POPULATION STATUS, DISTRIBUTION AND BEHAVIOURAL ECOLOGY OF HANUMAN LANGUR (Semnopithecus entellus Dufresne, 1797) AT DEVGHAT, CHITWAN, NEPAL.

A Dissertation Submitted to Central Department of Zoology, Tribhuvan University for the Partial Fulfillment of the Requirement for the Master's Degree in Zoology [Ecology]

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September, 2007

Date:

RECOMMENDATION

It is recommended that **Krishna Prasad Subedi** has completed his dissertation work entitled "**POPULATION STATUS, DISTRIBUTION AND BEHAVIOURAL ECOLOGY OF HANUMAN LANGUR** (*Semnopithecus entellus* **Dufresne, 1797**) **AT DEVGHAT, CHITWAN, NEPAL**" under my supervision. This is the candidate's original work, which brings out useful findings in the concerned field of conservation biology. To the best of my knowledge, this dissertation has not been submitted for any other degree in any institution. Hence, I recommend this dissertation to be accepted for the partial fulfillment of requirement for the degree of Master's of Science in Zoology (Ecology).

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APPROVAL

On the recommendation of Supervisor Dr. Mukesh Kumar Chalise, Associate Professor, Central Department of Zoology, Tribhuvan University, the dissertation work entitled "POPULATION STATUS, DISTRIBUTION AND BEHAVIOURAL ECOLOGY OF HANUMAN LANGUR (*Semnopithecus entellus* Dufresne, 1797) AT DEVGHAT, CHITWAN, NEPAL", submitted by Krishna Prasad Subedi has been approved for the examination.

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ACCEPTANCE

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ACKNOWLEDGEMENT

I express my sincere honor and special thanks to my academic supervisor, Associate Professor Dr. Mukesh Kumar Chalise for his guidance, encouragement and brilliant insight throughout this research work.

I am highly obliged to Professor Dr. Vasanta Kumar Thapa, Department Head, Central Department of Zoology; TU. for his kind support, suggestions and encouragement. I am grateful to Ex-Head of the Department Prof. Dr. Tej Kumar Shrestha for the support in this research work. I express my sincere thanks to my respected teachers of Central Department of Zoology; TU.

I am grateful Devghat Area Development Committee (DADC) for providing me the dissertation grant to carry out this work. I would like to thank District Forest Office, Chitwan for granting me permission to carry out this research work at Devghat. I express my thanks to the Director of Devghat Area Development Committee (DADC); Dr Guru Prasad Subedi who provided me valuable information, support and suggestions in my field work.

My special thanks are due to Mr. Laxman Khanal who suggested me in the completion of this research paper in this format.

I am thankful to my colleagues Mr. Prakash Aryal, Mr. Janak Raj Khatiwoda, Mr. Ganga Ram Regmi, Kamal Kandel and Narendra Kumar Upadhyay for their continuous support in my work. I am grateful to my parents and beloved wife Neena Bhattarai for encouragement and support throughout the course of study and I would like to dedicate this dissertation to my loving parents.

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ABSTRACT

A study on "Population Status, Distribution and Behavioural Ecology of Hanuman Langur (*Semnopithecus entellus* Dufresne, 1797) at Devghat, Chitwan" was made by direct observation, field survey and behavioral sampling methods. Field research was mainly conducted from June 2007 to September 2007 to explore the age-sex composition and distribution pattern of Langur population, food plants of Langur monkey and daily activity pattern of the Langur population in Devghat area of Chitwan.

The total population of the Hanuman Langur in the study area was 43, out of which 26 (60.46%) were adults, 6 (13.95%) were sub-adults, 1 (2.32%) was juvenile and 10 (23.25%) were infants. The male to female sex ratio from the sex identified age groups of adult and sub-adult was 1:1.13. From the four different troops of Hanuman Langur observed in Devghat, the average troop size was computed to be of 10.75 individuals per troop. The distribution of Langur population inside the study area was found regular or random type of distribution.

A total of 87 plant species were recorded from the study area among which Sal (*Shorea robusta*), Sissoo (*Dalbergia sissoo*), Jamuno (*Syzygium cumini*), Kyamuno (*Cleistocalyx opperculatus*) etc. were dominant species. Among the recorded species, 13 (14.94%) were found to be used by the Langur monkey as food plant. The leaves, fruits, flowers and buds of the plants were used as food. Feeding, grooming, resting, playing, fighting (agonistic) and monitoring were the major behaviour observed in Langur monkeys from Devghat. Resting (inactive) was the major activity of the Langur monkey in summer and rainy seasons followed by feeding, locomotion playing and grooming.

Deforestation, human encroachment, pressure of pilgrimage and competition with domestic livestock (cattle, goats) were major threats to Langur of Devghat. The conservation awareness raising programs and further researches on ecology and behaviour of the Hanuman Langur can be recommended from this study.

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