

First photographic record of royle's pika (*Ochotona roylei*) in Ganderbal District, Jammu and Kashmir

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Abstract

Royle's Pika (*Ochotona roylei* Ogilby, 1839) is a poorly documented alpine lagomorph of the western Himalaya. A single individual was recorded on 16 May 2024 in Waliwar forest, Ganderbal District, Jammu and Kashmir, at 2,757 m a.s.l. The sighting occurred along a forest trail within a dense *Aesculus indica* patch, where the animal showed typical rock-dwelling behavior using boulder crevices for concealment. This record adds to the limited distributional data from the Kashmir Valley and highlights the importance of forest-alpine transition habitats, emphasizing the need for focused ecological studies and conservation attention for the species.

key words: Alpine mammals, Sindh valley, Lagomorpha, Herbivore, Western Himalayas

Pikas belong to the family Ochotonidae and genus *Ochotona*. They are small non-hibernating, diurnal lagomorph mammals, closely related to rabbits and hares; order lagomorpha. There are about 30 species throughout the world, seven of which are found in the Indian Himalayan region (Hoffmann & Smith, 2005). They have four incisors which make them different from rodents with 2 incisors. (Haleem et al., 2012). Their tiny limbs, rounded ears, and lack of an external tail are characteristics that indicate their adaptability to alpine conditions. They store vegetation during the summer to create hay piles that promote early spring reproduction and winter survival, in contrast to most alpine animals that show altitudinal migration or hibernation (Huntly et al., 1986; Dearing, 1997; Morrison & Hik, 2007; Holtcamp, 2010).

Royle's Pika (*Ochotona roylei*) Ogilby, 1839, is a species found in the Himalayan region (Hoffmann & Smith, 2005). Their body length ranges from 15-20 cm with a head diameter roughly around 7 cm (Alfred et al., 2006) and weighing around 100-175 g (Beever, 2002). This species occurs at an elevation ranging from 2,500 to 5,000 m in western Himalaya (Bhattacharya et al., 2009), mainly preferring open rocky grounds, and rhododendron forests (Tak & Lamba, 1985). Their distribution directly depends on the availability of plant species that they forage on (Kawamichi, 1968). The species is classified as 'Least Concern' on the IUCN red list of threatened species (Smith & Bhattacharyya, 2016) and it is categorised as depleted in 2021 according to the IUCN Green Status of Species assessment data

(Bhattacharyya & Dahal, 2021). In India, it is also listed under Schedule I of the Wildlife (Protection) Amendment Act, 2022, indicating highest level of protection. Royle's pika is distributed throughout the Jammu & Kashmir (Ahmad et. al., 2020), and has been reported recently from Kishtwar district of J&K (Mushtaq & Ahmed, 2025). However, there are no confirmed records of the species from Ganderbal district.

Ganderbal District lies in the Kashmir Valley and forms part of the catchment of the Sindh Nallah, a major tributary of the River Jhelum. Waliwar village, situated at an elevation range of 2,100-3,000 m a.s.l., is characterized by reserved forests that provide access to the alpine meadows of Mohnmarg and Kamidalawa. The forest composition at lower elevations near human habitation is dominated by *Cedrus deodara*, *Picea smithiana*, *Pinus wallichiana*, and *Abies pindrow*. Broad-leaved species such as *Ailanthus excelsa*, *Juglans regia*, *Morus* spp., *Aesculus indica*, *Celtis australis*, and *Robinia pseudocacia* form dense patches near villages, while *Prunus persica*, *Prunus armeniaca*, and *Betula utilis* characterize the treeline leading to alpine pastures. Like other forests of the Kashmir Valley, Waliwar forest supports rich wildlife diversity, including Himalayan Black Bear (*Ursus thibetanus laniger*), Common Leopard (*Panthera pardus fusca*), Himalayan Musk Deer (*Moschus cupreus*), Himalayan Marmot (*Marmota himalayana*), Kashmir Gray Langur (*Senopithecus ajax*), Rhesus Macaque (*Macaca mulatta*), and Red Fox (*Vulpes vulpes*).

