



The Mystery of Dead Mud Snakes Found in Landlocked Central Mumbai: Glossy Marshsnake, *Gerarda prevostiana* (Eydoux and Gervais 1822)

Raju V. Vyas¹ and Noshervan Sethna²

¹1–Sashwat Apartment, BPC-Haveli Road, Nr. Splatter Studio, Alakapuri, Vadodara–390007, Gujarat, India (razoovyas@hotmail.com; corresponding author)
²691, Albless Building, Dinshaw Master Road, Dadar Parsi Colony, Mumbai 400014, India (nosh_sethna@yahoo.com)

Here, we present a report on the mysterious find of a small number of freshly dead, beheaded, or mutilated mud snakes within the high human density habitat of Dadar, Mumbai, Maharashtra. On various days during the month of September 2021, the second author (NS) found 2–4 beheaded fresh snakes (Fig. 1) lying under tree canopies in the residential area of Parsi Colony, Dadar, Mumbai, Maharashtra, India (19.01733°N, 72.8507°E) (Fig. 2). Using various color images and guides (Smith 1943; Whitaker and Captain 2004), the snakes were identified as Glossy Marshsnakes, *Gerarda prevostiana* (Eydoux and Gervais 1822) (Fig. 3). In India, the family Homalopsidae is represented by ten species (Murphy and Voris 2014; Aengals et al. 2018), two of them found widely on the coastlines of India: *G. prevostiana* and the Dog-faced Watersnake (*Cerberus rynchops*).

Parsi Colony, Dadar, is located centrally in Mumbai, bound to both the east and west by brackish muddy coastal habitat and the sea within a distance of 2–2.5 km. These habitats are ideal for two coastal homalopsid snakes (see Karunarathna et al. 2018), including *G. prevostiana* (Voris and Murphy 2002; Murphy et al. 2012; Vyas et al. 2013). A total of 15 dead Glossy Marshsnakes were found during the month of September 2021 (Table 1). All the snakes were

found in the early morning under the canopies of large avenue trees. We presumed that these dead snakes might have been brought by some nocturnal animals for food and during feeding activity they might have accidentally fallen down or slipped from their mouths/beaks (Fig 4). Additionally, human consumption of snakes is not present in any nearby areas. Therefore, we observed all the nearby tree canopies and found the remains of a small nesting colony of Black-crowned Night Herons (*Nycticorax nycticorax*) whose chicks had fledged but were still in the vicinity of a few large trees (*Peltophorum*, *Peltophorum pterocarpum*, and Raintree, *Samanea saman*).

Mutilated homalopsids have been discovered before, as a number of Dog-faced Watersnakes were found dead at Chilka Lake, Orissa (Dutta 1989). According to Dutta (1989), none of the snakes had any external injuries, except crushed heads and throats. Inquiries with local fishermen revealed that this species is common in the lake and it frequently gets trapped in fishing nets in large numbers. Generally, the fishermen use nets with small mesh for catching prawns, and this is the principal cause of death. Dutta (1989) found 20 dead snakes within a radius of one hundred meters, along with several Filesnakes (*Acrochordus granulatus*) and Estuarine Seasnakes (*Hydrophis obscurus*). However, in this present case, we were



Fig. 1. Beheaded specimen of *Gerarda prevostiana* at Parsi Colony, Dadar, Mumbai, Maharashtra, India: ventral (A) and dorsal (B) views are shown. Photograph by Noshervan Sethna.



Fig. 2. Street view with a large *Peltophorum* tree canopy at Parsi Colony, Dadar, Mumbai, Maharashtra, India. Photograph by Noshewan Sethna.



Fig. 3. *Gerarda prevostiana* (Eyduoux and Gervais 1822), one of the widely distributed and commonly found estuarine snake species on the western coast of Surat, Gujarat, India. Photograph by Raju Vyas.



Fig. 4. Ventral view of a fresh regurgitated Glossy Marshsnake found at Parsi Colony, Dadar, Mumbai, Maharashtra, India. Photograph by Noshewan Sethna.

unable to make any direct observations such as the Black-crowned Night Heron bringing the snakes, but it is possible that these herons are preying on snakes. Since the Black-crowned Night Heron is a nocturnal bird, it forages at night on seashores, estuaries, riverbanks, and small bodies of water. Earlier, in various studies of the diets of egrets and herons, we found a few species of amphibians and reptiles, including three species of snakes (Striped Keelback, *Amphiesma stolata*;

Table 1. Collection and morphological details of dead, regurgitated, and beheaded *Gerarda prevostiana* found in the month of September 2021 at Parsi Colony, Dadar, Mumbai, Maharashtra, India.

