

Bird checklist and contributions to conservation of the Atlantic forest-cerrado ecotone in Três Lagoas municipality, Brazil

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Abstract. Although Três Lagoas municipality is located in a rare and highly fragmented Atlantic Forest-Cerrado ecotone, there is scarcity of biodiversity data to guide conservation decisions. Therefore, this study aimed to compile the first bird checklist in 31 localities in this municipality to propose conservation strategies based on avian richness, conservation and migratory status. A total of 419 bird species were recorded, of which 412 were exclusive to the Atlantic Forest-Cerrado ecotone and seven to the Cerrado domain (*C. minor*, *L. xenopterus*, *P. unicinctus*, *T. curucui*, *S. pileata*, *S. melanopsis* and *S. luteola*). According to the results, 12 species are included in the Near Threatened category, four are vulnerable (*C. fasciata*, *L. xenopterus*, *A. tricolor* and *S. hypoxantha*) and one is endangered (*U. coronata*). Regarding migratory birds, 112 were recorded (95 intracontinental, 17 intercontinental). Since the majority of these species are recorded in grasslands, aquatic habitats and Seasonal Deciduous Alluvial Forest, they necessarily have highest priority for conservation and restoration. Thus, we recommend that: (1) areas 2, 11 and 24 be considered as both Important Bird Area and “Área de Proteção Ambiental”; (2) riparian forest restoration along the Paraná river act as a local ecological corridor among these areas, allowing the recolonization, genetic exchange and restoration of locally reduced populations of migratory and near/threatened bird species.

Keywords. Avifauna; Conservation policies, Neotropical environments, Restoration.

INTRODUCTION

Três Lagoas municipality (TLM) stands out for its extensive economic growth in recent years (SEMAC, 2011), mainly due to the increased number of industries locally installed (Tisott *et al.*, 2017). This high number of industries made TLM one of the world's largest centers of pulp for paper production (Mendonça *et al.*, 2020). The region is attractive because it is located at the junction of some of the main roads, rivers and rail networks in Brazil (SEMADE, 2015). Therefore, it is believed that this municipality will continue to grow exponentially, both economically and demographically (IBGE, 2022), which in turn will impact the local landscape.

TLM is inserted in a region of ecological tension between the Atlantic Forest and the Cerrado

domain. Thus, its growth must consider environmental policies aimed at conserving the local biota, since the Atlantic Forest and the Cerrado are two of the five hotspots and most threatened biomes on the planet, with a high number of endemic plant and vertebrate species (Myers *et al.*, 2000). However, these biomes are extremely fragmented by pastures and monocultures in the northwest portion of the Atlantic Forest in the Alto Paraná ecoregion (Rodrigues & Bononi, 2008; Uezu & Metzger, 2016), especially the Seasonal Deciduous Alluvial Forest along the Paraná River, which has the most threatened Atlantic Forest phytobiognomy, with only 1% of the remaining forest (Fundação Ipardes, 1992).

The studies of avifauna in the Mato Grosso do Sul state (MGS) have always focused on the western region, that is, the Pantanal domain due to its

tourist structure and peculiar biome (Nunes *et al.*, 2022). This justifies why historically there were rare significant bird expeditions to TLM. *Cypsnagra hirundinacea* was the first bird collected in TLM by J. Steinbach (Museum of Comparative Biology, Harvard University) in 1918. There were two main expeditions to collect birds in TLM: a) in 1931 by the Museum of Comparative Biology and; b) in 1936 by the Field Museum of Natural History (<https://vertnet.org>). The closest historical expedition to TLM was carried out at "Fazenda Capão Bonito" (Sidrolândia municipality) in 1937 by Emmet Blake, who collected several bird specimens now deposited at the Field Museum of Natural History in Chicago/USA (Straube, 2011). The first scientific papers focused on birds in TLM were performed by Augusto João Piratelli (Piratelli *et al.*, 2001; Piratelli & Pereira, 2002; Piratelli, 2003; Piratelli & Blake, 2006) and José Ragusa-Netto (Ragusa-Netto, 2002). In the last two decades, many excursions and studies have been performed by us in several environments in TLM. However, there is no bird checklist compilation regarding the species found in this municipality up to now.

The strategy of providing a list of species is the first step toward conservation efforts, being highly recommended by the Chico Mendes Institute for Biodiversity Conservation (ICMBio, 2013). In addition, the avifauna can be used as a bioindicator of environmental changes, since it can be found at different trophic levels, constitutes one of the most studied groups of vertebrates and is extremely sensitive to environmental disturbances (Bierregaard *et al.*, 1992; Stotz *et al.*, 1996). Thus, it is important to observe some patterns in bird communities in order to predict the impact that past improper land use had on natural environments and make efforts towards their restoration and conservation (Sodhi *et al.*, 2011). Although Nunes *et al.* (2022) highlight the main historical excursions of ornithologists and collectors to the state of MGS, none is focused on the territory of the municipalities. In fact, Brazilian bird checklists usually do not cover all the municipality area, but particular areas or environments, as is the case of the studies conducted by Pivatto *et al.* (2006), Simpson *et al.* (2012), Lees *et al.* (2013), Corrêa & De Mello (2013) and Schunck *et al.* (2019), making it difficult to outline conservation strategies through municipal policies.

Therefore, in the present study we provide the first bird checklist for Três Lagoas municipality, including all of its environments, in addition to discussing conservation strategies for this region based on bird richness and status of conservation and migration.

MATERIAL AND METHODS

Area of study

TLM is located in the sedimentary plateau of the Paraná River Basin with predominantly sandy soils. Its area comprises 10.206,949 km² (20°45'04"S and 51°40'42"W) (SEMAC, 2011; SEMADE, 2015) and it is under the influence of a tropical savanna climate (Aw), according to the

Köppen-Geiger classification (Peel *et al.*, 2007), with an annual mean temperature of 26°C. The total annual rainfall is between 900 mm and 1.400 mm/year, with a rainy season during the summer and a dry season during the winter (SEMAC, 2011). Although located mainly in the Cerrado domain, TLM contains a Cerrado-Atlantic Forest ecotone area. In fact, the municipality of TLM is characterized by the presence of Atlantic Forest strips arranged perpendicularly in relation to the banks of the Paraná River (Fig. 1). These strips alternate with the Cerrado vegetation until they narrow and disappear as they move away from the river towards the northwest portion of TLM, which is exclusively covered by the Cerrado vegetation (SEMAC, 2011). As a result, these aspects create high biodiversity in this region. However, its environments have been largely modified, initially due to beef cattle production, and from the year 2000 onwards, due to extensive eucalyptus plantations (SEMADE, 2015). In particular, the areas of the Semideciduous Atlantic Forests and Cerrado Forests (Cerradão) have been suppressed, resulting in few isolated and small remnants (SEMADE, 2015).

According to Fig. 1, the descriptions of all 31 studied areas are: 1 = Lakes, Semideciduous Atlantic Forest and Cerradão Forest of Três Lagoas municipality (urban environment) – 20°47'03.08"S, 51°42'42.76"W; 2 = Semideciduous Atlantic Forest, including the Seasonal Deciduous Alluvial Atlantic Forest of the Parque Natural Municipal das Capivaras – 20°44'48.15"S, 51°39'25.76"W; 3 = Semideciduous Atlantic Forest, including the Seasonal Deciduous Alluvial Atlantic Forest: 20°37'42.08"S, 51°37'39.81"O; 4 = Cerradão Forest in the interchange with Inocência municipality – 20°38'59.65"S, 51°45'05.24"W; 5 = Cerradão Forest, riparian forest and grassland – 20°47'08.30"S, 51°47'23.92"W; 6 = Semideciduous Atlantic Forests, Cerradão, riparian forest, wet grassland and Vereda of Suzano Papel e Celulose – 20°59'17.22"S, 51°46'55.66"W; 7 = Riparian forest and grassland of the Água Tirada stream – 20°31'22.13"S, 51°58'23.91"W; 8 = Riparian forest and grassland of the Pinto stream – 20°43'21.82"S, 51°46'42.76"W; 9 = Semideciduous Atlantic Forest, including the Seasonal Deciduous Alluvial Atlantic Forest of the Paraná River – 21°05'04.02"S, 51°54'00.75"W; 10 = Cerradão Forest, Brazilian savanna and riparian forest of the Parque Natural Municipal do Pombo – 20°21'23.16"S, 52°37'53.20"W; 11 = Semideciduous Atlantic Forest, including the Seasonal Deciduous Alluvial Atlantic Forest of Cargill – 20°50'29.45"S, 51°42'22.16"W; 12 = Open grassland of Petrobras UFN3 – 20°59'31.23"S, 51°53'22.60"W; 13 = Semideciduous Atlantic and riparian forests of Eldorado Brasil Celulose – 20°35'56.77"S, 51°37'31.01"W; 14 = Brazilian savanna and riparian forest of the Crioulinho Arapuá stream – 20°42'11.83"S, 52°06'54.97"W; 15 = Cerradão forest at the SP 158 Sucuriú road – 20°41'01.40"S, 51°46'30.71"W; 16 = Brazilian savanna and riparian forest of the Bebedouro stream – 20°27'42.43"S, 51°50'25.43"W; 17 = Brazilian savanna of the SITREL – 20°47'12.81"S, 51°51'29.33"W; 18 = Brazilian savanna and riparian forest of the CTR Buriti – 20°35'39.84"S, 52°25'43.21"W; 19 = Riparian forest of the Curtume of Três Lagoas municipality – 20°51'34.09"S,

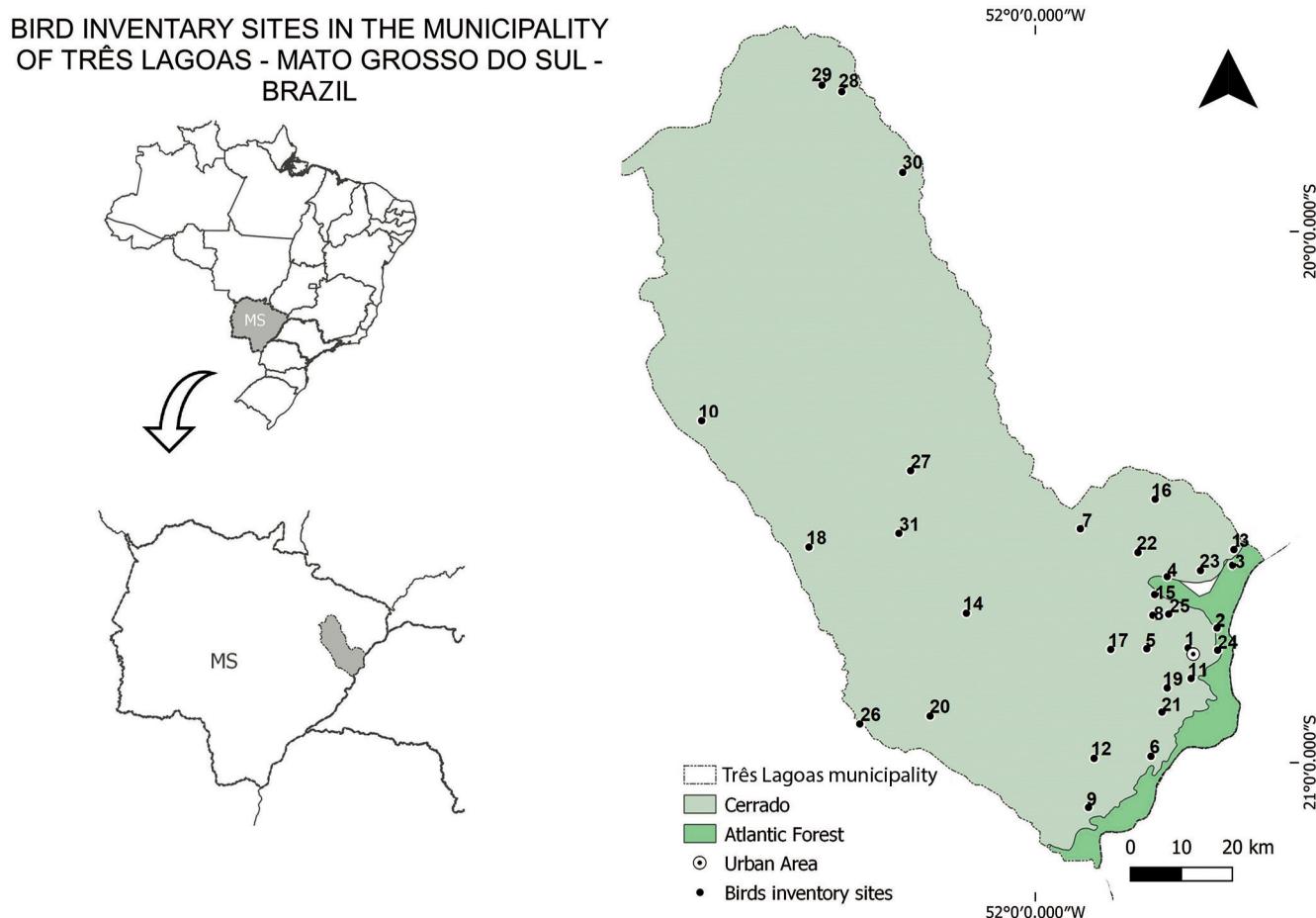


Figure 1. Três Lagoas Municipality map, Atlantic forest-cerrado ecotone and survey and localities (1-31).

51°45'05.08"W; 20 = Cerradão and riparian forests of Fazenda Rio Verde – 20°54'44.9"S, 52°11'58.5"W; 21 = Brazilian savanna and riparian forest of the Palmito stream – 20°54'17.5"S, 51°45'40.9"W; 22 = Cerradão Forest and Brazilian savanna of Fazenda Primavera – 20°36'16.7"S, 51°48'23.8"W; 23 = Cerradão Forest and Brazilian savanna of Fazenda Paranoá – 20°38'18.9"S, 51°41'18.4"W; 24 = Semideciduous Atlantic Forest of APA Jupiá – 20°47'18.4"S, 51°39'21.7"W; 25 = Brazilian savanna and open grassland close to MS road – 20°43'14"S, 51°44'55"W; 26 = Brazilian savanna, open grassland and small patches of the riparian forest of the Verde River – 20°55'38"S, 52°19'57"W; 27 = Cerradão Forest of Fazenda Vista Alegre – 20°27'02"S, 52°14'11"W; 28 = Cerradão Forest and wet grassland of Fazenda Mata Verde – 19°38'04.47"S, 52°25'19.36"W; 29 = Cerradão Forest of Fazenda Santa Izabel – 19°36'45.37"S, 52°28'47.76"W; 30 = Cerradão Forest, Brazilian savanna, riparian forest of the Ribeirão Imbaúva stream and wet grassland of Fazenda Santa Vitória, Embay and Timbaí and 31 = Brazilian savanna and Cerradão Forest of Fazenda Serrinha – 20°37'16.42"S, 52°15'23.27"W.

Bird survey

A total of 31 areas (see above), including all the environments found in TLM, were surveyed, namely, urban

environments, open and/or wet grasslands, Brazilian savanna (*Cerrado sensu stricto*), and Cerradão, riparian and semideciduous Atlantic forests.

