

Checklist

A checklist of mammals of Gaurishankar Conservation Area, Nepal

Madhu Chetri^{1,2*} | Pramod Raj Regmi¹ | Tulasi Prasad Dahal¹ | Shankar Thami¹

¹ Department National Trust for Nature Conservation, Khumaltar, Lalitpur, Nepal

² Inland Norway University of Applied Sciences, Norway

* Correspondence: mchetri@gmail.com

Suggested citation: Chetri, M., Regmi, P. R., Dahal, T. P. and Thami, S. 2022. A checklist of mammals of Gaurishankar Conservation Area, Nepal. *Nepalese Journal of Zoology* 6(S1):56–62.
<https://doi.org/10.3126/njz.v6iS1.50533>

Article History:

Received: 20 February 2022

Revised: 21 October 2022

Accepted: 27 October 2022

Publisher's note: The editorial board and the publisher of the NJZ remain neutral to the opinions expressed and are not responsible for the accuracy of the results and maps presented by the authors.



Copyright: © 2022 by the authors

Licensee: Central Department of Zoology, Tribhuvan University, Kathmandu, Nepal.

Abstract

Understanding the mammalian fauna is one of the first steps for protected areas management. Proper taxonomic identification is essential for initiating long-term conservation management and species action plans. Here, we present the checklist of mammals of Gaurishankar Conservation Area based on direct observation, field reports, key interviews, focal group discussion, and a literature review. Seventy-seven species of mammals belonging to eight orders and 26 families were known to occur in the region. Of these, only 32 species were of confirmed occurrence and are based on direct observation and camera trap records. The remaining 45 species listed in the checklist were based on interviews and literature. Small mammals of orders Chiroptera and Rodentia were reported less based on interviews and literature surveys, hence needs further studies to confirm their existence. The highest species belonged to the order Carnivora (25 species), followed by Chiroptera (21 species), Rodentia (12 species), Cetartiodactyla (7), Lagomorpha (5), Eulipotyphla (3), Primates (3) and Pholidota (1). A more robust taxonomic study particularly focusing on small mammals is warranted considering the ecological gradients and topography in the region.

Keywords: Checklist; Chiroptera; Carnivora; Order; Rodentia; Species

1 | Introduction

Understanding the mammalian fauna in a protected landscape is one of the first steps for protected areas management. Proper taxonomic identification is essential for initiating long-term conservation management and species action plans. Nepal is rich in mammalian biodiversity and constitutes about 4.2% of global mammalian fauna (Jnawali et al. 2011). The National Red List Series of Nepal's mammals compiled existing data and reported the presence of 208 species of mammals, of which 38% are considered Data Deficient (Jnawali et al. 2011). Out of 208 species enumerated, 79 species listed are from lower mammalian taxa, with 48% of species assessed considered as Data Deficient. In the proposed study area, the existence of 76 mammalian species has been reported but mostly based on anecdotal reports (GCA 2013). Small mammals are underrepresented in the list. There is a high possibility

of the existence of new small mammalian taxa as research on lower taxa has not been prioritized in the Himalayas. In the study area, the vertical topography and high variation in altitudinal gradients have created a mosaic of habitats suitable for many species of global significance. A recent camera trapping study has identified the presence of many important charismatic species in the region (Koju et al. 2020; Koju et al. 2021; Pandey et al. 2021). Therefore, systematic taxonomic research in this area is sorely needed to understand mammalian fauna in the region.

The series of explorations of the mammalian fauna have been documented since early 1820 (Thapa 2014). Brian H. Hodgson collected 373 specimens of 70 genera and 114 species of mammals from Nepal (Mitchell 1975). Since then, many biologists and researchers added to the existing list of Hodgson. Shah and Baral (2008) updated 208 species in their book *Mammals of Nepal*. Based on the literature review, Pearch (2011) updated

