

# Range extension of the known distribution of the Black-backed Grosbeak, *Pheucticus aureoventris* (Passeriformes: Cardinalidae) in Brazil, with the first records for the states of Rondônia, Amazonas and Goiás

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**ABSTRACT:** We present the first records of *Pheucticus aureoventris* from the states of Rondônia, Amazonas and Goiás in Brazil, which significantly expand the species' known range into central South America and Amazonia. Previously, *P. aureoventris* was known only as an austral migrant to semi-open areas in south-western Brazil. We hypothesize that deforestation (creating additional open habitats) and an increase in the number of ornithologists surveying poorly sampled regions, may be related to the range extension of *P. aureoventris* in Brazil.

**KEYWORDS:** Amazon, Cerrado, Madeira River, wintering areas, deforestation.

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The Black-backed Grosbeak, *Pheucticus aureoventris* (d'Orbigny & Lafresnaye, 1837) is a medium-sized passerine bird, typical of shrubby, semi-open areas and dry forests in semi-arid regions, also occurring at the edge of wet, montane forest and highland fields. *Pheucticus aureoventris* is found between 500 m and 3,700 m along the Andean slopes, from Venezuela and Colombia to Argentina, but in Paraguay and southwestern Brazil it occurs only as an austral migrant during the post-breeding season, mostly between July and August (Sick 1997, Nunes 2008, Ridgely & Tudor 2009). Most populations of this species are apparently sedentary, although with possibly some altitudinal movements in northwestern Argentina and adjacent areas (Orenstein & Brewer 2011).

Until recently, *P. aureoventris* was considered as vagrant in Brazil (CBRO 2011). Nunes (2008) compiled Brazilian records for the species and found that they were concentrated in the Pantanal and surrounding plateaus in the upper Paraguay River basin (see in Pelzeln 1871, Naumburg 1930, Stone & Roberts 1934, Pinto 1944, Willis & Oniki 1990, Silveira & D'Horta 2002, Donatelli

2005, Melo 2005). Recent records have expanded the distribution of *P. aureoventris* farther inland in Brazil, reaching the Paraná River basin in the Cerrado (Faxina *et al.* 2010). However, until the present study the known range of *P. aureoventris* was restricted to the states of Mato Grosso and Mato Grosso do Sul.

On 21 and 23 August 2010, G. B. M. recorded two individuals of *P. aureoventris* in the municipality of Porto Velho, state of Rondônia (08°47'29"S; 63°45'50"W; 87 m altitude), on the right bank of the Madeira River, about 3 km from an urban area, at an altered and recently burned site, surrounded by a patch of "terra-firme" forest. One of these birds, a female, was photographed (Figure 1, Malacco 2010), and is the first documented record of the species for Rondônia.

The closest record of *P. aureoventris* to the one in Porto Velho was located in the Victoria region of Bolivia, formerly Department of Beni and currently belonging to the Department of Pando, northern Bolivia (Gyldenstolpe 1945). This region is near the confluence of the Madre de Dios and Beni Rivers, two important tributaries of the



**FIGURE 1.** Female of *Pheucticus aureoventris* photographed at Porto Velho, Rondônia, on 23 August 2010. WA193006. Photo by: G. B. M.

Madeira River, and is covered by a mosaic of forests and patches of savanna (Paynter 1992). The record from Porto Velho is more than 350 km away from the Victoria region. Thus, *P. aureoventris* possibly uses patches of savanna along the Beni River as a dispersal route and is probably benefited from deforestation in the intervening areas.

A. A. and B. D. S. documented the first record of *P. aureoventris* for the state of Amazonas on 27 August 2011 near the settlement of Santa Helena, in the municipality of Manicoré, southern Amazonas state (06°03'02"S; 61°44'18"W; 46 m altitude), on the left bank of the Madeira River. This individual was found on the edge of "várzea" forest, at 11:00 h, next to an

area of recently burned vegetation. After confirming the species identification, the individual was collected with a shotgun, prepared as a study skin, and deposited in the ornithological collection of the Museu Paraense Emílio Goeldi (MPEG 73473). It was a male weighing 52 g, with 209 mm of total length (Figure 2).

On 12 July 2012, G. A. S. and S. M. recorded one individual of *P. aureoventris* in the municipality of Rio Verde, state of Goiás (18°15'05"S; 50°51'06"W; 707 m altitude), on a slope covered with shrubby vegetation in a transitional region in southwestern Goiás dominated by savanna and both gallery and dry forests. This individual, a male, remained perched for about 2 minutes at the top



**FIGURE 2.** Male specimen of *Pheucticus aureoventris* (MPEG 73473) collected in the municipality of Manicoré, Amazonas, on 27 August 2011. Photo by: B. D. S.

of a medium-sized tree a few meters away and in apparent response to playback of *Glaucidium brasilianum*, a notorious bird predator (Sick 1997, Sigrist 2006). G. A. S documented the record with a point and shoot camera and the resulting photograph shows some of the unmistakable features of *P. aureoventris*, such as the blackish head and wings with two thick white bars, yellow belly, and the massive beak (picture not shown, available up request to the authors).

