

A note on the avian diversity of Satajaan Wetland, Assam

Inland wetlands are pristine water bodies inhabiting diverse species of flora and fauna. These wetlands act like reservoirs with a capacity to hold the flooded water (Acreman & Holden 2013). Wetlands also play a crucial role in groundwater recharge (Min et al. 2010), with its vegetation having the potential of bioremediation (Bhatia & Goyal 2013).

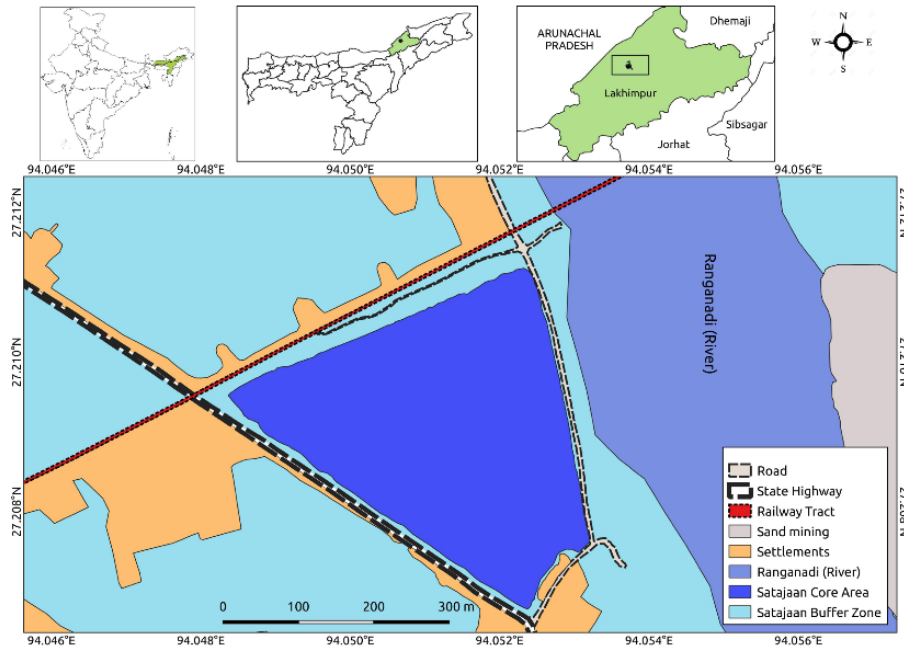
Every year, numerous species of waterfowl migrate from across the globe and most of them are accommodated in these wetlands. Satajaan, one such wetland situated in the north-Lakhimpur District of Assam, India, is at a distance of 8 km from Lakhimpur township. This wetland has remained under-research since its formation and was selected for the study of avian diversity. It is situated aside from the river Ranganadi covering an area of 39 acres. According to (Gogoi et al. 2019), the wetland is covered by rich vegetation with approximately 262 species of vascular plants. The climate of the area is mostly humid with temperatures ranging 7–31 °C (NWAA 2010). The wetland which is claimed to have got created by the earthquake of 1950, is bifurcated by the railway crossing into two halves.

One segment of the wetland is enriched with water, aquatic and semi-aquatic vegetation, whereas, the other section is poorly managed with very little scope for accommodating birds. The swamp also resides adjacent to a

roadway that traverses across the plains to meet the foothills of Arunachal Pradesh. We pursued a survey of this wetland on the 22 December 2019 from 0600–1400 h and 10 January 2021 from 0700–1200 h to record the diversity of birds visiting the study site in winter.

A survey was conducted by a group of five birders. A total of 71 and 68 species were recorded during the first and second surveys respectively. Around 87 species were recorded cumulatively from both surveys (Table 1). Thirty-four winter migratory species were observed of which eight were specifically waterfowls. Some of the local non-migratory water birds such as White-breasted Waterhen *Amaurornis phoenicurus*, Bronze-winged Jacana *Metopidius indicus*, Eurasian Moorhen *Gallinula chloropus*, and Grey-headed Swamphen *Porphyrio poliocephalus* were also recorded and are suspected to be present perennially.

In addition to the resident birds, migratory terrestrial birds such as Tickell's Leaf Warbler *Phylloscopus affinis*, Pallas's Grasshopper Warbler *Locustella certhiola*, Black-faced Bunting *Emberiza spodocephala*, and aquatic birds such as Gadwall *Mareca strepera* & Ferruginous Duck *Aythya nyroca* were also recorded. Lesser Whistling-Duck *Dendrocygna javanica* was the most abundant species present with an



Map of Satajaan Wetland, northern Lakhimpur, Assam.

observation count of 1,250.