For the elaboration of the consolidated list of birds found in TLM (Table 1), we adopted the method described by Nunes *et al.* (2022) with some modifications. We considered the records made by the authors' fieldwork from 2007 to 2022 (Rv/sNP followed by the authors' initials) derived from transects surveys. We also collected records available in the literature (Rv/sP), such as the studies conducted by: Piratelli *et al.* (2001); Ragusa-Netto (2002); Piratelli & Pereira (2002); Piratelli (2003) and Piratelli & Blake (2006); Godoi *et al.* (2011, 2012a, b, 2013), Previatto *et al.* (2013) and Gabriel & Godoy (2019). However, we did not consider *Campylopterus largipennis* recorded by Previatto *et al.* (2013) due to its restricted distribution in the northern region of the Amazon Forest. In addition, we also took into account the photographic and sound information (FSI) available until August 2022 on WikiAves (<https://www.wikiaves.com>), Xeno-canto (<https://www.xeno-canto.org>), eBird (<https://ebird.org>), iNaturalist (<https://www.inaturalist.org>), Macaulay library (<https://www.macaulaylibrary.org>) and GBIF (<https://www.gbif.org>). We also consulted the Vertnet library (<https://vertnet.org>) to include species collected in TLM by museums. Thus, we included each species in a list composed of species with at least one occurrence in TLM, along with documentary evidence,

Table 1. List of bird species in Três Lagoas municipality/MS. Captions: a = Intracontinental migrant; aa = Intracontinental waterfowl migrant; b = Intercontinental migrant; bb = Intercontinental waterfowl migrant; 1 = Globally Near Threatened; 2 = Data Deficient in Brazil and Globally Near Threatened; 3 = Globally Vulnerable; 4 = Data Deficient in Brazil and Globally Vulnerable; 5 = Data Deficient in Brazil; 6 = Near Threatened in Brazil; 7 = Near Threatened in Brazil; 8 = Endangered in Brazil and globally; 9 = Vulnerable in Brazil; FS1 = photo and/or song published on the internet; Rv/SnP = visual and/or sound records quoted in a publication; Rv/SnP = visual and/or sound records obtained by the authors; SRP = Sérgio R. Posso; MNNG = Maurício N. Godoi; VAG = Vagner de A. Gabriel; FIG = Fernando Igor de Godoy; LPS = Lys P. de Souza; CF = Cláudencice Faxina; MAV = Marcelo Alejandro Villegas Vallejos and LAC = Luiz Arthur C. Cintra.

Species/conservation and migration status	Portuguese Name	English Name	Localities	Source
Rheidae				
<i>Rhea americana</i> (Linnaeus, 1758) ¹	ema	Greater Rhea	3, 6, 8, 10, 13, 12, 15, 17, 18, 19, 22, 23, 25, F4, 28-30	FS1, Rv/SnP, Rv/SnP (SRP, MNNG, FIG, VAG, MAV, LAC)
Tinamidae				
<i>Crypturellus atacamensis</i> (Temminck, 1815)	inhambu-chiná	Tataupa Tinamou	2, 5, 6, 13, 18, 19, 20, 22	Rv/SnP, Rv/SnP (SRP, MNNG, FIG, VAG, CF)
<i>Crypturellus parvirostris</i> (Wagler, 1827)	inhambu-chororó	Small-billed Tinamou	1-15, 17, 20, 22-24, 28, 29	FS1, Rv/SnP, Rv/SnP (SRP, MNNG, FIG, VAG, LPS, CF, MAVV)
<i>Crypturellus obsoletus</i> (Temminck, 1815)	inhambu-guaçu	Brown Tinamou	2, 6, 9	Rv/SnP, Rv/SnP (SRP)
<i>Crypturellus undulatus</i> (Temminck, 1815)	jáó	Undulated Tinamou	1, 2, 6, 13, 17-26, 28-31	FS1, Rv/SnP, Rv/SnP (SRP, MNNG, FIG, VAG, LPS, CF, MAVV)
<i>Nothura maculosa</i> (Temminck, 1815)	codorna-amarela	Spotted Nothura	2, 3, 5, 6, 8, 10, 11, 13, 15, 17, 18, 19, 21	FS1, Rv/SnP, Rv/SnP (SRP, MNNG, FIG)
<i>Rhynchotus ruficollis</i> (Temminck, 1815)	perdiz	Red-winged Tinamou	2, 3, 5, 6, 10, 11, 13, 15, 17, 18, 19, 22, 23, 28, 30	Rv/SnP, Rv/SnP (SRP, MNNG, FIG, VAG, CF, MAVV, LAC)
Anhimidae				
<i>Anhima cornuta</i> (Linnaeus, 1766)	anhumá	Horned Screamer	1, 2, 3, 6, 13, 18, 19	FS1, Rv/SnP, Rv/SnP (SRP, MNNG, FIG, CF, LAC)
<i>Chauna torquata</i> (Oken, 1816)	tachá	Southern Screamer	2, 3	FS1, Rv/SnP (SRP)
Anatidae				
<i>Dendrocygna viduata</i> (Linnaeus, 1766) ¹	ireré	White-faced Whistling-Duck	1, 2, 3, 5, 6, 10, 11, 13, 14, 17, 18, 19	FS1, Rv/SnP, Rv/SnP (SRP, MNNG, FIG, CF, LAC)
<i>Dendrocygna autumnalis</i> (Linnaeus, 1758) ^{aa}	mareca-caboclo	Black-bellied Whistling-Duck	1, 2, 3, 5, 6, 10, 11, 13, 17, 19	FS1, Rv/SnP, Rv/SnP (SRP, MNNG, FIG, CF, LAC)
<i>Caninia moschata</i> (Linnaeus, 1758) ^{aa}	pato-do-mato	Muscovy Duck	1, 2, 3, 6, 10, 13, 14, 13, 18, 19, 13	FS1, Rv/SnP, Rv/SnP (SRP, MNNG, FIG, CF)
<i>Sarkidiomis sylvicola</i> (Hering & Ihering, 1907 ^{aa}	pato-de-crísta	Comb Duck	3, 13	Rv/SnP (SRP)
<i>Amazonetta brasiliensis</i> (Gmelin, 1789)	mareca-ananal	Brazilian Teal	1, 2, 3, 6, 10, 13, 14, 18, 19, 13	FS1, Rv/SnP, Rv/SnP (SRP, MNNG, FIG, CF)
Cracidae				
<i>Penelope superciliaris</i> (Temminck, 1815) ²	jacupari	Rusty-margined Guan	2, 3, 5, 6, 10, 13, 14, 17, 18, 19, 20, 22, 28	FS1, Rv/SnP, Rv/SnP (SRP, MNNG, VAG, FIG, CF, MAVV)
<i>Crax fasciolata</i> Spix, 1825 ³	mutum-de-pechado	Bare-faced Curassow	2, 3, 4, 5, 6, 10, 13, 14, 15, 17, 18, 19, 20, 24	FS1, Rv/SnP, Rv/SnP (SRP, MNNG, FIG, VAG, LPS, LAQ)
Podicipedidae				
<i>Tachybaptus dominicus</i> (Linnaeus, 1766) ^{aa}	mergulhão-pequeno	Least Grebe	1, 2, 6, 19	FS1, Rv/SnP, Rv/SnP (SRP)
<i>Podilymbus podiceps</i> (Linnaeus, 1758) ^{aa}	mergulhão-cinzador	Pied-billed Grebe	1, 2, 3	FS1, Rv/SnP (SRP)
Columbidae				
<i>Columba livia</i> Gmelin, 1789	pombo-doméstico	Rock Pigeon	1, 2, 11, 19	FS1, Rv/SnP (SRP, FIG, CF)
<i>Patagioenas speciosa</i> (Gmelin, 1789)	pomba-trocal	Scallop Pigeon	6, 9, 22, 29-31	FS1, Rv/SnP, Rv/SnP (SRP, FIG, MAVV)
<i>Patagioenas picazuro</i> (Temminck, 1813) ³	pomba-ásia-branca	Picazuro Pigeon	1-26, 28-31	FS1, Rv/SnP, Rv/SnP (SRP, MNNG, FIG, VAG, LPS, CF, MAVV, LAC)
<i>Patagioenas cayennensis</i> (Bonnaterre, 1792)	pomba-galega	Pale-necked Pigeon	2, 3, 5, 6, 9, 10, 14, 13, 17, 18, 19, F4, 28-29, 31	FS1, Rv/SnP, Rv/SnP (SRP, MNNG, FIG, CF, MAVV)
<i>Geotrygon montana</i> (Linnaeus, 1758)	pariri	Ruddy Quail-Dove	6, 9, 13	FS1, Rv/SnP, Rv/SnP (SRP, FIG, CF)
<i>Leptotila rufaxilla</i> (Richard & Bernard, 1792)	juriti-de-testa-branca	Gray-fronted Dove	2, 6, 9, 13, 14, 18, 19, 22	Rv/SnP, Rv/SnP (SRP, MNNG, VAG, FIG, CF)
<i>Leptotila verreauxi</i> Bonaparte, 1855	juriti-pupu	White-tipped Dove	2, 3, 6, 5, 10, 11, 13, 17, 18, 19, 20-24, 28-31	FS1, Rv/SnP, Rv/SnP (SRP, MNNG, FIG, VAG, LPS, CF, MAVV)
<i>Zenaidura auriculata</i> (Des Murs, 1847) ^{aa}	avante	Eared Dove	1-18, 21, 22, 28	FS1, Rv/SnP, Rv/SnP (SRP, MNNG, FIG, CF, MAVV)
<i>Clariaria pretiosa</i> (Ferrari-Perez, 1886)	parati-zu	Blue Ground-Dove	2, 6, 9, 10, 22	FS1, Rv/SnP, Rv/SnP (SRP, MNNG, VAG, FIG, CF)
<i>Columbina talpacoti</i> (Temminck, 1811)	rolinha-roxa	Ruddy Ground-Dove	1-17, 20-23, 28	FS1, Rv/SnP, Rv/SnP (SRP, MNNG, FIG, VAG, LPS, CF, MAVV, LAC)
<i>Columbina minuta</i> (Linnaeus, 1766)	rolinha-de-asas-canela	Plain-breasted Ground-Dove	2, 3, 6, 8, 9, 13, 18, 19	Rv/SnP, Rv/SnP (SRP, MNNG)

Species/conservation and migration status	Portuguese Name	English Name	Localities	Source
<i>Columbina picui</i> (Jenminck, 1813)	rolinha-picuí	Picui Ground-Dove	2, 3, 6, 13, 17, 18, 19	Rv/sP, Rv/sNP (SRP, MNG, CF)
<i>Columbina squammata</i> (Lesson, 1831)	rolinha-fogo-apagou	Scaled Dove	1-26, 28-30	FSl, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, CF, MAVV, LAC)
Cuculidae				
<i>Guita guita</i> (Gmelin, 1788)	anu-branco	Guita Cuckoo	1-16, 20, 22, 28-31	FSl, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, CF, MAVV, LAC)
<i>Crotophaga major</i> Gmelin, 1788	anu-coroca	Greater Ani	2, 6, 9, 19	FSl, Rv/sP, Rv/sNP (SRP, MNG, FIG, CF, LAC)
<i>Crotophaga ani</i> Linnaeus, 1758	anu-preto	Smooth-billed Ani	1-17, 21, 22, 24, 28-30	FSl, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, MAVV, LAC)
<i>Tapera naevia</i> (Linnaeus, 1766)	saci	Striped Cuckoo	1, 2, 3, 6, 8, 10, 12, 13, 17, 18, 19, 21, 22, 30	FSl, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, CF, MAVV, LAC)
<i>Dromococcyx pavoninus</i> Pezeln, 1870	peixe-frito-pavonino	Pavonine Cuckoo	2, 6, 9, 17, 18, 22	FSl, Rv/sP, Rv/sNP (SRP, MNG, FIG, CE, LAC)
<i>Praya ayana</i> (Linnaeus, 1766)	alma-de-gato	Squirrel Cuckoo	1-18, 20, 22, 23, 31	FSl, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, CF, MAVV, LAC)
<i>Coccyzus melacoryphus</i> Vieillot, 1817 ^a	papa-lagarta-acanelado	Dark-billed Cuckoo	2, 6, 9, 17, 18, 22	FSl, Rv/sP, Rv/sNP (SRP, MNG, VAG, CF)
<i>Coccyzus euleri</i> Cabanis, 1873 ^a	papa-lagarta-de-euler	Pearly-breasted Cuckoo	2, 3, 6, 5, 13, 19, 22	Rv/sP, Rv/sNP (SRP, MNG, VAG, LAC)
<i>Coccyzus minutus</i> Vieillot, 1817 ^a	chincóe-pequeno	Little Cuckoo	9	Rv/sNP (SRP)
<i>Coccyzus americanus</i> (Linnaeus, 1758) ^b	papa-lagarta-de-asa-vermelha	Yellow-billed Cuckoo	9, 11, 17	FSl, Rv/sNP (SRP, MNG, CF)
Nyctibiidae				
<i>Nyctibius griseus</i> (Gmelin, 1789)	urutau-grande	Great Potoo	6, 10	FSl, Rv/sNP (SRP, FIG)
<i>Nyctibius grandis</i> (Gmelin, 1789)	urutau	Common Potoo	2, 3, 6, 10, 13, 18, 19, 22	FSl, Rv/sP, Rv/sNP (SRP, MNG, VAG, FIG, CF)
Caprimulgidae				
<i>Antrostomus rufus</i> (Boddart, 1783) ^a	jão-conta-pau	Rufous Nightjar	2, 3, 6, 9, 10, 17, 18, 22, 30	FSl, Rv/sP, Rv/sNP (SRP, VAG, FIG, MAVV, LAC)
<i>Nyctidromus albicollis</i> (Gmelin, 1789)	bacurau	Common Pauraque	2, 3, 4, 5, 6, 7, 9, 10, 11, 13, 14, 17, 18, 19, 20, 22, 24, 30	FSl, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, CF, MAVV, LAC)
<i>Hydropsalis torquata</i> (Gmelin, 1789)	bacurau-tesoura	Scissor-tailed Nightjar	2, 6, 20, 25	FSl, Rv/sP, Rv/sNP (VAG, FIG, CF)
<i>Hydropsalis maculicaudus</i> (Lawrence, 1862)	bacurau-de-rabo-maculado	Spotted-tailed Nightjar	6	Rv/sP, Rv/sNP (LAC)
<i>Hydropsalis parvula</i> (Gould, 1837) ^a	bacurau-chintá	Little Nightjar	2, 6, 9, 13, 17, 20	Rv/sP, Rv/sNP (SRP, MNG, VAG, CF, LAC)
<i>Lurocalis semitorquatus</i> (Gmelin, 1789) ^a	tujú	Short-tailed Nighthawk	6, 13	Rv/sP, Rv/sNP (FIG)
[<i>Nyctiphrynus ocellatus</i>] (Tschudi, 1844)]	bacurau-otelado	Ocellated Poorwill	2, 19	Rv/sP, Rv/sNP (SRP, MNG)
<i>Podargus nacunda</i> (Vieillot, 1817) ^a	coruca	Naunuda Nighthawk	1, 2, 3, 5, 6, 10, 11, 13, 17, 18, 19	FSl, Rv/sP, Rv/sNP (SRP, MNG, CF, LAC)
<i>Chordeiles minor</i> (Forster, 1771) ^b	bacurau-norte-americano	Common Nighthawk	30	FSl
<i>Nannocheordeiles pusillus</i> (Gould, 1861) ^a	bacurauzinho	Least Nighthawk	6, 9, 10	Rv/sP, Rv/sNP (SRP)
Apodidae				
<i>Chaetura meridionalis</i> Hellmayr, 1907 ^a	andorinhão-do-temporal	Sick's Swift	6, 10	FSl, Rv/sP, Rv/sNP (SRP, MNG)
<i>Streptoprocne zonaris</i> (Shaw, 1796)	taperuçu-de-oleria-branca	White-collared Swift	1, 2, 11	Rv/sP, Rv/sNP (SRP)
<i>Iachomis squamata</i> (Cassin, 1853)	andorinhão-do-buriti	Fork-tailed Palm Swift	1, 2, 6, 10, 11, 17, 18, 19, 30	FSl, Rv/sP, Rv/sNP (SRP, MNG, FIG, CF, MAVV, LAC)
Trochilidae				
<i>Chionomesa fimbriata</i> (Gmelin, 1788)	beija-flor-de-garganta-verde	Glittering-throated Emerald	1, 2, 5, 6, 9, 10, 13, 14, 17, 18, 19, 22, 23, 24, 29	FSl, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, CF, MAVV)
[<i>Chionomesa laticea</i> (Lesson, 1832)]	beija-flor-de-peito-azul	Sapphire-spangled Emerald	6, 22	Rv/sP, Rv/sNP (FIG)
<i>Chrysuronia versicolor</i> (Vieillot, 1818)	beija-flor-de-banda-branca	Versicolored Emerald	1, 2, 6, 10, 22	Rv/sP, Rv/sNP (SRP, FIG, CF)
<i>Colibri serrirostris</i> (Vieillot, 1816) ^a	beija-flor-de-orelha-violeta	White-vented Violetear	6	Rv/sP, Rv/sNP (FIG)
<i>Florisuga fusca</i> (Vieillot, 1817) ^a	beija-flor-preto	Black Jacobin	1, 2, 6, 9, 21, 13	Rv/sP, Rv/sNP (SRP, FIG, CF)
<i>Phaethornis pretrei</i> (Lesson & Delattre, 1839)	rabo-branco-acanelado	Planalto Hermit	1-16, 20, 21, 28-30	FSl, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, CF, MAVV, LAC)
<i>Polytelms guianumbi</i> (Pallas, 1764)	beija-flor-de-bico-curvo	White-tailed Goldenthroat	1, 2, 6, 14, 17, 18, 19	FSl, Rv/sP, Rv/sNP (SRP, MNG)
<i>Chrysolampis mosquitis</i> (Linnaeus, 1758)	beija-flor-vermelho	Ruby-topaz Hummingbird	2, 6, 17, 19, 23	FSl, Rv/sP, Rv/sNP (MNG, VAG)
<i>Anthracothorax nigricollis</i> (Vieillot, 1817) ^a	beija-flor-de-veste-preta	Black-throated Mango	1, 2, 3, 5, 6, 10, 13, 14, 17, 18, 19, 22	FSl, Rv/sP, Rv/sNP (SRP, MNG, VAG, FIG, CF)

