



Avifauna of the Upper Guaporé River Valley in Mato Grosso state, Southern Brazilian Amazon Forest

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Abstract

The Guaporé Valley is located in an important transition area between the Cerrado and the Amazon biomes and has a large area of its extent legally protected by Conservation Units or Indigenous Territories. However, the region, inserted in the "deforestation arc", territorial area known for high rates of forest loss, has been changed over the years by the replacement of natural forests by pastures for cattle production. This work aimed to survey the bird population with the current land use in different areas. The research on bird species was performed from March 2012 to January 2013 in eight points along 25 km of the Guaporé River. It was recorded 11,192 birds belonging to 173 species from which 5 were seasonal visitors. Our study was also compared with other studies carried out in the area, and so we added 30 species not yet recorded by previous studies.

Keywords: Birds and Environment; Conservation; Endangered Species

Introduction

The Upper Guaporé Valley, located in the southwest of the state of Mato Grosso-Brazil, is formed by a complex ecotone, made up of the confluence of three important Brazilian biomes, the Amazon Rainforest and the Cerrado [1]. Drained by the Guaporé River, the valley is made up of a mosaic of unique ecosystems, reflecting its rich biodiversity. This makes the region of fundamental importance for studies aimed at understanding the composition of the fauna and flora of these unique environments.

The Ornithological Records Committee has registered 1,832 species of birds in Brazil. Of these, 1,300 species are registered in the Amazon rainforest, with 20% endemic species. The Cerrado has recorded 837 species, of which 4.3% are endemic.

Although it has enormous potential for bird species richness, the Upper Guaporé Valley region has few studies

Natterers-Pelzeln, et al. [2-4] which aim to carry out systematized surveys in order to gain knowledge of all its rich avifauna. In this way, we present the first systematized survey of avifauna carried out in the Alto Guaporé Valley region, in the municipality of Vila Bela da Santíssima Trindade - MT.

Material and Methods

Study Area

The Alto Guaporé Valley is made up of six municipalities, all located in the southwestern region of the state of Mato Grosso. The valley is drained by the Guaporé River, one of the main tributaries of the Mamoré River, which after its confluence forms the Madeira River, one of the most important tributaries of the Amazon River [5,6].

Inserted in the transition region between the Amazon and Cerrado morphoclimatic domains [1]. The Upper Guaporé Valley is characterized by three to four dry months

(from June to September) with summer rains, an average temperature of the coldest month of approximately 23°C and an average annual rainfall of 2150 mm [7].

In general, the environmental impacts frequently observed in the valley are represented by the advance of deforestation to make way for pastures and agriculture, as well as the burning and elimination of riparian forests,

causing soil erosion and the carrying of sediment into the riverbed [8].

The municipality of Vila Bela da Santíssima Trindade/MT (Figure 1) was chosen for the study, as it is the first municipality in which the Guaporé River is entirely navigable [8], as well as being the area that best represents the ecological tension between the two biomes in the region.

