

Short Communication

Additional Distribution Record of Ibisbill-*Ibidorhyncha Struthersii* Vigors, 1832 and Wallcreeper *Tichodroma muraria* Linnaeus, 1766 in Assam from Bornadi Wildlife Sanctuary, India

Vivek Chetry¹, Pranjal Mahananda¹, Keshob Jyoti Borah¹, Prasanta Kumar Saikia¹ & Malabika Kakati Saikia^{1*}

¹Animal Ecology and Wildlife Biology Laboratory, Department of Zoology, Gauhati University, Guwahati - 781014, Assam, Guwahati, India.

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ABSTRACT

The presence of Ibisbill (*Ibidorhyncha Struthersii*) and Wallcreeper (*Tichodroma muraria*) was investigated in Bornadi Wildlife Sanctuary in Assam. The sanctuary was chosen as the study site due to its proximity to the eastern Himalayan foothill region, which has a few hill streams. Six sampling locations near hill streams were chosen at random, and point count surveys were undertaken from December through March 2021 and 2022. Ibisbill and Wallcreeper were sighted in the study area, indicating their regular visits to the sanctuary during the winter season. The sanctuary is Assam's third known distribution record for Ibisbill and sixth known distribution record for Wallcreeper. These observations help to identify critical habitats, conservation priorities, and improve understanding of bird biodiversity, all of which help to make conservation efforts more effective.

Key words: Altitudinal migrant, Eastern Himalaya, Hill stream, Udalguri

INTRODUCTION

The winter season is essential for migrating birds, as they seek refuge in suitable habitats to survive throughout this challenging season. Birds migrate to lower elevations during the winter because of harsh temperatures and a lack of food in high-elevation zones. The Eastern Himalaya foothill region, characterized by its diverse ecosystems, serves as an important stopover and wintering ground for several altitudinal migratory bird species (Arya & Gopi, 2021).

Ibisbill is a resident bird of the Himalayas and its distribution in India is mostly limited to the Union Territories and states that fall under the Indian Himalayan Region (Jammu and Kashmir, Ladakh, Uttarakhand, Himachal Pradesh, West Bengal, Sikkim, Assam and Arunachal Pradesh). Ibisbill is said to descend to the foothills of northern West Bengal and east Assam mostly to hill streams on the north bank of the Brahmaputra River (Ali & Ripley, 1971). One of the earliest known records of Ibisbill in Assam was reported from Nameri National Park, where it was described as a very rare species in Assam (Saikia & Bhattacharjee, 1990). Records of Ibisbill in Assam are only from upstream of Jia Bharali River in Nameri National Park which is in Sonitpur District and Beki River stream from Manas National Park in Baksa District (eBird Basic Dataset, 2022).

Wallcreeper is also an altitudinal migrant, a winter visitor to the lower altitude areas of the Himalayan region throughout the North Indian Subcontinent (Kirwan, Löhrl & Wilson, 2020). The Wallcreeper was first

recorded in Assam from Kaziranga National Park in 1994 (Barua, 1999) and has been recorded from only a few places since then. It has also been recorded from Manas National Park (Choudhury, 2004), Dibrus-Saikhowa National Park (Choudhury, 2004), Jeypore Reserve Forest (Saikia & Devi, 2011), and Kamrup District (Saikia & Saikia, 2015).

In this study, we have reported new occurrence records of Ibisbill (*Ibidorhyncha Struthersii*) and Wallcreeper (*Tichodroma muraria*) in Assam, from Bornadi Wildlife Sanctuary.

MATERIALS AND METHODS

Study Area

Bornadi Wildlife Sanctuary, an Important Bird Area (IBA), is situated in the Udalguri district of Assam along the foothills of the eastern Himalayas (Figure 1). It has an area of 26.22 sq. km and shares its northern border with the Jomotsangkha Wildlife Sanctuary of Bhutan (Birdlife International, 2022). The wildlife sanctuary derives its name from the Bornadi River, which flows along the western boundary of the sanctuary.

Method

Six sampling sites were selected for the study, consisting of two sites in each of the three river streams: Bornadi, Deosunga and Nalanadi (Figure 1). Bornadi is the westernmost hill stream in the sanctuary, while Deosunga flows through the center of the sanctuary. Except during the monsoon season, the Deosunga stream has very little water flow. The Nalanadi stream runs

*Corresponding Author's E-mail: malabika8370@gmail.com

along the easternmost boundary of the sanctuary. All three streams flow from the highlands of Bhutan on the sanctuary's northern side.

To ensure representative coverage, sampling sites were randomly chosen near the hills, as these areas often provide

suitable habitats for altitudinal migrant birds. The point count survey method was used to record bird species and estimate their abundances. During the survey period, which spanned from December to March 2021 and 2022, four 10-minute counts were conducted at each site.

