

Hornbill (*Ocyrceros birostris*) and Local Birds: A status survey across Chandigarh region, India

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Abstract

A project was carried out in Chandigarh to survey the awareness and knowledge about the existence and distribution of various birds especially the state bird of Chandigarh *i.e.* *Ocyrceros birostris*. In response to a question about their love for birds out of 827 responses 41% liked Peacock as their favourite bird, Parrot was the favourite of 25%, 2% liked all the birds, 8% did not have any favourite bird. Rest 73 persons did not respond to this question. Responding to a question about hornbill 514 persons recognized this bird and 386 did not recognize this bird even after showing the pictures along with the questionnaire. This shows that a fairly good number of people were able to recognize this bird. It was observed that 394 persons knew that this bird is **State bird of Chandigarh** but 506 persons did not know about it. Scope of the project was to create more awareness about this bird is needed for general public. Because despite being a State Bird of Chandigarh, India not much are aware of it. The Hornbills belong to the family Buceritidae after the name *Buceros* which means “cow horn” in Greek. They look different because of their distinctive bill and can be recognized very easily. The large bill assists in fighting, preening, constructing the nest and catching prey. The bill has a casque over it. The casque is larger in males than in females. They have bright skin around their eyes and long eye lashes.

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Table-1. Different types of Hornbills found in India.

S. No.	Name	Distribution	Characteristic Feature(s)	Size (in cm)	IUCN Category
1	Great Hornbill, <i>Buceros bicornis</i>	In forests of India, few forest areas in Western Ghats and the forest along Himalayas, extends to Thailand, Burma, Malaya & Sumatra.	Large member, bright yellow-black casque on top of massive bill, casque appears U-shaped when viewed from front.	95-130	N.T.
2	Indian Grey Hornbill, <i>Ocyrceros birostris</i>	Wide spread in Indian sub-continent, Himalayan foothills, South-wards through Indian Peninsula, wet forests and Western Ghats.	Grayish-black beak, pointed casque which is bigger in male, grey tail with tipped black and white.	55-60	L.C.
3	White-throat Brown Hornbill, <i>Anorrhinus austeni</i>	Hills of Assam, Arunachal Pradesh, Nagaland, Manipur.	Dark brown head and back, bright rufous brown below, sides and neck white in male, small keel shaped casque.	73-80	N.T.
4	Malabar-Pied Hornbill, <i>Anthracosceros coronatus</i>	Found in old world tropical Southern Asia., Central India.	Also called lesser-pied hornbill, Bill yellow with a large mainly black casque.	62-65	N.T.
5	Oriental-Pied Hornbill, <i>Anthracosceros albirostris</i>	Range from Bangladesh Bhutan Eastern & Northern India.	Also called Indo Malayan pied hornbill.	60-65	L.C.
6	Wreathed Hornbill, <i>Rhyticeros undulates</i>	Found in forests of North-East India and Bhutan	Also called bar pouched wreath hornbill, dark bar on lower throat.	75-100	L.C.
7	Narcondum Hornbill, <i>Rhyticeros narcondami</i>	Indian island of Narcondam in Andamans.	Male and female have distinct plumage.	45-50	En
8	Rufos-necked Hornbill, <i>Aceros nipalensis</i>	North-East India especially Arunachal Pradesh, Indian sub-	Rufos (red) head and under parts, voice loud barking, tail white,		

		continent and South-East Asia.	female black except white tip of tail, beak lacks true casque but has thickenings with number of dark ridges on upper beak.	110-117	Vu
9	Malabar Grey Hornbill, <i>Ocyrceros griseus</i>	Endemic to Western Ghats and associated with hills of Southwest India.	Large beak but lack casque.	45-58	L.C.

Abbreviation: En- endangered, L.C.- least concern, N.T.- near threatened, Vu- vulnerable

Hornbills are found in tropical and sub-tropical Africa, Asia and parts of the Pacific Islands including the Philippines and Solomon Islands. There are many species and kinds of Hornbills. There are about 24 species of hornbills in Africa. In Asia, one species is found in open grasslands and the rest are forest-dwellers. Indonesia has 13 hornbill species, 9 of them are in Sumatra and 9 are in Thailand. There are nine species found in India and one species is found only in the island of Sri Lanka. The hornbills found in India are as follows (Table - 1 & Plate 1): For the preparation of the manuscript relevant literature has been consulted¹⁻¹².

Indian Grey Hornbill is a common hornbill found on the Indian sub-continent. It is reported to occur in India, Pakistan and Nepal. In India it is distributed throughout the country excepting for Malabar, parts of Rajasthan and Assam. In Southern India this species is reported to occur in dry deciduous tracts of Eastern Ghats, foothill forests of Western Ghats. Hornbills are farmers of the forest as they disperse the seeds of many tropical trees and keep the forests alive.