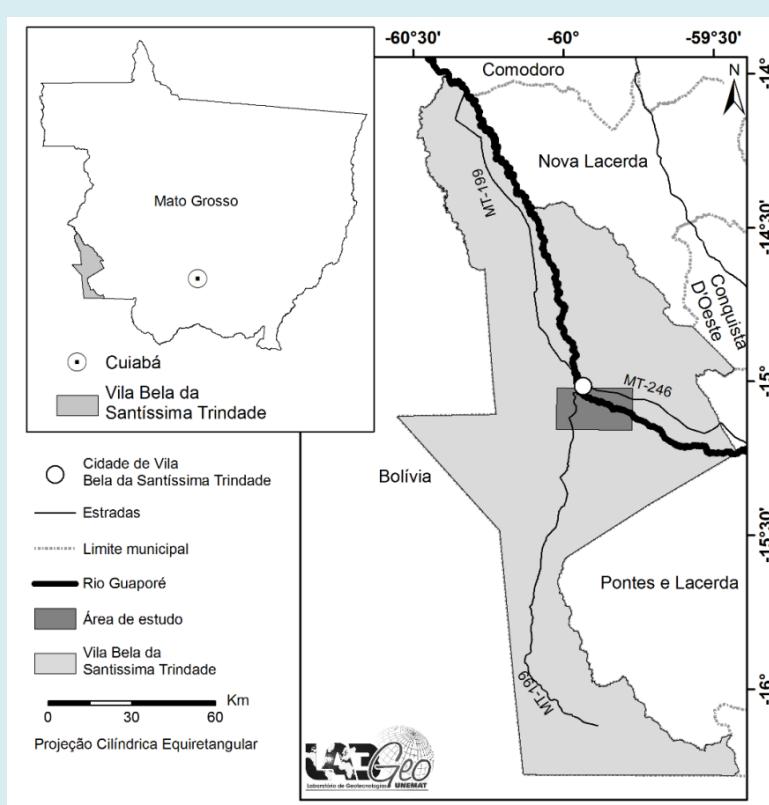


Figure 1: Location of the study area: Upper Guaporé Valley - Vila Bela da Santíssima Trindade (Source: LABGEO Unemat 2012).

Data Collection

The bird census was carried out monthly between March 2012 and January 2013, sampling every hydrological period. Birdlife was sampled using the modified point sampling method at eight points along approximately 25 km of the Guaporé River, in the municipality of Vila Bela da Santíssima Trindade, considering the diversity of environments and forms of use found [9,10].

At each point, 20-minute stops were made to establish visual and auditory contact with the bird species. Binoculars (7x50mm) were used to observe and record the bird species, and photographs were taken with a Canon Rebel XTI digital camera, with 12 mega pixel resolution, and vocalization records were made when possible.

The species were systematically sorted using basic

references on the birds found on Sick, et al. [11-15]. The nomenclature used was in accordance with the Brazilian Committee of Ornithological Records [16].

Using the qualitative data, it was possible to estimate the richness of the region's birds and the most representative families and orders. As well as allowing us to verify the occurrence of species that are endemic to Brazil, seasonal visitors or threatened with extinction.

Using the qualitative data, we calculated the frequency of occurrence in order to establish their abundance indices. The calculation of frequency of occurrence was determined using the Lindsdale Index [17]. This is the ratio between the number of times the species was recorded and the total number of visits expressed as a percentage. Abundance

indices were defined as: very abundant, species recorded between 81-100%; abundant, 61-80%; frequent, 41-60%; occasional, 21-40% and rare, 1-20%. Species described as seasonal visitors were not taken into account, nor were species with nocturnal habits, since no censuses were carried out that included the time when individuals were most active.

Results and Discussion

In this study we recorded 173 species of birds belonging to 48 families and 23 orders in the Upper Guaporé Valley, southwestern Mato Grosso State, Brazil (Table 1). The families with the highest number of species were Tyrannidae with 19 species, followed by the Accipitridae, Ardeidae and Icteridae families, all with 10 species, and the Psittacidae family with 9 species recorded. All the species recorded in this study are considered to be of low concern in terms of threat of extinction on a global scale [18] and are not on the Ministry of the Environment's list of endangered species at a national or local level [19].

The frequency of occurrences showed that more than half (55%) of the species recorded in this study for the region were considered rare, 16% were very abundant, 13% were occasional, 8% were abundant and 7% were frequent species (Table 1).

In previous bird surveys carried out in the Upper Guaporé Valley by Natterers-Pelzeln [2]; Willis, et al. [3], Silveira, et al. [4], a total of 472 species were recorded for the region. In our surveys, we recorded 30 species that were not recorded in the

aforementioned surveys: *Dendrocygna autumnalis* (Linnaeus 1758), *Circus buffoni* (Gmelin 1788), *Porphyrio flavirostris* (Gmelin 1789), *Phaetusa simplex* (Gmelin 1789), *Brotogeris chiriri* (Vieillot 1818), *Pionus maximiliani* (Kuhl 1820), *Phaethornis spretrei* (Lessone Delattre 1839), *Chloroceryle inda* (Linnaeus 1766), *Campylorhamphus trochilirostris* (Lichtenstein 1820), *Certhiaxis cinnamomeus* (Gmelin 1788), *Schiffornis virescens* (Lafresnaye 1838), *Elaenia flavogaster* (Thunberg 1822), *Elaenia chiriquensis* (Lawrence 1865), *Myiarchus swainsoni* (Cabanis Heine 1859), *Tyrannopsis sulphurea* (Spix 1825), *Griseotyrannus aurantioatrocristatus* (d'Orbigny e Lafresnaye 1837), *Arundinicola leucocephala* (Linnaeus 1764), *Lathrotriccus euleri* (Cabanis 1868), *Riparia riparia* (Linnaeus 1758), *Troglodytes musculus* (Naumann 1823), *Cantorchilus guarayanus* (d'Orbigny e Lafresnaye 1837), *Paroaria capitata* (d'Orbigny e Lafresnaye 1837), *Sicalis flaveola* (Linnaeus 1766), *Sporophila nigricollis* (Vieillot 1823), *Sporophila bouvreuil* (Statius Muller 1776), *Piranga flava* (Vieillot 1822), *Icterus pyrrhogaster* (Vieillot 1819), *Icterus croconotus* (Wagler 1829), *Amblyramphus holosericeus* (Scopoli 1786), *Molothrus oryzivorus* (Gmelin 1788).

