

Checklist of birds recorded from Dumad and Koyali ponds of Vadodara district, Gujarat

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ABSTRACT

During the study, a total of 77 bird species were observed from Koyali and Dumad ponds in Vadodara district, Gujarat state. Dumad Pond has more species (73) as compared to Koyali Pond (34). These species belong to the following orders: Ciconiformes, Podicipediformes, Anseriformes, Falconiformes, Galliformes, Gruiformes, Pelicaniformes, Charadriiformes, Columbiformes, Psittaciformes, Apodiformes, Coraciiformes, Piciformes and Passeriformes. At the Koyali pond, maximum number of species (12) belongs to the Passeriformes order, followed by five from the Ciconiformes and Coraciiformes orders, four from the Podicipediformes, three from the Anseriformes, and two from the Charadriiformes. Pelicaniformes, Psittaciformes and Columbiformes contained one bird species each. In the Dumad pond, out of 73 species, the maximum number belonged to the Passeriformes order (29 species), followed by Podicipediformes (9), Coraciiformes (7), Charadriiformes (6), Gruiformes and Anseriformes (4), Ciconiformes and Psittaciformes (3), Falconiformes, Galliformes and Columbiformes, which contained two species each. The remaining two orders (Apodiformes and Piciformes) represent single species.

Introduction

Birds played a crucial and functional role in the ecosystem. Birds are an excellent indicator of ecosystem health. They are quick to respond to changes in habitat and ecosystem (Harish and Hosetti, 2009). The Indian subcontinent has almost 1300 bird species (Grimmett *et al.*, 1999). Various studies on bird diversity and abundance have been conducted in India in different habitats including forest, wetlands, rivers, protected areas and urban areas (Kannan, 1998; Oswin, 1999; Mahabal 2000; Aravind *et al.* 2001; Dookia 2002; Chhangani 2002; Sivaperuman & Jayson, 2000; Reginald *et al.*, 2007). Several studies have been conducted on the bird community in relation to ecology and its behaviour (Cody, 1974; Wiens, 1989; Perrins and Birkhead, 1983; Keast, 1990). But no more studies have been conducted on Koyali and Dumad Ponds in Vadodara District, Gujarat State. In order to present studies was carried out on birds diversity in Koyali and Dumad pond.

Material and methods-

During the present study, field work was conducted in two ponds, Koyali and Dumad ponds, of Vadodara district from January 2007 to December 2008. Observations of birds were taken in the early morning (6:00 a.m. to 9:00 a.m.) and late evening (4:00 p.m. to 6:00 p.m.) with the help of Nikon

8x40 binoculars. The bird species were identified with the help of standard field guides (Grimmett *et al.*, 1999; Ali, 2002).

Result and Discussion

During the study, I observed a total of 77 bird species in Koyali and Dumad ponds in Vadodara district. Dumad Pond has 73 bird species, while Koyali Pond has 34. Recorded bird species belong to 14 orders: Ciconiformes, Podicipediformes, Anseriformes, Falconiformes, Galliformes, Gruiformes, Pelicaniformes, Charadriiformes, Columbiformes, Psittaciformes, Apodiformes, Coraciiformes, Piciformes, and Passeriformes. At the koyali ponds, out of 34 bird species maximum species (12 species) belongs to Passeriformes order, followed by five from the Ciconiformes and Coraciiformes orders, four from the Podicipediformes, three from the Anseriformes, and two from the Charadriiformes. Pelicaniformes, Psittaciformes, and Columbiformes contained one bird species each. In the Dumad pond, out of 73 species, the maximum number belonged to the Passeriformes order (29 species), followed by Podicipediformes (9), Coraciiformes (7), Charadriiformes (6), Gruiformes and Anseriformes (4), Ciconiformes and Psittaciformes (3), Falconiformes, Galliformes, and Columbiformes, which contained two species each. The remaining two orders (Apodiformes and Piciformes) represent single species.

Table 1- Check list of birds recorded at Dumad and Koyali ponds during the study period (Verma, 2010).