the small mammals of Nepal enumerating 118 species. But some of the taxon enumerated by Pearch (2011) might not exist in Nepal and needs further verification (Thapa 2014). For example, the presence of *Sorex thibetanus*, a species endemic to China (Smith & Xie 2013). The taxonomic classification of this species is still subject to controversy. The National Red List Series of Nepal's mammals is the first initiative undertaken at a national level in Nepal to assess the mammalian faunal status using IUCN categories and criteria (Jnawali et al. 2011). However, the taxonomic representation of the species is confusing and contradictory. Some species which might not exist in Nepal are also listed in the National Red List Series (see Thapa 2014). Later Thapa (2014), confirmed the occurrence of 192 species of mammals representing 37 families and 12 orders. The list includes two endemic species: *Apodemus gorkha* and *Myotis csorbai*. Additional two species new to Nepal are added to this checklist namely, *Mus pahari* and *Scotozous dormeri*. Amin et al. 2018 reported the presence of 212 species in Nepal, out of which eighty-three species of the mammalian fauna are listed as data deficient. A recent review on Nepal's mammalian fauna reported the presence of 213 species in the country (Bist et al. 2021).

The present manuscript aims to prepare checklist of mammalian species that thrives in Gaurishankar Conservation Area (GCA). This information will generate interest among scientist and conservationist for conducting further research in this important region that induced by anthropogenic activities such as infrastructure development.

2 | Materials and methods

2.1 | Study area

The GCA is located between E 85° 46.8' - 86° 34.8' and N 27°34.2' - 28°10'. The area lies in between two important national parks- Langtang National Park (LNP) in the west, and Sagarmatha National Park (SNP) in the east and acts as a biological corridor for several globally threatened species (Fig. 1). The northern border is adjacent to the Tibetan autonomous region of the People's Republic of China and both wild and domestic animals move between borders. This area also falls within the Sacred Himalayan landscape (WWF Nepal 2012). GCA covers an area of 2179 km² along with three districts-Dolakha, Rammechhap, and Sindupalchok. The physiographic and climatic zones vary from mid-hills to high mountains and from sub-tropical to arctic. Within

a short span of 120 km, the altitude rises from less than 1,000 m to over 7,000 m. Eighteen types of forest habitats exist within the region. Approximately, 67000 people are living within the GCA (GCA 2013). As local communities are within the GCA, pressure on forest habitats is high. Since its inception in 2010, the National Trust for Nature Conservation-Gaurishankar Conservation Area Project is managing the area and has initiated important conservation work in partnership with the concerned stakeholders and local communities.

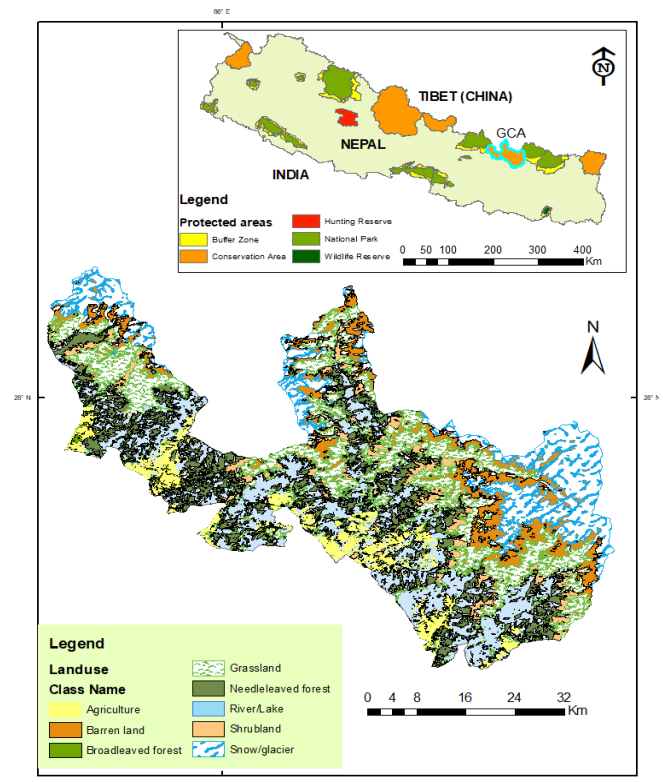


Figure 1. Study area showing the habitat types

In terms of wildlife, the most common animal that is seen at lower altitudes is the Himalayan goral (*Naemorhedus goral*). Three primate species are also found in the region including the globally near-threatened Assamese macaque (*Macaca assamensis*) (Boonratna et al. 2020). Higher grazing pastoral areas harbor several species of rodents, mustelids which are not explored to date and may probably be new to science. At higher altitude rangeland are used for grazing livestock such as goat, sheep, cow, horses, dzo (yak-hybrid), and yak. To escape severe winter, some northern villages also have a tradition of temporary migration at lower altitudes for 3-4 months along with livestock herds.

