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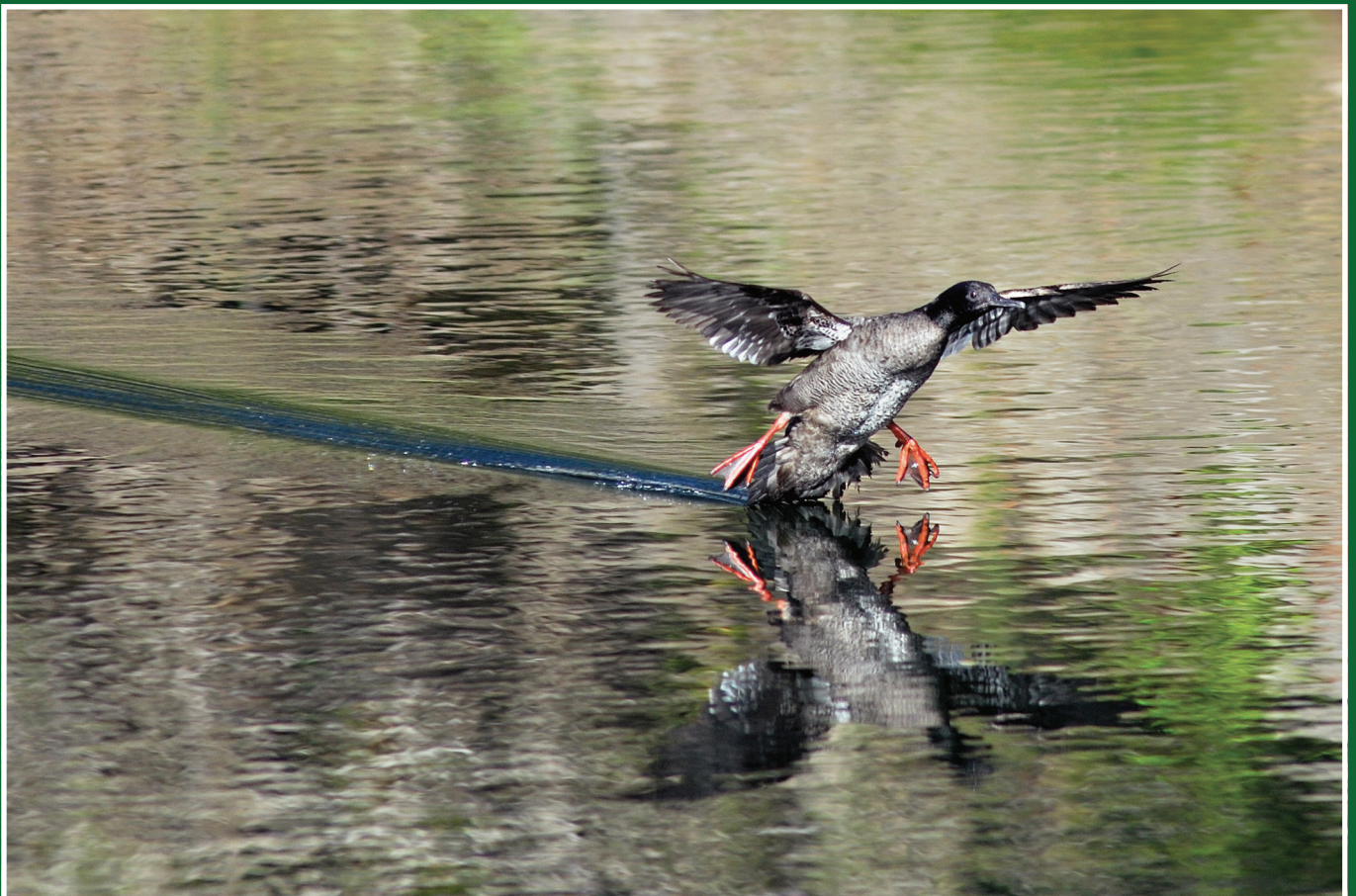
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## Masked Tityra *Tityra semifasciata* in Mato Grosso do Sul, Brazil

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**RESUMO:** O anambé-branco-de-máscara-negra *Tityra semifasciata* no Mato Grosso do Sul, Brasil. A ocorrência do anambé-branco-de-máscara-negra (*Tityra semifasciata*) no Brasil têm sido tradicionalmente considerada restrita à região Amazônica e ao ecótono entre a Floresta Amazônica e o Cerrado. Neste artigo apresentamos 18 registros de ocorrência de *T. semifasciata* obtidos em oito localidades no estado de Mato Grosso do Sul, em regiões que incluem tanto o bioma Cerrado quanto o ecótono entre o Cerrado e as Florestas Estacionais Semidecíduais da bacia do rio Paraná, sob domínio Atlântico. Os dados aqui apresentados expandem substancialmente nosso conhecimento sobre a distribuição geográfica de *T. semifasciata* no Brasil.

