



Preliminary observations on avifauna of the Jai Prakash Narayan Bird Sanctuary (Suraha Tal Lake), Ballia, Uttar Pradesh, India

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Suraha Tal Lake is the largest floodplain lake in Ballia District of eastern Uttar Pradesh. It is an open type oval 'U' shaped ox-bow lake in the floodplain of river Ganga, located 8km north of the district headquarters of Ballia. It is a perennial meander of the river Ganga with an area of 26km². During the monsoon season, it covers about 33.4km². It extends between 25°48'–25°52'N and 84°8'–84°13'E at an altitude of 166m. The lake circumference is about 33.4km (Image 1). The Government of Uttar Pradesh has notified an area of 34.4km² including the lake as a bird sanctuary by Gazette notification No. 1088(1)/14-3-19/89 Lucknow dated 24.03.1991. The sanctuary has been named "Jai

Prakash Narayan Bird Sanctuary" and it comprises both private and Gram Samaj lands in a number of small pockets where paddy is cultivated throughout the year. The lake is connected with the river Ganga through 32.6km long Katehar nullah. The lake is drained and filled through Katehar nullah according to the water level of the river Ganga, resulting in complete inundation during the monsoon months. It offers good habitat for a variety of flora and fauna. Birds are known to arrive frequently this lake due to the availability of nesting and feeding habitats. The lake has great recreational value and supports local agriculture and tourism and also other activities common in low lying areas such as irrigation and fisheries. Human interference and alteration in water levels of the wetlands are significantly responsible to recent decline in bird population. So far there is no detail information on the population status of water birds and the possible impact of human activities on wild birds population of this region.

Materials and methods: The checklist of the avifauna of Suraha Tal Lake was prepared by extensive field surveys between August 2002 and July 2004. Surveys were conducted by fishing boat inside the entire lake and in paddy fields, trees and villages situated around the lake. Surveys were conducted monthly in the mornings from 0800–1100 hr and in the evenings from 1500–1800 hr with the help of 8×40 Bushnell binoculars. Identification and records were maintained according to their status (resident, migrant and local migrant), season (summer, winter and throughout the year) and habitat (aquatic, trees and human habitation). Birds were identified with the help of books by King et al. (1975), Hancock (1984), Woodcock (1984), Ali & Ripley (1987), Manakadan & Pittie (2001), and Ali (2002).

Results and Discussion: A total of 91 species of birds representing 33 families and 13 orders were recorded. Of these, 62 species are resident, 24 migrant and 20 are local migrant (Table 1). Availability of food and suitable habitat facilitated resident and local migrant bird species to visit the lake throughout the year (Fig. 1). In the winter season maximum birds species were recorded while in summer season the record was minimum. Common Teal, Temminck's Stint, Pallas's Fishing Eagle, and Great Crested Grebe