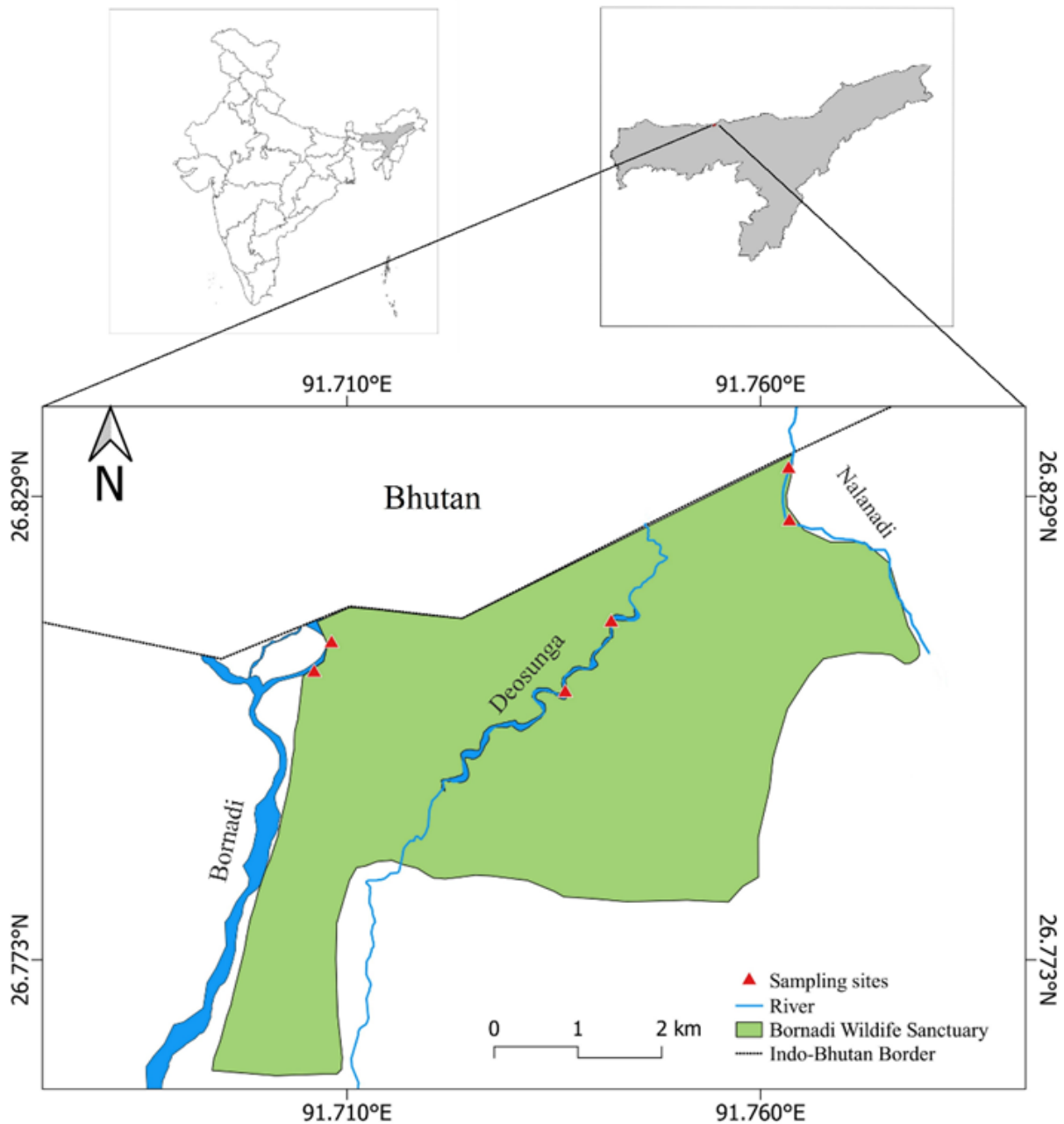


Figure 1. Location of sampling sites in the study area

RESULT AND DISCUSSION

Based on our observations at one of the sampling sites among the six designated locations, we recorded the presence of Ibisbill and Wallcreeper. Both species were encountered during two field visits between February 2021 and March 2022 (Table 1). The species were observed in a sampling site that comprised mainly an eroded hillside with the Bornadi River flowing from Bhutan to Indian territory (Figure 2).

Wallcreeper *Tichodroma muraria* Linnaeus, 1766

Observation

Wallcreeper was first encountered on 24th February 2021 at 11:47 h at the bank of Bornadi river where it was seen hopping from one rock to another (Figure 3). During another field visit on 8th March 2022 at 15:37 h, one individual wallcreeper was seen flying above that

