

Census of birds on Godavari River in the month of January: A peak month of winter in Nanded (Maharashtra State)

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Abstract

Avian fauna occupies a special position in an aquatic Ecosystem. Wetland is a special type of ecosystem which supports to the variety of local and migratory bird species by providing the specific habitat component such as abundant food to the herbivores and carnivores bird species. Present study based on census of birds on Godavari River in the month of January 2017. During the study total 757 birds of 43 different species were identified and counted. Among this 42 species 6 species were migratory birds they are Black Winged Stilt, Painted Stork, Common Sandpiper, Rudy Shell Duck, Northern Pintail and Spoonbill. These birds are found abundant during the study period.

Keywords: bird's census, Godavari, Nanded

1. Introduction

The rivers are important source of fresh water for various activities and are biologically rich in flora and fauna. Rivers and marshy places forms natural habitat for feeding, breeding and nesting grounds for animals including birds.

Diversity of avifauna is one of the most important ecological indicators to evaluate the quality of habitats. Now-a-days, avifaunal diversity has been decreasing due to the destruction of natural habitats and human disturbances. Birds are essential animal group of an ecosystem and maintain a tropic level. Therefore, detail study on avifauna and their ecology is important to protect them. Birds play prominent and diverse role in religion, and popular culture. They have their functional role in the ecosystem as potential pollinators and

scavengers and are rightly called as bio-indicators. All birds are not aquatic but few of them reside on the bank of reservoir. Birds are important group of aquatic food chain. They feed on vegetation, fishes and other animals of the reservoir ^[1]. Wetlands are important and are integral ecosystems providing numerous benefits.

Birds are the indicators of environment and are being used for conservation and environmental impact assessment ^[2]. This bird census was carried out to know the exact number of bird species found in the month of January, as in Nanded this month is a peak month of winter season.

2. Materials and Methods

The Godavari is the second longest river in India after the river Ganges having its source at Tryambakeshwar, Maharashtra. It starts in Maharashtra and flows east for 1,465 kilometres emptying into Bay of Bengal. The Nanded Godavari River is situated at 19.1383° N, 77.3210° E. The spot was Sai Temple to Rahim Peth on river Godavari.

During the study observation were done by using line Transect method ^[3] and numbers of individuals were counted by using point count method ^[4] to work out the abundance and species richness in the month of January 2017 at every Sunday. Birds were sighted by using binoculars of 7X and 8X magnification and identified as per guidelines suggested ^[5, 6] and were photographed by using Sony Cyber shot Camera (Model No. W570). The scientific and local names to the identified birds were given as per Manakadan and Pittie ^[7] and a check list is prepared as per Abdulali ^[8]

Sr. No.	Common Name	Zoological Name	Bird Count	Total
1	Little Cormorant (RC)	<i>Phalacrocorax niger</i>	12,31,4	47
2	Grey Heron (RC)	<i>Ardea cinerea</i>	2,5,1	08
3	Pond Heron (RC)	<i>Ardeola grayii</i>	2,4,16,8,4,2,1,4	41
4	Little Egret (RC)	<i>Egretta garzetta</i>	4,6,2,21,27,38,20,17,14,9,2,8,4	172
5	Cattle Egret (RC)	<i>Bubulcus ibis</i>	4,2,3	09
6	Intermediate Egret (RC)	<i>Mesophoyx intermedia</i>	8	08
7	Great Egret (RC)	<i>Ardea alba</i>	7,2,1,1	11
8	Black Ibis (RC)	<i>Pseudibis papillosa</i>	1,2	03
9	Rudy Shell Duck (WMr)	<i>Todorna ferruginea</i>	2,2,4,6,1	15
10	Hoopoe (RC)	<i>Upupa epops</i>	1	01
11	Northern Pintail (WMr)	<i>Anas acuta</i>	6,2,1,3,4,2,4	22
12	Gray Babbler (RC)	<i>Turdoides malcolmi</i>	6	06
13	White Breasted Water Hen (RC)	<i>Amauornis phoenicurus</i>	1,1,2	04
14	Asian koel (RC)	<i>Eudynamis scolopacea</i>	1,1	02
15	Red wattle Lapwing (RC)	<i>Vanellus indicus</i>	2,3,2	07
16	Common Sandpiper (WMr)	<i>Actitis hypoleucos</i>	2,2,2,4,2,2,2,2	18
17	Painted Stork (WMr)	<i>Mycteria leucocephala</i>	1	01
18	White Breasted Kingfisher (RC)	<i>Halcyon smyrnensis</i>	1,1	02
19	Spoonbill (WMr)	<i>Platalea leucorodia</i>	2	02
20	Black Winged Stilt (WMr)	<i>Himantopus himantopus</i>	4,16,5,3,4,6,4,3,5	50