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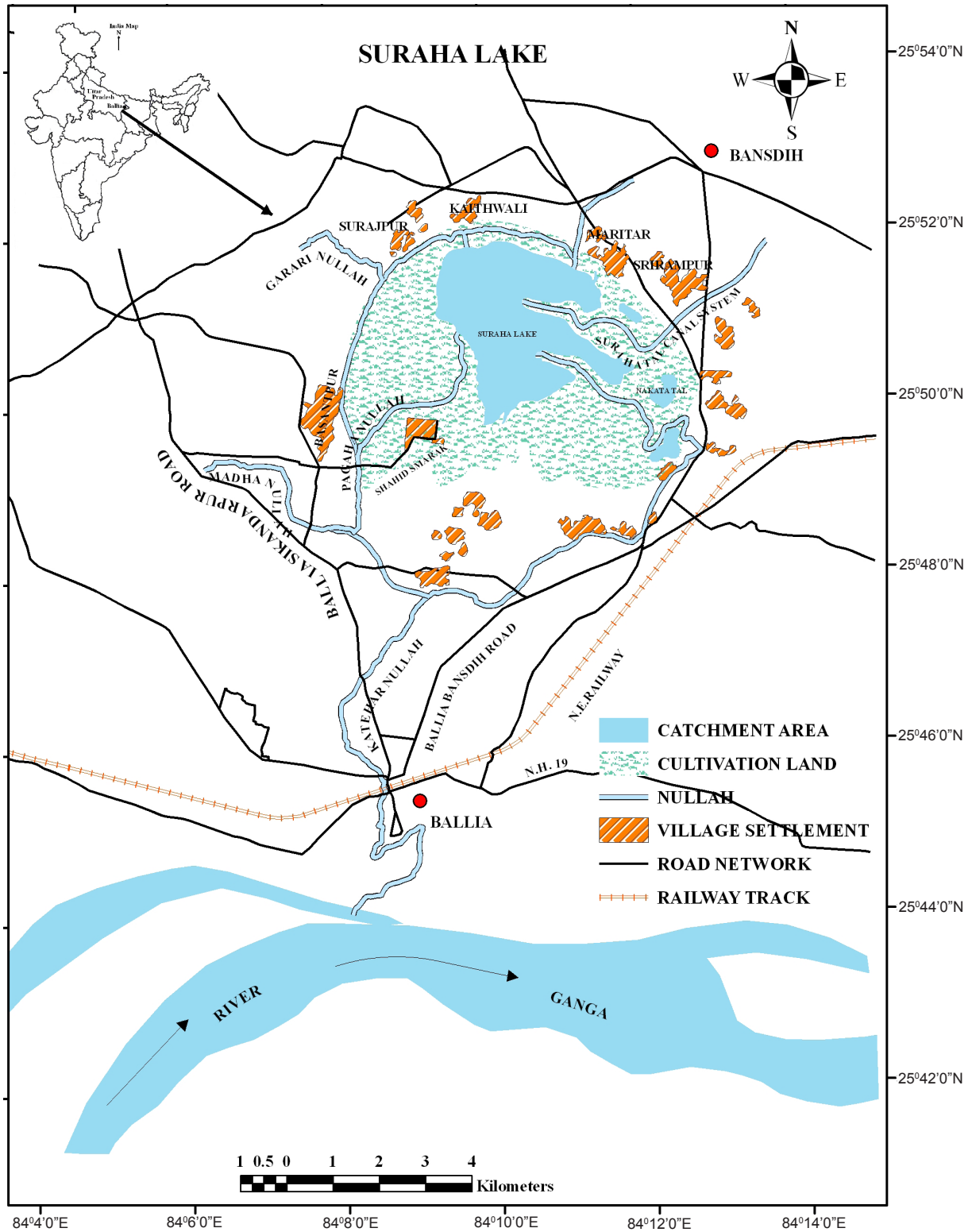


Image 1. Schematic map of Jai Prakash Narayan Bird Sanctuary (Suraha Tal Lake)

were recorded occasionally during the study.

The common resident birds were Grey Heron, Indian Pond Heron, Cattle Egret, Little Egret, Median Egret,

Great Cormorant, Indian Shag, Little Cormorant, Rose-ringed Parakeet, Greater Coucal, Indian Cuckoo, Indian Roller, Coppersmith Barbet, Brown-capped Pygmy