Species/conservation and migration status	Portuguese Name	English Name	Localities	Source
<i>Heliomaster squamulosus</i> (Temminck, 1823)	bico-reto-de-banda-branca	Strip-breasted Starthroat	1, 2, 6, 9, 21	FSI, Rv/sP, Rv/sNP (SRP, FIG, CF)
<i>Heliomaster furcifer</i> (Shaw, 1812)	bico-reto-azul	Blue-tufted Starthroat	1, 6, 9	Rv/sP, Rv/sNP (SRP)
<i>Heliomaster longirostris</i> (Audubert & Vieillot, 1801)	bico-reto-cinzento	Long-billed Starthroat	1	Rv/sP
<i>Calliphlox amethystina</i> (Boddart, 1783)	estrelinha-ametista	Amethyst Woodstar	6, 11, 19	FSI, Rv/sP, Rv/sNP (MNG)
<i>Leucosticte albicollis</i> (Vieillot, 1818)	beija-flor-de-papo-branco	White-throated Hummingbird	2, 6	Rv/sP, Rv/sNP (SRP)
<i>Aphantochroa airochrois</i> (Vieillot, 1818)	beija-flor-cinza	Sombre Hummingbird	1, 2	Rv/sP
<i>Chlorostilbon lucidus</i> (Shaw, 1812)	besourinho-de-bico-vermelho	Glittering-bellied Emerald	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 18, 19, 20, 22, 24, FIG, VAG, MAVV	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, MAVV)
<i>Thalurania furcata</i> (Gmelin, 1788)	beija-flor-tesoura-verde	Fork-tailed Woodnymph	2, 6, 13, 14, 17, 18, 19, 22, 31	FSI, Rv/sP, Rv/sNP (SRP, MNG, VAG, FIG, CF, MAVV)
<i>Eupetomena macroura</i> (Gmelin, 1788)	beija-flor-tesoura	Swallow-tailed Hummingbird	1-17, 21, 22, 29-30	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, CF, MAVV, LAC)
<i>Hylocharis chrysura</i> (Shaw, 1812)	beija-flor-dourado	Gilded Hummingbird	1, 2, 5, 6, 10, 13, 14, 17, 18, 19, 20-24, 31	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, LPS, CF, MAVV, LAC)
<i>Hylocharis sapphirina</i> (Gmelin, 1788)	beija-flor-safira	Rufous-throated Sapphire	1	Rv/sP
Aramidae				
<i>Aramus guarauna</i> (Linnaeus, 1766) ^{aa}	carão	Limpkin	1, 2, 3, 6, 7, 9, 10, 11, 12, 13, 19	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, CF)
Rallidae				
<i>Paratidulus nigricans</i> (Vieillot, 1819)	saracura-saňá	Blackish Rail	2, 6, 17, 18	Rv/sP, Rv/sNP (MNG, CF)
<i>Rutinallus viridis</i> (Status Muller, 1776)	saňá-castanha	Russet-crowned Crake	2, 6, 19	FSI, Rv/sP, Rv/sNP (MNG, CF)
<i>Laterallus exilis</i> (Temminck, 1831)	saňá-dio-capim	Gray-breasted Crake	2, 3	FSI, Rv/sP, Rv/sNP (SRP)
<i>Laterallus melanophrys</i> (Vieillot, 1819)	saňá-parda	Rufous-sided Crake	2, 13	FSI, Rv/sP, Rv/sNP (SRP, CF)
<i>Laterallus senegalensis</i> Conover, 1934 ^a	saňá-de-cara-túvia	Rufous-faced Crake	30	FSI, MAVV
<i>Muscelirallus albicollis</i> (Vieillot, 1819)	saňá-carijó	Ash-throated Crake	2, 3, 6, 10, 11, 13, 17, 18, 19, 21, 29-30	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, CF, MAVV)
<i>Anaurocephalus concular</i> (Gosse, 1847)	saracura-lísia	Uniform Crake	10, 17, 18	FSI, Rv/sP, Rv/sNP (SRP, MNG)
<i>Aramides cajaneus</i> (Status Muller, 1776)	saracura-três-potes	Gray-necked Wood-Rail	1, 2, 6, 10, 11, 17, 18, 19, 21	FSI, Rv/sP, Rv/sNP (SR, MNG, FIG, CF, LAC)
<i>Gallinula galeata</i> (Lichtenstein, 1850) ^{aa}	galinha-d'água	Common Gallinule	1, 2, 6	FSI, Rv/sP, Rv/sNP (SRP, FIG, CF)
<i>Porphyrio martinica</i> (Linnaeus, 1766) ^{aa}	frango-d'água-azul	Purple Gallinule	1, 2	FSI, Rv/sP, Rv/sNP (SRP, FIG)
Helminthidae				
<i>Helminis fulica</i> (Boddart, 1783)	picaparra	Sungebe	2, 19	Rv/sP, Rv/sNP (SRP, MNG, CF)
Charadriidae				
<i>Pluvialis dominica</i> (Status Muller, 1776) ^{5b}	baturiúcu	American Golden-Plover	2	FSI, Rv/sP, Rv/sNP (SRP)
<i>Vanellus chilensis</i> (Molina, 1782)	queiro-queiro	Southern Lapwing	1-18, 21, 24, 28-31	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, CF, MAVV, LAC)
<i>Charadrius collaris</i> Vieillot, 1818	baturá-de-coleira	Collared Plover	2	FSI
Recurvirostridae				
<i>Himantopus melanurus</i> Vieillot, 1817 ^{aa}	pemilongo-de-costas-brancas	White-backed Stilt	1, 2, 3, 11, 13, 17, 19	FSI, Rv/sP, Rv/sNP (MNG, FIG, CF)
Scolopacidae				
<i>Gallinago undulata</i> (Boddart, 1783) ^{5a}	narejão	Giant Snipe	10, 18	Rv/sP, Rv/sNP (MNG, CF)
<i>Gallinago paraguaiae</i> (Vieillot, 1816) ^{aa}	nareja	South American Snipe	2, 3, 13	FSI, Rv/sP, Rv/sNP (SRP)
<i>Bartamia longicauda</i> (Bechstein, 1812) ^{5b}	macaíto-do-campo	Upland Sandpiper	2, 24	FSI, Rv/sP, Rv/sNP (SRP)
<i>Tringa flavipes</i> (Gmelin, 1789) ^{5b}	maçaito-de-pema-amarela	Lesser Yellowlegs	1, 2	Rv/sP, Rv/sNP (SRP)
<i>Tringa solitaria</i> Wilson, 1813 ^{5b}	macaíto-solitário	Solitary Sandpiper	1, 2, 6, 11, 14, 17, 18, 19	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, LAC)
<i>Calidris fuscicollis</i> (Vieillot, 1819) ^{5b}	macaíto-de-sobre-branco	White-tailed Sandpiper	2	Rv/sP
<i>Actitis macularius</i> (Linnaeus, 1766) ^{5b}	macaíto-pintado	Spotted Sandpiper	1, 2	FSI, Rv/sP, Rv/sNP (SRP)
Jacanidae				
<i>Jacana jacana</i> (Linnaeus, 1766)	jácanã	Wattled Jacana	1, 2, 3, 6, 7, 9, 10, 11, 13, 17, 18, 19, 21	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, CF, LAC)

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Laridae				
<i>Rynchops niger</i> Linnaeus, 1758 ^{aa}	talha-mar	Black Skimmer	2, 3, 9, 13	FSI, Rv/sP, Rv/sNP (SRP, F)
<i>Sternula superciliaris</i> (Vieillot, 1819) ^{aa}	trinta-reis-pequeno	Yellow-billed Tern	2, 3, 9, 11	Rv/sP, Rv/sNP (SRP)
<i>Phaetusa simplex</i> (Gmelin, 1789) ^{aa}	trinta-reis-grande	Large-billed Tern	1, 2, 3, 13, 19	FSI, Rv/sP, Rv/sNP (SRP, MNG, CF)
Euryptigidae				
<i>Euryptuga helias</i> (Pallas, 1781)	Pavãozinho-do-Pará	Sunbittern	11	FSI, Rv/sNP (LAC)
Ciconiidae				
<i>Gronia maguari</i> (Gmelin, 1789) ^{aa}	maguari	Maguari Stork	1, 2, 3, 9, 6, 11, 13	FSI, Rv/sP, Rv/sNP (SRP)
<i>Jabiru mycteria</i> (Lichtenstein, 1819) ^{aa}	tuiuiú	Jabiru	1, 2, 3, 6, 9, 13, 18	FSI, Rv/sP, Rv/sNP (SRP, FIG, LAC)
<i>Mycteria americana</i> Linnaeus, 1758 ^a	cabeça-seca	Wood Stork	1, 2, 3, 6, 9, 10, 11, 13, 18, 19	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, CF, LAC)
Anhingidae				
<i>Anhinga anhinga</i> (Linnaeus, 1766)	biquatinga	Anhinga	1, 2, 3, 6, 9, 10, 11, 13	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, CF, LAC)
Phalacrocoracidae				
<i>Nannopterum brasilianum</i> (Gmelin, 1789) ^{aa}	biquá	Neotropic Cormorant	1, 2, 3, 6, 9, 11, 13, 17, 18, 19, 29	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, CF, MAVV)
Ardidae				
<i>Igorromala lineatum</i> (Boddart, 1783)	socó-boi	Rufescent Tiger-Heron	1, 2, 3, 6, 9, 10, 11, 13, 17, 18, 19, 21	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, CF, LAC)
<i>Cochlearius cochlearius</i> (Linnaeus, 1766)	ara-papá	Boat-billed Heron	24	FSI, Rv/sNP (FIG)
<i>Nycticorax nycticorax</i> (Linnaeus, 1758)	socó-dominguinhos	Black-crowned Night-Heron	1, 2, 3, 6, 9, 13	FSI, Rv/sP, Rv/sNP (SRP, FIG, LAC)
<i>Butorides striata</i> (Linnaeus, 1758)	socozinho	Striated Heron	1, 2, 3, 6, 9, 10, 11, 13, 17, 18, 19	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, CF, LAC)
<i>Bubulcus ibis</i> (Linnaeus, 1758)	garça-voqueira	Cattle Egret	1, 2, 3, 5, 7, 8, 10, 13, 17, 18, 19, 30	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, CF, MAVV)
<i>Ardea cocoi</i> Linnaeus, 1766	garça-moura	Cooi Heron	1, 2, 3, 5, 6, 9, 10, 13, 17, 18, 19	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, CF, LAC)
<i>Ardea alba</i> Linnaeus, 1758 ^{aa}	garça-branca-grande	Great Egret	1, 2, 3, 5, 6, 9, 10, 11, 13, 17, 18, 19, 28-30	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, CF, MAVV, LAC)
<i>Syrigma sibilatrix</i> (Temminck, 1824)	maria-faceira	Whistling Heron	1, 2, 3, 6, 8, 9, 10, 11, 13, 17, 18, 19, 22, 24, 29	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, CF, MAVV, LAC)
<i>Pilherodius pileatus</i> (Boddart, 1783)	garça-real	Capped Heron	1, 2, 3	FSI, Rv/sNP (SRP)
<i>Egretta thula</i> (Molina, 1782)	garça-branca-pequena	Snowy Egret	1, 2, 3, 5, 6, 7, 8, 9, 10, 11, 13, 15, 17, 18, 19	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, CF, LAC)
<i>Egretta caerulea</i> (Linnaeus, 1758) ^{aa}	garça-azul	Little Blue Heron	9	FSI, Rv/sNP (SRP)
Threskiornithidae				
<i>Mesembriophorus gayi</i> Linnaeus, 1758 ^{aa}	coró-coró	Green Ibis	1, 2, 3, 6, 10, 13, 14, 17, 18, 19, 22, 30	FSI, Rv/sP, Rv/sNP (SRP, MNG, VAG, FIG, CF, MAVV, LAC)
<i>Plegadis chihi</i> (Vieillot, 1817) ^{aa}	caralina	White-faced Ibis	2, 3, 9	FSI, Rv/sNP (SRP)
<i>Theristicus caerulescens</i> (Vieillot, 1817)	curica-ca-real	Plumbeous Ibis	2, 3, 11, 13	Rv/sP, Rv/sNP (SRP)
<i>Phimosus infuscatus</i> (Lichtenstein, 1823) ^{aa}	tapicuru	Bare-faced Ibis	1, 2, 6, 19	FSI, Rv/sP, Rv/sNP (SRP, MNG, LAC)
<i>Theristicus caudatus</i> (Boddart, 1783)	curicaca	Buff-necked Ibis	1-16, 20-24, 28-30	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, CF, MAVV, LAC)
<i>Platalea ajaja</i> Linnaeus, 1758 ^a	colhereiro	Roseate Spoonbill	1, 2, 3, 9, 13, 14, 17, 18, 19	FSI, Rv/sP, Rv/sNP (SRP, FIG, CF, LAC)
Cathartidae				
<i>Sarcogyps papa</i> (Linnaeus, 1758) ⁶	urubu-rei	King Vulture	1, 6, 13, 10, 17	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG)
<i>Coragyps atratus</i> (Bechstein, 1793)	urubu-preto	Black Vulture	1-17, 21, 22, 24	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, CF, LAC)
<i>Cathartes aura</i> (Linnaeus, 1758)	urubu-de-cabeça-vermelha	Turkey Vulture	1-16, 21, 22, 28	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, CF, MAVV, LAC)
<i>Cathartes burrovianus</i> Cassin, 1845	urubu-de-cabeça-amarela	Lesser Yellow-headed Vulture	1, 2, 3, 6, 10, 13, 14, 17, 18, 19, 28, 30	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, CF, MAVV)
Pandionidae				
<i>Pandion haliaetus</i> (Linnaeus, 1758) ^b	água-pescadora	Owl	2, 3, 9, 13, 19	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG)

