



## Checklist of Birds in and Around Ansupa Lake, Odisha, India

Rudra Narayan Pradhan<sup>1\*</sup>, Udit Pratap Das<sup>2</sup>, Rajesh Kumar Mohapatra<sup>3</sup> and Arun Kumar Mishra<sup>4</sup>

<sup>1</sup>RCCF office, Angul, Odisha, INDIA

<sup>2</sup>BJB Autonomous College, Bhubaneswar, Odisha, INDIA

<sup>3</sup>Utkal University, Vani vihar, Bhubaneswar, Odisha, INDIA

<sup>4</sup>Athagarh Division, Cuttack, Odisha, INDIA

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### Abstract

*The present study recorded 61 species of birds belonging to 27 family in a preliminary assessment of avifauna diversity in and around Ansupa lake, Odisha, India, between June 2011 and May 2013. The findings of the present study underline the importance of Ansupa lake as a preferred habitat for birds and provided baseline data about avifauna diversity of the lake to orient future research and management policies.*

**Keywords:** Birds, avifauna diversity, habitat.

### Introduction

Birds play an important role in the ecosystem as a part of food web, as potential pollinators and bio-indicators<sup>1,2</sup>. Wetlands are important bird habitats and birds use them for feeding, roosting, nesting and rearing young<sup>2,3,4</sup>. In the state Odisha of India there are two wetlands of international importance (Ramsar sites), e.g. Chilika lagoon and Bhitarkanika wildlife sanctuary. Besides these, there are other wetlands of National importance e.g. Kanjia lake at Nandankanan wildlife sanctuary at Khurda district and of regional importance, e.g. Ansupa lake at Cuttack district. No systematic documentation of the avifaunal diversity of Ansupa lake is available despite of its importance as a nesting and migration site for many bird species. The present study enlists the birds sighted in and around Ansupa lake, Odisha, India during study period.

**Study Site:** Ansupa lake, is the largest freshwater lake in the state Odisha. Its typical lacustrine eco-system spreading over an area of 382 acres is situated in Cuttack district of Odisha within 20 26' 28.43" to 20 28' 34.44" Latitude and 85 35' 56.74" to 85 36' 30.01" Longitude. The surrounding region is broadly undulating plain with isolated hill range such as Saranda (124 m) on the west, Bishnupur (65 m) on the east Dhangarh (160m) on the north and Betla pahara (105 m) on the northwest and dissected valleys. The lake is connected with Mahanadi in its southern side with a channel known as Kabula nala through which flood water of Mahanadi enters the lake. The length of Ansupa lake is about three kilometers and breadth varies from 250 m to 500 m. The temperature of the area ranges between 19-37°C during the study period. The south west monsoon brings most of the rain to the area between June and October. The major portion of the lake remains submerged throughout the year. During rainy season the water level raises up to 1-2.5

meters. Systematic checklist of birds of the Ansupa lake is lacking. Therefore the present study intended to enlist the avifauna found in and around this wetland.

### Methodology

Avifauna of the water bodies of Ansupa lake (figure 1) and adjacent areas within 0.5 kilometre periphery were surveyed 29 times between on June, 2011 and May, 2013. Observations were carried out on fixed path using line transect method in early morning, i.e., 6:30am to 9:30am as counting birds should be carried out at the time of highest bird activity<sup>5,6</sup>. Birds were sighted by using binoculars and identification was done by using field guides<sup>7-10</sup>.

