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Birds of the Jaú National Park and adjacent areas, Brazilian Amazon: new species records with reanalysis of a previous checklist

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RESUMO: Aves do Parque Nacional do Jaú e áreas adjacentes, Amazônia brasileira: novos registros de espécies com reanálise de uma listagem prévia. Aqui é apresentada uma listagem de espécies de aves do Parque Nacional do Jaú (PNJ) e de três áreas protegidas adjacentes compilada ao longo de 15 anos de trabalhos de campo. Foram registradas 501 espécies de aves distribuídas em 68 famílias. Ao menos 50 espécies foram acrescentadas à listagem previamente publicada. São reportadas informações detalhadas de espécies de interesse biogeográfico ou raras na natureza incluindo o segundo registro de campo de *Seiurus noveboracensis* para o Brasil. Futuras pesquisas ornitológicas para a região do PNJ devem ser direcionadas para estudos das populações de aves altamente especializadas em habitats de distribuição restrita na região (p.ex. ilhas fluviais e campinas de areia branca) e a melhor definição do *status* taxonômicos de aves aparentemente restritas ao baixo rio Negro.

PALAVRAS-CHAVE: Rio Negro; Áreas protegidas; Biodiversidade amazônica.

ABSTRACT: Birds of the Jaú National Park and adjacent areas, Brazilian Amazon: new species records with reanalysis of a previous checklist. We presented here an updated checklist of birds species found in Jaú National Park and three adjacent protected areas compiled during 15 years of fieldwork. We recorded 501 bird species from 68 bird families. At least 50 species were added to the previously published checklist. Detailed information on rare or relevant species from a biogeographical perspective is provided. This includes the second field record of *Seiurus noveboracensis* from Brazil. Future ornithological investigation needs to focus on populational studies of birds specialized in habitats with restricted distribution in JNP (*e.g.*, fluvial islands and white sand campinas). Revision of the taxonomic status of bird taxa, whose geographical distributions apparently are restricted to the lower course of the Rio Negro, is also needed.

KEY-WORDS: Rio Negro, Protected areas, Amazonian biodiversity.

Although it is recognized that the Amazon lowland houses the richest avifauna of the world (Haffer 1990), there are few places or sites where the avifauna has been monitored for medium to long time periods, such as BDFFP sites north of Manaus and Manu National Park in Peru (Cohn-Haft *et al.* 1997, Paterson *et al.* 2006). One of these regions is the Jaú National Park (JNP) whose avifauna has been studied for more than 15 years (Carvalhoes 1996, Borges *et al.* 2001, Borges 2004a). Several sites in JNP were visited by individual or groups of ornithologists from 1992 to 1999 aimed at providing biological information for the park's management plan. These field expeditions targeted birds in poorly known vegetation types and in regions with difficult access. After seven years of fieldwork, a synthesis of regional avifauna was published (Borges *et al.* 2001). This work was of major relevance since the western region of the lower Rio

Negro was poorly known from an ornithological perspective (Oren and Albuquerque 1991).

New regions of JNP were investigated after the publication of Borges *et al.* (2001) in the context of a research program called Windows for Biodiversity, designed to identify priority regions for a more efficient sampling of the park's biodiversity (Borges *et al.* 2004b). During the planning stage of the program, 12 sectors (windows) were identified within JNP in order to implement additional biological inventories. The ornithological team participating in field expeditions of the Windows of Biodiversity program had the opportunity to study previously unknown regions in JNP, resulting in a significant increase of the bird checklist (Borges 2004b).

After the conclusion of the Windows for Biodiversity program, the ornithological investigation of the JNP region continued in the context of biodiversity monitoring (*e.g.*,

monitoring populations of large frugivorous birds by Ricardo Almeida), technical studies for creation and management of protected areas (FVA 2005, SDS/FVA 2008), and fieldwork to support graduate studies (*e.g.*, Borges 2004a).

