

## Additional sighting records of the Yellow-throated Marten (*Martes flavigula* Boddaert, 1785) from Chamba district, Himachal Pradesh, India Tariq Ahmed Shah<sup>1,2\*</sup>, P. Vishal Ahuja<sup>2</sup>, Martina Anandam<sup>2</sup> and C. Aditya Srinivasulu<sup>3</sup>

The Chamba district (32°33'16" N, 76°7'26" E) having a population of 518,844 individuals is one of the northernmost districts of Himachal Pradesh and spans over an area of about 6522 sq.km. It is located in the biodiversity-rich Lower Himalaya or Sivalik Ranges. The extent of forest cover in this district is about 2436 sq.km. which amounts to about 37.35% of the total geographic area. The Chamba district is home to five Wildlife Sanctuaries with varied fauna and flora. The vegetation of the district is predominantly montane moist temperate forest type (Champion & Seth 1968) with tree species belonging the genera *Abies*, *Acer*, *Albizia*, *Aesculus*, *Bauhinia*, *Bombax*, *Cedrus*, *Cupressus*, *Dalbergia*, *Ficus*, *Juglans*, *Morus*, *Picea*, *Pinus*, *Populus*, *Pyrus*, *Salix*, *Quercus*, *Rhododendron*, *Toona* and *Urtica*. Dense pine forests with shrubby undergrowth constitute about 60% of the area with the rest being predominantly grassy.

During the field surveys documenting the range and population status of the Himalayan Grey Langur *Semnopithecus ajax* from May 2012 to May 2013 in Chamba valley of Himachal Pradesh, we sighted the Yellow-throated Marten *Martes flavigula* Boddaert, 1785, at different sites in Chamba district. Other than the martens we have also observed individuals of Rhesus macaque *Macaca mulatta*, Indian wolf *Canis lupus*, Indian porcupine *Hystrix indica* (indirect evidence of presence), Jungle cat *Felis chaus*, Ibex *Capra ibex* and Himalayan brown bear *Ursus arctos isabellinus*. Besides these, a rich diversity of avian species was also observed. In this note we provide additional sighting records of the Yellow-throated Marten from Chamba district, Himachal Pradesh.



**Fig. 1.** Distribution map of the Yellow-throated Marten (*Martes flavigula* Boddaert, 1785) in Himachal Pradesh (red circle - recent sighting records; black circle - past sighting records 1941 to 2004)

The Yellow-throated Marten is the largest species of its genus. This is a highly adaptable species and seen in wide variety of habitats and exhibits seasonal altitudinal movements (Pocock 1941; Gaston *et al.* 1983; Zhou *et al.* 2008). It has been observed to take refuge in holes in large rocks and in the hollows of trees and though commonly perceived to be nocturnal in nature it is in fact diurnal, hunting mostly by day in pairs but sometimes three or more form a small hunting party. It is an omnivore feeding on eggs, insects specifically cicadas, bees and their hives, frogs, small to medium sized animals that it can easily overpower ranging from rats, hares, snakes, lizards, ground birds such as the francolins, pheasants, to fawns of

the barking deer and also native house cats. It probably also feeds on flowers, fruits and berries and exhibits fondness for nectar (Pocock 1941; Lekagul & McNeely 1977; Payne *et al.* 1985; Nandini & Karthik 2007; Parr & Duckworth 2007; Zhou *et al.* 2008). They have been observed chasing Himalayan Tahr, hunting flying squirrels and brown musk deer (Satyakumar 1999). It has also been recorded to feed upon the exposed carcasses of humans (Pocock 1941). During our present survey we have not kept any records of its diet except for the information from the local farmers in Gajnoi who revealed that the martens sometimes fed on the potato crops.

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**Fig. 2. Yellow-throated Marten (*Martes flavigula* Boddaert, 1785) in Chamba district, Himachal Pradesh.**

The Yellow-throated Marten is distributed from the Indo-Nepalese Himalayan belt and its range extends up to East Russia and Borneo to Taiwan (Proulx *et al.* 2004). In India, it is distributed in the states of Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Arunachal Pradesh, Meghalaya, Sikkim, Assam and Manipur (Pocock 1941, Ramakantha 1994, Choudhury 1997a & b, Hussain 1999, Nandini & Karthik 2007, Abramov *et al.* 2008).

