

Wild Mammals of the Annapurna Conservation Area - 2019

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Wild Mammals of the Annapurna Conservation Area

अन्नपूर्ण संरक्षण क्षेत्रका स्तनधारी वन्यजन्तु



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National Trust for Nature Conservation
Annapurna Conservation Area Project
2019

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National Trust for Nature Conservation
Annapurna Conservation Area Project
2019

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Compilers
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National Trust for Nature Conservation
Annapurna Conservation Area Project
2019



Pasture land of Upper Mustang © Rishi Baral /NTNC-ACAP

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Northern Belt of ACA acts as important habitat for Blue Sheep and Snow Leopard
© Rishi Baral /NTNC-ACAP



Dense temperate forests in the southern part of ACA is important fore species like Himalayan black bear, Clouded Leopard, Leopard, Himalayan Serow and Muntjac - Sikles © Rishi Baral /NTNC-ACAP

Government of Nepal
Ministry of Forest and Environment
Department of National Parks & Wildlife Conservation

Ref. - 3031

Foreword

Nepal lies in the heart of the Himalayas within a highly important bio-geographic region. Nepal's Protected Areas covers 23.39% of total land area of the country and occupies 80 ecosystems existing within the country. Nepal is home to about 212 species of wild mammal that comprises 4.2% of the global mammalian fauna

The Annapurna Conservation Area (ACA), established in 1986, is the first and largest protected area of Nepal and covers area of 7,629 km2. The Annapurna Conservation Area Project (ACAP)initiated in Ghandruk Village Development Committee (VDC) in 1986 is now notified as a 'Conservation Area' since in 1992. The ACA is managed by the National Trust for Nature Conservation (NTNC) as an 'Integrated Conservation and Development Programme' which combines nature conservation together with local economic and social development objectives. This has made the Annapurna region famous among community-driven conservation organizations globally.

Mammals play unique roles in forests and other ecosystems, predominantly as preys, predators and scavengers. Out of 27 protected species of Nepal, ACA harbors 14 species which is presented in this book in detail. Mammalian species with IUCN Red Data status such as Critically Endangered, Endangered, Vulnerable, Near-threatened are home to this area, which offers a wide range of habitats to these species.

This book can be considered as an important for researchers, nature lovers and local peoples seeking knowledge on wild mammals of the Annapurna area. I hope that this latest information will be helpful for the conservation of the species in this region. The book will also be equally important for driving future initiatives for the conservation of the habitats of these mammals.

I would like to congratulate all the researchers, the review and compiling teams and the Annapurna Conservation Area Project for this wonderful work and for their dedication to prepare this valuable book.

Thank you

03/07/2019

Man Bahadur Khadka
Director General

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Juvenile Blue Sheeps taken by camera traps in Manang © NTNC-ACAP



Snow Leopard camera trapped in Manang © NTNC-ACAP

Ministry of Industry, Tourism, Forest and Environment
Gandaki Province
Nepal

☎ :061-467654
467669
467670

Ref. No.:
Letter No.:-

Foreword

The Gandaki Province is enriched with two conservation areas, namely the Annapurna Conservtion Area (ACA) and the Manaslu Conservation Area (MCA). The ACA is the largest protected area of Nepal. It comprises of 15 Rural Municipalities (previously 57 VDCs) and 87 wards of 5 districts (Kaski, Manang, Mustang, Lamjung and Myagdi). This area is a renowned tourist destination for national and international visitors, especially for trekking.

The ACA occupy 35.10 % of the total area of Gandaki Province. The Annapurna Conservation Area Project (ACAP) was established in 1986 to manage the ACA, covering an area of 7,629 sq. km. It has played a special role in combining conservation and people participation. This approach was first tested as a pilot program in Ghandruk Village Development Committee (VDC) in 1986. ACAP has had great success in promoting community-driven conservation concepts in Nepal and abroad with its 'Integrated Conservation and Development Programme' or ICDP model. The ACA area contains some of the highest and most beautiful snow peaks, particularly Annapurna I, Annapurna II, Machhapuchre, Annapurna-South and Lamjung Himal. The world's deepest rivervalley, the Kali Gandaki Valley, and the world's largest rhododendron forest, in Ghorepani, lie in this area.

ACA was established mainly for biodiversity conservation and tourism promotion. This book of written on the mammals of the area shows that the region is also an equally important as mammal's habitat. As many as 128mammals species has been listed in this book, which indicate the area is rich in mammals diversity. In fact the region is exteremly rich in overall biodiversity.

I would like to thanks and congratulate all the helping hands, researchers, reviewers and compilers for their effort and hard work to bring out this book into its final shape. This book will undoubtedly add more value and benefit to all the concerned organizations, agencies and people for the conservation of mammal species and their habitats.

Thank you

03/07/'19

Bishnu Bhandari
Secretory

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Camera trapping installed for survey of mammals at Jomsom, Mustang



Sherman traps used for rodent survey at Jomsom, Mustang

NATIONAL TRUST FOR NATURE CONSERVATION

Foreword

The Annapurna Conservation Area (ACA) is the largest and first Conservation Area managed by the National Trust for Nature Conservation (NTNC). It covers an area of 7,629 sq. km. or 5.18% of the total area of Nepal and is home to over 100,000 residents of different ethnicity, cultural and linguistic groups.

This area is rich in biodiversity and harbors 1,352 species of plants, 128 species of wild mammals, 518 species of birds, 40 species of reptiles, 23 species of amphibians amd 348 species of butterflies. To manage this area, NTNC started from the success of its pilot phase in Ghandruk, Kaski. The Annapurna Conservation Area Project (ACAP) was then extended to 5 districts (Kaski, Manang, Mustang, Lamjung and Myagdi). ACAP-NTNC has its headquarters in Pokhara and has 7 Unit Conservation Offices (UCOs). The UCOs are in both the northern and the southern belt. Lomangthang, Jomsom and Manang UCOs are in the northwhereas Ghandruk, Lwang, Sikles and Bhujung UCOs are in the south.

The ACA includes ecosystems ranging from subtropical Sal forest to sub-alpine meadows and trans-Himalayan cold deserts. ACA has 22 different forest types which serve as the habitat for many species. Species such as Steppe Polecat, Kashmir Musk Deer, Tibetan Gazelle, Pallas's Cat, Kiang, Himalayan Wolf and Tibetan Argali were first reported in Nepal from this area. The region is home to globally **Critically Endangered** species such as the Chinese Pangolin,**Endangered** Himalayan Musk Deer and Tibetan Antelope Red Panda and **Vulnerable** species such as the Himalayan Black Bear, Clouded Leopard and many other mammals.

I trust that this precious work will help many researchers, locals, trekkers and organizations as a valuable source of information and will highlight ACA as a truly important area for mammalian species. I appreciate the research team as well as the review members for their effort to bring about this book in its final shape.

.....

Yajna Nath Dahal
Member Secretary

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Leopard is an apex predator inhabiting the southern belt of ACA © Rishi Baral/NTNC-ACAP



Orange-bellied Himalayan Squirrel feeding near Lwang, Kaski © Rishi Baral/NTNC-ACAP

NATIONAL TRUST FOR NATURE CONSERVATION

ANNAPURNA CONSERVATION AREA PROJECT

Preface

The Annapurna Conservation Area (ACA) with its spectacular natural beauty is rich in biodiversity and is a treasure trove for many species of flora and fauna. Its participatory Integrated Conservation and Development Programme (ICDP) is a prime example for community-based conservation in Nepal as well as in the world. This area is bordered by the Marshyangdi River in the east, the Kali Gandaki River in the west, the dry alpine desert of Tibet (China) in the north and the valleys and foothills of Pokhara in the south.

The ACA is broadly divided into two distinct ecological regions, the Trans-Himalayan region and the Cis-Himalayan region due to its unique topography. The area is endowed with a climate ranging from sub-tropical to artic and has twenty nine types of ecosystems. Out of the total land area of ACA, barren land occupies nearly half (49.67%), followed by grassland (21.27%), forest (15.21 %), glaciers (4.45%) and agriculture land (3.07%).

Having all these features, the floral and faunal diversity in this area are abundant. The previously reported number of wild mammals in ACA was 101, but this book suggests that it has now get hold of 128 species. This book 'Wild Mammals of the Annapurna Conservation Area' is a great piece of work with crucial information about mammalian baseline in the Annapurna regions. It is a matter of pleasure that, for the first time, we have been able to come up with the status of wild mammals in the ACA. I am sure this publication is highly authoritative as it is based mostly on primary information gathered during extensive work. I believe this book will be a valuable reference for researchers and naturalists, intend to working in ACA.

I acknowledge the dedication and hard work of the compilers and NTNC-ACAP team for their collective contribution for accomplished this publication. I would like extend my sincere gratitude to NTNC central team for their continuous supports and valuable inputs. I would also like to express my gratitude to the reviewers' team for their precious and valuable time to review the book, and make it worthful.

At this moment, we highly appreciate your valuable inputs and feedback from all the readers and well-wishers regarding the publication.

.....

Raj Kumar Gurung
Project Chief

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Abbreviations And Acronyms

ACA	Annapurna Conservation Area
ACAP	Annapurna Conservation Area Project
BCN	Bird Conservation Nepal
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
DNPWC	Department of National Parks and Wildlife Conservation
VDC	Village Development Committee
RM	Rural Municipality
NTNC	National Trust for Nature Conservation
BCC	Biodiversity Conservation Centre
BCP	Bardiya Conservation Program
GCA	Gaurishankar Conservation Area
ICDP	Integrated Conservation and Development Programme
IUCN	International Union for Conservation of Nature and Natural Resources
MCA	Manaslu Conservation Area
NP	National Park
OIC	Office In-charge
PA	Protected Area
SCP	Suklaphanta Conservation Program
UCO	Unit Conservation Office



Catchment area of Lamjung Himal, a habitat for wildlife © Rishi Baral/NTNC-ACAP

Acknowledgements

We would like to thank the following individuals and organizations for their help and support during the preparation of this book.

1. **Prof. Karan Bahadur Shah , Dr. Naresh Subedi, Dr. Will Dockworth and Yadav Ghimirey:** for reviewing and comenting on this book upto its final stage.
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3. **Raj Kumar Gurung:** for providing guidance and an excellent working environment.
4. **NTNC- ACAP, Unit Conservation Office**s (UCOs): Manang, Mustang, Lomanthang, Sikles, Bhujung, Ghandruk and Lwang: for providing the checklists and photographs from their area.
5. **NTNC-ACAP Office Personnel**: Achyut Raj Pant, Santosh Sherchan, Dr. Paras Bikaram Singh, Yam Bahadur Gurung, Bidur Bikram Kuinkel, Rajesh Prasad Gupta, Tulsi Prasad Dahal, Babulal Tiruwa, Utsav Neupane, Surendra Pariyar, Narendra Kumar Shrestha, Pooja Khanal, Bijaya Gurung, Suresh Thapa, Shree Krishna Neupane, Pawan Kumar Yadav, Basudev Neupane, Bishnu Prasad Poudel, Lekhnath Gautam, Khushi Kurmi, Dhan Kumari Gurung, Pratima Dhunganga, Om Bahadur Gurung, Netra Lal Mahatara : for support during field work and for sharing checklists.
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7. Prof. Karan Bahadur Shah, Raju Acharya, Yadav Ghimirey, Hari Basnet, Tek Gharti Magar, Sanjeev Binaya, Basant Sharma, Bibek Gautam, Friends of Nature (FON) Nepal, Nepal Bat Research and Conservation Union (NeBRCU) : for providing photographs.
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Status of Wild Mammals in Nepal

Favourable geographical location has given Nepal a distinct advantage in biodiversity including mammals. A total of 212 species of wild mammals have been recorded in Nepal (Amin et al. 2018) which is 4.2% of the mammalian fauna found in the whole world. Nepal's mammalian fauna diversity ranges from the world's second largest terrestrial mammal, the Asian Elephant (*Elephas maximus*) to one of the world's smallest mammals, the white-toothed pygmy shrew (*Suncus etruscus*). It also includes the Royal Bengal Tiger (*Panthera tigris*), the largest cat species and the indian Spotted Chevrotain (*Moschiola indica*) (IUCN, 2011).

Of the 212 mammal species assessed, 49 species (23%) were categorised as nationally Threatened. These comprise nine Critically Endangered species (18%), 26 Endangered species (53%), 14 Vulnerable species (29%) and one species regionally Extinct. A total of seven species (3%) were considered Near Threatened and 83 species (39%) were Data Deficent. (Amin R., *et.al*, 2017). There are two endemic species of mammals to Nepal from ACA. i.e the Himalayan Field Mouse (*Apodemus gurkha*) and Csorbas Mouse-eared bat (*Myotis csorbai*).

Status of Wild Mammals in Annapurna Conservation Area

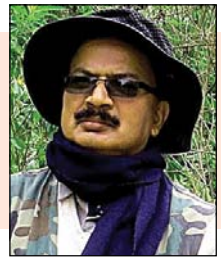
This book is partly based on the report **"Bio-Diversity Conservation Data"** prepared by the Bio-diversity Conservation Data Project team submitted to the King Mahendra Trust for Nature Conservation (KMTNC) in July 1994.