Long term monitoring makes the JNP's avifauna one of the best known of the Amazon region. Bird studies of JNP have been published in various articles on ecology, biogeography, conservation and educational products (*e.g.*, Borges 2004c, Borges 2007a, Borges 2007b, Borges 2007c, Borges and Carvalhaes 2000, Borges *et al.* 2004a, FVA 2003). In addition, biological materials (*e.g.*, voucher specimens, tape records) of individual species collected in JNP contributed to the resolution of important taxonomic questions (*e.g.*, Bierregaard *et al.* 1999; Isler *et al.* 2009). Here we present an updated version of JNP's bird checklist, integrating and synthesizing 15 years of field work in the region.

STUDY AREAS AND METHODS

The Jaú National Park is one of Brazil's largest protected areas encompassing 2,272,000 hectares located

200 km northwest of Manaus (Figure 1). Its boundaries are defined by three black water rivers: Unini (northern limit), Jaú (central area) and Carabinani (southern limit). The bird checklist reported in this study results from field work also extending to three additional protected areas adjacent to JNP (Figure 1): Rio Negro State Park – Northern Sector (146,028 ha), Rio Unini Extractive Reserve (833,352 ha), and Amanã Sustainable Development Reserve (2,313,000 ha). The sampling efforts in these protected areas, however, were much less intensive than in JNP and the species lists can be considered only a preliminary assessment of bird species diversity of these areas.

The bird inventories concentrated on ten specific regions covering the lower, middle and upper courses of the Puduari, Carabinani, Jaú, Unini and Papagaio rivers (Figure 1). In each of these sectors we sampled birds in all major habitats using complementary methods in order to obtain the most complete species lists possible (Table 1). Field effort was variable, however, and some regions could be considered well sampled while others remain poorly known, especially at the headwaters of the rivers (Table 1, Figure 1).