In Himachal Pradesh, this species has been noted to occur in Tissa in Chamba district, Kothi in the Kullu Valley of Kullu district (Pocock 1941), Bandli Wildlife Sanctuary (Mandi District), Shimla Water Catchment Sanctuary, Daranghati Wildlife Sanctuary (Shimla District), Dhauladhar Wildlife Sanctuary, Sarah Valley, Lower Dharamsala and Pong Dam Lake Wildlife Sanctuary (Kangra District), Gamgul Siahbehi Wildlife Sanctuary, Kugti Wildlife Sanctuary (Chamba District), Manali Sanctuary and Kanawar Wildlife Sanctuary (Kullu District) and Majathal Wildlife Sanctuary (Solan District) (Islam & Rahmani 2004). This species has also been reported from Kalatop-Khajjiar

Wildlife Sanctuary (Singh & Banyal 2012) (Chamba District), Great Himalayan National Park (Vinod & Sathyakumar 1998) and from Manali, Tirthan, Sainj, Kasol & Garahan, Pulga, Shat, Seraj, Daranghati and Parbati (Gaston *et al.* 1983) (Fig. 1).

Throughout the span of a year we sighted the Yellow-throated Marten at 9 sites (6 in Mehla Block and 3 in Chamba Block) in Chamba district. This species was seen on a number of occasions either in groups or solitary (Table 1, Fig. 1) at altitudes ranging between 786 m asl to 2664 m asl. In the Chamba Block, two individuals were observed feeding on shrubs at Bamouth, three individuals were observed at Dainkund (Fig. 2a & b) in grassland habitat interspersed with dry shrubs, a solitary individual was observed at Khajjiar in mixed forest habitat and two individuals were observed at Sundla on hilly grassland. In the Mehla Block, two individuals were observed at Saun (Fig. 2c) in dense shrubbery, at Gajnoi a solitary individual was observed in cropland, at Chanadu a solitary individual was observed among rocks, at Pataru a group of three individuals were observed among shrubs and at Talai a group of three individuals were observed in

a habitat of trees interspersed with shrubs (Table 1).

The Yellow-throated Marten is primarily a forest dwelling species. It is facing threat due to conversion of forest lands and hunting. This species is hunted in some parts of northeast India, Southeast Asia, Lao PDR and northern parts of Russia for its meat and fur (Abramov *et al.* 2008; Selvan *et al.* 2013). However, despite these threats the populations of this species in areas where it is distributed is surviving well probably because it is not much preferred for its meat and also because of its scansorial habit due to which it can detect and escape traps laid by hunters and getting caught by their dogs (Abramov *et al.* 2008). It has been accorded protection in many parts of its range including Myanmar, peninsular Malaysia, Thailand and China. In India it is accorded protection under the Indian Wildlife Protection Act (1972) Schedule II Part II and Appendix III of CITES.

Though, the dietary habits of this species has been well studied, further research into its behaviour, population status, ecology, their dependence on forest ecosystem and human-animal interactions would provide an opportunity for us to better conserve this species.

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**Table 1. Sighting records of Yellow-throated Marten (*Martes flavigula* Boddaert, 1785) in Chamba district, Himachal Pradesh**

