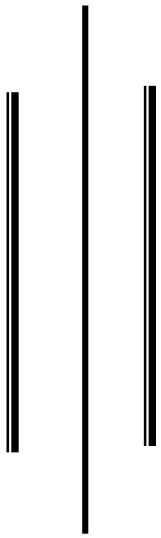
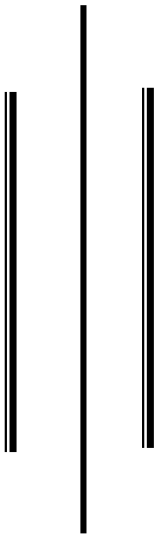
HABITAT, DIVERSITY AND STATUS OF MAMMALS OF KANKALI COMMUNITY FOREST, CHITWAN, NEPAL



A Dissertation Submitted for the Institute of Science and Technology, Tribhuvan University in Partial Fulfillment of the Requirement for the Master's Degree in Zoology (Ecology)



By

Kiran Neupane

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2007

Date:

RECOMMENDATION

Mr. Kiran Neupane has completed the dissertation entitled '**Habitat, Diversity and Status of Mammals of Kankali Community Forest, Chitwan, Nepal**' under my supervision. This is candidate's original work, which brings out useful findings in the concerned field. Hence, I recommend this dissertation to be accepted for partial fulfillment of requirement for the degree of Master's of Science in Zoology (Ecology).

.....

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ACCEPTANCE

The dissertation work entitled **'Habitat, Diversity and Status of Mammals of Kankali Community Forest, Chitwan, Nepal'** submitted by **Mr. Kiran Neupane** has been accepted for the partial fulfillment of M.Sc. degree in Zoology with ecology as special paper.

Expert Committee

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Supervisor	Head
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ABSTRACT

This study was aimed to assess habited condition, explore diversity and assess the status of mammalian fauna of Kankali Community Forest (KCF) in Chitwan.

Fixed sized quadrat sampling method was employed to collect data on vegetation and the line transect survey, random survey and questionnaires survey methods were employed to explore diversity and to assess status of mammalian fauna. Habitat condition was determined through its vegetation features such as density, frequency, basal area, IVI, dominance and diversity. Mammalian diversity was explored through direct observation, collection of indirect evidences (fecal matter, foot print, shelter etc.) and questionnaires survey. General conservation status was determined through the help of different literature by examining the status list. (IUCN, CITES, NRDB).

Through vegetation study 76 plant species were recorded and among them 35 were trees, 21 were shrubs and 20 were herbs. The total tree density was 1771.80 Pl/ha with 42.21 m^2/ha basal area, shrub density was 24550 Pl/ha and herb density was 47.96 Pl/m^2.

Altogether 26 mammalian species belonging 7 order and 14 families were recorded. Among 26 recorded species, 6 species were listed in IUCN red list, 15 species were listed in CITES list and 9 species were listed in NRDB list. Locally, 5 species were common, 4 species were intermediate, 6 species were least abundant and 2 species were rare. The findings of this study show that the KCF acquired greater potential to develop itself a better habitat for mammalian species. Public awareness about wild mammal conservation and research work on mammal's diversity and threatened mammals are needed to manage mammal and their habitat in the KCF.

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LIST OF ABBREVIATIONS

ACA	:	Annapurna Conservation Area.
ACF	:	Agingare Cmmunity Forest.
BA	:	Relative Basal Area.
BNP	:	Bardia National Park.
BPP	:	Biodiversity Profile Project.
CITES	:	Convention on International Treaties on Endangered Species.
CNP	:	Chitwan National Park.
GN	:	Government of Nepal.
IUCN	:	International Union of Conservation of Nature.
IVI	:	Importance Value Index.
KCF	:	Kankali Community Forest.
KTWR	:	Koshi Tappu Wildlife Reserve.
NTNC	:	National Trust for Nature Conservation.
PAS	:	Protected Area System.
PWR	:	Parsa Wildlife Reserve.
RBA	:	Relative Basal Area.
RD	:	Relative Density.
RF	:	Relative Frequency.
SCF	:	Satkanaya Community Forest.
ShNP	:	Shivapuri National Park.
SWR	:	Sukhlaphanta Wildlife Reserve.
TMSRF	:	Terai Mixed Shorea robusta Forest.
TPSRF	:	Terai Pure Shorea robusta Forest.
VDC	:	Village Development Committee.
WWF	:	World Wildlife Fund.