

Unique feeding behavior of Asian kukri snakes gutting frogs and toads

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Credit: Western Kukri, *Oligodon affinis* . Credit: L. Shyamal, Wynaad, 2006

After describing a unique behavior in the Small-banded Kukri Snake (*Oligodon fasciolatus*) last September, two new studies, also led by Henrik Bringsøe, are now reporting the same gruesome feeding strategy in another two species: the Taiwanese Kukri Snake (*Oligodon formosanus*) and the Ocellated Kukri Snake (*Oligodon ocellatus*). In their research across Asia, the scientists also observed and contemplated

other rare behaviors in kukri snakes.

The closely related three species of snakes within the genus *Oligodon* have evolved an unusual behavior where they pierce the abdomens of amphibians, tear off their organs and swallow them one by one, keeping the prey alive for up to a few hours. Given that these species have also been recorded to feed in a more typical way: by swallowing their prey whole, the scientists find it likely that the alternative strategy has evolved specifically in their species group, in order to be able to eat larger animals. The latest findings are also published in the peer-reviewed, open-access scholarly journal *Herpetozoa*.

One of the new studies reports about two instances from Hong Kong, where Taiwanese Kukri Snakes were observed to disembowel Painted Burrowing Frogs (*Kaloula pulchra*). In one of the cases, the [snake](#) had cut open the belly of the frog and inserted its head into the frog's abdomen. Further, the reptile was seen to repeatedly rotate its body longitudinally in a 'performance' also known as 'death rolls.' In the other case, reported in the study, the organs of the frog had been forced out of its abdomen. The researchers also provide video recordings of these unique behaviors.

"We believe that the purpose of these death rolls was to tear out organs to be subsequently swallowed," comments Bringsøe.

Meanwhile, the study mentions a new observation of one of the studied snake species (the Small-banded Kukri Snake, *Oligodon fasciolatus*), however preferring to swallow its Painted Burrowing Frog whole, after doing the same death rolls, which led the scientists to think that it is the size of the prey that determines how exactly the snake would go about its dinner. The researchers also add that in both cases, the snake would eventually swallow its prey's remains.

The second newly published [research paper](#) studies a third [species](#): the Ocellated Kukri Snake, which was observed to eat the toxic Asian Black-spotted Toad (*Duttaphrynus melanostictus*) in Vietnam. Initially, the snake was seen to have buried its large head eyes-deep into the amphibian's abdomen. Eventually, though, the snake swallowed the toad whole despite its toxicity, providing further evidence that kukri snakes are in fact resistant to the cardiac glycoside toxins of the toads.

"We hope that future observations may uncover additional aspects of the fascinating feeding habits of kukri snakes though we may indeed call them gruesome!" says Bringsøe.

More information: Henrik Bringsøe et al, Gruesome twosome kukri rippers: *Oligodon formosanus* (Günther, 1872) and *O. fasciolatus* (Günther, 1864) eat *Kaloula pulchra* Gray, 1831 either by eviscerating or swallowing whole, *Herpetozoa* (2021). [DOI: 10.3897/herpetozoa.34.e62688](#)

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