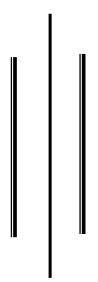
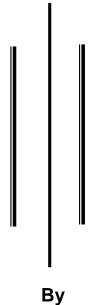
# HABITAT, DIVERSITY AND STATUS OF MAMMALS OF KANKALI COMMUNITY FOREST, CHITWAN, NEPAL



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)



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2007

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### 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.

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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 m²/ha basal area, shrub density was 24550 Pl/ha and herb density was 47.96 Pl/m².

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.

# **CONTENTS**

			Page
Rec	ommen	dation	i
Acc	eptance		ii
Ack	nowled	gement	iii
	tract		iv
Con	tents		v-vi
	of Tabl	es	vii
	of Figu		viii
List	OI ADI	previations	ix
1.	INT	RODUCTION	1-4
	1.1	Background	1
	1.2	Statement of the Problem	3
	1.3	Objectives	4
	1.4	Rationale	4
2.	STU	DY AREA	5-11
	2.1	Location	5
	2.2	Geology and Soils	5
	2.3	River Systems	5
	2.4	Climates	8
	2.5	Biological Components	10
		2.5.1 Vegetation	10
		2.5.2 Fauna	10
3.	ME	THODS	12-19
	3.1	Reconnaissance Survey	12
	3.2	Field Surveys	12
	3.3	Habitat Assessment	14
		3.3.1 Vegetation Surveys	14
		3.3.1.1 Line Transect	14
		3.3.1.2 Vegetation Data Analysis	14
	3.4	Mammal Survey	16
		3.4.1. Line Transect	16

		3.4.2 Collection and Identification of Indirect Evidences	16
		3.4.2.1 Feces (Scats or pellets or droppings)	17
		3.4.2.2 Footprint (Pugmarks or tracks)	18
		3.4.2.3 Scratches, Feeding Signs, Shelters and	
		Vocalizations	18
		3.4.3 Questionnaire Survey	18
	3.5	Status of Mammals	18
4.	RES	ULTS 2	20-28
	4.1	Vegetation Analysis	20
		4.1.1 Tree: Species Composition	20
		4.1.2. Shrubs: Species composition, Density and Frequence	cy 21
		4.1.3 Herbs: Species Composition	21
		4.1.4 Diversity and Dominance	21
	4.2	Mammal Diversity	23
5.	DISC	CUSSION	29-33
	5.1	Habitat Status	29
	5.2	Mammalian Diversity and Status	33
6.	CON	NCLUSION AND RECOMMENDATION	34-35
	6.1	Conclusion	34
	6.2	Recommendations	35
REI	ERRE	NCE	36-41
APF	PENDI	CES	
PLA	TES		

# LIST OF TABLES

		Page
Γable 1:	Mammalian Diversity and their Validation Method	24
Γable 2:	Encounters Rates (no/km) of Signs of Mammals Species	25
Γable 3:	Number of Individual and Percentage of Mammals Directly	
	Observed	26
Γable 4 :	Status of Mammalian Species in KCF, 2006	28

# LIST OF FIGURE

		Page
Figure 1:	Location of the Study Area	6
Figure 2:	Map of the Study Area	7
Figure 3:	Mean Monthly Temperature ( <sup>0</sup> C) recorded at Rampur	
	Meteorological Station (2001-2005), Chitwan	8
Figure 4:	Mean Monthly Precipitation (mm) Recorded at Rampur	
	Meteorological Station (2001-2005), Chitwan.	9
Figure 5:	Mean Monthly Humidity (%) Recorded at Rampur	
	Meteorological Station (2001-2005), Chitwan.	9
Figure 6:	Topographic Map of KCF: Showing Blocks and Transects	13
Figure 7:	Species Diversity Index of Different Vegetation	22
Figure 8:	Dominance Index of Different Vegetation	22
Figure 9:	Percentage Distribution of Order of Mammalian Species in	
	Kankali Community Forest, 2006	23
Figure 10:	Percentage Distribution of Signs of Mammals	26
Figure 11:	Encounter rate of Sign	27

#### 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.