



Helmeted Basilisk (*Corytophanes cristatus*) Predation by Red-eyed Tree Snake (*Siphlophis compressus*) in Rainmaker, Parrita, Costa Rica

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The Helmeted Basilisk (*Corytophanes cristatus*) is a common sit-and-wait predator. It is an infrequently observed, secretive rainforest lizard, which spends most of its time motionless waiting for prey. It feeds on large arthropods and occasionally smaller lizards and snakes (Leenders 2019; Sasa and Monrós 2000). *Corytophanes cristatus* is an extremely variable species that shows cryptic coloration and an exceedingly wary behavior, which makes observation rare. In Costa Rica, it inhabits the lowland regions of the Caribbean and Pacific slopes (Leenders 2019).

The snake genus *Siphlophis* is composed of seven mostly arboreal species, which can be found in South and Central America. The Red-eyed Tree Snake (*Siphlophis compressus*) ranges from the southwestern lowlands in Costa Rica to Rio de Janeiro State in southeastern Brazil (Guedes et al. 2011). In Costa Rica this species is distributed only in the southwestern lowlands from sea level to 200 m (Leenders 2019). The Red-eyed Tree Snake is an arboreal and nocturnal snake that has been reported to prey on lizards of the genus *Tropidurus* (Withworth et al. 2011), and other genera including: *Gonatodes*, *Anolis*, *Enyalioides*, *Alopoglossus*, *Neuticurus*, *Ameiva*, *Kentropyx*, and *Plica* (Pazmiño-Otamendi 2020). Specific cases of predation also include, *Iguana iguana* (Mollo-Neto et al. 2013), and an already dead *Polychrus marmoratus* (Solé and Dias 2017). Prudente et al. (1998) suggested that lizards with diurnal activity may be captured by *S. compressus* while they sleep on branches at night. This snake has also been reported to occasionally prey on anurans, snakes, mammals, and lizard eggs (Guedes et al. 2011).

At 2350 h on 16 May 2022, one of us (JSZ), while giving a night tour at Rainmaker, Parrita, Costa Rica (9.578389 N, -84.212917 W), encountered a *Siphlophis compressus* constricting and beginning to swallow an adult male *C. cristatus*. The snake eventually managed to engulf the whole lizard. To

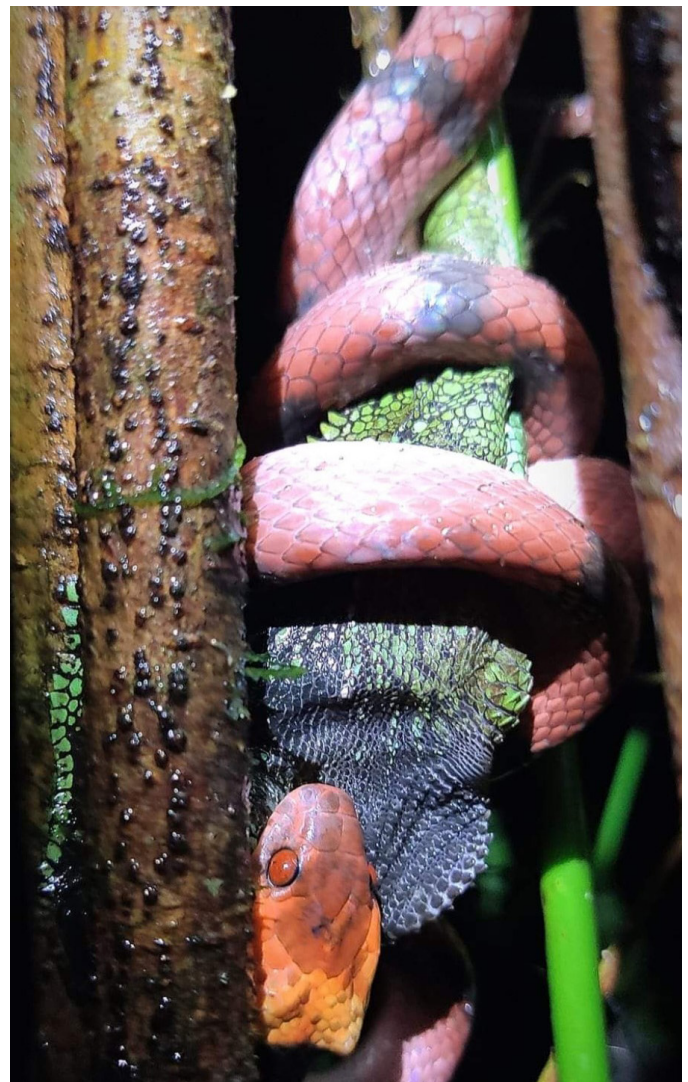


Fig. 1. An adult Red-eyed Tree Snake (*Siphlophis compressus*) constricting and beginning to ingest an adult Helmeted Basilisk (*Corytophanes cristatus*) headfirst. Photograph by Jorge A Sandi Zúñiga.

the best of our knowledge this is the first reported case of *S. compressus* preying upon *C. cristatus* (Fig. 1). This observation advances our understanding of the ecology of both species and their interactions, and sheds light on the trophic web dynamics in which they take part.

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