Indian Grey Hornbill is arboreal and commonly sighted in pairs. They have grey

feathers all over the body with a dull white brownish belly. It is a beautiful bird with black or grey bill like beak with a casque on it extending to the point of curvature of the horn. The casque is pointed and bigger in males. The Indian Grey Hornbill is a medium sized bird measuring around 24 inches in length. The flight feathers are dark brown with whitish tip. The tail is long and has dark sub-terminal bands (Plate 2 & 3).

This bird is mainly found in the plains up to a height of 1500 ft. Its call is a squeaking call somewhat like that of a black kite. The flight is heavy, involves interspersed with glides. These can be recognized from their angle of neck with the body.

No work has been done on the biodiversity in particular to the diversity profile of Indian Grey Hornbill. This bird was declared as “**State Bird of Chandigarh**” in 2010. A postal stamp was also released later on this bird but unfortunately very few citizens know much about it. An attempt was made to talk to various persons and students but it was found that a large section of the society is generally ignorant about this fact.

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Chandigarh to survey the awareness and knowledge about the existence and distribution of various birds especially the state bird of Chandigarh i.e. *Ocyeros birostris*. In response to a question about their love for birds and which one out of 827 responses, 41% liked Peacock as their favourite bird Parrot was the favourite of 25%, 2% liked all the birds, 8% did not have any favourite bird. Rest 73 persons did not respond to this question. Responding to a question about hornbill 514 persons recognized this bird and 386 did not recognize this bird even after showing the pictures along with the questionnaire. This shows that a fairly good number of persons were able to recognize this bird.

A questionnaire was prepared and distributed among the citizens of Chandigarh to get the information about the diversity profile and distribution pattern of Indian Grey Hornbill from Chandigarh. The questionnaire was as follows:

Diversity profile and distribution pattern of Indian Grey Hornbill from Chandigarh :

Questionnaire Date:
Name:.....
Age.....
Gender:Male/Female.....
Address.....
Profession:Service/Business/Student/
others.....
PhoneNo. Email.....
.....
(Optional) (Optional)

Qualification.....
Staying in Chandigarh since.....

Q. 1 Do you love birds?
(i) No (ii) Somewhat (iii) Fairly(iv) Very much.....

Q.2 Which is your favourite bird and why?

Q.3 Which is/ was the most frequently seen bird in your locality/ neighborhood?
(i) Currently
iii) 10 years ago

Q.4 Do you recognize the bird in this photograph Yes No

Q.5 Have you ever seen this bird in your locality Yes No
If yes where,
Your garden (on which tree).....

Roadside

Local gardens of Chandigarh.....

Other.....

Q.6 Did you know that grey hornbill is State bird of Chandigarh? Yes No

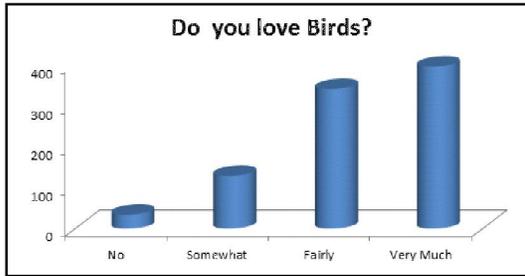
Q.7 Can you narrate any of your experience/ story related to Grey Hornbill.

Q.8 How do you recognize the Grey Hornbill?

Ques. 1: Do you love Birds?

Observation: It was observed that out of 900 responses, 396 loved the birds very much

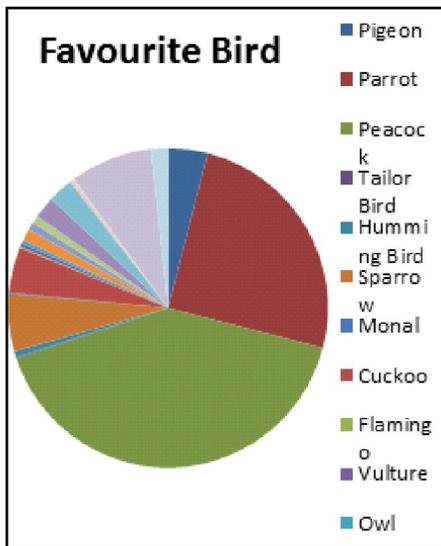
whereas 34 did not like the birds whereas 341 loved birds fairly and 129 gave response as somewhat (Graph 1).



Graph 1: Showing the survey response of people toward birds.

Ques. 2: Which is your favourite bird and why?