**PALAVRAS-CHAVE:** *Tityra semifasciata*; Anambé-branco-de-máscara-negra; Novos registros; Mato Grosso do Sul; América do Sul.

**KEY-WORDS:** *Tityra semifasciata*; Masked Tityra; New records; Mato Grosso do Sul; South America.

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The genus *Tityra* represents a trio of widespread suboscine passerines occurring in the southernmost part of the Nearctic Region and over much of the Neotropical Region. They inhabit a variety of habitats from forests, woodlands and plantations to clearings or savanna with scattered trees (Ridgely and Tudor 1994, Mobley 2004). Two of these species, the Black-crowned Tityra *Tityra inquisitor* and Masked Tityra *T. semifasciata*, occur within a wide area from Mexico to Argentina, whereas Black-tailed Tityra *T. cayana* is restricted to South America only (Mobley 2004, Ridgely and Tudor 2009). Both *T. inquisitor* and *T. cayana* are distributed over much of Brazil, including the State of Mato Grosso do Sul (Sick 1997, Pivatto *et al.* 2006, Sigrist 2009). Masked Tityra *Tityra semifasciata* comprises eight to nine subspecies which occur from Mexico through northern Bolivia and Amazonian Brazil (Dickinson 2003, Mobley 2004).

For a long time, the distribution of the Masked Tityra *Tityra semifasciata* was considered to be restricted to tropical parts of the Americas, especially in the Amazon basin, occurring inclusively in ecotones between the Amazon Forest and Cerrado biomes. In Brazil, the species

was known to occur almost entirely south of the Amazon, ranging east to Pará, Amapá, Piauí and northern Maranhão and south to Acre, Rondonia, southern Mato Grosso, Tocantins and northern Goiás, to the north of this region only along the Amazon and in Amapá (Ridgely and Tudor 1994, Sick 1997, Mobley 2004, Sigrist 2009).

Contrary to all the expectations, Lowen *et al.* (1997) recorded the Masked Tityra in northeastern Paraguay (Carrapá waterfall and Parque Nacional Cerro Corá) and Bodrati *et al.* (2008) in northeastern Argentina (Iguazu National Park, Misiones region), indicating that the range of this widespread species in South America could be larger than previously known (Figure 1). We speculate that similarities in the color of the plumage with its congeneric species *T. cayana*, could lead to misidentifications of birds in regions where both species occur in sympatry.

The purpose of this paper is to increase the knowledge of geographic distribution of *T. semifasciata* in South America, especially in extra-Amazon regions of Brazil. We present 18 records obtained from eight localities in Mato Grosso do Sul State, Brazil, where the species was not observed previously.