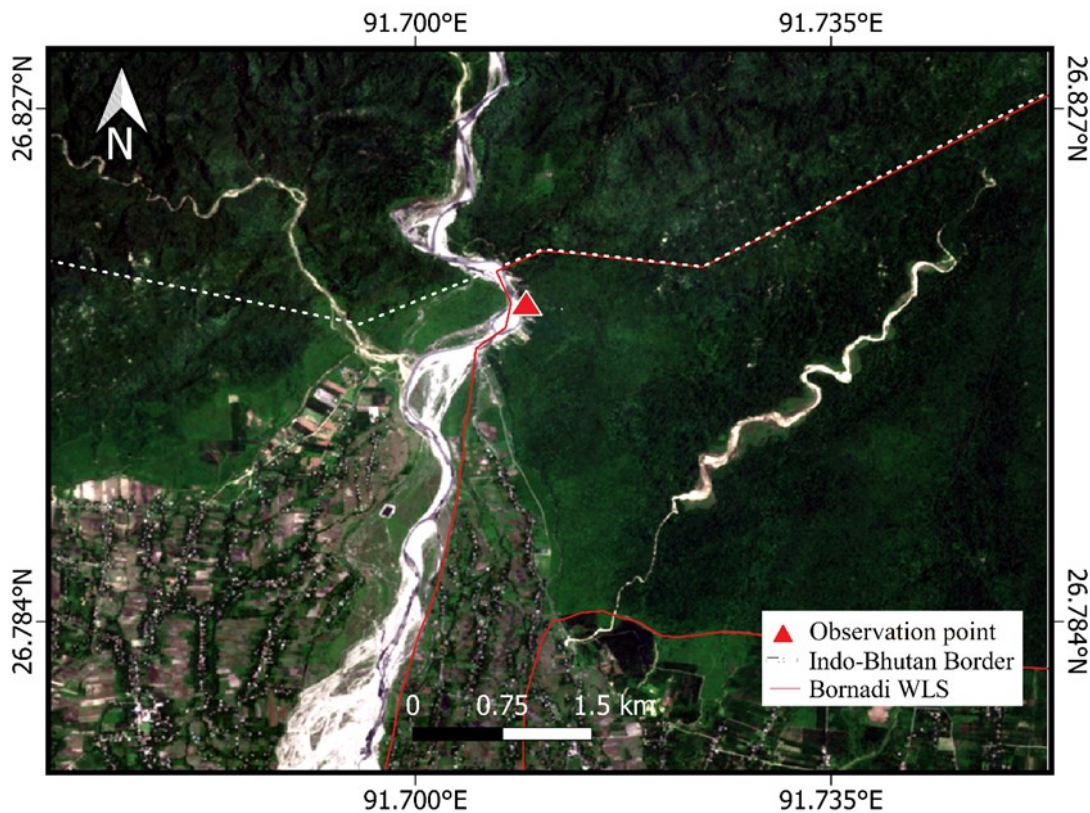


Figure 2. Location of the observation site of the two species

Table 1. Observation notes about the sighting of Ibisbill and Wallcreeper

Sl. No	Species	Date	Observation Time	Individuals	Coordinates	Habitat
1	<i>Tichodroma muraria</i>	24/02/2021	11:47 h	1	26.808387°N 91.708129°E	Hill stream bank with large boulders
		08/03/2022	15:39 h	1	26.808583°N 91.708267°E	River stream adjacent to eroded hillside
2	<i>Ibidorhyncha struthersii</i>	08/03/2022	15:37 h	1	26.808583°N 91.708267°E	River stream



Figure 3. Wallcreeper *Tichodroma muraria*



Figure 4. Ibisbill *Ibidorhyncha struthersii* foraging along the bank of Bornadi River

flew towards the hills to the north of the sampling site.

Identification

Wallcreeper was identified by its blackish-brown wing with bright crimson shoulder and outer edge, the primaries with round white spots very prominent in flight. The tail is comparatively short having a blackish brown with a grey tip and the outer rectrices are mostly white in colour (Ali & Ripley, 1971).

Ibisbill *Ibidorhyncha struthersii* Vigors, 1832

Observation

We first encountered an Ibisbill at the same spot during the second field visit on 8th March 2022 at 15:37 h. It came flying from the Bhutan side, was seen foraging for a while, and then continued flying downstream along the river (Figure 4).

Identification

The Ibisbill was identified by its distinct downward curved red bill, black facial mask and breast band (Ali & Ripley, 1971).

Both species are classified as Least Concern due to their large geographical range (IUCN, 2019). However, it is important to note that within their vast geographic range, these species may exhibit variations in population densities and distribution patterns, leading to their rarity and ecological significance in specific localities. The conventional notion of geographic range size as a fixed attribute impacting extinction risk assumes that species with smaller ranges are more prone to extinction. However, mobile species with diverse movement patterns, including migrations and nomadic behaviour, can undergo significant temporary expansions and contractions of their ranges, potentially elevating the risk of extinction (Runge *et al.*, 2015).

CONCLUSION

Based on our study, it can be concluded that Bornadi Wildlife Sanctuary is the third known distribution record of Ibisbill apart from Nameri and Manas national park in Assam. The sighting of the Wallcreeper was also significant as it is the first record from Bornadi Wildlife Sanctuary as well as the sixth known record from the state of Assam. The observation of the two species suggests that both the two altitudinal migrant species may be regular winter visitors to Bornadi wildlife sanctuary. Sighting of less conspicuous or rare birds contributes to their identification, distribution mapping and ecological assessment. Furthermore, these reports can help identify important habitats and conservation priorities for these species. It also contributes to a better understanding of

the complete range of avian biodiversity and effective conservation efforts for both well-known and lesser-known bird species.

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