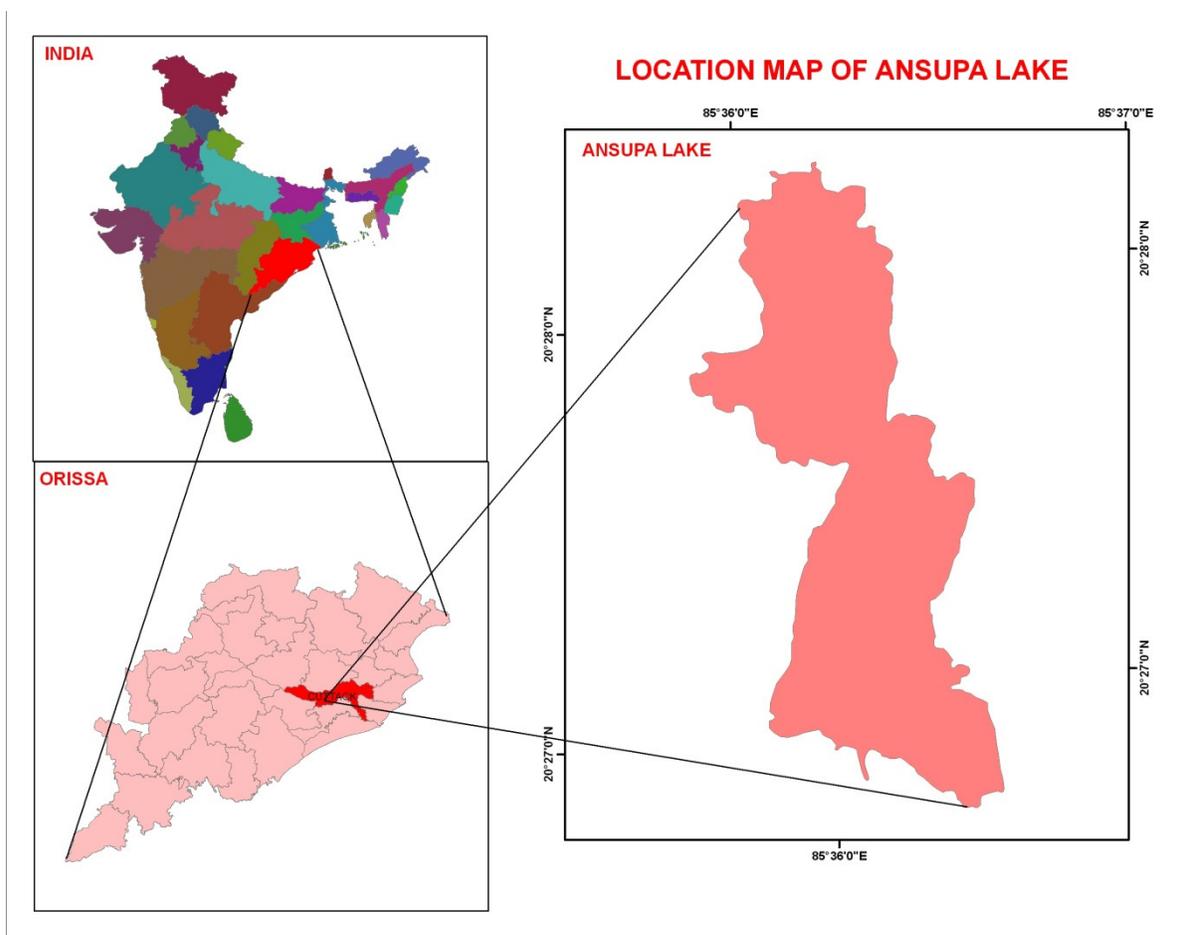
### Results and Discussion

During the study period 61 species of birds, belonging to 27 families, were recorded. These birds include both wetland dependant birds and terrestrial birds. Family Ardeidae topped the list with eight bird species. A list of species of birds observed during the study is presented in Table 1. Common English names and scientific names were presented in the checklist following Ali (2002) and classification of family following Grimmett *et al.*. Among the 61 recorded species, 50 species of birds come under the protection category as per the Indian Wildlife (Protection) Act 1972. Except the species listed under family Charadriidae, Laridae, Accipitridae, Falconidae, Meropidae and Corvidae in the Table-1 all other species are protected as Schedule-IV species under Indian Wildlife (Protection) Act, 1972. The findings of the present study underline the importance of wetlands as a preferred habitat for birds.