21	Cotton Teal (WMr)	<i>Nettapus coromandelianus</i>	1,10,5,2,4	22
22	Grey Wagtail (RC)	<i>Motacilla cinerea</i>	1,1	02
23	White Wagtail(RC)	<i>Motacilla alba</i>	1,1,2	04
24	Indian Peafowl (RC)	<i>Pava Cristatus</i>	3,2,5	10
25	Rose ringed parakeet(RC)	<i>Psittacula krameri</i>	2	02
26	Blue Rock Pigeon (RC)	<i>Columba livia</i>	4,3,1	08
27	Common Myna (RC)	<i>Acridotheres tristis</i>	4,1,2,3,1,2	13
28	Ring Dove (RC)	<i>Streptopelia capicola</i>	2,2,1,1	06
29	Black Drongo (RC)	<i>Dicrurus macrocer</i>	1,1,2	04
30	Yellow wagtail (RC)	<i>Motacilla flava</i>	2,2,1	05
31	Common coot (RC)	<i>Fulica atra</i>	2,1,2,2,1,13,16,1	38
32	Pied Myna(RC)	<i>Gracupica contra</i>	2	02
33	House crow(RC)	<i>Corvus corax</i>	10,2,1,30	43
34	Pariah kite(RC)	<i>Milvus migrans</i>	1,2,1	04
35	Common Pochard (WMU)	<i>Aythya ferina</i>	6,2,1,1	10
36	Red throated flycatcher (RC)	<i>Ficedula parva</i>	4	04
37	Indian Robin (RC)	<i>Saxicoloides fulicata</i>	1,1	02
38	Grater Coucal (RC)	<i>Centropus sinensis</i>	1,1	02
39	Dusky crag martin (RC)	<i>Ptyonoprogne concolor</i>	120,2,5,20	147
40	White ibis (RU)	<i>Threskiornis melanocephalus</i>	3,2,1	06
41	River tern (RC)	<i>Sterna aurantia</i>	1,1	02
42	Little grebe (RMC)	<i>Tachybaptus ruficollis</i>	2	02
			Total	767

The status of bird is categorized as RC- Resident Common, WMr- Winter Migrant Mr- Migrant, RMr- Resident Migrant, WMU- Winter Migrant Uncommon,

3. Results and Discussion

During the study total 757 birds of 42 different species were identified and counted as described in table No.1. Among the 42 species 31 species are categorised in to RC (Residential Common) and are found abundant throughout the study period. This study was helpful to observe and record of migratory as well as residential birds. However, many researchers have study the avifauna in this region but the continuous study will helpful to manage record of the birds found on Godavari River. The month of January is really a suitable for bird watching; the time is early in the morning from 6 to 8 am whereas in the evening it was 4 to 6 pm. specially for students and youngsters who are not familiar with the environment but by bird watching they can gain a good knowledge of birds and other.

Studies was carried out on bird biodiversity by many authors such as Kulkarni *et al* ^[9] recorded 18 piscivorous bird species in Dongarkhedha irrigation tank. Dist. Hingoli. Kulkarni *et al.* ^[10] recorded 18 Piscivorous bird species in Dongarkhedha irrigation tank. Dist. Hingoli. Kulkarni *et al.* ^[11] also recorded 93 species of birds in Shikhachiwadi Wadi, reservoir Dist. Nanded; Pawar *et al* ^[12] recorded 95 bird species from three water reservoir from Satara Dist; Balkhande *et al.*, ^[13] recorded 50 species of birds near river Purna Dist. Parbhani. Balkhande *et al.*, ^[14] recorded 53 species of birds on river Godavari near Dhangar Takli Tq. Purna Dist. Parbhani; Laxmi Narayana *et al* ^[15] recorded 66 species of birds in Sherpally, Nalgonda District, Andhra Pradesh; Kante, *et. al.*, ^[16] recorded 164 bird species in Manjeera Wildlife Sanctuary, Medak District, Andhra Pradesh.

4. References

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