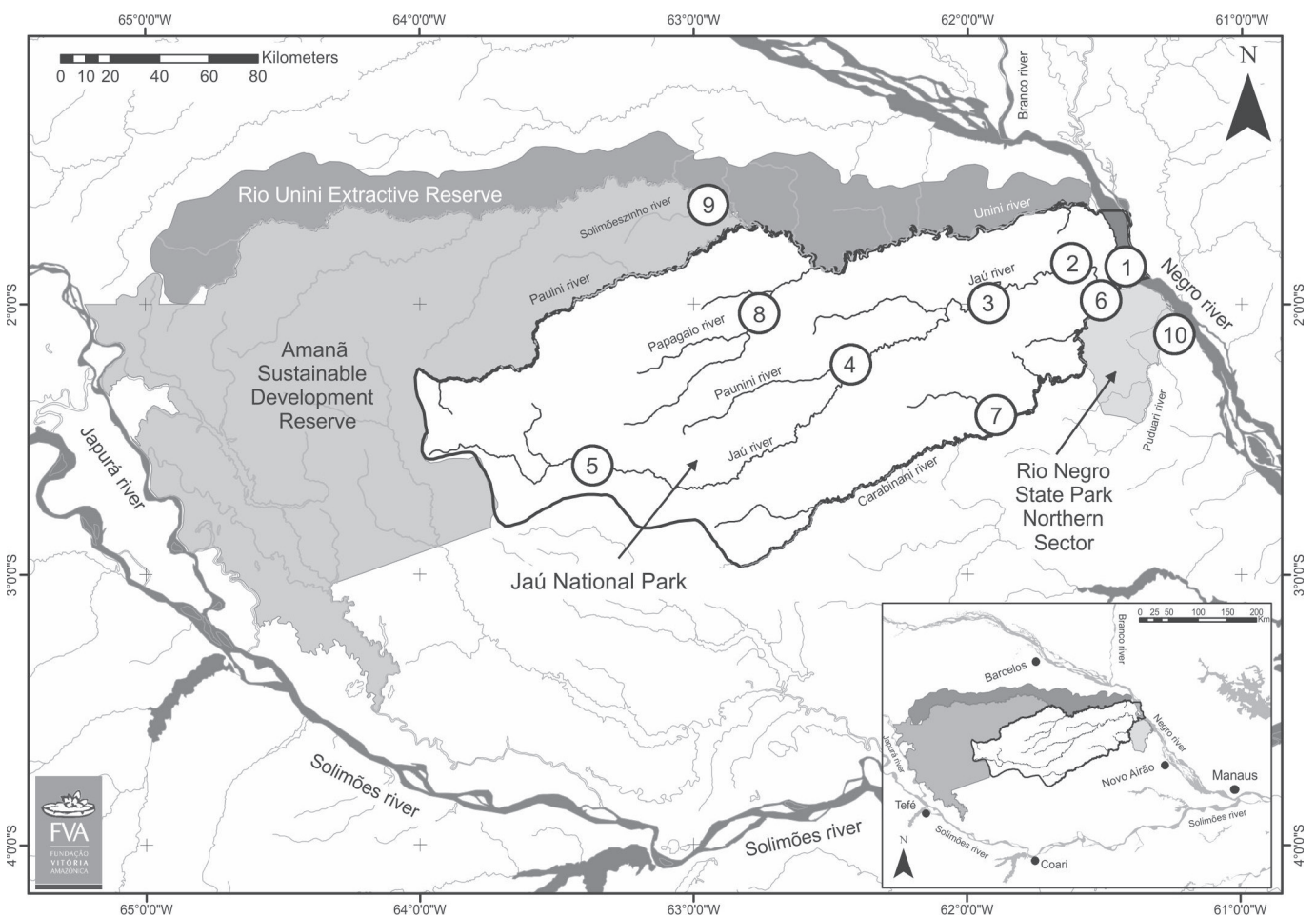


FIGURE 1: Lower course of the Rio Negro showing the limits of Jaú National Park and adjacent protected areas. The numbers identify the specific regions where bird inventories were carried out, corresponding to the numbers shows in Table 1.

TABLE 1: Regions and habitats where birds were sampled in Jaú National Park and adjacent protected areas. Numbers in front of the regions' names are the same as in Figure 1.

Regions	Geographical coordinates of reference	Sampling effort (days)	Habitats sampled
Mouth of Jaú (1)	61°25'11"W/1°51'41"S	124	<i>Terra firme</i> forest, <i>igapó</i> forest, river beaches, river islands
Seringalzinho (2)	61°37'19"W/1°50'49"S	275	<i>Terra firme</i> forest, <i>igapó</i> forest, lakes, rocky banks, white sand campina, woody campinarana, secondary growth
Miratucu (3)	61°55'13"W/1°59'46"S	74	<i>Terra firme</i> forest, <i>igapó</i> forest, lakes
Tambor (4)	62°25'15"W/2°13'55"S	50	<i>Terra firme</i> forest, <i>igapó</i> forest, lakes
Monteiro (5)	63°22'09"W/2°35'52"S	14	<i>Terra firme</i> forest, <i>igapó</i> forest, lakes
Cachoeira (6)	61°30'40"W/1°59'11"S	18	<i>Terra firme</i> forest, <i>igapó</i> forest, lakes, rocky banks, woody campinarana, secondary growth
Tabatinga (7)	61°53'47"W/2°24'53"S	7	<i>Terra firme</i> forest, <i>igapó</i> forest, lakes
Papagaio (8)	62°45'28"W/2°02'05"S	20	<i>Terra firme</i> forest, <i>igapó</i> forest, lakes
Solimõeszinho (9)	62°56'44"W/1°38'06"S	25	<i>Terra firme</i> forest, <i>igapó</i> forest, lakes, secondary growth
Puduari (10)	61°14'47"W/2°06'42"S	9	<i>Terra firme</i> forest, <i>igapó</i> forest, lakes, secondary growth, woody campinarana

The complex landscape of JNP comprises a great diversity of vegetation types including *terra firme* forest, black water flooded forest (*igapó* forest), and white sand campinas. Some of these vegetation types such as fluvial islands and white sand campinas have a very restricted distribution in JNP. Detailed information on climate, vegetation and geology of JNP is available in Ferreira (1997), FVA (1998), Ferreira and Prance (1998), Ferreira and Prance (1999), Forsberg *et al.* (2000), Borges *et al.* (2001), Borges *et al.* (2004a) and Vicentini (2004).

