

Novel Prey Species in the Diet of the Spectacled Cobra (Naja naja)

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The Spectacled Cobra (*Naja naja*) is a venomous elapid found in India, Pakistan, Sri Lanka, Bangladesh, Nepal, Bhutan, and Afghanistan (Uetz et al. 2021). Prey includes rodents, toads, frogs, birds, lizards, and other snakes (Wall 1921; Whitaker 1974; Sharma 1991; Mukherjee and Bhupathy 2004; Mirza et al. 2007; Kalki 2020; Maheta et al. 2020). Herein we describe four predation events by *N. naja* in India involving five novel prey species.

At 1330 h on 27 November 2018, SA responded to a rescue call in Lohegaon, Pune, Maharashtra, India (18.5990°N, 73.9300°E), during which the caller reported male combat between two Banded Racers (*Platyceps plinii*). When SA arrived, one of the racers was being bitten at midbody by a large (~1.5 m) *N. naja* (Fig. 1) and the other had taken refuge under a tin sheet. Over the course of two hours, the cobra manipulated its prey until it had hold of its head, swallowed it head-first, and then retreated into a rock wall. This observa-

tion is of particular interest because male combat in *P. plinii* had not been reported in the literature (unfortunately no photographs were taken to document this event) and because *P. plinii* is a novel prey item in the diet of *N. naja*.

On 11 November 2016, a large (-2 m) *N. naja* regurgitated a large (-1.5 m) Sharp-nosed Vinesnake (*Ahaetulla oxyrhyncha*) and two medium-sized (-1 m) Oriental Ratsnakes (*Ptyas mucosa*) in Bengaluru, Karnataka, India (12.9944°N, 77.6980°E). Security guards at a housing community had caught the four snakes and were holding them in a large trash bin for three days before they planned to release them. At the time of release, they opened the bin to find that the cobra had eaten the other three snakes, which it then regurgitated in the course of a few minutes. Both of the ratsnakes had been swallowed head-first before swallowing the vinesnake in a coiled position.

At 1354 h on 21 June 2021 during a rescue call in Bangalore, Karnataka, India (12.9944°N, 77.6980°E), YK



Fig. 1. An adult Spectacled Cobra (*Naja naja*) feeding on a Banded Racer (*Platyceps plinii*) in Pune, Maharashtra, India. Photograph by Shubham Adhikari.



Fig. 2. An adult Spectacled Cobra (*Naja naja*) regurgitating two Oriental Ratsnakes (*Ptyas mucosa*) and a Sharp-nosed Vinesnake (*Ahaetulla oxyrhyncha*) in Bangalore, Karnataka, India. Photograph by Ajit Singh.



Fig. 3. A hatchling Spectacled Cobra (*Naja naja*) feeding on a Spotted House Gecko (*Hemidactylus parvimaculatus*) in Bangalore, Karnataka, India. Photograph by Yatin Kalki.

observed a hatchling *N. naja* ingesting an adult Spotted House Gecko (*Hemidactylus parvimaculatus*) head-first. The snake took approximately 5 min to swallow the gecko, after which it was captured and relocated. Wall (1921) mentioned that young *N. naja* fed on lizards in captivity but, to the best of our knowledge, this is the first report of a Spectacled Cobra eating a gecko in nature.

On 24 October 2017 during a rescue call in Bangalore, Karnataka, India (13.0556°N, 77.6674°E), SC observed a large (-2 m) *N. naja* regurgitate a medium-sized (-0.5 m) Russel's Viper (*Daboia russelii*). The viper had been swallowed head-first. Once the cobra finished regurgitating the prey, it was captured and relocated. Both *N. naja* and *D. russelii* are common hemerophilic snakes in Bangalore, constituting 41.5% and 18.9% of human-snake encounters, respectively, in the city (Kalki et al. 2018). Interactions between these two species are rare and have not been reported in the literature.

These observations, albeit one in an unnatural setting, attest to the opportunistic and ophiophagic nature of *N. naja* (Wüster 1998; Whitaker and Captain 2004).



Fig. 4. An adult Spectacled Cobra (*Naja naja*) regurgitating a Russel's Viper (*Daboia russelii*) in Bangalore, Karnataka, India. Photograph by Subhadra Cherukuri.

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