

Protected Mammals of Nepal

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Introduction

The biological diversity of Nepal is of international importance due to its richness in fauna and flora owing to diverse topography to a wide altitudinal range and climatic zone. Nepal cover only 0.01% of land area of global scale but represent 4.5% of global mammalian species (suwal and verheght 1995), out of which a total of 181 mammal belongs to 12 orders and 39 families. Among them one mammal species, Himalayan Field Mouse (*Apodemus Gurkha*) is endemic to Nepal occurring in coniferous forest of central Nepal with 2200-3600m altitudinal range. Although these natural assets give Nepal a unique identity, numerous factors are engaged in the declination of these species. Other, three species namely Pigmy Hog (*Sus Salvinus*), Indian chevrotain (*Moschiola Memina*), Cheotah (*Acinonyx jabatus*) have become extinct from Nepal. Hispid hare (*Caprologus hispidus*), Nayan Sheep (*Ovis ommon*), Tibetain Antelope (*Pantholops hodgsoni*) is also believed to have vanished from Nepal as there is no recent information. Wild animal conservation, as a global issue, several organizations are devoting to face this issue. IUCN (International Union for conservation of nature and natural resources) is one of the independent international organizations established in 1948. IUCN has prepared Red list of threatened animals of world in 1986, 1988, 1990, 1994, where threatened animals are those which are known or suspected threatened with extinction and those known or believed to have become extinct all over the world. The red data book includes globally threatened animals on the basis of their population declination and range size of species. In 1994, IUCN Red list of threatened animals, 5929 species of animals out of total world species belonged to Nepal, which can be tabulated as follows:

S.N.	Species	World	Nepal
1	Mammals	741	28
2	Birds	970	22
3	Amphibians	169	-
4	Reptiles	316	9
5	Fishes	979	-
6	Invertebrates	2754	2

Nepal a state member of IUCN, Nepal red data book was published by IUCN- Nepal by categorizing the mammals of Nepal based on Red data book in 1994. Currently there are 58 mammals, 40 birds, 13 reptiles, 1 amphibian, 2 insects and 13 plants which appear in various categories.

IUCN categories (developed in 1960 and revised in 1994)

· Extinct (Ex)

Species not definitely located in the wild during the past 50 years (criterion as used by CITES)

· Endangered (E)

Taxa, danger of extinction and whose survival is unlikely if the casual factors continue operating.

Included are taxa whose numbers have been reduced to a critical level or whose habitats have been so drastically reduced that they are deemed to be in immediate

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danger of extinction. Also included are taxa that may be extinct but have definitely been seen in the wild in the past 50 years.

Vulnerable (V)

Taxa likely to move into the endangered category in the near future if the casual factors continue operating. Included are taxa of which most or all the population is decreasing because of over-exploitation, extensive destruction of habitat or other environmental disturbances. Taxa with populations that have been seriously depleted and whose ultimate security has not yet been assured and taxa with population that is still abundant but is under threat from severe adverse factors throughout their range.

In practice, Endangered and vulnerable categories may include temporarily taxa whose populations are beginning to recover as a result of remedial action. But whose recovery is insufficient to justify their transfer to another category.

Rare (R)

Taxa with small world populations that are not at present 'Endangered' or vulnerable but are at risk.

These taxa are usually localized within restricted geographical areas or habitat or are thinly scattered over a more extensive range.

Indeterminate (I)

Taxa known to be endangered, vulnerable or rare but where there is not enough information to say which of the three categories is appropriate.

Insufficiently known (K)

Taxa that are suspected but not definitely known to belong to any of the above categories, because of lack of information.

Threatened (T)

A general term used to denote species which are endangered, vulnerable, rare, indeterminate or insufficiently known and should not be confused with the use of same term by the US office of endangered species. In previous volumes it has been used to identify taxa comprised of several sub-taxa which have differing status categories.

Commercially threatened (CT)

Taxa not currently threatened with extinction but most or all of whose populations are threatened as a sustainable commercial resources or will become so unless their exploitation is regulated.

This category applies only to taxa whose populations are assumed to be relatively large. In practice, this category has only been used for marine species of commercial importance that are being over fished in several parts of their range.

In 1994 IUCN Red list of threatened animals, 5929 species of animals out of total world animal species, 61 species belong to Nepal which can be tabulated.

