

Record of Some Unusual Avian Species from the Wetlands of Urbanizing Haryana, India

Haryana, known for its agricultural lands with ponds, lakes and other water logged sites, is counted as one of the key habitats for wetland dependent resident and migratory birds. However, being situated near Delhi, the capital of the country, this state is rapidly urbanizing, where only 3.9% of the total area of the state is covered by forest (Haryana Forest Department, 2015). Among the urbanizing districts of Haryana, Gurugram and Jhajjar are two such districts that have witnessed the maximum growth of urbanization in the past decades and now have become two important hubs for many industries. In spite of these massive anthropogenic changes, these two districts host thousands of migratory birds in winter from Central Asia and Western Palearctic region, as the area falls in the Central Asian Migratory Flyway.

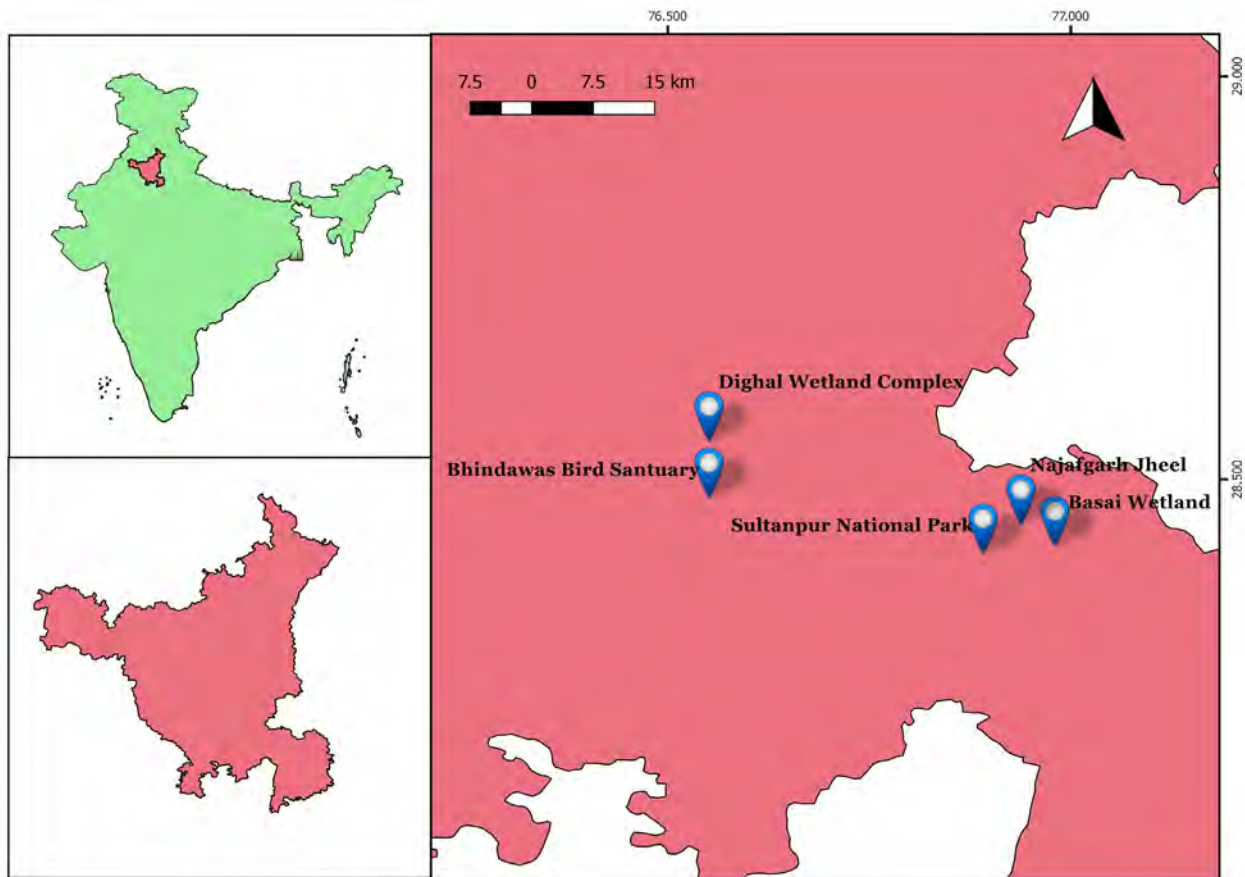
The present study was conducted in five wetlands *viz.* Sultanpur National Park, Basai wetland, Najafgarh Jheel (a Hindi word for wetland, water body or lake), Bhindawas Bird Sanctuary and Dighal wetland complex of Gurugram and Jhajjar district during a period of two years (October 2014 - December 2016). This article aims to report the unusual sightings of some globally important species from these wetlands which include two protected areas and three non-protected areas. Among these wetlands, Sultanpur National Park, Basai wetland and Najafgarh Jheel are qualified as Important Bird Areas (IBAs) (Islam & Rahmani, 2005).