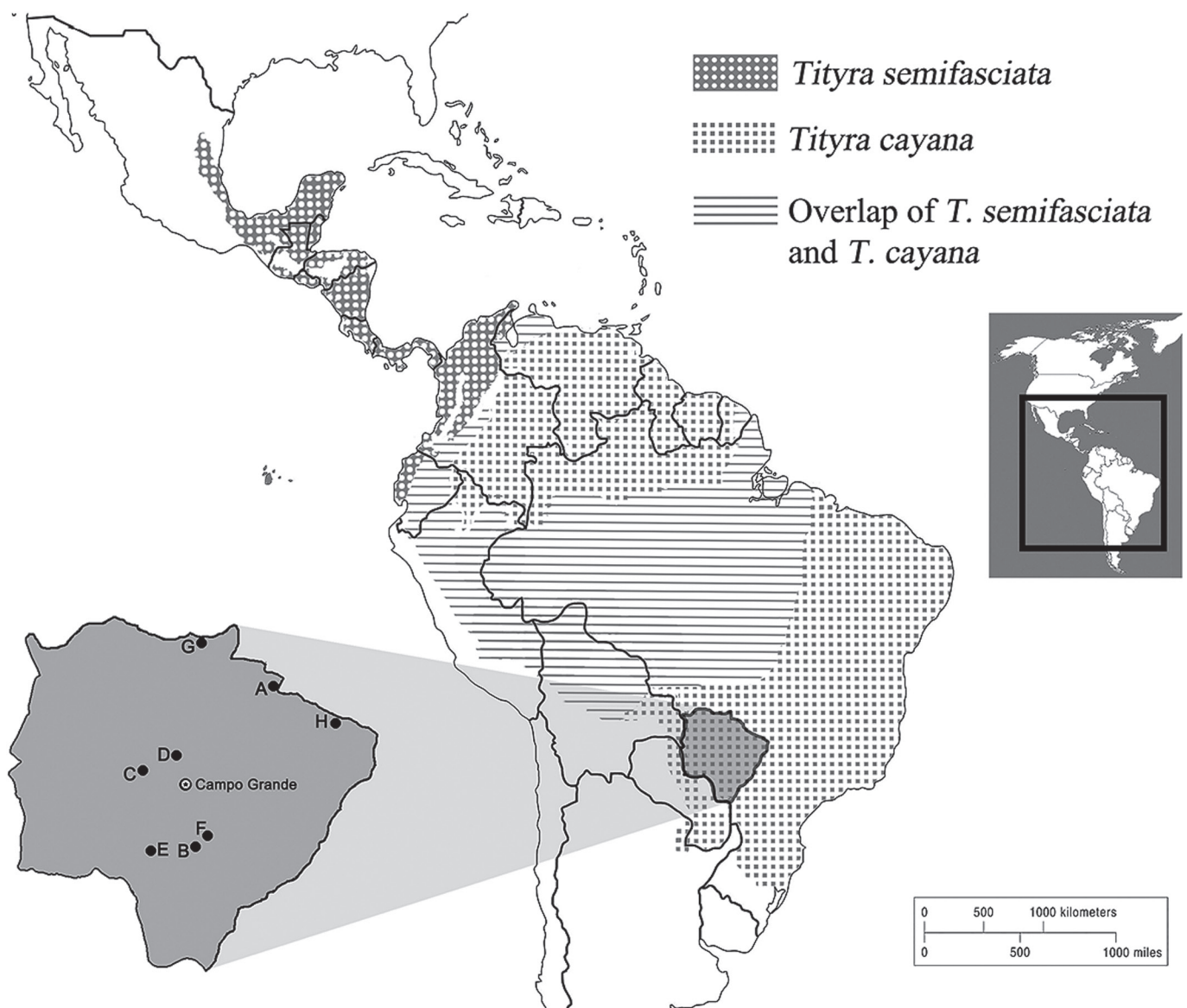
## RESULTS AND DISCUSSION

Between August 2006 and August 2010 we obtained 18 records of *T. semifasciata* in Mato Grosso do Sul State (Table 1), distributed in eight different districts (Figure 1). These records represent the southernmost distribution limits of the species in Brazil and increase the knowledge about the geographic distribution of *T. semifasciata* in South America.

Besides revealing a much larger distribution than that currently described in ornithological literature, these records emphasize the necessity of careful and accurate identification of *Tityra* species, since misidentifications could have distorted the true picture of the geographic distribution of *T. semifasciata* in Brazil, especially in southern regions where the species of genus

*Tityra* are sympatric (Bodrati *et al.* 2008). *T. semifasciata* and *T. cayana* produce similar vocalizations and are of the equal size (Ridgely and Tudor 1994, Sick 1997) and that is why the species can mostly be distinguished by the color patterns (Figure 2). Male *T. semifasciata* resembles male *T. cayana* but has less black on head (none on hind-crown) and does not have all black tail. Females likewise resemble female *T. cayana* but are always unstreaked and also lack all-black tail (Ridgely and Tudor 1994, Van Perlo 2009).