Table 1. Checklist of birds recorded from Suraha Tal Lake area

	Scientific name	Common name	Vernacular name	Status	Season	Habitation
	Ciconiformes Ardeidae					
1	<i>Ardea alba</i>	Large Egret	Bagula	R, LM	W	A
2	<i>Ardea cinerea</i>	Grey Heron	Khanjan	R	W	A
3	<i>Ardea purpurea</i>	Purple Heron	Khyra	R, LM	T	A
4	<i>Ardeola grayii</i>	Indian Pond Heron	Andha Bagula	R	T	A
5	<i>Bubulcus ibis</i>	Cattle Egret	Bagula	R	W	A
6	<i>Egretta garzetta</i>	Little Egret	Bagula	R	W	A
7	<i>Mesophoyx intermedia</i>	Median Egret	Bagula	R	W	A
	Threskiornithidae					
8	<i>Nycticorax nycticorax</i>	Night Heron	Manduk	R, LM	W	A
9	<i>Pseudibis papillosa</i>	Black Ibis	Kala Baz	LM	W	A
10	<i>Threskiornis melanocephalus</i>	White Ibis	Baz	R, LM	W	A
	Ciconiidae					
11	<i>Anastomus oscitans</i>	Open billed Stork	Ghonghil	R, LM	W	A
12	<i>Ciconia episcopus</i>	White-necked Stork	Lag Lag	R, LM	S	A
	Anseriformes Anatidae					
13	<i>Anas crecca</i> (Linne)	Common Teal	Jal Murgi	M	W	A
14	<i>Nettapus coromandelianus</i>	Cotton Teal	Girria	R, LM	WS	A
15	<i>Sarkidiornis melanotos</i>	Comb Duck	Nakta	R	W	A
	Falconiformes Accipitridae					
16	<i>Accipiter badius</i>	Indian Shikra	Shikra	R	T	T
17	<i>Calidris temminckii</i>	Temminck's Stint	Chhota Panlawa	M	W	A
18	<i>Charadrius dubius</i>	Little ringed Plover	Titir	M	T	A
19	<i>Elanus caeruleus</i>	Black winged Kite	Kapassi	R	W	A
20	<i>Haliaeetus leucoryphus</i>	Pallas's Fishing Eagle	Machhmmanga	M	W	A
21	<i>Pluvialis apricaria</i>	Golden plover	Batan	M	W	A
22	<i>Vanellus cinereus</i>	Grey headed Lapwig	Vuer chirae	M	W	A
	Charadriiformes Charadriidae					
23	<i>Tringa glareola</i>	Spotted Sandpiper	Chupka	M	W	A
24	<i>Tringa hypoleucos</i>	Common Sandpiper	Merwa	M	W	A
25	<i>Tringa nebularia</i>	Common Greenshank	Tintima	M	W	A
26	<i>Tringa totanus</i>	Common Redshank	Chhota Batan	M	W	A
	Recurvirostridae					
27	<i>Glareola lactea</i>	Pratincole or Swallow Plover	Babuibattan	M	WS	T
28	<i>Himantopus himantopus</i>	Black winged Stilt	Gozpaun	M	T	A
	Laridae					
29	<i>Larus ridibundus</i>	Black headed gull	Dhomra	M	W	A
30	<i>Larus brunnicephalus</i>	Brown headed gull	Dhomra	M	W	A
31	<i>Sterna aurantia</i>	River tern	Tehri	R	T	A
	Jacanidae					
32	<i>Hydrophasianus chirurgus</i>	Pheasant-tailed Jacana	Piho	R, LM	T	A
33	<i>Metopidius indicus</i>	Bronze-winged Jacana	Kattoi	R	T	A

	Scientific name	Common name	Vernacular name	Status	Season	Habitation
	Columbiformes Columbidae					
34	<i>Columba livia</i>	Blue Rock Pigeon	Kabutar	R	T	T
35	<i>Streptopelia decaocto</i>	Eurasian Collared-dove	Panduk	R, LM	T	T
36	<i>Streptopelia chinensis</i>	Spotted Dove	Panduk	R, LM	T	T
37	<i>Treron phoenicoptera</i>	Yellow-legged Green Pigeon	Harial	LM	W	T
	Pelecaniformes Phalacrocoracidae					
38	<i>Anhinga melanogaster</i>	Darter or Snake Bird	Pandubbi	M	W	T
39	<i>Phalacrocorax carbo</i>	Great Cormorant	Pankawwa	R	W	T
40	<i>Phalacrocorax fuscicollis</i>	Indian Shag	Kaul	R	W	T
41	<i>Phalacrocorax niger</i>	Little Cormorant	Pankawwa	R	W	T
	Psittaciformes Psittacidae					
42	<i>Psittacula krameri</i>	Rose-ringed Parakeet	Tota	R	T	T
	Cuculiformes Cuculidae					
43	<i>Centropus sinensis</i>	Greater Coucal	Mohoka	R	W	T
44	<i>Cuculus micropterus</i>	Indian Cuckoo	Papiha	R	W	T
45	<i>Eudynamis scolopacea</i>	Asian Koel	Koel	R, LM	W	T
	Apodiformes Apodidae					
46	<i>Apus affinis</i> (Gray)	House Swift	Babila	R	W	A
47	<i>Cypsiurus balasiensis</i>	Asian Palm Swift	Telchatta	R	T	A
	Coraciiformes Alcedinidae					
48	<i>Alcedo atthis</i>	Small Blue Kingfisher	Chhota Kilkila	R	T	A
49	<i>Ceryle rudis</i>	Lesser Pied Kingfisher	Kilkila	R	T	A
50	<i>Halcyon smyrnensis</i>	White-breasted Kingfisher	Kourilla	R	T	T
51	<i>Pelargopsis capensis</i>	Stork-billed Kingfisher	Badami Kourilla	R	T	T
	Meropidae					
52	<i>Merops orientalis</i>	Small Bee-eater	Patringia	R	T	T
53	<i>Merops philippinus</i>	Blue-tailed Bee-eater	Bada Patringia	R, LM	T	T
	Coraciidae					
54	<i>Coracias benghalensis</i>	Indian Roller	Nilkanth	R	T	T
	Pioformes Capitonidae					
55	<i>Megalaima haemacephala</i>	Coppersmith Barbet	Chotta Basanth	R	S	T
	Picidae				T	
56	<i>Dendrocopos nanus</i>	Brown-capped Pygmy Woodpecker	Kathphorwa	R	W	T
	Podicipediformes Podicipedidae					
57	<i>Podiceps cristatus</i>	Great Crested Grebe	Pandubbi	M	W	A
58	<i>Tachybaptus ruficollis</i>	Little Grebe	Pandubbi	M	W	A
	Passeriformes Alaudidae					
59	<i>Alauda gulgula</i>	Eastern Skylark	Bharat	R	W	A
	Hirundinidae					
60	<i>Hirundo smithii</i>	Wire-tailed Swallow	Leishra	R, LM	W	T
61	<i>Hirundo rustica</i>	Common Swallow	Ababeel	M	W	T

