

New records of the Forbes's Blackbird *Curaeus forbesi* (Sclater, 1886) in the state of Minas Gerais, with comments on its conservation

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RESUMO: Novos registros do anumará *Curaeus forbesi* (Sclater, 1886) no estado de Minas Gerais, com comentários sobre sua conservação. O anumará *Curaeus forbesi*, espécie ameaçada da Mata Atlântica, tem sua ocorrência documentada em apenas duas localidades do sudeste do Brasil. Três novas localidades de ocorrência da espécie na bacia do Rio Doce são apresentadas, resultando num aumento significativo da distribuição conhecida da espécie em sua porção meridional. Também são discutidos registros anteriores não documentados da espécie e apresentados comentários sobre sua conservação no estado de Minas Gerais.

PALAVRAS-CHAVE: *Curaeus forbesi*, Mata Atlântica, bacia do Rio Doce, Minas Gerais.

ABSTRACT: New records of the Forbes's Blackbird *Curaeus forbesi* (Sclater, 1886) in the state of Minas Gerais, with comments on its conservation. The Forbes's Blackbird *Curaeus forbesi* (Sclater, 1886), an endangered species endemic to the Atlantic Forest, has its occurrence documented from only two localities of southeastern Brazil. Here we report on three new localities in the Rio Doce basin, state of Minas Gerais, where *C. forbesi* has been documented, resulting in a significant extension of the known species' distribution in its southern part. We also discuss previous undocumented records of *C. forbesi* and comment on its conservation status in the state of Minas Gerais.

KEY-WORDS: *Curaeus forbesi*, Atlantic Forest, Doce River basin, Minas Gerais.

The Forbes's Blackbird *Curaeus forbesi* is an Atlantic Forest endemic (Parker *et al.* 1996) and globally endangered species, which inhabits forests, forest edges, and adjacent marshy areas (Jaramillo and Burke 1999, BirdLife International 2011). It is considered vulnerable in Brazil (Silveira and Straube 2008) and critically endangered in Minas Gerais (Copam 2010), the only state in the country known to harbor southeastern populations of this species, at least 1.400 km away from those of northeastern Brazil (BirdLife International 2011).

In Minas Gerais, the Forbes's Blackbird occurrence is documented from only two localities: the Rio Doce State Park (Willis and Oniki 1991, Sick 1997), where two specimens were collected by G. T. Mattos and E. Dente in 1978 (currently held at the Departamento de Zoologia da Universidade Federal de Minas Gerais, Belo Horizonte under accession numbers DZUFMG 186 and DZUFMG 187); and from the municipality of Raul Soares, where historical specimens have also been

collected and are now held at the Los Angeles County Museum (Short and Parks 1979). Additionally, there are records from the municipality of Pirapora, Cavernas do Peruaçu National Park (Vasconcelos *et al.* 2006), and one (unconfirmed) from the middle São Francisco Valley, municipality of Januária (Willis and Oniki 1991). The latter two records are probably erroneous and lack proper documentation, as we discuss below.

METHODS

Here we present information on three new documented records of the Forbes's Blackbird *Curaeus forbesi* in the Atlantic Forest of southeastern Brazil, two of them located in the Rio Doce upper basin and one in the Rio Manhuaçu basin, a tributary of the Rio Doce (Figure 1). Vocalizations were recorded with Sony PCM-M10 digital tape-recorder and Sony ECM-674 shotgun microphone.

These recordings have been deposited at Arquivo Sonoro Prof. Elias Coelho (ASEC), Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil. Whenever possible, specimens were also photographed, and these photographs were deposited at the WikiAves website (www.wikiaves.com.br).

