

Government of Tripura
Directorate of Information and Cultural Affairs

S- 15

Agartala, 3rd February, 2020

BARAMURA HORNBILL FESTIVAL – A Conservation Endeavour in Tripura

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Hornbill birds resident of tropical and subtropical moist forests derive their name from the horn-like projection (called a casque) on the top of their beaks which are usually coloured brightly. These flashy birds are typically large-headed, with thin necks, broad wings, and long tails with bright skin around their eyes and long eyelashes. Most of them have a brilliantly coloured pouch of loose skin at their throat wherein they carry their favourite food of fruits. They are larger than other birds. About 54 species of hornbills are recorded in the world, with 23 of them fly in African forests and 31 in Asia, making homes mostly in tropical rain zones. India has nine hornbill species-Great pied Hornbill, Rufous-necked Hornbill, Wreathed Hornbill, White-throated Brown Hornbill, Narcondam Hornbill, Malabar Pied Hornbil, Oriental Pied Hornbill and the Indian Grey Hornbill. Uniquely Malabar Grey hornbill has no casque. Out of nine species five are found in NE India i.e. Great pied Hornbill, Rufous-necked Hornbill, Wreathed Hornbill, White-throated Brown Hornbill and Oriental Pied Hornbill and only one i.e. Oriental pied Hornbill (*Anthracoceros albirostris*) is found in Tripura.

2. "Hornbills are known as the 'farmers of forest' for playing a crucial role in dispersing hundreds of fruit tree species in the forests. The presence of hornbills indicates that the forest is not only prosperous but also balanced. This is why hornbills are considered as an indicator species. These birds seek dense canopies to roost and nest. Tripura has the presence of Hornbills which indicate the richness of our biodiversity. If the hornbills are conserved, the related habitats are also conserved and nourished in the forests. Feeding on a diversity of fruits, ensures that nutritional requirements are met. In the non-breeding season fruits that are selected for are generally sugar rich, while lipid-rich fruits and invertebrates are highly selective of eatables during the breeding season.

3. The best sightings of Hornbills are in Karnataka, Maharashtra, TN, Assam and Arunachal Pradesh. Many hornbills are today threatened by habitat loss, hunting, and loss of large trees that they need for feeding

and nesting. The major challenge in conservation of Hornbill is hunting. It is hunted for majestic feathers, casque used as head decorations. Paite tribes in NE use the feathers in their headbands. The Nyshi communities which traditionally wore hornbill beaks as headgear are now biggest saviors of Hornbill in Arunachal Pradesh. In Tripura, the communities are protecting this beautiful bird for showing the biodiversity to eco-tourists.

4. Interestingly, Hornbills are generally monogamous and breed between January and June; oriental pied hornbills typically commence breeding in February. Hence their breeding season starts now. The pairs are in search of suitable locations for the nests. This coincides with the onset of rain depending on geographic location, and peak abundance of fruit. The male and female first select a suitable nest-hole on the trunk of a tree. Then the female enters and seals it with the help of a sticky paste made from her own droppings, mixing with small twigs and other similar materials, using her large beak for this purpose, covering the hole almost completely, leaving just a small opening to insert its beak out (for food). Thus the days go by, by which time it is its turn to lay eggs inside the cozy nest. The eggs are laid over a period of six to eight weeks. During this period it moulds its feathers to form a cushion for the newly hatched chicks and becomes incapable of flight. To maintain nest sanitation it twists around each time to forcibly eject her droppings through the narrow slit of the nest cavity. The male hornbill, meanwhile, travels over a distance of several kilometers within the forests in search of suitable food, to come back diligently to feed its 'family'. During this period, in case the male gets poached or a mishap occurs the entire family perishes. The females and chicks break open the seal when they are ready.

5. Hornbill nests are built in the hollows found in trees or rock crevices that they seal, leaving a narrow opening, vertically slit. In places where there are shortages of such sites, hornbills often fight and evict other birds, even snakes and large monitor-lizards, to gain entry into the cavities.

