



A Failed Predation Attempt by a Central American Indigo Snake (*Drymarchon melanurus*) on a Tiger Ratsnake (*Spilotes pullatus*) in Campeche, Mexico

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The Central American Indigo Snake (*Drymarchon melanurus*) is a large snake that inhabits forests, savannas, grasslands, and mangroves from the southern United States through Mexico and Central America to northwestern South America (Lee 2000; Wüster et al. 2001). It is a diurnally active, primarily terrestrial species with a varied diet comprised of small mammals, birds, bird eggs, fish, anurans, lizards, and especially snakes (Hardy and McDiarmid 1969; Lemos-Espinal and Dixon 2013; Platt et al. 2016). Previous accounts (Daza-R. 2005; Hernández-Ríos et al. 2013) have documented individuals ingesting or attempting to ingest snakes of similar size. The Tiger Ratsnake (*Spilotes pullatus*), another large diurnally active snake that inhabits forests, savannas, and mangroves from Mexico south to South America, co-occurs with *D. melanurus* across parts of its range (Lee 2000).

At 1112 h on 3 July 2019, during a herpetological transect survey in tropical semi-deciduous forest in the buffer zone of the Calakmul Biosphere Reserve in Campeche, Mexico (18.81609°N, 89.27442°W; WGS 84; elev. 178 m asl), we

encountered an adult *D. melanurus* biting the tail of an adult *S. pullatus* of comparable size (Fig. 1). The Central American Indigo Snake was twisting its head and adjusting its grip while the Tiger Ratsnake struggled. After approximately 45 sec, the *S. pullatus* managed to escape and fled, closely pursued by the *D. melanurus*. We attempted to follow the snakes but found no further signs of them.

Previously, Hernández-Ríos et al. (2013) observed a *D. melanurus* in the process of consuming a *S. pullatus* in the state of Tamaulipas, Mexico, although the prey was subsequently regurgitated; however, because initial capture of the prey was not observed, whether the *S. pullatus* was predated or scavenged is unknown. Our observation provides definitive evidence that *D. melanurus* actively hunts *S. pullatus*. Due to an overlapping distribution, similar habitat preferences of both species, and a tendency for *D. melanurus* to prey on snakes, this type of interaction likely occurs with some regularity. However, successful predation and consumption of *S. pullatus* by *D. melanurus* has yet to be documented.



Fig. 1. A Central American Indigo Snake (*Drymarchon melanurus*) attempting to prey on a Tiger Ratsnake (*Spilotes pullatus*) in Campeche, Mexico. Photograph by Joseph Oakley.

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