Notas de História Natural & Distribuição Geográfica

Predation of cockatiel (*Nymphicus hollandicus*) eggs by the snake *Oxyrhopus petolarius* (Serpentes: Dipsadidae)

Yan Garani*, Nathália R. Honório, Henrique C. Costa

Departamento de Zoologia, Instituto de Ciências Biológicas, Universidade Federal de Juiz de Fora, 36036-900 Juiz de Fora, MG, Brasil.

** Corresponding author: yangarani@gmail.com*

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The phenomenon of snakes capturing prey is rarely witnessed in natural environments. Nevertheless, predation is one of the most important aspects of natural history (Seigel, 1987). *Oxyrhopus petolarius* (Linnaeus, 1758), a Pseudoboini snake species found from Central to South America, inhabits open areas, forests, and anthropized environments (Gaiarsa et al., 2013; Nogueira et al., 2019). It is considered terrestrial, foraging both during the day and night (Gaiarsa et al., 2013), and has a generalist diet, primarily feeding on lizards and small terrestrial mammals (Gaiarsa et al., 2013; Costa et al., 2014; Marques et al., 2019), as well as amphibians (Gaiarsa et al., 2013), bats (França & Lima, 2012), birds (Bernarde & Machado, 2000; Folly et al., 2016) and bird eggs (Gaiarsa et al., 2013). There is one record of egg predation by *O. petolarius* based on a specimen from western Amazonia that "contained in the stomach fragments of small bluish birds' eggs." (Cunha & Nascimento, 1983, p. 17). In this note, we present a record of predation on eggs of *Nymphicus hollandicus* (cockatiel, a non-native bird widely raised as pet in Brazil) by *O. petolarius* in an urban environment.

On a sunny day, January 14th, 2022, at 10:30 am, an adult individual of *Oxyrhopus petolarius digitalis* (Reuss, 1834)—the subspecies of *O. petolarius* occurring in Brazil (Guedes et al., 2023)—was discovered in a residence in Além Paraíba, Minas Gerais, southeastern Brazil (-21.872°, -42.686°). The snake was inside a birdcage at 160 cm above ground, where cockatiels are raised (Fig. 1). The residence is in the Atlantic Forest region, near streams and fragments of native vegetation. The snake had a swelling in the anterior region of the body and was captured by the residents, who placed it in a glass jar. This procedure caused the regurgitation of six intact cockatiel eggs, recognized by the residents.

The eggs were stored in 70 % ethanol and later deposited in the adjunct collection of the reptile collection of Universidade Federal de Juiz de Fora (CHUFJF), where they were numbered, measured (length 24.83–26.53 mm, mean: 25.62 mm; width 18.22–19.92 mm, mean: 19.22 mm), weighed (3.3–5.2 g, mean: 4.4 g), and preserved in 4 % formalin. The snake, with an estimated total length of 900 mm was released on the same day near the same fragment of Atlantic Forest adjacent to the residence.

Among the Pseudoboini species known for the region (Assis et al., 2018), the recorded individual had typical morphological characteristics of *Oxyrhopus p. digitalis*, such as two postoculars, temporals 2+3, eight supralabials, and preocular scale in contact with frontal (Cunha & Nascimento, 1983; Bernardo et al., 2012). This last feature distinguishes this species from the melanistic morph of its sister taxon, *O. clathratus* Duméril, Bibron & Duméril, 1854 (Bernardo et al., 2012), whose diet is considered specialized in small mammals (Alencar et al., 2013).

Our finding represents the second record of bird eggs as a food item for *O. petolarius*. It also confirms the species' ability to forage above ground level, as noted by other authors (Gaiarsa et al., 2013; Quinteros-Muñoz & Aguayo, 2021). Predation on birds and bats by this species is based only on stomach contents, but suggests that *O. petolarius* could be considered semiarboreal (Quinteros-Muñoz & Aguayo, 2021), hunting while the prey are resting (Folly et al., 2016), on the ground (Quinteros-Muñoz & Aguayo, 2021), or—in the case of bats—are clinging to cave walls (França & Lima, 2012).

