishes, frogs
5	Cattle Egret	Bubulcus libis	Ardeidae	R	Chiefly grasshoppers bluebottle
6	Whitenecked stork	Ciconia episcopus	Ciconidae	LM	Fishes, frogs, reptiles, crab
7	Openbill stork	Anastomus oscitans	Ciconidae	R	Snails
8	Grey heron	Ardea cinereal	Ardeidae	WM	Frog fishes
9	Pond heron	Ardeola grayll	Ardeidae	R	Frogs, fishes, crabs, insects
10	Purple heron	Ardea purpurea	Ardeidae	R	Frogs, fishes, crabs, insects
11	Blakibis	Pseudibis papillosa	Threskiornthidae	R	Insects, grains and small reptiles
12	Pintail	Anas acute	Anatidae	M	Shoot and seeds of aquatic plants
13	Indian river tern	Sterna aurantia	Laridae	R	Fishes
14	Yellow wattled	Vanellus wetabaricus	Charadridae	R	Insects grabs
	Lapwing				
15	Black winged stilt	Himantopus	Recurvirostridae	R	Worms, molluscs, aquatic insects
16	Grey wagtail	Motacilla cinera	Pacelonidae	M	Tiny insects
17	Whitbreasted king fisher	Halcyon smyrnesis	Alcedinidae	R	Fishes tadpoles, lizards, grasshopers, insects
18	Small kingfisher	Alcedo atthis	Alcinidae	RM	Small fishes, tadpole, lizards
19	Pied kingfisher	Ceryle rudis	Alcidinidae	R	Fishes, tadpoles. frogs and aquatic insects
20	Common teal	Anas crecca		M	Vegetarian, shoots, tubers, seeds of aquatic plants
21	Pied myna	Sturnus contra	sturnidae	R	Grain, fruit, insects, molluscs
22	Jungle crow	Corvus macrorhynchos	corvidae	R	Insects, Bird eggs, seeds and fruits.

 $R-Resident, RM-Resident\ migrant,\ LM-Local\ migrant,\ M-Migrant,\ WM-Winter\ migrant.$ 

Puri (2015) recorded the twenty-seven species were recorded belonging to 08 different orders and 11 families at Malguzari Lake near Amgaon in Gondia district. Kedar and Patil (2005) recorded 60 birds' species from Rishi lake, Karanja (lad) of Washim district (MS), Kukade *et al.* (2011) recorded 68 birds' species of Chhatri lake of Amravati district (MS).

During the present study period 22 species are found belonging to 10 families were determined. Most of the birds were occurred in small flocks in the morning all over the spot. Birds were mostly seen in less populated area and less disturbed part of the spot and having deep water (Ali, 1996).

Out of total found migratory birds, arrived during October to January and birds leave from last week of January by Muzumdar et al. (2005) .Birds like little egret, yellow wattled lapwing, Black winged stilit were found on river side where shallow water is present and insects, worms and tadpoles are easily available. The birds like common teal, White brister fisher, Pintail are found where aquatic plant was found. These findings were listed with Muzumdar et al. (2005). Black winged stilt, Purple heron, Openbill stork were seen during the month of March and April when snails, molluscs are exposed and similar observations were made by Kedar et al. (2005). During summer season, the river is under threat due the pollution and other factors and result in the decrease in biological diversity, water quality, sedimentation, etc. and depending on these number of migratory birds and fish fauna are also decreasing.

## **CONCLUSION**

The study of Avian biodiversity of Purna river proved that, the ecological characteristics of river water made the birds throughout the years to inhabits. The main factors which affects the avian biodiversity are pollution, Shrinkage of water bodies, sedimentation and human disturbance, so it is necessary to restore the ecological features of water body. If water quality is maintained then Avian biodiversity can also be restored.

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