

Predation of Azara's agouti (*Dasyprocta azarae*) by the broad-snouted caiman (*Caiman latirostris*) in Southern Brazil

Predação de cutia (Dasyprocta azarae) por jacaré-de-papo-amarelo (Caiman latirostris) no Sul do Brasil

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ABSTRACT

The broad-snouted caiman (*Caiman latirostris*) is a widespread South American crocodilian that inhabits floodplains, mangroves, lakes, and rivers, including both wild and anthropogenic regions. The species is considered a generalist predator, feeding on both invertebrates and vertebrates. Despite that, records of mammals on the species' diet are particularly scarce. Therefore, we report here, for the first time, the predation of Azara's agouti (*Dasyprocta azarae*) (Mammalia; Rodentia) by *C. latirostris*. The predation occurred in the municipality of Florianópolis, Santa Catarina Island, Santa Catarina state, Southern Brazil. The present report highlights the ecological role of crocodilians as predators of medium-sized rodents in South America.

Keywords: Alligatoridae, Crocodylia, Dasyproctidae, diet, Rodentia.

RESUMO

O jacaré-de-papo-amarelo (*Caiman latirostris*), um crocodiliano sul-americano amplamente distribuído, habita planícies aluviais, manguezais, lagos e rios, incluindo regiões preservadas e antropogênicas. A espécie é considerada um predador generalista, alimentando-se tanto de invertebrados quanto de vertebrados. Apesar disso, registros de mamíferos na dieta da espécie são particularmente escassos. Portanto, no presente trabalho, é relatada pela primeira vez a predação da cutia (*Dasyprocta azarae*) (Mammalia; Rodentia) por *C. latirostris*. A predação ocorreu no município de Florianópolis, Ilha de Santa Catarina, estado de Santa Catarina, Sul do Brasil. Destaca-se o potencial papel ecológico dos crocodilianos como predadores de roedores de médio porte na América do Sul.

Palavras-chave: Alligatoridae, Crocodylia, Dasyproctidae, dieta, Rodentia.

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INTRODUCTION

The broad-snouted caiman (*Caiman latirostris* (Daudin, 1802)) is a widespread South American crocodilian, distributed in Argentina, Uruguay, Paraguay, Bolivia and Brazil, the last country encompassing approximately 70% of the species' distribution (BARRETO-LIMA *et al.*, 2021; ZUCOLOTO *et al.*, 2021). In such a range, the species inhabits floodplains, mangroves, lakes, and rivers, including both wild and anthropogenic regions (COUTINHO *et al.*, 2013). The wide range, environmental plasticity, and current population stability have led IUCN to classify the species as "least concern" (IUCN, 2026).

Regarding diet, *C. latirostris* is considered a generalist predator like other crocodilians (MELO, 2002; BORTEIRO *et al.*, 2009). While juveniles tend to feed mostly on invertebrates (e.g., insects) and small vertebrates (e.g., fishes) (DIEFENBACH, 1988; MELO, 2002; FREITAS-FILHO, 2008), adults have

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a fairly diverse diet, feeding on insects, arachnids, crustaceans, molluscs (e.g., *Pomacea*), fishes, amphibians, reptiles (snakes and turtles), birds and mammals (BRAZAITIS, 1973; DIEFENBACH, 1979). Despite such a generalist diet, records of mammals on the diet of *C. latirostris* are particularly scarce, with only few observations related to the predation of *Myocastor coypus* (MELO, 2002), *Rattus* sp. (FREITAS-FILHO, 2008) and other non-identified mammals (BORTEIRO, 2009). Therefore, the goal of the present study is to report the first observation of predation of Azara's agouti (*Dasyprocta azarae* (Lichtenstein, 1923)) (Mammalia: Rodentia) by the broad-snouted caiman.

MATERIAL AND METHODS

The observations reported here were obtained sporadically between February 16th and 19th, 2026, in the municipality of Florianópolis, Santa Catarina state, southern Brazil. We used a binocular (10x42) and a digital camera (Nikon P700) for naturalistic observations and documentation, respectively.

RESULTS

On February 16th, 2026, at 16:20 h, we found an adult *C. latirostris* preying on an adult *D. azarae* in an urban river in the municipality of Florianópolis, Santa Catarina Island, Santa Catarina state, Southern Brazil (coordinates 27°34'42.81"S, 48°30'29.68"W; 12 m altitude; figure 1). The river crosses an urban area, surrounds the Botanical Garden of Florianópolis (an urban green area) and flows into the mangroves of Parque Natural Municipal do Manguezal do Itacorubi – Fritz Müller, where there is a population of broad-snouted caiman. The observation took place in the section of the river that surrounds the Botanical Garden. The broad-snouted caiman was found with the Azara's agouti in its mouth, and the presence of fresh blood in the agouti's ear and the absence of signs of decomposition on the agouti suggest active predation by the caiman. On the mornings of February 17th and 18th, the agouti's body was found about 100 meters downstream, while the caiman remained beside it, as if guarding its prey. On February 18th, the agouti's body already showed signs of decomposition, was swollen and covered by flies. On the morning of February 19th, both the agouti and the caiman disappeared from the place, and it was not possible to confirm whether the caiman definitely ate its prey.



Figure 1 – Broad-snouted caiman (*Caiman latirostris*) preying on Azara's agouti (*Dasyprocta azarae*) in the municipality of Florianópolis, Santa Catarina state, southern Brazil. Source: primary.

DISCUSSION

Azara's agouti is a neotropical rodent species that inhabits forest areas (e.g., Atlantic and Amazonian Forests), but also savannas (e.g., *cerrado*), and is frequently associated to riparian zones (OLIVEIRA & BONVICINO, 2006). On Santa Catarina Island, the species is particularly common, occupying almost all forest protected areas (LIMA-SILVA *et al.*, 2024), but also occurring in peri-urban habitats and urban green parks, such as Córrego Grande Ecological Park, Córrego Grande Linear Park, and the Botanical Garden (authors' *pers. observ.*). Therefore, the broad-snouted caiman and Azara's agouti have little habitat overlap, and the predation event would only be possible in transitional zones between forested areas occupied by agoutis and the wetlands used by caimans.

Unfortunately, it was not possible to confirm whether the Broad-snouted Caiman ate its prey. It is possible that the agouti's body was too large to be immediately ingested by the caiman, so the caiman moved and guarded it for later consumption. Independently on the reason, the present report reinforces the ecological role of *C. latirostris* as a predator of small/medium-sized rodents in the neotropics, since all mammals reported until now as its preys were rodents (see MELO, 2002; FREITAS-FILHO, 2008). Additional studies on the diet of *C. latirostris* are still needed to improve our knowledge of the relative importance of mammals in the species' diet.

CONCLUSION

The present study reported for the first time the predation of *Dasyprocta azarae* by *Caiman latirostris*, highlighting the ecological role of crocodilians as predators of medium-sized rodents in South America.

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