According to Sick (1997), the three species of the genus *Tityra* can be found in the same region, but they occur in different habitats, so it is uncommon to find them together. However, during the field work *T. semifasciata* and *T. inquisitor* were observed in the same areas in Corguinho Municipality, and on one occasion, the three



**FIGURE 1:** Geographic distribution of the Masked Tityra (*Tityra semifasciata*) and Black-tailed Tityra (*Tityra cayana*) in Latin America, demonstrating the expansion of known distribution of *T. semifasciata* in Brazil, with the first records obtained in the state of Mato Grosso do Sul. Source: Map adapted from NatureServe (2007). The dots show the municipalities where *T. semifasciata* was recorded in Mato Grosso do Sul state, as follows: A: Costa Rica; B: Rio Brillhante; C: Aquidauana; D: Corguinho; E: Maracaju; F: Nova Alvorada do Sul; G: Sonora; H: Cassilândia.



**TABLE 1:** Dates, geographic coordinates, altitude and vegetation types of places where the Masked Tityra (*Tityra semifasciata*) was recorded in the state of Mato Grosso do Sul, Brazil.

Date	Geographic Coordinates	County	Local	Altitude and vegetation
02/08/2006	18°33'40.27"S; 53°08'10.14"W	Costa Rica	Salto Majestoso do Sucuriu Bathhouse	620 m. Gallery forests.
02/08/2006	No coordinates available	Costa Rica	Cachoeira de Lajes Bathhouse	620 m. Gallery forests.
06/08/2006	No coordinates available	Costa Rica	Vila da Capela	620 m. Gallery forests.
07/08/2007	21°42'04.15"S; 54°31'13.94"W	Rio Brillhante	LDC Rio Brillhante Mill	360 m. Semi-deciduous Forest fragment
10/2008	No coordinates available	Aquidauana	Piraputanga district, Maracaju Range	Forested savanna
05/2010	20°27'12.8"S; 55°29'49.4"W	Aquidauana	Piraputanga district, Maracaju Range	300 m. Semi-deciduous Forest fragment
05/10/2009	19°55'56.36"S; 55°04'20.54"W	Corguinho	Gavião de Penacho Particular Reserve Maracaju Range	353 m. Forested savanna
09/10/2009	19°57'08.89"S; 55°04'16.32"W	Corguinho	Border of Vale do Bugio Particular Reserve, Maracaju Range	365 m. Forested savanna
09/10/2009	19°58'33.68"S; 55°03'53.55"W	Corguinho	Ribeirão da Serra farm, Maracaju Range	360 m. Pasture with the Cerrado (Savannah) fragments and gallery forests
20/01/2010	21°47'30.07"S; 55°33'18.50"W	Maracaju	Vista Alegre Mill	560 m. Semi-deciduous Forest fragment
27/04/2010	21°44'47.56"S; 55°32'34.80"W	Maracaju	Vista Alegre Mill	560 m. Semi-deciduous Forest fragment
12/02/2010	21°34'39.07"S; 54°14'00.63"W	Nova Alvorada do Sul	Santa Luzia Mill	384 m. Forested savanna
14/02/2010	21°34'41.24"S; 54°16'49.94"W	Nova Alvorada do Sul	Santa Luzia Mill	345 m. Semi-deciduous Forest fragment
19/02/2010	17°32'02.68"S; 54°26'20.25"W	Sonora	Santa Gabriela Small Central Hydroelectric	540 m. Gallery forests of the Correntes River
19/02/2010	17°31'09.68"S; 54°26'07.40"W	Sonora	PCH Santa Gabriela Small Central Hydroelectric	558 m. Forested savanna
12/08/2010	17°32'01.52"S; 54°25'04.51"W	Sonora	PCH Santa Gabriela Small Central Hydroelectric	440 m. Gallery forests of Correntes river
13/08/2010	17°32'06.46"S; 54°26'03.01"W	Sonora	PCH Santa Gabriela Small Central Hydroelectric	460 m. Gallery forests of Correntes river
23/08/2010	19°19'55.04"S; 51°49'38.32"W	Cassilândia	No locality	530 m. Gallery forests

species of *Tityra* were found in the same area in forests of Nova Alvorada do Sul Municipality.

Major field guides and books specialized in identification of Brazilian birds indicate that *T. semifasciata* occurs in the Amazon basin and in its ecotone between the Amazon Forest and Cerrado biomes in northern parts of the country (Ridgely and Tudor 1994, 2009, Sick 1997, Souza 2004, Sigrist 2009, Van Perlo 2009), considering Mato Grosso, Maranhão, Tocantins and Piauí states the southernmost area (Sick 1997, Silveira and d'Horta 2002, Lopes *et al.* 2009, Pinheiro and Dornas 2009), in regions that present forests with considerable biogeographic influence of Amazon forests (Silva 1996).

