Predation of *Phyllopezus pollicaris* by the common marmoset *Callithrix jacchus* in the Caatinga scrub of northeastern Brazil

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The Brazilian gecko, *Phyllopezus pollicaris* (Spix, 1825), is one of the largest phyllodactyliid species, and typical of the northeastern region, where it is associated with crevices in large rocky outcrops (Vanzolini et al., 1980). The species may reach 9 cm in rostrum-cloaca length and is characterized by its translucent skin marked with small granules and larger dorsal tubercles (Vanzolini et al., 1980; Alves et al., 2012). This lizard is typically nocturnal (Recorder et al., 2012), and is a sit-and-wait forager that depends on visual cues to detect potential prey, which mainly include ants, termites, and beetles (Vitt, 1995; Silva, 2008). In the present study, we report the predation of *Phyllopezus pollicaris* by a common marmoset at the Grota do Angico Natural Monument, GANM (-9.683º, -38.516º; DATUM = WGS84; 180 m a.s.l.) between Poço Redondo and Canindé do São Francisco, Sergipe, Brazil.

On 9th November 2012 at around 13:36 h, we were observing a female marmoset when it perceived the presence of the gecko, which was moving up the trunk at a distance of 1.2 m from the monkey. The marmoset watched the lizard for approximately three minutes before pouncing and capturing it in a single movement. The marmoset grasped the gecko by the trunk and returned to its previous resting site. The prey was consumed head-first (Figure 1a), in typical marmoset fashion, with part of the head (possibly the skull) subsequently being discarded. The monkey then pulled out the lizard’s viscera using its mouth and discarded them (Figure 1b). Having ingested approximately half of the gecko (Figure 1c), the marmoset dropped the remains, which fell to the ground, and then continued resting as before. As an adult *P. pollicaris* weighs approximately 10 g (Vitt, 1986), the marmoset may have ingested around 5 g of prey, which would represent ~1.5% of the body weight of an adult *C. jacchus* (Stevenson and Rylands, 1988; Clarke, 1994).

The predation of lizards is not easily observed in the wild (Malkmus, 2000; Aguiar and Di-Bernardo, 2004). The principal predators of these reptiles are snakes (Rocha and Vrcibradic, 1998; Silva and Araújo, 2008), other lizards (Rocha and Vrcibradic, 1998; Araújo, 1991), mammals (Silva and Araújo, 2008), and birds (Gallup, 1973; Constantini et al., 2007). However, predator-prey interactions between primates and lizards are poorly documented, although there are some records for *C. jacchus* (Digby and Barreto, 1998) and other marmosets (Ferrari, 1988; Passamani and Rylands, 2000), as well

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as other platyrrhine monkeys (Freese and Oppenheimer, 1981). In few cases, however, has the prey species been identified (Canale et al., 2013; Rodrigues et al., 2013).

The Caatinga scrublands is a region that dramatically modifies its scenery throughout the year though provides just few microhabitats that can be used as refuge for lizards (Denno et al., 2005; Santos et al., 2011). Therefore, predation events are more likely to occur, and consequently it’s observation, being able to improve the understanding of the predator-prey relationship and it’s ecological process.

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References


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