



Cope's Parrot Snake, *Leptophis depressirostris* (Cope 1861), Predation on the Frog, *Craugastor mimus*, in Costa Rica

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Cope's Parrot Snake (*Leptophis depressirostris*) is a fast diurnal snake of the tropical rainforest. This snake ranges from the Atlantic slope of eastern Honduras to the Pacific slope of central Panama and south into northern South America (Uetz et al. 2023). In Costa Rica, the species is found in the extreme southwestern region of the country. This snake is an active hunter that usually preys on lizards like anoles (Anolidae), whiptails (Teiidae), and occasionally frogs such as those of the genus *Craugastor* (Solórzano 2004; Leenders 2019).



Figure 1. First record of a Cope's Parrot Snake (*Leptophis depressirostris*) preying on the frog, *Craugastor mimus*, at Lapa Verde Wildlife Refuge, Sarapiquí, Costa Rica. Photograph by Randall A. Montoya Solano.

At 1231 h on 30 November 2021, we observed an adult *L. depressirostris* (1.02 m total length) at Lapa Verde Wildlife Refuge, Sarapiquí, Costa Rica (10.768389 N, 84.103250 W; elev. 90 m asl), preying on a *Craugastor mimus* (Fig. 1). *Leptophis depressirostris* occasionally preys on frogs, but no previous record documents predation on this prey species (Savage 2002; Solórzano 2004; Leenders 2019). We observed this snake eating the frog headfirst with a total elapsed time of 25 min from capture to complete ingestion.

The snake uses opisthoglyphous dentition to inject saliva, which contains anticoagulants and toxins comprised mainly of CRiSPs, 3FTxs, and AChE, which facilitate immobilization and digestion of amphibian prey. These agents, however, show low toxicity to mammals (Solorzano 2004; Sanchez et al. 2018).

Literature Cited

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