The presence of Amazonian birds in forests within the Cerrado biome, especially in gallery forests of Central Brazil, has been well documented in ornithological literature (Silva 1996, Pinheiro and Dornas 2009), demonstrating the penetration of typically Amazonian elements into the Cerrado biome, especially through forests located along great rivers, such as the Araguaia.

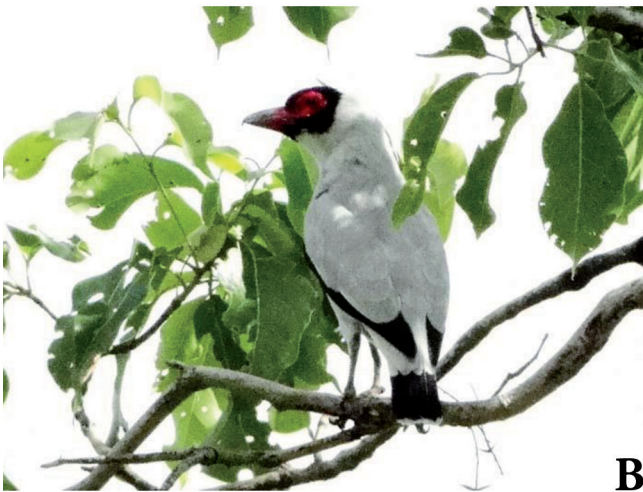
Among the records of *T. semifasciata* presented here, the northernmost were obtained in the Municipalities of Sonora, along the Correntes River on the border with

Mato Grosso State, Costa Rica and Cassilândia, in the northeast of Mato Grosso do Sul state. These areas are located in a *core area* of the Cerrado biome, and the presence of *T. semifasciata* can be explained by biogeographic influence of the Amazon in Cerrado forests, especially in its northern regions (Silva 1996).

The records obtained in Sonora and Maracaju Range, in Corguinho and Aquidauana (Piraputanga district) Municipalities, which belong to the upper Paraguay River basin, demonstrated that *T. semifasciata* occur in the surroundings of the Pantanal wetlands. This fact suggests the possibility that *T. semifasciata* occurs in the Pantanal of Mato Grosso do Sul State, since the species was observed in forests along rivers that run through the Pantanal wetlands, such as the Aquidauana and Correntes Rivers. It is important to emphasize that *T. semifasciata* is included in the list of bird species for the Pantanal wetlands, but solely for the northernmost parts of the state of Mato Grosso (Tubelis and Tomas 2003). Apparently, *T. semifasciata* can expand its breeding range into southern Brazil through the upper Paraguay River basin, especially into forests of Maracaju Range, at Mato Grosso do Sul state.

The other records presented here were obtained in forests located in the northeast of Mato Grosso do Sul, in Costa Rica and Cassilandia Municipalities, in a *core area* of the Cerrado biome, and south of this state, at Rio Brilhante, Maracaju and Nova Alvorada do Sul Municipalities, in a region characterized by ecotones between the Cerrado biome and semi-deciduous forests of the Parana

River basin, inside the Atlantic domain. The presence of *T. semifasciata* in the surroundings of the Emas National Park (Hass 2003) and Rio Verde municipality (Bessa 2009), both in the state of Goiás, demonstrates its occurrence in the Cerrado of central Brazil and the Parana River basin, indicating that forests of this region also allow southward expansion of the species in Brazil.



**FIGURE 2:** Masked Tityra (*Tityra semifasciata*). A and B: male recorded at Gavião-de-Penacho Private Reserve in Corguinho, Mato Grosso do Sul. C: Female recorded in the vicinities of Vale do Bugio Private Reserve in Corguinho, Mato Grosso do Sul. Black-tailed Tityra (*Tityra cayana*). D: Male and E: Female. Photo credits: A and C: Maria Antonietta C. Pivatto. B: Vivian Ribeiro B. Maria. D and E: Mauricio Godoi.



The majority of Mato Grosso do Sul state is covered by the Cerrado and Pantanal biomes, with biogeographic influences of the Atlantic Forest in semi-deciduous forests in the Parana River basin, Amazon forests in its northern regions and the Chaco biome on the western border of the Pantanal wetlands (Veloso *et al.* 1992). Given the great habitat diversity and the biogeographic influences of different biomes, at least 580 bird species occur in the state of Mato Grosso do Sul, however, we believe that the species richness could be larger, since only few areas in the state have been explored adequately (Tubelis and Tomas 2003, Agostinho *et al.* 2004, Nunes *et al.* 2005, Pivatto *et al.* 2006, Silva *et al.* 2006, Straube *et al.* 2006a, b, Pivatto *et al.* 2008).

