

Short Note

Predation of *Xenopeltis unicolor* (Serpentes: Xenopeltidae) on *Kaloula pulchra* (Anura: Microhylidae) in Bangkok, Thailand

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The sunbeam snake, *Xenopeltis unicolor* (Boie, 1827), is a medium-sized fossorial snake often encountered close to water bodies despite spending much of their time hidden.^{1,2} It has a large distribution throughout much of southeast Asia¹, with genetic studies inferring it is a basal lineage to Pythons³. They are predominantly nocturnal, and are known to forage for frogs, reptiles, and small mammals,^{4,5,6,7} while readily accepting most food items in captivity.¹ Cox (1993) also notes how they swallow small prey alive, and constrict bigger prey until death, however due to its skull structure they are unable to swallow relatively large prey items.

There is little information regarding the diet of wild individuals, and nothing describing the natural species composition of their diet.

Here we report a confirmed predation event of an adult *X. unicolor* on an adult Banded bullfrog *Kaloula pulchra* (Gray, 1831), in Pathum Thani, Bangkok, Thailand (13.9720°N, 100.5847°E, Datum 47P). On the 1 March 2018, at 1949 h, we observed an adult *X. unicolor* constricting an adult *K. pulchra* on a grassy roadside verge (Figure 1). The snake was constricting the frog so

tightly that the frog has prolapsed some viscera from its mouth. There was various plastic waste and litter in proximity to the event. The verge backed on to an overgrown empty lot, where we have observed both *X. unicolor* and *K. pulchra* independently. The event occurred approximately 250m from a large water body, however they are often frequented away from water (Gilbert & Goodyear, pers. obs.) As the snake was engaged in constricting the frog, we left it so as not to disturb the snake, and returned approximately 15 minutes later where it was in the process of swallowing the frog. The snake had no problem getting its jaw around the frog, despite its skull structure, and the ability for the frog to inflate itself when threatened, and release noxious secretions.^{8,9} We observed the snake consuming the frog for a further 3 minutes and then left while it when it was in the final stage of swallowing.

This observation provides insight into the wild diet of sunbeam snakes, with *K. pulchra* comprising part of the diet of *X. unicolor*. They are both considered synanthropes,^{2,10} and are encountered regularly within Bangkok (Goodyear, pers. obs) therefore likely a significant food source.



FIGURE 1. Adult sunbeam snake (*Xenopeltis unicolor*) constricting and biting a banded bullfrog (*Kaloula pulchra*)

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