

## First records of the Crested Black-Tyrant (*Knipolegus lophotes*, Tyrannidae) in the State of Mato Grosso do Sul, Brazil

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**Abstract:** The Crested Black-Tyrant (*Knipolegus lophotes*) is a member of the Tyrannidae family that occurs throughout open areas in central, southeastern and southern Brazil. Although this species occurs in regions that surround the state of Mato Grosso do Sul, there had never been a recorded sighting in the state. Thus, information on its distribution across Brazil's midwestern region is scarce. In this study, we report the first sightings of *K. lophotes* in Mato Grosso do Sul. These records extend the known distribution range of the species in midwestern Brazil and contribute to expanding knowledge of bird species composition in this region. We believe that the absence of *K. lophotes* from the lists of bird species recorded in different localities in Mato Grosso do Sul may be a reflection of its local rarity and the lack of bird inventory efforts in this region, which underscores the need for further research into bird communities in this poorly known region of Brazil.

**Keywords:** birds, Tyrannidae, range extension, Cerrado, mid-western Brazil.

GODOI, M.N., COSTACURTA, M.B., NUNES, A.P., PATRIAL, E.W. & MORANTE FILHO, J.C. **Primeiros registros da maria-preta-de-penacho (*Knipolegus lophotes*, Tyrannidae) no estado de Mato Grosso do Sul, Brasil.** Biota Neotrop. 12(3): <http://www.biotaneotropica.org.br/v12n3/pt/abstract?short-communication+bn01012032012>

**Resumo:** A Maria-Preta-de-Penacho (*Knipolegus lophotes*) é um membro da família Tyrannidae que no Brasil ocorre em áreas abertas das regiões sudeste, central e sul. Apesar de ocorrer em regiões próximas ao estado de Mato Grosso do Sul, a espécie nunca foi registrada neste estado, e assim informações sobre sua distribuição no centro-oeste do país são escassas. Neste artigo reportamos os primeiros registros da ocorrência de *K. lophotes* no Mato Grosso do Sul. Estes registros ampliam a área de distribuição conhecida dessa espécie na região centro-oeste do Brasil e contribuem para o conhecimento da avifauna desta região. Acredita-se que o registro recente de *K. lophotes* no Mato Grosso do Sul se deva tanto a sua raridade local quanto a falta de estudos ornitológicos mais amplos no estado, apontando a necessidade da realização de mais estudos nesta região pouco conhecida do país em relação a sua avifauna.

**Palavras-chave:** aves, Tyrannidae, extensão de distribuição geográfica, Cerrado, centro-oeste do Brasil.

## Introduction

The Crested Black-Tyrant (*Knipolegus lophotes*, Boie 1828) is a small member of the Tyrannidae family. It measures 20.5 – 21 cm, being that the female specimen is larger than the male (Sick 1997). This species occurs in shrubby and semi arboreal fields (known locally as *campos sujos* and *campos cerrados*, respectively), dry forests, shrubby riparian formations and rocky fields in mountains (Sick 1997, Sigrist 2009, Grantsau 2010).

Its distribution in South America covers a large portion of Uruguay, northeastern Paraguay and Brazil (Birdlife International 2009), where it occurs in the country's midwestern (State of Mato Grosso), southeastern (Minas Gerais, São Paulo, Espírito Santo and Rio de Janeiro), central (Goiás and Tocantins) and southern regions (Paraná to Rio Grande do Sul) (Ridgely & Tudor 1994, Sick 1997, Grantsau 2010).

The Crested Black-Tyrant (*K. lophotes*) occurs over a wide geographic range in central Brazil and has been recorded in regions near the state of Mato Grosso do Sul, such as Emas National Park in the state of Goiás (Hass 2003) and Chapada dos Guimarães in the state of Mato Grosso (Lopes et al. 2009). Although some bird inventories have been conducted in Mato Grosso do Sul, specifically in the Pantanal wetlands (Tubelis & Tomas 2003), Serra da Bodoquena (Pivatto et al. 2006), Cerrado (Silva et al. 2006), Chaco (Straube et al. 2006) and the Paraná River basin (Gimenes et al. 2007), there has never been any confirmed evidence of the occurrence of *K. lophotes* in the state. Thus, there is a great knowledge gap concerning the geographic distribution of *K. lophotes* across the midwestern region of Brazil, which underscores the need for more detailed information on its occurrence in this region. In this study, we present the first records of *K. lophotes* in the state of Mato Grosso do Sul, expanding knowledge on its geographic distribution in Brazil and contributing to the knowledge of bird composition in a poorly studied region of Brazil.