Date	Numbers	Specimen Size(s) (cm)	Remarks
7 Sept. 2021	3	22–42	All fresh, beheaded
8 Sept. 2021	2	20–45	Regurgitated
10 Sept. 2021	2	35–40	Fresh, beheaded, intact body
14 Sept. 2021	1	32	Regurgitated
24 Sept. 2021	4	45–50	Fresh, intact body
25 Sept. 2021	1	33	Fresh, intact body
28 Sept. 2021	2	22–44	Fresh, beheaded

Checked Keelback, *Fowlea piscator*; and Saw-scaled Viper, *Echis carinatus*), all high-protein sources for nestlings (Vyas and Parasharya 2016).

Murphy (2007) stated that homalopsids are primarily aquatic and many are nocturnal, with some species specializing in salt or brackish water systems (e.g., mangroves, coastlines), and others in freshwater ecosystems (e.g., rivers, lakes). Homalopsidae have a variety of predators (Voris and Murphy 2002), including the White-bellied Sea Eagle, *Haliaeetus leucogaster*; the Brahminy Kite, *Haliastur indus*; and the Pariah Kite, *Milvus migrans*, which are known predators of *C. rynchops* (Saha 1983; Murthy and Rao 1986). The present study and all other conditions indicated the Black-crowned Night Heron (*Nycticorax nycticorax*) is a potential predator of *G. prevostiana*. Whether it preys or scavenges on dead snakes needs further observations and detailed study on the diets of the herons.

Literature Cited

- Aengals, R., V.M. Sathishkumar, M.J. Palot, and S.R. Ganesh. 2018. *A Checklist of Reptiles of India*. Version 3.0. <www.zsi.gov.in>.
- Dutta, S.K. 1989. On the mass killing of the dog-faced water snake (*Cerberus rynchops*) in the Chilka Lake, Orissa. *Hamadryad* 14: 227–228.
- Karunarathna, S., T. Surasinghe, M. Botejue, and M. Madawala. 2018. *Gerarda prevostiana* (Serpentes: Homalopsidae) in Sri Lanka: Distribution and behaviour. *Herpetological Bulletin* 145: 8–13.
- Murphy, J.C. 2007. *Homalopsid Snakes, Evolution in the Mud*. Krieger Publishing Co., Malabar, Florida, USA.
- Murphy, J.C. and H.K. Voris. 2014. A checklist and key to the homalopsid snakes (Reptilia, Squamata, Serpentes), with the description of new genera. *Fieldiana Life and Earth Sciences* 8: 1–43.
- Murphy, J.C., H.K. Voris, and D.R. Karns. 2012. The dog-faced water snakes, a revision of the genus *Cerberus* Cuvier, (Squamata, Serpentes, Homalopsidae), with the description of a new species. *Zootaxa* 3484: 1–34. <https://doi.org/10.11646/zootaxa.3484.1.1>.
- Murthy, T.S.N. and K.V.R. Rao. 1986. Observations on some snake-eating birds of the Chilka Lagoon, Orissa. *Journal of the Bombay Natural History Society* 85: 620.
- Saha, B.K. 1983. More on the dog-face. *Hamadryad* 8: 4–5.
- Smith, M.A. 1943. *The Fauna of British India, including Ceylon and Burma. Reptilia and Amphibia. Vol. III.—Serpentes*. Taylor and Francis, London, UK.
- Voris, H.K. and J.C. Murphy. 2002. The prey and predators of homalopsine snakes. *Journal of Natural History* 36: 1621–1632.
- Vyas, R.V., J.C. Murphy, and H.K. Voris. 2013. The Dog-faced Water Snake (*Cerberus rynchops*) and Gerard's Mud Snake (*Gerarda prevostiana*) at the western edge of their distribution. *Herpetological Review* 44: 34–36.
- Vyas, R.V. and B.M. Parasharya. 2016. Amphibian and reptilian inventories augmented by sampling at heronries. *Reptiles & Amphibians* 23: 68–73. <https://doi.org/10.17161/randa.v23i1.14102>.
- Whitaker, R. 1969. The dog-faced water snake (*Cerberus rynchops*) in the Bombay area and notes on its habits. *Journal of the Bombay Natural History Society* 66: 386.
- Whitaker, R. and A. Captain. 2004. *Snakes of India. The Field Guide*. Draco Books, Chennai, India.