We also had a focused group discussion with the local community members residing around Satajaan which provided us insights to understand the inter-dependencies between the community and the wetland. The communities have been protecting this primeval water body for decades now with the help of local non-governmental organizations. However, currently, the health of this wetland is challenged by several anthropogenic activities. Yearly winter picnics accompanied by plastic littering, loud music, chopping down of plants for fire and fodder, and cattle grazing are some of the primary disturbances to the avifauna of this wetland. Additionally, sand mining on the adjacent river and high-tension wire over the wetland also impose a threat.

We recommend frequent documentation across different seasons to understand the temporal diversity of avifauna in the wetland. Along with birds, we also suggest the documentation of herpetofauna, the findings of which might interest researchers across the globe. Although large water bodies from the state such as Deepor Beel and Maguri Beel are well known for species diversity and eco-cultural interaction, smaller patches of swamps like Satajaan are usually overlooked.

These small-scaled wetlands aren't trivial and play important role in accommodating several species of flora and fauna, as well as in providing resources to the communities dependent on them. Thus, conservation efforts must be encouraged from a policy level, supported by a scientific study from the experts.

Table 1: Checklist of birds recorded in Satajaan Wetland from the two surveys (December 2019 and January 2021).

Common Name	Scientific Name	Migratory Status	IUCN Status
Ashy Woodswallow	<i>Artamus fuscus</i>	R	LC
Asian Barred Owlet	<i>Glaucidium cuculoides</i>	R	LC
Asian Openbill	<i>Anastomus oscitans</i>	R	LC
Asian Palm-Swift	<i>Cypsiurus balasiensis</i>	R	LC
Asian Pied Starling (Pied Myna)	<i>Gracupica contra</i>	R	LC
Bar-headed Goose	<i>Anser indicus</i>	WM	LC
Barn Swallow	<i>Hirundo rustica</i>	R / WM	LC
Baya Weaver	<i>Ploceus philippinus</i>	R	LC
Black Drongo	<i>Dicrurus macrocercus</i>	R	LC
Black Kite (Black-eared)	<i>Milvus migrans (lineatus/formosanus)</i>	WM	LC
Black Kite (Black)	<i>Milvus migrans migrans</i>	R	LC
Black-crowned Night-Heron	<i>Nycticorax nycticorax</i>	R	LC
Black-faced Bunting	<i>Emberiza spodocephala</i>	WM	LC
Black-hooded Oriole	<i>Oriolus xanthornus</i>	R	LC
Blue-throated Barbet	<i>Psilopogon asiaticus</i>	R	LC
Blyth's Reed Warbler	<i>Acrocephalus dumetorum</i>	WM	LC
Bronze-winged Jacana	<i>Metopidius indicus</i>	R	LC
Brown Shrike	<i>Lanius cristatus</i>	WM	LC
Cattle Egret	<i>Bubulcus ibis</i>	R	LC
Chestnut-tailed Starling	<i>Sturnia malabarica</i>	R	LC
Cinereous Tit	<i>Parus cinereus</i>	R	LC
Cinnamon Bittern	<i>Ixobrychus cinnamomeus</i>	R	LC
Citrine Wagtail	<i>Motacilla citreola</i>	WM	LC
Clamorous Reed Warbler (Indian Great Reed Warbler)	<i>Acrocephalus stentoreus</i>	WM	LC
Common Greenshank	<i>Tringa nebularia</i>	WM	LC
Common Iora	<i>Aegithina tiphia</i>	R	LC
Common Myna	<i>Acridotheres tristis</i>	R	LC
Common Sandpiper	<i>Actitis hypoleucos</i>	WM	LC
Common Tailorbird	<i>Orthotomus sutorius</i>	R	LC
Dusky Warbler	<i>Phylloscopus fuscatus</i>	WM	LC
Eurasian Coot	<i>Fulica atra</i>	WM	LC
Eurasian Moorhen	<i>Gallinula chloropus</i>	R	LC
Eurasian Tree Sparrow	<i>Passer montanus</i>	R	LC
Ferruginous Duck (Ferruginous Pochard)	<i>Aythya nyroca</i>	WM	LC
Fulvous Whistling-Duck	<i>Dendrocygna bicolor</i>	WM	LC
Gadwall	<i>Mareca strepera</i>	WM	LC

