

Biodiversity Record: Predation of a frog by a white-bellied rat snake

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Subjects: White-bellied rat snake, *Ptyas fusca* (Reptilia: Squamata: Colubridae);
Frog, indeterminate genus and species (Amphibia: Anura: Dicroglossidae).

Subjects identified by: Daniel Oon.

Location, date and time: Singapore Island, Central Catchment Nature Reserve, Costus Trail along edge of Lower Peirce Reservoir; 30 May 2026; 1545–1605 hrs.

Habitat: Secondary forest.

Observer: Daniel Oon.

Observation: A white-bellied rat snake of about 1.5 m total length was first observed moving along the dry leaf litter beside the broad walk at 1545 hrs. The snake slithered around the general area appearing to look for prey. Occasionally, it raised the anterior part of its body and was observed twice swaying the anterior part of its body. At 1600 hrs, the snake suddenly struck at a frog among the leaf litter head-first (Figs. 1 & 2) and swallowed it in approximately 25 seconds (Fig. 3). A short video clip of the event (swaying and swallowing) recorded by the observer can be viewed at <https://youtu.be/ZlUvjPlqtaA>.



Fig. 1. Dorsal view of the snake having engulfed the head and torso of the frog, with all four limbs of the prey sticking out of its mouth. (Photograph by: Daniel Oon)



Fig. 2. Dorsal view of the snake's head in the final stages of swallowing the frog. The two hind legs of the frog are visible. Fig. 3. Lateral view of the head of the snake after having ingested the frog. (Photographs by: Daniel Oon).

Remarks: This record shows the white-bellied rat snake to be a diurnal hunter that actively seeks out prey. The prey in this instance was secured by the mouth and immediately swallowed without any attempt to immobilize it. Perhaps the small size of the prey allows the snake to ingest it alive and struggling. A recent observation by Donnelly (2023) of a failed attempt by a congener *Ptyas carinata* to eat a juvenile spiny terrapin suggests that the snake can achieve this only with prey that can be gripped securely and restrained with the snake's teeth. It also has to be soft and can readily fit into the snake's mouth. Apart from frogs, *Ptyas fusca* is also known to feed on fish, lizards, small birds and mammals (Law et al., 2025).

The behaviour in which the snake raises and undulates the anterior part of its body is known as periscoping, which is thought to give it an elevated and much wider field of vision (see Law et al., 2025) while hunting.

Literature cited:

Donnelly J (2023) Biodiversity Record: Attempted predation of spiny hill terrapin by keeled rat snake. Nature in Singapore, 16: e2023051. DOI: 10.26107/NIS-2023-0051
 Law IS, Law IT, Shivaram R, Serin S & Sankar A (2025) A Field Guide to the Reptiles and Amphibians of Singapore. John Beaufoy Publishing, United Kingdom, 304 pp.