Species/conservation and migration status	Portuguese Name	English Name	Localities	Source
Accipitridae				
<i>Elaeus leucurus</i> (Vieillot, 1808)	gavião-peneira	White-tailed Kite	1,2,5,13,17,18	Rv/sNP (SRP,MNG), CF
<i>Hierosazia superciliosa</i> (Linnaeus, 1766)	tatuá-passarinho	Tiny Hawk	1,5,6,19	Rv/sNP (SRP,MNG)
<i>Gampsonyx swainsonii</i> Vigors, 1825	gaviãozinho	Pearl Kite	1,2,6,10,19	FSI,Rv/sNP (SRP,MNG), CF,
<i>Chondrohierax uncinatus</i> (Temminck, 1822)	gavião-caracoleiro	Hook-billed Kite	8	FSI
<i>Leptodon cayanensis</i> (Latham, 1790)	gavião-qato	Gray-headed Kite	3,6,13,19,22,30	FSI,Rv/sP,Rv/sNP (SRP,MNG,VAG,FIG,MAV)
<i>Spiræetus melanoleucus</i> (Vieillot, 1816)	gavião-pato	Black-and-white Hawk-Eagle	6	FSI,Rv/sP
<i>Spizetus ornatus</i> (Daudin, 1800) ^a	gavião-de-penacho	Oriente Hawk-Eagle	6	FSI,Rv/sP
<i>Buteo swainsoni</i> (Latham, 1790)	gavião-belo	Black-collared Hawk	1,2,3,6,11,13,19	FSI,Rv/sP,Rv/sNP (SRP,MNG,FIG,CF)
<i>Buteo albonotatus</i> Kaup, 1847	gavião-urubu	Zone-tailed Hawk	6,11	Rv/sP,Rv/sNP (SRP)
<i>Buteo nitidus</i> (Latham, 1790)	gavião-pedreiro	Gray-lined Hawk	2,11	FSI,Rv/sNP (SRP)
<i>Buteo brachyurus</i> Vieillot, 1816 ^c	gavião-de-cauda-curta	Short-tailed Hawk	6	FSI,Rv/sP (FG)
<i>Parabuteo unicinctus</i> (Temminck, 1824)	gavião-asa-de-telha	Harris's Hawk	10	Rv/sNP (SRP)
<i>Elaenias forficatus</i> (Linnaeus, 1758) ^b	gavião-tesoura	Swallow-tailed Kite	2,6	FSI,Rv/sP (SRP,FIG)
<i>Rostrhamus sociabilis</i> (Vieillot, 1817) ^a	gavião-caramujinho	Snail Kite	1-18	FSI,Rv/sP,Rv/sNP (SRP,MNG,FIG,CF,LAC)
<i>Ictinia plumbea</i> (Gmelin, 1788) ^a	sovi	Plumbeous Kite	1,2,3,4,5,6,7,8,9,10,11,13,17,18,19,22,24,31	FSI,Rv/sP,MNG,FIG,VAG,CF,MAV
<i>Accipiter striatus</i> Vieillot, 1808	tatuá-miúdo	Sharp-shinned Hawk	29	Rv/sNP (MAGV)
<i>Geranospiza caerulescens</i> (Vieillot, 1817)	gavião-pernilongo	Crane Hawk	2,10,13,18,28	FSI,Rv/sNP (SRP,MNG,FIG,MAV)
<i>Heterospizioides meridionalis</i> (Latham, 1790)	gavião-caboclo	Savanna Hawk	1,2,3,5,6,7,8,10,11,13,14,17,18,19,22,25,[4,31]	FSI,Rv/sP,Rv/sNP (SRP,MNG,FIG,CF,MAV,LAC)
<i>Urubitinga urubitinga</i> (Gmelin, 1788)	gavião-preto	Great Black Hawk	1,3,6,13,18,19	FSI,Rv/sP,Rv/sNP (SRP,MNG)
<i>Urubitinga coronata</i> (Vieillot, 1817) ^a	água-cinzenta	Crowned Eagle	6,10,13,18-25	FSI,Rv/sP,Rv/sNP (SRP,MNG,FIG)
<i>Rupornis magnirostris</i> (Gmelin, 1788)	gavião-carijó	Roadside Hawk	1-17,20,21,22,25,28-31	FSI,Rv/sP,Rv/sNP (SRP,MNG,FIG,MAV,LAC)
<i>Circus buffoni</i> (Gmelin, 1788)	gavião-do-baranhado	Long-winged Harrier	2,3,9,13	Rv/sP,Rv/sNP (SRP,CF)
<i>Geranospiza albicaudatus</i> Vieillot, 1816	gavião-de-rabo-branco	White-tailed Hawk	1,2,6,10,13,17,18,20,25	FSI,Rv/sP,Rv/sNP (SRP,MNG,LPS,FIG,CF)
Tytonidae				
<i>Tyto furcata</i> (Temminck, 1827)	sulinara	American Barn Owl	2,6,11,13,17,18,19,24,25	FSL,Rv/sP,Rv/sNP (SRP,MNG,FIG,CF)
Strigidae				
<i>Megascops choliba</i> (Vieillot, 1817)	corujinha-do-mato	Tropical Screech-Owl	2,3,6,10,13,17,18,19,22,24,30	FSL,Rv/sP,Rv/sNP (SRP,MNG,FIG,VAG,CF,MAV,LAC)
<i>Strix huhula</i> Daudin, 1800	coruja-preta	Black-banded Owl	6	FSI,Rv/sP (FIG)
<i>Bubo virginianus</i> (Gmelin, 1788)	jacurutu	Great Horned Owl	3,9	FSI,Rv/sNP (SRP)
<i>Glaucidium brasiliense</i> (Gmelin, 1788)	caburé	Ferruginous Pygmy-Owl	1-18,20	FSI,Rv/sP,Rv/sNP (SRP,MNG,LPS,FIG,CF,LAC)
<i>Athene cunicularia</i> (Molina, 1782)	coruja-buracueira	Burrowing Owl	1-18,25	FSI,Rv/sP,Rv/sNP (SRP,MNG,FIG,CF,LAC)
<i>Asio clamator</i> (Vieillot, 1808)	coruja-orelhuda	Striped Owl	2,6,11,24	FSI,Rv/sNP (SRP,LAC)
Trogonidae				
<i>Trogon surrucura</i> Vieillot, 1817	surrucá-variado	Surucua Tropic	6,18,29	FSL,Rv/sP,Rv/sNP (SRP,MNG,FIG,MAV)
<i>Trogon curucui</i> Linnaeus, 1766	surrucá-de-barriga-vermelha	Blue-crowned Tropic	10	FSI,Rv/sNP (MNG,SRP)
Momotidae				
<i>Momotus momota</i> (Linnaeus, 1766)	udu-de-coroa-azul	Amazonian Motmot	2,3,4,5,6,7,9,10,11,13,15,17,18,19,20,22,23,24	FSI,Rv/sP,Rv/sNP (SRP,MNG,FIG,VAG,LPS,CF,LAC)
<i>Baryphthengus ruficapillus</i> (Vieillot, 1818)	juruva	Rufous-capped Motmot	11	FSI,Rv/sNP (SRP)
Aicedinidae				
<i>Megaceryle torquata</i> (Linnaeus, 1766)	marim-pescador-grande	Ringed Kingfisher	1,2,3,6,9,10,13,17,18,19,21,28	FSI,Rv/sP,Rv/sNP (SRP,MNG,FIG,CF,MAV)

Species/conservation and migration status	Portuguese Name	English Name	Localities	Source
<i>Chloroceryle amazona</i> (Latham, 1790)	martim-pescador-verde	Amazon Kingfisher	1,2,3,5,6,10,13,17,18,19	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, CF)
<i>Chloroceryle americana</i> (Gmelin, 1788)	martim-pescador-pequeno	Green Kingfisher	2,3,6,13,14,18,19	FSI, Rv/sP, Rv/sNP (SRP, MNG, CF)
<i>Chloroceryle aenea</i> (Pallas, 1764)	martim-pescador-miúdo	American Pygmy Kingfisher	17	Rv/sNP (MNG)
Galbulidae				
<i>Brachygalba lugubris</i> (Swainson, 1838)	ariamba-preta	Brown Jacamar	6,9	FSI, Rv/sP, Rv/sNP (SRP, LAC)
<i>Galbulula ruficauda</i> Cuvier, 1816	ariamba-de-cauda-ruiva	Rufous-tailed Jacamar	2,3,6,7,9,10,11,13,15,17,18,19,20,21,23,29,30	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, LPS, CF, MAVV, LAC)
Bucconidae				
<i>Chelidoptera tenebrosa</i> (Pallas, 1782)	urubuzinho	Swallow-winged Puffbird	2,6,9	FSI, Rv/sP, Rv/sNP (SRP, FIG, CF, LAC)
<i>Monasa nigrifrons</i> (Spix, 1824)	chora-chuva-preto	Black-fronted Nunbird	2,3,4,5,6,7,9,13,15,18,19,22,24,28,30	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, CF, MAVV, LAC)
<i>Nomnula rubecula</i> (Spix, 1824)	macuru	Rusty-breasted Nunlet	6	FSI, Rv/sP (FIG)
<i>Nystalus maculatus</i> (Gmelin, 1788)	rapazinho-dos-velhos	Spot-backed Puffbird	1,2,3,6,9,10,13,15,17,18,20,22,30	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, CF, MAVV)
<i>Nystalus chacuru</i> (Vieillot, 1816)	joão-dobro	White-eared Puffbird	2,3,6,8,10,11,13,15,17,18,19,22,30	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, CF, MAVV)
<i>Nystalus striatpectus</i> (Sclater, 1854)	rapazinho-do-chaco	Chaco Puffbird	10,11,14,17,19	Rv/sP, Rv/sNP (SRP, MNG, FIG)
Ramphastidae				
<i>Ramphastos toco</i> Statius Muller, 1776	tucanuçu	Toco Toucan	1-17,20,21,22,24,29-31	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, CF, MAVV, LAC)
<i>Pteroglossus castaneus</i> Gould, 1834	araçari-castanho	Chestnut-eated Aracari	2,3,4,5,6,7,9,10,11,13,15,18,21,24	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, CF, LAC)
Pitidae				
<i>Pitamus albosquamatus</i> d'Orbigny, 1840	picapauzinho-es-camoso	White-wedged Piculet	2,3,4,5,6,7,9,10,11,13,15,17-22,24,29-31	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, LPS, CF, MAVV, LAC)
<i>Pramnus aratus</i> Temminck, 1825	picapauzinho-barbado	White-barred Piculet	2,6,11,19	Rv/sP, Rv/sNP (MNG, CF)
<i>Melanerpes carolinus</i> (Otto, 1796)	pica-pau-branco	White Woodpecker	1,2,3,5,6,8,10,11,12,13,15,17,18,19,21,22,29,30	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, CF, MAVV)
<i>Melanerpes flavifrons</i> (Vieillot, 1818)	benedito-de-testa-amarela	Yellow-fronted Woodpecker	2,15,18	FSI, Rv/sP, Rv/sNP (SRP, MNG)
<i>Veniliornis passerinus</i> (Linnaeus, 1766)	pica-pau-pequeno	Little Woodpecker	1,2,3,6,10,11,13,15,17-24,29-31	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, CF, MAVV)
<i>Campetherus melanoleucus</i> (Gmelin, 1788)	pica-pau-de-topete-vermelho	Crimson-crested Woodpecker	1,6,10,13,17,18,20,22,28	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, CF, MAVV)
<i>Dryocopus lineatus</i> (Linnaeus, 1766)	pica-pau-de-banda-branca	Lineated Woodpecker	1,2,3,5,6,7,9,10,11,13,15,17,18,19,20,22,24,29,30	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, CF, MAVV, LAC)
<i>Celeus flavescens</i> (Gmelin, 1788)	pica-pau-de-cabeça-amarela	Blond-crested Woodpecker	2,10,29	Rv/sP, Rv/sNP (SRP, MNG, FIG, NAVV)
<i>Colaptes melanochloros</i> (Gmelin, 1788)	pica-pau-verde-barbado	Green-barred Woodpecker	1,2,3,5,6,10,11,13,15,17,18,19,20,22,23,28,30,31	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, CF, MAVV, LAC)
<i>Colaptes campestris</i> (Vieillot, 1818)	pica-pau-do-campo	Campo Flicker	1,2,3,5,6,8,10,11,12,13,17,18,19,21,22,28,31	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, CF, MAVV, LAC)
Cariamidae				
<i>Cariauna cristata</i> (Linnaeus, 1766)	seriema	Red-legged Seriema	1-18,20-23,28-31	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, LPS, CF, MAVV, LAC)
Falconidae				
<i>Herpetotheres cachinnans</i> (Linnaeus, 1758)	acaiá	Laughing Falcon	1,2,3,4,5,6,7,9,10,11,13,15,17,18,19,24,28,29,31	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, CF, MAVV, LAC)
<i>Microstur semitorquatus</i> (Vieillot, 1817)	falcão-relógio	Collared Forest-Falcon	2,4,13,22,29	FSI, Rv/sP (SRP, VAG, MAVV)
<i>Caracara plancus</i> (Miller, 1777)	caraíá	Crested Caracara	1-18,20,21,22,24,28-30	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, CF, MAVV, LAC)
<i>Milvago chimachima</i> (Vieillot, 1816)	carapateiro	Yellow-headed Caracara	1-18,22,23,24,29,30	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, CF, MAVV, LAC)
<i>Falco sparverius</i> Linnaeus, 1758	quiniquiri	American Kestrel	1,2,3,5,6,8,9,10,13,15,17,18,19,29	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, CF, MAVV)
<i>Falco rufigularis</i> Daudin, 1800	cauré	Bat Falcon	6,8,18	FSI, Rv/sP, Rv/sNP (SRP, MNG)
<i>Falco femoralis</i> Temminck, 1822	falcão-de-coleira	Apionando Falcon	1,2,3,6,10,11,13,17,18,19,20,21	FSI, Rv/sP, Rv/sNP (SRP, LAC)
<i>Falco peregrinus</i> Tunstall, 1771	falcão-peregrino	Peregrine Falcon	1,6	Rv/sP, Rv/sNP (SRP)
Pithecidae				
<i>Brachyteles chrysops</i> (Vieillot, 1818)	periquito-de-encontro-amarelo	Yellow-cheeked Parakeet	1-17,20-24,28-31	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, CF, MAVV, LAC)
<i>Alipiopsitta xanthops</i> (Spix, 1824) ⁷	papagaio-galego	Yellow-faced Parrot	1-16,21,22,29-31	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, CF, MAVV, LAC)

