

Updating the snake menu: two cases of ophiophagy by the Western Indigo Snake, *Drymarchon corais* (Boie, 1827), in a Neotropical rain forest

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Ophiophagy, the behaviour of feeding on snakes, constitutes one of several feeding behaviours documented in various animals globally. Interestingly, the occurrence of such feeding habit has frequently been observed in a great deal of snake species. For instance, in the Neotropical region, some popularly known ophiophagous feeding behaviours have been recorded for the Black Mussurana (*Clelia Clelia*; Rivas et al., 2023), Chilean Green Racer (*Philodryas chamissonis*; Enriquez et al., 2021), Common Lancehead (*Bothrops atrox*; Pelegrini et al., 2019; Starace et al., 2021), Western Indigo Snake (*Drymarchon corais*; Campos et al., 2010; Garcia-da-Silva and Filho, 2024; Nogueira et al., 2024; Prudente et al., 2014; Santos et al., 2024), and Cat-eyed Snakes (*Leptodeira* sp.; Escalante et al., 2021; Quezada et al., 2024).

Drymarchon corais (Boie, 1827) is one of five colubrid snakes currently described in the genus *Drymarchon*, a group distributed across south and southeastern North America (Wüster et al., 2001; Nogueira et al., 2019). Among the members of its genus, *D. corais* occupies the most extensive range, occurring in a variety of ecoregions from dry to humid regions of the Amazon rainforest (Nogueira et al., 2024; Santos et al., 2024). It is a large semi-arboreal snake that can reach about 290 cm in length, has an anterior body that varies from shades of grey to dark brown, a yellowish belly, and a posterior body of yellowish or pale brown colouration (Martínez et al., 2020). *D. corais* is a diurnal snake with a generalised diet, particularly feeding on amphibians, amphisbaenids, lizards, snakes, birds, and mammals (Leary and Razafindratsita, 1998; Campos et

al., 2010; Prudente et al., 2014; Pelegrini et al., 2019; Oda et al., 2022). Snakes in particular, constitute about 15.63% of its prey items, comprising both venomous (e.g., *Bothrops taeniatus*) and non-venomous snakes (e.g., *Pseudoboa nigra*, *Erythrolamprus reginae*, *Atractus* sp.) (Prudente et al., 2014). However, there are no records of *D. corais* preying on snakes of the genus *Epicrates* and *Siphlophis*. Herein, we provide a report on two ophiophagous feeding events of an adult and sub-adult *D. corais* preying on the Rainbow Boa (*Epicrates cenchria*) and Checker-bellied Snake (*Siphlophis cervinus*), respectively.

At 11:56 h on 26 January 2025, an adult *Drymarchon corais* (approximately 200 cm in total length) was observed preying on a Rainbow Boa along a trail near the field camp ‘Saut Pararé’ (4.0392°N, 52.6757°W) in the nature reserve ‘Les Nouragues’, French Guiana. Upon initial observation, we noticed that the *Epicrates cenchria* was being swallowed alive with parts of its posterior body already ingested in a posterior-anterior direction. While being swallowed, the *E. cenchria* had its anterior body, specifically head and neck region, firmly coiled around a nearby branch, perhaps in an attempt to escape predation (Fig. 1A). Using coordinated muscle contractions and jaw movements, the *D. corais* continued swallowing towards the head region of its prey while periodically pulling it in an effort to dislodge its grip around the aforementioned branch (Fig. 1B). Eventually, the hold of the *E. cenchria* was released, possibly due to being overpowered by its predator or from exhaustion, and it was dragged by the *D. corais* to another location few meters away from the initial location. However, while being pulled, the *E. cenchria* managed to coil and grasp onto another branch but was again unable to maintain its hold. The *D. corais* continued ingesting its prey and eventually left the observation area with only a small section of the head region of its prey left to be swallowed. The whole predation event from the time