## Materials and Methods

The data presented here were obtained by means of bird inventories conducted by the authors between 2009 and 2011. The inventories took place near the stream of São Domingos in the town of Caarapó (22° 43' S and 54° 39' W), Correntes River in the town of Sonora (17° 32' S and 54° 26' W), and in plateaus in the town of Rio Negro (19° 28' S and 54° 49' W). The method used to conduct the surveys was bird census based on direct observation (Rodrigues et al. 2005), which consists of sampling as many habitats as possible through visualization techniques and bird vocalizations during periods of high bird activity, between 06:00 – 10:00 and 15:00 – 18:00 hours. *K. lophotes* individuals were sighted and identified via binoculars and bird identification guides (Ridgely & Tudor 1994, Sigrist 2009). Whenever possible, individuals were photographed as a means to record their sighting and photos were then uploaded to Wiki Aves (online Encyclopedia of Brazilian Birds). Additional information on each recorded sighting, such as geographic coordinates and type of habitat, were also recorded to better characterize the species' occurrence and distribution in the state of Mato Grosso do Sul.

## Results and Discussion

In this study, we present the first records of *K. lophotes* in the state of Mato Grosso do Sul and expand its known geographic distribution in Brazil. The records were collected from three different localities in the state (Figure 1). On June 18, 2009, one individual was sighted and photographed by Marco Costacurta in the town of Caarapó, located in the southeast region of the state. The specimen, identified as an

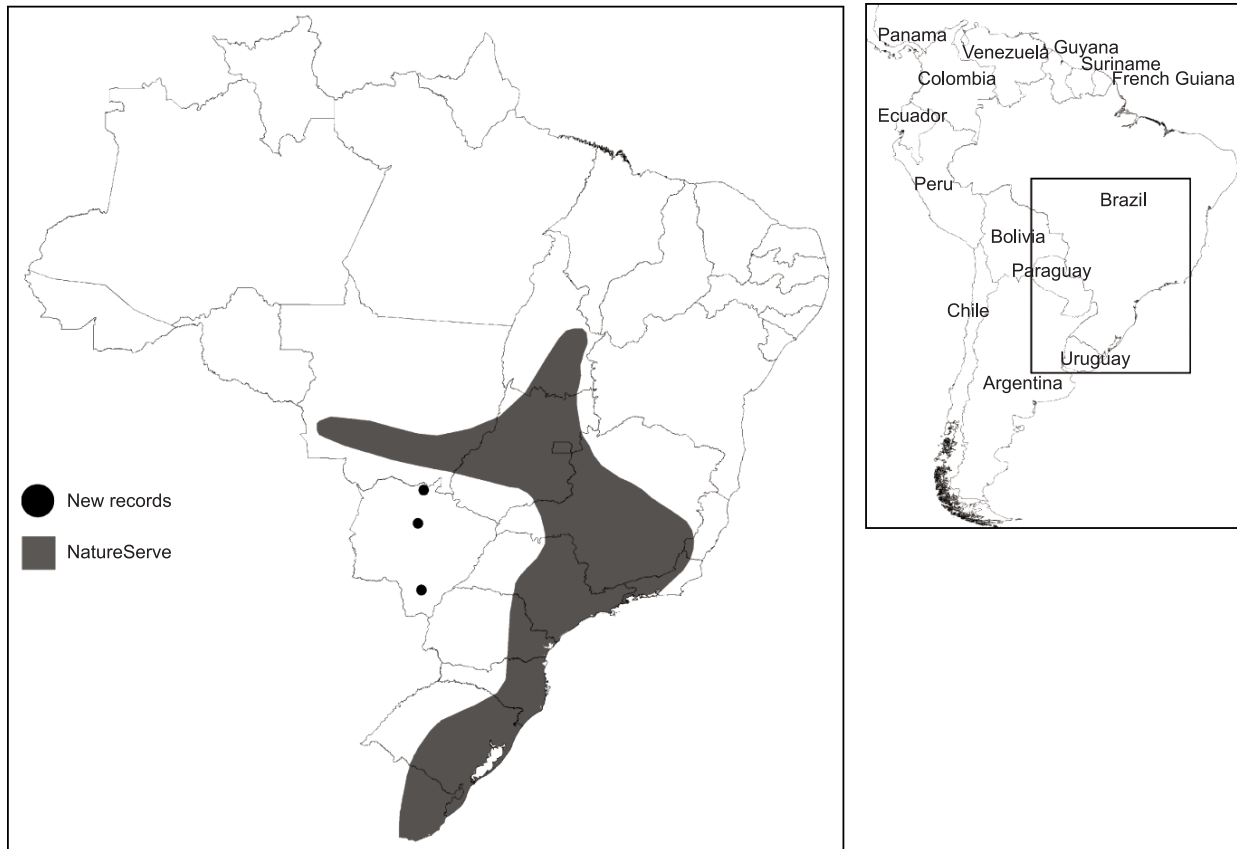
adult male, was perched on a wire fence in a pasture near the stream of São Domingos (22° 43' S and 54° 39' W). The second recorded sighting took place in a sugar-cane plantation near the same stream, on the morning of June 19, 2009. On both occasions, Marco Costacurta observed the bird's black plumage and crests and used these features for species identification. The landscape of São Domingos stream is dominated by cultivated pastures, with small fragments of riparian forests and extensive sugar-cane cultivation. Another area of species occurrence in Mato Grosso do Sul is the region of Correntes River, in areas adjacent to the Small Hydro Power Plant Santa Gabriela in the municipality of Sonora (17° 32' S and 54° 26' W). In this area, Mauricio Godoi sighted *K. lophotes* individuals in February, May and November 2010 (Godoi 2011), and José Carlos Morante Filho sighted individuals in February 2011 (Morante Filho 2011) (Figures 1 and 2). On these occasions, pairs of *K. lophotes* were observed foraging in grasslands and shrubby fields in the margins of Correntes River. This region's landscape is dominated by patches of cerrado *stricto sensu*, riparian forests and cultivated pastures. Finally, during a brief bird inventory undertaken at Serra de Maracaju in March 2011, Eduardo Patrial sighted and photographed a *K. lophotes* individual in a shrubby field located in a plateau in the town of Rio Negro (19° 28' S and 54° 49' W) (Figure 1). In this region, the landscape is predominantly dominated by plateaus with cultivated pastures and Cerrado vegetation.