We recorded 5 known migratory species in this study [20]. The Osprey (*Pandion haliaetus*, Linnaeus 1758) (Figure 2), the only member of the Pandionidae family, was recorded from September onwards. *P. haliaetus* is native to North America, where it breeds, migrating to South America during the winter. This species can be seen in almost all Brazilian states. Its migration route usually follows bodies of water, due to its preference for feeding on fish.



Figure 2: *Pandion haliaetus*, a seasonal visitor from the northern hemisphere, recorded in the Guaporé River, Vila Bela da Santíssima Trindade - Mato Grosso, Brazil. Photo by B. W. Zago.

Swallow-tailed Kite (*Elanoides forficatus*, Linnaeus 1758) (Figure 3), recorded in March and then only from September onwards, with the number of individuals gradually increasing over the months, reaching 317 individuals in December flying over the study area in search of food, clearly demonstrating a migratory movement. *E. forficatus* has a subspecies resident in Brazil and a subspecies from North America, migrating to

the south and southeast of Brazil from August/September and remaining until February/March, corroborating what was recorded in this study Nunes, et al. [21]. This pattern of occurrence was also recorded by Vitorino, et al. [22]; Nunes, et al. [23] Nunes, et al. [24] in different regions of the Pantanal in Mato Grosso.



Figure 3: *Elanoides forficatus*, a seasonal visitor from the northern hemisphere, recorded in the Guaporé River, Vila Bela da Santíssima Trindade - Mato Grosso, Brazil. Photo by J. R. S. Nunes.

Vermilion flycatcher (*Pyrocephalus rubinus*, Boddaert 1783), a bird from the Tyrannidae family, notable for the strong red coloration of the male during the breeding season. It was sighted from July to August, with the males wearing breeding plumage. *P. rubinus* are southern migrants, coming from southern Brazil and Argentina to the Amazon in winter. They return to the south in spring-summer to begin breeding.

Another noteworthy fact is the formation of a nesting area for wood stork (*Mycteria americana*, Linnaeus 1758) (Figure 4) at one of the sampling points. The area has dominant

Buriti vegetation (*Mauritia flexuosa*, Linnaeus 1782). The individuals of *M. americana* were seen sporadically from April onwards. Later, in July, around 120 individuals of *M. americana* (in a mixed flock with *Platalea ajaja*, Linnaeus 1758) established themselves in the area, building nests and starting to reproduce. Young individuals of *M. americana* began to appear in September and remained in the area until October. This makes the area extremely important for maintaining the species in the state's Pantanal plains.



Figure 4: Nesting area of *Mycteria americana* in an area dominated by buriti (*Mauritia flexuosa*) on the banks of the Guaporé River, Vila Bela da Santíssima Trindade - Mato Grosso, Brazil. Photo by B. W. Zago.

It is important to note that the Upper Guaporé Valley is located in a region that is extremely rich in biodiversity and is still little known. It also has a unique composition of species as it is a transition area between two important

Brazilian biomes (the Amazon and the Cerrado). This raises the need for the creation of Conservation Unit areas, in view of the advance of agricultural and pastoral activities in the region.