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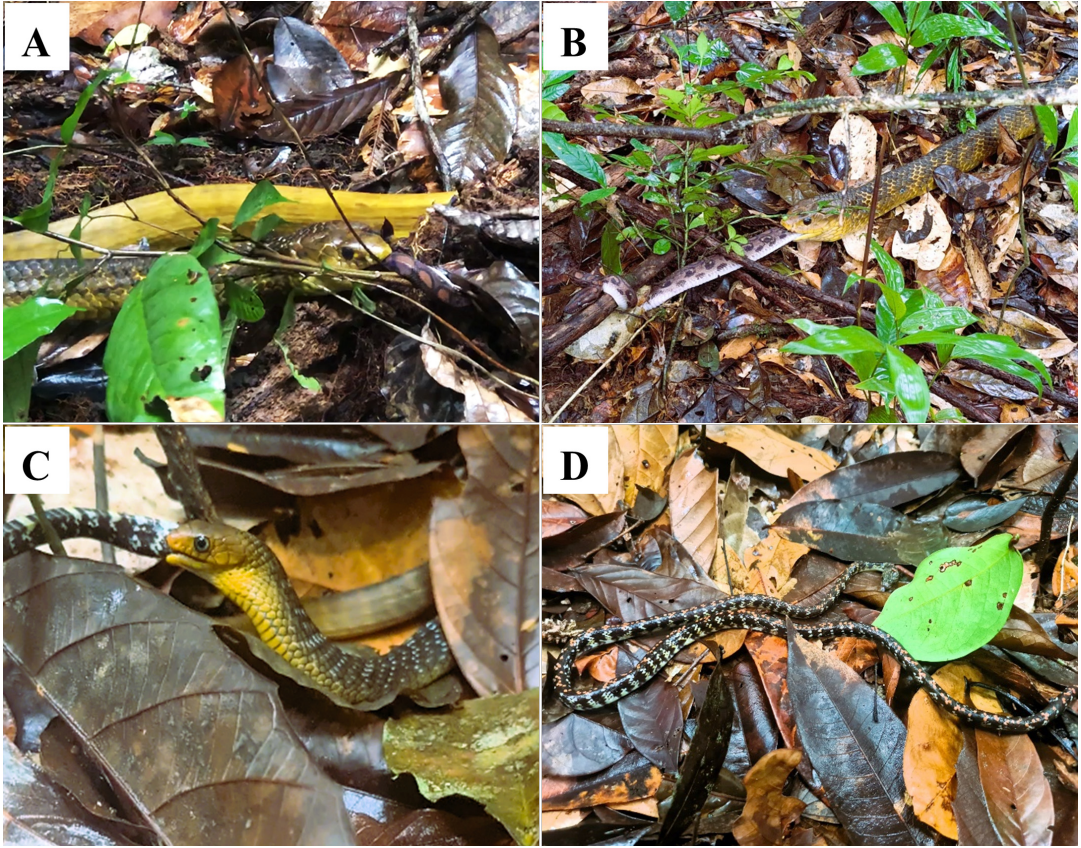


Figure 1. Predation of *Epicrates cenchia* and *Siphlophis cervinus* by adult (A and B) and sub-adult (C) *Drymarchon corais*, respectively. A) Adult *D. corais* swallowing towards the head region of its prey, B) Adult *D. corais* pulling *Epicrates cenchia*, C) Sub-adult *D. corais* consuming a *Siphlophis cervinus*, D) Regurgitated *Siphlophis cervinus*). Photos by Eva Ringler (A and B), Ádám Simon (C), and John Bosu Mensah (D).

the event was sighted to the exit of the predator lasted for about 15 minutes (video available here: <https://youtu.be/RKpJ4WE27T8>). It is also worth mentioning that prior to this day, a similar sized individual of *D. corais* was spotted moving towards the direction of the area of the predation event. Given that *D. corais* are active foragers (Prudente et al., 2014), it is possible that both observations were from the same individual, suggesting that the individual was possibly hunting within the area.

The second observation occurred on the 30 January 2025, around 11:17 h, along a trail towards the field camp ‘Inselberg’ in the nature reserve ‘Les Nouragues’, French Guiana during a hiking trip. A sub-adult *D. corais* was sighted consuming a *Siphlophis cervinus*, with more than half of the total length of the prey already consumed antero-posteriorly (Fig. 1C). The

D. corais was initially sighted camouflaged beneath the leaf litters of the forest floor. However, as we attempted to spread out the leaf litter for increased visibility, the predator began dragging its prey towards the buttress root of a nearby tree while concurrently shaking its tail rapidly. Shortly afterwards, the *D. corais* began regurgitating its prey and left the location post-regurgitation. This behaviour may have been a response to perceived threat and increase stress posed by our proximity to the snake. Similar behaviours of *D. corais* in response to observer proximity was also reported by Nogueira et al. (2024).

Other snake species reported as preys of *D. corais* include the Banded Cat-eyed Snake (*Leptodeira annulate*; Pelegrini et al., 2019), Atlantic Bushmaster (*Lachesis muta*; Santos et al., 2024), South American Coralsnake (*Micrurus lemniscatus*; Nogueira et

al., 2024), Tschudi's False Coralsnake (*Oxyrhopus melanogenys*) and Mussurana (*Clelia Clelia*) (Champagne et al., 2021). However, our observation is the first record of *D. corais* preying on *Epicrates cenchria* and *Siphlophis cervinus*. Our report therefore documents two new prey items for *D. corais* and provides further information into the natural history and trophic dynamics of this species.

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