Species/conservation and migration status	Portuguese Name	English Name	Localities	Source
<i>Amazona aestiva</i> (Linnaeus, 1753) ⁷	papagaio-verdeadeiro	Turquoise-fronted Parrot	1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 13, 14, 17, 18, 19, 20-24, 28-30	FSL, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, LPS, CF, MAVV, LAC)
<i>Amazona amazonica</i> (Linnaeus, 1756)	curiça	Orange-winged Parrot	2, 6, 9, 10, 11, 13, 18, 19, 20, 22, 24	FSL, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, CF)
<i>Foapis xanthopterygius</i> (Spix, 1824)	tuiú	Blue-winged Parrotet	1, 2, 3, 6, 9, 13, 15, 17, 18, 19, 22	FSL, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, CF, LAC)
<i>Eupsittula aurea</i> (Gmelin, 1788)	periquito-rei	Peach-fronted Parakeet	1-17, 20-24, 28-31	FSL, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, CF, MAVV, LAC)
<i>Aratinga auricapillus</i> (Kuhl, 1820) ¹	jandáia-de-testa-vermelha	Golden-capped Parakeet	6	FSL, Rv/sP
<i>Orthopsittaca manilatus</i> (Boddart, 1783)	maraçanã-do-buriti	Red-bellied Macaw	2, 6, 9, 10, 11, 15, 17, 18, 19, 20, 21, 22, 24, 29, 30	FSL, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, CF, MAVV, LAC)
<i>Ara ararauna</i> (Linnaeus, 1758)	araça-canindé	Blue-and-yellow Macaw	1-18, 20-24, 28-31	FSL, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, CF, MAVV, LAC)
<i>Ara chloropterus</i> Gray, 1859	araça-vermelha	Red-and-green Macaw	10, 18	FSL, Rv/sP, Rv/sNP (SRP, MNG)
<i>Dipsitaca nobilis</i> (Linnaeus, 1758)	maraçanã-pequena	Red-shouldered Macaw	1, 2, 3, 6, 9, 10, 11, 13, 17, 18, 19, 21, 22, F4, 29	FSL, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, CF, MAVV)
<i>Pionus maximiliani</i> (Kuhl, 1820)	maltaca-verde	Scaly-headed Parrot	2, 6, 9, 11, 22, F4	Rv/sP, Rv/sNP (SRP, VAG, FIG)
<i>Primolius maracana</i> (Vieillot, 1846) ¹	maraçanã	Blue-winged Macaw	2, 6, 9	Rv/sP, Rv/sNP (SRP, CF)
<i>Pyrhura frontalis</i> (Vieillot, 1817) ¹	tiriba-de-testa-vermelha	Maroon-bellied Parakeet	2	Rv/sP, Rv/sNP (SRP)
<i>Psittacara leucophthalmus</i> (Statius Muller, 1776)	periquitão	White-eyed Parakeet	1-16, 21, 22, 31	FSL, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, CF, MAVV, LAC)
Thamnophilidae				
<i>Formicivora rufa</i> (Wied, 1831)	papa-formiga-vermelho	Rusty-backed Antwren	2, 3, 5, 6, 9, 10, 11, 13, 15, 17, 18, 19, 20, 29	FSL, Rv/sP, Rv/sNP (SRP, MNG, VAG, LPS, CF, MAVV)
<i>Dysithamnus mentalis</i> (Temminck, 1823)	choquinha-lisa	Plain Anttireo	6, 29	FSL, Rv/sP (FIG, MAVV)
<i>Hepsiolachmus longirostris</i> Pezelih, 1868	chorozinho-de-bico-comprido	Large-billed Antwren	2, 3, 5, 6, 10, 11, 13, 15, 17, 18, 19, 20, 23, 28-31	FSL, Rv/sP (FIG, MAVV, LAC)
<i>Hepsiolachmus atricapillus</i> Pezelih, 1868	chorozinho-de-chapeu-preto	Black-capped Antwren	6, 30	Rv/sP (MAVW)
<i>Thamnophilus solitarius</i> (Linnaeus, 1764)	choca-barata	Barred Antshrike	1-17, 20, 21, 24, 29-31	FSL, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, LPS, CF, MAVV, LAC)
<i>Thamnophilus torquatus</i> Swainson, 1825	choca-de-asa-vermelha	Rufous-winged Antshrike	6, 10	FSL, Rv/sP, Rv/sNP (SRP, MNG)
<i>Thamnophilus pelzelni</i> Hellmayr, 1924	choca-do-planalto	Planalto Slaty-Antshrike	2, 6, 9, 10, 13, 15, 17, 18, 19, 20, 22, 23, 30, 31	FSL, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, LPS, CF, MAVV)
<i>Thamnophilus caeruleiceps</i> Vieillot, 1816	choca-da-mata	Variable Antshrike	2, 6, 9	FSL, Rv/sP, Rv/sNP (SRP, CF)
<i>Taraba major</i> (Vieillot, 1816)	choró-boi	Great Antshrike	2, 3, 6, 9, 13, 15, 17, 18, 19, 22	FSL, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, CF)
<i>Melanopareiae</i>	méia-lua-do-cerrado	Collared Crescentchest	8, 10	FSL, Rv/sNP (SRP, VAG)
Dendrocolaptidae				
<i>Sittasomus griseicapillus</i> (Vieillot, 1818)	araçapu-verde	Oliveaceous Woodcreeper	2, 6, 9, 10, 11, 13, 17, 18, 19, 20, 23, 28-31	FSL, Rv/sP, Rv/sNP (SRP, MNG, VAG, LPS, FIG, CF, MAVV, LAC)
<i>Dendrocolaptes platyrostris</i> Spix, 1825	araçapu-grande	Planalto Woodcreeper	2, 3, 6, 10, 11, 18, 19, 22, 24, 30, 31	FSL, Rv/sP, Rv/sNP (SRP, MNG, FIG, CF, MAVV, LAC)
<i>Campylorhynchus trochilirostris</i> (Lichtenstein, 1820)	araçapu-beija-flor	Red-billed Scythebill	2, 6, 9, 18, 22, 29	FSL, Rv/sP, Rv/sNP (SRP, MNG, FIG, CF, MAVV)
<i>Xiphorhynchus guttatus</i> (Lafrènaye, 1850)	araçapu-de-tatrenayé	Lafresnaye's Woodcreeper	6	Rv/sP
<i>Lepidocolaptes angustirostris</i> (Vieillot, 1818)	araçapu-de-cenrado	Narrow-billed Woodcreeper	1-19, 20, 22, 23, 30	FSL, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, CF, MAVV, LAC)
<i>Xenops rutilans</i> (Temminck, 1821)	bico-virado-carão	Streaked Xenops	2	FSL, Rv/sNP (CF)
Furnariidae				
<i>Automolus leucophthalmus</i> (Wied, 1821)	barranqueiro-de-olho-branco	White-eyed Foliage-gleaner	6	Rv/sP
<i>Furnarius rufus</i> (Gmelin, 1788)	joão-de-barro	Rufous Hornero	1-17, 21, 22, 28, 29	FSL, Rv/sP, Rv/sNP (SRP, MNG, FIG, CF, MAVV, LAC)
<i>Phaeoptilas trufffers</i> (Wied, 1821)	joão-de-pau	Rufous-fronted Thornbird	2, 3, 6, 9, 10, 11, 13, 17, 19, 31	FSL, Rv/sP, Rv/sNP (SRP, MNG, FIG, CF, MAVV)
<i>Phaeoptilas truber</i> (Vieillot, 1817)	graveteiro	Greater Thornbird	2, 6, 10, 11, 13, 15, 17, 18, 19, 21, F4, 30	FSL, Rv/sP, Rv/sNP (SRP, MNG, FIG, CF, MAVV)
<i>Cranioleuca vulpecula</i> (Pelezeli, 1856)	arediço-do-rio	Rusty-backed Spinetail	2, 6, 18, 19, F4	FSL, Rv/sP, Rv/sNP (SRP, MNG, FIG, CF)
<i>Certhiaxis himantopus</i> (Gmelin, 1788)	cunatié	Yellow-chinned Spinetail	1, 2, 3, 6, 10, 13, 17, 18, 19, F3	FSL, Rv/sP, Rv/sNP (SRP, MNG, FIG, CF, LAC)
<i>Albanoris rectirostris</i> (Wied, 1821)	cisqueiro-do-rio	Chestnut-capped Foliage-gleaner	6	Rv/sP
<i>Schoeniophylax phryganophilus</i> (Vieillot, 1817)	bichota	Chotyo Spinetail	2, 6, 10, 13, 17, 28	FSL, Rv/sP, Rv/sNP (SRP, MNG, CF, MAVV, LAC)

Species/conservation and migration status	Portuguese Name	English Name	Localities	Source
<i>Synallaxis scutata</i> Sclater, 1859	estrelinha-preta	Orbicular Spinetail	6, 22	FSI, Rv/sP, Rv/sNP (VAG, FIG)
<i>Synallaxis hypopodia</i> Sclater, 1874	joão-grilo	Cinereous-breasted Spinetail	2, 6, 13F4	FSI, Rv/sP, Rv/sNP (FIG, CF)
<i>Synallaxis abyssensis</i> Temminck, 1823	úi-pi	Pale-breasted Spinetail	2, 6, 9, 10, 13, 15, 17, 18, 19, 22	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, CF)
<i>Synallaxis frontalis</i> Pelzeln, 1859	petrún	Sooty-fronted Spinetail	1, 2, 3, 6, 9, 13, 15, 17, 18, 19, 20, 22, 23, 24, 29-31	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, LPS, CF, MAVV)
<i>Syndactyla dimidiata</i> (Pelzeln, 1859)	limpa-folha-do-brejo	Russet-mantled Folige-gleaner	6, 15, 18, 19	Rv/sP, Rv/sNP (SRP, MNG)
Pipridae				
<i>Neopelma pallescens</i> (Lafresnaye, 1853)	fruxo-do-cerradão	Pale-bellied Tyrant-Manakin	2, 6, 13, 18, 19, 20, 23	FSI, Rv/sP, Rv/sNP (SRP, MNG, VAG, LPS, FIG, CF)
<i>Antilophia agleata</i> (Lichtenstein, 1823)	soldadinho	Helmeted Manakin	2, 3, 6, 7, 9, 10, 13, 17, 18, 19, 20, 28-30	FSI, Rv/sP, Rv/sNP (SRP, MNG, LPS, FIG, CF, MAVV, LAC)
<i>Pipra fasciicauda</i> a Hellmayr, 1906	uirapuru-tarância	Band-tailed Manakin	6	FSI, Rv/sP (FIG)
<i>Macheiropterus pyrocephalus</i> (Sclater, 1852)	uirapuru-cigarrá	Fiery-capped Manakin	2	Rv/sP, Rv/sNP (SRP)
Tityridae				
<i>Tityra inquisitor</i> (Lichtenstein, 1823)	anambé-branco-de-bochecha-parda	Black-crowned Tityra	2, 6, 9, 19, 22	FSI, Rv/sP, Rv/sNP (SRP, MNG, VAG, FIG)
<i>Tityra semifasciata</i> (Spix, 1825)	anambé-branco-de-máscara-preta	Masked Tityra	26	FSI
<i>Tityra cayana</i> (Linnaeus, 1766) ^a	anambé-branco-de-tábo-preto	Black-tailed Tityra	2, 6, 18, 19, 22, 28, 30	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, MAVV, LAC)
<i>Xenopsaris albifrons</i> (Burmester, 1869)M	tjerila	White-throated Xénopsaris	6	Rv/sP
<i>Pachyramphus castaneus</i> (Lardine & Selby, 1827)	caneleiro	Chestnut-crowned Becard	2, 6	Rv/sP, Rv/sNP (CF)
<i>Pachyramphus validus</i> (Lichtenstein, 1823) ^b	caneleiro-de-chapéu-preto	Crested Becard	2, 6, 9, 13	Rv/sP, Rv/sNP (SRP, MNG, FIG)
<i>Pachyramphus validus</i> (Vieillot, 1816)	caneleiro-verde	Green-backed Becard	2, 6, 17, 22	Rv/sP, Rv/sNP (MNG, FIG)
<i>Pachyramphus polychopterus</i> (Vieillot, 1818) ^a	caneleiro-preto	White-winged Becard	2, 3, 6, 13, 15, 17, 18, 19, 20, 22, 23, 28, 30, 31	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, LPS, CF, MAVV)
Platyrinchidae				
<i>Platyrinchus mystaceus</i> Vieillot, 1818	patinho	White-throated Spadebill	6	Rv/sP
Rhynchococcyidae				
<i>Corythopis delalandii</i> (Lesson, 1830)	estalador	Southern Antipit	6, 13	Rv/sP, Rv/sNP (CF)
<i>Lepidothrix amurensis</i> Schudt, 1846	cabeçudo	Sepia-capped Flycatcher	2, 6, 11, 13, 19, 20	FSI, Rv/sP, Rv/sNP (SRP, MNG, LPS, FIG, CF, LAC)
<i>Tolmomyias sulphureiceps</i> (Spix, 1825)	bico-chato-de-orelha-preta	Yellow-olive Flycatcher	2, 3, 6, 10, 11, 13, 17, 18, 19, 20, 22	FSI, Rv/sP, Rv/sNP (SRP, MNG, VAG, FIG, CF)
<i>Todirostrum cinereum</i> (Linnaeus, 1766)	ferreirinho-relógio	Common Tody-Flycatcher	1, 2, 3, 6, 9, 10, 11, 13, 15, 17, 18, 19, 21	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, CF, LAC)
<i>Poecilotriccus latirostris</i> (Pelzeln, 1868)	ferreirinho-de-cara-parda	Rusty-fronted Tody-Flycatcher	2, 3, 6, 10, 13, 18, 19, 20, 21, 22, 24, 29, 30	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, LPS, CF, MAVV)
<i>Myiornis auricularis</i> (Vieillot, 1818)	miudinho	Eared Pygmy-Tyrant	6	FSI, Rv/sP
<i>Hemitriccus marginalis</i> (Vieillot, 1837)	sebinho-de-olho-de-ouro	Pearly-vented Tody-Tyrant	2, 3, 4, 5, 6, 7, 9, 10, 11, 13, 15, 17, 18, 19, 20, 22, 23, 24, 29-31	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, LPS, CF, MAVV)
Tyrannidae				
<i>Hirundinea ferruginea</i> (Gmelin, 1788) ^a	gibão-de-couro	Cliff Flycatcher	2, 9	FSI, Rv/s NP (SRP)
<i>Euscathartus meloryphus</i> Wied, 1831	barulhento	Tawny-crowned Pygmy-Tyrant	2, 5, 6, 19	FSI, Rv/sP, Rv/sNP (MNG, CF)
<i>Comptosia obsoletum</i> (Temminck, 1824)	risadinha	Southern Beardless-Tyrannulet	1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 13, 15, 17, 18, 19, 20, 22, 23, 28-30	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, CF, MAVV)
<i>Etenia flavogaster</i> (Thunberg, 1822)	guaracava-de-bariga-amarela	Yellow-bellied Elenia	1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 13, 15, 17, 18, 19, 21, 22, 23, 24, 26, 28, 29, 31	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, CF, MAVV, LAC)
<i>Etenia spectabilis</i> Pelzeln, 1868 ^a	guaracava-grande	Large Elenia	2, 6, 13, 17, 18, 13	FSI, Rv/sP, Rv/sNP (MNG, FIG, CF)
<i>Etenia mesoleuca</i> (Deppe, 1830)	tuque	Olivaceous Elenia	6, 22, 23	FSI, Rv/s NP (FIG, VAG)
<i>Etenia chiriquensis</i> Lawrence, 1865 ^a	chibum	Lesse Elenia	2, 6, 10, 17, 22, 23	FSI, Rv/sP, Rv/sNP (MNG, VAG, CF)
<i>Etenia obscura</i> (Orbigny & Lafresnaye, 1837)	tucão	Small-headed Elenia	2, 6	FSI, Rv/sP
<i>Etenia cristata</i> Pelzeln, 1868 ^a	guaracava-de-topete-uniforme	Plain-crested Elenia	2, 6, 9, 13	Rv/sP, Rv/sNP (SRP, CF)
<i>Etenia parvirostris</i> Pelzeln, 1868 ^a	tuque-pium	Small-billed Elenia	6, 9	Rv/sP, Rv/sNP (SRP)
<i>Suiriri suirini</i> (Vieillot, 1818)	suiriri-cinzento	Suiriri Flycatcher	2, 10, 15, 17, 18	FSI, Rv/sP, Rv/sNP (SRP, MNG)