We applied standard bird sampling methods, including captures with mist net (12 × 2 meters, 36 mm mesh), field observations, taped records of bird voices, and specimens collection. Mist nets were utilized in all major habitats of JNP resulting in more than 8,000 individuals captures. Generally the mist nets were arranged in continuous lines operated for two sequential days from 6:00 to 12:00. The birds captured were measured and photographed for documentation. We used analogical and digital tape recorders (Marantz PMD 222, Sony TCM 5000 and Marantz PMD 660) with directional microphones (Senheiser ME 66). The presence of several bird species in JNP was documented by voucher specimens incorporated in the bird collections of the Instituto Nacional de Pesquisas da Amazônia (INPA) and Museu Paraense Emílio Goeldi (MPEG). The presence of about 24% of bird species was not documented by physical evidence. The frequencies of documented species recordings were: collected specimens (30% of species, 154/501 species), photographs (33%, 165/501), and tape recording (66%, 330/501).

The species checklist presented here contains the following items: families, species, abundance, habitats, documentation method, sampling regions, and protected areas where the species was recorded. The taxonomic sequence and Portuguese names follow recommendations of CBRO (2009). Abundance was categorized as common, frequent, infrequent and rare. We followed the

contention of Cohn-Haft *et al.* (1997) in treated these categories, as the author's subjective impression of actual population size based on extensive captures with mist-nets and frequency of detection of each species in its preferred habitat. This way the abundance categories reported are viewed as hypotheses of species abundance that need to be evaluated by formal quantitative methods. In the checklist, the major habitat where each species was recorded is presented using the following categories: aerial, *terra firme* forest, *igapó* flooded forest, aquatic environments (rivers, lakes and streams), white sand campinas, woody campinaranas, and secondary growth. In some cases, micro-environments such as sand banks, rock banks and fluvial island were also mentioned in the checklist.

RESULTS AND DISCUSSION

Species diversity

We recorded 501 bird species distributed among 64 families in JNP and neighbouring regions (Appendix). In the final version of the checklist there are six species with hypothetical status, as there are similar species that could lead to misidentification. Better documentation is needed to confirm their presence at JNP. The families with highest diversity were Tyrannidae (60 species) and Thamnophilidae (50) among Passeriformes, and Psittacidae (21) and Trochilidae (22) among the non-Passeriformes. *Myrmotherula* was the most specious genus with 10 species. Other particularly species-rich genera include: *Crypturellus*, *Amazona*, *Nyctibius*, *Trogon*, *Pachyramphus*, *Euphonia*, *Hylophilus* and *Sporophila*.

At least 50 additional bird species were recorded compared with the previously published checklist (Borges *et al.* 2001). Some of these records result from more accurate identifications of previously recorded taxa (*e.g.*, *Crypturellus duidae*, *Picumnus lafresnayi*), but most species are

genuinely new records for the region. Increase in the number of species recorded for JNP is a consequence of extending inventories to the middle to upper courses of the Jaú, Unini and Carabinani rivers (Figure 1). Moreover, sampling of birds at the Rio Negro fluvial islands resulted in records of island specialists (e.g., *Myrmotherula klagesi*, *Cranioleuca gutturata*). Finally, we recorded species whose distributions are restricted to the eastern margin of Rio Negro, but also found on islands near that margin within the borders of the JNP (Figure 1) (e.g., *Monasa atra*, *Hypocnemis cantator*, *Percnostola rufifrons*).