2.2 | Methods

We compiled the mammalian species list based on direct observation, data collection from the field, villagers' reports of sightings, signs left in livestock predation and crop damages, infant and sick animals received from local communities, key informant interviews, and focal group discussion (FGD). FGD (3 events) were conducted in Dolakha, Ramechhap, and Sindhupalchok districts in September 2021 to confirm the presence of species. We also reviewed the existing literature on the mammals of Nepal (Abe 1971; Mitchell 1975; Abe 1977; Suwal et al. 1995; Shah & Baral 2008; Jnawali et al. 2011; Thapa 2014; Amin et al. 2018; Sharma et al. 2019; Bist et al. 2021). In addition, we also used recent camera trap data that was placed in GCA. We followed the taxonomic and threatened categories updates based on IUCN (2022).

3 | Results

Our results showed the occurrence of 77 species of mammals that belong to 8 orders and 26 families in GCA. Out of these, only 32 species' presence is confirmed through direct observation and camera trap records. Most of the species belonging to the order Chiroptera (n=20) and Rodentia (n=8) are listed based on probable occurrence, key interviews, FGD, and literature surveys (Annex 1).

4 | Discussion

GCA is least explored in terms of biodiversity research. Recent research in the area reported the presence of snow leopard (*Panthera uncia*), Himalayan wolf (*Canis lupus*), Asiatic golden cat (*Pardofelis temminckii*) (Koju et al. 2020; Koju et al. 2021; Pandey et al. 2021). The existence of red panda (*Ailurus fulgens*) and Chinese pangolin (*Manis pentadactyla*) was also confirmed in this

study. These two species are rescued by the local communities that enter the village and are released into natural habitats. The checklist provided in the management plan of GCA needs to update as some species which are not present in Nepal are reported (GCA 2013) for example- *Miniopterus schreibersii* which is a resident of Europe and part of Turkey-Asia (Gazaryan et al. 2020). The presence of *Semnopithecus ajax* is also contradictory in Nepal (Thapa 2014). According to IUCN, the species is restricted to Himachal Pradesh in India and found in Jammu and Kashmir (Kumar et al. 2020) only. Further study is needed to verify the extent of this species in the Nepal Himalayas. Twenty species that belong to the order Chiroptera were from literature review and interviews. Similarly, only two species of rodents have been so far confirmed and the remaining eight species are listed based on literature review (Jnawali et al. 2011; Thapa 2014) and interviews. This shows that lower animal taxa are of the least priority in the context of Nepal. A detailed taxonomic study of bats and rodents is very much needed in GCA. Many of the species' presence particularly small mammals in Nepal as well as GCA have contradictory taxonomic information. This needs further study using robust techniques such as the use of DNA and genomic study to verify the species and sub-species.

Acknowledgements

We are grateful to National Trust for Nature Conservation for providing us with the opportunity to work in Gaurishankar Conservation Area. We are very much thankful to the local communities who helped us with the information.

Conflicts of interest

Authors declare no conflict of interest

References

- Abe, H. 1971. Small mammals of central Nepal. Journal of the faculty of agriculture, Hokkaido University 56:367–423.
- Abe, H. 1977. Variation and taxonomy of some small mammals from central Nepal. Journal of the Mammalogical Society of Japan 7:63–73.
- Baral, H. S. and Shah, K. B. 2008. Wild mammals of Nepal. Himalayan Nature, Kathmandu, Nepal, p 188.
- Bist, B. S., Ghimire, P., Nishan, K. C., Poudel, B. S., Pokheral, C. P., Poudyal, L. P., Wright, W., Basnet, A., Pradhan, A. and Shah K. B. 2021. Patterns and trends in two decades of research on Nepal's mammalian fauna (2000–2019): examining the past for future implications. Biodiversity and Conservation 30: 3763–3790. <https://doi.org/10.1007/s10531-021-02289-2>

