Breeding colonies of Whiskered Terns

Chlidonias hybrida in Assam

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Manuscript received on 30 June 2020.

The Whiskered Tern Chlidonias hybrida has a wide distribution range covering four continents: Africa, Asia, Europe, and Australia. In South Asia, it is known as a breeding resident in the Gangetic Plains and is likely to breed in Afghanistan. It is a winter visitor and passage migrant in most parts of the Indian Subcontinent (Rasmussen & Anderton, 2012; Gochfeld et al., 2020). Ali & Ripley (1983), mentioned that the Whiskered Tern breeds in North Chachar in Assam, Kashmir, Delhi, Uttar Pradesh, and Bihar, and in Bangladesh. Rasmussen & Anderton (2012) expressed the need of substantiating its breeding reports from Assam, and Bangladesh. Hussain et al. (2018) reported the presence of Whiskered Terns, in their breeding plumage [3], from various places in Assam. As per eBird, there were 87 sight records of this species from Assam until June 2020. Here, I would like to provide the records of breeding populations of Whiskered Terns in Morigaon, Kamrup, and Sivasagar districts of Assam. The observations of breeding birds were carried out from a safe distance of about 200 m. I visited the site approximately once a week, prioritising the welfare of the species (Barve et al. 2020).

I observed a nesting colony of the Whiskered Tern on the outskirts of Pobitora Wildlife Sanctuary (26.23°N, 92.03°E; c.52 m asl), in Morigaon District [4], about 30 km from Guwahati, Assam. The Sanctuary resides in the floodplain of the Brahmaputra River and encompasses large water bodies, grasslands, and woodlands. I spotted Whiskered Terns along an 80 km stretch of the Brahmaputra, from the Sanctuary in the north to Mirza, Kamrup District in the south. Whiskered Terns breed in Water Hyacinth Eichhornia crassipes infested lagoons, on both sides of the Brahmaputra River. Their eastern-most breeding colony was

References
sighted in Sivasagar District, also on the bank of the Brahmaputra (Fig. 1).

3. A Whiskered Tern in breeding plumage.

The nesting colony near Pobitora was monitored from June to August 2019 (n=8 visits). I first noticed the colony on 02 June, when I spotted 15 adult Whiskered Terns in breeding plumage. Subsequently, I visited this site once every fortnight for three months. On each visit I observed the birds from 1600 to 1800 hrs through binoculars, and also photographed their activity. The nests were on an ‘island’ of Water Hyacinth growing in marshland. It was c.200 m from the road, undisturbed by the traffic. The nests were concealed in vegetation and quite far away from me to confirm the presence of eggs or chicks. I presumed the existence of nests when I saw adult terns landing frequently in the hyacinth patch, carrying either nesting material in their beaks, or food for a partner. The adults used aquatic vegetation as nest material [5], and collected this during short flights, or hovering over potential material and extracting it. The terns guarded their nests zealously. During the three months of observation, they were seen chasing away, and diving at Purple Swamphen Porphyrio poliocephalus (n=16), Yellow Bittern Ixobrychus sinensis (n=8), Pheasant-tailed Jacana Hydrophasianus chirurgus (n=2), and Bronze-winged Jacana Metopidius indicus (n=6). Their chicks were sighted in the Water Hyacinth patch in late July. On 21 July one fledgling was sighted in a bed of Water Hyacinth, on the banks of the Brahmaputra, in Guimara village, Mirza (26.11°N, 91.47°E). The month-old fledgeling had a black cap, black lores, black ear coverts, brownish-black scapula, black bill, and red tarsi. It had a white belly and vent, while the overall appearance from top view was grey. It had semipalmate feet and could swim very well [6]. It was seen bathing, and oiling and preening its feathers.
Food
I observed the adult terns dive to catch fishes and frogs. Common prey among fishes were barbs (Ciprinidae), notopterid fishes (Notopteridae), and catfishes (Bagridae) [7]. Sometimes they pursued and caught flying insects. The adult terns uttered calls when they approached the nesting area with food in their beaks.

Nesting progress near Pobitora Wildlife Sanctuary
It seemed that breeding activities were initiated at the beginning of June, when the birds occupied nests, and laying commenced in the second and third weeks of June. The maximum number of adults (n=300) were sighted during my visit on 22 June 2019 [8]. Towards the end of June, the monsoon had become active. On 13 July, the area was heavily flooded, leaving only a few hyacinth beds intact, while most of them were washed away. The flood waters had reduced by 27 July, but by then the original colony had been completely displaced.

On that day, I spotted a new colony c.500 m to the south of the original spot. About forty nests were initiated by the adult birds on some islands and hyacinth beds in the water filled marshland. It appeared as a second breeding attempt by these birds.

On 09 August 2019, small breeding colonies of Whiskered Terns were sighted at Gorokia Dol (27.16°N, 94.58E) and Disangmukh (27.05°N, 94.58°E), both located in Sivasagar District. At Gorokia Dol, 15 Whiskered Terns in breeding plumage, and five active nests were observed, while Disangmukh had two active nests with adult birds. The nesting colony at Mirza, Kamrup District (26.11°N, 91.47°E), was noted on 18 July 2019, but by then the young birds had fledged, though I did see seven adults flying about.

The breeding of Whiskered Terns has not been recorded from Assam for many years. The earliest record is Baker’s (1935), from lower Assam (Barak Valley). Birds in breeding plumage were recorded from all over Assam (Choudhury 2000; Hussain et al. 2018; eBird 2020) but nesting was never confirmed. Therefore it is interesting to document the presence of more than 100 nests in Morigaon District. The nesting in Sivasagar District appears to be the eastern-most breeding ground in India. It won’t be a surprise, if in future the birds are found nesting in Dibrugarh and Tinsukia districts, where similar habitat exist.

As mentioned by Ali & Ripley (1983), it is possible that a number of nests, and offspring, get washed away in flash-floods as the birds nest on the ground or on Water Hyacinth beds, as happened on 13 July with the entire colony that I was studying. But there was a fair chance that the chicks survived in the buoyant hyacinth beds. The benefits of buoyant hyacinth beds for nesting, might be worth studying.

Table 1. Nests and adult Whiskered Terns recorded near Pobitora Wildlife Sanctuary, Morigaon District, Assam in 2019

<table>
<thead>
<tr>
<th>Date</th>
<th>Nest</th>
<th>Whiskered Tern in flight</th>
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<tbody>
<tr>
<td>02 June</td>
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<td>15</td>
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<td>42</td>
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<tr>
<td>22 June</td>
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<td>300</td>
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<tr>
<td>29 June</td>
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<td>13 July</td>
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<td>29 August</td>
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References