Studies in bird diversity distribution suggest that sites in eastern Amazonia are relatively poor in species compared to central and western portions of the Amazon basin (Haffer 1990, Rahbek and Graves 2001). This pattern results from comparisons that do not take into account distribution of species among the major habitats (Cohn-Haft *et al.* 1997). Part of the differences in bird species diversity can be explained by regional availability of different habitats (Cohn-Haft *et al.* 1997). In the North of Manaus 257 species were recorded in *terra firme* forest (Cohn-Haft *et al.* 1997), while in the present study we found 250 species for the same habitat in JNP (Table 2). This comparison shows a slight difference in species diversity between two sites located in biogeographically distinct sectors of the Amazon (Borges 2007b).

The beta-diversity component is relevant in explaining high species diversity in JNP. The richest habitats of JNP are the *igapó* flooded forest and *terra firme* forest (Table 2). Vegetation types relatively poor in species also lend an important contribution to avifauna differentiation in JNP (Borges 2004c). For example, the lowest bird species diversity in JNP is found in white sand campinas with only 29 species, but most of them (n = 15) are exclusively recorded in this habitat. Additionally, a large proportion of bird species in JNP is composed of habitat specialists (Figure 2) reinforcing the importance of beta-diversity in the regional distribution of birds (Borges 2004a).

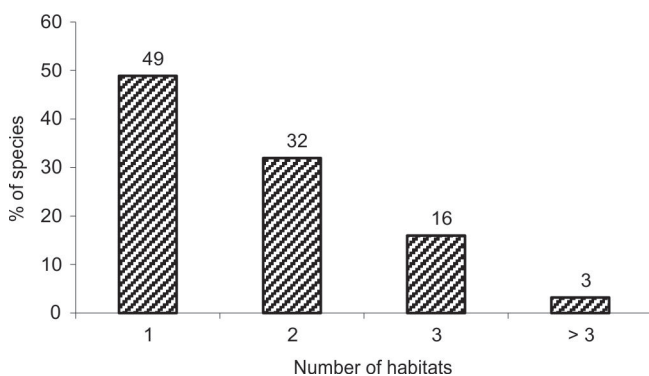


FIGURE 2: Proportions of bird species that used different numbers of distinct habitats in JNP. Most species use one or two habitats.

TABLE 2: Bird species diversity in major habitats of Jaú National Park and adjacent regions.

Major habitats	Number of species	% of unique species ¹	% of unique species ²
<i>Terra firme</i> forests	250	15%	30%
<i>Igapó</i> flooded forests	270	12%	21%
Woody campinaranas	131	0.20%	0.76%
Secondary growth	129	4%	14%
White sand campinas	29	3%	52%
River and lakes	49	7%	71%

1) calculated from the total number of species recorded at JNP and neighboring areas (n = 501).

2) calculated from the total number of species per habitat.

Species accounts

In this section we present detailed information on species whose biology or biogeographic distribution is otherwise poorly known. The specific regions and geographical coordinates mentioned below are found in Figure 1 and Table 1.

Crypturellus duidae

This small tinamou was tentatively identified as *Crypturellus erythropus* in the first version of the JNP bird checklist (Borges *et al.* 2001). Detailed field observations and comparisons of tape recordings made in JNP with recordings from other regions (Boesman 1999) resulted in a positive identification of individuals found in JNP as *C. duidae*. This tinamou is relatively common in white sand campinas and wood campinarana in the Seringalzinho region (Figure 1). The distribution of *C. duidae* was previously considered to be restricted to the northwestern Amazon region in Venezuela, Colombia, and Brazil in the Uapés river region (Restall *et al.* 2006, Novaes 1978). Recent records of *C. duidae* were obtained for northern Peru in vegetation types similar to the ones found at JNP (Alonso and Whitney 2003).