Species/conservation and migration status	Portuguese Name	English Name	Localities	Source
<i>Myioagris guimaraeii</i> (d'Orbigny, 1839)	maria-pedhim	Forest Elenia	2, 6, 18, 13, 29	FSI, Rv/s NP (MNG, FIG, MAVV)
<i>Myioagris vindictata</i> (Veillot, 1817) ^a	guaracava-de-crista-alaranjada	Greenish Elenia	2, 5, 6, 10, 13, 17, 19, 20, 22, 23, 28, 29	FSI, Rv/s NP (SRP, MNG, FIG, VAG, IPS, CE, MAVV)
<i>Myioagris caniceps</i> (Swainson, 1835)	guaracava-cinzenta	Gray Elenia	6, 10, 17, 18, 20, 21, 22, 29, 30	Rv/s NP (SRP, MNG, FIG, VAG, MAVV)
<i>Myiocephalus fasciatus</i> (Status Müller, 1776) ^a	filipe	Bran-colored Flycatcher	2, 6, 9, 10, 11, 13, 15, 17, 19, 21, 28, 30	Rv/s NP (SRP, MNG, FIG, CE, MAVV, LAC)
<i>Phaeomyias murina</i> (Spix, 1825) ^b	bagadeiro	Mouse-colored Tyrannulet	2, 6, 9, 10, 11, 13, 17, 19, 22, 23, 31	FSI, Rv/s NP (SRP, MNG, FIG, VAG, CE, MAVV)
<i>Pseudocolaptes sclateri</i> (Oustalet, 1892)	tricolino	Crested Doradito	9, 12	Rv/s NP (SRP)
<i>Polytmus petlorhynchus</i> (Veillot, 1817) ^a	papa-moscas-canela	Bearded Tachuri	17	FSI, Rv/s NP (MNG)
<i>Serophaeus subcristatus</i> (Veillot, 1817)	alegriinho	White-crested Tyrannulet	2, 3, 6, 10, 13, 15, 18, 19, 22	FSI, Rv/s NP (SRP, MNG, VAG, CF)
<i>Lanius leucotis</i> (Veillot, 1818) ^a	bem-te-vi-pirata	Piratic Flycatcher	2, 6, 10, 13, 18, 19	FSI, Rv/s NP (SRP, MNG, CF)
<i>Myiarchus ferox</i> (Gmelin, 1789)	maria-cavaleira	Short-crested Flycatcher	2, 3, 5, 6, 9, 10, 11, 13, 15, 17-24, 28, 29	FSI, Rv/s NP (SRP, MNG, FIG, VAG, CF, MAVV)
<i>Myiarchus tyrannulus</i> (Status Müller, 1776)	maria-cavaleira-de-rabo-enferrijado	Brown-crested Flycatcher	1-17, 20, 21, 22, 24, 28, 30, 31	FSI, Rv/s NP (SRP, MNG, FIG, VAG, CF, MAVV)
<i>Myiarchus swainsoni</i> Cabanis & Heine, 1859 ^a	irré	Swainson's Flycatcher	2, 6, 9, 13, 17, 18, 20, 22, 23, 30, 31	FSI, Rv/s NP (SRP, MNG, FIG, VAG, CF, MAVV)
<i>Sittiparus sibilator</i> (Veillot, 1818)	gritador	Sibilant Sittystes	2, 9, 22, 29, 30	FSI, Rv/s NP (SRP, FIG, CF, MAVV)
<i>Casiornis rufus</i> (Veillot, 1816)	maria-ferugem	Rufous Casiornis	2, 3, 5, 6, 9, 10, 11, 13, 15, 17, 18, 19, 20, 22, 23, 28-31	FSI, Rv/s NP (SRP, MNG, FIG, VAG, IPS, CE, MAVV)
<i>Pitangus sulphuratus</i> (Linnaeus, 1766)	bem-te-vi	Great Kiskadee	1-17, 21-26, 28-31	FSI, Rv/s NP (SRP, MNG, FIG, VAG, CF, MAVV, LAC)
<i>Philothryx lictor</i> (Lichtenstein, 1823)	bentevizinho-do-brejo	Lesse Kiskadee	2, 3, 11	FSI, Rv/s NP (SRP)
<i>Machetornis rixosa</i> (Veillot, 1819)	suiriri-cavalinho	Cattle Tyrant	1, 2, 3, 4, 5, 6, 8, 10, 11, 12, 13, 17, 18, 19, 22, 26	FSI, Rv/s NP (SRP, MNG, FIG, CF, LAC)
<i>Myiodynastes maculatus</i> (Status Müller, 1776) ^a	bem-te-vi-rojado	Streaked Flycatcher	1-17, 20, 22, 23, 24, 26, 28	FSI, Rv/s NP (SRP, MNG, FIG, VAG, IPS, CE, MAVV, LAC)
<i>Megarynchus pitangua</i> (Linnaeus, 1766)	neinei	Boat-billed Flycatcher	1-17, 20, 22, 23, 24, 26, 29, 30	FSI, Rv/s NP (SRP, MNG, FIG, VAG, CF, MAVV, LAC)
<i>Myiozetetes cayanensis</i> (Linnaeus, 1766) ^a	bentevizinho-de-asa-ferruginea	Rusty-margined Flycatcher	1-16, 21, 26, 28, 30	FSI, Rv/s NP (SRP, MNG, FIG, CE, MAVV, LAC)
<i>Myiozetetes similis</i> (Spix, 1825) ^a	bentevizinho-de-penacho-vermelho	Social Flycatcher	jan/16	FSI, Rv/s NP (SRP, MNG, FIG, CF)
<i>Tyrannus albogularis</i> Burmeister, 1856 ^c	suiriri-de-garganta-branca	White-throated Kingbird	2, 3, 6, 9, 10, 11, 13, 17, 18, 19	FSI, Rv/s NP (SRP, MNG, FIG, VAG, CF)
<i>Tyrannus melancholicus</i> Vieillot, 1819 ^a	suiriri	Tropical Kingbird	1-17, 21-24, 31	FSI, Rv/s NP (SRP, MNG, FIG, VAG, CF, MAVV, LAC)
<i>Tyrannus savana</i> Daudin, 1802 ^a	tesourinha	Southern Fork-tailed Flycatcher	jan/17	FSI, Rv/s NP (SRP, MNG, FIG)
<i>Griseotyrannus aurantioatrocristatus</i> (d'Orbigny & Lafresnaye, 1837) ^a	peitica-de-chapeu-preto	Crowned Slaty Flycatcher	2, 3, 6, 11, 13, 17, 19, 22	FSI, Rv/s NP (SRP, MNG, FIG, VAG, CF)
<i>Epidonomus varius</i> (Veillot, 1818) ^a	peitica	Variegated Flycatcher	1, 2, 6, 11, 19, 22, 23	FSI, Rv/s NP (SRP, MNG, FIG, VAG, CF)
<i>Colonia colonus</i> (Veillot, 1818)	vivivinha	Long-tailed Tyrant	1, 2, 3, 6, 9, 13, 22, 23	FSI, Rv/s NP (SRP, VAG, FIG)
<i>Satrapa icterophrys</i> (Veillot, 1818)	suiriri-pequeno	Yellow-browed Tyrant	2	Rv/s P
<i>Anisognathus lacrymiger</i> (Linnaeus, 1764)	freirinha	White-headed Marsh Tyrant	1, 2, 3, 6, 9, 10, 15, 17, 18, 19, 28	FSI, Rv/s NP (SRP, MNG, FIG, CE, MAVV, LAC)
<i>Fluvicola albiventris</i> (Spix, 1825) ^a	lavadeira-de-cara-branca	Black-backed Water-Tyrant	1, 2, 9, 13	FSI, Rv/s NP (SRP, MNG, CF)
<i>Fluvicola nengeta</i> (Linnaeus, 1766)	lavadeira-mascaráda	Masked Water-Tyrant	1, 6, 9	FSI, Rv/s NP (SRP, FIG, LAC)
<i>Ptychocephalus rubinus</i> (Boddart, 1783) ^a	príncipe	Vermilion Flycatcher	1, 2, 3, 5, 6, 8, 9, 10, 13, 15, 17, 18, 19, 21, 28, 30	FSI, Rv/s NP (SRP, MNG, FIG, CE, MAVV, LAC)
<i>Gulbenkianyes yetapa</i> (Veillot, 1818) ^a	tesoura-do-brejo	Streamer-tailed Tyrant	2, 3, 6, 9, 10, 13, 15, 17, 18, 19, 22, 28, 30	FSI, Rv/s NP (SRP, MNG, FIG, VAG, CF, MAVV, LAC)
<i>Alectrurus tricolor</i> (Veillot, 1816) ^a	galito	Cock-tailed Tyrant	10, 17	FSI, Rv/s NP (SRP, MNG)
<i>Lathrotriccus euleri</i> (Cabanis, 1868)M	enferrijado	Euler's Flycatcher	2, 6, 10, 13, 17, 29	Rv/s P
<i>Sublegatus modestus</i> (Wied, 1833) ^a	guaracava-modesta	Southern Scrub-Flycatcher	2, 6, 8, 10	Rv/s P
<i>Philydorias fasciatus</i> (Thunberg, 1822) ^a	piolhinho	Planalto Tyrannulet	6	Rv/s P
<i>Gremnorhynchus fuscatus</i> (Wied, 1831)	guaracavuçu	Fuscous Flycatcher	2, 3, 5, 6, 9, 10, 13, 14, 17, 18, 19, 20, 22, 23, 30	FSI, Rv/s NP (SRP, MNG, FIG, VAG, IPS, CE, MAVV, LAC)
<i>Contopus cinereus</i> (Spix, 1825) ^a	papa-moscas-cinzento	Tropical Pewee	1, 6, 9, 13, 17, 22, 30	FSI, Rv/s NP (SRP, MNG, FIG, VAG, MAVV)
<i>Xolmis velatus</i> (Lichtenstein, 1823)	nóvinha-branca	White-tumped Monjita	1, 2, 3, 4, 6, 8, 9, 10, 12, 13, 15, 17, 18, 19, 26, 28-30	FSI, Rv/s NP (SRP, MNG, FIG, CE, MAVV, LAC)
<i>Nengetus cinereus</i> (Veillot, 1816) ^a	primavera	Gray Monjita	1, 2, 5, 6, 10, 13, 15, 17, 18, 19	FSI, Rv/s NP (SRP, MNG, FIG, CF)

Species/conservation and migration status	Portuguese Name	English Name	Localities	Source
Vireonidae				
<i>Cyathornis gujanensis</i> (Gmelin, 1789)	pitiguary	Rufous-browed Pepper-shrike	1-17, 20, 22, 23, 24, 28-31	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, LPS, CF, MAVN, LAC)
<i>Hylophilus pectoralis</i> Schater, 1866	vite-vite-de-cabeça-cinza	Ashy-headed Greenlet	2, 6, 9, 22, 13	FSI, Rv/sP, Rv/sNP (FIG, VAG, CF)
<i>Vireo chivi</i> (Vieillot, 1817) ^a	juruviata	Chiwi Vireo	2, 3, 6, 9, 10, 11, 13, 17, 20, 22, 23, 31	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, CF, MAVN)
Corvidae				
<i>Cyanocorax cristatellus</i> (Temminck, 1823)	gralha-do-campo	Curl-crested Jay	2, 3, 6, 8, 9, 10, 12, 13, 15, 17, 18, 19, 20, 22, 23, 26, 28, 30	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, CF, MAVN)
<i>Cyanocorax chrysops</i> (Vieillot, 1818)	gralha-piça	Plush-crested Jay	1-17, 20-23, 26	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, CF)
<i>Cyanocorax cyanopogon</i> (Wied, 1821)	gralha-cancá	White-tailed Jay	2, 30	FSI (MAVN)
Hirundinidae				
<i>Stelgidopteryx ruficollis</i> (Vieillot, 1817) ^a	andorinha-serradora	Southern Rough-winged Swallow	1-17, 20, 22, 26, 28-30	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, CF, MAVN, LAC)
<i>Allochelidon fuscata</i> (Temminck, 1822) ^a	andorinha-morena	Tawny-headed Swallow	2, 26	Rv/sP, Rv/sNP (FIG, CF)
<i>Progne tapera</i> (Linnaeus, 1766) ^b	andorinha-do-campo	Brown-chested Martin	1-17, 21, 22, 23	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, CF, LAC)
<i>Progne subis</i> (Linnaeus, 1758) ^b	andorinha-azul	Purple Martin	2	FSI, Rv/s NP (SRP)
<i>Progne chalybea</i> (Gmelin, 1789) ^b	andorinha-grande	Gray-breasted Martin	2, 3, 6, 9, 10, 11, 13, 15, 17, 18, 19, 22, 26, 30	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, CF, MAVN)
<i>Tachycineta albiventer</i> (Boddart, 1783) ^b	andorinha-do-riô	White-winged Swallow	1, 2, 3, 6, 9, 11, 13, 15, 17, 19	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, CF)
<i>Tachycineta leucorrhoa</i> (Vieillot, 1817) ^a	andorinha-de-sobre-branco	White-rumped Swallow	1, 2, 3, 10, 13, 17, 18, 19	Rv/sP, Rv/sNP (SRP, MNG, CF)
<i>Riparia riparia</i> (Linnaeus, 1758) ^b	andorinha-do-baranco	Bank Swallow	6	Rv/sP
<i>Hirundo rustica</i> Linnaeus, 1758 ^b	andorinha-de-bando	Barn Swallow	1, 2	FSI, Rv/sP, Rv/sNP (SRP, CF)
<i>Petrochelidon pyrrhonota</i> (Vieillot, 1817) ^b	andorinha-de-dorsو-aganelado	Cliff Swallow	2	FSI, Rv/sP (CF)
<i>Pygochelidon cyanoleuca</i> (Vieillot, 1817) ^a	andorinha-pequena-de-casa	Blue-and-white Swallow	1, 2, 3, 6, 9, 11, 13, 18, 19, 24, 30	Rv/sP, Rv/sNP (SRP, MNG, FIG, CF, MAVN)
Trochilidae				
<i>Trochilus lucifer</i> (Linnaeus, 1758)	corujá	Southern House Wren	1, 2, 3, 6, 10, 13, 15, 17, 18, 19, 21, 22, 26, 30, 31	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, CF, MAVN, LAC)
<i>Antorchilus leucotis</i> (Lafresnaye, 1845)	garanhão-de-barriga-vermelha	Buff-breasted Wren	2, 6, 9, 22	FSI, Rv/sP, Rv/sNP (SRP, VAG, CF)
Poliopithecidae				
<i>Poliopithex dumicolor</i> (Vieillot, 1817)	balançá-rabo-de-máscara	Masked Gnatcatcher	1, 2, 3, 6, 9, 10, 11, 13, 15, 17, 18, 19, 20, 22, 23, 24, 28-31	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, LPS, CF, MAVN)
Donacobiidae				
<i>Donacobius atricapilla</i> (Linnaeus, 1766)	japacaním	Black-capped Donacobius	1, 2, 3, 6, 9, 11, 13, 15, 18, 19	FSI, Rv/sP, Rv/sNP (SRP, MNG, CF, LAC)
Turdidae				
<i>Crathes fusciceps</i> (Stephens, 1817) ^b	sabiázinho-norte-americano	Veery	2	FSI, Rv/sNP (CF)
<i>Turdus leucomelas</i> Vieillot, 1818	sabiá-barranco	Pale-breasted Thrush	1-17, 20-24, 26, 28-31	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, LPS, CF, MAVN, LAC)
<i>Turdus amaurochalinus</i> Cabanis, 1850 ^a	sabiá-poca	Creamy-bellied Thrush	2, 5, 6, 10, 11, 13, 17, 19-23, 26, 31	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, VAG, LPS, CF, MAVN, LAC)
<i>Turdus rufiventris</i> Vieillot, 1818	sabiá-laranjeira	Rufous-bellied Thrush	1, 2, 3, 5, 6, 10, 11, 13, 17, 18, 19, 21, 24, 28	FSI (em anexo) Rv/sP, Rv/sNP (SRP, MNG, FIG, CF, MAVN)
<i>Turdus subulatus</i> (Seehöhm, 1837) ^a	sabiá-ferreiro	Eastern Slaty Thrush	6	Rv/sP
<i>Turdus albicollis</i> Vieillot, 1818	sabiá-coleira	White-necked Thrush	2, 19, 31	Rv/sP, Rv/sNP (MNG, MAVN)
Mimidae				
<i>Mimus saturninus</i> (Lichtenstein, 1823)	sabiá-do-campo	Chalk-browed Mockingbird	1-17, 21, 22, 26, 28-31	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, CF, MAVN, LAC)
Estrildidae				
<i>Estrilda astrild</i> (Linnaeus, 1758)	bico-de-lacre	Common Waxbill	1, 2	Rv/sP, Rv/sNP (SRP)
Passeridae				
<i>Passer domesticus</i> (Linnaeus, 1758)	pardal	House Sparrow	1, 2, 8, 10, 12, 17, 18, 19	FSI, Rv/sP, Rv/sNP (SRP, MNG, FIG, CF)

