



Asian Swamp Eel, *Monopterus javanensis* (La Cépède 1800), as Natural Prey of the Malayan Krait, *Bungarus candidus* (Linnaeus 1758), in Narathiwat Province, Southern Thailand

Tom Charlton¹, David Howard², and Tom Williams³

¹Department of Natural Sciences, Manchester Metropolitan University, All Saints Building, Manchester M15 6BH, UK (Tom@ecoanimalencounters.co.uk)

²13 Arundel Close, Ross-on-Wye, Herefordshire HR9 7XG, UK

³28 Styles Gardens, Brixton, London SW9 7UZ, UK

The Malayan Krait (*Bungarus candidus*), a highly venomous elapid, has a distribution encompassing Thailand, peninsular Malaysia, Laos, Cambodia, Vietnam, and Indonesia (including Sumatra, Java, and Bali) (Das 2018). It is both nocturnal and terrestrial, occupying primary and secondary forest as well as disturbed habitats that include plantations and the surroundings of human settlements (Cox et al. 2018). Evidence from direct field observations and investigation of stomach contents suggests *B. candidus* feeds primarily on snakes, with further known natural prey including lizards, rodents, caecilians (*Ichthyophis* sp.), and anurans (Tweedie 1983; Slowinski 1994; Kuch 2001; Charlton 2019). Nonetheless, the full natural prey spectrum for this species remains largely unstudied. Ex-situ, Asian Swamp Eels (*Monopterus javanensis*) were accepted during feeding experiments by adult *B. candidus* collected from West Java (Kuch 2001). Another member of the genus *Bungarus*, the Many-banded Krait (*B. multicinctus*) has been reported to prey natu-

rally on *Monopterus* eels in Taiwan (Mao 1970). Additionally, captive *B. candidus* are known to consume rodents, chicken, and purpose-made sausages comprising cooked and blended fish or pork (Kuch and Schneyer 1991; Chanhom et al. 2001). Herein, we report the first confirmed observation of *B. candidus* preying on *M. javanensis* in nature in Narathiwat Province in southern Thailand.

At 2330 h (ICT) on 13 April 2023, we encountered an unsexed adult *B. candidus* (total length ~100 cm) on the bank of a small forest stream in the primary forest of Phukhao Thong, Sukhirin District, Narathiwat Province, southern Thailand (5.78205 N, 101.71545 E; elev. 203 m asl) (Fig. 1). Upon being disturbed, the snake regurgitated a freshwater eel approximately 30 cm in total length, which was later confirmed from photographs as *M. javanensis* (Fig. 1). The eel was alive at the time, indicating recent predation and consumption, although it died shortly after regurgitation, likely due to envenomation. The snake was released after taking photographs.



Figure 1. An adult Malayan Krait (*Bungarus candidus*) from Narathiwat Province, southern Thailand (left) and an Asian Swamp Eel (*Monopterus javanensis*) following regurgitation by the Malayan Krait (right). Photographs by Tom Charlton.

Despite a reputed preference for preying on snakes, *B. candidus* is known to be an opportunistic predator that consumes a variety of vertebrates in the wild. This varied diet is further supported through captive feeding observations. This report is the first known record of predation by *B. candidus* on *M. javanensis* in the wild and thus confirms synbranchid eels as natural prey. Although this observation is novel, it is unsurprising given reports of consumption of *M. javanensis* by *B. candidus* in captivity.

Acknowledgements

We thank Parinya Pawangkhanant for confirming the identity of the *Monopterus javanensis*.

Literature Cited

- Chanhome, L., P. Jintakune, H. Wilde, and M.J. Cox. 2001. Venomous snake husbandry in Thailand. *Wilderness & Environmental Medicine* 12: 17–23. [https://doi.org/10.1580/1080-6032\(2001\)012\[0017:vshit\]2.0.co;2](https://doi.org/10.1580/1080-6032(2001)012[0017:vshit]2.0.co;2).
- Cox, M.J., M.F. Hoover, L. Chanhome, T. Kumthorn, and P. Chattraphas. 2018. *Venomous Snakes of the ASEAN Nations*. Parpim Limited Partnership, Bangkok, Thailand.
- Das, I. 2018. *A Naturalist's Guide to the Snakes of Southeast Asia*. 2nd Edition. John Beaufoy Publishing, Oxford, UK.
- Charlton, T. 2019. *A Guide to Snakes of Peninsular Malaysia and Singapore*. Natural History Publications Borneo, Kota Kinabalu, Malaysia.
- Kuch, U. and W. Schneyer. 1991. Experiences with the captive husbandry of four diet-specialized elapid snake species of the genus *Bungarus* Daudin, 1803. Part I. *Bungarus candidus* (Linnaeus 1758). *Sauria* 1: 7–14.
- Kuch, U. 2001. Notes on the diet of the Malayan Krait, *Bungarus candidus* (Linnaeus, 1758). *Herpetological Bulletin* 75: 10–14.
- Mao, C.Y. 1970. Food of the common venomous snakes of Taiwan. *Herpetologica* 26: 45–48.
- Slowinski, J.B. 1994. The diet of kraits (Elapidae: Bungarus). *Herpetological Review* 25: 51–53.
- Tweedie, M.W.F. 1983. *The Snakes of Malaya*. 3rd Edition. Singapore National Printers, Singapore.