DISTRIBUTION AND HABITAT UTILIZATION OF HISPID HARE (*Caprolagus hispidus* Pearson, 1839) IN SHUKLAPHANTA NATIONAL PARK, KANCHANPUR, NEPAL

Submitted by

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T.U. Registration No: 5-2-61-86-2009

T.U. Examination Roll No: 15

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A thesis submitted

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RECOMMENDATION

This is to recommend that the thesis entitled **"Distribution and Habitat Utilization of Hispid hare (*Caprolagushispidus* Pearson, 1839) in ShuklaphantaNationalKanchanpur, Nepal"** has been carried out by Mr. DhirendraBahadur Chand 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.

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LETTER OFAPPROVAL

On the recommendation of supervisor Associate Prof. Dr. Mukesh Kumar Chalise, this thesis submitted by Mr. DhirendraBahadur Chand entitled **"Distribution and Habitat Utilization of Hispid hare (*Caprolagushispidus* Pearson, 1839) in Shuklaphanta National,Kanchanpur,Nepal"**is approved for the examination and submitted to the Tribhuvan University in partial fulfilment of the requirement for Master's Degree of Science in Zoology with special paper Ecology.

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CERTIFICATE OF ACCEPTANCE

This thesis work submitted by Mr. DhirendraBahadur Chand entitled "**Distribution and HabitatUtilization of Hispid hare (*Caprolagushispidus*Pearson, 1839) in Shuklaphantas National park, Kanchanpur, Nepal**"has been accepted as a partial fulfillment for the requirement of Master's Degree of Science in Zoology with special paper Ecology.

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DECLARATION

I hereby declare that this Thesis entitled "**Distribution and Habitat Utilization of Hispid Hare (*Caprolagushispidus* Pearson, 1839)in Shuklaphanta National ParkKanchanpur, Nepal"** is my own work except otherwise as acknowledged. I have not submitted it or any of its part to any other academic institutions for any degree.

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ABSTRACT

The Hispid hare (*Caprolagushispidus*), a member ofLeporidae family is cited as critically Endangered species by IUCN (1978) in IUCN Red list (2002) and is listed on Appendix I of CITES and protected by NPWC Act- 1973 of Nepal. Historically the species was distributed throughout the southern Himalayan foothill from Uttar Pradesh of India through Nepal and West Bengal to Assam of India, extending southwards as far as Dhaka in Bangladesh; however, the present distribution range is unknown in Nepal because of insufficient evidences of its distribution. This study was carried out to explore the distribution, habitat use and existing threats to the Hispid hare (*Caprolagushispidus*) inShuklaphanta National Park (SNP), Nepal in winter (November –December ,2015) and summer season(April-Maya,2016).

Line transect survey method was used for observation of the animal and its signs where the pellets density were calculated. The detail vegetation analysis of the plot was done for their habitat use and preference. The Population density of Hispid hare was found to be 0.18/ha in winter and 0.22/ha in summer. The species mainly preferred the Tall grassland habitat. Twelve Grass species were identified in the habitat of Hispid hare with dominancy of *Saccharumspontaneum,Imperatacylindrica*, *Narengaporphyrocoma,*and*Saccharummunj*.Illegal grazing of domestic animals inside the protected areas should be strictly banned. Mahakali flooding seems most dangerous for the Shuklaphanta National park in terms of Hispid hare survival. Check dam should be constructed at the point where the Mahakali River entered into SNP. Existing threats were fire, flood, illegal grazing of domestic animals, invasion of grass and tree species.

Action plan should be developed for the better management, field based conservation, and captive breeding program should be implemented immediately to maintain a viable population of Hispid hare in SNP.

Key word: Hispid hare, SNP, pellet density, distribution, existing threats.

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ABBREVIATION

CITES	:	Convention on International Trade in Endangered Species of Wild
DNPWC	:	Department of National Parks and Wildlife Conservation
GPS	:	Global Positioning System
ha	:	hector
IUCN	:	The World Conservation Union
JWS	:	Jaldapara Wildlife Sanctuary
NTNC	:	National Trust for Nature Conservation
SNP	:	Shuklaphanta National Park