TAXON NAME	PORTUGUESE NAME	FO	STATUS
TINAMIDAE			
<i>Crypturellus undulatus</i> (Temminck, 1815)	Jaó	O	R
ANHIMIDAE			
<i>Chauna torquata</i> (Oken, 1816)	Tachã	Ma	R
ANATIDAE			
<i>Dendrocygna viduata</i> (Linnaeus, 1766)	Irerê	O	R
<i>Dendrocygna autumnalis</i> (Linnaeus, 1758)	Asa-branca	A	R
<i>Cairina moschata</i> (Linnaeus, 1758)	Pato-do-mato	Ma	R
<i>Amazonetta brasiliensis</i> (Gmelin, 1789)	Pé-vermelho	Ra	R
CRACIDAE			
<i>Ortalis guttata</i> (Spix, 1825)	Aracuã	Ra	R
<i>Penelope superciliaris</i> (Temminck, 1815)	Jacupemba	Ra	R
<i>Aburria cujubi</i> (Pelzeln, 1858)	Cujubi	Ra	R
<i>Pauxi tuberosa</i> (Spix, 1825)	Mutum-cavalo	Ra	R
<i>Crax fasciolata</i> (Spix, 1825)	Mutum-de-penacho	Ra	R
CICONIIDAE			
<i>Ciconia maguari</i> (Gmelin, 1789)	Maguari	Ra	R
<i>Jabiru mycteria</i> (Lichtenstein, 1819)	Tuiuiú	Ra	R
<i>Mycteria americana</i> (Linnaeus, 1758)	Cabeça-seca	A	R

PHALACROCORACIDAE			
<i>Phalacrocorax brasiliensis</i> (Gmelin, 1789)	Biguá	Ma	R
ANHINGIDAE			
<i>Anhinga anhinga</i> (Linnaeus, 1766)	Biguatinga	Ma	R
ARDEIDAE			
<i>Tigrisoma lineatum</i> (Boddaert, 1783)	Socó-boi	Ma	R
<i>Agamia agami</i> (Gmelin, 1789)	Garça-da-mata	Ra	R
<i>Cochlearius cochlearius</i> (Linnaeus, 1766)	Arapapá	-	R
<i>Nycticorax nycticorax</i> (Linnaeus, 1758)	Savacu	-	R
<i>Butorides striata</i> (Linnaeus, 1758)	Socozinho	Ma	R
<i>Bubulcus ibis</i> (Linnaeus, 1758)	Garça-vaqueira	Fr	R
<i>Ardea cocoi</i> (Linnaeus, 1766)	Garça-moura	Ma	R
<i>Ardea alba</i> (Linnaeus, 1758)	Garça-branca-grande	Ma	R
<i>Pilherodius pileatus</i> (Boddaert, 1783)	Garça-real	Ra	R
<i>Egretta thula</i> (Molina, 1782)	Garça-branca-pequena	Fr	R
THRESKIORNITHIDAE			
<i>Mesembrinibis cayennensis</i> (Gmelin, 1789)	Coró-coró	A	R
<i>Phimosus infuscatus</i> (Lichtenstein, 1823)	Tapicuru-de-cara-pelada	A	R
<i>Theristicus caudatus</i> (Boddaert, 1783)	Curicaca	Ra	R
<i>Platalea ajaja</i> (Linnaeus, 1758)	Colhereiro	Ra	R
CATHARTIDAE			
<i>Cathartes aura</i> (Linnaeus, 1758)	Urubu-de-cabeça-vermelha	A	R
<i>Cathartes burrovianus</i> (Cassin, 1845)	Urubu-de-cabeça-amarela	O	R
<i>Coragyps atratus</i> (Bechstein, 1793)	Urubu-de-cabeça-preta	Ma	R
PANDIONIDAE			
<i>Pandion haliaetus</i> (Linnaeus, 1758)	Águia-pescadora	-	VN
ACCIPITRIDAE			
<i>Elanoides forficatus</i> (Linnaeus, 1758)	Gavião-tesoura	-	VN
<i>Circus buffoni</i> (Gmelin, 1788)	Gavião-do-banhado	Ra	R
<i>Busarellus nigricollis</i> (Latham, 1790)	Gavião-belo	Ma	R
<i>Rostrhamus sociabilis</i> (Vieillot, 1817)	Gavião-caramujeiro	A	R
<i>Geranospiza caerulescens</i> (Vieillot, 1817)	Gavião-pernilongo	Ra	R
<i>Heterospizias meridionalis</i> (Latham, 1790)	Gavião-caboclo	Ra	R
<i>Urubitinga urubitinga</i> (Gmelin, 1788)	Gavião-preto	Ra	R
<i>Rupornis magnirostris</i> (Gmelin, 1788)	Gavião-carijó	A	R
<i>Pseudastur albicollis</i> (Latham, 1790)	Gavião-branco	O	R
<i>Buteo nitidus</i> (Latham, 1790)	Gavião-pedrês	Ra	R
FALCONIDAE			
<i>Daptrius ater</i> (Vieillot, 1816)	Gavião-de-anta	Ra	R
<i>Caracara plancus</i> (Miller, 1777)	Caracará	Ra	R
<i>Milvago chimachima</i> (Vieillot, 1816)	Carrapateiro	Ra	R
<i>Herpetotheres cachinnans</i> (Linnaeus, 1758)	Acauã	O	R

