

A study on Black-headed Ibis at Naxalbari, foothills of Darjeeling, West Bengal



Black-headed Ibis flock of adults & sub-adults. © Antara Paul.

In the year 1990, a group of bird watchers from Siliguri (district Darjeeling, West Bengal) identified a breeding colony of the Black-headed Ibis *Threskiornis melanocephalus* (BHI) at river bed of Mechi situated in the Indo-Nepal border and other two places of Naxalbari block of Darjeeling District (Animesh Bose pers. comm.). In September 2019, a birder team of Himalayan Nature & Adventure Foundation (HNAF), Siliguri, initiated a preliminary study at Naxalbari and its adjacent areas.

The population study started in April 2020 at the beginning of nesting season. This area is the only known breeding site for the species at northern Bengal (comprising 6 districts of northern parts of West Bengal) till date.

BHI is a wading bird. It is protected under Schedule IV of the Wildlife (Protection) Act, 1972 of India, and has now been categorized as 'Near Threatened' by the IUCN Red List (Bird Life International 2016).

They are easily identified by their white plumage throughout their body, dark black head, neck & legs, and dark black downward curved beak. The black colour of the neck is quite dull in the juveniles and sub-adults. The adults are about 65–73 cm in length.

Morphologically, males and females are similar. During breeding time, a red patch is observed under the wings of both sexes, even a red patch is also observed on the hind neck of some birds



Colonial nesting. © Antara Paul.



Foraging. © Debojyoti Dey.



Black-headed Ibis with Red patch on the neck. @ Antara Paul.

(Kannan et al. 2010). Moreover, the adult male shows darker grey colour tertials. The juvenile and sub-adults do not show any variation despite the immature plumage (Ali & Ripley 1983).

The study was conducted round the year at Naxalbari. The area comprises large agricultural fields, marshy lands, perennial water bodies, rivers- Mechi, Changa, & Manjha, and degraded forest areas.

During the study, the nesting trees were recorded and the foraging areas in and around the village area (within a 20 km radius) were covered. The nesting habitats were observed by the point count method. The foraging was observed in the territorial count method. All observations, with the help of binoculars and DSLR with telephoto lenses, were made from sufficient distance without disturbing the birds. Parameters recorded were- nesting tree species, nest heights, nesting materials, distance to human habitation, distance to foraging area(s) and communal nesting with other birds.

It was observed that each year, in early March, they arrive in

the area and build nests only on 4-5 trees with large canopies despite the presence of other trees with large canopy. The trees were White Fig (Beng. Pakur, *Ficus* sp.), Banyan (Beng. Bot, *Ficus benghalensis*), Mango (*Mangifera indica*) and one was a mixed canopy formed by White Fig and Banyan. All the trees were located in populated areas of the village. Their nests were often associated with herons and egret species. They used twigs, sticks, grass, straws and threads as nesting materials (Senma & Acharya 2010). It was observed (120 nest observations) that both male and female of a pair of BHI were engaged to build a nest.

Egg-laying started from the last week of March which was extended even in the last week of May by some pairs. The average clutch size (observed nest 120) was 2–3 per nest. Eggs were oval in shape and chalky white with light blue-green shades.

The incubation time was 26 days on an average ($n = 120$). Both males and females were engaged in incubation.

Both the male and female were engaged in carrying food and feeding the juveniles. From July onwards, fledgling has been started in some flocks. The flocks stayed here till the juvenile fledge and start foraging with the adults. By the first week of October, the Ibis flocks with new juveniles moved away from the place. But, exact place of their next destination is still unknown.

Our observations suggest that the Naxalbari block is a suitable area for breeding and foraging of BHIs. In the year 2020, the total number including adults, sub-adults and

juveniles was about 465. In the year 2021, the total number counted was around 350. Whereas, in 2022, the number was about 400 in total.

The observations continue the year 2023. At present, the habitat of BHIs is threatened due to the drastic loss of nearby agricultural lands and water bodies, pollution caused by chemical pesticides and fertilizers used in the agricultural fields, polluted water bodies and biotic pressure.

The urgent and positive steps to conserve that 'Near Threatened' species should be initiated that could sustain the harmony in human beings and nature.

References

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