The Crested Black-Tyrant (*K. lophotes*) is not present in the lists of worldwide endangered species (Birdlife International 2009) or Brazilian endangered species (Silveira & Straube 2008). This species has a wide geographic distribution in central and southern Brazil, is predominantly insectivore and is mainly found in grasslands and shrubby fields (Willis 1976, Ribeiro et al. 2002), which could favored the expansion in its distribution by consequence of deforestation and the expansion of cultivated pastures in the state of Mato Grosso do Sul. Despite its wide geographic range and preference for open areas, which would make it an easily sighted bird, *K. lophotes* has not been previously sighted in the state of Mato Grosso do Sul.

With regard to the occurrence of congeneric species in Mato Grosso do Sul, at this time the only sight records are for *K. striaticeps* in the town of Corumbá (Naumburg 1930) and *K. aterrinus* in Bodoquena National Park (Bornschein et al. 2003). Although the distribution maps of *K. lophotes* in Brazil (Dunning 1987, Ridgely & Tudor 1994, Sigrist 2009, Gwynne et al. 2010) include a small and isolated area in the state of Mato Grosso do Sul (Pantanal and the southmost region of the state), there are no published records of the species' occurrence in these regions (Straube et al. 1996, Tubelis & Tomas 2003). Revisions of bird species lists from the town of Coxim (Pinto 1940), high Paraná River wetlands (Gimenes et al. 2007), Serra da Bodoquena (Pivatto et al. 2006) and the state's eastern Cerrado region (Pinto 1932, Silva et al. 2006), indicate no records of *K. lophotes* either.

Published records of *K. lophotes* sightings in midwestern Brazil come mainly from the Distrito Federal region (Braz & Cavalcanti 2001). However, confirmed sightings of the species in Cerrado regions near Mato Grosso do Sul, such as Emas National Park (Hass 2003) and Chapada dos Guimarães National Park (Lopes et al. 2009), suggest it does occur in the state. Therefore, we believe that the absence of the species from the bird lists of different localities in the state of Mato Grosso do Sul may reflect its local rarity and the lack of bird inventory efforts in this region. This is further reinforced by the fact that recent surveys found other bird species for the first time in the state (Zucca et al. 2007, Faxina et al. 2010, Godoi et al. 2011).

Thus, there is a clear need for more bird inventories in the state of Mato Grosso do Sul that would sample different state regions



**Figure 1.** Geographic distribution of the Crested Black-Tyrant (*Knipolegus lophotes*) in Brazil (according Ridgely & Tudor 1994) and the records obtained in the state of Mato Grosso do Sul. Image: Roberto Gamarra.

**Figura 1.** Distribuição geográfica da maria-preta-de-penacho (*Knipolegus lophotes*) no Brasil (segundo Ridgely & Tudor 1994) e os registros obtidos no estado de Mato Grosso do Sul. Imagem: Roberto Gamarra.



**Figure 2.** Adult male of the Crested Black-Tyrant (*Knipolegus lophotes*) photographed in the margins of Correntes river, Sonora county, state of Mato Grosso do Sul. Photo: José Carlos Morante Filho.

**Figura 2.** Macho adulto da maria-preta-de-penacho (*Knipolegus lophotes*) fotografado nas margens do rio Correntes, município de Sonora, Mato Grosso do Sul. Foto: José Carlos Morante Filho.

in order to better understand bird composition in the midwestern regions of Brazil, as well as provide more detailed information on the occurrence of different bird species whose distribution is poorly known in this region of the country.

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