6. Characteristics :

- The oriental pied hornbill is a medium size frugivore with a head-to-tail length of 55–60 cm and a wingspan of 23–36 cm.
- The bill measures 19 cm for males and 16 cm for females. The adult usually weighs about 900 g for males and 875 g for females. The plumage of the head, neck, back, wings and upper breast is black with

a slight green sheen. Bill development is often an indicator of sex and age. In other species the casque may extend up to 30 cm.

- The tail is black with white tips on all the feathers except the central feathers (rectories). The plumage of their lower breast, lower abdomen, thighs, under-wing and all the tips of the wings except the three basal secondaries and two outer primaries is white, as is the circumorbital skin around the eyes and on the throat skin.
- Casques of mature *A. albirostris* are laterally flattened "cylinders", which may form a protruding horn. Males and females are similar in coloration. Males can be distinguished from females by their larger body size, yellow bill, which has a black base, and bright red eyes.
- Females have a slightly smaller body size, a yellow bill and casque with a partly black, browned patched mandible, and grayish-brown eyes.
- The casque shape is often the easiest way to determine species.
- Hornbills have strong neck muscles that support the head and two fused vertebrae in the neck that give power to the bill and turn the head into a kind of pick axe
- Many have strong claws which allow them to grip the sides of trees like woodpeckers
- Hornbills possess binocular vision that aid in precision handling of food

7. Behavior :

- Most hornbills are sedentary and live in defined territories.
- Hornbills are generally monogamous. Many mate for life. Pairs usually share and defend a territory that ranges in size from 10 hectares to 100 squares kilometers.
- Males are slightly larger than females but females are more courageous.
- Hornbills make loud calls. Each species has its own distinctive calls. The calls of the oriental pied hornbill have been described as crowlike sounds, harsh crackles and screeches. Their call is a distinctive cackling Kek-Kek-Kek-Kek sound.
- They do dust bathe in order to keep feathers neat and tidy. Feathers insulate the skin, waterproof it and provide the power required for a good flight and eventually survival. In order to remove feather lice and mites and smoothening the feathers the dust bath is essential. Dust keeps the feathers non greasy. The excess dust is shaken off along with other undesirables. The urge for dust bath varies with season,

time of the day, quality of dust patch and non disturbed areas. Birds shake off excess dust followed by extended preening and perching sessions.

8. Baramura Hornbill festival

a. Tripura is endowed with a vast treasure of natural bounties. Natural habitats for Flora and fauna and eco-tourism potential are unique to the state. To conserve the nature, celebrate togetherness with nature and commit and converge the resources for the community and the posterity are the prime motives.

b. The two day long festival is in the name of globally respected bird and found in entire country. Hornbills are giants among the forest birds, spectacular, awe-inspiring. They play essential roles in forest ecosystems as dispersers of seeds of forest plants. Thus protecting an indicator species shall mean conserving a lot many other species in the forests.

c. The location of the proposed Hornbill festival is about 45 km away from Agartala at Baramura hill ranges (Hathai Kotor in Kokborok) and Teliamura in Khowai district but the festivities are likely to communicate the conservation message for Hornbill as well as its natural habitat.

d. In order to promote ecological and ethnic diversity and establish linkage with ecotourism, the festivities begin in the month of February. It starts with the onset of breeding season of Hornbill i.e. February month, wherein they tend to look for home, shelter and peace.

e. The festival location and surrounding areas are unique in terms of sighting for Vultures, Bats and Elephants. The nature lovers, eco-tourists, photographers and local ethnic communities are going to have gala time during the festivities.

f. The local communities in Baramura hills landscape are already conserving the birds. The festivities provide an opportunity to reflect on the ethnic, cultural and biological diversity. Conservation of Hornbill is likely to be symbolic overarching conservation endeavor covering the entire state which consists of habitats protection, ecological conservation and biodiversity improvement. This will create unique experience for the tourists and help in promoting ecotourism.