Amazona kawalli

This parrot was recently described and field records confirming its taxonomic status were obtained only in 1995 (Grantsau and Camargo 1989; Martuscelli and Yamashita 1997). Since then, several field records of the species have been reported, principally in sites south of the Amazon River (Cohn-Haft *et al.* 2007, Whittaker, 2009, Purus River, SHB *pers. obs.*). The first documented (taped records) records of *A. kawalli* for JNP were obtained in *terra firme* forest and *igapó* flooded forest in a region called Monteiro, near the Jaú River headwaters in June 2001 (Figure 1). These are likely the first records of this parrot north of the Amazon River. Apparently

the geographical distribution of *A. kawalli* is wider than previously thought and is potentially associated with different micro-habitats in flooded forest, or with biological interactions with other parrots of the *Amazona* genus (Conh-Haft *et al.* 2007).

Dromococcyx pavoninus

This cuckoo is rare throughout its geographical distribution (Payne 1997) and had never been observed in JNP even after years of field inventories. On April 2005, an individual of *D. pavoninus* was taped and video recorded in a *terra firme* forest in the proximity of Puduari River inside the limits of Rio Negro State Park – Northern Sector (Figure 1).

Asio stygius

In JNP this owl has been recorded in open habitats of white sand campinas and *igapó* flooded forest at Tambor, Seringalzinho and fluvial islands in the Rio Negro (Figure 1). Apparently this owl prefers open habitats like sand fields and *igapó* flooded forest, including fluvial islands (Naka *et al.* 2007). *Asio stygius* is widely distributed in the Amazon basin but is locally rare (Restall *et al.* 2006).

Nonnula amaurocephala

The geographical distribution of this rare puffbird is restricted to the Negro/Japurá interfluvium (Rasmussen and Collar 2002, Borges 2004a). *Nonnula amaurocephala* was rediscovered in JNP after more than 50 years without field records (Whittaker *et al.* 1995). In addition to field records previously reported (Whittaker *et al.* 1995, Borges *et al.* 2001), one individual of *N. amaurocephala* was collected (MPEG 55855) in an open *igapó* forest in Seringalzinho. Another was observed in a secondary growth forest near the Jaú River in the same region. In addition to specimens mentioned in Whittaker *et al.* (1995), the MZUSP housed two skins collected in Manacapuru (MZUSP 16561) and Codajás (MZUSP 16387).

Picumnus lafresnayi

The species of *Picumnus* observed in JNP was tentatively identified as *P. pumilus*, a species known from the northwestern Amazon region (Borges *et al.* 2001, Winkler and Christie 2002). However, the plumage patterns of specimens (MPEG 54064 collected in the Seringalzinho region) were closer to *P. lafresnayi* than *P. pumilus*. In 1936 Olivério Pinto described *P. pusilus* (type locality Codajás), which in the current nomenclature is treated as a subspecies of *P. lafresnayi* (Winkler and Christie, 2002). The geographical distribution of *P. lafresnayi pusilus* apparently is restricted to central Amazonia, from

the Solimões to the right margin of Rio Negro (Winkler and Christie, 2002). Museu de Zoologia da Universidade de São Paulo (MZUSP) houses six specimens of *P. l. pusilus* collected at Manacapuru. Plumage patterns and geographical distribution suggest that the population recorded in JNP belongs to *P. lafresnayi pusilus*.

Frederickena unduligera

This large antbird is rare throughout its geographical distribution, which includes regions south of the Amazon River and west of the Madeira River with some subspecies distributed from the upper Amazon to the northwestern sector of the basin (Zimmer and Isler 2003, Isler *et al.* 2009). We recorded *F. unduligera* in JNP during two opportunities – a female collected on the Papagaio River in June (MPEG 55867), and an adult male tape recorded on the Carabinani River in October 2004 (Figure 1). The latter vocal recording was used in a taxonomic study of *F. unduligera* (Isler *et al.* 2009). On both occasions the birds were found near large gaps inside primary *terra firme* forest.

Myrmotherula ignota

In a taxonomic revision of *Myrmotherula brachyuran*, Isler and Isler (2003) suggest that *M. ignota* could be recognized as a full species with distinctive populations in the northern Andes (*M. i. ignota*) and in the lowlands of western Amazonia (*M. i. obscura*) (Isler and Isler 2003, Ridgely and Tudor 2009). We taped *M. ignota* in a *terra firme* forest site near the mouth of the Carabinani River in October 2004. Whitney also tape recorded the species in the same general region (B. Whitney, *pers. com.*). These records suggest that the Rio Negro is the western limit of this species distribution (Ridgely and Tudor 2009).

