



# A Fight between Two MacClelland’s Coralsnakes, *Sinomicrurus macclellandi* (Reinhardt 1844), in Darjeeling, India

Aditya Pradhan

Ashoka Trust for Research in Ecology and the Environment, Regional Office Eastern Himalaya-Northeast India, NH 10 Tadong, Gangtok-737101, Sikkim, India (adityazoo@live.com)

MacClelland’s Coralsnake (*Sinomicrurus macclellandi*) is widely distributed across northeastern India, Nepal, Bangladesh, Bhutan, northern Myanmar, Thailand, Vietnam, China, Japan, and Taiwan (Uetz et al. 2020). Of the three currently recognized subspecies, *S. m. univirgatus* has been reported from Darjeeling-Sikkim Himalaya at elevations of 1,000–2,000 m asl (Uetz et al. 2020), where it occurs primarily in damp, humid mountain forests with thick humus floors and feeds on other reptiles (Jha and Thapa 2002). This venomous elapid is protected under Schedule IV of the Wildlife (Protection) Act of India (1991) and is classified as Near

Threatened in Japan (Ota 2000), but has not been assessed for the IUCN Red List.

At about 1620 h on 13 September 2014, I observed a fight between two adult MacClelland’s Coralsnakes on a footpath some 10 m from the nearest house in a residential area of Darjeeling, West Bengal, India (27.039268°N, 88.357546°E; elev. 1,580 m). The two entwined individuals were almost equal in size and were locked in mouth-to-mouth combat for the entire duration of the observed fight (Fig. 1). Entwinement is a component of stereotypical snake combat behavior (Lowe 1948). Both would periodi-



**Fig. 1.** Sequence of images documenting a fight between two MacClelland’s Coralsnakes (*Sinomicrurus macclellandi*) in Darjeeling, West Bengal, India. Photographs by the author.



Fig. 1. Continued.

cally flip during the fight, exposing their venters, but would also lay motionless and appear to be resting for minutes at a time. I later learned from a villager that the fight had started around 1400 h, over two hours prior to my arrival. I observed the fight until 1700 h, by which time many villagers had gathered.

The motivation for the fight is unknown. It might have been an attempt at cannibalism or it could have been a ritual struggle between two males (Lowe 1948), such as those observed in Australian elapids (Fleay 1937, 1951; Hosmer 1953; Baker 1969; Carpenter 1977, 1986; Shine and Allen 1980; Shine et al. 1981) as well as some booids, colubrids, and viperids (Carpenter 1977, 1986; Shine et al. 1981).

#### Literature Cited

- Baker, A.B. 1969. Snakes in combat. *Proceedings of the Royal Zoological Society of New South Wales* 1966–67: 29–31.
- Carpenter, C.C. 1977. Communication and displays of snakes. *American Zoologist* 17: 217–233.
- Carpenter, C.C. 1986. An inventory of combat rituals in snakes. *Smithsonian Herpetological Information Service* 69: 1–18.
- Fleay, D. 1937. Black snakes in combat. *Proceedings of the Royal Zoological Society of New South Wales* 1936–37: 40–42.
- Fleay, D. 1951. Savage battles between snakes. *Walkabout* 17: 10–13.
- Hosmer, W. 1953. An account of supposed mating of the taipan, *Oxyuranus scutellatus* (Peters). *North Queensland Naturalist* 22: 1–3.
- Jha, A. and K. Thapa. 2002. *Reptiles and Amphibians of Sikkim*. Mrs. Shila Jha, Chattisgarh, India.
- Lowe, C.H. 1948. Territorial behavior in snakes and the so-called courtship dance. *Herpetologica* 4: 129–135.
- Ota, H. 2000. Current status of the threatened amphibians and reptiles of Japan. *Population Ecology* 42: 5–9.
- Shine, R. and S. Allen. 1980. Ritual combat in the Australian copperhead, *Austrelaps superbus* (Serpentes, Elapidae). *Victoria Naturalist* 97: 188–190.
- Shine, R., G.C. Grigg, T.G. Shine, and P. Harlow. 1981. Mating and male combat in Australian blacksnakes, *Pseudechis porphyriacus*. *Journal of Herpetology* 15: 101–107.
- Uetz, P., P. Freed, and J. Hošek (eds.). 2020. The Reptile Database. <<http://reptile-database.reptarium.cz>>.