As many as 128 species of wild mammals representing 9 orders, 27 families have been recorded in the ACA. Species rich orders are Carnivora (37 species), the Rodentia (30 species) and the Chiroptera (30 species). Out of 27 priority protected species of Nepal, 14 species have been found in the ACA. Likewise, 26 species are included in CITES appendix (Appendix I=17, Appendix II=9) in ACA. Eleven species included in previous checklists are excluded in this book due to inconsistency in scientific name (3 species), subspecies (5 species), recorded from 2-3 districts of terai (1) and unreliable listing (2). Five species i.e Asiatic Golden Cat, Marbled Cat, Wild Yak, Tibetan Antelope and Stripe-backed Weasel have doubtful occurrence in this area.

Seven species of mammals, new to Nepal, were first time recorded from the ACA. They are Steppe Polecat; Kasmir Musk Deer; Tibetan Gazelle; Pallas's Cat; Kiang; Wolf and Tibetan Argali. Globally Critically Endangered species like Chinese Pangolin, Endangered species like Kasmir Musk deer, Himalayan Musk deer and Vulnerable species such as the Snow Leopard, Clouded Leopard, Red Panda and Himalayan Black Bear also occur in the area. This book presents an updated number of mammalian species of ACA from various sources. Further research and surveys may discover more species in this area.

Compilers Team

I am very much pleased with this excellent publication. it is a great piece of work providing crucial information and strong baseline for further research related to the area's mammals. I salute ability of the compilers, NTNC and ACAP personnel for timely undertaking this courageous work.



Prof. Karan Bahadur Shah
Himalayan Nature



The book provides complete list of mammals of Annapurna Conservation Area for general public and researchers with photographic information. I would like to congratulate to the compilers and ACAP for this wonderful piece of work.

Dr. Naresh Subedi
NTNC, Khumaltar

The Annapurna Conservation Area must rank as one of the most remarkable protected areas in the world. Well known for its spectacular scenery, this careful work shows it to support a rich, varied, and globally highly significant mammal fauna. The world owes a big thanks to the compilers for their vision and diligence in pulling together the dispersed information. The book is sure to inspire many people to continue to ensure the conservation of this vital area.



Dr. Will Dockworth
IUCN



Annapurna Conservation Area is one of the three most popular protected area in Nepal after Sagarmatha National Park and Chitwan National Park. Whole lot of research have also been carried out over a long period of time since the area was established. Much information on the wild mammals found here has been scattered all around. Hence a book written specifically on the wild mammals of Annapurna Conservation Area is a welcome step. I believe this step will be appreciated by every wildlife researcher/ conservationist in Nepal.

Yadav Ghimirey
Friends of Nature (FON) Nepal



Himalayan Wolfs camera trap in Manang © NTNC-ACAP



Snow Leopards camera trap in Manang © NTNC-ACAP

National Trust for Nature Conservation

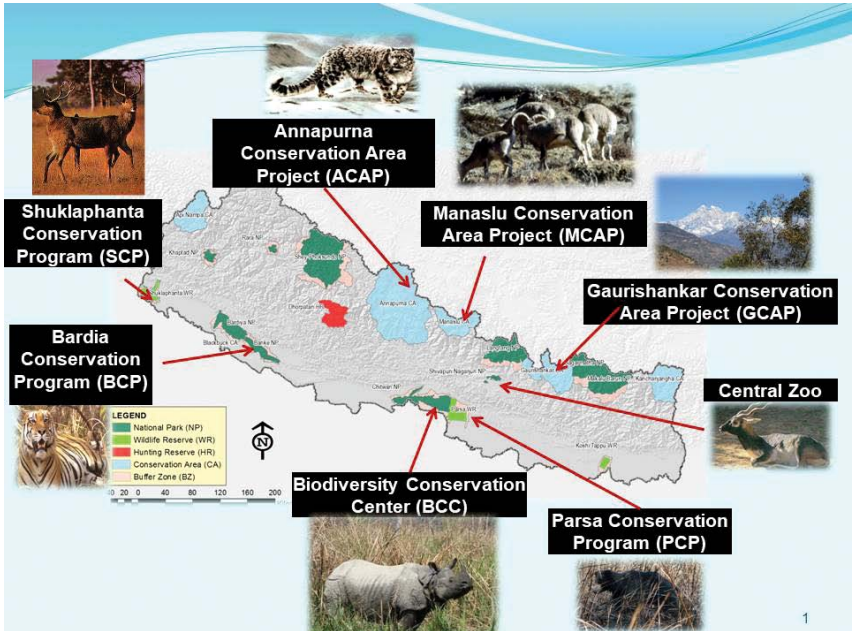
The National Trust for Nature Conservation (NTNC) was established in 1982 by the legislative act as an autonomous and not-for-profit organization, mandated to work in the field of nature conservation in Nepal. The Trust, in the past 3 decades, has successfully implemented various projects to fulfill the need and demands of communities on nature and wildlife conservation and biodiversity as well as cultural heritage protection, ecotourism, alternative energy promotion, gender empowerment, agriculture and livestock support and community based health services for sustainable development of the communities. The Trust's experience over the years has shown that conservation efforts in a low income economy such as Nepal cannot be successful, much less sustainable, unless the needs and welfare of the local people are addressed. Holistic and integrated conservation and development programs with active people's participation aimed at promoting local guardianship is the focus of all the Trust activities.

Geographically, the Trust’s activities are spread across Nepal from the sub-tropical plains to the lowlands and the high Himalayas, including the trans-Himalayan region of Upper Mustang and Manang. Currently, the Projects of the Trust are divided into three geographical areas-the lowland, the mid hills (Kathmandu Valley) and the high mountains. The Trust's activities in the lowlands are based in and around Chitwan National Park, Parsa Wildlife Reserve, Bardia National Park and Shuklaphanta National Park located in the central, western and far-western development regions of Nepal, through the Biodiversity Conservation Centre (BCC) and Parsa Conservation Program (PCP) in Chitwan and Parsa, the Bardia Conservation Program (BCP) in Bardia and the Suklaphanta Conservation Program (SCP) in Kanchanpur. Similarly, the Annapurna Conservation Area (ACA), the Manaslu Conservation Area (MCA) and the Gaurishankar Conservation Area (GCA) are the three protected areas managed by the Trust in the mountain region. The Central Zoo is the only project of the Trust in Kathmandu Valley.

Mission Statement

"To conserve, manage and promote nature in all its diversity balancing human needs with the environment on a sustainable basis for posterity-ensuring maximum community participation with due cognizance of the linkage between economics, environment, and ethics through a process in which people are both the principle actors and beneficiaries."

Projects of NTNC



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Annapurna Conservation Area Project (ACAP)

Launched in 1986, the Annapurna Conservation Area Project (ACAP) is the largest undertaking of NTNC and also the first Conservation Area and largest protected area in Nepal. It covers an area of 7,629 sq. km. and is home to over 100,000 residents of different cultural and linguistic groups. ACAP is rich in biodiversity and is a treasure house for 1,352 species of plants, 128 wild mammals (recent), 514 birds (recent) , 348 butterflies, 40 reptiles and 23 amphibians.

There are several features that make the Annapurna region a unique place in the world. It contains world's deepest river valley - Kali Gandaki Valley, a valley with fossils from the Tethys Sea dating back 60 million years ago. The region contains the world's largest rhododendron forest in Ghorepani. Tilicho lake, located in Manang – north of Annapurna massif, is the world's highest large altitude fresh water lake of its size.

The biological diversity of the Annapurna region is equally rivaled by its cultural diversity. Gurung and Magar are the dominant groups in the south, whereas Thakali, Manange and Loba are dominant in the north. Each of these groups speaks their own dialit, and have unique cultures and traditions. Besides, there are also Brahmin, Chhetri and other occupational castes although in comparatively smaller numbers. Hindu, Buddhist and pre-Buddhist Bon religions along with a mixture of all these are prevalent across the region. The local people reside in the 15 Rural Municipalitie of 5 districts and 87 wards (Previous 57 Village Development Committees (VDCs) of the Annapurna Conservation Area (ACA). The natural and cultural features of ACA have made it the most popular trekking destination in the country, drawing more than 60 percent of the country's total trekkers. Tourism, over the years, has been firmly established as one of the most important and competitive sectors of the local economy. There are over 1,000 lodges, teashops and hundreds of other subsidiary services to cater to the thousands of trekkers, pilgrims and their support staff.

The soaring number of visitors, whose fuel wood consumption is twice as much as that of local people, has exerted immense pressure on forest resources already stressed by the growing local population. Similarly, litter, particularly the waste produced by trekkers and hoteliers, is another major concern. It is estimated that an average trekking group of 15 people generates about 15 kgs of non-biodegradable and non-burnable garbage in a 10 days trek, producing tons of garbage in the Annapurna region annually.



The multifaceted problems of ACA have been addressed through an integrated, community based conservation and development approach, an experimental model which has been in the vanguard of promoting the concepts of "Conservation Area" through an "Integrated Conservation and Development Programme" approach in the country and abroad. ACAP was first tested as a pilot Program in the Ghandruk Village Development Committee (VDC) in 1986. After being notified in the Gazette as a "Conservation Area" in 1992, ACAP's program covered the entire area.

Additionally, ACA is the first protected area that has allowed local resident to live within the boundaries as well as own their private property and maintain their traditional rights and access to the use of natural resources. It is also the first protected area in Nepal, which has refrained from using army assistance to protect the dwindling natural resource base on which the region depends. Instead, it invests whatever financial resources available for community development and social capital building in the region. NTNC receives no regular funding support from the government for the operation of ACAP, but has been granted the right to collect entry fees from visiting trekkers. The revenue is ploughed back to implement conservation and development activities in ACA. Additional funds are raised from national and international donors and funds earned in the more popular areas are also spend in the less popular ones. This is an exemplary achievement of a Non-Government Institution's ability to manage a significant portion of the protected area system in Nepal.

In order to manage ACA more effectively, it has been divided into 7 unit conservation offices - Jomsom, Manang and Lo-Manthang in the trans-Himalayan region and Bhujung, Sikles, Ghandruk, and Lwang on the southern flank of the Annapurna range. The focus of Jomsom, Manang and Ghandruk, which are among the most popular trekking destinations, is on integrated tourism management and other development activities that benefit the local communities and the environment. The Program priorities for Bhujung, Sikles and Lwang are poverty alleviation and integrated agriculture development and agro-forestry. Similarly, while the focus in upper Mustang, which came under the jurisdiction of ACA in 1992, has been on managing controlled tourism on a sustainable basis, and promoting heritage conservation which is the major tourist attraction. The Conservation Education and Extension Program is being implemented in the entire region of ACA and forms the backbone of all its endeavors.

The first management mandate given by the Government to NTNC to manage ACA ended in 2002. The Government has given another management mandate of additional 10 years to the Trust. NTNC believes that areas such as the ACA will ultimately have to be managed by the local people themselves in perpetuity. Therefore, the focus is on building local capacity, both at the institutional and

individual levels, to meet all the conservation and development aspirations of the people.

Goal

"To achieve sustained balance between nature conservation and socio-economic improvement in the Annapurna Conservation Area (ACA) and thereby assist the National Trust for Nature Conservation in achieving its goal."

Objectives

- Conserve the natural resources of ACA for the benefit of present and future generations.
- Bring sustainable social and economic development to the local people.
- Develop tourism in such a way that it will have minimum negative impact on the natural, socio-cultural and economic environments.

For more Information

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Mammals recorded first from the Annapurna Conservation Area and were new to Nepal



Steppe Polecat *(Mustela eversmanii)*



Pallas's Cat *(Otocolobus manul)*



Wolf *(Canis lupus)*



Argali *(Ovis ammon hodgsoni)*



Kiang *(Equus kiang)*



Tibetan Gazelle *(Procapra picticaudata)*



Kasmir Musk Deer *(Moschus cupreus)*

Status of Biodiversity in ACA

S.N	Species	Worldwide no. of spp.	Nepal no. of spp.	ACA no. of spp.	ACA species % in Comparison to Nepal
1	Plant	369,000	7000	1352	(19%)
2	Mammal	5416	212	128	(60 %)
3	Bird	11,126	886	518	(58%)
4	Reptile	10793	123	40	(23%)
5	Amphibian	8001	117	23	(20%)
6	Butterfly	20,000	660	348	(53%)