	Scientific name	Common name	Vernacular name	Status	Season	Habitation
	Laniidae					
62	<i>Lanius schach</i>	Rufous backed Shrike	Kajala	M, LM	W	T
	Campephagidae					T
63	<i>Tephrodornis pondicerianus</i>	Common Woodshrike	Tartituiya	R	T	T
	Artamidae					
64	<i>Artamus fuscus</i>	Ashy Woodswallow	Ababeel	LM	T	T
	Stumidae					
65	<i>Acridotheres fuscus</i>	Jungle Myna	Junglee Myna	R, LM	T	T
66	<i>Acridotheres ginginianus</i>	Bank Myna	Myna	LM	T	T
67	<i>Acridotheres tristis</i>	Common Myna	Myna	R	T	T
	Corvidae					
68	<i>Corvus splendens</i>	House Crow	Deshi Kawwa	R	T	T
69	<i>Corvus macrorhynchos</i>	Jungle Crow	Dom Kawwa	R	T	T
	Pycnonotidae					
70	<i>Pycnonotus cafer</i>	Red-vented Bulbul	Bulbul	R	T	T
	Muscicapidae					
71	<i>Cisticola juncidis</i>	Zitting Cisticola	Ghas Ki Phutki	R	T	A
72	<i>Copsychus saularis</i>	Oriental Magpie Robin	Daiyar	R	T	T
73	<i>Erithacus svecicus</i>	Bluethroat	Nilkanth	M	W	A
74	<i>Orthotomus sutorius</i>	Common Tailorbird	Phutki	R	T	T
75	<i>Rhipidura albicollis</i>	White-throated Fantail	Chakdil	R	T	T
76	<i>Saxicoloides fulicata</i>	Indian Robin	Kalchhum	R	T	H
77	<i>Turdoides caudatus</i>	Common Babbler	Satbhai	R	T	T
78	<i>Turdoides striatus</i>	Jungle Babbler	Satbhai	R	T	T
	Sittidae					
79	<i>Sitta castanea</i>	Chestnut-bellied Nuthatch	Kath phorwa	R	T	T
	Motacillidae					
80	<i>Anthus rufulus</i>	Paddyfield Pipit	Charchari	R	T	A
81	<i>Motacilla alba</i>	White Wagtail	Dhoban	M	W	A
82	<i>Motacilla flava</i>	Yellow Wagtail	Pan Pilakh	M	W	A
83	<i>Motacilla maderaspatensis</i>	Large Pied Wagtail	Khanjan	R	W	A
84	<i>Motacilla citreola</i>	Yellow-headed Wagtail	Pani Ka Pilkya	M	W	A
85	<i>Motacilla cinerea</i>	Grey Wagtail	Pani Ka Pilkya	M	W	A
	Nectanidae					
86	<i>Nectarinia asiatica</i>	Purple Sunbird	Shakar khora	R	T	T
	Ploceidae					
87	<i>Eremopterix grisea</i>	Ashy-crowned Finch-Lark	Diyora	R, LM	T	A
88	<i>Ploceus philippinus</i>	Baya Weaver	Baya	R, LM	T	T
89	<i>Passer domesticus</i>	House Sparrow	Goraiya	R	T	H
90	<i>Petronia xanthocollis</i>	Yellow-throated Sparrow	Jangalee Goraiya	R	T	A
91	<i>Ploceus manyar</i>	Streaked Weaver	Bamani Baya	R	T	A

