

Mustelids and Viverrids of the Northwestern and Western Himalayas

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THE NORTHWESTERN and western Himalayan biogeographic zones of India are home to some of India's highly endangered, elusive and endemic fauna. Existing information on mammals of the Himalayan regions is mostly confined to large mammals particularly mountain ungulates. Information on other mammalian species is largely anecdotal. Amongst the carnivores, mustelids and viverrids form one important component of the faunal diversity of the Himalayas, but not much information exists. This article presents an account of mustelids and viverrids of the northwestern and western Himalayas based on personal observations of the author and collation of existing information.

Five species of mustelids viz., Beech or stone marten *Martes foina*, yellow-throated marten *M. flavigula*, Himalayan stoat or ermine *Mustela erminea*, yellow-bellied weasel *M. kathiah*, Siberian weasel *M. sibirica* and one species of viverrid i.e., the Himalayan masked palm civet *Paguma larvata* occur in the northwestern and western Himalayas (Fig. 1). Although the small Indian civet *Viverricula indica* and common palm civet or toddy cat *Paradoxurus hermaphroditus* and a few mongoose are reported to occur in the western Himalayas, information on these species is almost non-existent and therefore not included in this article.

MARTENS

1. Beech or stone marten *Martes foina*

Beech or stone martens inhabit the temperate and alpine zones of the Himalayas

and are rarely encountered below 1500 m (Prater 1971, Sharma 1994).

Champion (1996) has reported that pine martens (most probably beech or stone martens) or *Chitraulas* as they are called in Kumaon hills were frequent visitors or permanent residents of English households or colonies and were a great trouble for the domestic fowl. Reports of martens entering fowl-run and slaughtering all fowl were not uncommon in those days.

Beech or stone martens are now threatened as they are hunted for their fur. About 400 skins are smuggled out of Ladakh annually (Dar & Gaur 1984).

2. Yellow-throated marten *Martes flavigula*

In the western Himalayas the yellow-throated marten occurs in the forested habitats from 1200 m to 3200 m and in the Shiwaliks, in a wide range of habitats. It was fairly common in Kedarnath Wildlife Sanctuary (WLS), Uttar Pradesh (Sathyakumar 1994). During 1989 and 1991 it was sighted on 16 occasions between 1650 m and 3220 m of which seven sightings were of pairs, four sightings were of groups of three and the rest as solitary individuals. Green (1985) had reported that the Himalayan yellow-throated marten was the most abundant predator in Kedamath WLS during 1979 and 1981. There were 12 sightings (group size: 1-4) of this species. It is fairly common in other parts of western Himalayas such as Govind WLS, Gangotri and Yamunotri valleys, Nanda Devi National

Park (NP) and Biosphere Reserve and Great Himalayan NP (Sathyakumar 1993, *unpubl.*, Vinod & Sathyakumar 1999). It is reported to be rare in Panchchuli (Askot WLS) region (Rawat & Sathyakumar 1998). Silori & Badola (1999) reported four sightings, totalling nine individuals in the Chamoli part of Nanda Devi Biosphere Reserve during the years 1995-97.

Green (1985) analysed marten scats collected in Kedamath WLS during 1979-1981, and reported that they preyed on Himalayan tahr *Hemitragus jemlahicus*, flying squirrel *Petaurista* spp., reptiles and insects. Sathyakumar (1994) has reported observations on martens pursuing prey in Kedamath WLS. They include: (i) a pair of martens chasing an adult male Himalayan tahr towards the 'treeline' while the other tahrs gave alarm calls (ii) a Himalayan musk deer *Moschus chrysogaster* was chased by a pair on another occasion in the same area, and (iii) a solitary marten was observed chasing two gorals in the lower temperate forests. However, the hunting success of these pursuits were not known. Sathyakumar *et al.* (1993) reported an unsuccessful attempt by marten on kalij pheasant *Lophura leucomelana* in the low altitude oak forests of Kedamath WLS. Once a group of seven martens were observed on a goral *Nemorhaedus goral* kill near a river adjacent to a chir pine forest and also a pair entering the Musk Deer Captive Breeding Centre at Kanchulakharakh near Kedamath WLS (T.S.Bisht, *pers. comm.*)

WEASELS

1. Himalayan stoat or ermine *Mustela erminea*

In the western Himalayas the ermine inhabits wide and varied habitats in elevations ranging from 1500 to 4800 m, but prefers river banks, streams as well as edges of lakes and ponds (Kruska 1990, Sharma 1994). In India, this species is persecuted for its prized pelt (Sharma 1994).

2. Yellow-bellied weasel *Mustela kathiah*

The yellow-bellied weasel owes its name to the dark-yellow colour of the ventral side of the body. It is reported to be common in the Himalayas from northern Pakistan across Nepal, Myanmar, south and central China and Indo-China Peninsula where it lives at elevations between 1800 and 4000 m (Kruska 1990). Information on the status, distribution and ecology of this species is not known.