Site 1: Sultanpur National Park

Sultanpur National Park (28.463°N & 76.891°E) is situated in a predominantly agricultural landscape in Gurugram district occupying an area of 1.43 km². The core area of the Park is the Sultanpur Jheel, which is a seasonal wetland with irregular margins and fluctuating water level throughout the year. Before the urbanisation and constructions of drainage system in the areas around the Park, it remained waterlogged and attracted a large number of birds. However at present the lake is artificially revived using pumped water from the Yamuna River.

Site 2: Basai Wetland

Basai Wetland (28.472°N & 76.980°E) is located in the Basai village of Gurugram



Study Area

district. It is a non-protected wetland, facing threat from the unsustainable development and urbanization. Till the early 1990s, the lake was spread over an area of 1.01 km², vibrant with biodiversity; but large-scale urbanization led the wetland to the verge of extinction by leaving only 0.4 km² area of the wetland (Banerjee et al. 2017).

Site 3: Najafgarh Jheel

The Najafgarh Jheel (28.499°N & 76.938°E) is a part of the proposed Najafgarh Drain Bird Sanctuary, which was located on the basin of the Najafgarh drain. The part of the basin in Gurugram district is surrounded by agricultural lands and hosts a vast population of resident and migratory birds. The water body of this area is one of the most polluted water bodies of the capital of India due to the direct inflow of untreated sewage water from surrounding areas. However, many small wading birds were found in large numbers in this shallow saline water body.

Site 4: Bhindawas Bird Sanctuary

Bhindawas Bird Sanctuary (28.532°N & 76.551°E) of Jhajjar district, is spread over an area of 4.12 km², with a periphery of 12 km. It is a man-made perennial water body

constructed to store the excess water of Jawaharlal Nehru Canal from river Yamuna, through an escape channel at the time of power failure of lift irrigation. Being surrounded by agricultural fields the wetland hosts a vast diversity of birds during the winter months.

Site 5: Dighal Wetland Complex

The wetland complex of Dighal village (28.602°N & 76.628°E) is comprised of two ponds, a water storage tank and a waterlogged agricultural field spread on the both sides of the Jhajjar-Rohtak Expressway. In spite of the increase in transportation and nearby road constructions it holds a large population of birds during the winter months.

During the present study, birds were recorded fortnightly in these five wetlands. Observations were made using Nikon binoculars (10×50X). Bird identification in the field and their taxonomic nomenclature was done by following Grimmett et al. (2011). A total 270 species of birds were recorded from this area during the study period. This includes many species, which are rare and uncommon in this area. Some important and rare species from these wetlands are described below.

Kashmir Flycatcher (*Ficedula subrubra*)

It is a very rare and globally Vulnerable species (IUCN 2017, BirdLife International 2017). A pair of the species was recorded from Sultanpur National Park in January 2016. The birds were found regularly in the forested area of the Park, which was dominated with *Acacia* sp., *Zyzipus* sp. and *Azadirachta* sp. tree.

This species of flycatcher breeds in North-western Himalayas mainly in Kashmir and the Pir-Pinjal Range during summer and winters in Nilgiris (Grimmett et al. 1998; Zarri 2003), Western Ghats and Sri Lanka with isolated records from Punjab (Robson 1999; Kalsi 2001), Maharashtra (Baker 1922-1930) and Andhra Pradesh, Bihar, Nepal and Uttarakhand (Ali & Ripley 1983). However, the bird was also reported from Gujarat (Rasmussen & Anderton 2005) and Karnataka (Bhat 2014) in recent years. But there is no record from Haryana.



Kashmir Flycatcher

Lesser White-fronted Goose (*Anser erythropus*)

This rare bird was recorded from this area in two successive years. In November 2015, a single individual was recorded from Sultanpur National Park, mixed with a flock of



Lesser White-fronted Goose

Bar-headed Geese (*Anser indicus*). The bird stayed only for a week in the shallow water (2-3ft.) areas of the Park. Again in December 2016 an individual was spotted with a flock of Bar-headed Geese at Site 5. This time it was found throughout the month in the agricultural fields of Dighal village.