Dichrozona cincta

This antbird was recorded near the Jaú River headwater at a site called Monteiro (Table 1), where an adult male was killed by bees in a mist net in June 2006. The remains of the individual were prepared as a skin (MPEG 55868). *D. cincta* occurs south of the Amazon River and along most of its upper portion (Zimmer and Isler 2003, Ridgely and Tudor 2009). This record fills a gap in the species distribution between the Japurá and Negro rivers.

Microrhopias quixensis

This species is widely distributed in Central America, South of the Amazon River and in parts of the Guiana region (Zimmer and Isler, 2003). Several individuals of this species were observed and tape recorded on a fluvial island (Jussara Island) near the left margin of the Rio Negro (Figure 1). On this island *M. quixensis* is relatively

common and mostly associated with understory mixed flocks, which include species such as *Myrmotherula klagesi*, *Myrmotherula assimilis* and *Eucometis penicillata*. This species was found on the Jauaperi River, not far from Jus-sara Island (Trolle and Walther 2004). These are the first records of *M. quixensis* north of the Amazon in the central portion of the basin (Zimmer and Isler 2003, Ridgely and Tudor 2009).

Myrmeciza disjuncta

This species was reported for the first time in Brazil based on individuals tape recorded and collected (MPEG 54886, 54887) in a small patch of white sand campina located in the Seringalzinho region (Borges and Almeida 2001). Since then, the species has been recorded from the middle course of the Branco River in a similar habitat (Naka *et al.* 2006). In addition to records previously reported (Borges *et al.* 2001, Borges and Almeida 2001), *M. disjuncta* was also recorded in a large patch of flooded *igapó* forest with open structure similar to interfluvial sand soil forest (woody campinarana). In this habitat, which appears new for the species, nine individuals were captured in mist nets and released in November 2001 (Borges 2004a). Open *igapó* flooded forest is easily detected in satellite images and this habitat could be important to the dispersal of birds apparently isolated in patches of interfluvial white sand campinas, such as *Myrmeciza disjuncta* (Borges 2004a).

Ancistrops strigilatus

This foliage-gleaner bird was collected (MPEG 55859) in a *terra firme* forest on the Papagaio River (Figure 1). The known distribution of this species in Brazilian Amazonia appears restricted to south of the Amazon River and west of the Tapajós River (Ridgely and Tudor 2009). This is the first record of *A. strigilatus* north of the middle course of the Amazon River.

Perissocephalus tricolor

This bird had been recorded only once before in JNP by its distinctive vocalization (Borges *et al.* 2001). We recorded *P. tricolor* by vocalization at two additional sites, located at the transition zone between flooded and *terra firme* forest in the Seringalzinho region. This bird is very rare at JNP. Our records confirm that the lower course of the Rio Negro is not a barrier to its distribution (compare maps in Snow 2004 and Ridgely and Tudor, 2009).

Iodopleura isabellae

This small cotinga was observed along the edge of secondary growth forest at the mouth of the Jaú River in

May 2004. This species is widely distributed in southern and western Amazonia, being replaced by *I. fusca* in the Guiana region east of Rio Negro (Ridgely and Tudor 2009).

Turdus hauxwelli

Two specimens of this thrush were collected in the Monteiro region in June 2002 in a *terra firme* forest near a buriti palm (*Mauritia flexuosa*) swamp. The congeneric species *T. fumigatus* has been reported from JNP by taped records and specimens (Borges *et al.* 2001). The taxonomic history of *T. fumigatus* and *T. hauxwelli* is complex (Ridgely and Tudor 1989, Remsen *et al.* 2010). Recent molecular data lend support in treating *T. hauxwelli* as an independent species from *T. fumigatus* (Voelker *et al.* 2007). Apparently *T. fumigatus* and *T. hauxwelli* replace each other along the Jaú River, as also observed in the species pair *Myrmotherula multostriata/Myrmotherula cherriei* (Borges *et al.* 2001). The two species of thrushes have widely disjunctive distributions, and north of the Amazon River its substitution zone occurs at the Japurá/Negro interfluvium (Ridgely and Tudor 2009).