RESULTS

The areas and the context of our documented records of *Curaeus forbesi* in the state of Minas Gerais are described below:

Sítio São Pedro – Martins Soares municipality

Daniel Esser has been observing Forbes's Blackbirds at Sítio São Pedro (20°17'13"S, 41°52'39"W – 730 m; Figure 1) for over 20 years, but only recently, with the aid of photographs and tape-recordings, the birds could be safely identified. Ever since, notes on their behavior and more detailed observations were made. They are usually seen in small flocks of six to eight birds in a pasture next to a small stream, sometimes together with individuals of *G. chopi*. The vegetation consists mostly of grasses and cattails (*Typha* sp.) close to the stream. In this area, there is also a small house, an orchard, coffee-plantations, and a small forest fragment at the hilltop. Birds are usually seen foraging for small insects, but have already been sighted eating bananas next to the house (WA227494 – www.wikiaves.com/227494). This small group seems to be resident, since DE has observed them in every visit to the location on the following months: January 2009, February, September and October 2010, and January 2011. On the latter occasion, the birds were constantly flying in and around mango trees and one individual was photographed carrying a stick in its beak (WA567202 – www.wikiaves.com/567202), suggesting that it might be nesting in the area. Studer and Vieliard (1988) found 38 out of 46 nests of the species placed in mango trees at Quebrangulo, Alagoas, in northeastern Brazil.

Rio Corrente Grande – Virginópolis municipality

A single individual was sighted and tape-recorded by L. G. M. on 17 January 2011 on the right bank of the Rio Corrente Grande (18°53'43"S, 42°42'48"W – 650 m; Figure 1). This bird was very active, constantly swinging its tail and uttering *check-check* calls (ASEC 16383; Willis and Oniki 1991, Jaramillo and Burke 1999) whilst flying in scrub vegetation. On a subsequent visit to the area, on 4 August 2011, L. G. M. observed and tape-recorded a group of three birds in a small farm on the left

bank of the Rio Corrente Grande. The birds responded to playback and on several occasions performed a curious display, whereby a different call (ASEC 17093) was uttered while bending their wings and throwing back their heads. This site is close to two patches of well-preserved semideciduous forest of ca. 25 ha. Overall, the area still presents forest remnants with limited connectivity provided by forested mountaintops and riverine thickets. Not far from this location, on 3 August 2011, L. G. M., A. P. and R. M. observed and photographed (WA567297 – www.wikiaves.com/567297) a flock of six individuals in a small farm close to the left bank of the Rio Corrente Grande (18°53'29"S; 42°41'23"W – 660 m). This area had a small sugarcane plantation, and an orchard with some mango trees. The birds were very active, constantly swinging their tails, uttering calls, and performing the display described above.

Fazenda Estiva – Dom Joaquim municipality

A couple of Forbes's Blackbirds was photographed (WA567296 – www.wikiaves.com/567296) and tape-recorded by L. G. M. and E. C. D. on 23 January 2011 at Fazenda Estiva (18°53'56"S, 43°19'11"W – 600 m; Figure 1). This farm comprises almost 600 ha mainly of semideciduous forest fragments interspersed by abandoned pastures, and is currently under the process of becoming a private conservation unity. The record took place in an extensive marsh surrounded by a well-preserved semideciduous forest in the lowest part of the farm. The birds showed similar behavior to the ones recorded in the Virginópolis municipality, constantly swinging their tails and uttering *check-check* calls, responding promptly to playback. They were observed feeding on the seeds of *Urochloa maxima* (Poaceae) and gapping for small insects in the internodes of the same plant. This sighting lasted long enough for us to observe the typical characteristics (see description in Jaramillo and Burke 1999) such as bill shape, tail, and plumage of the species, and thus safely distinguish it from *G. chopi*.

DISCUSSION

Willis (2003) pointed out to the critical need of double-checking bird records in the Neotropics to avoid perpetuating errors. In fact, when dealing with rare species, material evidence, such as photographs, video, and audio recordings, are adequate and necessary (see Mckelvey *et al.* 2008). As we discussed above, the morphological traits of *C. forbesi* are hard to distinguish, especially when seen from a great distance. This can lead one to confuse it with the commoner Chopi Blackbird *Gnorimopsar chopi*, or the Scarlet-throated Tanager *Compsothraupis loricata*, a