S. No.	Place	Date of sighting [Numbers sighted]	Coordinates (in decimal degree) [Altitude]	Habitat Type
<b>Block Chamba</b>				
1	Sundla	29 October 2012 [2 individuals]	32.660 N, 76.030 E [786 m asl]	Rocky grassland with grasses such as <i>Chrysopogon zizanioides</i> , <i>Cenchrus ciliaris</i> , <i>Saccharum munja</i> , shrubs like <i>Dodonia viscosa</i> , <i>Vitex negundo</i> , <i>Ziziphus mauritiana</i> , <i>Ipomea</i> sp. etc., and tree species like <i>Dalbergia sissoo</i> , <i>Bombax ceiba</i> , <i>Albizia lebbek</i> , <i>Bauhinia variegata</i> , <i>Sapindus mukorossi</i> etc. Observed while the animal was crossing the road near dam site.
2	Bamouth	22 January, 2013 [2 individuals]	32.613 N, 76.251 E [1672 m asl]	Rugged terrain with thick shrubs and bushes. Tree species such as <i>Populus ciliata</i> , <i>Salix</i> sp., <i>Robinia pseudoacacia</i> , <i>Melia azedarak</i> , <i>Pinus wallichiana</i> , <i>Pinus roxburghii</i> , <i>Toona ciliata</i> , <i>Juglans regia</i> ; shrubs such as <i>Berberis vulgaris</i> , <i>Vitex negundo</i> , <i>Carissa spinarum</i> and grasses such as <i>Phalaris arundinacea</i> , <i>Dactylis glomerata</i> , <i>Lolium perenne</i> , <i>Phleum pratense</i> were present. Observed the animals near human habitation.
3	Khajjiar	31 May, 2012 [Solitary]	32.530 N, 76.130 E [2397 m asl]	Mixed forest habitat consisting of <i>Cedrus deodara</i> , <i>Abies pindrow</i> , <i>Picea smithiana</i> , <i>Aesculus indica</i> , <i>Juglans regia</i> , <i>Robinia pseudoacacia</i> , <i>Populus ciliata</i> ; <i>Berberis vulgaris</i> ; <i>Trifolium pratense</i> , <i>Trifolium repens</i> , <i>Dactylis glomerata</i> , <i>Medicago sativa</i> , <i>Bromus tectorum</i> . Observed while the animal was crossing the road in the protected area.
<b>Block Mehla</b>				
4	Gajnoi	25 January, 2013 [Solitary]	32.529 N, 76.081 E [1628 m asl]	Mixed forest consisting of <i>Populus ciliata</i> , <i>Salix</i> sp., <i>Robinia pseudoacacia</i> , <i>Melia azedarak</i> , <i>Pinus wallichiana</i> , <i>Pinus roxburghii</i> , <i>Toona ciliata</i> , <i>Juglans regia</i> ; shrubs such as <i>Berberis vulgaris</i> , <i>Vitex negundo</i> , <i>Carissa spinarum</i> and grasses such as <i>Phalaris arundinacea</i> , <i>Dactylis glomerata</i> , <i>Lolium perenne</i> , <i>Phleum pratense</i> . Observed the animal near human habitation.
5	Saun†	9 April, 2013 [2 individuals]	32.522 N, 76.079 E [1639 m asl]	Mixed forest consisting of <i>Populus ciliata</i> , <i>Salix</i> sp., <i>Robinia pseudoacacia</i> , <i>Melia azedarak</i> , <i>Pinus wallichiana</i> , <i>Pinus roxburghii</i> , <i>Toona ciliata</i> , <i>Juglans regia</i> ; shrubs such as <i>Berberis vulgaris</i> , <i>Vitex negundo</i> , <i>Carissa spinarum</i> and grasses such as <i>Phalaris arundinacea</i> , <i>Dactylis glomerata</i> , <i>Lolium perenne</i> , <i>Phleum pratense</i> . Observed the animal near human habitation.
6	Chanadu	9 December, 2012 [Solitary]	32.524 N, 76.075 E [1874 m asl]	The animal was seen in open rocky grassland near human habitations.
7	Talait	24 March, 2013 [3 individuals]	32.500 N, 76.057 E [2098 m asl]	Mixed forest consisting of <i>Cedrus deodara</i> , <i>Abies pindrow</i> , <i>Picea smithiana</i> , <i>Aesculus indica</i> , <i>Juglans regia</i> , <i>Robinia pseudoacacia</i> , <i>Populus ciliata</i> ; <i>Berberis vulgaris</i> ; <i>Trifolium pratense</i> , <i>Trifolium repens</i> , <i>Dactylis glomerata</i> , <i>Medicago sativa</i> , <i>Bromus tectorum</i> . Observed the animal on the grassy hill side among shrubs and rocks. No human habitations around.
8	Pataru	28 November, 2012 [3 individuals]	32.450' N, 76.260 E [2140 m asl]	Observed the animal in <i>Cedrus deodara</i> thicket interspersed with shrubs.
9	Dainkund*	20 April, 2013 [3 individuals]	32.525 N, 76.022 E [2664 m asl]	Near radar station (High Security Army Zone); mixed <i>Cedrus deodara</i> and <i>Pinus roxburghii</i> with little shrubs.

**Key to symbols:** \*Fig. 2A & 2B; † Fig. 2C; † Fig. 2D.