Status: R - Resident; M - Migrant; LM - Local Migrant

Season: S - Summer; W - Winter; T - Throughout the year

Habitat: A - Aquatic (swampy, grass, and paddy fields); T - Trees (small and large); H - Human habitations

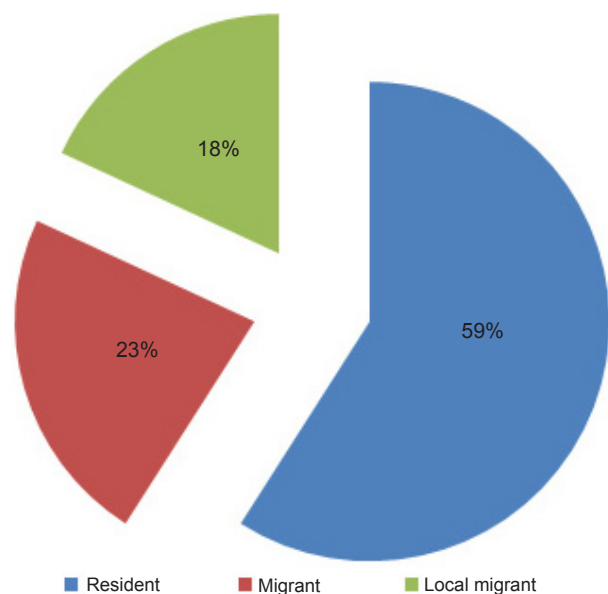


Figure 1. Percentage composition of avifauna of Suraha Tal Lake

Woodpecker, Common Myna, House Crow, Jungle Crow, Red-vented Bulbul, Jungle Babbler, Chestnut-bellied Nuthatch and House Sparrow (Table 1).

The local migrant birds encountered were Large Egret, Purple Heron, Night Heron, Black Ibis, White Ibis, Baya Weaver, White-necked Stork, Cotton Teal, Pheasant-tailed Jacana, Eurasian Collared-dove, Spotted Dove, Yellow-legged Green Pigeon, Asian Koel, Blue-tailed Bee-eater, Wire-tailed Swallow, Rufous backed Shrike, Jungle Myna, Bank Myna, Ashy-crowned Finch-Lark and Open billed Stork (Table 1). The migratory birds mostly visited the area during winter season, were Common Teal, Little Ringed Plover, Golden Plover, Spotted Sandpiper and Darter are very common in appearance and also high in density.

The number of migratory birds has decreased over the years with increase in indiscriminate poaching. Another serious problem is the use of pesticides in paddy fields around the lake. A number of bird hunters

kill the birds illegally either by trapping or poisoning. Poachers are adopting very special methods for birds hunting. They insert insecticides (Furadan) in the abdominal cavity of insects viz. (*Forficula auricularia*) and spread them near the vicinity of the lake and on the floating leaves of aquatic plants. Birds consume these poisoned insects, become lethargic and ultimately unconscious, and becoming easy prey to the poachers. The poachers revive them putting water drops in the bird's mouth. Then the live birds are furtively sold by them. Although the Forest Department has put up a signboard against the hunting of birds in these areas, they are still being hunted with the connivance of some local residents. Awareness programmes should be organized by local people, Government organizations and NGOs against the birds hunting and use of harmful pesticides in the agricultural fields. Human interference, eco-tourism and encroachment of wetlands are the main reasons for the decline in avifauna in terms of density as well as diversity.

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