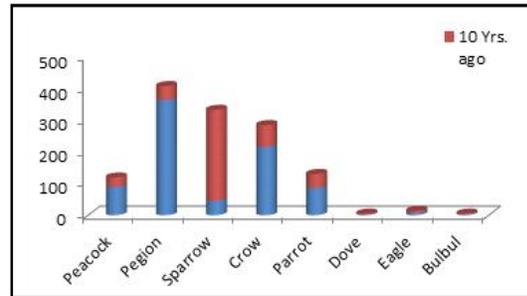
Observation: Out of 827 responses, 41% liked Peacock as their favourite bird. Parrot was the favourite of 25%, 2% liked all the birds, 8% did not have any favourite bird. Rest 73 persons did not respond to this question (Graph 2).



Graph 2: Percentage of people choice towards their favourite birds.

Ques. 3: Most frequently seen bird in your locality.

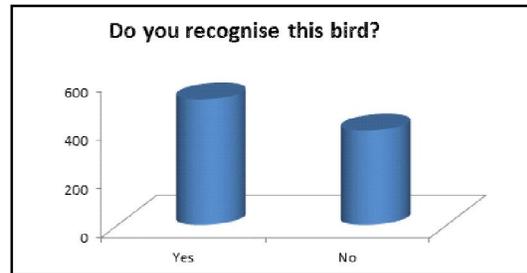
Observation: It was observed that 363 persons have seen pigeons more frequently in their locality currently followed by crows (215), peacocks and parrots (86 each) and sparrows (45). However, for 10 years ago, the observation is different. The highest number of observations is for sparrows (287) followed by crows (69), pigeons and parrots (44 each) and peacocks (30). These observations clearly indicate the decline in the number of sparrows (Graph 3).



Graph 3: Number of frequently seen birds in their locality.

Ques. 4: Do you recognize this bird?

Observation: It was observed that 514 persons recognized this bird and 386 did not recognize this bird even after showing the pictures along with the questionnaire. This shows that a fairly good number of persons were able to recognize this bird (Graph 4).



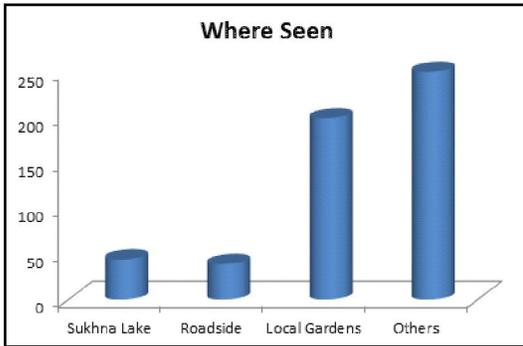
Graph 4: Response showing the awareness amongst the people for Hornbill.

Ques. 5: Have you ever seen this bird in your locality and Where?

Observation: The observations show that 394 persons have seen this bird and 368 have never seen this bird in their locality. Out of 394 persons, 44 have seen this near Sukhna Lake, 39 have seen on roadside, 199 have seen them in local gardens and 250 have reported to see this in other places such as School, College and University campus (Graph 5 & 6).



Graph 5: Response for number of people who had seen this bird in and around their locality.

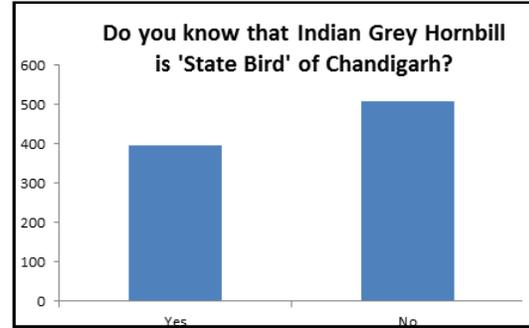


Graph 6: Prominent places of the Hornbill found in Chandigarh.

Ques. 6: Do you know that Indian grey Hornbill is State bird of Chandigarh?

Observation: Keeping in view the data, it

was observed that 394 persons knew that this bird is State bird of Chandigarh but 506 persons did not know about it. More awareness about this bird is needed for general public. Various nature awareness programs are required for this purpose (Graph 7).



Graph 7: Awareness level amongst the people for the Hornbill as 'State Bird'.

Ques. 7: How do you recognize this bird?

Observation: Those persons who recognized this bird could recognize it by its large beak and its squeaking call and its posture during flight.

There is an immediate need for developing strategies for the conservation of Indian Grey Hornbill which is 'State Bird' of Chandigarh. Various programmes may be devised by Department of Science and Technology, Chandigarh in unison with the Forest and Wildlife Department, Chandigarh Administration along with other stake holders after having a due consultation with the working scientists, researchers and ornithologists of various Colleges and University to develop a defined module for the better awareness of this bird in and around Chandigarh. It is also proposed to create "Bird Awareness Cell" in each institution.

