DISTRIBUTION, POPULATION STATUS AND CONSERVATION THREATS OF Bucerosbicornis LINNAEUS, 1758 IN THE CHITWAN NATIONAL PARK, NEPAL



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A thesis submitted in partial fulfillment of the requirements for the award of the degree of Master of Science in Zoology with special paper Ecology.

Submitted to

Central Department of Zoology Institute of Science and Technology Tribhuvan University Kirtipur, Kathmandu Nepal November, 2018



RECOMMENDATION

This is to recommend that the thesis entitled "DISTRIBUTION, POPULATION STATUS AND CONSERVATION THREATSOF *Bucerosbicornis* LINNAEUS, 1758 IN THE CHITWAN NATIONAL PARK, NEPAL" has been carried out by Mr. ArjunKhanal for the partial fulfillment of Master's Degree of Science in Zoology with special paper Ecology. This is his original work and has been carried out under my supervision. To the best of my knowledge, this thesis work has not been submitted for any other degree in any institutions.

Date: 30th Oct 2018

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LETTER OF APPROVAL

On the recommendation of supervisor "**Prof. Dr. TejBahadurThapa**", this thesis submitted by Mr. ArjunKhanal entitled "**DISTRIBUTION, POPULATION STATUS AND CONSERVATION THREATS OF** *Bucerosbicornis* **LINNAEUS, 1758 IN THE CHITWAN NATIONAL PARK, NEPAL**" is approved for the examination and submitted to the Tribhuvan University in partial fulfillment of the requirements for Master's Degree of Science in Zoology with special paper Ecology.

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This thesis work submitted by Mr. ArjunKhanal entitled "DISTRIBUTION, POPULATION STATUS AND CONSERVATION THREATS OF *Bucerosbicornis* LINNAEUS, 1758 IN THE CHITWAN NATIONAL PARK, NEPAL" has been approved as a partial fulfillment for the requirements of Master's Degree of Science in Zoology with special paper Ecology.

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Date: 15th Nov 2018

DECLARATION

I hereby declare that the work presented in this thesis has been done by myself, and has not been submitted elsewhere for the award of any degree. All sources of information have been specifically acknowledged by reference to the author(s) or institution(s).

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ABSTRACT

Great HornbillBucerosbicornis is one of threatened avian species of Nepal and Chitwan National Park is one of the important habitats for this highly restricted-range species. This study was carried in winter (November) and summer (March). The distribution and abundance of the species was carried by surveying 14 transects in five different blocks in Chitwan National Park.Equal number transect were performed in two habitat i.e., Sal (Shorearobusta) and riverine forest. Among the 14 transects, hornbill were observed only in 11 transects. Great Hornbill was recorded mostly in riverine forest than Sal. The distribution pattern of the Great Hornbill was found to be uniform. A total of 30 individuals were observed in summer season whereas 21 in winter season and the flock size ranged from 3-6 individuals. They were recorded feeding mostly on fruiting trees such as in Dysoxylumbinectariferum, Ficusbengalensis and Bombaxceiba. Fruits of Myristicaceae and Lauraceae were the important tree families that were being consumed. The threats to Great Hornbill were analyzed from questionnaire survey and through direct observation. The threats such as habitat loss, hunting and human disturbance were observed as the major threats to the species in the national park. Community based conservation initiation programs should be encouraged by Government and concerned conservation organizations and also further research should be conducted for the abundance and distribution on Great Hornbill.

Key Words: Great Hornbill, Near Threatened, Chitwan, Uniform

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LIST OF ABBREVATIONS

BCN	- Bird Conservation Nepal
BES - Bird	Education Society
BNP	- Bardia National Park
CBOs	- Communities Bodies Organizations
CITES	- Convention on International Trade in Endangered Species of Wild Fauna and Flora
CNP	- Chitwan National Park
DFO	- District Forest Office
DNPWC	- Department of National Parks and Wildlife Conservation
DoF	- Department of Forest
GH	- Great Hornbill
GPS	- Global Positioning System
IBA	- Important Bird and Biodiversity Area
IUCN	- International Union for Conservation of Nature
Masl	- Meter above sea level
NGO	- Non Governmental Organization
NT	- Near Threatened
PNP -	Parsa National Park
ZSL	- Zoological Society of London