

A caecilian (*Siphonops* sp.) as prey of a dwarf caiman *Paleosuchus palpebrosus*: an observation from Central Brazil

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The dwarf caiman *Paleosuchus palpebrosus* (Cuvier, 1807) is the smallest extant species of crocodylian (Magnusson and Campos, 2010), and occurs in Brazil, Bolivia, Peru, Colombia, Ecuador, Venezuela, French Guiana, and Surinam (Campos et al., 2010). Despite this wide geographic distribution, knowledge of *P. palpebrosus* ecology and natural history remain scarce (Magnusson and Campos, 2010). Dwarf caiman have a generalist diet, feeding on both invertebrates (e.g. molluscs, insects, spiders, crustaceans) and vertebrates (e.g. fish, small mammals, birds, snakes and frogs) (Magnusson et al., 1987; Campos et al., 1995; Botero-Arias, 2007; Dutra-Araújo et al., 2017). Herein we report a novel predation on a caecilian by a dwarf caiman.

The observation took place at 19:00 on 28 March 2015 near Serranópolis Municipality in southwestern Goiás State, central Brazil (17.97083333°S 52.18555556°W, Datum = WGS84; elevation ca. 800 m) (Fig. 1). The site is a pond with marsh vegetation surrounded by pasture and monocultures. Over ~25 min we observed a juvenile dwarf caiman (~75 cm total length nose to tail)

capture, dominate, and ingest a caecilian (~30 cm total length). Post-ingestion, the caiman remained at the water surface for a few minutes and then submerged. Although caecilian skin secretions may be toxic (Sawaya, 1940, Schwartz et al., 1998), during our observations the caiman showed no signs of adverse reaction.

From our recording of the observation (which includes a short video, available to view at <https://figshare.com/s/7961fce0e91c7381db5c>), we later identified the caecilian as a member of the genus *Siphonops* due to the presence of white/cream coloured annular grooves that completely surround the body, and a blue-black/slate body colouration (Taylor, 1968). Only two *Siphonops* species (*S. paulensis* and *S. annulatus*) occur in central Brazil, both being semi-fossorial with a wide distribution (Miranda et al., 2013; Santana et al., 2015). To our knowledge, only one previous record of predation by a caiman (*P. trigonatus* Schneider 1801) on a caecilian (*Caecilia marculsi* Wake, 1984) has been reported (Melo-Sampaio et al., 2013). Our observation is therefore novel in it being the first to detail a *Siphonops* caecilian as a prey item. Direct observations of caecilians as prey are infrequently recorded; our report is therefore of interest to herpetologists as well as tropical biologists and ecologists, and also of note in understanding the role of caecilians in food webs and trophic interactions.

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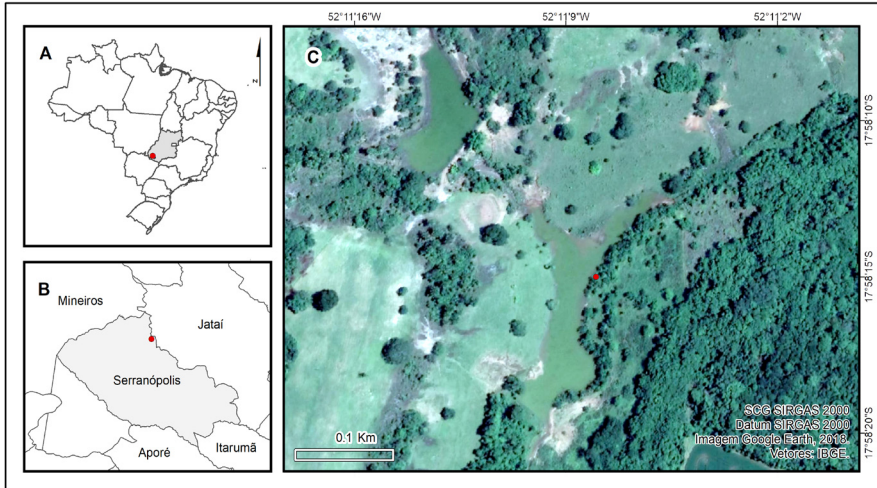


Figure 1. Geographic location of the study area in (A) Brazil; (B) the municipality of Serranópolis, Goiás state (B), and the observation site (C).



Figure 2. Predation of a caecilian (*Siphonops* spp.) by a dwarf caiman (*Paleosuchus palpebrosus*) from video stills. (A) Capture of the prey; (B, C) manipulation and ingestion; (D) Resting state after ingestion. Images by Seixas R. Oliveira.

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