We would like to emphasize the necessity to study avifauna in Mato Grosso do Sul State in greater detail in order to obtain an overall picture of bird distribution, species richness and better understanding about the patterns and biogeographic processes that determine the distribution and richness of birds in the state and its different biomes. Ornithological studies are particularly important now that biodiversity conservation in Brazil has been impeded by the rapid loss and conversion of natural areas, especially to large scale agriculture, carried out without a thorough knowledge of the birds that occur in these areas (Marini and Garcia 2005). Finally, most of the records presented in this paper were collected during environmental consulting works, demonstrating their importance for the inventories and conservation of birds, especially in regions which have not been well studied so far, such as Mato Grosso do Sul State (Vasconcelos 2006, Vasconcelos and Straube 2006).

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## REFERENCES

Agostinho, A. A.; Thomas, S. M.; Júlio Jr., H. F.; Han, N. S. and Rodrigues, L. (2004). *A planície de inundação do Alto Rio Paraná:*

- Componente Biótico – Avifauna*. Relatório Técnico. Programa PELD/CNPq.
- Bessa, R. (2009). Foto do anambé-branco-de-máscara-negra (*Tityra semifasciata*, Spix 1825). Em: Wikiaves: A enciclopédia das Aves do Brasil. [www.wikiaves.com.br/foto.php?f=78342&t=c&c=1072&s=11441&p=1](http://www.wikiaves.com.br/foto.php?f=78342&t=c&c=1072&s=11441&p=1) (acesso em 23/08/2010).
- Bodrati, A.; Roesler, I.; Areta, J. I.; Pagano, L. G.; Jordan, E. A. and Juhant, M. (2008). Três espécies del género *Tityra* en Argentina. *Hornero*, 23(1):45-49.
- Dickinson, E. C. (Ed.). (2003). *The Howard and Moore complete checklist of the birds of the world*. Christopher Helm, London, United Kingdom.
- EMBRAPA. (2005). *Brasil em Relevô – Mato Grosso do Sul*. Embrapa Monitoramento por Satélite. Brasília: Empresa Brasileira de Pesquisa Agropecuária. [www.relevobr.cnpem.embrapa.br/ms/index](http://www.relevobr.cnpem.embrapa.br/ms/index) (acesso em 20/08/2010).
- Hass, A. (2003). Avaliação da avifauna do Parque Nacional das Emas. Em: Plano de Manejo do Parque Nacional das Emas. Brasília, DF. IBAMA/MMA.
- Lopes, L. E.; Pinho, J. B.; Bernardon, B.; Oliveira, F. F.; Bernardon, G.; Ferreira, L. P.; Vaconcelos, M. F.; Maldonado-Coelho, M.; Nóbrega, P. F. A. and Rubio, T. C. (2009). Aves da Chapada dos Guimarães, Mato Grosso, Brasil: uma síntese histórica do conhecimento. *Papéis Avulsos de Zoologia*, Museu de Zoologia da Universidade de São Paulo, 42(2):9-47.
- Lowen, J. C.; Clay, R. P.; Barnett, J. M.; Madronó, A.; Pearman, M.; Lanús, B. L.; Tobias, J. O.; Liley, D. C.; Brooks, T. M.; Esquivel, E. Z. and Reid, J. M. (1997). New and noteworthy observations on the Paraguayan avifauna. *Bulletin of the British Ornithologists' Club*, 117:275-293.
- Marini, M. A. and Garcia, F. I. (2005). Conservação de aves no Brasil. *Megadiversidade*, Vol. 1, Nº 1, 95-102.
- Mobley, J. A. (2004). Genus *Tityra*, p. 449-450. In: J. del Hoyo, A. Elliott, and D. Christie (Eds.). *Handbook of the birds of the world*. Vol. 9. Cotingas to pipits and wagtails. Lynx Edicions, Barcelona, Spain.
- NATURESERVE. (2007). Animais e Ecossistemas da América Latina. Mapas de distribuição de *Tityra semifasciata* e *Tityra cayana*. NatureServe/Infonatura. [www.natureserve.org/infonatura](http://www.natureserve.org/infonatura) (acesso em 20/08/2010).
- Nunes, A. P.; Tomas, W. M. and Tizianel, F. A. T. (2005). Aves da Fazenda Nhumirim, Pantanal da Nhecolândia, MS. Série Documentos, EMBRAPA-CPAP, 81:1-34.
- Pinheiro, R. T. e Dornas, T. (2009). Distribuição e conservação das aves na região do Cantão, Tocantins: ecótono Amazônia/Cerrado. *Biota Neotropica*, Vol. 9, nº 1, Jan./Mar., 187-205.
- Pivatto, M. A. C.; Manço, D. D. G.; Straube, F. C.; Urban-Filho, A. E. and Milano, M. (2006). Aves do Planalto da Bodoquena, estado do Mato Grosso do Sul (Brasil). *Atualidades Ornitológicas*, 129, janeiro/fevereiro, 1-26.
- Pivatto, M. A. C.; Donatelli, R. J. and Manço, D. D. G. (2008). Aves da Fazenda Santa Emília, Aquidauana, Mato Grosso do Sul. *Atualidades Ornitológicas*, 143, maio/junho, 33-37.
- Ridgely, R. S. and Tudor, G. (1994). *The Birds of South America*. Vol. 2. University of Texas Press, Austin.
- Sick, H. (1997). *Ornitologia Brasileira*. Editora Nova Fronteira S.A., Rio de Janeiro, RJ.
- Sigrist, T. (2009). *Guia de Campo Aves Brasilis: Avifauna Brasileira*. 1ª Edição. Vinhedo, São Paulo. 492p.
- Silva, J. M. C. (1996). Distribution of Amazonian and Atlantic birds in gallery forests of Cerrado region, South America. *Ornitologia Neotropical*, Vol. 7, nº 1, 1-18.
- Silva, M. B.; Zucca, C. F.; Souza, C. R.; Mamede, S.; Pina, P. I. and Oliveira, I. R. (2006). Inventário da Avifauna no Complexo Aporé-Sucuriú. p. 113-128. Em: T. C. S. Pagotto and P. R. Souza (Eds.). Biodiversidade do Complexo Aporé-Sucuriú: Subsídios à conservação e ao manejo do Cerrado. Área Prioritária 316-Jauru.