<i>Falco sparverius</i> (Linnaeus, 1758)	Quiriquiri	Ra	R
<i>Falco rufigularis</i> (Daudin, 1800)	Cauré	Ra	R
EURYPYGINIDAE			
<i>Eurypyga helias</i> (Pallas, 1781)	Pavãozinho-do-pará	Ra	R
ARAMIDAE			
<i>Aramus guarauna</i> (Linnaeus, 1766)	Carão	Ma	R
RALLIDAE			
<i>Aramides cajanea</i> (Statius Muller, 1776)	Saracura-três-potes	Ra	R
<i>Laterallus viridis</i> (Statius Muller, 1776)	Sanã-castanha	Ra	R
<i>Porzana albicollis</i> (Vieillot, 1819)	Sanã-carijó	Ra	R
<i>Porphyrio martinica</i> (Linnaeus, 1766)	Frango-d'água-azul	O	R
<i>Porphyrio flavirostris</i> (Gmelin, 1789)	Frango-d'água-pequeno	Fr	R
HELIORNITHIDAE			
<i>Heliornis fulica</i> (Boddaert, 1783)	Picaparra	Fr	R
CHARADRIIDAE			
<i>Vanellus chilensis</i> (Molina, 1782)	Quero-quero	A	R
JACANIDAE			
<i>Jacana jacana</i> (Linnaeus, 1766)	Jaçanã	Ma	R
STERNIDAE			
<i>Phaetusa simplex</i> (Gmelin, 1789)	Trinta-réis-grande	Ra	R
COLUMBIDAE			
<i>Columbina talpacoti</i> (Temminck, 1811)	Rolinha-roxa	O	R
<i>Claravis pretiosa</i> (Ferrari-Perez, 1886)	Pararu-azul	O	R
<i>Columba livia</i> (Gmelin, 1789)	Pombo-doméstico	Ma	R
<i>Patagioenas cayennensis</i> (Bonnaterre, 1792)	Pomba-galega	A	R
<i>Patagioenas plumbea</i> (Vieillot, 1818)	Pomba-amargosa	O	R
<i>Zenaida auriculata</i> (Des Murs, 1847)	Pomba-de-bando	Ra	R
<i>Leptotila verreauxi</i> (Bonaparte, 1855)	Juriti-pupu	Ra	R
PSITTACIDAE			
<i>Ara ararauna</i> (Linnaeus, 1758)	Arara-canindé	Ma	R
<i>Ara chloropterus</i> (Gray, 1859)	Arara-vermelha-grande	Fr	R
<i>Orthopsittaca manilata</i> (Boddaert, 1783)	Maracanã-do-buriti	Ma	R
<i>Aratinga leucophthalma</i> (Statius Muller, 1776)	Periquitão-maracanã	Ra	R
<i>Brotogeris chiriri</i> (Vieillot, 1818)	Periquito-de-encontro-amarelo	A	R
<i>Pionus menstruus</i> (Linnaeus, 1766)	Maitaca-de-cabeça-azul	O	R
<i>Pionus maximiliani</i> (Kuhl, 1820)	Maitaca-verde	Ra	R
<i>Amazona amazonica</i> (Linnaeus, 1766)	Curica	Ra	R
<i>Amazona aestiva</i> (Linnaeus, 1758)	Papagaio-verdadeiro	O	R
OPISTHOCOMIDAE			
<i>Opisthocomus hoatzin</i> (Statius Muller, 1776)	Cigana	Ma	R
CUCULIDAE			
<i>Coccycua minuta</i> (Vieillot, 1817)	Chincoã-pequeno	Ra	R

