



Evidence of Burmese Pythons, *Python bivittatus* (Kuhl 1820) (Pythonidae), in the Shivalik Forest Division, India

Devavrat Pawar¹, Siddhant Umariya¹, V.K. Jain², A.K. Singh¹, and I.P. Bopanna¹

¹WWF-India, Rajpur Road, Dehradun, Uttarakhand–248001, India (dpawar@wwfindia.net)

²Office of Conservator of Forests, 2/2419, Court Road, Gill Colony, Saharanpur, Uttar Pradesh–247001, India

The Burmese Python (*Python bivittatus*) is one of the largest snakes in the world (Penning et al. 2015). Little is known about its status and distribution in India, largely because the Burmese Python until recently (Jacobs et al. 2009) was considered a subspecies of the Indian Rock Python (*Python molurus*) (e.g., Whitaker and Captain 2004), with which it is frequently confused — especially in the Terai Region (lowlands in the foothills of the Himalayas). However, recent observations suggest that almost all the records of pythons in the Terai Belt actually represent Burmese Pythons.

The two species are difficult to differentiate morphologically. Coloration of the Indian Rock Python is more yellowish and the sixth or seventh supralabial is in contact with the eye, whereas the Burmese Python is lighter with dark brown, black-bordered blotches and the sixth supralabial is separated from the eye by a subocular scale (Whitaker and Captain 2004).

Burmese Pythons thrive in marshes and swamps, exemplified by the rapid increase in the introduced population in Florida, USA (e.g., Nafus et al. 2020). However, forested areas, including mangroves and rainforests, grasslands, coastal plains, and rocky foothills also provide suitable habitat (e.g., O’Shea 1998; Barker and Barker 2008). In India, the Burmese Python is protected under the Indian Wildlife (Protection) Act, 1972 and is listed under schedule 1 which provides the species the highest level of protection. It is listed as Vulnerable (VU) on the IUCN Red List (Stuart et al. 2012) and is included in CITES Appendix II (CITES 2019).

Previous records of Burmese Pythons in the Terai Region from inside and outside protected areas include the Hastinapur Wildlife Sanctuary in Meerut, Uttar Pradesh (Yadav et al. 2017), Rajaji Tiger Reserve and Timli Forest Range in Uttarakhand (Joshi and Singh 2015), and Amargarh Tiger Reserve, Uttar Pradesh (Hushangabadkar et al. 2019). Herein we provide photographic evidence of a range exten-

sion of the Burmese Python in the Shivalik Forest Division, which could be the westernmost record of the species in India.

The snake (Fig. 1) was captured on a camera trap, deployed for the purpose of monitoring and recording the fauna found in the Shivalik Forest Division under a joint project between WWF-India and the Shivalik Forest Division of Uttar Pradesh, on 20 February 2020 in the Barkala Range of Shivalik Forest Division (30.39459°N, 77.62455°E; elev. 548 m asl). Habitat at the site where the snake was photographed consisted of moist deciduous mixed forest (Fig. 2).

Anecdotal information suggests that sightings of Burmese Pythons in the region are rare. Populations of the species throughout its range are experiencing rapid declines due to deforestation for unplanned development, poaching, and fires set by humans to burn agricultural residue (Stuart et al. 2012). Additional surveys and intensive studies of the species’ ecology are necessary to better understand the status and distribution of Burmese Pythons in India’s Terai Region and to develop management strategies for its long-term conservation.



Fig. 1. Image of a female Burmese Python (*Python bivittatus*) captured by a camera trap in the Barkala Range, Shivalik Forest Division, Uttar Pradesh, India. Photograph courtesy of WWF-India, Shivalik Forest Department.



Fig. 2. Habitat where an image of a Burmese Python (*Python bivittatus*) was captured by a camera trap in the Barkala Range, Shivalik Forest Division, Uttar Pradesh, India. Photograph by Siddhant Umariya.

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