- Boonratana, R., Chalise, M. K., Htun, S. and Timmins, R. J. 2020. *Macaca assamensis*. The IUCN Red List of Threatened Species 2020: e.T12549A17950189. <https://dx.doi.org/10.2305/IUCN.UK.2020-2.RLTS.T12549A17950189.en>. Downloaded on 11 October 2022.
- Gazaryan, S., Bücs, S. and Çoraman E. 2020. *Miniopterus schreibersii* (errata version published in 2021). The IUCN Red List of Threatened Species 2020: e.T81633057A195856522. <https://dx.doi.org/10.2305/IUCN.UK.2020-2.RLTS.T81633057A195856522.en>. Downloaded on 02 November 2021.
- GCA. 2013. Gaurishankar Conservation Area Management Plan (2013-2017). National Trust for Nature Conservation, p 166.
- IUCN 2022. The IUCN Red List of Threatened Species. Version 2022-1. <https://www.iucnredlist.org>. Downloaded on 27 October 2022.
- Jnawali, S., Baral, H., Lee, S., Acharya, K., Upadhyay, G., Pandey, M., Shrestha, R., Joshi, D., Lamichhane, B. and Griffiths, J. 2011. The Status of Nepal's Mammals: The National Red List Series-IUCN. Department of National Parks and Wildlife Conservation, Kathmandu, Nepal, p 276.
- Koju, N. P., Bashyal, B., Pandey, B. P., Shah, S. N., Thami, S. and Bleisch, W. V. 2021. First camera-trap record of the snow leopard *Panthera uncia* in Gaurishankar Conservation Area, Nepal. *Oryx* 55:173–176. <https://doi.org/10.1017/S003060532000006X>
- Koju, N. P., Bashyal, B., Pandey, B. P., Thami, S., Dhamala, M. K. and Shah, S. N. 2020. New record on Asiatic Golden Cat *Catopuma temminckii* Vigors & Horsfield, 1827 (Mammalia: Carnivora: Felidae): photographic evidence of its westernmost distribution in Gaurishankar Conservation Area, Nepal. *Journal of Threatened Taxa* 12:15256–15261. <https://doi.org/10.11609/jott.5227.12.2.15256-15261>
- Kumar, A., Singh, M., Anandam, M., Ahuja, V., Kumara, H.N. and Molur, S. 2020. *Semnopithecus ajax*. The IUCN Red List of Threatened Species 2020: e.T39833A17943210. <https://dx.doi.org/10.2305/IUCN.UK.2020-2.RLTS.T39833A17943210.en> Downloaded on 02 November 2021.
- Mitchell, R.M. 1975. A checklist of Nepalese Mammals (Excluding bats). *Säugetierkundliche Mitteilungen* 23:152–157.
- Pandey, B. P., Thami, S. M., Shrestha, R. and Chalise, M. K. 2021. On the occurrence of the Himalayan Wolf *Canis lupus*, L. 1758 (Mammalia: Carnivora: Canidae) in the Gaurishankar Conservation Area, Nepal; its existence confirmed through sign and visual evidence in Rolwaling Valley. *Journal of Threatened Taxa* 13:18967–18974.
- Pearch, M. J. 2011. A review of the biological diversity and distribution of small mammal taxa in the terrestrial ecoregions and protected areas of Nepal. *Zootaxa* 3072:1–286–281–286. <https://doi.org/10.11646/zootaxa.3072.1.1>
- Sharma, B., Subedi, A., Subedi, B., Panthee, S. and Acharya, P. R. 2019. First record of the Small Bamboo Bat *Tylonycteris fulvida* (Peters, 1872) (Mammalia: Chiroptera: Vespertilionidae) from Nepal. *Journal of Threatened Taxa* 11: 14216–14219. <https://doi.org/10.11609/jott.4502.11.9.14216-14219>
- Smith, A. T. and Xie, Y. 2013. *Mammals of China*. Princeton University Press.
- Suwal, R., Verheugt, W. and Yonzon, P. 1995. Enumeration of Mammals of Nepal Biodiversity Profiles Project Publication No. 6. Department of National Parks and Wildlife Conservation, Kathmandu.
- Thapa, S. 2014. A checklist of mammals of Nepal. *Journal of Threatened Taxa* 6:6061–6072. <https://doi.org/10.11609/JoTT.o3511.6061-72>
- WWF Nepal. 2012. Socio-Economic Baseline Survey for REDD+Readiness in the Sacred Himalayan Landscape, Nepal. December 2012.