Species/conservation and migration status	Portuguese Name	English Name	Localities	Source
Motacillidae				
<i>Anthus chii</i> Vieillot, 1818	caminheiro-zumbidor	Yellowish Pipit	2,5,6,10,14,18,19,25	FSI, Rv/s NP (SRP, MNG, FIG, LAC)
Fringillidae				
<i>Spinus magellanicus</i> (Vieillot, 1805)	pintasilgo	Hooded Siskin	2,24	Rv/s P, Rv/s NP (FIG)
<i>Euphonia chlorotica</i> (Linnaeus, 1766)	fim-fim	Purple-throated Euphonia	1-17, 20-24, 29-31	FSI, Rv/s P, Rv/s NP (SRP, MNG, FIG, VAG, CF, MAVN, LAC)
<i>Euphonia lanifrons</i> d'Orbigny & Lafresnaye, 1837	gaturamo-de-bico-grosso	Thick-billed Euphonia	6	FSI, Rv/s P (FIG)
<i>Euphonia violacea</i> (Linnaeus, 1758)	gaturamo-verdeiro	Violaceous Euphonia	6	Rv/s P
Passerellidae				
<i>Ammodramus humeralis</i> (Bosc, 1792)	tico-tico-do-campo	Grassland Sparrow	2,3,5,6,8,10,11,12,13,17,18,19,22,26,29	FSI, Rv/s P, Rv/s NP (SRP, MNG, FIG, CF, MAVN, LAC)
<i>Arremon palmarum</i> Bonaparte, 1850	tico-tico-de-costas-cinza	Gray-backed Sparrow	2,6,9,13,17,20,22,24	FSI, Rv/s P, Rv/s NP (SRP, MNG, FIG, VAG, LPS, CF)
<i>Zonotrichia capensis</i> (Statius Müller, 1776)	tico-tico	Rufous-collared Sparrow	1-16, 22, 29	Rv/s P, Rv/s NP (SRP, MNG, FIG, CF, MAVN)
Icteriidae				
<i>Cacicus haemorrhous</i> (Linnaeus, 1766)	guaxa	Red-rumped Cacique	2,3,6,9,13,29	FSI, Rv/s P (FIG, MAVN)
<i>Leistes superciliaris</i> (Bonaparte, 1850) ^a	pólicia-inglesa-de-sul	White-browed Meadowlark	1,2,3,5,8,12,13,17,18,19, F1	FSI, Rv/s P, Rv/s NP (SRP, MNG, FIG, CF)
<i>Cacicus cela</i> (Linnaeus, 1758)	xexéu	Yellow-rumped Cacique	10	Rv/s P, Rv/s NP (SRP)
<i>Icterus croconatus</i> (Wagler, 1829)	jão-pinto	Orange-backed Troupial	1,2,6,9,13,19	FSI, Rv/s P, Rv/s NP (SRP, MNG, FIG, CF, LAC)
<i>Icterus pyrrhogaster</i> (Vieillot, 1819)	encontro	Variable Oriole	1,2,3,5,6,9,10,11,13,15,17,18,19,20,22,29	FSI, Rv/s P, Rv/s NP (SRP, MNG, FIG, VAG, LPS, CF, MAVN, LAC)
<i>Molothrus ater</i> Cassin, 1866	chupim-azevêdo	Screaming Cowbird	2,6,10,11,18,19,26	FSI, Rv/s P, Rv/s NP (SRP, MNG, FIG, CF)
<i>Molothrus bonariensis</i> (Gmelin, 1789)	chupim	Shiny Cowbird	1-16, 21, 22, 25, 26	FSI, Rv/s P, Rv/s NP (SRP, MNG, FIG, VAG, CF)
<i>Molothrus oryzivorus</i> (Gmelin, 1788)	iráuina-grande	Giant Cowbird	1,2	FSI (em anexo), Rv/s NP (SRP)
<i>Amblyramphus holosericeus</i> Scopoli, 1786	cardeal-do-hanhado	Scarlet-headed Blackbird	9,11	FSI (em anexo), Rv/s NP (SRP)
<i>Gnorimopsar chopi</i> (Vieillot, 1819)	pássaro-preto	Chopi Blackbird	1-17, 20, 21, 23, 25, 26, 28-30	FSI, Rv/s P, Rv/s NP (SRP, MNG, VAG, FIG, CF, MAVN, LAC)
<i>Agelaioides badius</i> (Vieillot, 1819)	asa-de-tehá	Grayish Baywing	11, 19	Rv/s P, Rv/s NP (SRP, MNG)
<i>Aegithalos caudatus</i> (Wied-Neuwied, 1831)	carreteão	Unicolored Blackbird	2,3,10,13,19	FSI, Rv/s P
<i>Panocelus decumanus</i> (Pallas, 1769)	jápu	Crested Oropendola	6	FSI, Rv/s P, Rv/s NP (SRP, MNG)
<i>Chrysomus ruficapillus</i> (Vieillot, 1819) ^a	garibaldi	Chestnut-capped Blackbird	1,2,19	FSI, Rv/s P, Rv/s NP (SRP, MNG, FIG)
<i>Pseudoleistes guianahuro</i> (Vieillot, 1819)	chupim-do-brejo	Yellow-rumped Marshbird	2,9,10,11,14,17,18,19,30	FSI, Rv/s P, Rv/s NP (SRP, MNG, CF, MAVN)
Parulidae				
<i>Setophaga pityophila</i> (Vieillot, 1817)	matiquita	Tropical Parula	2,6,10,17,18,19,20,22,29-31	FSI, Rv/s P, Rv/s NP (SRP, MNG, FIG, VAG, MAVN)
<i>Myiothlypis euophrys</i> Peltzeln, 1868	pula-pula-de-sobrancelha	White-striped Warbler	2,10,14,18,19,13	FSI, Rv/s P, Rv/s NP (SRP, MNG, FIG, CF)
<i>Myiothlypis flaveola</i> Baird, 1865	canário-do-mato	Flavescent Warbler	2,6,9,13,15,17,18,19,20,22,23,28-31	FSI, Rv/s P, Rv/s NP (SRP, MNG, FIG, VAG, LPS, CF, MAVN)
<i>Geothlypis aequinoctialis</i> (Gmelin, 1789)	pia-cobra	Masked Yellowthroat	2,6,13,17,19,21	Rv/s P, Rv/s NP (SRP, MNG, FIG, CF)
<i>Basilornis curvirostris</i> (Despe, 1830)	pula-pula	Golden-crowned Warbler	2,6,13,17,18,19,20,22,29,30	FSI, Rv/s P, Rv/s NP (SRP, MNG, FIG, VAG, CF, MAVN)
Cardinalidae				
<i>Piranga flava</i> (Vieillot, 1822)	sanhão-de-fogo	Hepatic Tanager	2,6	FSI, Rv/s P, Rv/s NP (SRP)
<i>Habia rubica</i> (Vieillot, 1817)	tiê-de-bando	Red-crowned Ant-Tanager	6,9	Rv/s P, Rv/s NP (SRP)
<i>Cyanoloxia brissonii</i> (Lichtenstein, 1823)	azulão	Ultramarine Grosbeak	6	FSI, Rv/s P
Thraupidae				
<i>Nemosia pileata</i> (Boddart, 1783)	sáia-de-chapéu-preto	Hooded Tanager	2,3,6,7,9,11,13,15,17,18,19,20,21,22	FSI, Rv/s P, Rv/s NP (SRP, MNG, FIG, VAG, CF)
<i>Emberizoides herbicola</i> (Vieillot, 1817)	canário-do-campo	Wedge-tailed Grass-Finch	2,6,7,8,10,12,13,17,18,19,28	FSI, Rv/s P, Rv/s NP (SRP, MNG, FIG, CF, MAVN, LAC)
<i>Emberizoides spilogaster</i> Ihering & Ihering, 1907	canário-do-brejo	Lesser Grass-Finch	2,6,9	FSI, Rv/s NP (SRP)

Species/conservation and migration status	Portuguese Name	English Name	Localities	Source
<i>Emberiza platensis</i> (Gmelin, 1789)	sabiá-do-banhado	Great Pampa-Finch	2	FSI, Rv/s NP (CF)
<i>Hemithraupis guira</i> (Linnaeus, 1766)	sára-de-papo-preto	Guira Tanager	1,2, 3, 5, 6, 8, 9, 10, 12, 13, 15, 17, 18, 19, 20, 22, 23, 29, 31	FSI, Rv/s NP (SRP, MNG, FIG, VAG, LPS, CE, MAVV)
<i>Tersina viridis</i> (Illiger, 1811) ^a	sá-andorinha	Swallow Tanager	1,2, 6, 7, 9, 11, 13, 17, 18, 22, 25, 26	Rv/s NP (SRP, MNG, VAG, FIG, CF)
<i>Ganerpes cyanocephalus</i> (Linnaeus, 1766)	sára-beija-flor	Red-legged Honeycreeper	2,6, 9, 10, 13 F5	FSI, Rv/s NP (SRP, MNG, FIG, CF)
<i>Dacnis cayana</i> (Linnaeus, 1766)	sarazul	Blue Dacnis	1,2, 3, 5, 6, 10, 13, 17, 19, 20, 22, 23, 28	FSI, Rv/s NP (SRP, MNG, FIG, VAG, LPS, CE, MAVV)
<i>Saltatricula atricollis</i> Vieillot, 1817	batiqueiro	Black-throated Saltator	2,3, 5, 6, 8, 10, 12, 13, 15, 17, 18, 19, 22, 28, 29	FSI, Rv/s NP (SRP, MNG, FIG, CF, MAVV)
<i>Saltator similis</i> d'Orbigny & Lafresnaye, 1837	trinca-ferro	Green-winged Saltator	2,3, 5, 6, 7, 10, 11, 13, 15, 17, 18, 19, 20, 22, 23, 30, 31	FSI, Rv/s NP (SRP, MNG, FIG, VAG, LPS, CE, MAVV)
<i>Coereba flaveola</i> (Linnaeus, 1758)	cambacá	Bananaquit	1-16, 20, 22, 25, 26, 29, 31	FSI, Rv/s NP (SRP, MNG, FIG, VAG, LPS, CE, MAVV)
<i>Volatinia jacarina</i> (Linnaeus, 1766) ^a	tiziú	Blue-black Grassquit	1-16, 20-26, 28, 29	FSI, Rv/s NP (SRP, MNG, FIG, VAG, LPS, CE, MAVV)
<i>Eucometis penicillata</i> (Spix, 1825)	pipira-da-taoca	Gray-headed Tanager	2,6, 9, 13, 17, 20, 22, 24	FSI, Rv/s NP (SRP, MNG, FIG, VAG, CF, LAC)
<i>Pipreolaeidea melanonota</i> (Vieillot, 1819) ^a	sára-vilávia	Fawn-breasted Tanager	2,6, 9, 1, 28, 30	Rv/s NP (SRP, FIG, CE, MAVV, LAC)
<i>Trichothraupis melanops</i> (Vieillot, 1818)	tié-de-topete	Black-goggled Tanager	6, 18	FSI, Rv/s NP (SRP, FIG, CF)
<i>Coryphospingus cucullatus</i> (Statius Muller, 1776)	tico-tico-rei	Red-crested Finch	1,2, 3, 5, 6, 8, 10, 12, 13, 15, 17, 18, 19, 20, 22, 23, 26, 28-31	FSI, Rv/s NP (SRP, MNG, FIG, VAG, LPS, CE, MAVV, LAC)
<i>Tachyphonus rufus</i> (Boddart, 1783)	bigodinho	White-lined Tanager	2,3, 5, 6, 10, 13, 17, 19, 20, 26, 30	FSI, Rv/s NP (SRP, MNG, VAG, LPS, FIG, CF, MAVV)
<i>Tachyphonus coronatus</i> (Vieillot, 1822) ^a	tié-preto	Ruby-crowned Tanager	6, 9, 13	Rv/s NP (SRP, FIG)
<i>Ramphocelus carbo</i> (Pallas, 1764)	pirira-vermelha	Silver-beaked Tanager	2,3, 6, 9, 13, 17, 18, 19, 26	FSI, Rv/s NP (SRP, MNG, FIG, CF)
<i>Sporophila lineola</i> (Linnaeus, 1758) ^a	coleirinho	Lined Seedeater	1,2, 3, 6, 10, 11, 13, 17, 19	FSI, Rv/s NP (SRP, MNG, CF, LAC)
<i>Sporophila plumbea</i> (Wied, 1830) ^a	patativa	Plumbeous Seedeater	10, 17, 18, 28	FSI, Rv/s NP (MNG, MAVV)
<i>Sporophila collaris</i> (Boddart, 1733) ^a	coleirão-do-brejo	Rusty-collared Seedeater	1,2, 3, 6, 9, 10, 13, 17, 19	FSI, Rv/s NP (SRP, MNG, FIG, CF)
<i>Sporophila nigricollis</i> (Vieillot, 1823)	baiano	Yellow-bellied Seedeater	13	FSI, Rv/s NP (CF)
<i>Sporophila caerulescens</i> (Vieillot, 1823) ^a	coleirinho	Double-collared Seedeater	1,2, 5, 7, 8, 6, 9, 12, 13, 17, 18, 19, 24, 28	FSI, Rv/s NP (SRP, MNG, FIG, CF, MAVV)
<i>Sporophila leucopétra</i> (Vieillot, 1817) ^a	chorão	White-bellied Seedeater	2,3, 6, 9, 10, 11, 13, 17, 19	FSI, Rv/s NP (SRP, MNG, CF)
<i>Sporophila pileata</i> (Schäfer, 1865) ^b	caboclinho-oxaudo	Pearly-bellied Seedeater	18	FSI, Rv/s NP (MNG)
<i>Sporophila angolensis</i> (Linnaeus, 1766)	curiú	Chestnut-bellied Seedeater	1,2, 3, 6, 10, 13, 14, 18, 19, 21	FSI, Rv/s NP (SRP, MNG, FIG, CF)
<i>Sporophila hypoxantha</i> Cabanis, 1851 ^b	caboclinho	Tawny-bellied Seedeater	2	Rv/s P
<i>Sporophila boucardii</i> (Statius Müller, 1776) ^a	minetirinho	Copper Seedeater	11, 14, 17, 18, 19	Rv/s NP (MNG, CF)
<i>Chaniotispa euoxoma</i> Oberholser, 1905 ^c	sai-canário	Coal-crested Finch	2	Rv/s P
<i>Thlypopsis sordida</i> (d'Orbigny & Lafresnaye, 1837) ^a	bandoleta	Orange-headed Tanager	2,5, 6, 14, 17, 18, 19, 20, 22	FSI, Rv/s NP (SRP, MNG, VAG, CF)
<i>Gypsagla hirundinacea</i> (Lesson, 1831)	figuiinha-de-rabo-castanho	Chestnut-vented Conebill	2,3, 6, 13, 17, 19, 20, 21, 22, 24	FSI, Rv/s NP (MNG, FIG, VAG, LPS, CE, LAC)
<i>Conirostrum speciosum</i> (Temminck, 1824)	típia	Grassland Yellow-Finch	2,4, 6, 18	FSI, Rv/s NP (SRP, MNG, FIG, CF, LAC)
<i>Sicalis luteola</i> (Sparman, 1789)	canário-da-terra	Saffron Finch	1-17, 21, 22, 26, 28-30	FSI, Rv/s NP (SRP, MNG, FIG, CF, MAVV)
<i>Sicalis flaveola</i> (Linnaeus, 1766)	cigarrão-do-campo	White-banded Tanager	6, 10, 29	FSI, Rv/s NP (MNG, FIG, VAG, LPS, CE, MAVV)
<i>Neothraupis fasciata</i> (Lichtenstein, 1823) ^d	sanhão-de-coleira	Black-faced Tanager	2, 18	FSI, Rv/s NP (MNG, CF)
<i>Schistochlamys melanopterus</i> (Latham, 1790)	bico-de-veludo	Cinnamon Tanager	6, 17	FSI, Rv/s NP (MNG)
<i>Schistochlamys ruficapillus</i> (Vieillot, 1817)	cavalaria	Yellow-billed Cardinal	2, 3, 6, 9, 11, 13	FSI, Rv/s NP (SRP, FIG, CF)
<i>Paroaria dominicana</i> (Linnaeus, 1758)	cardeal-do-nordeste	Red-cowled Cardinal	2, 3, 6	Rv/s P, Rv/s NP (SRP)
<i>Paroaria coronata</i> (Miller, 1776)	cardeal	Red-crested Cardinal	6, 9	FSI, Rv/s NP (SRP)
<i>Thraupis sayaca</i> (Linnaeus, 1766)	sanhão-cinzento	Sayaca Tanager	1-17, 20-26, 29, 31	FSI, Rv/s NP (SRP, MNG, FIG, VAG, LPS, CE, MAVV, LAC)
<i>Thraupis palmarum</i> (Wied, 1821)	sanhão-do-coqueiro	Palm Tanager	1-17, 21, 22, 24, 26, 28, 29	FSI, Rv/s NP (SRP, MNG, FIG, VAG, LPS, CE, MAVV, LAC)
<i>Stilpnia cyanata</i> (Linnaeus, 1766)	sára-amarela	Burnished-buff Tanager	1-17, 20, 22, 23, 25, 26, 28, 31	FSI, Rv/s NP (SRP, MNG, FIG, VAG, LPS, CE, MAVV, LAC)

that is, published papers and item(s) available for independent consultation in the form of a complete or partial specimen, photograph, audio or video recording, which allowed us to safely and indisputably determine the species. In this context, the filtering protocol is the detailing of information referring to the record, coherently associated with the species distributional and dispersion patterns established based on documentary evidence.