<i>Piaya cayana</i> (Linnaeus, 1766)	Alma-de-gato	O	R
<i>Crotophaga major</i> (Gmelin, 1788)	Anu-coroca	A	R
<i>Crotophaga ani</i> (Linnaeus, 1758)	Anu-preto	Ma	R
<i>Guira guira</i> (Gmelin, 1788)	Anu-branco	O	R
STRIGIDAE			
<i>Pulsatrix perspicillata</i> (Latham, 1790)	Murucututu	-	R
<i>Bubo virginianus</i> (Gmelin, 1788)	Jacurutu	-	R
APODIDAE			
<i>Streptoprocne zonaris</i> (Shaw, 1796)	Taperuçu-de-coleira-branca	Ra	R
TROCHILIDAE			
<i>Phaethornis nattereri</i> (Berlepsch, 1887)	Besourão-de-sobre-amarelo	Ra	R
<i>Phaethornis pretrei</i> (Lesson&Delattre, 1839)	Rabo-branco-acanelado	Ra	R
<i>Anthracothorax nigricollis</i> (Vieillot, 1817)	Beija-flor-de-veste-preta	Ra	R
<i>Hylocharis cyanus</i> (Vieillot, 1818)	Beija-flor-roxo	Ra	R
TROGONIDAE			
<i>Trogon melanurus</i> (Swainson, 1838)	Surucuá-de-cauda-preta	Ra	R
<i>Trogon curucui</i> (Linnaeus, 1766)	Surucuá-de-barriga-vermelha	Ra	R
ALCEDINIDAE			
<i>Megacyrle torquata</i> (Linnaeus, 1766)	Martim-pescador-grande	Ma	R
<i>Chloroceryle amazona</i> (Latham, 1790)	Martim-pescador-verde	Ma	R
<i>Chloroceryle aenea</i> (Pallas, 1764)	Martinho	Ra	R
<i>Chloroceryle americana</i> (Gmelin, 1788)	Martim-pescador-pequeno	Ma	R
<i>Chloroceryle inda</i> (Linnaeus, 1766)	Martim-pescador-da-mata	Fr	R
BUCCONIDAE			
<i>Monasa nigrifrons</i> (Spix, 1824)	Chora-chuva-preto	Fr	R
RAMPHASTIDAE			
<i>Ramphastos toco</i> (Statius Muller, 1776)	Tucanuçu	A	R
<i>Pteroglossus castanotis</i> (Gould, 1834)	Araçari-castanho	Fr	R
PICIDAE			
<i>Melanerpes cruentatus</i> (Boddaert, 1783)	Benedito-de-testa-vermelha	Ra	R
<i>Veniliornis passerinus</i> (Linnaeus, 1766)	Picapauzinho-anão	Ra	R
<i>Colaptes melanochloros</i> (Gmelin, 1788)	Pica-pau-verde-barrado	Ra	R
<i>Dryocopus lineatus</i> (Linnaeus, 1766)	Pica-pau-de-banda-branca	O	R
<i>Campephilus rubricollis</i> (Boddaert, 1783)	Pica-pau-de-barriga-vermelha	Ra	R
<i>Campephilus melanoleucus</i> (Gmelin, 1788)	Pica-pau-de-topete-vermelho	Ra	R
THAMNOPHILIDAE			
<i>Taraba major</i> (Vieillot, 1816)	Choró-boi	Ra	R
DENDROCOLAPTIDAE			
<i>Dendrocincla fuliginosa</i> (Vieillot, 1818)	Arapaçu-pardo	Ra	R
<i>Campylorhamphus trochilirostris</i> (Lichtenstein, 1820)	Arapaçu-beija-flor	Ra	R
<i>Dendroplex picus</i> (Gmelin, 1788)	Arapaçu-de-bico-branco	Ra	R