During a biodiversity survey, a single individual of Royle's Pika was observed at 10:17 AM on 16 May 2024 along an existing forest trail within a dense patch of Horse Chestnut (*Aesculus indica*) forest at Waliwar, Ganderbal District (34.284930°N; 74.718100°E) at an elevation of 2,757 m a.s.l. (Fig. 1 & 2). The individual was recorded within a forest-alpine transition zone characterized by mixed conifer-broadleaf vegetation. The broader habitat consisted of dense stands of *Aesculus indica* interspersed with conifer species, while the immediate microhabitat included rocky substrates with large boulders and crevices. The individual was seen actively moving in and out of rock crevices and pausing near large boulders, a behavior that likely aids in predator avoidance and shelter. This suggests that even within forested landscapes, the availability of suitable rocky microhabitats is a key determinant of site use by the species. However, increasing anthropogenic pressures such as deforestation, forest product extraction, and livestock grazing are rapidly degrading suitable habitats. Given its elusive nature and occurrence at high elevations, *O. roylei* remains poorly studied, emphasizing the need for focused ecological and biological research on this keystone alpine species (Upadhyay et al., 2013).

The present study documents a confirmed sighting of Royle's Pika from Waliwar forest in Ganderbal District, Jammu and Kashmir, thereby contributing valuable baseline information on the species' distribution within the Kashmir Valley. The nearest documented occurrence is located approximately 250 Km from the present site. Therefore, the present observation represents a district-level record, contributing to filling a distributional gap in the Kashmir Valley. The observation at a forest-alpine transition zone highlights the importance of rocky microhabitats and mixed forest structures for the persistence of this species. Despite its current classification as Least Concern, increasing anthropogenic pressures such as deforestation, forest resource extraction, and livestock grazing threaten suitable habitats. Given the ecological significance of pikas as alpine ecosystem engineers and indicators of environmental change, focused long-term studies on their ecology, population dynamics, and habitat use are urgently required. Such efforts will be essential for developing effective conservation and management strategies for high-altitude Himalayan ecosystems.

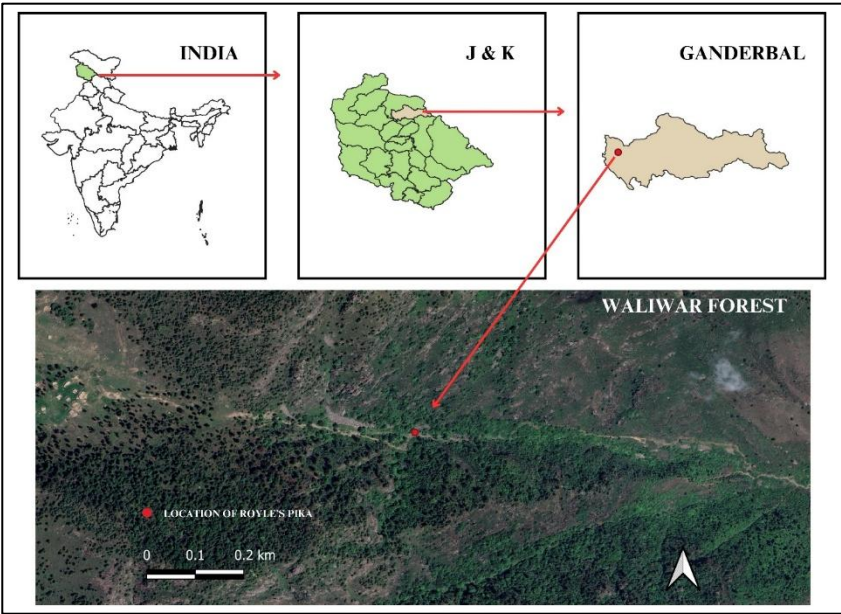


Figure 1. Location map of Royle's Pika sighting in Ganderbal, Jammu & Kashmir.



Figure 2. Royle's Pika (*Ochotona roylei*) in Ganderbal, Jammu and Kashmir.

Conflict of interest

The authors declare that they have no competing interests.