Source: NTNC-ACAP, 2019



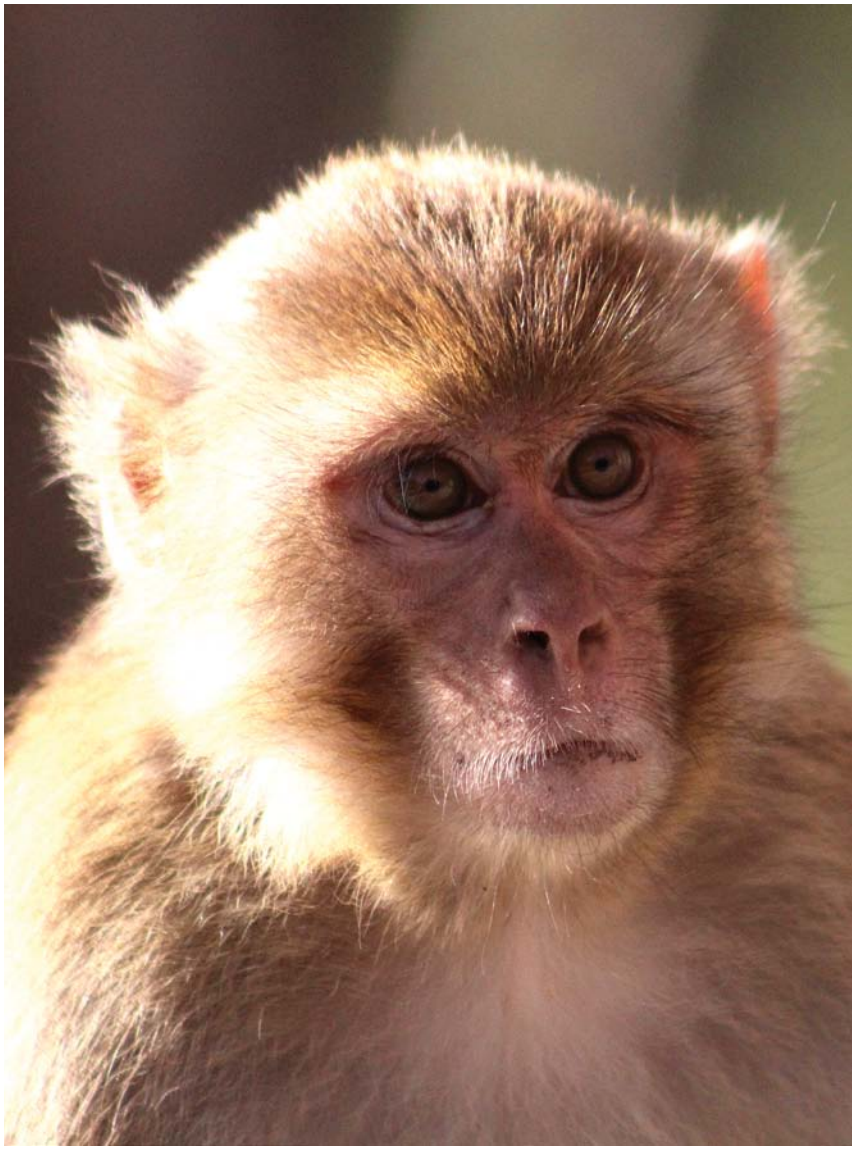
Snow Leopard captured by a camera trap in Chhonup, upper Mustang © NTNC-ACAP (Camera trap)



Golden Jackal © Rishi Baral /NTNC-ACAP

ORDER: PRIMATES

Family: Cercopithecidae



Rhesus Macaque © Rishi Baral /NTNC-ACAP



Nepal Grey Langur at Parche, Sikles © Rishi Baral /NTNC-ACAP

S.N.	English Name	Scientific Name	नेपाली नाम	National Red Data Status	IUCN Global Status
Order: Primates					
Family: Cercopithecidae					
1	Rhesus macaque	*Macaca mulatta (Zimmermann, 1170)*	रातो बाँदर	Least Concern	Least Concern
2	Assamese macaque	*Macaca assamensis* (M'Clelland, 1840)	पहरे बाँदर	Vulnerable D1	Near Threatened
3	Nepal Grey Langur	*Semnopithecus schistaceus* (Hodgson, 1840)	कालोमुखे बाँदर, लाम्पुच्छे बाँदर, ढेंडु	Least Concern	Least Concern

ORDER: PHOLIDOTA

Family: Manidae



Chinese Pangolin © Prof. Karan Bahadur Shah

S.N.	English Name	Scientific Name	नेपाली नाम	National Red Data Status	IUCN Global Status
Order: Pholidota					
Family: Manidae					
4	Chinese Pangolin	*Manis pentadactyla* (Linnaeus, 1758)	कालो सालक	Endangered	Critically Endangered A2d+3d+4d

ORDER: CARNIVORA

Family: Felidae



Snow Leopard is the apex predator in the transhimalays of Manang district
© NTNC-ACAP (Camera trap- Manang)



Leopard camera trapped near Sikles
© NTNC-ACAP, UCO Sikles
(Camera trap- Sikles)



Leopard Cat with Kittens © NTNC-ACAP/
Project Abroad, Ghandruk
(Camera trap- Ghandruk)



Jungle Cat at Lek Gau, Narchyang Myagdi
© Rishi Baral /NTNC-ACAP



Clouded Leopard © FON, Nepal
(Camera trap- Sikles)

S.N.	English Name	Scientific Name	नेपाली नाम	National Red Data Status	IUCN Global Status
Order: Carnivora					
Family: Felidae					
5	Snow Leopard	*Panthera uncia* (Schreber, 1775)	हिँऊ चितुवा	Endangered D	Vulnerable C1
6	Eurasian Lynx	*Lynx lynx* (Linnaeus, 1758)	पाहन बिरालो, प्याकु बिरालो	Vulnerable B1a; D2	Least Concern
7	Leopard	*Panthera pardus* (Schlegel, 1857)	चितुवा	Vulnerable D1	Vulnerable A2cd
8	Asiatic Golden Cat	*Catopuma temminckii* (Vigors & Horsfield, 1827)	सुनौलो बिरालो	Data Deficient	Near Threatened
9	Marbled Cat	*Pardofelis marmorata* (Martin, 1837)	छिरबिरे बिर ालो	Data Deficient	Near Threatened
10	Leopard Cat	*Prionailurus bengalensis* (Kerr, 1792)	चरी बाघ	Vulnerable C2a(i)	Least Concern
11	Jungle Cat	*Felis chaus* (Schreber, 1777)	वन बिरालो	Least Concern	Least Concern
12	Clouded Leopard	*Neofelis nebulosa* (Griffith, 1821)	ध्वाँसे चितुवा	Endangered B1ab (iii,v); C2(i); D	Vulnerable A2cd+3cd
13	Pallas's Cat	*Otocolobus manul* (Pallas, 1776)	जुँगे बिरालो	Data Deficient	Near Threatened

Family: Viverridae



Large Indian Civet is the largest civet species
© NTNC-ACAP (Camera trap- Sikles)



Small Indian Civet © NTNC-ACAP
(Camera trap)



Masked Palm Civet © FON, Nepal



Common Palm Civet feeding on the Papaya
© Bibek Gautam

S.N.	English Name	Scientific Name	नेपाली नाम	National Red Data Status	IUCN Global Status
Family: Viverridae					
14	Large Indian Civet	*Viverra zibetha* (Linnaeus, 1758)	ठुलो निर बिरालो, सिली	Near Threatened	Least Concern
15	Small Indian Civet	*Viverricula indica* (É. Geoffroy Saint-Hilaire, 1803)	सानो निर बिरालो	Least Concern	Least Concern
16	Masked Palm Civet	*Paguma larvata* (C.E.H. Smith, 1827)	गाजलु निर बिरालो, कस्तुरी बिरालो	Least Concern	Least Concern
17	Common Palm Civet	*Paradoxurus hermaphroditus* (Pallas, 1777)	टाँडी निर बिरालो	Least Concern	Least Concern

Family: Prionodontidae



Spotted Linsang was photographed for the first time in Nepal from ACA © FON, Nepal (Camera trap- Sikles)

S.N.	English Name	Scientific Name	नेपाली नाम	National Red Data Status	IUCN Global Status
Family: Prionodontidae					
18	Spotted Linsang	*Prionodon pardicolor* (Hodgson, 1841)	सिलु बिरालो	Endangered C2a(i)	Least Concern

Family: Herpestidae



A pair of Small Indian Mongoose in its natural habitat © Rishi Baral /NTNC-ACAP



Crab-eating Mongoose has also been recently recorded from ACA © NTNC-ACAP, UCO Sikles (Camera trap- Sikles)

S.N.	English Name	Scientific Name	नेपाली नाम	National Red Data Status	IUCN Global Status
Family: Herpestidae					
19	Indian Grey Mongoose	*Herpestes edwardsii* (É. Geoffroy Saint-Hilaire, 1818)	ठुलो न्याउरीमुसा	Least Concern	Least Concern
20	Small Indian Mongoose	*Herpestes auropunctatus* (Hodgson, 1836)	सानो न्याउरीमुसा	Least Concern	Least Concern
21	Crab-eating Mongoose	*Herpestes urva* (Hodgson, 1836)	गंगटे न्याउरीमुसा	Vulnerable C2a (i)	Least Concern

Family: Canidae



Himalayan Wolf © NTNC-ACAP (Camera trap- Manang)



Golden Jackal© Shailendra Kumar Yadav /NTNC-ACAP)



Red Fox © NTNC-ACAP
(Camera trap- Manang)



Asiatic Wild Dog/ Dhole has been photographed for the first time in ACA © FON, Nepal
(Camera trap- Sikles)

S.N.	English Name	Scientific Name	नेपाली नाम	National Red Data Status	IUCN Global Status
Family: Canidae					
22	Himalayan Wolf	*Canis lupus* (Linnaeus, 1758)	हिमाली ब्वाँसो	Critically Endangered C2a(i); D	Least Concern
23	Golden Jackal	*Canis aureus* (Linnaeus, 1758)	स्याल	Least Concern	Least Concern
24	Red Fox	*Vulpes vulpes* (Linnaeus, 1758)	रातो फ्याउरो	Data Deficient	Least Concern
25	Bengal Fox	*Vulpes bengalensis* (Shaw, 1800)	फुस्रो फ्याउरो	Vulnerable C1+2a(i)	Least Concern
26	Asiatic Wild Dog/ Dhole	*Cuon alpinus* (Pallas, 1811)	वन कुकुर	Endangered C2a(i)	Endangered C2a(i)
27	Tibetan Fox	*Vulpes ferrilata* (Hodgson, 1842)	भोटे फ्याउरो	Data Deficient	Least Concern

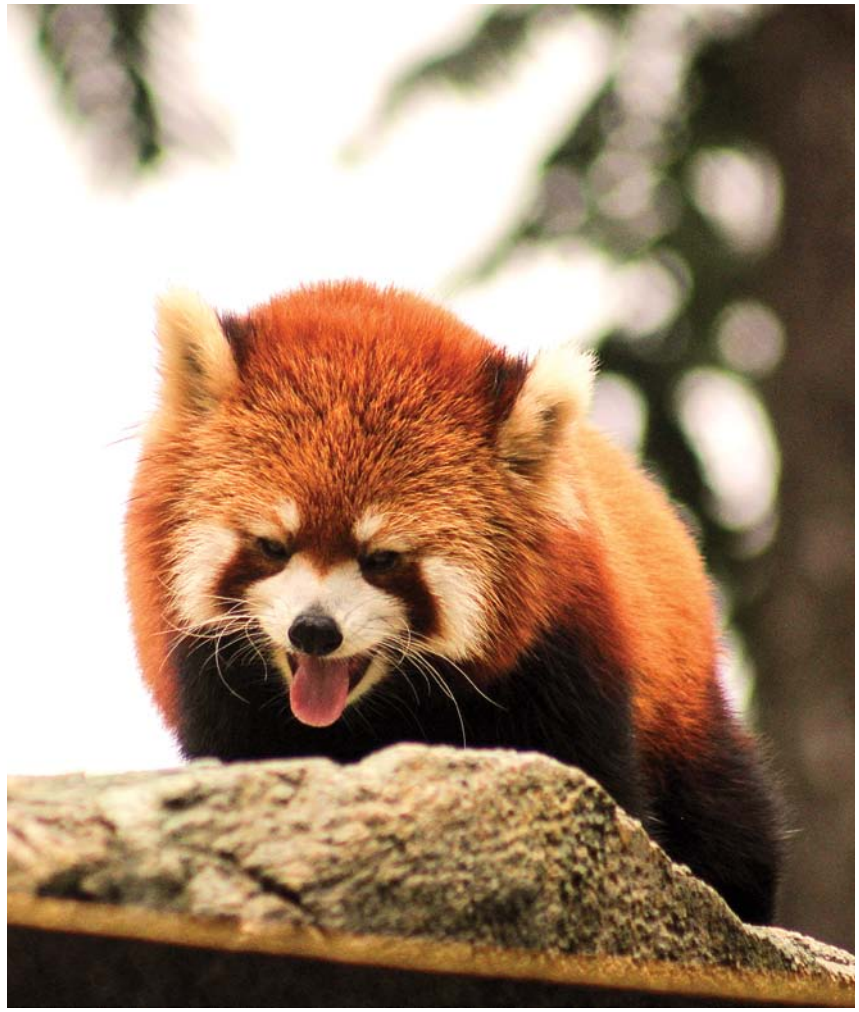
Family: Ursidae



Himalayan Black Bear © Rishi Baral/NTNC-ACAP

S.N.	English Name	Scientific Name	नेपाली नाम	National Red Data Status	IUCN Global Status
Family: Ursidae					
28	Himalayan/Asiatic Black Bear	*Ursus thibetanus* (G. [Baron] Cuvier, 1823)	कालो भालु	Endangered C2a(i)	Vulnerable A2cd
29	Brown Bear	*Ursus arctos* (Linnaeus, 1758)	रातो भालु	Critically Endangered C2a(i); D	Least Concern

Family: Ailuridae



Red Panda © Rishi Baral/NTNC-ACAP

S.N.	English Name	Scientific Name	नेपाली नाम	National Red Data Status	IUCN Global Status
Family: Ailuridae					
30	Red Panda	Ailurus fulgens (Cuvier, 1825)	हाब्रे, पुँडेकुँदो	Endangered C2a(i)	Endangered A2cde +3cde +4cde



