



Presumptive Nest Excavation by a Banded Racer (*Platyceps plinii*)

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The Banded Racer, *Platyceps plinii* (Merrem 1820), is a non-venomous colubrid that inhabits dry deciduous and tropical thorn forests in southern Asia (Whitaker and Captain 2004; Deepak et al. 2021). Mating occurs from late winter to mid-monsoon and oviposition occurs from January to September (Deepak et al. 2021) with clutch sizes of 2–23 eggs (Vyas 1987; Patel et al. 2019). Although some aspects of *P. plinii*'s reproductive habits have been well documented, little is known about its nesting behavior. Herein we report an instance of a gravid female *P. plinii* digging a hole (presumably to lay eggs) in Maharashtra, India.

At 1430 h on 15 January 2021, SP observed a Banded Racer excavating what appeared to be a nest in Dahanu, Maharashtra, India (19.97628°N, 72.764443°E). The snake emerged from a nearby burrow and began clearing an area of

approximately 0.1 m² by dislodging embedded stones with its snout, holding them between the underside of its head and neck, and discarding them to the side with a flinging motion. Once the area was clear, the snake began excavating loose soil with its snout and using the same technique as above to remove stones embedded below the surface. As the hole got deeper, the snake took 1–2 min to remove each stone. This process continued for 3 h (until 1730 h), with the snake surfacing to expel stones and soil over 80 times during that interval. At 1730 h the hole was 457 mm deep.

A crowd of about 50 people had gathered to observe the snake and eventually disturbed it. It abandoned the hole, at which point we caught and examined it. Based on its distended lower body and short tail, we determined it to be a gravid female. The snake measured 975 mm in total length



Fig. 1. A gravid female Banded Racer (*Platyceps plinii*) removing a stone by gripping it between its chin and neck while excavating a presumptive nesting site in Maharashtra, India. Photographs by Sagar Patel.

with a tail length of 210 mm. The snake was bagged and released in the same area at 2130 h that night after the crowd had dispersed.

Most oviparous colubrid snakes lay eggs in mammal burrows, termite mounds, tree hollows, crevices, or under rocks or logs (Whitaker and Captain 2004). Digging holes to deposit eggs has been documented in other reptiles like turtles (D’Cruze et al. 2018), lizards (Rand 1968), and crocodylians (Lutz and Dunbar-Cooper 1984), but this behavior remains poorly documented in snakes. Pine Snakes (*Pituophis melanoleucus*) have been reported to exhibit similar excavation and nesting behavior in the New Jersey Pine Barrens (Burger and Zappalorti 1991, 1992) and the North Carolina Sandhills (Beane and Pusser 2012) in the United States; as have Eastern Hog-nosed Snakes (*Heterodon platirhinos*) in Canada (Cunnington and Cebek 2005). Characteristics shared by Banded Racers and these two species include inhabiting somewhat xeric and sandy habitats and possession of a pronounced rostral scale (Edgren 1955; Knight 1986; Deepak et al. 2021) that can be utilized for soil excavation.

Unfortunately we were unable to observe the full extent of the presumptive nesting behavior in this Banded Racer due to disturbance of the snake. Further observations are necessary to understand the excavation and possible nesting habits of *P. plinii*.

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