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Caption: Large Indian Civet *Viverra zibetha*, Tricoloured Munia *Lonchura malacca* and *Hoya wightii* (Medium—pencil crayon on watercolour paper) © Supriya Samanta.



## Breeding record of Black-headed Ibis *Threskiornis melanocephalus* (Aves: Threskiornithidae) at Mavoor wetland, Kozhikode District, Kerala, India

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Black-headed Ibis *Threskiornis melanocephalus* is a nomadic and medium-sized wading bird that belongs to the family Threskiornithidae (Hancock et al. 2001). It is also known as Oriental White Ibis and comes under IUCN 'Near Threatened' category (BirdLife International 2021) and is experiencing moderately rapid decline across its distribution range (BirdLife International 2021). It is distributed across India, Pakistan, Sri Lanka, Nepal, China, Bangladesh, Myanmar, Thailand, Vietnam, Cambodia, and is a rare visitor to Japan, Indonesia, and Philippines (Hancock et al 2001; Ali & Ripley 2007; BirdLife International 2012). In the Indian subcontinent, it is widespread resident, however unrecorded in eastern and northwestern Indian subcontinent (Grimmet et al. 2011). Though the bird is often a common species across Kerala but little information is available about its nesting site ecology so far.

As part of my PhD program, I have been surveying and monitoring the Mavoor wetland since January 2020 and collecting ecological data on wetland associated avian fauna. Mavoor wetland (11.260N, 75.939E) is situated on the north-west side of Mavoor town, 21 km east of Kozhikode city (Aarif & Basheer 2012). Mavoor wetlands have three types of aquatic habitats: agricultural land, shallow water body (< 0.3 m depth) and

deep-water body (> 0.3 m depth). Shallow waterbody (vegetated with sedges and cattails) dominate in the Mavoor wetlands, followed by deep water body with *Nymphaea*, *Salvinia*, *Elodea* species (Renila et al. 2020). A total of 57 species of waterbirds were documented from Mavoor wetlands (Aarif & Basheer 2012) including resident and migrant species. Further, they reported the status of Black-headed Ibis as a common, non-breeding and locally migrant species. A recent study (Bobika et al. 2021) showed that a total of 40 species of waterbirds were encountered during their study, which clearly shows the declining trends of avian species from this fragile ecosystem.

During initial visits, I found Black-headed Ibises foraging on shallow water columns, in groups or solitarily. Juveniles and adults in breeding plumage were also observed foraging at Mavoor Wetland. But, only the first week of September 2021, found them roosting in the heronry. There were 10 nests, two with two chicks each and 3–4 nests were under construction. Many pairs were engaged in mating. In addition to Ibises, nests of Purple Herons and 'Near Threatened' Oriental Darters were also encountered. The nests built in those parts which were inaccessible to me, are not included in the report and hence the actual number of nests in the area

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**Table 1. Breeding species of waterbirds in Mavoor heronry during July–September**

| Species           | Total number of nests | Active/Inactive | Number of nests with incubating birds | Number of chicks | Number of juveniles |
|-------------------|-----------------------|-----------------|---------------------------------------|------------------|---------------------|
| Black-headed Ibis | 10                    | 10              | 3                                     | 8                | 5                   |
| Oriental Darter   | 5                     | 5               | 2                                     | 0                | 23                  |
| Purple Heron      | 2                     | 1               | 0                                     | 0                | 15                  |


**Image 1. Black-headed Ibis foraging in shallow water habitat at Mavoor wetland.**

**Image 2. Nesting site of Black-headed Ibis seen associated with Purple Heron and Oriental Darter at Mavoor wetland.**

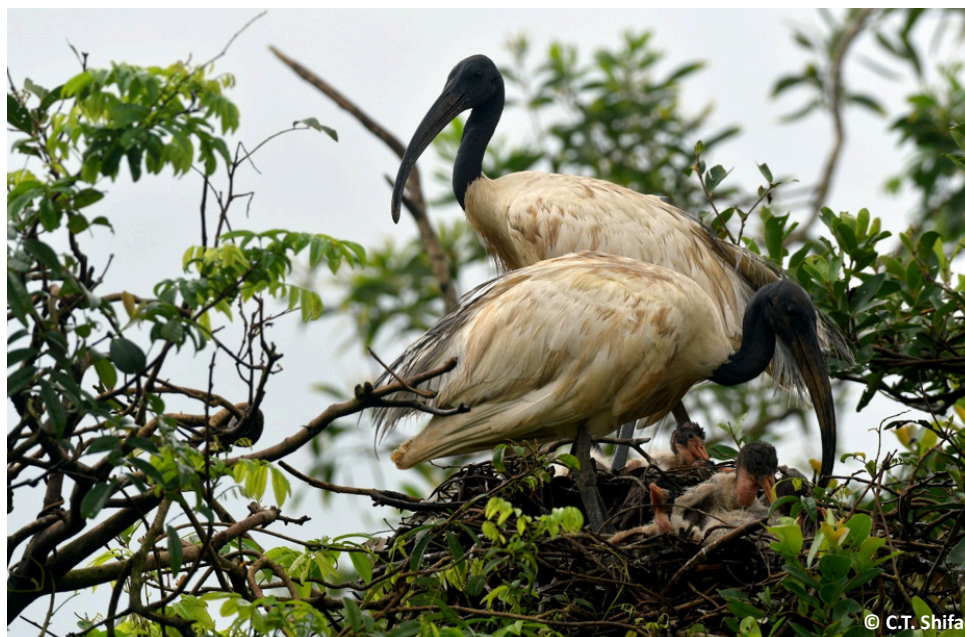


Image 3. Black-headed Ibis with chicks. Two nests seen closer with two chicks in each nest at Mavoor wetland.

may well have been higher than the number reported here. Earlier breeding records of Black-headed Ibis were reported from Panamaram Heronry at Wayanad District (Balakrishnan & Thomas 2004), Kumarakom at Kottayam District (Narayanan et al. 2006), and Manthakad at Palakkad District (Roshnath et al. 2017). Breeding success of Ibis in captivity at Trivandrum Zoo were also reported (Bindya et al. 2019). This is probably the first breeding record of Black-headed Ibis for the Kozhikode district and fourth breeding location for this bird in Kerala.

Black-headed Ibis breeds in or during rainy seasons. In southern India, November–March is the general breeding season for Black-headed Ibises (Ali & Ripley 1983; Ali 1996); however, at Kumarakom heronry, they were found nesting in July–September (Narayanan et al. 2006). Nesting of Ibises at Mavoor wetland were also found in July–September. This coincides with the south-west monsoon in Kerala. Though, Mavoor wetland extends over an area of 37.23148 ha (Aarif & Basheer 2012), a suitable nesting site especially in an anthropogenic stress free zone is rare.

An additional breeding site at Mavoor wetland for Black-headed Ibis is a positive sign towards its declining population trends. Regular monitoring of the population of Ibises especially from the newly recorded breeding sites in Kerala may enhance the breeding population of this species and help in recovering the regional populations.

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