Smooth-coated Otters© Shailendra Kumar Yadav/NTNC-ACAP

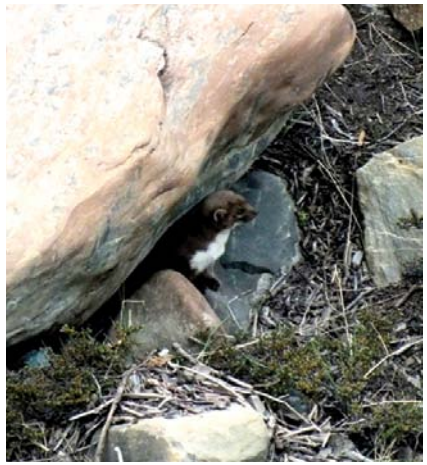


Yellow-throated Marten at Thulakharka, Kaski © Rishi Baral/NTNC-ACAP

S.N.	English Name	Scientific Name	नेपाली नाम	National Red Data Status	IUCN Global Status
Family: Mustelidae					
31	Eurasian Otter	*Lutra lutra* (Linnaeus, 1758)	कालो ओंत	Near Threatened	Near Threatened
32	Smooth-coated Otter	*Lutra perspicillata* (I.Geoffroy Saint-Hilaire, 1826)	खैरो ओंत	Endangered C1	Vulnerable A2cde
33	Yellow-throated Marten	*Martes flavigula* (Boddaert, 1785)	कुखैरी मल्सांप्रो	Least Concern	Least Concern



Mountain Weasel
© Yadav Ghimirey /FON Nepal



Stone Marten © Tek Gharti Magar

S.N.	English Name	Scientific Name	नेपाली नाम	National Red Data Status	IUCN Global Status
Family: Mustelidae					
34	Stone / Beech Marten	*Martes Foina* (Erxleben, 1777)	हिमाली मल्सांप्रो	Least Concern	Least Concern
35	Stoat / Ermine / Short-tailed Weasel	*Mustela erminea* (Linnaeus, 1758)	बहुरुपी मल्सांप्रो	Data Deficient	Least Concern
36	Yellow-bellied Weasel	*Mustela kathiah* (Hodgson, 1835)	पितोदार मल्सांप्रो	Data Deficient	Least Concern
37	Stripe-backed Weasel	*Mustela strigidorsa* (Gray, 1853)	धर्के मल्सांप्रो	Data Deficient	Least Concern
38	Altai / Mountain Weasel	*Mustela altaica* (Pallas, 1811)	पहाडी मल्सांप्रो	Data Deficient	Near Threatened
39	Siberian Weasel	*Mustela sibirica* (Pallas, 1773)	साइबेरियाली मल्सांप्रो	Least Concern	Least Concern
40	Steppe Polecat	*Mustela eversmanii* (Lesson, 1827)	क्याक	Least Concern	Least Concern
41	Large-toothed Ferret Badger (Burmese Ferret Badger)	*Melogale personata* (I.Geoffroy Saint-Hilaire, 1831)	सानो सुँगुरे भालु	Data Deficient	Least Concern

ORDER: EULIPOTYPHLA

Family: Soricidae



Sikkim Large-clawed /Himalayan Shrew from Manang © Rishi Baral / NTNC-ACAP



Asian House Shrew © Rishi Baral / NTNC-ACAP

S.N.	English Name	Scientific Name	नेपाली नाम	National Red Data Status	IUCN Global Status
Family: Soricidae					
42	Asian House Shrew	*Suncus murinus* (Linnaeus, 1766)	घर छुचुन्द्रो	Least Concern	Least Concern
43	Sikkim Large-Clawed Shrew/ Himalayan Shrew	*Soriculus nigrescens* (Gray, 1842)	सिक्किमे छुचुन्द्रो	Least Concern	Least Concern
44	Bailey's Shrew	*Crocidura baileyi* (Osgood, 1936)	छुचुन्द्रो	Least Concern	Least Concern
45	Elegant Water Shrew	*Nectogale elegans* (Milne-Edwards, 1870)	सुन्दर पानीछुचुन्द्रो	Data Deficient	Least Concern
46	Himalayan Water Shrew	*Chimarrogale himalayica* (Gray, 1842)	पहाडी पानीछुचुन्द्रो	Endangered B2ab (ii,iii)	Least Concern
47	Long-tailed Brown-toothed Shrew	*Episoriculus leucops* (Horsfield, 1855)	लामपुच्छे खैरो दाँते छुचुन्द्रो	Least Concern	Least Concern
48	Hodgson's Brown-toothed Shrew	*Episoriculus caudatus* (Horsfield, 1851)	हडसनको खैरो दाँते छुचुन्द्रो	Least Concern	Least Concern

ORDER: CHIROPTERA

Family: Pteropodidae



Indian Flying Fox © Rishi Baral/NTNC-ACAP



Leschenault's Rousette Bat © Sanjeev Baniya



Greater Short-nosed Fruit Bat © Rishi Baral/NTNC-ACAP

S.N.	English Name	Scientific Name	नेपाली नाम	National Red Data Status	IUCN Global Status
Family: Pteropodidae					
49	Indian Flying Fox	*Pteropus giganteus* (Brunnich, 1782)	राज चमेरो	Least Concern	Least Concern
50	Leschenault's Rousette Bat	*Rousettus eschenaultia* (Desmarest, 1820)	सानो बदुरा चमेरो	Least Concern	Least Concern
51	Greater Short-nosed Fruit Bat	*Cynopterus sphinx* (Vahl, 1797)	नेप्टे चमेरो	Least Concern	Least Concern

Family: Rhinolophidae



Great Himalayan Leaf-nosed Bat (Left) and Intermediate Horseshoe Bat (Right) © Sanjeev Baniya



Intermediate Horseshoe Bat © Basant Sharma/ NeBRCU



Big-eared Horseshoe Bat © Sanjeev Baniya



Least Horseshoe Bat © Sanjeev Baniya

S.N.	English Name	Scientific Name	नेपाली नाम	National Red Data Status	IUCN Global Status
Family: Rhinolophidae					
52	Greater Horseshoe Bat	*Rhinolophus ferrumequinum* (Schreber, 1774)	ठुलो घोड्नाले चमेरो	Least Concern	Least Concern
53	Intermediate Horseshoe Bat	*Rhinolophus affinis* (Horsfield, 1823)	मझलो घोड्नाले चमेरो	Least Concern	Least Concern
54	Big-eared Horseshoe Bat	*Rhinolophus macrotis* (Blyth, 1844)	लामकाने घोड्नाले चमेरो	Least Concern	Least Concern
55	Pearson's Horseshoe	*Rhinolophus pearsonii* Bat (Horsfield, 1851)	पिएरसनको घोड्नाले चमेरो	Least Concern	Least Concern
56	Least Horseshoe Bat	*Rhinolophus pusillus* (Temminck, 1834)	सानो घोड्नाले चमेरो	Least Concern	Least Concern
57	Little Nepalese Horseshoe Bat	*Rhinolophus subbadius* (Blyth, 1844)	घोड्नाले चमेरो	Data Deficient	Least Concern
58	Chinese Horseshoe Bat	*Rhinolophus sinicus* (K. Andersen, 1905)	रातो घोड्नाले चमेरो	Least Concern	Least Concern

Family: Rhinolophidae



Great Himalayan Leaf-nosed Bat © Rishi Baral/NTNC-ACAP



Least Leaf-nosed Bat © Sanjeev Baniya

S.N.	English Name	Scientific Name	नेपाली नाम	National Red Data Status	IUCN Global Status
Family: Hipposideridae					
59	Great Himalayan Leaf-nosed Bat	*Hipposideros armiger* (Hodgson, 1835)	ठूलो गोलोपत्रे चमेरो	Least Concern	Least Concern
60	Least Leaf-nosed Bat	*Hipposideros cineraceus* (Blyth, 1853)	फुस्रो गोलोपत्रे चमेरो	Data Deficient	Least Concern
61	Andersen's Leaf-nosed Bat	*Hipposideros pomona* (K.Andersen, 1918)	गुदीखाने गोलोपत्रे चमेरो	Near Threatened	Least Concern

Family: Vespertilionidae



Noctule © Basant Sharma / NeBRCU



Pipistrellus sp. © Basant Sharma / NeBRCU

S.N.	English Name	Scientific Name	नेपाली नाम	National Red Data Status	IUCN Global Status
Family: Vespertilionidae					
62	Bonze Sprite	*Arielulus circumdatus* (Temminck, 1840)	काले चमेरो	Data Deficient	Least Concern
63	Asian/Eastern Barbastelle	*Barbastella leucomelas* (Cretzschmar, 1826)	हिमाली चमेरो	Least Concern	Least Concern
64	Mountain Noctule	*Nyctalus montanus* (Barrett-Hamilton, 1906)	पहाडी चमेरो	Least Concern	Least Concern
65	Coromandel Pipistrelle	*Pipistrellus coromandra* (Gray, 1838)	बुच्चे चमेरो	Least Concern	Least Concern
66	Javan Pipistrelle	*Pipistrellus javanicus* (Gray, 1838)	चमेरो	Least Concern	Least Concern

Family: Vespertilionidae



Myotis © Basant Sharma / NeBRCU

S.N.	English Name	Scientific Name	नेपाली नाम	National Red Data Status	IUCN Global Status
Family: Vespertilionidae					
67	Steppe Whiskered Bat	*Myotis mystacinus* (Kuzyakin, 1935)	चमेरो	Least Concern	Least Concern
68	Nepal Myotis Bat	*Myotis nipalensis* (Dobson, 1871)	नेपाली मुसाकाने चमेरो	Least Concern	Least Concern
69	Himalayan Whiskered Bat	*Myotis siligorensis* (Horsfield, 1855)	सानो दाँते चमेरो	Least Concern	Least Concern

S.N.	English Name	Scientific Name	नेपाली नाम	National Red Data Status	IUCN Global Status
70	Hodgson's Bat	*Myotis formosus* (Hodgson, 1835)	हडसनको चमेरो	Least Concern	Least Concern
71	Nepalese Whiskered Bat	*Myotis muricola* (Gray, 1864)	पर्खाले चमेरो	Least Concern	Least Concern
72	Csorba's Mouse-eared Bat	*Myotis csorbai* (Topál, 1997)	चमेरो	Critically Endangered B1ab(v)	Data Deficient
73	Mandelli's Mouse-eared Myotis	*Myotis sicarius* (Thomas, 1915)	मन्डीलीको मुसाखाने चमेरो	Vulnerable	Vulnerable B2ab (iii)
74	Harlequin Bat	*Scotomanes ornatus* (Blyth, 1851)	गहना चमेरो	Endangered B1ab(iii)	Least Concern
75	Noctule	*Nyctalus noctula* (Schreber, 1774)	गान्धे चमेरो	Data Deficient	Least Concern
76	Brown Big-eared Bat	*Plecotus auritus* (Linnaeus, 1758)	खैरो लामकाने चमेरो	Data Deficient	Least Concern
77	Painted Bat	*Kerivoula picta* (Pallas, 1767)	रङ्गीचङ्गी चमेरो	Least Concern	Least Concern

Family: Miniopteridae

S.N.	English Name	Scientific Name	नेपाली नाम	National Red Data Status	IUCN Global Status
Family: Miniopteridae					
78	Small Long-fingered Bat	*Miniopterus pusillus* (Dobson, 1876)	सानो बाङ्गे चमेरो	Data Deficient	Least Concern

ORDER: RODENTIA

Family: Sciuridae



Orange-bellied Himalayan Squirrel
© Rishi Baral/ NTNC-ACAP



Hoary-bellied Squirrel
© Rishi Baral/NTNC-ACAP



Red Giant Flying Squirrel © Rishi Baral/NTNC-ACAP

Family: Sciuridae



Himalayan Marmot babies photographed at Dhalung pasture, upper Mustang
© Yadav Ghimirey/ FON Nepal

S.N.	English Name	Scientific Name	नेपाली नाम	National Red Data Status	IUCN Global Status
Family: Sciuridae					
79	Orange-bellied Himalayan Squirrel	*Dremomys lokriah* (Hodgson, 1836)	हिमाली वन लोखर्के	Least Concern	Least Concern
80	Hoary-bellied / Irrawaddy Squirrel	*Callosciurus pygerythrus* (I.Geoffroy Saint Hilaire, 1832)	पहाडी वन लोखर्के	Least Concern	Least Concern
81	Himalayan Striped Squirrel	*Tamiops macclellandii* (Horsfield, 1840)	हिमाली धर्के लोखर्के	Least Concern	Least Concern
82	Particolored Flying Squirrel	*Petaurista elegans* (Müller, 1840)	माले राजपंखी लोखर्के	Least Concern	Least Concern

S.N.	English Name	Scientific Name	नेपाली नाम	National Red Data Status	IUCN Global Status
83	Spotted Giant Flying Squirrel	*Petaurista elegans* (Muller, 1840)	थोप्ले राजपंखी लोखर्के	Data Deficient	Least Concern
84	Hodgson's Giant Flying Squirrel	*Petaurista magnificus* (Hodgson, 1836)	सुन्दर राजपंखी लोखर्के	Data Deficient	Least Concern
85	Bhutan Giant Flying Squirrel	*Petaurista nobilis* (Gray, 1842)	भुटानी राजपंखी लोखर्के	Data Deficient	Near Threatened
86	Red Giant Flying Squirrel	*Petaurista petaurista* (Pallas, 1766)	रातो राजपंखी लोखर्के	Least Concern	Least Concern
87	Himalayan Marmot	*Marmota himalayana* (Hodgson, 1841)	हिमाली फ्याउमुसा	Least Concern	Least Concern

