



# Predators of the Bengal Monitor (*Varanus bengalensis*)

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The Bengal Monitor (*Varanus bengalensis*), one of the most widely distributed varanid species, ranges across Iran, Afghanistan, Pakistan, India, Sri Lanka, Bangladesh, Nepal, Bhutan, China, and Myanmar (Auliya and Koch 2020; Cota et al. 2021; Uetz et al. 2021). The species is well adapted to living in various terrestrial habitats (Auffenberg and Ipe 1983; Auffenberg 1994) and thrives in anthropogenic situations such as home gardens and homesteads, even occupying households and densely populated urban environments (Koch et al. 2013). Although an effective predator, these lizards occasionally resort to scavenging (Karunarathna et al. 2017).

Gujarat is home to two species of *Varanus*, the Bengal Monitor and the Desert Monitor (*Varanus griseus*). The former occurs throughout the entire state, whereas the latter is largely restricted to the dry arid regions of Kutch (Patel and Vyas 2019). Herein we present three observations of predation on Bengal Monitors in Gujarat, India, two are natural

predation by snakes and the other documents an unsuccessful attempt by feral dogs (*Canis familiaris*).

The second author (YB) offers voluntary snake rescue services at Dharmaj, Anand District, Gujarat. At 1530 h on 2 November 2011, YB received a phone call from a local sawmill owner requesting that a snake be rescued from the vicinity of the mill. Upon reaching the rescue site, he encountered a sizeable (~2 m total length) Indian Cobra (*Naja naja*) holding the left anterior limb of a Bengal Monitor that was 75–80 cm in length (Fig. 1). The lizard, apparently envenomated, was totally immobile. The snake took over three hours to ingest the lizard.

Daniel (2002) mentioned that Indian Cobras feed primarily on rats, frogs, and toads, and occasionally consume birds, bird eggs, lizards, and other snakes, including other cobras. A large adult Bengal Monitor is a noteworthy addition to the dietary spectrum of the Indian Cobra.



**Fig. 1.** An Indian Cobra (*Naja naja*) about 2 m in total length holding a forelimb of an immobilized adult Bengal Monitor (*Varanus bengalensis*) near a sawmill at Dharmaj, Anand District, Gujarat, India (left), and the cobra ingesting its prey (right). Photographs by Yagnesh Bhatt.





**Fig. 2.** The large Indian Ratsnake (*Ptyas mucosa*) engulfing a juvenile Bengal Monitor (*Varanus bengalensis*) at Sayaji Baug, Vadodara, Gujarat, India. Photograph by Raju Vyas.



**Fig. 3.** Two feral dogs cornering a large adult Bengal Monitor (*Varanus bengalensis*) on the outskirts of Wadhwan, Surendranagar, Gujarat, India. Photograph by Devratsinh Mori.

At 1230 h on 25 April 2017, the first author (RV) observed an adult Indian Ratsnake (*Ptyas mucosa*) (~2 m in total length) trying to engulf a 45–50 cm long Bengal Monitor (Fig. 2) at Sayaji Garden, Vadodara City. The prey appeared to be a juvenile based on its size and coloration — hatchling and juvenile Bengal Monitors are characterized by a dark brown dorsal ground color with bright yellow spots (Pianka et al. 2004; Thakur 2020). Ingestion of the lizard took less than 30 min.

Indian Ratsnakes have eclectic diets, devouring almost anything within reach (Daniel 2002). Whitaker and Captain (2004) noted that ratsnakes feed on frogs, toads, birds, bats, snakes, and, in one case, a young tortoise, and one very large individual consumed a month-old domestic kitten (*Felis catus*) (Vyas 1993). A juvenile Bengal Monitor was just another, albeit an unusual prey item for a ratsnake.

At noon on 25 July 2011, the third Author (DM), while walking in the outskirts of Wadhawan Town, Surendranagar District, noticed two feral dogs chasing and cornering a large adult Bengal Monitor. The lizard suddenly stopped running and assumed a defensive posture, elevating its body and curling its tail (Fig. 3). Both dogs paused, allowing the lizard an opportunity to escape into a nearby rock crevice.

Known predators of *Varanus bengalensis* include reptiles (5 species), birds (11 species), and mammals (9 species) (e.g., Thomas 2015; Karunarathna et al. 2017; Mori et al. 2017). Based on our observations, two additional species of snake species and feral dogs can be added to the list of potential predators.

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