



# Sighting of the Himalayan Trinket Snake, *Orthriophis hodgsonii* Günther (1860) (Reptilia: Colubridae), in Sahastra Dhara, Uttarakhand: A new elevational record

<sup>1</sup>Abhishek Singh and <sup>2</sup>Ritesh Joshi

<sup>1</sup>Endangered Flora and Fauna on Earth Conservation Team, Vasant Vihar, Dehradun, Uttarakhand, INDIA <sup>2</sup>Conservation & Survey Division, Ministry of Environment, Forest & Climate Change, New Delhi, INDIA

**Abstract.**—In 2016, two individuals of *Orthriophis hodgsonii* (Himalayan Trinket Snake) were observed from the Sahastra Dhara area, Uttarakhand, India, confirming the occurrence of this species in the Garhwal region. This report provides the lowest elevational record (835 m) of *Orthriophis hodgsonii* from its previously known distribution range (1,000–3,200 m).

**Keywords.** Geographic distribution, north India, Garhwal region, range extension, Sauria, conservation

**Citation:** Singh A, and Joshi R. 2018. Sighting of the Himalayan Trinket Snake, *Orthriophis hodgsonii* Günther (1860) (Reptilia: Colubridae), in Sahastra Dhara, Uttarakhand: A new elevational record. *Amphibian & Reptile Conservation* 12(1) [General Section]: 15–17 (e152).

**Copyright:** © 2018 Singh and Joshi. This is an open-access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License, which permits unrestricted use for non-commercial and education purposes only, in any medium, provided the original author and the official and authorized publication sources are recognized and properly credited. The official and authorized publication credit sources, which will be duly enforced, are as follows: official journal title *Amphibian & Reptile Conservation*; official journal website <amphibian-reptile-conservation.org>.

**Received:** 06 September 2016; **Accepted:** 21 December 2016; **Published:** 31 January 2018

Of the four species in the genus *Orthriophis* found across the world (*Orthriophis mollendorffi*, *O. taeniurus*, *O. hodgsonii*, and *O. cantoris*), three are found in India (*O. taeniurus*, *O. hodgsonii*, and *O. cantoris*) (Utiger et al. 2002; Whitaker and Captain 2004). The Himalayan Trinket Snake (*Orthriophis hodgsonii*) is native to India, Nepal, and China (Tibet) (Whitaker and Captain 2004). In India, this species is distributed in Jammu and Kashmir northern Punjab, Himachal Pradesh, Uttarakhand, Bihar, Northern, West Bengal Sikkim and Meghalaya, ranging from the elevation of 1,000–3,200 m (Smith 1943; Das 2002; Whitaker and Captain 2004; Sharma 2007).

On 1 April 2016 (11:10 hours), a Himalayan Trinket Snake (sex unknown) was recorded from a small barren plot, located close to human settlements in the Sahastra Dhara area near Dehradun (30°23'07.4"N, 78°07'40.5"E, 831.4 m; Fig. 1). The spot was near the protected forest of the Mussoorie Forest Division. Some of the plants in this area where the snakes were seen are: *Murraya koenigii* (Curry Tree), *Lantana camara* (Lantana), *Jatropha curcas* (Ban Arandi), and *Datura stramonium* (Jimson Weed). Both snakes (including the one recorded below) were photographed and visually identified based on descriptions given by Smith (1943), Sharma (2007), and Whitaker and Captain (2004). No scalation data was recorded. Thereafter, on 18 August 2016 (13:20 hours), an individual of unknown sex was observed far from

where the first specimen was recorded (30°23'05.5"N, 78°07'44.6"E, 839.4 m; Figs. 2 and 3). Both sightings were during the summer season and near the Sahastra Dhara.

Husain and Ray (1995) first recorded this species from Pauri, Chamoli, and Nainital districts of the Uttarakhand State. Thereafter, Whitaker and Captain (2004) recorded this species from Mussoorie, Almora, and Nainital districts of Uttarakhand State, at an elevation ranging from 1,000–3,200 m. Smith (1943), Sharma (2003) and Bahuguna (2010) also corroborated the presence of the Himalayan Trinket Snake in the State. Vasudevan and Sondhi (2010) had only included the Himalayan Trinket Snake in a checklist of snakes of Uttarakhand but no description and locality records were stated.

We herein confirm the occurrence of the Himalayan Trinket Snake in the Uttarakhand State, Garhwal region (Sahastra Dhara—a perennial river) and provide the first record of its presence below 1,000 m. The Sahastra Dhara is located in northern India at 29°26'–31°28'N and 77°49'–80°06'E and falls within the Himalaya Biogeographic Zone and located in the West Himalaya Province. The largest portion of this area is in the Shivalik's Biogeographic Subdivision, which constitutes an important repository of reptilian fauna.

The Himalayan Trinket Snake has not yet been assessed by the IUCN Red List. Increasing development

**Correspondence.** <sup>1</sup>ngoeffect@gmail.com; <sup>2</sup>ritesh\_joshi2325@yahoo.com (Corresponding author)



Fig. 1. Himalayan Trinket Snake, *Orthriophis hodgsonii*, near Sahastra Dhara.