**Table-1**  
**Checklist of birds of Ansupa lake, Cuttack district, Odisha, India**

Family	Common name	Scientific name
Anatidae	Cotton pygmy goose	<i>Nettapus coromandelianus</i>
	Lesser whistling duck	<i>Dendrocygna javanica</i>
	Northern shoveller	<i>Anas clypeata</i>
	Red crested pochard	<i>Rhodonessa rufina</i>
	Brahminy shelduck	<i>Todorna ferruginea</i>
Ardeidae	Black-crowned night heron	<i>Nycticorax nycticorax</i>
	Black bittern	<i>Dupetor flavicollis</i>
	Cattle egret	<i>Bubulcus ibis</i>
	Crestnut bittern	<i>Ixobrychus cinnamomeus</i>
	Grey heron	<i>Ardea cinerea</i>
	Median egret	<i>Mesophoyx intermedia</i>
	Little egret	<i>Egretta garzetta</i>
	Indian pond heron	<i>Ardeola grayii</i>
Ciconiidae	Purple heron	<i>Ardea purpurea</i>
	Asian open-bill stork	<i>Anastomus oscitans</i>
Charadriidae	Painted stork	<i>Mycteria leucocephala</i>
	Red wattled Lapwing	<i>Vanellus indicus</i>
Alcedinidae	Little ringed plover	<i>Charadrius dubius</i>
	Small blue kingfisher	<i>Alcedo atthis</i>
	Lesser pied kingfisher	<i>Ceryle rudis</i>
	Stork-billed kingfisher	<i>Halcyon capensis</i>
Jacanidae	White-breasted kingfisher	<i>Halcyon smyrnensis</i>
	Pheasant-tailed jacana	<i>Hydrophasianus Chirurgus</i>
Rallidae	Bronze-winged jacana	<i>Metopidius indicus</i>
	Purple moorhen	<i>Porphyrio porphyrio</i>
	Common moorhen	<i>Gallinula chloropus</i>
	White-breasted waterhen	<i>Amaurornis phoenicurus</i>
Phalacrocoracidae	Common coot	<i>Fulica atra</i>
	Little cormorant	<i>Phalacrocorax niger</i>
	Indian shag	<i>Phalacrocorax fuscicollis</i>
Recurvirostridae	Great cormorant	<i>Phalacrocorax carbo</i>
Scolopacidae	Black-winged stilt	<i>Himantopus himantopus</i>
Estrildidae	Common sand piper	<i>Actitis hypoleucos</i>
	Red munia	<i>Amandava amandava</i>
Laridae	White rumped munia	<i>Lonchura striata</i>
	River tern	<i>Sterna aurantia</i>
Accipitridae	Black kite	<i>Milvus migrans</i>
	Western marsh harrier	<i>Circus aeruginosus</i>
	Black shouldered kite	<i>Elanus caeruleus</i>
Falconidae	Red-headed falcon	<i>Falco chicquera</i>
Phasianidae	Common quail	<i>Coturnix coturnix</i>
Dicruridae	Black drongo	<i>Dicrurus macrocercus</i>
Nectariniidae	Purple sunbird	<i>Nectarinia asiatica</i>
	Purple rumped sunbird	<i>Nectarinia zeylonica</i>
Sturnidae	Common myna	<i>Acridotheres tristis</i>
	Asian Pied starling	<i>Sturnus contra</i>
	Brahminy starling	<i>Sturnus pagodarum</i>
Muscicapidae	Oriental magpie robin	<i>Copsychus saularis</i>
Timaliidae	Jungle babbler	<i>Turdoides striatus</i>
Meropidae	Small bee-eater	<i>Merops orientalis</i>
	Blue tailed bee-eater	<i>Merops philippinus</i>

	Chestnut headed bee-eater	<i>Merops leschenaulti</i>
Pycnonotidae	Red whiskered bulbul	<i>Pycnonotus jocosus</i>
	Red vented bulbul	<i>Pycnonotus cafer</i>
Strigidae	Spotteed owlet	<i>Athene brama</i>
Ramphastidae	Brown-headed barbet	<i>Megalaima zeylanica</i>
Columbidae	Spotted dove	<i>Streptopelia chinensis</i>
	Little brown dove	<i>Streptopelia senegalensis</i>
Corvidae	Jungle crow	<i>Corvus macrorhynchos</i>
Motacillidae	Paddy field pipit	<i>Anthus rufulus</i>



**Figure-1**  
 Location map of study area, Ansupu lake, Cuttack, Odisha, India

**Discussion:** This study provides a baseline data of the avian diversity of Ansupu lake, therefore emphasizing on better management of the habitat and conservation of its rich avifaunal diversity. Further comprehensive studies on species richness and habitat preferences of species are needed for better orientation of management policies.

Habitat degradation is today a major threat for avian species. The major threats faced by these birds were analyzed to be both environmental and anthropogenic. Environmental degradation like siltation, closure of inflow and outflow mechanism from Mahanadi into Ansupu reduced water spread area creating

highly eutrophic condition of water and weed infestation. Anthropogenic activities include fishing, cattle grazing, fire wood collection, disturbances and pollution through tourism activities. Due to increased tourist activities, the fauna of the area faces stress because of intrusion, vehicular exhaust, lights, littering and noise.

Management of Ansupu lake is being done by Chilika Development Authority (CDA) since November, 2009. Though some of the renovation initiatives of Ansupu by CDA and barren hill plantation initiative by Forest Department, Government of Odisha have taken place in the study area, much activities is

required to be done in recent future. To improve with the present state of lake, there is an acute need to recover the inflow and outflow mechanism between the Mahanadi and Ansupa.

## Conclusion

Present study illustrates the importance of the area as a good habitat for avifauna. Sixty one species of birds, belonging to twenty seven families, were recorded during the study. Control of habitat destruction, exploitation of its wilderness, human interference and pollution by tourism can be helpful in conservation of these winged beauties. This requires planned management of eco tourism activity and maintenance of the Ansupa lake with an aim of conservation its native fauna.

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