By adding basic biology data regarding the diet and habits of this species, our contribution also helps to fill gaps in knowledge of species interaction, i.e., Eltonian shortfall (Hortal et al., 2015). Also, the collaboration of the local population has long been recognized as important in the study of snakes (e.g.,

Cunha & Nascimento, 1978; Argôlo, 2004; Durso et al., 2021; Patria et al., 2022), and individuals with greater education tend to react with less violence towards snakes (Moura et al., 2010), as reported here. We commend the attitude of these local residents, who, despite the negative perception that usually falls on snakes (Lima-Santos et al., 2020), restrained the animal without injuring it, and contacted one of the authors (YG).

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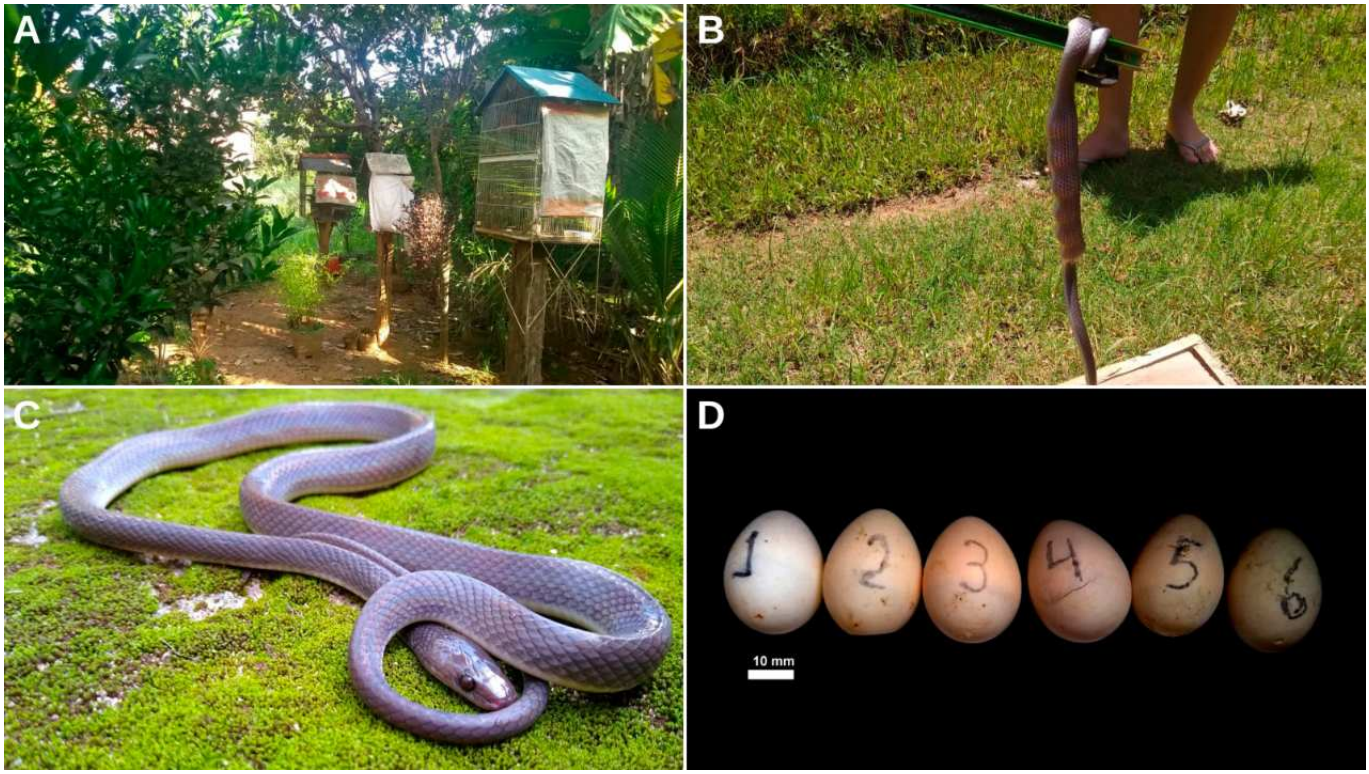


Figure 1. Sequence of events of cockatiel egg predation by *Oxyrhopus petolarius digitalis* witnessed by residents in Além Paraíba, Minas Gerais. A) Birdcages where the cockatiels were located. B) Snake captured by residents, showing swelling due to the ingested eggs. C) Individual released in natural habitat. D) Cockatiel eggs regurgitated by the snake.