FURNARIIDAE			
<i>Furnarius rufus</i> (Gmelin, 1788)	João-de-barro	Ra	R
<i>Certhiaxis cinnamomeus</i> (Gmelin, 1788)	Curutié	O	R
TITYRIDAE			
<i>Schiffornis virescens</i> (Lafresnaye, 1838)	Flautim	Ra	R
<i>Tityra cayana</i> (Linnaeus, 1766)	Anambé-branco-de-rabo-preto	Fr	R
TYRANNIDAE			
<i>Camptostoma obsoletum</i> (Temminck, 1824)	Risadinha	Ra	R
<i>Elaenia flavogaster</i> (Thunberg, 1822)	Guaracava-de-barriga-amarela	Ra	R
<i>Elaenia chiriquensis</i> Lawrence, 1865	Chibum	Ra	R
<i>Elaenia parvirostris</i> (Pelzeln, 1868)	Guaracava-de-bico-curto	Ra	R
<i>Myiopagis caniceps</i> (Swainson, 1835)	Guaracava-cinzenta	Ra	R
<i>Myiarchus swainsoni</i> (Cabanis & Heine, 1859)	Irré	Ra	R
<i>Casiornis rufus</i> (Vieillot, 1816)	Maria-ferrugem	Ra	R
<i>Pitangus sulphuratus</i> (Linnaeus, 1766)	Bem-te-vi	Ma	R
<i>Philydor lictor</i> (Lichtenstein, 1823)	Bentevizinho-do-brejo	A	R
<i>Machetornis rixosa</i> (Vieillot, 1819)	Suiriri-cavaleiro	O	R
<i>Tyrannopsis sulphurea</i> (Spix, 1825)	Suiriri-de-garganta-rajada	Ra	R
<i>Myiozetetes cayanensis</i> (Linnaeus, 1766)	Bentevizinho-de-asa-ferrugínea	O	R
<i>Tyrannus albogularis</i> (Burmeister, 1856)	Suiriri-de-garganta-branca	Ra	R
<i>Tyrannus savana</i> (Vieillot, 1808)	Tesourinha		R
<i>Griseotyrannus aurantioatrocristatus</i> (d'Orbigny&Lafresnaye, 1837)	Peitica-de-chapéu-preto	Ra	R
<i>Empidonax varius</i> (Vieillot, 1818)	Peitica	Ra	R
<i>Pyrocephalus rubinus</i> (Boddaert, 1783)	Príncipe	-	VS
<i>Arundinicola leucocephala</i> (Linnaeus, 1764)	Freirinha	O	R
<i>Lathrotriccus euleri</i> (Cabanis, 1868)	Enferrujado	Ra	R
CORVIDAE			
<i>Cyanocorax cyanomelas</i> (Vieillot, 1818)	Gralha-do-pantanal	Ra	R
HIRUNDINIDAE			
<i>Stelgidopteryx ruficollis</i> (Vieillot, 1817)	Andorinha-serradora	A	R
<i>Progne tapera</i> (Vieillot, 1817)	Andorinha-do-campo	O	R
<i>Progne chalybea</i> (Gmelin, 1789)	Andorinha-doméstica-grande	O	R
<i>Tachycineta albiventer</i> (Boddaert, 1783)	Andorinha-do-rio	Ma	R
<i>Riparia riparia</i> (Linnaeus, 1758)	Andorinha-do-barranco	Ra	VN
TROGLODYTIIDAE			
<i>Troglodytes musculus</i> (Naumann, 1823)	Corruíra	Ra	R
<i>Campylorhynchus turdinus</i> (Wied, 1831)	Catatau	Ma	R
<i>Pheugopedius genibarbis</i> (Swainson, 1838)	Garrinchão-pai-avô	Ra	R
<i>Cantorchilus guarayanus</i> (d'Orbigny&Lafresnaye, 1837)	Garrincha-do-oeste	Ra	R
DONACOBIIDAE			
<i>Donacobius atricapilla</i> (Linnaeus, 1766)	Japacanim	Ma	R
POLIOPTILIDAE			