Common Name	Scientific Name	Migratory Status	IUCN Status
Great Myna	<i>Acridotheres grandis</i>	R	LC
Green-winged Teal (Common Teal)	<i>Anas crecca</i>	WM	LC
Grey-backed Shrike	<i>Lanius tephronotus</i>	WM	LC
Grey-headed Swamphen (Purple Swamphen)	<i>Porphyrio poliocephalus</i>	R	LC
Grey-sided Bush Warbler	<i>Cettia brunnifrons</i>	WM	LC
House Crow	<i>Corvus splendens</i>	R	LC
House Swift (Nepal House Swift)	<i>Apus nipalensis</i>	R	LC
Indian Pond-Heron	<i>Ardeola grayii</i>	R	LC
Indian Spot-billed Duck	<i>Anas poecilorhyncha</i>	R	LC
Intermediate Egret	<i>Ardea intermedia</i>	R	LC
Jungle Myna	<i>Acridotheres fuscus</i>	R	LC
Large-billed Crow	<i>Corvus macrorhynchos</i>	R	LC
Lesser Adjutant	<i>Leptoptilos javanicus</i>	R	NT
Lesser Coucal	<i>Centropus bengalensis</i>	R	LC
Lesser Whistling-Duck	<i>Dendrocygna javanica</i>	R	LC
Little Cormorant	<i>Microcarbo niger</i>	R	LC
Little Egret	<i>Egretta garzetta</i>	R	LC
Little Ringed Plover	<i>Charadrius dubius</i>	R	LC
Long-tailed Shrike	<i>Lanius schach</i>	WM	LC
Northern Shoveler	<i>Spatula clypeata</i>	WM	LC
Olive-backed Pipit	<i>Anthus hodgsoni</i>	WM	LC
Oriental Darter	<i>Anhinga melanogaster</i>	R	LC
Oriental Honey-buzzard (Crested Honey Buzzard)	<i>Pernis ptilorhynchus</i>	R	LC
Oriental Magpie-Robin	<i>Copsychus saularis</i>	R	LC
Osprey	<i>Pandion haliaetus</i>	WM	LC
Paddyfield Pipit	<i>Anthus rufulus</i>	R	LC
Pallas's Grasshopper-Warbler	<i>Locustella certhiola</i>	WM	LC
Peregrine Falcon	<i>Falco peregrinus</i>	WM	LC
Purple Heron	<i>Ardea purpurea</i>	R	LC
Red-vented Bulbul	<i>Pycnonotus cafer</i>	R	LC
Red-wattled Lapwing	<i>Vanellus indicus</i>	R	LC
Rock Pigeon (Feral Pigeon)	<i>Columba livia</i>	R	LC
Rosy Pipit	<i>Anthus roseatus</i>	WM	LC
Rufous Treepie	<i>Dendrocitta vagabunda</i>	R	LC
Scaly-breasted Munia (Spotted Munia)	<i>Lonchura punctulata</i>	R	LC
Shikra	<i>Accipiter badius</i>	R	LC
Siberian Rubythroat	<i>Calliope calliope</i>	WM	LC

Common Name	Scientific Name	Migratory Status	IUCN Status
Siberian Stonechat (Common Stonechat)	<i>Saxicola maurus</i>	WM	LC
Smoky Warbler	<i>Phylloscopus fuligiventer</i>	WM	LC
Spotted Bush Warbler	<i>Locustella thoracica</i>	WM	LC
Spotted Dove	<i>Streptopelia chinensis</i>	R	LC
Stork-billed Kingfisher	<i>Pelargopsis capensis</i>	R	LC
Striated Grassbird	<i>Megalurus palustris</i>	R	LC
Striated Heron (Little Heron)	<i>Butorides striata</i>	R	LC
Taiga Flycatcher (Red-throated Flycatcher)	<i>Ficedula albicilla</i>	WM	LC
Tickell's Leaf Warbler	<i>Phylloscopus affinis</i>	WM	LC
Tufted Duck	<i>Aythya fuligula</i>	WM	LC
White Wagtail (Hodgson's)	<i>Motacilla alba alboides</i>	WM	LC
White Wagtail (Chinese)	<i>Motacilla alba leucopsis</i>	WM	LC
White-breasted Waterhen	<i>Amaurornis phoenicurus</i>	R	LC
White-throated Kingfisher	<i>Halcyon smyrnensis</i>	R	LC

*Where R = Resident, WM = Winter Migrant, LC = Least Concern, NT = Near Threatened

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