Annex 1. A check list of mammals of GCA

S N	Scientific Name	Common Name	Order	Family	Methods of Confirmation			IUCN Status
					DO	IT	LT	
1	<i>Herpestes edwardsii</i> (È. Geoffroy Saint-Hilaire, 1818)	Indian Grey Mongoose	Carnivora	Herpestidae		☉	☉	LC
2	<i>Herpestes javanicus</i> (È. Geoffroy Saint-Hilaire, 1818)	Javan Mongoose	Carnivora	Herpestidae	☉			LC
3	<i>Lutra lutra</i> (Linnaeus, 1758)	Eurasian Otter	Carnivora	Mustelidae		☉	☉	NT
4	<i>Mustela altaica</i> Pallas, 1811	Altai Weasel	Carnivora	Mustelidae		☉	☉	NT
5	<i>Mustela sibirica</i> Pallas, 1773	Siberian Weasel	Carnivora	Mustelidae		☉	☉	LC
6	<i>Martes flavigula</i> (Boddaert, 1758)	Yellow-throated Marten	Carnivora	Mustelidae	☉			LC

7	<i>Martes foina</i> (Erxleben, 1777)	Beech Marten	Carnivora	Mustelidae	☉	☉	LC
8	<i>Viverra zibetha</i> (Linnaeus, 1758)	Large Indian Civet	Carnivora	Viverridae	☉		LC
9	<i>Paradoxurus hermaphroditus</i> (Pallas, 1777)	Common Palm Civet	Carnivora	Viverridae	☉	☉	LC
10	<i>Vivericula indica</i> (É. Geoffroy Saint-Hilaire, 1803)	Small Indian Civet	Carnivora	Viverridae	☉	☉	LC
11	<i>Paguma larvata</i> (C.E.H. Smith, 1827)	Masked Palm Civet	Carnivora	Viverridae	☉	☉	LC
12	<i>Ailurus fulgens</i> F.G. Cuvier, 1825	Red Panda	Carnivora	Ailuridae	☉		EN
13	<i>Canis lupus</i> Linnaeus, 1758	Grey wolf/Himalayan wolf	Carnivora	Canidae	☉		LC
14	<i>Canis aureus</i> Linnaeus, 1758	Golden Jackal	Carnivora	Canidae	☉		LC
15	<i>Vulpes vulpes</i> (Linnaeus, 1758)	Red Fox	Carnivora	Canidae	☉		LC
16	<i>Vulpes ferrilata</i> Hodgson, 1842	Tibetan Fox	Carnivora	Canidae	☉	☉	LC
17	<i>Ursus thibetanus</i> G. [Baron] Cuvier, 1823	Himalayan Black Bear	Carnivora	Ursidae	☉		VU
18	<i>Melursus ursinus</i> (Shaw, 1791)	Sloth bear	Carnivora	Ursidae	☉		VU
19	<i>Neofelis nebulosa</i> (Griffith, 1821)	Clouded Leopard	Carnivora	Felidae	☉	☉	VU