In the IUCN Red list, Lesser White-fronted Goose is listed as a Vulnerable species (IUCN 2017). It is a rare and sparse winter visitor to North India.

From Haryana, the species has an old record from Bhindawas Bird Sanctuary (Islam & Rahmani, 2005), but there was no report until the recent years. However, it was sporadically recorded from Kashmir, Uttar Pradesh, Bengal, Bihar and Assam (Ali & Ripley 1983). There is also an old record of the presence of the species from Maharashtra, Pune district (Trevenen 1922). The bird has been reported recently from Little Rann of Kutch, Gujarat, where a single individual was found mixed with a flock of Greater White-fronted Geese (*Anser albifrons*) (Shreeram et al. 2014). Generally the bird is found only two or three in numbers, separately or mixed with flocks of Greylag Geese (*Anser anser*) (Ali & Ripley 1983), but in both cases from Haryana the bird was spotted with the flocks of Bar-headed Geese. The record of the species in two successive years from this part of the country indicates that it might become a regular winter visitor in this area.

Pallas's Fish Eagle (*Haliaeetus leucoryphus*)

This species of global concern (IUCN 2017) has disappeared from many wetlands of India, either as a breeding bird or as a winter visitor (Islam & Rahmani 2005). This resident bird was formerly a rare winter visitor to Haryana with records from Ambala, Hissar and other areas (BirdLife International 2001), but there was no recent record of the presence of the species from this region. However, a juvenile Pallas's fish eagle was spotted in Bhindawas Bird Sanctuary in January 2015 and again in September 2015 at Sultanpur National Park.



Pallas's Fish Eagle

White-tailed Eagle (*Haliaeetus leucogaster*)

This occasional wintering raptor is essentially a sea eagle, but occasionally wanders

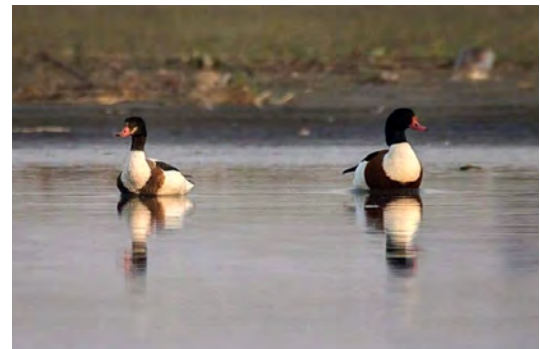


White tailed Eagle (Juvenile)

in large lakes and rivers. A juvenile of this species was seen in February 2016 in the Bhindawas Bird Sanctuary. The bird was seen throughout the month. It is a casual winter migrant in Northern India with very few records from Himachal Pradesh, Punjab, Gujarat and Rajasthan (Ali & Ripley 1983). Although the bird has a wide distribution but it is very rare in this region.

Common Shelduck (*Tadorna tadorna*)

This unusual wintering species was recorded from the Najafgarh Jheel in both study years. In December 2015 only one individual was sighted, however, in November-December 2016 a group of three individuals were recorded from the same site. In both cases it was found mixed with flocks for Bar-headed Geese and Greylag Geese in the shallow waters of the Jheel.



Common Shelduck

Common Shelduck is a rare casual winter migrant to India with occasional records from Kashmir, Punjab, Uttar Pradesh, Delhi, Bengal, Bihar, Assam, Orissa, Gujarat and Madhya Pradesh (Ali & Ripley 1983). Recently the bird is also reported from Vidarbha, Maharashtra (Wadatkar et al. 2014). Although the bird is an occasional visitor to Delhi and Punjab but it is not documented from Haryana.



Dunlin

Dunlin (*Calidris alpine*)

A group of 14 individuals of this unusual wintering wader was seen in the muddy banks of Dighal wetlands in December 2016. It is a common and widespread winter visitor to the coastal mudflats of India, but sparsely recorded from the muddy inland wetlands. Although the species is an occasional passage migrant in the Gangetic river system, very rarely seen in this part of the country (Manakadan et al. 2011).

Although this part of Haryana experiencing massive urbanization, still it hosts a large population of avian species which includes many rare species. However, due to anthropogenic development the wetlands of this area are rapidly altering into unsuitable habitats for avifauna. Growing urbanization, traffic and pollution in this region has affected

the bird diversity of both protected and non-protected areas, resulting in irregular breeding of resident birds and early return of wintering birds (Banerjee et al. 2017). Nevertheless, the burgeoning anthropogenic pressure arise a question about the sustainability of avifauna of this area. Therefore, we are strongly recommending a detailed study to prepare a sustainable management plan and implementing it before it is too late!

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