CITES

Convention on International trade of Endangered species of Wild flora and fauna, established in 1973, and came into force in 1 July 1975, Nepal a state member of CITES in 1975 also follow its criteria as described below with 3 appendices. The main objective of CITES is to protect certain species of wild flora and fauna against over-exploitation through international trade.

Appendix 1

Contain species that are deemed to be threatened with extinction and which are or may be affected by trade. For these species trade is strictly regulated and only permitted in special circumstance. Appendix 1 include some highly threatened species, such as tiger, rhino, giant panda, Madagascar lemur, some crocodiles some orchids and some cacti.

Appendix 2

Contain species that although are not necessarily threatened, could become so if their trade is not properly controlled. Appendix 2 also contains some species that look so similar to species already listed that their trade is monitored and regulated in order to make control easier. Some of the species listed in Appendix 2 include- parrots, wild cats, some butterflies and stony corals.

Trade in Appendix 2 species is only permitted if the exporting country issues an export permit, while in the case of appendix 1 species where extra safeguards are necessary, an important permit is also required.

Appendix 3

Include species that are identified by any party as being subjected to regulations in that country and which require international cooperation to control trade.

About the table

1. Status of table
Accorded by global designation (IUCN) threat category and CITES Appendices) and National protected status (Nepal government- National park and wildlife reserve Act 1973) under this and next reading a dash indicates that no threat category has be ascribed.
2. Nepal Red data book status
Threat category ascribed for the species population within Nepal after suwal et al (1995)
3. Common name
After Carbet (1978) and (Corbet and Hill 1992)

Abbreviation Used

CNP	– Chitwan National Park
BNP	– Bardia National Park
MBNP	– Makalu Barun National Park
SNP	– Sagarmatha National Park
SiNP	– Shivapuri National Park
RNP	– Rara National Park
KNP	– Khaptad National Park
SPNP	– Shey Phoksundo National Park
LNP	– Langtang Natioanl Park
KTWR	– Koshi Tappu Wildlife Reserve
SWR	– Shukla Phanta Wildlife Reserve
PWR	– Parsa Wildlife Reserve
ACA	– Annapurna Conservation Area
DHR	– Dhorpatan Hunting Reserve
NG	– Nepal Government
CITES	– Convention of international trade of endangered species
IUCN	– International Union for Conservation of Nature and Natural Resource

Common Name (Family)	Scientific Name	Distribution in Protected Areas of Nepal	Habitat	Status	Status in NRDB
Indian Pangolin, (Manidae) salak, N.	<i>Manis crassicaudata</i>	ACAP, RNP, PWR	Forests, living in borrows in ground	NG-P, CITES-1 IWA	Susceptible
Chinese Pangolin (Manidae), salak	<i>Manis pentadactyla</i>	MBNP, CNP,	Found in forest living in borrow in the ground	NG-P CITES-1 IWA	Susceptible
Assamese monkey (Ceropithecidae)	<i>Macaca assamensis</i>	ACAP, MBNP, LNP, RNP,	Broad leaved evergreen forest, arboreal, shelter in cliffs and ravine	NG-P CITES – 11	no
Grey wolf/Canidae	<i>Canis lupus</i>	All NP except CNP & BNP, DHR, ACAP, various district	Adopted for hunting on relatively open ground, not found in deep forest	NG - P, IUCN- V, CITES -I	Vulnerable
Brown bear/ursidae	<i>Ursus arctos</i>	ACAP, RNP, SPNP (lamjung district)	Generally restricted above tree line in barren, grassy & rock uplands	NG - P, CITES -I	Vulnerable
Red panda/Ailuridae	<i>Ailurus fulgens</i>	ACAP, SNP, SPNP, MBNP, LNP, DHR, RNP & KNP, Various districts.	Moist temperate forest, feeding in bamboo shoots leaves & fruits, spends daylight hours sleeping in upper branches of trees.	NG - P IUCN- V, CITES -II IWA	Endangered
Spotted lingsang	<i>Prionodon pardicolor</i>	ACAP and CNP	Inhabits forests of hills in tropical and sub tropical zones	NG-P CITES- IWA	?
Striped hyeana/hyaenidae	<i>Hyaena hyaena</i>	BNP, CNP, SWR, PWR	Not known	NG - P	vulnerable
Leopard cat/felidae	<i>Felis bengalensis</i>	ACAP, KNP, MBNP, LNP, BNP, CNP, RNP, DHR	A forest spp avoiding open country but found also in plantation & suburban habitats.	NG-P CITES II IWA	Vulnerable
Clouded leopard/felidae	<i>Neofelis nebulosa</i>	MBNP, RNP, ACAP, CNP, SWWR	Dense evergreen subtropical & tropical forest, prefer Schima castanopsis largely arboreal	NG-P, IUCN-V, CITES-I, IWA	Vulnerable
Lynx/felidae	<i>Felis lynx</i>	ACAP, DHR	Prefer sub alpine and alpine dry steppe zone in sparsely vegetated areas	NG-P, IUCN-E CITES-II, IWA	Endangered
Bengal tiger/felidae	<i>Panthera tigris</i>	RBNP, CNP, SWR, PWR, various districts	Forest and savanna	NG-P, IUCN-E, CITES-I, IWA	Endangered
Snow leopard	<i>Panthera uncia</i>	ACAP, SNP, SPNP, MBNP, DHR & RNP	Broken areas with cliffs, rocks, talus, scree and morainal habitats for cover and usually travels on ridgelines, base f cliffs, river, buffs and human trails.	NG-P, CITES-E, IUCN-E, IWA	Endangered