peculiar tanager common in northern Minas Gerais (Vasconcelos and D'Angelo Neto 2007, S. D'Angelo Neto, *pers. comm.*). According to Jaramillo and Burke (1999): "[...] the most delicate identification problem lies in differentiating Chopi Blackbird from the very rare and sympatric Forbes's Blackbird [...]". The same authors also add that for the Caatinga region of Brazil (which occurs in northern Minas Gerais), the 'blackbird-like' Scarlet-throated Tanager may be confused with Chopi Blackbird. Besides, the characteristic scarlet throat of *C. loricatea* is not present in most individuals, and one may confound it for some Icterids, such as the Chopi Blackbird or the Shiny Cowbird *Molothrus bonariensis* (Sick 1997). Thus, the records presented by Willis and Oniki (1991) and Vasconcelos *et al.* (2006) must be viewed with caution and require further documentation, as they could be

erroneous and might refer to *C. loricatea* or *G. chopi*. These were based merely on sight-records obtained in a biome (Cerrado) where the species had never been recorded before. We have found that it is not safe to rely entirely on the morphological traits of *C. forbesi* to correctly identify it, especially because, from a long distance, these characteristics are really hard to see. Instead, the voice may be the single most reliable way to separate these two similar species (Jaramillo and Burke 1999).

The Atlantic Forest within the Rio Doce basin is one of the most fragmented areas of Minas Gerais. In some regions, deforestation has eliminated 93.9% of the original vegetation cover, and most of the remaining areas are composed of small fragments with low connectivity (Machado 1995). Contrariwise, Dom Joaquim still presents 7.883 ha of forest cover, which represents almost