References

- Ahmad, K., Bhat, B. A., Ahmad, R. & Suhail, I. 2020. Wild mammalian diversity in Jammu and Kashmir State. In *Biodiversity of the Himalaya: Jammu and Kashmir state* (pp. 933–953). Singapore: Springer Singapore.
- Alfred, J.R.B., Das, A.K. & Sanyal, A.K. 2006. *Animals of India: Mammals*. Zoological Survey of India, 236 pp.
- Beever, E.A. 2002. Persistence of Pikas in two low-elevation national monuments in the western United States. U.S. National Park Service, 7 pp
- Bhattacharya, S., Adhikari B.S. & Rawat, G.S. 2009. Abundance of Royle's Pika (*Ochotona roylei*) along an altitudinal gradient in Uttarakhand Western Himalaya. *Hystrix Italian Journal of Mammalogy* 20(2): 111–119. <https://doi.org/10.4404/hystrix-20.2-4441>
- Bhattacharyya, T. & Dahal, S. 2021. *Ochotona roylei* (Green status assessment). The IUCN Red List of Threatened Species 2021: e.T41268A4126820251. <https://doi.org/10.2305/IUCN.UK.2016-3.RLTS.T41268A45184591.en>. Accessed on 24.v.2025.
- Dearing, M.D. 1997. The function of haypiles of Pikas (*Ochotona princeps*). *Journal of Mammalogy* 78(4): 1156–1163. <https://doi.org/10.2307/1383058>
- Haleem, A., Ilyas, O., Syed, Z. & Arya, S. K. 2012. Abundance and distribution of Royle's Pika (*Ochotona roylei*) along different altitudinal ranges of Kedarnath Wildlife Sanctuary, Uttarakhand Himalayas, India. *Journal of Environmental Science, Toxicology and Food Technology*, 1(2), 13–16.
- Hoffmann, R.S. & Smith, A.T. 2005. Order Lagomorpha, pp. 185–211. In: Wilson, D.E. & D.M. Reeder (eds.). *Mammal Species of The World: A Taxonomic and Geographic Reference*. Johns Hopkins University Press, 2142 pp.
- Holtcamp, W. 2010. Silence of the Pikas. *Bio Science* 60(1): 8–12. <https://doi.org/10.1525/bio.2010.60.1.3>
- Huntly, N., Smith, A.T. & Ivins, B.L. 1986. Foraging behavior of the Pika (*Ochotona princeps*), with comparisons of grazing versus haying. *Journal of Mammalogy* 67(1): 139–148. <https://doi.org/10.2307/1381010>
- Kawanichi, T. 1968. Winter Behaviour of the Himalayan Pika (*Ochotona roylei*). *Journal of the Faculty of Science Hokkaido University Series VI. Zoology* 16: 582–584. <http://hdl.handle.net/2115/27467>
- Morrison, S.F. & Hik, D.S. 2007. Demographic analysis of a declining Pika population: Linking survival to broad-scale climate patterns via spring snowmelt patterns. *Journal of Animal Ecology* 76(5): 899–907. <https://doi.org/10.1111/j.1365-2656.2007.01276.x>
- Mushtaq, U. & Ahmed, K. 2025. Sighting of Royle's Pika *Ochotona roylei* Ogilby, 1839 (Mammalia: Lagomorpha: Ochotonidae) in Kishtwar District, Jammu & Kashmir, India. *Journal of Threatened Taxa* 17(7): 27300–27302. <https://doi.org/10.11609/jott.9948.17.7.27300-27302>
- Prater, S.H. 2005. *The Book of Indian Animals* (3rd Ed.). Bombay Natural History Society & Oxford University Press, 348 pp.
- Smith, A.T. & Bhattacharyya, S. 2016. *Ochotona roylei*. The IUCN Red List of Threatened Species 2016: e.T41268A45184591. <https://doi.org/10.2305/IUCN.UK.2016-3.RLTS.T41268A45184591.en>. Accessed on 24.v.2025.
- Tak, P.C. & Lamba, B.S. 1985. Nanda Devi National Park: a contribution to its mammalogy. *Indian Journal of Forestry* 8: 219–230.

Upadhyay, M. K. & Bahuguna, S. N. 2013. Reproduction and Breeding Biology of Indian Pika; *Ochotona roylei* (Lagomorpha) from Tungnath Garhwal Himalaya India. *Nat. Resour. Conserv*, 1, 1-8.