- Silveira, L. F. and d'Horta, F. M. (2002).** A avifauna da região de Vila Bela da Santíssima Trindade, Mato Grosso. *Papéis Avulsos de Zoologia*, Museu de Zoologia da Universidade de São Paulo, 42(10):265-286.
- Souza, D. (2004).** *Todas as aves do Brasil*. Bahia: DALL Editora. 350p.
- Straube, F. C.; Urban-Filho, A.; Nunes, A. P.; Tomás, W. M. and Vieira-da-Rocha, M. C. (2006a).** Avifauna do Pantanal de Nabileque (Mato Grosso do Sul, Brasil). *Atualidades Ornitológicas*, 134, novembro/dezembro: 1-22.
- Straube, F. C.; Urban-Filho, A.; Nunes, A. P.; Tomás, W. M. and Vieira-da-Rocha, M. C. (2006b).** Nova contribuição à Ornitologia do Chaco Brasileiro (Mato Grosso do Sul, Brasil). *Atualidades Ornitológicas*, 134, novembro/dezembro, 1-27.
- Tubelis, D. P. and Tomas, W. M. (2003).** Bird species of the wetland, Brazil. *Ararajuba*, 11(1):5-37.
- Van Perlo, B. (2009).** *A field guide to the Birds of Brazil*. New York: Oxford University Press. 465p.
- Vasconcelos, M. F. (2006).** Uma opinião crítica sobre a qualidade e a utilidade dos trabalhos de consultoria ambiental sobre avifauna. *Atualidades Ornitológicas*, 131:10-12.
- Vasconcelos, M. F. and Straube, F. C. (2006).** Sugestões para melhor aproveitamento dos resultados de consultorias em estudos biogeográficos e na conservação das aves. *Atualidades Ornitológicas*, 132:10-11.
- Veloso, H. P.; Rangel-Filho, A. L. R. and Lima, J. C. A. (1992).** *Classificação da vegetação brasileira adaptada a um sistema universal*. Rio de Janeiro: IBGE. 123p.