

**DIET COMPOSITION OF LEOPARD (*Panthera pardus* Linnaeus,
1758) IN SHIVAPURI NAGARJUN NATIONAL PARK, NEPAL.**



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RECOMMENDATIONS

This is to recommend that the thesis entitled “**Diet composition of Leopard (*Panthera pardus* Linnaeus, 1758) in Shivapuri Nagarjun National Park, Nepal**” has been carried out by **Mr. Purna Man Shrestha** for the partial fulfilment of Master’s Degree of Science in Zoology with special paper Ecology and Environment. 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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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

Leopards are most common and widely distributed species of big cat. This species can easily survive in human dominated landscapes with considerable conflicts with people. This study attempted to assess the abundance of prey species, diet composition and threats to the survival of Leopard in the Shivapuri-Nagarjung National Park. Prey data were collected through line transect and analysed in term of encounter rate (number/kilometre). Through the survey of 41.064 kilometres line transects recorded *Martes flavigula* (0.3), *Macaca assamensis* (0.6), *Muntiacus muntjak* (0.7), *Semnopithecus* spp. (0.4), *Sus scrofa* (0.1) and domestic prey such as *Bos taurus* (0.4) and *Capra aegagrus hircus* (0.3). For diet composition, 61 scats collected and analysed revealed 12 species including both wild prey: (*Herpestes urva* (13.3), *Tamiops maccllellandii* (8.4), *Muntiacus muntjak* (13.1), *Macaca assamensis* (1.2), *Martes flavigula* (7.2), *Rattus* spp. (*Rat*), *Macaca mulata* (3.6), *Viverra zibetha* (6), *Herpestes auropuntatus* (3.6), *Paguma larvata* (12), *Lepus nigricollis* (1.2) and *Sus scrofa* (3.6) and domestic prey; *Canis lupus familiaris* (9.8) and *Capra aegagrus hircus* (9.8). Forest fire, visitor inflow and other anthropogenic activities were identified as the threats to Leopard habitat. The analysis showed prey abundance in the study area is lower comparing with protected areas in lowland of Nepal. Majority of prey species recorded were sub-optimal species in diet entailing deficiency of medium prey species in the SNNP. Anthropogenic activities need to control and channelize communication mechanism to reduce threats to the survival of Leopard.

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ABBREVIATIONS

Abbreviated form	Details of abbreviations
%	Percentage
°C	Degree Celsius
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
DNPWC	Department of National Park and Wildlife Conservation
DFO	District Forest Office
Eg	example
GPS	Global Positioning System
HMG	His Majesty Government
SSC	Species Survival Commission
IUCN	International Union for Conservation of Nature
km	kilometre
KMTNC	King Mahindra Trust For Nature Conservation
m	meter
msl	Meter from sea level
n	number
NHM	Natural History Museum
NPWC	National Park and Wildlife Conservation
PAs	Protected Areas
SNNP	Shivapuri Nagarjun National Park
SWWR	Shivapuri Watershed and Wildlife Reserve
TU	Tribhuvan University
UNDP	United Nation Development Programme
WWF	World Wildlife Fund for nature conservation
Sp.	Species