



The Indian Rock Python (*Python molurus*) in the Thol Lake Bird Sanctuary, Gujarat, India: Evidence of Reproduction and a Roadkill

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The Indian Rock Python (*Python molurus*), one of the world’s largest snakes (Murphy and Henderson 1997; O’Shea 2007), is widely distributed in southeastern Asia, ranging from Pakistan, India, Nepal, and Bhutan south into Sri Lanka, Myanmar, and Vietnam (Uetz et al. 2021). In India, these snakes occupy a wide variety of habitats (Bhupathy and Vijayan 1989) that range from arid land to rain forest, scrub land to grassy marshes, and rocky area to mangroves (Murphy and Henderson 1997), although Baber et al. (2019) indicated that damp areas and savanna are preferred. The species is listed on Schedule I of the Indian Wildlife Protection Act (1972) and as Near Threatened (NT) on the IUCN Red List of Threatened Species (Aengals et al. 2021). Principal threats include habitat destruction and illegal hunting for food, leather, and the live-animal trade (Vyas 1996; Aengals et al. 2021).

The Thol Lake Bird Sanctuary, which extends across nearly 7 km² in Mehsana District, Gujarat, India, surrounds a man-made lake constructed in 1918 for irrigation purposes but which was established as a bird sanctuary in 1988

(Prajapati and Mahato 2018). The area provides habitat for 144 species of birds belonging to 21 families (Karia 2012).

We visited the Thol Lake Bird Sanctuary on four occasions from June to September 2019 as part of a preliminary survey of Ahmedabad District, Gujarat. Our short-term survey was focused on the breeding biology of the Indian Rock Python. However, due to unknown population size, limited time and resources, and problems acquiring permits, we were unable to implement the study in the sanctuary. However, on 29 July 2019, we found empty egg shells of an Indian Rock Python inside a den (Fig. 1). The eggs appeared to have hatched within the previous few days. The den, likely constructed by rodents (as in a previous study by Ramesh and Bhupathy 2010), had three openings, although one was obstructed with soil. It was located on an embankment approximately 15 m from the nearest body of water. On 6 September 2019, we encountered a recently road-killed juvenile Indian Rock Python (SVL ~1 m) in the sanctuary on a road near Thol Lake (23.140210°N, 72.389740°E) (Fig. 2).



Fig. 1. The shell of a recently hatched Indian Rock Python (*Python molurus*) egg, one of several found in an abandoned rodent burrow in the Thol Lake Bird Sanctuary, Gujarat, India. Photograph by Shruti Patel.



Fig. 2. A recently road-killed juvenile Indian Rock Python (*Python molurus*) in the Thol Lake Bird Sanctuary, Gujarat, India. Photograph by Jaydeep Maheta.

Based on these anecdotal observations, the Thol Lake Bird Sanctuary apparently supports a sustainable population of Indian Rock Pythons; however, the area is a popular tourist destination (Prajapati and Mahato 2018) and development and vehicular traffic pose threats to the python population. We recommend that tourism be limited and vehicles be prohibited within the sanctuary.

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