# Rufous-necked Hornbill (Aceros nipalensis)

SAVE THE "VULNERABLE" RUFOUS -NECKED HORNBILL



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#### Finding

The study revealed that the altitudinal distribution of Rufous-necked hornbill in the park was between 784-1608m. They were found mostly in forested area having diverse fruiting tree species.

The fruit bearing tree species consumed by RHN were Aphanamixis polystachya, Arthocarpus lakoocha, Alangium chinense, Beilschimiedia assamica, Beilschimiedia grammiena, Casearia glomerata, Canarium strictum, Choerospondias axillaris, Cryptocarya amygdalina, Eleocarpus lanceifolius, Ficus hederacea, Ficus benjamina, Ficus hirta, Ficus hispida, Ficus roxburghii, Ficus semicordata, Hovenia acerba, Litsea sericea, Mangefera sylvatica, Persea odoratissima, Phoebe lanceolata, Prunas cornuta, and Taluama hodgsonii.

Animal matter such as the remnant of crabs, beetles and the larva of bees were recorded below the nesting tree during the breeding season (Mid of April to Mid of July). Some caterpillar were also being consumed during the non-breeding season.



The threats that were seen in the RNH habitat were agriculture, logging, firewood collection, grazing, extension of land for building houses and high power transmission lines. However, no threat of hunting for meat were seen.

I hope that this study would help in better understanding of the ecology, behavior and habitat use of RNH and lead to its long term conservation in foothills of Bhutan.



## JIGME SINGYE WANGCHUCK NATIONAL PARK, BHUTAN



### "CONSERVATION OF RUFOUS-NECKED HORNBILL"



#### Status and Distribution "Literature"

Rufous-necked Hornbill (*Aceros nipalensis*) is classified as vulnerable by the IUCN and Birdlife International. It inhabits mature broadleaved forests, generally between 600-1,800m asl (maximum altitude 2,200m asl), but locally down to 150m asl. The global population is estimated to be around 1500-7000 individuals (BirdLife International, 2017).



Female Rufous-necked Hornbill

Rufous-necked Hornbill (RNH) is currently known from Bhutan, north-east India, Myanmar, southern Yunnan and south-east Tibet, China, Thailand, Laos and Vietnam. They occur mainly in broadleaved, evergreen forest, edges of forest clearings, open, moist and groves of large fruit trees.

Historically, hornbills have been subjected to hunting all over their range in Asia. The threats of habitat loss and fragmentation severely impacted their survival adding to their vulnerability. It is said to be extinct from Nepal and close to extinction in Vietnam.

#### Nesting habit

The remarkable nesting habits of Rufous-necked Hornbill is such that the female seals herself in a large cavity of a living tree, leaving only a narrow opening hole for her mate to pass food to her and the chicks. The female lays about two eggs in April. After a total of 125 days of incarceration, the female breaks the nests' seal and leaves, the chicks following shortly afterwards.



Female RNH enclosed in the nest

The nesting and breeding behavior of Rufous-necked Hornbill are the important habitat components which determine their long term sustainability and therefore forms important basis for studies towards conservation.

#### **Conservation measures**

In Bhutan, the national system of protected areas and biological corridors forms a contiguous landscape for the safe dispersal of both plant and animal species. A very important step was the declaration by His Majesty the Fourth King of Bhutan to keep at least 60% of the country forested at all times. Recently, a study on "Foraging behaviour, Food resources and Habitat use by Rufous-necked Hornbill (*Aceros nipalensis*)" was carried out in Jigme Singye Wangchuck National Park (JSWNP) from June to October of 2016.



# Research team monitoring the habitat and food resources of Rufous-necked Hornbill

Five sites of different habitat types were chosen namely Korphu, Nimshong and Nabji under Korphu Village block (Trongsa district); Gonphaii and Nabay under Trong village block (Zhemgang district). These areas were selected as it encompassed the main elevational gradient where RNH is known to occur in JSWNP (Dorji, 2013), although it occurs sparsely in other areas of the park.