Family: Cricetidae

S.N.	English Name	Scientific Name	नेपाली नाम	National Red Data Status	IUCN Global Status
Family: Cricetidae					
88	Blyth's Vole	*Phaiomys leucurcus* (Blyth, 1863)	ब्लीथको मुसो	Data Deficient	Least Concern
89	Royle's Mountain Vole	*Alticola roylei* (Gray, 1842)	पहाडी घाँसे मुसा	Data Deficient	Near Threatened

Family: Muridae



Mus Sp. at Lwang © Rishi Baral/ NTNC-ACAP



Rattus Sp © Rishi Baral/ NTNC-ACAP

S.N.	English Name	Scientific Name	नेपाली नाम	National Red Data Status	IUCN Global Status
Family: Vespertilionidae					
90	House Mouse	*Mus musculus* (Linnaeus, 1758)	घर मूसा	Least Concern	Least Concern
91	Common Indian Field Mouse	*Mus booduga* (Gray, 1837)	सानो खेतमूसो	Least Concern	Least Concern
92	Fawn-colored Mouse	*Mus Cervicolor* (Hodgson, 1845)	खाकिरङ्गी मूसो	Least Concern	Least Concern
93	Himalayan Field Rat	*Rattus nitidus* (Hodgson, 1845)	हिमाली खेतमूसो	Least Concern	Least Concern
94	House Rat	*Rattus rattus* (Linnaeus, 1758)	घर मूसो	Least Concern	Least Concern
95	Brown Rat	*Rattus norvegicus* (Berkenhout, 1769)	खैरो धानचरी	Least Concern	Least Concern
96	Himalayan Rat	*Rattus pyctoris* (Hodgson,1845)	तुर्किस्ताने मूसो	Least Concern	Least Concern

S.N.	English Name	Scientific Name	नेपाली नाम	National Red Data Status	IUCN Global Status
97	Lesser Bandicoot Rat	*Bandicota bengalensis* (Gray, 1835)	सानो ढाडेमूसो	Least Concern	Least Concern
98	Greater bandicoot Rat	*Bandicota indica* (Bechstein, 1800)	ठूलो ढाडेमूसो	Least Concern	Least Concern
99	Soft-furred Rat	*Millardia meltada* (Gray, 1837)	मखमली मूसो	Least Concern	Least Concern
100	Nepalese / Himalayan Field Mouse	*Apodemus gurkha* (Thomas, 1924)	हिमाली मूसो	Endangered B1ab(iii)	Least Concern
101	Long-tailed Field Mouse	*Apodemus sylvaticus* (Linnaeus, 1758)	लामपूच्छे खेतमूसो	Least Concern	Least Concern
102	Ward's Field Mouse/Himalayan Field Mouse	*Apodemus pallipes* (Barrett-Hamilton, 1900)	वार्डको खेतमूसो	Data Deficient	Least Concern
103	Short-tailed Bandicoot Rat	*Nesokia indica* (Gray, 1830)	ठुटे ढाडेमूसो	Least Concern	Least Concern
104	Little Himalayan/ Smoke-bellied Rat	*Niviventer eha* (Wroughton, 1916)	ध्वाँसे मूसो	Least Concern	Least Concern
105	Himalayan White-bellied Rat	*Niviventer niviventer* (Hodgson, 1836)	हड्सनको दूधेभुँडी मूसो	Least Concern	Least Concern
106	Chestnut White-bellied Rat	*Niviventer fulvescens* (Gray, 1847)	दूधेभुँडी मूसो	Data Deficient	Least Concern

Family: Hystricidae



Indian Crested Porcupine has a distinct crest like hairs on the upper part of its head © NTNC-ACAP (Camera trap)



Himalayan/Malayan Porcupine © NTNC-ACAP, UCO Sikles (Camera trap- Sikles)

S.N.	English Name	Scientific Name	नेपाली नाम	National Red Data Status	IUCN Global Status
Family: Hystricidae					
107	Indian Crested Porcupine	*Hystrix indica* (Kerr, 1792)	जुरे दुम्सी	Data Deficient	Least Concern
108	Himalayan/ Malayan Porcupine	*Hystrix brachyura* (Linnaeus, 1758)	मलाया दुम्सी	Least Concern	Least Concern

ORDER: LAGOMORPHA

Family: Leporidae



Woolly Hare at Koralla, Upper Mustang © Rishi Baral /NTNC-ACAP

S.N.	English Name	Scientific Name	नेपाली नाम	National Red Data Status	IUCN Global Status
Family: Leporidae					
109	Woolly Hare	*Lepus oiostolus* (Hodgson,1840)	भोटे खरायो	Least Concern	Least Concern
110	Indian Hare	*Lepus nigricollis* (F.Cuvier, 1823)	खैरो खरायो	Least Concern	Least Concern

Family: Ochotonidae



Royle's Pika at Chonnup, Upper Mustang © Rishi Baral/ NTNC-ACAP

S.N.	English Name	Scientific Name	नेपाली नाम	National Red Data Status	IUCN Global Status
Family: Ochotonidae					
111	Royle's Pika	*Ochotona roylei* (Ogilby, 1839)	मूसो ठुटेखरायो	Data Deficient	Least Concern
112	Plateau/Black-lipped Pika	*Ochotona curzoniae* (Ogilby, 1839)	कालोमुखे ठुटेखरायो	Data Deficient	Least Concern
113	Nubra Pika	*Ochotona nubrica* (Thomas, 1922)	नुब्रि ठुटेखरायो	Data Deficient	Least Concern
114	Large-eared Pika	*Ochotona macrotis* (Günther, 1875)	लाम्काने ठुटेखरायो	Least Concern	Least Concern
115	Moupin Pika	*Ochotona thibetana* (Milne-Edwards, 1871)	तिब्बती ठुटेखरायो	Data Deficient	Least Concern

Family: Equidae



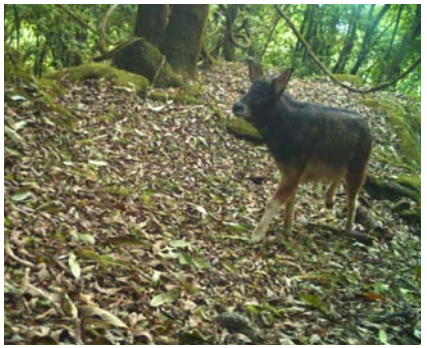
Kiang was first discovered in Nepal from ACA © Yadav Ghimirey / FON Nepal

S.N.	English Name	Scientific Name	नेपाली नाम	National Red Data Status	IUCN Global Status
Family: Equidae					
116	Kiang /Tibetan Wild Ass	*Equus kiang* (Moorcroft, 1841)	क्याङ्, जंगली गधा	Vulnerable B1ab (iii) + 2ab (iii); D1	Least Concern

Family: Bovidae



Blue Sheep at Nar, Manang © Ashok Subedi / NTNC-ACAP



Himalayan Serow is the largest antelope species in mid-hills of Nepal © NTNC-ACAP (UCO Sikles) Camera trap- Sikles)

S.N.	English Name	Scientific Name	नेपाली नाम	National Red Data Status	IUCN Global Status
Family: Bovidae					
117	Wild Yak	*Bos mutus* (Przewalski, 1883)	जंगली चौरीगाई	Data Deficient	Vulnerable C1
118	Tibetan Argali	*Ovis ammon* (Linnaeus, 1758)	नायन	Data Deficient	Near Threatened
119	Blue Sheep/ Bharal	*Pseudois nayaur* (Hodgson, 1833)	नाउर	Least Concern	Least Concern
120	Himalayan Tahr	*Hemitragus jemlahicus* (C.H. Smith, 1826)	झारल	Near-Threatened	Near Threatened
121	Himalayan Serow	*Capricornis thar* (Hodgson, 1831)	थार / सिरो	Data Deficient	Near Threatened
122	Himalayan Goral	*Naemorhedus goral* (Hardwicke, 1825)	घोरल	Near-Threatened	Near Threatened
123	Tibetan Antelope / Chiru	*Pantholops hodgsonii* (Abel, 1826)	चिरु	Data Deficient	Near Threatened
124	Tibetan Gazelle / Goa	*Procapra picticaudata* (Hodgson, 1846)	घोवा	Critically Endangered B1ab(iii): D	Near Threatened

Family: Cervidae



Barking Deer/ Muntjac with its fawn near Sikles © NTNC-ACAP, UCO Sikles
(Camera trap- Sikles)

S.N.	English Name	Scientific Name	नेपाली नाम	National Red Data Status	IUCN Global Status
Family: Cervidae					
125	Barking Deer / Muntjac	*Muntiacus vaginalis* (Boddaert, 1785)	रतुवा	Vulnerable A2acd	Least Concern

Family: Moschidae



A Himalayan Musk Deer in its habitat in Manang © NTNC-ACAP (Camera trap- Manang)



Kasmir Musk Deer has been recently discovered from Mustang © NTNC-ACAP
(Camera trap- Mustang)

S.N.	English Name	Scientific Name	नेपाली नाम	National Red Data Status	IUCN Global Status
Family: Moschidae					
126	Himalayan Musk Deer	*Moschus leucogaster* (Hodgson, 1839)	सेतोकण्ठे कस्तुरी	Data Deficient	Endangered A2d
127	Kasmir Musk Deer	*Moschus cupreus* (Grubb, 1982)	कस्मीरी कस्तुरी	Data Deficient	Endangered A2d

Family: Suridae



Wild Pig/Boar © Rishi Baral / NTNC-ACAP

S.N.	English Name	Scientific Name	नेपाली नाम	National Red Data Status	IUCN Global Status
Family: Suridae					
128	Wild Boar / Eurasian Wild Pig	*Sus scrofa* (Linnaeus, 1758)	जंगली बँदेल	Least Concern	Least Concern

References

Acharya P., Adhikari H., Dahal S., Thapa A & Thapa S. (2010). Bats of Nepal-A Field Guide. Small Mammals Conservation and Research Foundation, New Baneshwor, Kathmandu. 114 pp.

Amin, R., Baral H.S., Lamichhane B.R., Poudyal L.P., Lee S., Jnawali S.R., Acharya K.P., Upadhyaya G.P., Pandey M.B., Shrestha R., Joshi D., Grifths J., Khatwada A.P. & Subedi N. (2018). The status of Nepal's mammals. Journal of Threatened Taxa; htp://doi.org/10.11609/jot.3712.10.3.11361-11378

Aryal, A. (2009). Habitat ecology of Himalayan Serow (Capricornis sumatraensis ssp. thar) in Annapurna Conservation Area of Nepal. Tiger paper. 34:12-20.

Baral R., Ghimirey Y., Neupane B., Lamichhane B., Bhattarai S., & Shah K.B. (Submitted). First Photographic evidence of the Large-toothed Ferret Badger Melogale personata in Annapurna Conservation Area, Nepal.

Baral R., Gurung R.B., Gurung R.K., Yadav S.K., & Ghimirey Y. (2019). A Leopard Cat with its kitten Camera Trapped in Annapurna Conservation Area, Nepal. CAT News 69:32-33

Baral, H.S. & Shah K.B. (2008). Wild Mammals of Nepal. Himalayan Nature, Kathmandu, 158 pp.

Chapagain N.R. & Chhetri M. (2006). Biodiversity Profile of Upper Mustang, National Trust for Nature Conservation.

Chetri M., Odden M., Mccarthy T. & Wegge P. (2014). First record of Steppe Polecat Mustela eversmanii in Nepal. Small Carnivore Conservation, 51:79–81.

Chetri M. & Pokhrel A. (2005). Status and Distribution of Tibetan argali and Kiang in Damodar Kund area, Upper Mustang, Nepal. Our Nature. 3:56-62.

Chetri M. (2005a). Distribution, Status and Conservation of Snow leopard (Uncia uncia) in Upper Mustang, Nepal. Greenery-A journal of environment and biodiversity. 6:110-117.

Chetri M. (2005b). Status, Habitat use and conservation of Tibetan gazelle in Dhalung Rangeland, Upper Mustang, Upper Mustang Biodiversity Conservation Project. National Trust of Nature Conservation. Nepal.

Chetri M. (2005b). Biodiversity Survey in Dhalung-Chhujung Rangeland, Upper Mustang. Research Report Series 25

Chetri M. (2007), Gray wolf (Canis lupus) in Upper Mustang: Problems and Constraints in Conservation. Greenery, A journal of environment and biodiversity. Institute of Forestry. Pokhara. 97-103.

Chetri M. (2008). Brown bear (Ursus arctos) from upper mustang. Prakriti. Newsletter of the National Trust for Nature Conservation. 19-22.

Chetri M., Jhala Y.V., Jnawali S.R., Subedi N., Dhakal M. & Yumnam B., (2016). Ancient himalayan wolf (Canis lupus chanco) lineage in upper mustang of the annapurna conservation area, Nepal. ZooKeys 582, 143e156. https://doi.org/10.3897/zookeys.582.5966.