20	<i>Prionailurus bengalensis</i> (Kerr, 1792)	Leopard Cat	Carnivora	Felidae	☉		LC
21	<i>Felis chaus</i> Schreber, 1777	Jungle Cat	Carnivora	Felidae	☉		LC
22	<i>Pardofelis temminckii</i> (Vigors & Horsfield, 1827)	Asiatic Golden Cat	Carnivora	Felidae	☉		NT
23	<i>Panthera pardus</i> (Linnaeus, 1758)	Common Leopard	Carnivora	Felidae	☉		VU
24	<i>Lynx lynx</i> (Linnaeus, 1758)	Eurasian lynx	Carnivora	Felidae		☉	LC
25	<i>Panthera uncia</i> (Schreber, 1775)	Snow Leopard	Carnivora	Felidae	☉		VU
26	<i>Sus scrofa</i> Linnaeus, 1758	Wild Boar	Cetartiodactyla	Suidae	☉		LC
27	<i>Moschus leucogaster</i> Hodgson, 1839	Himalayan Musk Deer	Cetartiodactyla	Moschidae	☉		EN
28	<i>Muntiacus vaginalis</i> (Zimmermann, 1780)	Northern Red Muntjac	Cetartiodactyla	Cervidae	☉		LC
29	<i>Naemorhedus goral</i> (Hardwicke, 1825)	Himalayan Goral	Cetartiodactyla	Bovidae	☉		NT
30	<i>Capricornis thar</i> (Hodgson, 1831)	Mainland Serow	Cetartiodactyla	Bovidae	☉		VU
31	<i>Hemitragus jemlahicus</i> (C.H. Smith, 1826)	Himalayan Tahr	Cetartiodactyla	Bovidae	☉		NT
32	<i>Pseudois nayaur</i> (Hodgson, 1833)	Bharal/Blue Sheep	Cetartiodactyla	Bovidae	☉		LC
33	<i>Cynopterus sphinx</i> (Vahl, 1797)	Greater Short-nosed Fruit Bat	Chiroptera	Pteropodidae		☉	LC
34	<i>Rousettus leschenaulti</i> (Desmarest, 1820)	Leschenault's Rousette	Chiroptera	Pteropodidae		☉	LC
35	<i>Miniopterus pusillus</i> Dobson, 1876	Small Long-fingered Bat	Chiroptera	Miniopteridae		☉	LC
36	<i>Rhinolophus affinis</i> Horsfield, 1823	Intermediate Horseshoe Bat	Chiroptera	Rhinolophidae	☉	☉	LC
37	<i>Rhinolophus ferrumequinum</i> (Schreber, 1774)	Greater Horseshoe Bat	Chiroptera	Rhinolophidae	☉	☉	LC
38	<i>Rhinolophus lepidus</i> Blyth, 1844	Blyth's Horseshoe Bat	Chiroptera	Rhinolophidae		☉	LC
39	<i>Rhinolophus macrotis</i> Blyth, 1844	Big-eared Horseshoe Bat	Chiroptera	Rhinolophidae		☉	LC

