

Predation on the lizard *Polychrus acutirostris* (Squamata, Polychrotidae) by the curl-crested jay *Cyanocorax cristatellus* (Aves, Corvidae) in the Cerrado of Central Brazil

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Resumo

Predação do lagarto *Polychrus acutirostris* (Squamata, Polychrotidae) pela gralha-do-campo *Cyanocorax cristatellus* (Aves, Corvidae) no Cerrado do Brasil Central. Eventos de predação em lagartos são difíceis de observar na natureza. Aqui é apresentado o primeiro evento de predação do lagarto *Polychrus acutirostris* pela gralha-do-campo *Cyanocorax cristatellus* em uma área de cerrado do Parque Nacional da Chapada dos Veadeiros – GO, aumentando o conhecimento dos hábitos alimentares desta espécie de ave.

Unitermos: *Cyanocorax cristatellus*, *Polychrus acutirostris*, predação

Abstract

Predation on lizards is difficult to observe in nature. Here, we report for the first time an act of predation on the lizard *Polychrus acutirostris* by the Curl-crested Jay *Cyanocorax cristatellus* in a Cerrado area of the Chapada dos Veadeiros National Park, central Brazil, thus increasing knowledge of the diet of this bird species.

Key words: *Cyanocorax cristatellus*, *Polychrus acutirostris*, predation

Lizards are recognized as bird prey in Neotropical habitats (Rocha and Vrcibradic, 1998; Pianka and Vitt, 2003). Generally, birds that eat lizards are large non-passerine species such as raptors, owls, seriemas and motmots, but such predation by Passeriforme species is very infrequent (del Hoyo et al., 1994; 1999; Sick, 1997). The Curl-crested Jay (*Cyanocorax cristatellus*) is a large Oscine passerine (mean adult size = 34.5cm) distributed in open areas of Brazil, Paraguay and Bolivia,

and it is considered to be endemic to the Cerrado biome (Ridgely and Tudor, 1989; Sick, 1997). The diet of this species includes insects (termites, orthopterans and wasp nests), fruits and nectar (Henriques and Palma, 1998; Amaral and Macedo, 2003). Here, we report the first observation of a Curl-crested Jay preying on the lizard *Polychrus acutirostris* (Polychrotidae) in the Cerrado of central Brazil.

The observation occurred on 25 August 2006 at 11:20h during field work on a canyon waterfalls of the Chapada dos Veadeiros National Park (14°09'S, 47°48'W; elev. 1092m), municipality of Alto Paraíso, state of Goiás. We witnessed a single Curl-crested Jay jumping between the branches of a Cerrado *sensu-stricto* tree carrying a *Polychrus acutirostris* (snout-vent length = 130mm, approximately) in its bill (Figure 1A). The lizard was identified visually due to its characteristic morphology and coloration. Afterwards, the jay flew up to a higher branch and held the lizard on it with its the claws (Figure 1B). The jay pecked several times exclusively on the lizard's head and then proceeded to swallow it by the injured head, taking up to half an hour to ingest the lizard entirely.

Polychrus acutirostris is a medium-sized (<150mm SVL) arboreal lizard that inhabits open formations of South America, east of the Andes (Ávila-Pires, 1995). This lizard exhibits some tactics to escape predation. To avoid detection it can remain motionless like a branch, and can change its dorsal pigmentation to match the background. When detected, it shows a threatening behaviour, filling the lungs and expanding the body, and mostly it opens its mouth to show the black coloration inside (Vanzolini et al., 1980; Vitt and Lacher, 1981). Although some snakes (*Chironius multiventris*, *Rhinobothrium lentiginosum*, and *Siphlophis cervinus*) have been observed preying on *Polychrus* species (Martins and Oliveira, 1999), there is no record of bird predation for this genus. The predation behavior presented by the jay, pecking the lizard's head first, indicates that this bird recognizes *P. acutirostris* as a dangerous species. This behavior is commonly used by birds that prey on venomous snakes such as vipers and rattlesnakes (Greene, 1997).

The family Corvidae is recognized in the literature as comprising mainly omnivorous species, feeding on invertebrates, fruits, reptiles, amphibians, small birds and mammals, and carrion, as well as eggs (Goodwin, 1986; Zusi, 1987). The diet of another two Brazilian jay species, the White-naiped Jay *Cyanocorax cyanopogon* and the Azure Jay *C. caeruleus*, indicates that the food items range from vegetable material and invertebrates to bird eggs and young (Reinert and Bornschein, 1998;

Caten et al., 2007), but no lizards or reptiles have been reported. This work reports a newly-discovered food item for *Cyanocorax* species.



FIGURE 1: A – *Cyanocorax cristatellus* carrying a *Polychrus acutirostris* in its bill. B – *Cyanocorax cristatellus* with the lizard in its claws.

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