

## Attack by Jungle Babblers (Argya striata) on a Trinket Snake (Coelognathus helena) Elicited Death-feigning Behavior

Anuj D. Raina<sup>1</sup> and Rakesh Pampaniya<sup>2</sup>

<sup>1</sup>M-1203, Tivoli, Godrej Garden City, Jagatpur, Ahmedabad, Gujarat-382470, India (anzraina@gmail.com [corresponding author])

<sup>2</sup>At-Ajotha,Vadi Vistar, Tal, Veraval, Gir Somnath, Gujarat-362268, India (rakesh.pampaniya@gmail.com)

n 13 March 2019, we observed an attack by Jungle Babblers (*Argya striata*) on a Trinket Snake (*Coelognathus helena*) in Ajotha Village, Junagadh District, Gujarat, India (20°53'52.9"N, 70°27'30.6"E), that was brought to our attention by the distress call of a Jungle Babbler that had spotted a juvenile Trinket Snake (*Coelognathus helena*) moving along a water pipe. The flock of birds followed the snake before four babblers landed and attacked the snake, which responded by feigning death (Fig. 1).

Thanatosis (feigning death or tonic immobility) is a behavior in which a potential prey animal feigns death in order to deceive predators. Thanatosis usually is the final defensive response when all other alternatives (evasion, fight, or flight) failed (Rogers and Simpson 2014). The prey adopts

an immobile posture, which is triggered by physical contact or proximity to a predator (Humphreys and Ruxton 2018).

Jungle Babblers are common gregarious birds found in urban and forested landscapes throughout much of the Indian Subcontinent (Birdlife International 2016). These birds often engage in allopreening, play chases, mock fights (Gaston 1978), and form mixed-species foraging groups (Rasmussen and Anderton 2005). Whenever a threat is perceived, babblers mob the predator and every individual takes up a vantage point and all act simultaneously as sentinels (Devasahayam and Devashayam 1991).

In an ultimately unsuccessful effort to deceive the angry flock, the snake twice employed death-feigning behavior. During each attempt, the babblers watched for the slightest



Fig. 1. Sequence of images showing Jungle Babblers (*Argya striata*) attacking a juvenile Trinket Snake (*Coelognathus helena*) in Ajotha Village, Junagadh District, Gujarat, India (20°53'52.9"N, 70°27'30.6"E), that responded by feigning death. Note some of the babblers preening and others assuming obviously vigilant positions during the episode. Photographs by Rakesh Pampaniya.

movement of the snake and tested for death by pecking it. When the snake responded, the babblers reacted with multiple stomps and additional pecks, following it closely when it attempted to escape. The snake's head and tail were principal targets. Although the babblers behaved aggressively, they did not emit alarm or distress calls, a couple of individuals intermittently paused to preen, and all were obviously vigilant, presumably watching for a nearby cat or dog. The entire episode lasted approximately 10 min before the snake was killed, after which the babblers flew away.

To the best of our knowledge, this is the first record of thanatosis by a Trinket Snake. Other Indian snakes known to have engaged in death-feigning behavior include the Checkered Keelback (Fowlea piscator), Tytler's Keelback (F. tytleri), Green Keelback (Rhabdophis plumbicolor), Copperheaded Trinket Snake (Coelognathus radiatus), Common Wolfsnake (Lycodon aulicus), Yellow-collared Wolfsnake (L. flavicollis), Large-eyed Bamboo Snake (Pseudoxenodon macrops), Yellow-striped Kukri Snake (Oligodon woodmasoni), and Common Sandboa (Eryx conicus) (Vogel and Han-Yuen 2010; Mirza et al. 2011; Bhosale et al. 2013; Muliya et al. 2018; Chandramouli 2020; Deshmukh et al. 2020, 2021)

## Literature Cited

Bhosale, H.S. and V. Thite. 2013. Death feigning behavior in Large-eyed False Cobra *Pseudoxenodon macrops* (Blyth, 1854) (Squamata: Colubridae). *Russian Journal of Herpetology* 20: 190–192. https://doi.org/10.30906/1026-2296-2013-20-3-190-192.

- Birdlife International. 2016. *Turdoides striata. The IUCN Red List of Threatened Species* 2016: e.T103871402A94493697. https://doi.org/10.2305/IUCN. UK.2016-3.RLTS.T103871402A94493697.en.
- Chandramouli, S.R. 2020. Death-feigning and defensive behavior in two snakes of the Andaman and Nicobar Archipelago of India. *Reptiles & Amphibians* 27: 237–238. https://doi.org/10.17161/randa.v27i2.14190.
- Deshmukh, R.V., S.A. Deshmukh, S.A. Badhekar, U.M. Udapure, and S.K. Hattimare. 2020. Death-feigning behavior in the Common Sand Boa, *Eryx conicus* (Schneider 1801) (Erycidae), and the Common Wolfsnake, *Lycodon aulicus* (Linnaeus 1758) (Colubridae). *Reptiles & Amphibians* 27: 65–67. https://doi.org/10.17161/randa.v27i1.14457.
- Deshmukh, R.V., S.A. Deshmukh, S.A. Badhekar, S. D. Katgube, and A. Bhelkar. 2021. Notes on behavior in Green Keelbacks, *Rhabdophis plumbicolor* (Cantor 1839) (Reptilia: Squamata: Natricidae). *Reptiles & Amphibians* 28: 34–36. https://doi.org/10.17161/randa.v28i1.15300.
- Devasahayam, S. and A. Devasahayam. 1991. Aggressive behaviour of Jungle Babblers *Turdoides striatus* (Dumont) towards a snake. *Journal of the Bombay Natural History Society* 88: 288.
- Gaston, A.J. 1978. The evolution of group territorial behavior and cooperative breeding. *The American Naturalist* 112: 1091–1100. https://doi.org/10.1086/283348.S2CID84022037.
- Humphreys, R.K. and G.D. Ruxton. 2018. A review of thanatosis (death feigning) as an anti-predator behaviour. *Behavioral Ecology and Sociobiology* 72: 1–16. https://doi.org/10.1007/s00265-017-2436-8.
- Mirza, Z., V. Vaze, and R. Sanap. 2011. Death feigning behavior in two species of the genus *Lycodon* of Asia (Squamata: Colubridae). *Herpetology Notes* 4: 295–297.
- Muliya, S.K., A. Nath, and A. Das. 2018. First report of death feigning behaviour in the yellow collared wolf snake (*Lycodon flavicolis*). *The Herpetological Bulletin* 143: 41–42.
- Rasmussen, P.C. and J.C. Anderton. 2005. *Birds of South Asia. The Ripley Guide.*Volume 2: Attributes and Status. Smithsonian Institution & Lynx Edicions,
  Barcelona, Spain.
- Rogers, S.M. and S.J. Simpson. 2014. Thanatosis. *Current Biology* 24: R1031–R1033. https://doi.org/10.1016/j.cub.2014.08.051.
- Vogel, G. and K. Han-Yuen. 2010. Death feigning behavior in three colubrid species of tropical Asia. Russian Journal of Herpetology 17: 15–21.