

SHORT COMMUNICATIONS

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A NOVEL HOST OF THE SHINY COWBIRD (*MOLOTHRUS BONARIENSIS*): THE NEAR-THREATENED PALE-THROATED SERRA-FINCH (*EMBERNAGRA LONGICAUDA*)

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Um novo hospedeiro do parasita de ninho Vira-bosta (*Molothrus bonariensis*): o quase-ameaçado Rabo-mole-da-serra (*Embernagra longicauda*).

Key words: Pale-throated Serra-Finch, *Embernagra longicauda*, Shiny Cowbird, *Molothrus bonariensis*, Brazil, breeding biology, brood parasitism, cowbirds, fledgling, interspecific nest parasitism.

INTRODUCTION

The Pale-throated Serra-Finch (*Embernagra longicauda*) is a poorly-known bird endemic to the mountain tops of eastern Brazil, being nearly confined to the Espinhaço Range in the states of Minas Gerais and Bahia (Vasconcelos 2008). It is listed as Near Threatened by BirdLife International (2012) due to habitat loss within its restricted and naturally fragmented distribution range.

The natural history of the Pale-throated Serra-Finch is still poorly known. The most detailed study of the species is about its territory size and habitat selection (Freitas & Rodrigues 2012). Recent observations have also been made on the species' diet, behavior, and other natural history aspects (Freitas & Rodrigues 2008, 2011; Hoffmann *et al.* 2009). The reproductive biology of the Pale-throated

Serra-Finch - breeding season, nest, egg, nestling and juvenile descriptions - are generally known (Mattos & Sick 1985, Vasconcelos & Silva 2003, Freitas & Rodrigues 2008, Freitas *et al.* 2009, Hoffmann *et al.* 2009, Rodrigues *et al.* 2009). More than 10 breeding attempts (nests of family groups) can be gathered from those studies; nevertheless, none have mentioned brood parasitism in this species. Here I document the Pale-throated Serra-Finch as an effective host of the Shiny Cowbird (*Molothrus bonariensis*), an obligate brood parasite.

METHODS

The observation was conducted opportunistically in 'Alto do Palácio' (19°15'37"S, 43°31'57"W; c. 1360 m a.s.l.), a region in the northern part of Serra do Cipó National Park, municipality of Morro do Pilar, state of Minas

Gerais, southeastern Brazil. Alto do Palácio lies near the top in eastern slope of the Serra do Cipó mountain, in the southern portion of the Espinhaço Range (see Rodrigues *et al.* 2011 and Freitas & Rodrigues 2012 for a detailed description of the area).

RESULTS AND DISCUSSION

On 18 January 2012, I found a Shiny Cowbird fledgling perched in a ‘candeia’ tree (*Eremanthus* sp., Asteraceae) growing in the sparse vegetation of campos rupestres (rocky grasslands) habitat. The parasite fledgling was in a dull blackish plumage, matching the ‘*melanogyna*’ morph (Fraga 2011). After a few minutes, an adult Pale-throated Serra-Finch approached and fed the parasite (Fig. 1). The finch foraged in the denser cover of low bushes surrounding the area, while the cowbird stayed for most time perched in visible higher bushes or small trees, sometimes following the host. I observed the birds by about 40 min, during which no other adult Pale-throated Serra-Finch nor fledgling was detected.

January is the end of the breeding season of the Pale-throated Serra-Finch, when fledglings are still observed (Freitas & Rodrigues 2008, Freitas *et al.* 2009, Hoffmann *et al.* 2009). The Shiny Cowbird is recorded at Serra do Cipó highlands mostly from August to December (Costa & Rodrigues 2012), which overlaps the Pale-throated Serra-Finch’s breeding season.

The Pale-throated Serra-Finch has not been listed among the target host species of the Shiny Cowbird (Lowther 2012), although its status as a host of this parasitic bird was previously suspected by Collar *et al.* (1992). The observation reported here strongly suggests that the species is a true or effective host, i.e., able to rear parasitic young until independence (Lowther 2012). The congeneric Great Serra-Finch (*Embernagra platensis*)

and the phylogenetically related Wedge-tailed Grass-Finch (*Emberizoides herbicola*) have also been reported as victims (*sensu* Lowther 2012) of the Shiny Cowbird in Paraguay and Argentina (Friedmann 1931, Di Giacomo 2005, Lowther 2012).

A recent compilation listed more than 260 species as victims of the Shiny Cowbird with 97 species known to be true hosts along the range of this obligate brood parasite (Lowther 2012).

In Brazil, there has been limited information about the hosts of the Shiny Cowbird (see Sick 1958, 1997; Cavalcanti & Pimentel 1988). Therefore, to help our understanding, it is essential that brood parasitism be studied in Brazil and that even simple observations reporting new hosts be properly published (e.g., Maurício 2011).

Although based on a single observation, this report indicates that brood parasitism is one potential threat for the Pale-throated Serra-Finch. In Serra do Cipó highlands, another bird also endemic to the mountain tops and near-threatened, the Cipo Canastero (*Asthenes luizgae*), is a recognized host of Shiny Cowbird (Gomes & Rodrigues 2010) which is intensely parasitized also by the ‘*melanogyna*’ morph of *M. bonariensis* (Costa & Freitas in prep.; see Costa 2011). This is the only information on brood parasitism for the region. In ‘Alto do Palácio,’ where the Pale-throated Serra-Finch is common (Rodrigues *et al.* 2011), 17 mated pairs were studied for one year, but only one nest and few family groups were observed (Freitas & Rodrigues 2008, 2012; Freitas *et al.* 2009, Rodrigues *et al.* 2009). In Serra do Rola Moça State Park, municipality of Nova Lima, Minas Gerais, two of three nests of the Pale-throated Serra-Finch were successful (Hoffmann *et al.* 2009). The paucity of recorded breeding attempts prevents additional inference on breeding success or parasitism frequency of this species.



FIG. 1. Shiny Cowbird (*Molothrus bonariensis*) fledgling being fed by an adult Pale-throated Serra-Finch (*Embernagra longicauda*), at Serra do Cipó National Park, southeastern Brazil.

Further studies could discover if the Pale-throated Serra-Finch is a casual host or if it is regularly parasitized, and determine the effects of parasitism on the population dynamics of this species in order to improve the conservation needs of this species.

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