Fig. 2. Close-up of the head of a Himalayan Trinket Snake recorded from Sahastra Dhara.

and anthropogenic activities across the riparian corridors, shrinkage of natural water sources inside protected areas, expansion of the road network across a long chain of protected habitats, and lack of awareness among the local people were some of the observed threats that could potentially lead to population decline of the species.

**Acknowledgements.**—The authors would like to acknowledge the anonymous reviewers, including Mr. Ashok Captain, a renowned Indian herpetologist and conservationist, who provided valuable input and comments on the previous versions of the manuscript and contributed significantly to improve the manuscript to its

present form. Thanks are due to Mr. Sudhakar Sharma and Mr. Raj Shekhar Singh for assisting us in collecting field data.

### Literature Cited

Bahuguna A. 2010. Reptilia. Pp. 445–503 In: *Fauna of Uttarakhand*. (Part 1) Vertebrates. State Fauna Series 18. Editor, Director, Zoological Survey of India, M-Block, New Alipore, Kolkata 700 053. Zoological Survey of India, Kolkata, India. 621 p. Available: <http://faunaofindia.nic.in/PDFVolumes/sfs/062/index.pdf> [Accessed: 31 January 2018].





**Fig. 3.** Himalayan Trinket Snake in its natural habitat in the Sahastra Dhara area.

- Das I. 2002. *A Photographic Guide to the Snakes and Reptiles of India*. New Holland Publishers, London, United Kingdom. 144 p.
- Husain A, Ray P. 1995. Reptilia. Pp. 159–167 In: *Fauna of Western Himalaya (Part-2)-Himachal Pradesh*. Himalayan Ecosystem Series (Part I). Editor, Director, Zoological Survey of India, Kolkata, India. Published by the Director, Zoological Survey of India, Kolkata, India. 359 p. Available: <http://faunaofindia.nic.in/PDFVolumes/ess/021/index.pdf> [Accessed: 31 January 2018].
- Rodgers WA, Panwar HS, Mathur VB. 2002. *Wildlife Protected Areas in India: A review*. Executive Summary. Wildlife Institute of India, Dehradun, India. 44 p.
- Sharma RC. 2003. *Handbook: Indian Snakes*. Editor, Director, Zoological Survey of India, Kolkata, India. Publisher, Zoological Survey of India, Kolkata, India. 292 p.
- Sharma RC. 2007. *The Fauna of India and the Adjacent Countries: Reptilia, Volume 2: Sauria*. Editor, Director, Zoological Survey of India, Kolkata, India. Publisher, Zoological Survey of India, Kolkata, India. 410 p. Available: <http://faunaofindia.nic.in/PDFVolumes/fi/037/index.pdf> [Accessed: 31 January 2018].
- Smith MA. 1943. *The Fauna of British India, Ceylon and Burma including the Whole of the Indo-Chinese Sub-region, Reptilia and Amphibia Volume III*. Serpents. Taylor and Francis, London, England. 583 p.
- Utiger U, Helfenberger N, Schatti B, Schmidt C, Ruf M, Ziswiler V. 2002. Molecular systematic and phylogeny of old and new world ratsnakes, *Elaphe* AUCT., and related genera (Reptilia, Squamata, Colubridae). *Russian Journal of Herpetology* 9(2): 105–124.
- Vasudevan K, Sondhi S. 2010. *Amphibians and Reptiles of Uttarakhand, India*. Wildlife Institute of India, Dehradun, Uttarakhand, India. 94 p.
- Whitaker R, Captain A. 2004. *Snakes of India, The Field Guide*. Draco Books, Chennai, India. 481 p.



**Abhishek Singh** graduated from the Subharti University, India in 2009. He is the chairman of the non governmental organization Endangered Flora and Fauna on Earth Conservation Team (EFFECT). His research interests are the ecology and taxonomy of reptiles in northern India, and particularly serpents and threatened species. He is also associated with TRAFFIC India (The Wildlife Trade Monitoring Network). The past six years, he has been actively involved in providing training in the identification and rescue of various poisonous and non-poisonous snakes, as well as other wildlife, to the staff of the State Forest Department of Uttarakhand State.



**Ritesh Joshi** is a scientist presently working for the Ministry of Environment, Forest and Climate Change, Government of India. He has a bachelor, master's, and doctorate degree in environmental sciences from India universities. Dr. Joshi is actively involved in research on wildlife in protected areas of northern India. His research interest includes ecology and behavior of wildlife, especially mammals and serpents. He has published three books on wildlife and more than 75 research papers in various national and international scientific journals. He has also published nearly 50 scientific articles in scientific magazines on wildlife and conservation of the environment. The Department of Official Languages, Ministry of Home Affairs, Government of India, has honored Ritesh with the Rajiv Gandhi National Award for his book, *Wildlife of Uttarakhand and Conservation*. This award was given to him by the Hon'ble President of India in 2015.