Sr. no	Common name	Scientific name	Koyali Pond	Dumad Pond
Order: Ciconiformes , Family: Ardeide				
1	Little Egret	<i>Egretta garzetta</i>	+	-
2	Cattle Egret	<i>Bubulcus ibis</i>	+	+
3	Great Egret	<i>Egretta alba</i>	+	-
4	Pond Heron	<i>Ardeola grayii</i>	+	-
5	Purple heron	<i>Ardea purpuria</i>	-	+
6	Grey heron	<i>Ardea cinerea</i>	+	+
Order: Podicipediformes				
Family: Podicipedae				
7	Little grebe	<i>Tachybaptus rufficollis</i>	+	+
Family: Ciconiidae				
8	Painted Stork	<i>Mycteria leucocephala</i>	+	+
9	Asian Open bill-Stork	<i>Anastomus oscitans</i>	-	+
10	Black-necked Stork	<i>Ephippiorhynchus asiaticus</i>	-	+
11	White-necked Stork	<i>Ciconia episcopus</i>	+	+
Family: Threskiornithidae				
12	Oriental White Ibis	<i>Threskiornis elanocephalus</i>	-	+
13	Black Ibis	<i>Pseudibis papillosa</i>	+	+
14	Glossy Ibis	<i>Plegadis falcinellus</i>	-	+
15	Eurasian Spoonbill	<i>Platalea leucorodia</i>	-	+
Order: Anseriformes				
Family: Anatidae				
16	Bar headed goose	<i>Anser indicus</i>	-	+
17	Brahminy-Shelduck	<i>Tadorna fetruginea</i>	+	+
18	Northern Pintail	<i>Anus acuta</i>	+	+
19	Spot billed duck	<i>Anas poecilorhyncha</i>	+	+
Order: Falconiformes				
Family: Accipitridae				
20	Black-shouldered kite	<i>Elanus caeruleus</i>	-	+
21	Black kite	<i>Milvus migrans</i>	-	+
Order: Galliformes				
Family: Phasianidae				
22	Grey francolin	<i>Francolinus pious</i>	-	+
23	Indian Peafowl	<i>Pavo cristatus</i>	-	+
Order: Gruiformes				
Family: Gruidae				
24	Demoiselle Crane	<i>Anthropoides virgo</i>	-	+
Family: Rallidae				
25	White-breasted Waterhen	<i>Amauromis phoenicurus</i>	-	+
26	Purple Moorhen	<i>Porphyrio porphyrio</i>	-	+
27	Common Coot	<i>Fulica atra</i>	-	+
Order: Pelicaniformes				

Family: Phalacrocorcidae				
28	Little Cormorant	<i>Phalacrocorax niger</i>	+	-
Order: Charadriiformes				
Family: Recurvirostridae				
29	Black winged stilt	<i>Himantopus himantopus</i>	+	+
Family: Charadriidae				
30	Red wattled lapwing	<i>Vanelus indicus</i>	+	+
31	Little ringed plover	<i>Charadrius dubius</i>	-	+
Family: Scolopacidae				
32	Common sandpiper	<i>Actitis hypoleucous</i>	-	+
33	Curlew sandpiper	<i>Calidris ferruginea</i>	-	+
Family: Laridae				
34	Indian river tern	<i>Sterna auratia</i>	-	+
Order: Columbiformes				
Family: Columbidae				
35	Blue rock pigeon	<i>Columbia livia</i>	+	+
36	Little brown dove	<i>Streptopelia sensgelenis</i>	-	+
Order: Psittaciformes				
Family: Psittacidae				
37	Rose-ringed parakeet	<i>Psittacula krameri</i>	+	+
38	Blossom headed parakeet	<i>Psittacula roseta</i>	-	+
Family: Cuculidae				
39	Asian koel	<i>Eudynamis scolopcea</i>	-	+
Order: Apodiformes				
Family: Apodidae				
40	House swift	<i>Apus affinis</i>	-	+
Order: Coraciiformes				
Family: Alcedinidae				
41	Lesser pied Kingfisher	<i>Ceryle rudis</i>	+	+
42	Small blue Kingfisher	<i>Alcedo attis</i>	+	+
43	White breasted Kingfisher	<i>Halcyon smyrnensis</i>	+	+
Family: Meropidae				
44	Small bee eater	<i>Merops orientalis</i>	+	+
Family: Coraciidae				
45	Indian roller	<i>Coracias bengalensis</i>	+	+
Family: Upupidae				
46	Common Hoopoe	<i>Upupa epops</i>	-	+
Family: Bucerotidae				
47	Indian Grey hornbill	<i>Ocyrceros birostris</i>	-	+
Order: Piciformes				
Family: Capitonidae				
48	Coppersmith Barbet	<i>Megalaima haemacephala</i>	-	+
Order: Passeriformes				
Family: Alaudidae				
49	Rufous-tailed FinchLark	<i>Ammomanes phoenicurus</i>	-	+