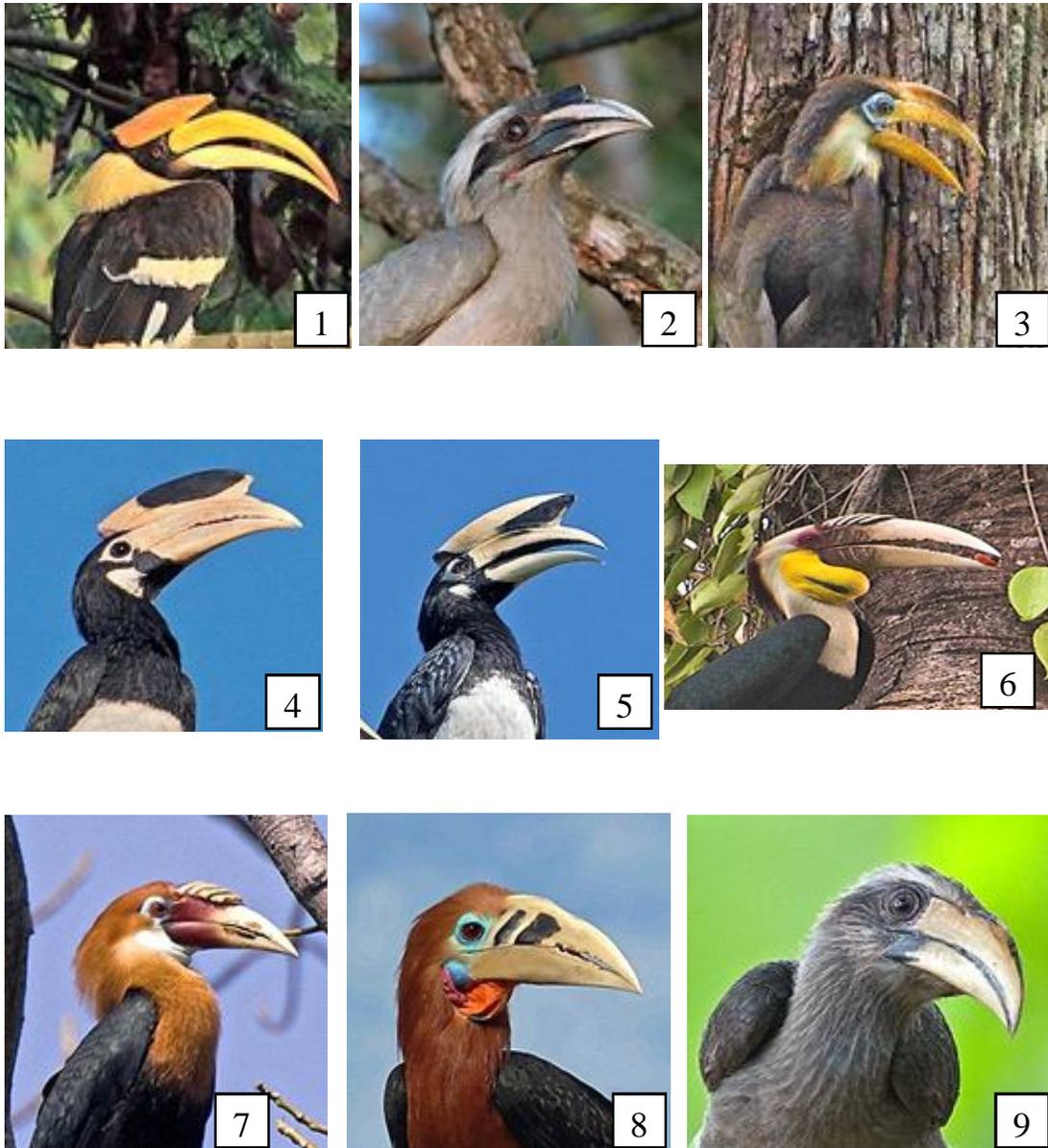


Plate 1. Nine species of Hornbill in India: 1) Great Hornbill, 2) Indian Grey Hornbill, 3) Brown Hornbill, 4) Malabar-Pied Hornbill, 5) Oriental-Pied Hornbill, 6) Wreathed Hornbill, 7) Narcondam Hornbill, 8) Rufous-necked Hornbill, 9) Malabar Grey Hornbill.



Plate 2. Indian Grey Hornbill, *Ocyrceros birostris*: Adults,
a) Male b) Female



Plate 3. Indian Grey Hornbill, *Ocyrceros birostris*: a) Adult pair,
b) Female Baby, c) Male Baby.

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