

## Predation on the lizard *Pantodactylus parkeri* Ruibal, 1952 (Squamata: Gymnophthalmidae) by *Guira guira* (Aves, Cuculidae) in the Pantanal at Pocone, Western Brazil

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Lizards are prey for a wide variety of animal groups including snakes, other lizards, mammals, birds and invertebrates (Avila-Pires 1995; Martins and Oliveira 1998; Pianka and Vitt 2006). Observations on predation events of lizards in nature are scarce, the most commonly observed include various species of cuckoos, with lizards dangling from their beaks (Pianka and Vitt 2006). In the Neotropical region, several bird species have been recorded as predators of lizards and most of the lizard-eating species are primarily insectivorous (Poulin et al., 2001; Lopes et al., 2005; Coutinho et al., 2014; Sandoval-Conte et al., 2014). Because of their low aerobic capacities relative to bird predators, lizards are expected to be cryptic and to rely on brief movements into inaccessible microhabitats for escape (Greene, 1988). Attributes of lizard-eating species suggest that social feeding can contribute importantly to diet composition and not only to foraging success (Poulin et al., 2001).

The Guira cuckoo, *Guira guira* (Gmelin, 1788) is widely distributed through South America, inhabiting Brazil, Bolivia, Paraguay, Uruguay and Argentina (Sick, 1997). This bird is an opportunistic predator with a carnivorous preference that feeds primarily on arthropods, but also small vertebrates, principally frogs

and lizards (Mesquita, 2009; Repenning et al., 2009; Coutinho et al., 2014; Koski and Merson, 2015; Andrade et al., 2015). The Guira cuckoo is a social species, often seen in small groups in open and semi-open habitats. It presents arboreal habits, but can frequently be seen on the ground (Sick 1997).

Herein, we report the predation of the gymnophthalmid lizard *Pantodactylus parkeri* Ruibal, 1952 by the bird *Guira guira* in the Pantanal at Pocone, Western Brazil. On 07 January 2016 at around 09:00h on the Transpantaneira Highway (16°30'S, 56°42'W), while observing a group of six individuals of *Guira guira*, we observed an individual of *G. guira* perched on a fence post with a small lizard in its beak (Figs. 1 and 2). Observations lasted ca. three minutes until the lizard was ingested.

Based on photographs taken from different angles, it was possible to observe the following characters that



**Figure 1.** Individual of *Guira guira* with lizard *Pantodactylus parkeri* in its beak, in the Pantanal at Pocone, Western Brazil.

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**Figure 2.** Individual of *Guira guira* with lizard *Pantodactylus parkeri* in its beak, in the Pantanal at Pocone, Western Brazil.

can, according to Ruibal (1952) unambiguously identify the lizard as *Pantodactylus parkeri*, a small lizard with elongate body, limbs short but well developed with five fingers on hand and five toes on feet, head short, eyelids present, presence of a postmental followed by four pairs of mentals, dorsal scales elongated and keeled (just slightly differentiated from lateral scales) and with ventral scales smooth, large and rectangular. The lizard observed also had a color pattern that included white blotches on the labial region followed by a white stripe that extended along the side of the body; a faint whitish dorsolateral stripe from the eye along the body, and a series of lateral black and white ocelli between the stripes. Furthermore, a black mid-dorsal stripe was present, as well as reddish blotches along the ventrolateral region (common in adult reproductive males according to, for example, Avila Pires (1995) and Barreto *et al.*, (2012).

This is the first record of *Guira guira* (Cuculiformes: Cuculidae) preying on a gymnophthalmid lizard, although other lizards such as *Hemidactylus mabouia*, *Iguana iguana*, *Ophiodon vertebralis* and *Tropidurus torquatus* have been recorded (Coutinho *et al.*, 2014; Koski and Merçon, 2015; Andrade *et al.*, 2015). *Pantodactylus parkeri* is a heliophilic, open-habitat dwelling lizard that occurs preferentially in savannah habitats in northwestern Brazil, lowland Bolivia and adjacent Peru, but little is known about its natural history (Avila-Pires, 1995; Barreto *et al.*, 2012). Therefore, our record expands the knowledge on natural history of the lizard *P. parkeri* with the identification of one of

its natural predators, and adds information about the dietary diversity of *Guira guira*.

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