50	Bengal Bush-Lark	<i>Mirafra assamica</i>	-	+
Family: Hirundinidae				
51	Wire-tailed Swallow	<i>Hirundo smithii</i>	-	+
52	Common Swallow	<i>Hirundo rustica</i>	-	+
53	House Swallow	<i>Hirundo tahitica</i>	+	+
54	Red-rumped Swallow	<i>Hirundo daurica</i>	-	+
55	Streak-throated Swallow	<i>Hirundo fluviicola</i>	-	+
Family: Laniidae				
56	Great Grey Shrike	<i>Lanius excubitor</i>	-	+
57	Baybacked shrike	<i>Lanius vittatus</i>	+	+
Family: Dicruridae				
58	Black Drongo	<i>Dicrurus macrocercus</i>	+	+
Family: Sturnidae				
59	Common Myna	<i>Acridotheres tristis</i>	+	+
60	'Brahminy Starling	<i>Sturnus pagodarum</i>	-	+
61	Rosy Starling	<i>Sturnus roseus</i>	+	+
Family: Pycnonotidae				
62	Red-vented Bulbul	<i>Pycnonotus cater</i>	+	+
Family: Muscicapidae				
63	Large Grey Babbler	<i>Turdoides malcolmi</i>	+	+
64	Jungle Babbler	<i>Turdoides striatus</i>	+	+
65	Asian Paradise- Flycatcher	<i>Terpsiphone paradisi</i>	-	+
66	Ashy Prinia	<i>Prinia socialis</i>	-	+
67	Indian Robin	<i>Saxicoloides fulvicata</i>	-	+
Family: Motacillidae				
68	Oriental Tree Pipit	<i>Anthus hodgsoni</i>	-	+
69	Yellow wagtail	<i>Motacilia favia</i>	+	+
70	Grey wagtail	<i>Motacilia cinerea</i>	+	+
71	White wagtail	<i>Motacilia alba</i>	+	+
72	Large pied wagtail	<i>Motacilia moderaspenis</i>	-	+
Family: Nectarinidae				
73	Purple rumped Sunbird	<i>Nectarina zeylonica</i>	+	+
74	Purple Sunbird	<i>Nectarina asiatica</i>	-	+
Family: Passeridae				
75	House sparrow	<i>Passer domesticus</i>	-	+
	Sub-family: Plocinae			
76	Baya weaver	<i>Ploceus philippinus</i>	-	+
77	White throated munia	<i>Lonchura malabarica</i>	-	+

Table 2- Order and number of species in Koyali and Dumad pond

Sr. No.	Order	Number of birds species at different pond	
		Koyali pond	Dumad Pond
1.	Ciconiformes	5	3
2.	Podicipediformes	4	9
3.	Anseriformes	3	4
4.	Falconiformes	0	2
5.	Galliformes	0	2

6.	Gruiformes	0	4
7.	Pelicaniformes	1	0
8.	Charadriiformes	2	6
9.	Columbiformes	1	2
10.	Psittaciformes	1	3
11.	Apodiformes	0	1
12.	Coraciiformes	5	7
13.	Piciformes	0	1
14.	Passeriformes	12	29

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