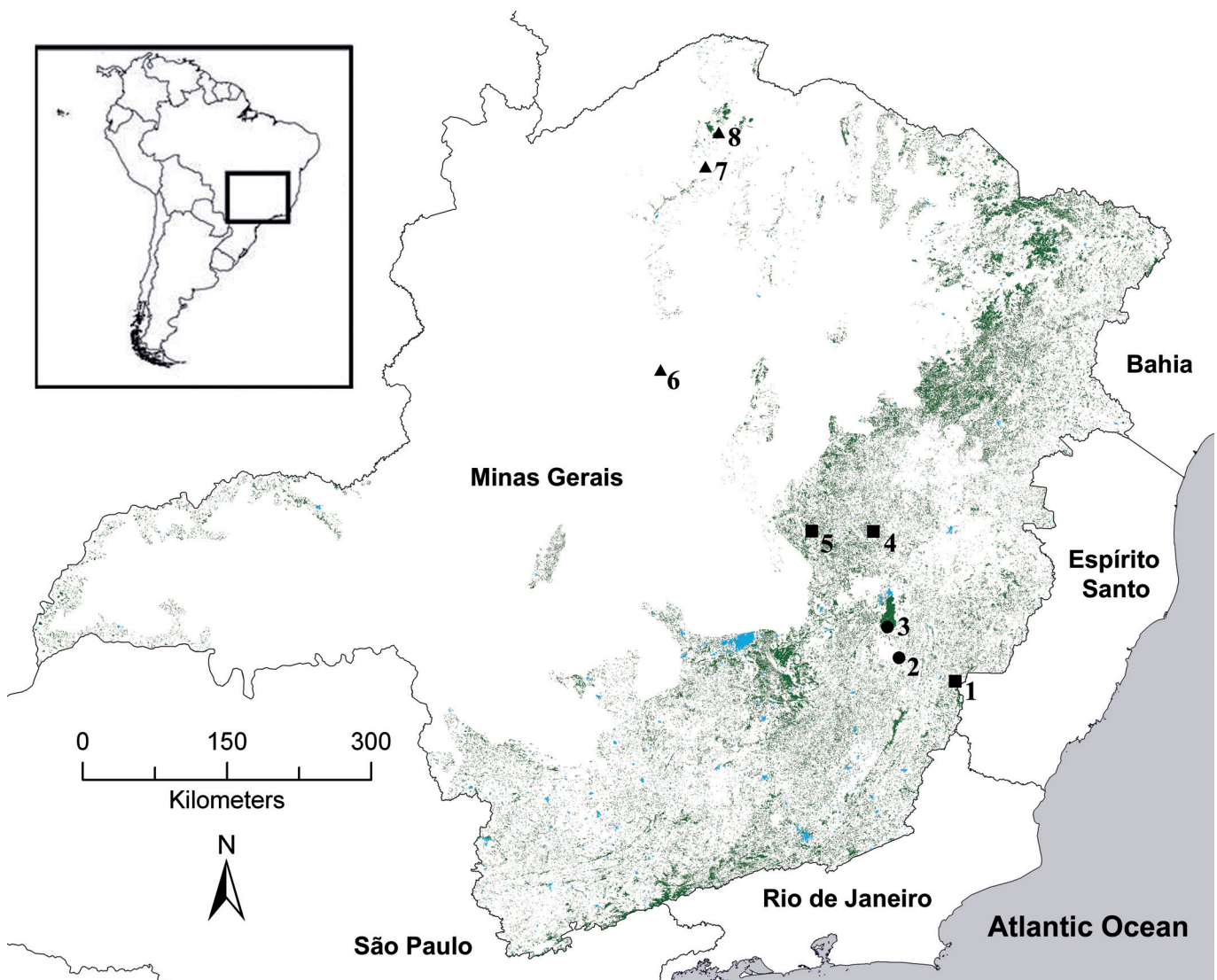


FIGURE 1: Map showing records of Forbes's Blackbird *Corvus forbesi* in southeastern Brazil. Squares correspond to records presented in this study. Circles correspond to historical records with collected specimens. Triangles correspond to undocumented records (Willis and Oniki 1991, Vasconcelos *et al.* 2006). Green areas correspond to Atlantic Forest remnants during 2008-2010, according to Fundação SOS Mata Atlântica and INPE (2010) (minimum mapped area 3 ha). Blue represents urban areas. Localities are numbered as follows: 1) Martins Soares municipality. 2) Raul Soares municipality. 3) Rio Doce State Park. 4) Virgíópolis municipality. 5) Dom Joaquim municipality. 6) Pirapora municipality. 7) Januária municipality. 8) Cavernas do Peruaçu National Park.

20% of the municipality original forest cover (Fundação SOS Mata Atlântica and INPE 2010). Furthermore, together with the municipalities of Conceição do Mato Dentro and Morro do Pilar, this region holds considerable blocks of semideciduous forest fragments, most of them relatively connected. This situation is reflected by the presence in the area of large raptors (e.g., Black Hawk-Eagle *Spizaetus tyrannus* and Ornate Hawk-Eagle *Spizaetus ornatus*), game birds (e.g., Spot-winged Wood-Quail *Odontophorus capueira* and Speckled Chacalaca *Ortalis guttata*), understory specialists (e.g., Such's Antthrush *Chamaeza meruloides* and Rufous-breasted Leaftosser *Scelerurus scansor*) and considerable populations of the endangered Vinaceous Parrot *Amazona vinacea* (L. G. M., unpubl. data).

The new record obtained at Dom Joaquim represents an extension of over 110 km to the northwest from the nearest previous locality where *C. forbesi* is known to occur, the Rio Doce State Park (Figure 1). Moreover, there is a gap of about 215 km between our two most distant records, Dom Joaquim and Martins Soares, with the Rio Doce State Park right in the middle, representing, at least presumably, the stronghold for this species. Additionally, A. H. Oliveira (*pers. comm.*) reports observations of the species since 1965 from the municipality of Manhumirim, which is only about 10 km away from Martins Soares. Records of small flocks in distinct dates in the municipalities of Virginópolis and Martins Soares suggest that small populations of this species may persist in these areas.

We recommend playback surveys for *C. forbesi* throughout the areas mentioned above and in other suitable habitats within the Rio Doce basin in Minas Gerais, because the species may have been overlooked in the region. It is also alarming that none of our records were made within federal or state reserves, and the only protected area with documented records of the species in Minas Gerais is the Rio Doce State Park. Another few conservation units could harbor populations of the species, such as the RPPN Feliciano Miguel Abdala, in the municipality of Caratinga. New data is urgently needed to assess the real conservation status of this species in southeastern Brazil.

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