<i>Polioptila dumicola</i> (Vieillot, 1817)	Balança-rabo-de-máscara	Ra	R
TURDIDAE			
<i>Turdus rufiventris</i> (Vieillot, 1818)	Sabiá-laranjeira	Ra	R
MIMIDAE			
<i>Mimus saturninus</i> (Lichtenstein, 1823)	Sabiá-do-campo	Ra	R
THRAUPIDAE			
<i>Saltator maximus</i> (Statius Muller, 1776)	Tempera-viola	Ra	R
<i>Saltator coerulescens</i> (Vieillot, 1817)	Sabiá-gongá	Ra	R
<i>Ramphocelus carbo</i> (Pallas, 1764)	Pipira-vermelha	Ma	R
<i>Tangara sayaca</i> (Linnaeus, 1766)	Sanhaçu-cinzento	Ra	R
<i>Tangara palmarum</i> (Wied, 1823)	Sanhaçu-do-coqueiro	Fr	R
<i>Schistochlamys melanopis</i> (Latham, 1790)	Sanhaçu-de-coleira	Ra	R
<i>Paroaria capitata</i> (d'Orbigny&Lafresnaye, 1837)	Cavalaria	Ma	R
EMBERIZIDAE			
<i>Sicalis flaveola</i> (Linnaeus, 1766)	Canário-da-terra-verdadeiro	Ra	R
<i>Volatinia jacarina</i> (Linnaeus, 1766)	Tiziú	O	R
<i>Sporophila collaris</i> (Boddaert, 1783)	Coleiro-do-brejo	Ra	R
<i>Sporophila lineola</i> (Linnaeus, 1758)	Bigodinho	Ra	R
<i>Sporophila nigriceps</i> (Vieillot, 1823)	Baiano	Ra	R
<i>Sporophila bouvreuil</i> (Statius Muller, 1776)	Caboclinho	Ra	R
<i>Sporophila angolensis</i> (Linnaeus, 1766)	Curió	Ra	R
CARDINALIDAE			
<i>Piranga flava</i> (Vieillot, 1822)	Sanhaçu-de-fogo	Ra	R
<i>Pheucticus aureoventris</i> (d'Orbigny & Lafresnaye, 1837)	Rei-do-bosque	-	VA (O)
ICTERIDAE			
<i>Psarocolius decumanus</i> (Pallas, 1769)	Japu	Ra	R
<i>Procnociclus solitarius</i> (Vieillot, 1816)	Iraúna-de-bico-branco	Ra	R
<i>Cacicus cela</i> (Linnaeus, 1758)	Xexéu	O	R
<i>Icterus pyrrhogaster</i> (Vieillot, 1819)	Encontro	Ra	R
<i>Icterus croconotus</i> (Wagler, 1829)	João-pinto	Fr	R
<i>Gnorimopsar chopi</i> (Vieillot, 1819)	Graúna	Ra	R
<i>Amblyramphus holosericeus</i> (Scopoli, 1786)	Cardeal-do-banhado	Ra	R
<i>Agelaius cyanopus</i> (Vieillot, 1819)	Carretão	Ra	R
<i>Molothrus oryzivorus</i> (Gmelin, 1788)	Iraúna-grande	Ra	R
<i>Molothrus bonariensis</i> (Gmelin, 1789)	Vira-bosta	Ra	R

Table 1: Systematic list of birds recorded in the Upper Guaporé Valley - Mato Grosso, Brazil. (FO) Frequency of Occurrence: (Ma) very abundant, species recorded between 81-100%; (A) abundant, between 61-80%; (Fr) frequent, 41-60%; (O) occasional, 21-40%; (Ra) rare, 1-20%; (-) birds not considered for classification. The categories and abundance classes were based on Bugalho (1974). Status: (R) resident, (VS) seasonal visitor from the south of the continent, (VN) seasonal visitor from the north of the continent (VA (O)) vagrant, species of apparently irregular occurrence in Brazil; may be a regular migrant in neighboring countries to the west. Status classes were based on CBRO.

Bank Swallow (*Riparia riparia*) belonging to the Hirundinidae family, was only seen in December. *R. riparia* appears as a northern visitor in Brazil from September to April. Commonly found in mixed flocks with Barn Swallow (*Hirundo rustica*).

Black-backed Grosbeak (*Pheucticus aureoventris*, d'Orbigny e Lafresnaye 1837), belonging to the Cardinalidae family, only one individual was seen in November. *P. aureoventris* has a scarce and irregular occurrence in Brazil, having so far only been recorded in the far west of the state of Mato Grosso. It can be considered a southern migrant, as it has a wide distribution in the Andes.

Conclusions

The Upper Guaporé Valley has great potential for richness of fauna and flora, its location in a transition area between the Amazon and the Cerrado, and with the Pantanal as a neighboring biome, the species composition in this environment becomes unique as species from all three biomes can be found in the area.

The species richness recorded in this study is considered to be high when compared to other environments in Brazil and even abroad, even more so when taking into account that we are only dealing with species that can be found along the river.

Conflicts of Interest

The authors declare that there are no conflicts of interest involving this publication.

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