Chetri M., Odden M. & Wegge P.(2017). Snow leopard and himalayan wolf: food habits and prey selection in the central Himalayas, Nepal. PloS One. https:// doi.org/10.1371/journal.pone.0170549.

Department of National Park and Wildlife Conservation. (2075). The list of Threatened mammals and plants listed in CITES, Government of Nepal, Ministry of Forest and Environment, Department of National Park and Wildlife Conservation, Babarmahal, Kathmandu.

Ghimirey Y., Yadav K., Rai J., Prasai R., Rana P. & Acharya R. (2018). First verifiable record of Spotted Linsang Prionodon pardicolor from Nepal since the nineteenth century . Small Carnivore Conservation 56: 48–53.

IUCN. (2015). The IUCN Red List of Threatened Species. Version 2015-1.

IUCN 2019. The IUCN Red List of Threatened Species. Version 2019-1. http:// www.iucnredlist.org. Downloaded on 21 March 2019.

Jnawali S.R., Baral H.S., Lee S., Acharya K.P., Upadhyay G.P., Pandey M., Shrestha R., Joshi D., Laminchhane B.R., Grifths J., Khatwada A.P., Subedi N. & Amin R. (compilers) (2011). The Status of Nepal Mammals. The Natonal Red List Series, Department of Natonal Parks and Wildlife Conservaton, Kathmandu, Nepal

Pandey M.R. & Chetri M. (2004). An assessment of people wildlife conflict in Upper Mustang and possible mitigation measures: King Mahendra Trust for Nature Conservation: Annapurna conservation area project. Research report series 21.

Shah K.B. (2001): A preliminary survey of Biodiversity in Upper Mustang, Research Report Series 4.

Shah K.B. (2004): Biodiversity Survey of Damodar Kunda Area, Upper Mustang, Research Report Series 14.

Shrestha B., Ale S., Jackson R., Thapa N., Gurung L.P., Adhikari A., Dangol L., Basnet., Subedi N. & Dhakal M. (2012). Nepal's first Pallas's cat. CATnews 60 Spring 2014: .23-24

Singh P.B., Khatiwada J.R, Saud P. & Jiang Z. (2019). mtDNA analysis confirms the endangered Kashmir musk deer extends its range to Nepal. Scientific Reports 9:4895 | https://doi.org/10.1038/s41598-019-41167-4

Singh P.B., Shrestha B.B., Thapa A., Saud P., Jiang Z. (2018). Selection of latrine sites by Himalayan musk deer (Moschus leucogaster) in Neshyang Valley, Annapurna Conservation Area, Nepal. JOURNAL OF APPLIED ANIMAL RESEARCH, 2018 VOL. 46, NO. 1, 920–926

Thapa S., Shah K.B. & Chetri M. (2014).The highest elevation record of the brown long-eared bat (*Plecotus auritus*). TAPROBANICA, Vol. 06, No. 01: pp. 63–65.

Thapa S. (2014). A checklist of mammals of Nepal. Journal of Threatened Taxa 6(8): 6061-6072; http: dx.doi.org/10.11609/JoTT.03511.6061-72.

Werhahn G., Senn H., Ghazali M., Karmacharya D., Sherchan A.M., Joshi J., Kusi N., Lopez-Bao J.V., Tosen T.., Kachel S., Zubiri C.S. & Machdonald D.W. (2018). The unique genetic adaptation of the Himalayan wolf to highaltitudes and consequences for conservation. Global Ecology and Conservation, https://doi.org/10.1016/j.gecco.2018.e00455.



Himalayan Marmot © Raju Acharya / FON, Nepal

WILDLIFE SIGNS



Primates track © Rishi Baral/NTNC-ACAP



Pugmarks of a cat species © Rishi Baral/NTNC-ACAP

Mammals species previously included in ACA but excluded in this book

S.N	English Name	Scientific Name	Reason for exclusion
1	Indian Pangolin	*Manis crassicaudata*	Unreliable listing, only recorded from 2-3 Tarai districts till now
2	Grey Wolf	*Canis lupus*	Subspecies, old data
3	Tibetan Brown Bear	*Ursus arctos pruinosus*	Subspecies, old data
4	Pika	*Ochotona amatiberan*	No such species with Scientific name
5	Bat	*Myotis minopterus*	No such species with Scientific name
6	Red flying Squirrel	*Petaurista inomatus*	No such species with Scientific name
7	Tibetan Marmot	*Arctomys hodsoni*	Unreliable listing
8	Mouse	*Mus musculus humorus*	Subspecies, old data
9	City Mouse	*Mus musculus urbanus*	Subspecies, old data
10	Wild Rat	*Rattus rattus ehaeha*	Subspecies, old data
11	Cape Hare	*Lepus capensis tibetanus*	Unreliable listing



Mountain Weasel is a common weasel species in Manang transhimalayas
© NTNC-ACAP (Camera trap-Manang)

Threat of mammals in Annapurna Conservation Area

Since local people in ACA depend on the forest and natural resources for their survival there is an interaction between them and wildlife. This ultimately leads to human-wildlife conflict. Wildlife are under threat from various other human activities too, from direct negative impact in habitat to disease transmission. . The major threats to wildlife observed in ACA are as follows;

1. Human wildlife conflict

Human-wildlife conflict is one of the important threats to wildlife in ACA. Retaliatory killing of mammals due to livestock depredation have been observed in the area. Snow leopard and common leopard are highly prone to retaliation for livestock depredation and black bear for human injury. In addition, crop raiding from monkey, black bear, barking dear, blue sheep including other mammals has been a cause of conflicts with local people.



Human injury caused by Black Bear in Sikles, Kaski © UCO Sikles/NTNC-ACAP

2. Poaching

Poaching or illegal hunting of several mammals has been recorded in ACA. Musk deer is highly sensitive to poaching for its musk pod. Similarly, barking deer has been poached for the meat purpose and other mammals for their skin, bones or scales. Poachers use guns, snares and different kinds of traps for poaching. Interestingly, many cases of poaching are carried out in the pretext of retaliatory killings.



Himalayan Tahr (Jharal) killed by poachers at Karuwa Kapuche, Kaski© Rishi Baral/NTNC-ACAP

3. Habitat degradation

Habitat degradation due to forest fire, infrastructure construction and rangeland degradation has been observed in ACA. Lower Mustang and lower Manang are sensitive to forest fire. Similarly, construction of road networks haphazardly has fragmented wildlife habitat leading to habitat loss and degradation. The mountain ungulates are under threats because of rangeland degradation.



Forest fire in Manang© UCO Manang/NTNC-ACAP

4. Road kill



Vehicular killing of Common Palm Civet in Lwang, Kaski © Rishi Baral /NTNC-ACAP

During last decade the road network has been rapidly increased in ACA. Construct of roads to connect the villages and to promote hydro projects have caused the road kills of Mammals in ACA. Such kind of problem has been observed in the forest areas of Mustang. Though it is not a pressing threat at present its magnitude is likely to increase in future.

5. Feral dog:

Feral dog is an emerging threat to mammals in ACA. Predation of different mammals by the feral dogs reduces its population and also the prey availability to the carnivores. Some cases of blue sheep predation by feral dogs in Manang district have



Feral dog chasing Blue Sheep in Manang © Rishi Baral/NTNC-ACAP

been observed. Such feral dogs are source of different kinds of diseases too which presents a high risk of disease transmission from feral dog to other wild mammals.

6. Disease



A dead (unknown cause) Himalayan Marmot at Chhonup, Lo- Manthang© Rishi Baral/NTNC-ACAP

Natural death of different species of Mammals has been observed in ACA. Though there is no scientific researches on wildlife disease it is believed to be exist. Livestock husbandry being a source of livelihood of local people, sharing of rangelands between livestock and the wild mammals is common. Therefore, there is a high risk of disease transmission from the livestock to wildlife. In addition, sharing of the carcasses between dogs and other carnivores increases the possibilities of rapid diseases transmission to the wildlife

7. Electrification



Electrocuted bat, Kaski
© Rishi Baral/NTNC-ACAP

Electrocution: In the recent years, the power lines for electrification have been extended in different villages of ACA. The high voltage electric current in power lines are lethal to different species of bats. Such threat has been observed in ACA.

Protected Priority Mammals (NPWC, ACT 1973) of ACA

S.N	Common Name	Scientific Name	नेपाली नाम	National Red Data Status	IUCN Red List Status	CITES
1	Assamese macaque	*Macaca assamensis*(MClelland, 1840)	पहरे बाँदर	Vulnerable D1	Near Threatened	II
2	Chinese Pangolin	*Manis pentadactyla*(Linnaeus, 1758)	कालो सालक	Endangered	Critically Endangered A2d+3d+4d	I
3	Snow Leopard	*Panthera uncia* (Schreber, 1775)	हिँऊ चितुवा	Endangered D	Vulnerable C1	I
4	Eurasian Lynx	*Lynx lynx*(Linnaeus, 1758)	पाहन बिरालो, प्याकु बिरालो	Vulnerable B1a;D2	Least Concern	II
5	Leopard Cat	*Prionailurus bengalensis*(Kerr, 1792)	चरी बाघ	Vulnerable C2a(i)	Least Concern	II
6	Clouded Leopard	*Neofelis nebulosa*(Griffith, 1821)	ध्वाँसे चितुवा	Endangered B1ab(iii,v);C2(i);D	Vulnerable A2cd+3cd	I
7	Spotted Linsang	*Prionodon pardicolor*(Hodgson, 1841)	सिलु बिरालो	Endangered C2a(i)	Least Concern	I
8	Himalayan Wolf	*Canis lupus* (Linnaeus, 1758)	तिब्बती ब्वाँसो	Critically Endangered C2a(i);D	Least Concern	

S.N	Common Name	Scientific Name	नेपाली नाम	National Red Data Status	IUCN Red List Status	CITES
9	Brown Bear	*Ursus arctos* (Linnaeus, 1758)	रातो भालु	Critically Endangered C2a(i);D	Least Concern	I
10	Red Panda	*Ailurus fulgens* (Cuvier, 1825)	हाब्रे	Endangered C2a(i)	Endangered A2cde+3cde+4cde	I
11	Wild Yak	*Bos mutus*(Przewalski, 1883)	जंगली चैरीगाई	Data Deficient	Vulnerable C1	I
12	Tibetan Antelope/ Chiru	*Pantholops hodgsonii* (Abel, 1826)	चिरु	Data Deficient	Near Threatened	I
13	Tibetan Gazelle /Goa	*Procapra picticaudata* (Hodgson, 1846)	घोवा	Critically Endangered B1ab(iii):D	Near Threatened	
14	Himalayan Musk Deer	*Moschus leucogaster* (Hodgson, 1839)	सेतोकण्ठे कस्तुरी	Data Deficient	Endangered A2d	I

Wild Mammals of the Annapurna Conservation Area

Presence Occurence Doubtful

S.N	English Name	Scientific Name	नेपाली नाम	National Status	Global Status	Reason
1	Asiatic Golden Cat	*Felis temmincki* (Vigors & Horsfield, 1827)	सुनौलो बिरालो	Data Deficient	Near Threat-ened	Doubtful because the westernmost authentic evidence of the species recorded in the country till now is Gaurishankar Conservation Area. Extensive camera trapping in Sikles Bhujung forests in 2017 and 2018 didn't record a single individual
2	Marbled cat	*Pardofelis marmorata* (Martin, 1837)	छिरबिरे बिरालो	Data Deficient	Vulnerable C1+2a(i)	Only authentic record of the species till date in the country is from the eastern Nepal that too very recently. There have been no authentic documentation of the species from any recent surveys in ACA
3	Wild Yak	*Bos mutus* (Przewalski, 1883)	जंगली चौरी गाई	Data Deficient	Vulnerable A2ac+3c+4c	The species existed in the northern part of the area historically however extensive surveys in the probable habitat of this species in ACA has not resulted in any authentic records
4	Tibetan Antelope	*Pantholops hodgsonii* (Abel, 1826)	चिरु	Data Deficient	Endangered	The species existed in the northern part of the area historically however extensive surveys in the probable habitat of this species in ACA has not resulted in any authentic records
5	Stripe-backed Weasel	*Mustela strigidorsa* (Gray, 1853	धर्के मलसाँप्रो	Data Deficient	Least Concern	Global distribution assessment of stripe-backed weasel by Abramov et al. 2008 - concluded that there has been no authentic occurrence record of this species from Nepal