Gagetic Dolphin/platanistidae	<u>Platanisa gangetica</u>	BNP, CNP, KTR	River systems in terai Found in wide varieties of forest but limited on one hand by need for daily access and on the other by feeding primarily upon grass and therefore avoiding large area of closed canopy — forest bland and woodland	NG-P, IUCN-CITES-I	C
Asiatic elephant/elephantidae	<u>Elaphas maximus</u>	BNP, CNP, SWR, PWR, KTR districts	Found in wide varieties of forest but limited on one hand by need for daily access and on the other by feeding primarily upon grass and therefore avoiding large area of closed canopy — forest bland and woodland	NG-P IUCN-E CITES-I IWA	Endangered
One horned rhinoceros/rhinocerotidae	<u>Rhinoceros unicornis</u>	SWR, BNP, CNP, PWR districts	Open grassland, scarce bland and woodland	NG-P IUCN-E CITES-I IWA	Endangered
Pymgy hog/suidae	<u>Sus salvanius</u>	-	Not known	NG-P IUCN-I CITES-I IWA	EXN
Himalaya musk deer/moschidae	<u>Moschus chrysogaster</u>	SNP, MBNP, LNP, ACAP, SPND, DHR, KNP, RNP Districts	Associated with temperate, sub alpine zone, preferring birch- rhododendron and scrub & conifer forests	NG-P IUCN-E CITES-I IWA	Endangered
Swamp deer/cervidae	<u>Cervus duvauceli</u>	BNP & SWR	The population north of the Ganges occupy swampy habitats but those south of the Ganges are found on drier grassland	NG-P IUCN-E CITES-I IWA	-----
Gaur bison /Bovidae	<u>Bos gaurus</u>	CNP, PWR, KTR districts	Sal forest of the terai and siwalik	NG-P IUCN-U CITES-I	Endangered
Wild yak/Bovidae	<u>Bos grunniens</u>	ACA, SPNP, SNP, districts	Inhabits the coldest, wildest arctic and desert biotype of trans-Himalayan zones	NG-P IUCN-E CITES-I IWA	C
Wild water buffalo/bovidae	<u>Bubalus arnee</u>	KTR districts	Not known	NG-P IUCN-E CITES-I IWA	C
Four horned antelope/bovidae	<u>Tetracerus quadricornis</u>	CNP, PWR, BNP	Not known	IUCN-V CITES-III, (NP) IWA	Endangered
Black buck/bovidae	<u>Antilopes cervicapra</u>	BNP	Grazers, farming large herds on grasslands and in open thorn forest and capable in surviving in semi desert habitats	NG-P IUCN-V CITES-III, IWA	Endangered
Tibetan antelope or chiru	<u>Pantholops nodgsoni</u>	ACAP and SPNP districts	Grassy open slopes of steppe habitats of Tibetan plateau, often shelters and rests in excavated hollows	NG-P CITES-I IWA	C
Great Tibetan sheep	<u>Ovis ommon</u>	ACAP Damolar kund valley, SPNP, MPNP and LNP	Frequent borders of snowline, entering ravines with streams, low bushes, Inhibits desolate plains	NG-P IUCN-I CITES-I IWA	C
Hispid hare, Assam rabbit/hyrixidae	<u>Caproloquus hispidus</u>	BNP, CNP, SWR	Found in tall riverine grassland along the edge of foot hills	NG-P IUCN-E CITES-I IWA	?