

Biodiversity Record: Predation of four-lined tree frog by big-eye green whip snake at night

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Subjects: Big-eye green whip snake, *Ahaetulla mycterizans* (Reptilia: Squamata: Colubridae);
Four-lined tree frog, *Polypedates leucomystax* (Amphibia: Anura: Rhacophoridae).

Subjects identified by: Yon-lu Goh.

Location, date and time: Singapore Island, Old Upper Thomson Road; 26 January 2024; 2040–2055 hrs.

Habitat: Secondary forest. On a tree branch about 2 m above the ground.

Observers: Yon-lu Goh, Cheong Wai Lun and Zyon Aaronel Wee Zhun Wei.

Observation: A big-eye green whip snake of about 1 m total length was found having caught an adult four-lined tree frog. The head of the frog was already in the snake's mouth (Fig. 1). As the frog did not struggle, it could already be dead. It took the snake about 10 minutes to swallow the entire frog (Fig. 2). Shortly after, it began to climb further up the tree, and the observers also left the scene.

Videos of the event recorded by Yon-lu Goh can be viewed at <https://www.youtube.com/watch?v=kN0EqA0zOnQ>.



Fig. 1. Ventral view of the whip snake with the head of the frog in its mouth. Fig 2. Fronto-lateral view of the head and neck of the snake in the process of swallowing the frog. The ingested body of the frog is stretching the skin of the snake's neck, and only its feet remain visible. Note also the snake's much dilated pupil which helps it to see in low light (Photographs by: Yon-lu Goh).

Remarks: In Singapore, *Ahaetulla mycterizans* seems to be restricted to the primary and mature secondary forests of the Bukit Timah and Central Catchment Nature Reserves and adjacent parks, where it seems to be common (Figueroa et al., 2023). This record is significant because there apparently are limited records of predation by this species of snake, and it adds frogs to the diet of *A. mycterizans* which was previously known to comprise of lizards and birds (Das, 2018). A swamp skink, *Tytthoscincus temasekensis*, was extracted from the gut of an *Ahaetulla mycterizans* at Old Upper Thomson Road (Figueroa et al., 2023).

The present record is also interesting because the event occurred after sunset, and *Ahaetulla mycterizans* is presumed to be diurnal in habits (Baker & Lim, 2012). It shows that this snake does hunt at night. At the time of observation, the sky had gone dark, but there was a full moon, and the road adjacent to the tree was brightly lit by street lamps. The dilated pupils of the snake's large eyes (Fig. 2) could have enabled it to see well in low light conditions.

Literature cited:

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- Das I (2018) A Naturalist's Guide to the Snakes of Southeast Asia. 2nd edition. John Beaufoy Publishing, United Kingdom, 176 pp.
- Figueroa A, Low MEY & Lim KKP (2023) Singapore's herpetofauna: updated and annotated checklist, history, conservation, and distribution. *Zootaxa*, 5287: 1–378.