CITES listed mammals in ACA

S.N.	Common Name	Scientific Name	नेपाली नाम	National Red Data Status	IUCN Red List Status	CITES
1	Nepal Gray Langur	*Semnopithecus schistaceus* (Hodgson, 1840)	कालोमुखे बाँदर, लाम्पुच्छे बाँदर	Least Concern	Least Concern	I
2	Chinese Pangolin	*Manis pentadactyla*(Linnaeus, 1758)	कालो सालक	Endangered	Critically Endangered A2d+3d+4d	I
3	Snow Leopard	*Panthera uncia*(Schreber, 1775)	हिँऊ चितुवा	Endangered D	Vulnerable C1	I
4	Leopard	*Panthera pardus*(Linnaeus, 1758)	चितुवा	Vulnerable D1	Vulnerable A2cd	I
5	Marble Cat	*Pardofelis marmorata* (Martin, 1837)	छिरविरे विरालो	Data Deficient	Near Threatened	I
6	Clouded Leopard	*Neofelis nebulosa*(Griffith, 1821)	ध्वाँसे चितुवा	Endangered B1ab(iii,v);C2(i);D	Vulnerable A2cd+3cd	I
7	Spotted Linsang	*Prionodon pardicolor*(Hodgson, 1841)	सिलु विरालो	Endangered C2a(i)	Least Concern	I
8	Himalayan/Asiatic Black Bear	*Ursus thibetanus*(G. [Baron] Cuvier, 1823)	कालो भालु	Endangered C2a(i)	Vulnerable A2cd	I
9	Brown Bear	*Ursus arctos* (Linnaeus, 1758)	रातो भालु	Critically Endangered C2a(i);D	Least Concern	I
10	Red Panda	*Ailurus fulgens* (Cuvier, 1825)	हाब्रे	Endangered C2a(i)	Endangered A2cde+3cde+4cde	I
11	Eurasian Otter	*Lutra lutra*(Linnaeus, 1758)	कालो ओत	Near Threatened	Near Threatened	I
12	Wild Yak	*Bos mutus*(Przewalski, 1883)	जंगली चैरीगाई	Data Deficient	Vulnerable C1	I
13	Argali	*Ovis ammon*(Linnaeus, 1758)	नयन	Data Deficient	Near Threatened	I

S.N.	Common Name	Scientific Name	नेपाली नाम	National Red Data Status	IUCN Red List Status	CITES
14	Himalayan Serow	*Capricornis thar* (Hodgson, 1831)	थार / सिरो	Data Deficient	Near Threatened	I
15	Himalayan Goral	*Naemorhedus goral* (Hardwicke, 1825)	घोरल	Near-Threatened	Near Threatened	I
16	Tibetan Antelope/Chiru	*Pantholops hodgsonii* (Abel, 1826)	चिरु	Data Deficient	Near Threatened	I
17	Himalayan Musk Deer	*Moschus leucogaster* (Hodgson, 1839)	सेतोकण्ठे कस्तुरी	Data Deficient	Endangered A2d	I
18	Rhesus macaque	*Macaca mulata*(Zimmermann, 1170)	रातो बाँदर	Least Concern	Least Concern	II
19	Assamese macaque	*Macaca assamensis(*M'Clelland, 1840)	पहरे बाँदर	Vulnerable D1	Near Threatened	II
20	Eurasian Lynx	*Lynx lynx*(Linnaeus, 1758)	पहन विरालो, प्याकु विरालो	Vulnerable B1a;D2	Least Concern	II
21	Leopard Cat	*Prionailurus bengalensis*(Kerr, 1792)	चरी बाघ	Vulnerable C2a(i)	Least Concern	II
22	Jungle Cat	*Felis chaus* (Schreber, 1777)	वन विरालो	Least Concern	Least Concern	II
23	Asiatic Wild Dog/Dhole	*Cuon alpinus (*Pallas, 1811)	वन कुकुर	Endangered C2a(i)	Endangered C2a(i)	II
24	Smooth-coated Otter	*Lutra perspicillata* (I.Geoffroy Saint-Hilaire, 1826)	खैरो ओत	Endangered C1	Vulnerable A2cde	II
25	Indian Flying Fox	*Pteropus giganteus* (Brunnich, 1782)	राज चमेरो	Least Concern	Least Concern	II
26	Kiang / Tibetan Wild Ass	*Equus kiang*(Moorcroft, 1841)	जंगली गधा	Vulnerable B1ab(iii)+2ab(iii);D1	Least Concern	II



Snow Leopard © NTNC-ACAP (Camera trap- Manang)



Small Indian Mongoose (mating) © NTNC-ACAP

National IUCN red list status and Global IUCN red list status of Mammals of ACA

National IUCN Red List Status	
Critically Endangered B1ab (iii): D	1
Critically Endangered B1ab (v)	1
Critically Endangered C2a (i); D	2
Data Deficient	36
Endangered	1
Endangered A2ade	1
Endangered B1ab (iii)	2
Endangered B1ab (iii,v); C2 (i); D	1
Endangered B2ab (ii,iii)	1
Endangered C1	1
Endangered C2a (i)	4
Endangered D	1
Least Concern	63
Near Threatened	5
Vulnerable	1
Vulnerable A2acd	1
Vulnerable B1a;D2	1
Vulnerable B1ab(iii)+2ab(iii);D1	1
Vulnerable C1+2a(i)	1
Vulnerable C2a(i)	2
Vulnerable D1	1
Total	**128**

Global IUCN red list	
Critically Endangered A2d+3d+4d	1
Data Deficient	1
Endangered A2cde+3cde+4cde	1
Endangered A2d	2
Endangered C2a(i)	1
Least Concern	101
Near Threatened	14
Vulnerable A2cd+3cd	1
Vulnerable A2cde	1
Vulnerable A2cd	2
Vulnerable B2ab(iii)	1
Vulnerable C1	2
Total	**128**

APPENDIX

Summary of the five criteria (A–E) used to evaluate if a taxon belongs in a Threatened category (Critically Endangered, Endangered or Vulnerable)

Use any of the criteria A–E	Critically Endangered	Endangered	Vulnerable
A. Population reduction	Declines measured over the longer of 10 years or 3 generations		
A1	≥ **90%**	≥ 70%	≥ 50%
A2, A3 & A4	≥ 80%	≥ 50%	≥ 30%
Al. Population reduction observed, estimated, inferred, or suspected in the past where the causes of the reduction are clearly reversible **AND** understood **AND** have ceased, based on and specifying any of the following: **(a)** direct observation **(b)** an index of abundance appropriate to the taxon **(c)** a decline in area of occupancy (AOO), extent of occurrence (EOO) and/or habitat quality **(d)** actual or potential levels of exploitation **(e)** effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites. **A2.** Population reduction observed, estimated, inferred, or suspected in the past where the causes of reduction may not have ceased **OR** may not be understood **OR** may not be reversible, based on (a) to (e) under Al **A3.** Population reduction projected or suspected to be met in the future (up to a maximum of 100 years) based on (b) to (e) under Al. **A4.** An observed, estimated, inferred, projected or suspected population reduction (up to a maximum of 100 years) where the time period must include both the past and the future, and where the causes of reduction may not have ceased **OR** may not be understood **OR** may not be reversible, based on (a) to (e) under Al.			
B. Geographic range in the form of either B1 (extent of occurrence) AND/OR B2 (area of occupancy)			
B1. Extent of occurrence	< 100 km²	< 5,000 km²	< 20,000 km²
B2. Area of occupancy	< 10 km²	< 5,00 km²	< 20,00 km²
AND at least 2 of the following:			
(a) Severely fragmented, **OR** Number of locations	= 1	≤ 5	≤ 10
(b) Continuing decline in any of: **(i)** extent of occurrence; **(ii)** area of occupancy; **(iii)** area, extent and/or quality of habitat; **(iv)** number of locations or subpopulations; **(v)** number of mature individuals			
(c) Extreme fluctuations in any of: **(i)** extent of occurrence; **(ii)** area of occupancy; **(iii)** number of locations or subpopulations; **(iv)** number of mature individuals			

C. Small population size and decline			
Number of mature individuals	< 250	< 2,500	< 10,000
AND either C1 or C2			
C1. An estimated continuing decline of at least: (up to a max. of 100 years in future)	25% in 3 years or 1 generation	20% in 5 years or 2 generations	10% in 10 years or 3 Generations
C2. A continuing decline **AND** (a) and/or (b):			
(a i) number mature individuals in each subpopulation:	< 50	< 250	< 1,000
(a ii) or % individuals in one subpopulation =	90–100%	95–100%	100%
(b) extreme fluctuations in the number of mature individuals			
D. Very small or restricted population **Either**:			
Number of mature Individuals	< 50	< 250	**D1.** < 1,000
	Restricted area of occupancy		AND/OR **D2**. typically: AOO < 20 km² or number of locations ≤ 5
E. Quantitative Analysis Indicating the probability of extinction in the wild to be:	≥ 50% in 10 years or 3 generations (100 years max)	≥ 20% in 20 years or 5 generations (100 years max)	≥ 10% in 100 years

Source: National IUCN Red List, 2011



Himalayan Marmot at Chhonup, Upper Mustang © Rishi Baral /NTNC-ACAP



Himalayan Goral at Narchyang, Myagdi © Rishi Baral /NTNC-ACAP

Order and Family with Species of Wild Mammals of ACA

S.N	Order	Family	Species
1	Primates		
	1	Cercopithecidae	3
2	Pholiota		
	2	Manidae	1
3	Carnivora		
	3	Felidae	9
	4	Viverridae	4
	5	Priondontidae	1
	6	Herpestidae	3
	7	Canidae	6
	8	Ursidae	2
	9	Ailuridae	1
	10	Mustelidae	11
4	Eulipotyphia		
	11	Soricidae	7
5	Chiroptera		
	12	Pteropodidae	3
	13	Rhinolophidae	7
	14	Hipposideridae	3
	15	Vespertilionidae	16
	16	Miniopteridae	1
6	Rodentia		
	17	Sciuridae	9
	18	Cricetidae	2
	19	Muridae	17
	20	Hystricidae	2
7	Lagomorpha		
	21	Leporidae	2
	22	Ochotonidae	5
8	Perissodactyla		
	23	Equidae	1
9	Cetartiodactyla		
	24	Bovidae	8
	25	Cervidae	1
	26	Moschidae	2
	27	Suridae	1
		Total	**128**

Order and species number

S.N	Order	Species
1	Primates	3
2	Pholiota	1
3	Carnivora	37
4	Eulipotyphia	7
5	Chiroptera	30
6	Rodentia	30
7	Lagomorpha	7
8	Perissodactyla	1
9	Cetartiodactyla	12
	Total	**128**

Some pictures of mammals recorded in camera trap survey in ACA in recent years



Jungle Cat © NTNC-ACAP
(Camera trap- Jomsom)



Large Indian Civet © NTNC-ACAP
(Camera trap- Sikles)



Yellow throated Marten © NTNC-ACAP
(Camera trap)



Himalayan Black Bear © NTNC-ACAP, UCO Sikles (Camera trap- Sikles)



Leopard Cat © NTNC-ACAP
(Camera trap- Ghandruk)



Himalayan Goral© NTNC-ACAP
(Camera trap- Ghandruk)



Rhesus Macaque© NTNC-ACAP
(Camera trap- Lwang)



Red Fox © NTNC-ACAP
(Camera trap- Manang)



Snow Leopard © NTNC-ACAP
(Camera trap- Manang)



Stone/Beech Marten© NTNC-ACAP
(Camera trap- Manang)

