

NOTAS DE CAMPO/FIELD NOTES

Depredation of a Shiny Cowbird *Molothrus bonariensis* by a common boa (*Boa constrictor*) in Manabí, EcuadorMartín Carrera^{1,2,*}, Claudia Samuelsson¹, Cornelio Williams¹¹ Mayu Guajalito, Bosque Protector Río Guajalito, Km 59 vía Quito-Chiriboga-Santo Domingo, Ecuador.² Department of Biology, University of Antwerp, Universiteitsplein 1, 2610 Wilrijk, Belgium.*Author for correspondence: martin-cl@hotmail.com

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Formerly native to natural grasslands of South America and several islands in the Lesser Antilles, the Shiny Cowbird *Molothrus bonariensis* has gradually expanded its distribution to Central and North America mainly due to land use changes (Crespo-Pérez *et al.*, 2016). This species is common in semi open areas associated with cattle, where is a brood parasite of 232 species of birds reported to date (Lowther, 2018). As such, it is a serious concern to globally threatened species like Pale-headed Brushfinch *Atlapetes pallidiceps*, a species endemic to Ecuador (Oppel *et al.*, 2004). The breeding biology of *M. bonariensis* has been extensively studied, but ecological interactions, including its role as prey, are poorly known. Recorded predators of adult *M. bonariensis* include Baron's Green Racer (*Philodryas baroni*), different species of avian raptors, presumably rice mice (*Oryzomys* spp.), whereas adult *M. bonariensis* has been reported preying upon nestlings (Wiley & Wiley, 1980; Salvador, 2016).

The Common Boa (*Boa constrictor*) is a polytypic species that occurs from Mexico to Argentina in a wide variety of habitats (Card *et al.*, 2016). It is a generalist predator that feeds on a broad spectrum of small and medium-sized vertebrates (Reinert *et al.*, 2021). Avian preys include Eared Dove *Zenaida auriculata*, Tropical Mockingbird *Mimus gilvus*, and Bananaquit *Coereba flaveola* (Martínez-Morales & Cuarón, 1999; Quick *et al.*, 2005). There is one record of *M. bonariensis* inside the stomach contents of an invasive individual of *B. constrictor* in Aruba (Reinert *et al.*, 2021), but there are no records of *B. constrictor* preying on *M. bonariensis* across the natural distribution ranges of both species. The size of prey consumed by *B. constrictor* is positively correlated with its body length; as they grow up, they consume larger prey (Reinert *et al.*, 2021).

In this note, we report a depredation event by *B. constrictor* on an adult male *M. bonariensis* observed in Cañaveral (0.239442, -80.03358), northern Manabí province, Ecuador. The area is dominated by shrimp farms, coconut palm fields, and grasslands for cattle. On 20 June 2021, after a light rain, Gregorio Carrera (local birdwatcher) was observing a *M. bonariensis* flock in the ground near a small building inside a coconut palm field, when he saw a *B. constrictor* attacking a male *M. bonariensis*. The bird was identified as *M. bonariensis* by its size and plumage tone, as compared to the superficially similar Scrub Blackbird *Dives waczewiczi*, which is often found with *M. bonariensis*. After the initial observation, we placed a smartphone Samsung S5 Mini in a tripod inside the building, 2 m from the boa, to record the depredation event. The boa was not disturbed during the feeding process because the tripod was set behind a one-way window glass that allowed us to see the boa, but the boa couldn't see the observers.

After the initial sighting at 10h05, we started recording at 10h15, when the boa was coiled around the cowbird and was already swallowing the bird's head (Fig. 1). From 10h15–11h35, the boa continued contracting and slowly ingesting the bird, reaching half of the body. At 11h35–11h45, the boa almost completely ingested the bird, excepting its legs. From 11h45–11h52 it swallowed the bird entirely, and after a short period of inactivity, it started to move at 11h57.

We translocated the boa in a plastic crate to a wetland 700 m from the palm field, where boas are regularly seen, 10 min after the boa started to move, in order to avoid regurgitation by stress. In Cañaveral area, boas are killed as soon as they are spotted by the palm field workers when they are close to farm animals, houses and inside the palm field. Before releasing the boa, we measured the snout-vent length (SVL) in a vertical and straight position with a 5-m Truper flexometer. The SVL of 50.5 cm suggested that the individual had not reached sexual maturity (Reed & Rodda, 2009). Unfortunately, several individuals of *B. constrictor* in the vicinity of Cañaveral do not reach sexual maturity because people kill adults and the more abundant juveniles (pers. observ.). According to local villagers, most juveniles are easy to spot mainly in pastures or gardens, where flocks of *M. bonariensis* are common. Due to their size, juveniles of *B. constrictor* could enter these areas to ambush *M. bonariensis* individuals due to their high availability in these habitats, suggesting that *B. constrictor* could regulate the populations of *M. bonariensis*.

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Figure 1: *Boa constrictor* contracting and swallowing an adult male Shiny Cowbird *Molothrus bonariensis* from its head; Cañaveral, Manabí province, 20 June 2021 (Martín Carrera).