3. The Siberian weasel *Mustela sibirica*

The Siberian weasel also known as the Siberian mink or kolinsky is the most common among Asian mustelids. In the Indian subcontinent, it is also known as the Himalayan weasel.

The Himalayan weasel is rare (as sightings are very few) in many Protected Areas in the western Himalayas such as Kedamath WLS, Nanda Devi NP, Great Himalayan NP, Govind WLS, Askot WLS (Panchchuli area) and in other forest divisions or valleys (Sathyakumar 1993, 1994, *unpubl.*, Rawat & Sathyakumar 1998, Vinod & Sathyakumar 1999). It appears to be common in Kugti WLS in Bharmour District of Himachal Pradesh where three sightings were obtained in just two days (Sathyakumar *pers. obs.*)

All these three races of the Himalayan weasel are distributed in widely varied habitats throughout the Himalayas between 1500 and 4800 m elevations. They shelter amongst rocks, under roots of trees, in hollow stumps or logs and quite often in the burrow of some other animals. Like the stoat or ermine, the Himalayan weasel is also known as the killing machine for its swift killing behaviour. They prey on rats, mice, mouse hares, birds and bird eggs, reptiles and even insects. Sharma (1994) has reported Himalayan weasel preying on Himalayan pit viper in Dachigam NP and on Agama lizard in Poonch and Kistawar sector of Jammu and Kashmir state.

Occurrence of five species of mustelids viz., stone marten, yellow-throated marten, ermine, yellow-bellied weasel, Siberian weasel, and one species of civet i.e. masked palm civet has been confirmed from the north-western and western Himalayas.

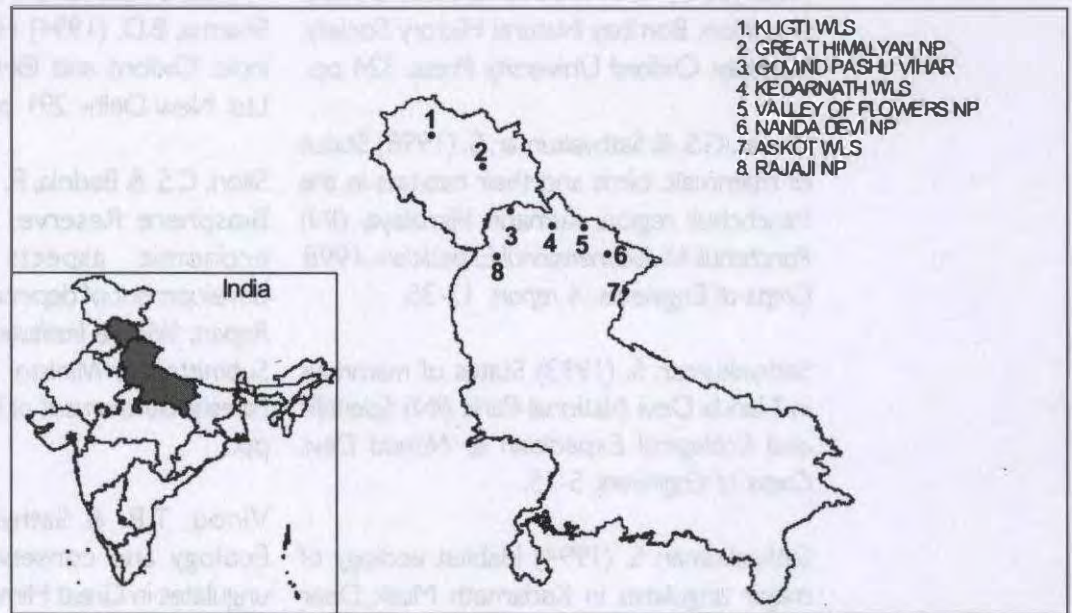


Fig. 1 Parts of western Himalayas with location of the Protected Areas with confirmed sightings of mustelids and viverrids.

They breed from February to May depending upon the region and the gestation period varies from 35-42 days (28 in captivity). Four to ten young ones are born.

CIVETS

I. Himalayan masked palm civet *Paguma larvata*

Sathyakumar (1994) reported that the Himalayan masked palm civet was very rare and was never sighted during the three-year study period (1989-1991) in Kedarnath WLS. The only record of this species was of a dead specimen in the upper temperate forests at an altitude of 2800 m. Green (1985) has recorded this species at 2440 m in Kedarnath WLS, which indicates probably a single sighting. Another dead specimen, a road kill was collected near Devprayag in Uttar Pradesh. Vinod & Sathyakumar (1999) have reported that this species is very rare in the Great Himalayan NP in Himachal Pradesh. It is reported to be rare in Panchchuli (Askot WLS) region (Rawat & Sathyakumar 1998).

The mustelids and viverrids of the western and northwestern Himalayas deserve immediate attention as they suffer from habitat loss, consequent loss of their prey and poaching for fur, all of which could lead to decrease in their numbers or local extinction. There is an urgent need for protection to these species from poaching. Status surveys are required to gather baseline information on these species.

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