We adopted the taxonomic classification and bird vernacular names proposed by the Brazilian Ornithological Records Committee (CBRO) (Pacheco *et al.*, 2021).

The species were divided into four categories according to their conservation status based on the global (IUCN, 2022) and national (ICMBio, 2022) lists of threatened species, namely, Near Threatened, Vulnerable, Endangered and Critically Endangered.

We considered the migratory status following the migratory bird lists for the state of MGS (Nunes *et al.*, 2022) and the Brazilian territory (Somenzari *et al.*, 2018). In addition, the species were distinguished between intercontinental and intracontinental migrants. In the intercontinental category, we included species that perform large displacements from the Northern Hemisphere (Canada and northern United States) to southern South America (until Patagonia), while in the intracontinental category we considered species that move from the southernmost portions of South America to the northernmost regions (mainly the Amazon basin) and vice-versa.

RESULTS

According to our list compilation, the avifauna of TLM is composed of 419 species. We recorded an overall number of 412 species in the Atlantic Forest-Cerrado ecotone (all areas except 7, 10, 14, 16, 18, 20, 26-31; Fig. 1 and Table 1) and seven only in the Cerrado domain (*P. unicinctus* and *T. curucui* in area 10; *S. pileata*, *S. melanopsis* and *S. luteola* in area 18 and *C. minor* and *L. xenopterus* in area 30 (Table 1)). The bird richness in the areas varies from 50 to 250 species recorded. The exceptions are areas 2 and 6, where we recorded more than 300 species (Table 1).

Seventeen species are included in some categories of conservation status in global and/or national lists of endangered species. The majority, in contrast, is included in the Near Threatened category (*R. americana*, *P. superciliaris*, *S. papa*, *S. ornatus*, *A. xanthops*, *A. aestiva*, *A. auricapillus*, *P. maracana*, *P. pectoralis*, *C. eucosma* and *N. fasciata*), while four are in the Vulnerable category (*C. fasciolata*, *L. xenopterus*, *A. tricolor* and *S. hypoxantha*) and only one is in the Endangered category (*U. coronata*). We gathered evidence of 11 species categorized at some level of threat in areas 2, 6, 8, 10 and 12, particularly 2 and 10, with eight and ten species, respectively (Table 1). We also recorded 10 near threatened or threatened species in grassland regions (areas 7, 8, 10 and 12): *R. americana*, *S. papa*, *A. xanthops*, *N. fasciata*, *P. pectoralis*, *S. pileata*, *C. eucosma*, *L. xenopterus*, *A. tricolor* and *S. hypoxantha*.

Our list comprises 112 migratory birds recorded mainly in areas 2, 3, 11, 13 and 19 (87, 63, 46, 42 and 39

species, respectively) (Table 1). Most species (96) are intracontinental migrants, whereas 15 are intercontinental migrants (*C. americanus*, *C. minor*, *P. dominica*, *B. longicauda*, *T. flavipes*, *T. solitaria*, *C. fuscicollis*, *A. macularius*, *P. haliaetus*, *E. forficatus*, *P. subis*, *R. riparia*, *H. rustica*, *P. pyrrhonota* and *C. fuscescens*). A total of 29 species are aquatic migratory birds, of which most (23) are intracontinental migrants, whereas six are intercontinental migrants (*P. dominica*, *B. longicauda*, *T. flavipes*, *T. solitaria*, *C. fuscicollis* and *A. macularius*). The non-aquatic migratory species belong mainly to the Tyrannidae family (23 species) and to the *Sporophila* genus (*S. lineola*, *S. plumbea*, *S. caerulescens*, *S. leucoptera*, *S. pileata*, *S. hypoxantha* and *S. bouvreuil*).

DISCUSSION

The number of bird species recorded in TLM represents 61% of all known avifauna of MGS (n = 679) (Nunes *et al.*, 2022) and 21% (n = 1971) of the Brazilian territory (Pacheco *et al.*, 2021). This high bird richness in the TLM territory can be attributed to: (1) the Atlantic Forest-Cerrado ecotone, which has a high number of small patches with different vegetation and environments (SEMAC, 2011); (2) the high heterogeneity of aquatic environments in the upper Paraná River floodplain and the TLM territory (SEMADE, 2015); and (3) the two South American migratory routes in the TLM territory (Stotz *et al.*, 1996).

According to Bierregaard *et al.* (1992), birds are sensitive to environmental disturbances and can be found at different trophic levels. Thus, as the patterns observed in bird communities can predict the impact that past improper land use had on natural environments, they can be used as bioindicators of these environmental changes (Sodhi *et al.*, 2011). In this context, we found 10 near threatened or threatened species in grassland. All of them are considered rare in the Atlantic Forest-Cerrado ecotone of MGS (Godoi *et al.*, 2013), except for *R. americana* and *A. xanthops*. The importance of this ecotone was highlighted for some threatened and migratory species (mentioned below), however, two near threatened birds were also recorded in this environment, *i.e.*, *P. pectoralis* and *N. fasciata*. The latter is endemic to the Cerrado and needs grasslands with sparse trees (Brazilian savanna or Cerrado *sensu stricto*) (Sick, 2001). Unfortunately, savannas and grasslands are two of the most impacted environments by agriculture in Brazil (Foley *et al.*, 2005). Nunes *et al.* (2022) also included many other threatened grassland bird species found in MGS, but some might have gone locally extinct in TLM, such as *T. nanus*, *N. minor*, *G. poeciloptera*, *C. melanotis*, *S. nigrorufa* and *S. cinnamomea*. Given the high number of grassland migrants, near threatened or threatened grassland species and local extinctions, it becomes clear that the grasslands of TLM (7, 8, 10 and 12 areas, Fig. 1) deserve more attention in terms of conservation policies developed by local (SEMEA – Secretariat of Environment and Agribusiness of Três Lagoas) and federal agencies (IBAMA – Brazilian Institute

of Environment and Renewable Natural Resources). Area 10, for example, is now protected by SEMEA, which created the “Parque Natural Municipal do Pombo” in 2019 (SEMEA, 2019). However, we still recommend protective and restoration measures for the other aforementioned grass land areas.

According to Stotz *et al.* (1996), 230 species of birds migrate in South America, most of them from southern portions of South America to Central Brazil and the Amazon basin. Somenzari *et al.* (2018) listed 198 migratory species in the Brazilian territory, which corresponds to 10% of all species in the country (Pacheco *et al.*, 2021). Nevertheless, we found a high percentage of migrants in TLM (26%). Moreover, the 111 migratory birds recorded herein correspond to 56% of all Brazilian migratory species – a very high percentage considering the small territory of TLM (10.206 km^2) in comparison with that of Brazil ($8.547.403 \text{ km}^2$) (IBGE, 2022). Most of these migrants are species that perform intracontinental displacements, using the region as a point of departure during their migrations across the South American continent (Anjos & Gimenes, 2005; Gimenes & Anjos, 2007). In fact, some species disperse from the Pre-Andes Mountains to the Pantanal and surrounding plateaus just after the reproductive period, which coincides with the end of the rainy season (Nunes *et al.*, 2008), while others extend their migratory routes to the Paraná River basin (Faxina *et al.*, 2010) where TLM is located. The species found in the southern areas of South America are mainly tyrannids and seedeaters (*Sporophila*) (Nunes *et al.*, 2008), which corroborates the records in TLM. Some seedeaters appear in large numbers to breed in the hydromorphic grassland areas during the winter (Nunes *et al.*, 2022), except for *S. lineola*, which appears in Central Brazil in September and, after the reproductive period in January, leaves together with the juveniles, returning to the Amazon basin and the northern portion of South America (Nunes *et al.*, 2008; Jaramilo & Kirwan, 2020).

In TLM there is also a high flow of migratory species dependent on aquatic environments, mainly from the Pantanal to the upper Paraná River floodplain (e.g., *P. ajaja* and *R. niger*), during the dry season (Nunes *et al.*, 2008; Lima *et al.*, 2022). It is noteworthy that out of the 15 Northern Hemisphere migratory species recorded, six are waterfowls represented by species of the Order Charadriiformes (Pacheco *et al.*, 2021). Lima *et al.* (2022) studied aquatic birds in a small area very close to TLM (Castilho municipality and surroundings) and found a high richness of waterfowls (52 species). The authors attributed this richness to the high heterogeneity of local aquatic environments in the upper Paraná River floodplain, the habitat selection combined with seasonality, and the absence of other humid locations in the surroundings. Indeed, the upper Paraná River floodplain where TLM is located has three large rivers (Paraná, Sucuriú and Tietê), as well as several small aquatic environments, such as streams, lakes and ponds (SEMAC, 2011; SEMADE, 2015), which partially explains the high richness of aquatic migratory birds recorded in our study. This great variety of aquatic habitats can also hold a high

diversity of intracontinental and intercontinental aquatic migratory birds in TLM, which take two main migratory South American routes in the territory: Central Brazil and Central Amazon/Pantanal routes (Stotz *et al.*, 1996). All of these data highlight the importance of the TLM territory as an area that harbors these birds during their migratory movements in South America, making even more evident the necessity to develop conservation strategies for the aquatic environments of this municipality, especially area 2, which has the highest richness of migratory waterfowls.

The forests in TLM have been impacted by beef cattle production, irregular land occupation, dam construction, and unsustainable use of the native forest, which in turn has led to illegal hunting (SEMAC, 2011; SEMADE, 2015; Lima *et al.*, 2022). As a result, the forest formations (Atlantic Forest and Cerradão) are the most impacted habitats in TLM, which became isolated small patches. These large alterations in land cover reduces the number of forest habitats and change their configuration, affecting biodiversity, and consequently leading to species extinction (Hill & Curran, 2003). The isolation affects negatively the species persistence and decrease individual movements among habitat patches (Fahrig, 2003; Fischer & Lindenmayer, 2007). In fact, the small and isolated forest patches are strongly related to a decrease in animal population size, an interruption of gene flow and the probability of local extinctions (Temple & Cary, 1988), especially sensitive bird species (Martensen *et al.*, 2012). The bird checklist proposed by Nunes *et al.* (2022) and the results of Emmet Blake's visit in 1937 (Straube, 2011) – the closest historical expedition to TLM (Fazenda Capão Bonito, Sidrolândia municipality) – lead us to suppose that many local extinctions of forest-dependent key species (e.g., *T. solitarius*, *O. capueira*, *T. chrysochlora*, *N. swainsoni*, *R. vitellinus*, *C. lineata*, *C. campanisona*, *P. nudicollis*, *C. caudata*, *P. leucoptera* and *S. fuliginosus*) took place in TLM. As these species have large forest area needs (Sick, 2001), the local extinctions probably occurred because of the disappearance of largest Atlantic Forest patches in the slopes and sides of the Paraná River due to flooding, leading to the construction of a dam for hydroelectric energy production (Jupiá Dam) in the '60s (Vianna, 2015), together with irregular land occupation and illegal hunting in the region (Lima *et al.*, 2022). We still recorded four near threatened or threatened bird species in the Atlantic Forest-Cerrado ecotone (i.e., *P. supercilialis*, *C. fasciolata*, *S. ornatus* and *P. maracana*) that can be extinct in a few decades for the previously mentioned reasons – although the first two are common in the Atlantic Forest-Cerrado ecotone in MGS state (Godoi *et al.*, 2013).

These results lead to the conclusion that grasslands, aquatic habitats and the Semideciduous Atlantic Forest in TLM should be preserved and strong efforts should be addressed to restore those with some level of disturbance. Therefore, we believe that this list, which included endangered and migratory species, will be an important tool to guide public policies and conservation/restoration strategies in TLM.

The criteria for Important Bird Areas (IBAs) proposed by Bird Life International establish some bird conservation efforts (Develey, 2021). According to this author, there are 237 IBAs in the Brazilian territory based on the following criteria: threatened species, endemism and congregatory species. We observed an overall number of 412 species in the Atlantic Forest-Cerrado ecotone, of which 16 are globally and/or nationally near threatened or threatened, four are vulnerable and one is endangered. Moreover, we recorded many endemic species in the Cerrado and the Atlantic Forest, in addition to a high richness of both migratory and congregatory species (dry and wet seasons). Thus, according to the criteria for IBAs and our results, we recommend the inclusion of a large Atlantic Forest-Cerrado ecotone area in TLM (areas 2, 11 and 24; Fig. 1) as an Important Bird Area (IBA). This recommendation can help TLM establish strategies and raise funds for the conservation of its birds and habitats. Additionally, most part of this ecotone is not under protection, except for the "Parque Natural Recantos das Capivaras" and Jupiá Park (areas 2 and 24, respectively), which are partially protected (up to 70 ha) by guidelines created by SEMEA. We also recommend political and scientific procedures in order to recognize this Atlantic Forest-Cerrado ecotone area as an Environmental Protection Area (APA = "Área de Proteção Ambiental"), according to the ICMBIO (2013) criteria. This ecotone is a large area with urban environments, including industries and fisherman villages, and the APA units exist to reconcile human occupation and sustainable use of natural resources (ICMBIO, 2013). The idea is the conservation of natural processes and biodiversity through guidance, development and adaptation of various human activities to the environmental characteristics of the area aiming at a sustainable development. The further positive benefit is that APAs can be implemented in areas of private and/or public domain by the Union, states or municipalities, without the need to expropriate private lands (ICMBIO, 2013). Furthermore, we also recorded three near threatened species in these areas, namely, *A. auricapillus*, *A. xanthops* and *A. aestiva*. They live in heterogeneous landscapes such as semi-open areas, but feed and rest in forest habitats (Collar et al., 1997). Therefore, the maintenance of forests also becomes essential for bird conservation since they provide them with resources, such as seeds and nesting cavities.

Additionally, we recommend the restoration of the riparian vegetation along the Paraná River that connects areas 2, 11 and 24 (Fig. 1). During the bird surveys, SRP observed that the riparian vegetation of the Paraná River between areas 2, 11 and 24 is partially fragmented with severe modifications caused by irregular and illegal human land occupation, mainly in the most threatened Atlantic Forest formation, the Seasonal Deciduous Alluvial Forest, with only 1% of the remaining (Fundação Iparades, 1992). This connectivity of riparian vegetation restoration among the forests patches will allow species movements (Fischer & Lindenmayer, 2007) and the improvement of colonization dynamics (Brown &

Kodric-Brown, 1977). According to Corenblit et al. (2007), as these riparian forests act as corridors, connecting isolated fragments, these measures can increase the size and survival chances of forest-dependent bird species populations, such as the near-threatened *P. superciliaris*, *S. ornatus*, *A. xanthops*, *A. aestiva*, *A. auricapillus*, *P. maracana*, and *N. fasciata* found in or close to these areas. Moreover, they allow recolonization with populations of locally reduced and endemic species of the Atlantic Forest, e.g., *B. ruficapillus* and *P. frontalis*, which are found only in very small and isolated Atlantic Forest patches (areas 2 and 11), in addition to a reduction of pressure in the surroundings of protected areas (Mech & Hallett, 2001). Another strong reason to recommend riparian corridors is that it is one of the easiest, cheapest and most effective methods for creating connectivity measures (Corenblit et al., 2007). Moreover, birds are preferentially used by researchers seeking to assess the effectiveness of restored areas due to their mobility, the speed at which they colonize new environments, their ability to connect habitats through seed dispersal, and their maintenance of gene flow between plant populations (Lindig-Cisneros et al., 2012). The avifauna essential role in pollination and seed dispersal has a great effect on the maintenance of forest succession and the restructuration of ecosystems (Sekercioglu, 2006; Pizo & Galetti, 2010).

Finally, the high richness, the 112 migratory birds and the 12 near-threatened and five threatened bird species found in TLM can also enhance birdwatching activities and offer other forms of ecotourism. This is the main reason why we adopted both bird vernacular and English names in our list compilation. In recent years, the birdwatching activity has grown considerably in Brazil, and birdwatchers have expressed their interest and involvement in conservation efforts (Develey, 2021). Undoubtedly, bird-based tourism in the Neotropical region brings significant economic benefits (Maldonado et al., 2018), which strongly justify the need for preserving the habitats and birds in TLM.

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