

Euphonia chalybea (Mikan, 1825): presence in the Serra da Mantiqueira massif and first documented records for Minas Gerais, southeastern Brazil

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The genus *Euphonia* (Aves: Fringillidae) occurs exclusively in the Neotropical region and is represented by 13 species in Brazil (CBRO 2014). One of those species is the Green-throated Euphonia, *Euphonia chalybea* (Mikan, 1825), which is restricted to southeast South America in Argentina, Paraguay and Brazil. In Brazil, the species, being endemic to the Atlantic Forest (Parker *et al.* 1996), is found in the states of Rio Grande do Sul, Santa Catarina, Paraná, São Paulo, Rio de Janeiro and Espírito Santo (Ridgely & Tudor 1989, Sick 1997, Sigrist 2006, Simon 2009, Hilty 2011).

Despite occurring in several subtropical forests at its southern range, the species seems to be especially linked to montane humid forests in the Serra do Mar mountain range, close to the coast of São Paulo and Rio de Janeiro states (Ridgely & Tudor 1989, Sick 1997, Sigrist 2006, Mallet-Rodrigues *et al.* 2007, 2010, Pimentel & Olmos 2010, Hilty 2011). Contrary to what is illustrated in several maps (e.g. Ridgely & Tudor 1989, Hilty 2011), this *Euphonia* is absent from most of the countryside São Paulo (Willis & Oniki 2003, Schunck 2009).

Euphonia chalybea is listed as globally Near-threatened and its population seems to be declining in southeast and south Brazil due to loss of habitat by deforestation (BirdLife International 2014). Further, it is regionally treated as possibly Threatened in the state of Rio de Janeiro (Alves *et al.* 2000), Vulnerable in the state of São Paulo (Schunck 2009), and Endangered in Minas Gerais (COPAM 2010), even though its occurrence in the latter was based on a suspicious single record without documentation (Burmeister 1856, repeated in Hellmayr 1936 and in Mattos *et al.* 1993). Thus, in the present study we provide the first documented records of the species for Minas Gerais and for the hinterland slopes of the Mantiqueira mountain range.

Material and Methods

On 1 April 1988, a male (possibly a subadult) was recorded (WA1449991, www.wikiaves.com.br) in the Minas Gerais portion of the Itatiaia National Park (hereafter Itatiaia NP), municipality of Itamonte (Figure 1). The bird was found in an area of Upper Montane Rain Forest at c. 1,900 m alt along the highway BR-485 (“Aguilhas Negras road”; 22° 22' 9" S, 44° 44' 52" W).

After 19 years without any other record, the Green-throated Euphonia was found again at the same place on 30 April 2007, when a male was voice-recorded (XC105951, www.xeno-canto.org).

Later, on 23 August 2009, F. Olmos and A. Silveira recorded (without documentation) *E. chalybea* in an area of Mixed (Upper) Montane Rain Forest at “Vale das Bruxas” (22° 49' 45" S, 46° 02' 47" W; 1,380 m alt), Monte Verde district, municipality of Camanducaia (F. Olmos 2011, pers. comm.).

On 30 August 2010, we again recorded the Green-throated Euphonia in the hinterland slope of Itatiaia NP with Upper Montane Rain Forest at km 2 of Agulhas Negras road, c. 1,780 m, municipality of Itamonte (22° 22' 29" S, 44° 45' 20" W). The species was detected by voice and an

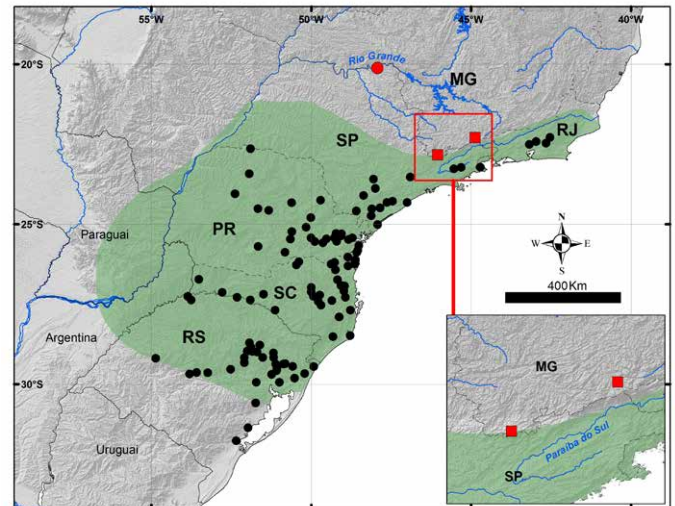


Figure 1. Distribution of the Green-throated Euphonia, *Euphonia chalybea*. Green shaded area: the distribution range as given in InfoNatura (2007); Red squares: the new records for hinterland Mantiqueira massif and Minas Gerais state (present work; highlighted in the inset); Red circle: the historical record by J. Natterer (see text); Black dots: Brazilian records available at the online database Wikiaves (www.wikiaves.com.br, as of January 2013).

adult male approached after playback, allowing good study and photos (Figure 2).

Lastly, on 4 July 2012, once again at Agulhas Negras road, c. 1,900 m, Itamonte (22° 22' 08.70" S, 44° 44' 52.80" W), we recorded a pair of the species through photographs, available at www.wikiaves.com: WA686001 (male) and WA697676 (female).

Discussion

Although we present the first unequivocal evidence of the occurrence of *E. chalybea* in Minas Gerais, its presence in the northwestern, hinterland slopes of the Mantiqueira range in Itatiaia NP was already expected given a few records of the species on the Atlantic slopes of the range, in the municipality of Itatiaia and Resende, both within Rio de Janeiro state (Collar & Andrew 1988, Pineschi 1990, Pacheco *et al.* 1997). In addition, the presence of *E. chalybea* was also expected to occur in southwestern Minas Gerais, since a specimen was collected by Johann Natterer at “Porto do Rio Paraná”, on the border of São Paulo and Minas Gerais, in May 1823 (Pelzeln 1868-70, Vanzolini 1993). Indeed, given that Natterer spent c. 40 days at that locality (Vanzolini 1993), it is probable that some of the birds collected by him were acquired on the right bank (Minas Gerais) of the Rio Grande. This possibility was already suggested by Willis and Oniki (2003:342), even though they have treated the specimen of *Euphonia chalybea* collected by Natterer as coming from São Paulo.

As a concluding remark, we highlight the lack of avifaunal surveys in southernmost Minas Gerais and the Mantiqueira massif (Vasconcelos & D’Angelo-Neto 2009, Lombardi *et al.* 2012), despite the region being near renowned research centers such as the cities of São Paulo



Figure 2. A male Green-throated Euphonia, *Euphonia chalybea*, photographed at Agulhas Negras road, Itatiaia National Park, Itamonte, Minas Gerais, on 30 August 2010. Photo: Bruno Rennó.

and Rio de Janeiro. This lack of surveys, combined with the local rarity of the species and its possible and still poorly understood migratory movements (Willis & Oniki 2003), may explain the previous absence of records of *E. chalybea* in that region. A similar scenario regards *Dacnis nigripes* Pelzeln, 1856, which was also only recently recorded in Minas Gerais (Gonzaga 1983, Whittaker *et al.* 2010, Lombardi *et al.* 2012). Therefore, it is of primary importance that such poorly studied areas receive more attention, especially for their high ornithological potential (Drummond *et al.* 2005, Bencke *et al.* 2006) and the threats to the natural habitats due to deforestation, illegal settlements and fire.

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