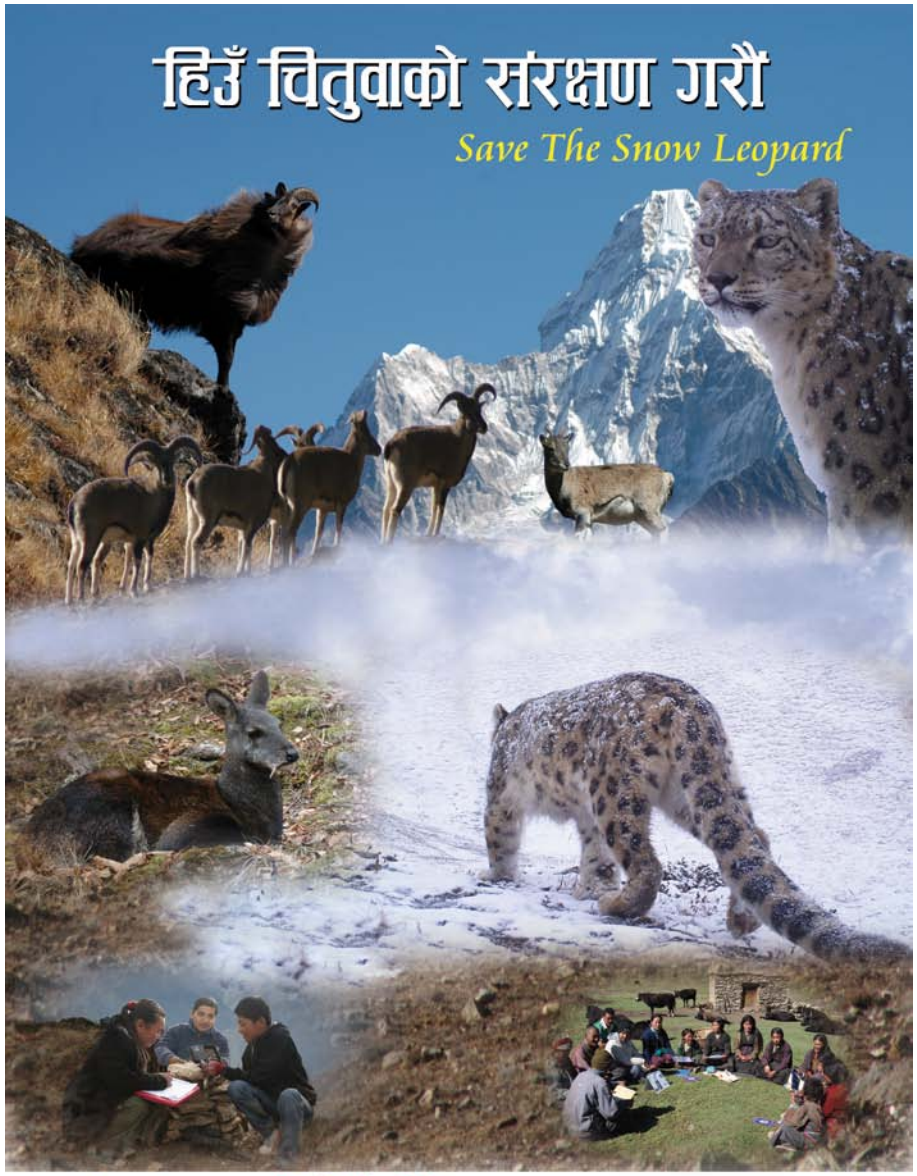


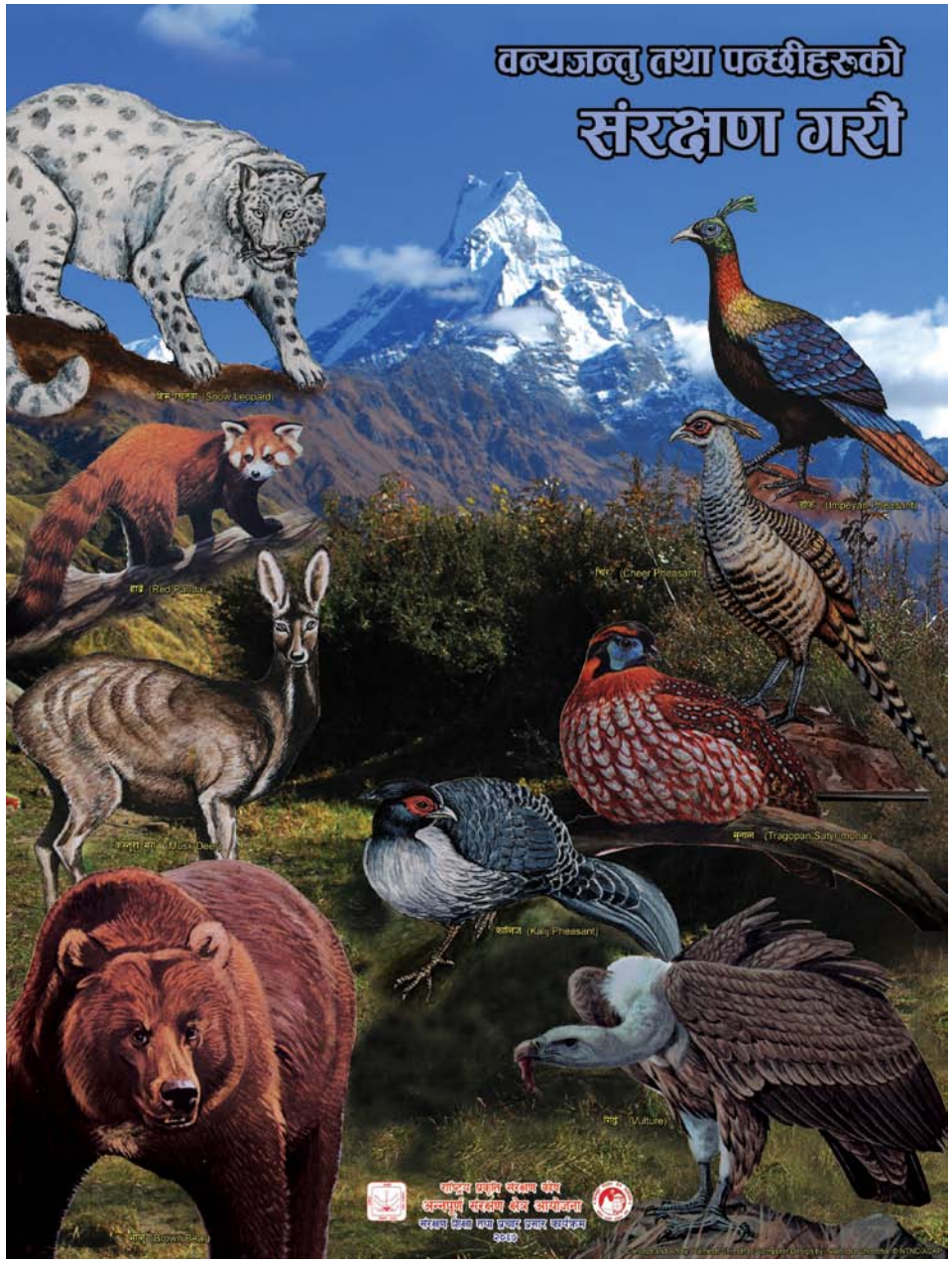
Indian Crested Procupine© NTNC-ACAP
(Camera trap)

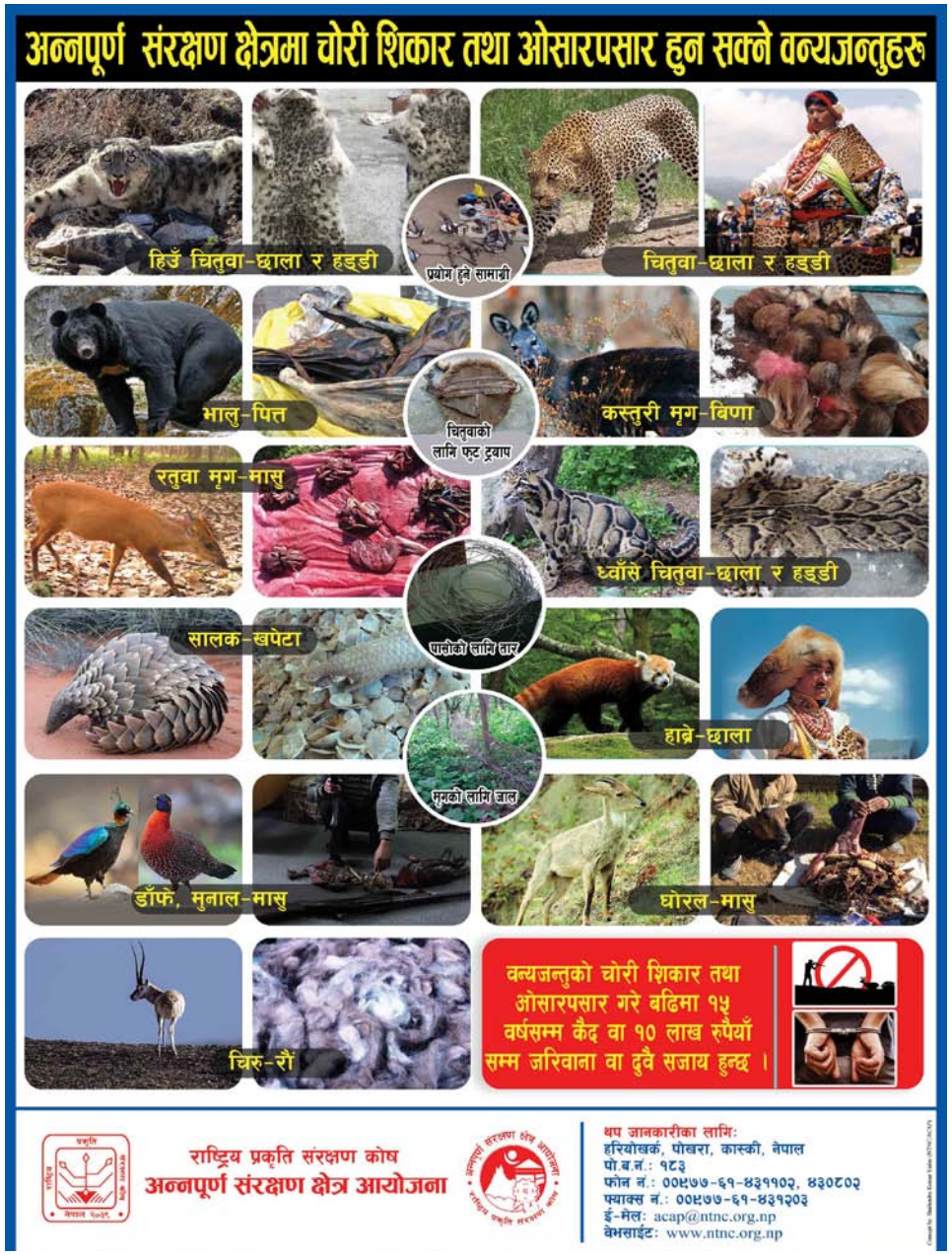


Pika sp.© NTNC-ACAP
(Camera trap- Manang)

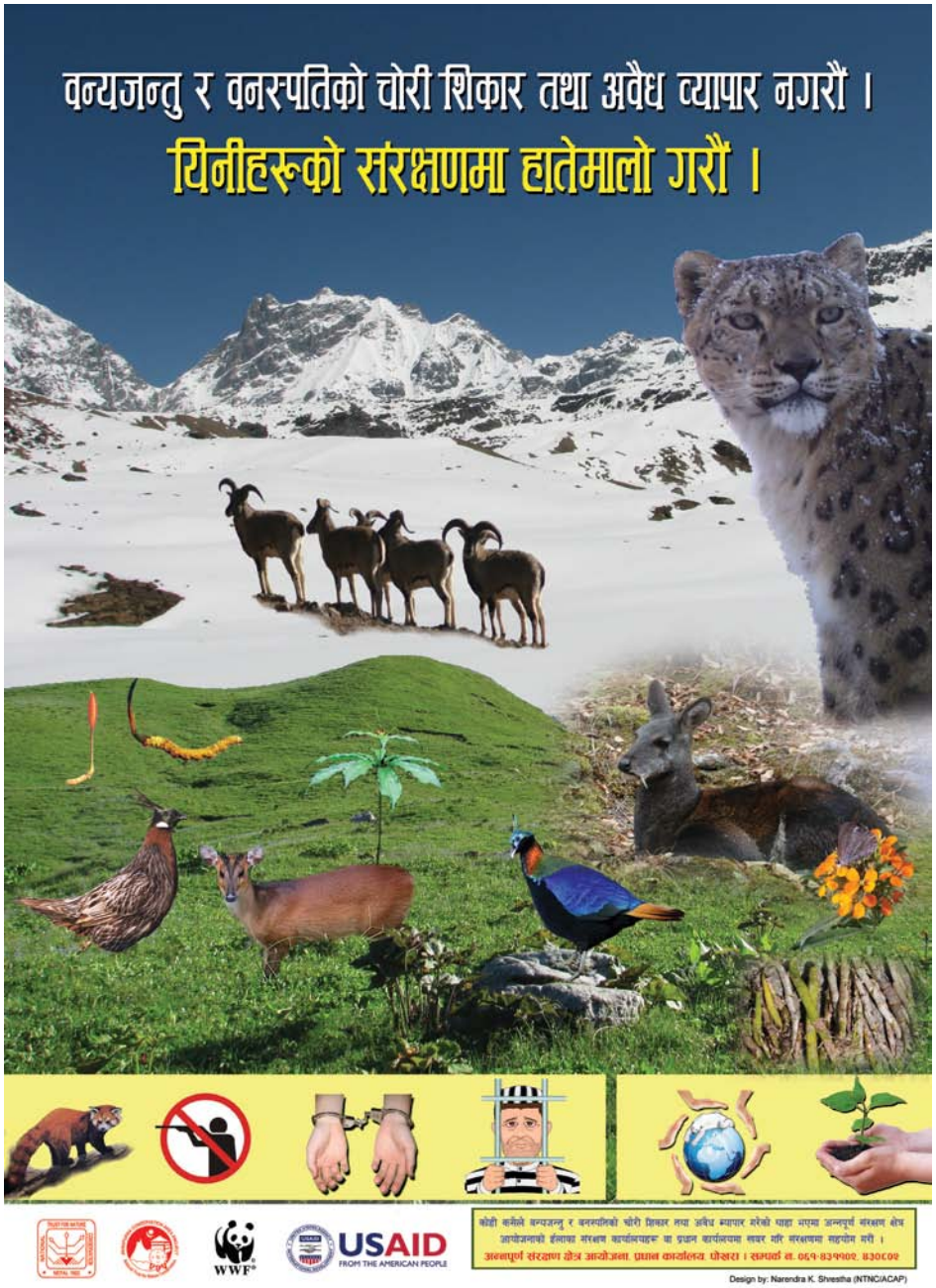
Posters related to Wildlife of ACA






अन्नपूर्ण संरक्षण क्षेत्रमा चोरी शिकार तथा ओसारपसार हुन सक्ने वन्यजन्तुहरू
हिउँ चितुवा-छाला र हड्डी
प्रयोग हुने सामाग्री
चितुवा-छाला र हड्डी
भालु-पित्त
चितुवाको लागि फुट ट्रयाप
कस्तुरी मृग-बिणा
रतुवा मृग-मासु
ध्वाँसे चितुवा-छाला र हड्डी
पानीको लागि ताल
सालक-खपेटा
हाब्रे-छाला
मुनाको लागि ताल
डाँफे, मुनाल-मासु
घोरल-मासु
चिरु-रौं
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थप जानकारीका लागि:
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पो.ब.नं.: १८३
फोन नं.: ००४७७-६१-४३१९०२, ४३०८०२
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