This is the first record of *P. aureoventris* for Goiás and only the third record for the Paraná River basin, with the previous two records reported by Faxina *et al.* (2010). Our record from Rio Verde is approximately 250 km

away from the closest record at Parque Natural Municipal Salto do Sucuriú, in the municipality of Costa Rica, state of Mato Grosso do Sul (Faxina *et al.* 2010), located on the right bank of the Paraná River.

The records presented here significantly extend the known distribution of *P. aureoventris* in Brazilian territory, not only expanding its known wintering range in the central-western part of the country, but also including Amazonia in it (Figure 3). The presence of *P. aureoventris* between July and August in Brazil reinforces the idea of altitudinal movements for this species, as also verified for other species such as *Tiaris obscurus* (Rising *et al.* 2011) and *Pseudocolpteryx acutipennis* (Fitzpatrick *et al.* 2004).

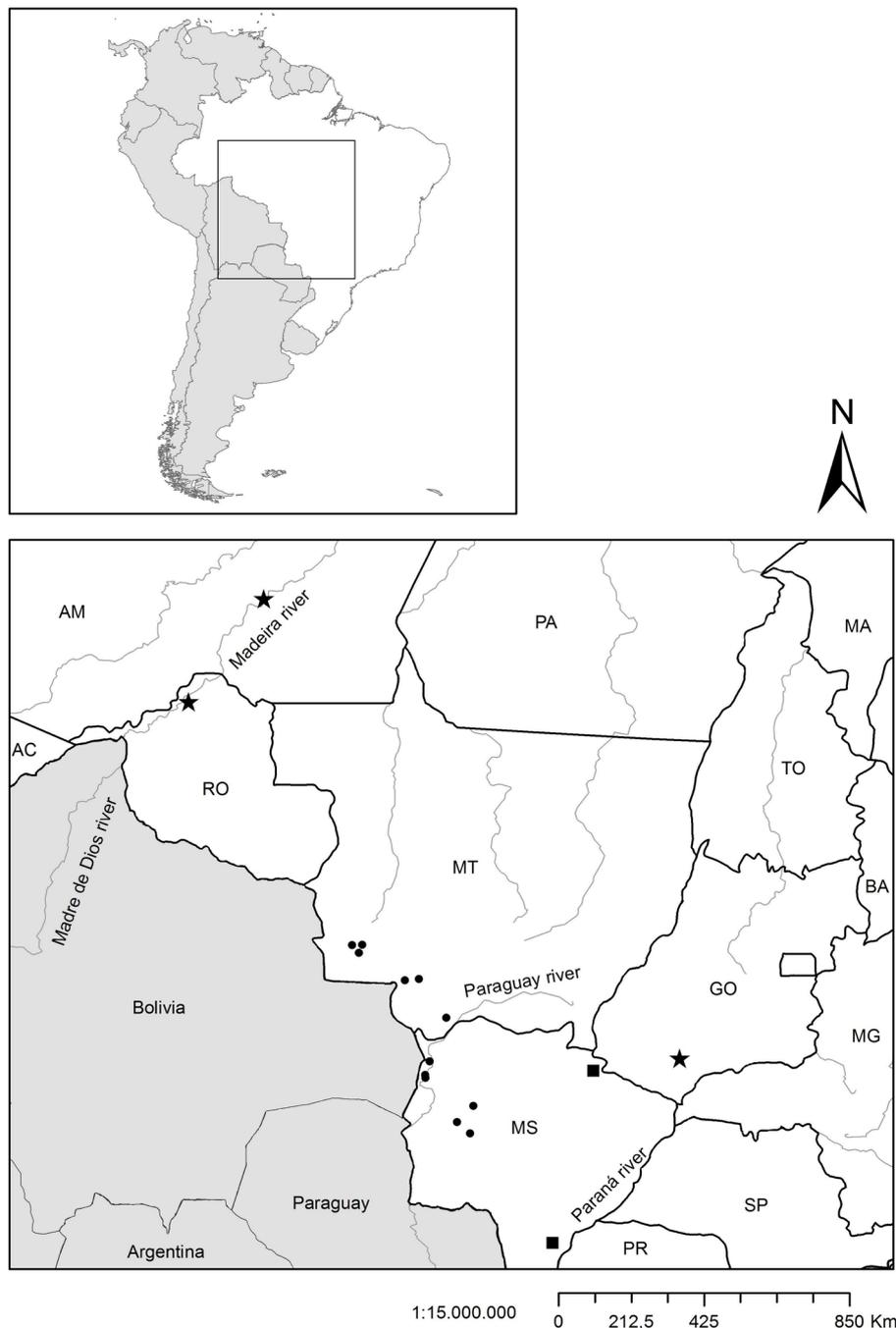


FIGURE 3. Map containing the distribution of *Pheucticus aureoventris* in Brazilian territory, including records compiled by Nunes (2008; circles), Faxina *et al.* (2010; squares) and those of the present study (stars).

The extension of the known distribution of *P. aureoventris* reported here could be related to a) an increase in deforestation of Cerrado and Amazon regions, artificially creating favorable areas for the arrival of a species typical of more open environments; and b) an increase in the number of ornithologists sampling poorly known Brazilian regions. Thus, it is possible that records of *P. aureoventris* will become increasingly more common as deforestation progresses across both Cerrado and Amazonia.

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