40	<i>Rhinolophus pearsonii</i> Horsfield, 1851	Pearson's Horseshoe Bat	Chiroptera	Rhinolophidae	☉	LC	
41	<i>Rhinolophus pusillus</i> Temminck, 1834	Least Horseshoe Bat	Chiroptera	Rhinolophidae	☉	LC	
42	<i>Rhinolophus sinicus</i> K. Andersen, 1905	Chinese Horseshoe Bat	Chiroptera	Rhinolophidae	☉	☉	LC
43	<i>Hipposideros armiger</i> (Hodgson, 1835)	Great Himalayan Leaf-nosed Bat	Chiroptera	Hipposideridae	☉	☉	LC
44	<i>Hipposideros gentilis</i> K. Andersen, 1918	Andersen's Roundleaf Bat	Chiroptera	Hipposideridae	☉		
45	<i>Megaderma lyra</i> É. Geoffroy, 1810	Greater False Vampire	Chiroptera	Megadermatidae	☉	LC	
46	<i>Myotis blythii</i> (Tomes, 1857)	Lesser Mouse-eared Myotis	Chiroptera	Vespertilionidae	☉	LC	
47	<i>Myotis nipalensis</i> Dobson, 1871	Nepal Myotis	Chiroptera	Vespertilionidae	☉	☉	LC
48	<i>Myotis muricola</i> (Gray, 1864)	Nepalese Whiskered Myotis	Chiroptera	Vespertilionidae	☉	LC	
49	<i>Nyctalus noctula</i> (Schreber, 1774)	Noctule	Chiroptera	Vespertilionidae	☉	LC	
50	<i>Philetor brachypterus</i> (Temminck, 1840)	Short-winged Pipistrelle	Chiroptera	Vespertilionidae	☉	LC	
51	<i>Pipistrellus coromandra</i> (Gray, 1838)	Coromandel Pipistrelle	Chiroptera	Vespertilionidae	☉	LC	
52	<i>Plecotus auritus</i> (Linnaeus, 1758)	Brown Big-eared Bat	Chiroptera	Vespertilionidae	☉	LC	
53	<i>Plecotus austriacus</i> (J. Fischer, 1829)	Gray Big-eared Bat	Chiroptera	Vespertilionidae	☉	NT	
54	<i>Soriculus nigrescens</i> (Gray, 1842)	Himalayan Shrew	Eulipotyphla	Soricidae	☉	☉	LC
55	<i>Nectogale elegans</i> Milne-Edwards, 1870	Elegant Water Shrew	Eulipotyphla	Soricidae	☉	☉	LC
56	<i>Suncus murinus</i> (Linnaeus, 1766)	House Shrew	Eulipotyphla	Soricidae	☉	☉	LC
57	<i>Ochotona macrotis</i> (Günther, 1875)	Large-eared Pika	Lagomorpha	Ochotonidae	☉	LC	
58	<i>Ochotona nubrica</i> Thomas, 1922	Nubra Pika	Lagomorpha	Ochotonidae	☉	LC	
59	<i>Ochotona roylei</i> (Ogilby, 1839)	Royle's Pika	Lagomorpha	Ochotonidae	☉	LC	
60	<i>Lepus nigricollis</i> F. Cuvier, 1823	Indian Hare	Lagomorpha	Leporidae	☉	LC	
61	<i>Lepus oiostolus</i> Hodgson, 1840	Woolly Hare	Lagomorpha	Leporidae	☉	☉	LC
62	<i>Manis pentadactyla</i> Linnaeus, 1758	Chinese Pangolin	Pholidota	Manidae	☉	CR	
63	<i>Macaca assamensis</i> (M'Clelland, 1840)	Assam Macaque	Primates	Cercopithecidae	☉	NT	
64	<i>Macaca mulatta</i> (Zimmermann, 1780)	Rhesus Monkey	Primates	Cercopithecidae	☉	LC	
65	<i>Semnopithecus ajax</i> (Pocock, 1928)	Kashmir Gray Langur	Primates	Cercopithecidae	☉	EN	
66	<i>Marmota himalayana</i> (Hodgson, 1841)	Himalayan Marmot	Rodentia	Sciuridae	☉	LC	
67	<i>Neodon sikimensis</i> (Horsfield, 1841)	Sikkim Vole	Rodentia	Cricetidae	☉	☉	LC
68	<i>Rattus nitidus</i> (Hodgson, 1845)	Himalayan Field Rat	Rodentia	Muridae	☉	☉	LC
69	<i>Rattus rattus</i> (Linnaeus, 1758)	House Rat	Rodentia	Muridae	☉	☉	LC
70	<i>Bandicota bengalensis</i> (Gray, 1835)	Lesser Bandicoot Rat	Rodentia	Muridae	☉	☉	LC
71	<i>Cricetulus alticola</i> Thomas, 1917	Tibetan Dwarf Hamster	Rodentia	Cricetidae	☉	☉	LC

72	<i>Mus booduga</i> (Gray, 1837)	Common Indian Field Mouse	Rodentia	Muridae	☉	☉	LC
73	<i>Mus musculus</i> Linnaeus, 1758	House Mouse	Rodentia	Muridae	☉	☉	LC
74	<i>Funambulus pennanti</i> Wroughton, 1905	Five-striped Palm Squirrel	Rodentia	Sciuridae	☉	☉	LC
75	<i>Dremomys lokriah</i> (Hodgson, 1836)	Orange-bellied Himalayan Squirrel	Rodentia	Sciuridae	☉		LC
76	<i>Petaurista petaurista</i> (Pallas, 1766)	Red Giant Flying Squirrel	Rodentia	Sciuridae	☉	☉	LC
77	<i>Hystrix brachyura</i> Linnaeus, 1758	Malayan Porcupine	Rodentia	Hystriidae	☉		LC

Note: DO = Direct Observation, IT=Interviews, LT= Literature Review, LC=Least Concern, NT= Near Threatened, VU= Vulnerable, E=Endangered, CR= Critically Endangered.