Seiurus noveboracensis

We captured and photographed an individual of this migrant warbler in an open *igapó* forest in the Seringalzinho region in September 2001. Apparently *S. noveboracensis* is a regular visitor to Colombia, Venezuela, Guyana and north of Peru (Ridgely and Tudor 2009). This represents the second record of *S. noveboracensis* for Brazil which was previously collected in Rio Paru de Leste near the frontier between Pará state and Suriname (Novaes 1980).

The updated species checklist given here provides a solid database on the bird diversity of JNP. Further ornithological studies at JNP should prioritize bird population monitoring at a local scale. Birds with restricted geographical distribution and/or small population size with high levels of habitat specialization are good candidates for populational studies (Borges, 2007a). In this regard, the avifauna of river islands and white sand campinas deserves special attention in future monitoring programs.

Biogeographical analysis of the JNP avifauna allowed the identification of small groups of species whose distributions are apparently restricted to the lower course of the Rio Negro (Borges 2004a, Borges 2007b). However, a more complete and detailed taxonomic revision of these avian taxa is necessary. Taxonomic studies centered on these species should result in a better appreciation of the biological uniqueness of the lower Rio Negro region, as well as how relevant from a viewpoint of conservation is the regional system of protected areas.

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REFERENCES

- Alonso, J. A. and Whitney, B. M. (2003).** New distributional records of birds from white-sand forests of the northern Peruvian Amazon, with implications for biogeography of northern South America. *Condor*, 105:552-566.
- Bierregaard Jr., R. O.; Cohn-Haft, M. and Stotz, D. (1997).** Cryptic biodiversity: an overlooked species and new subspecies of antbird (Aves: Formicariidae) with a revision of *Cercomacra tyrannina* in northeastern South America. *Ornithological Monographs*, 48:111-128.
- Boesman, P. (1999).** *Birds of Venezuela: photographs, sounds and distributions*. Bird Songs International, Netherlands. CD-ROM.
- Borges, S. H. (2004a).** Avifauna do Parque Nacional do Jaú: um estudo integrado em biogeografia, ecologia de paisagens e conservação. Tese de Doutorado. Universidade Federal do Pará/Museu Paraense Emílio Goeldi.
- Borges, S. H. (2004b).** Inventário de aves no Parque Nacional do Jaú utilizando a abordagem do Projeto Janelas para a Biodiversidade, p. 177-192. Em: S. H. Borges, S. Iwanaga, C. C. Durigan and M. R. Pinheiro (eds.). *Janelas para a Biodiversidade no Parque Nacional do Jaú: Uma estratégia para o estudo da biodiversidade na Amazônia*. Fundação Vitória Amazônica, Manaus.
- Borges, S. H. (2004c).** Species poor but distinct: bird assemblages in white sand vegetation in Jaú National Park, Amazonian Brazil. *Ibis*, 146:114-124.
- Borges, S. H. (2007a).** Rarity of birds in the Jaú National Park, Brazilian Amazon. *Animal Biodiversity and Conservation*, 29: 179-189.
- Borges, S. H. (2007b).** Análise biogeográfica da avifauna da região oeste do baixo Rio Negro, Amazônia Brasileira. *Revista Brasileira de Zoologia*, 24:919-940.
- Borges, S. H. (2007c).** Birds assemblages in secondary forests developing after slash-and-burn agriculture in the Brazilian Amazon. *Journal of Tropical Ecology*, 23:469-477.
- Borges, S. H. and Almeida, R. A. (2001).** First Brazilian record of the Yacapan antbird (*Myrmeciza disjuncta*, Thamnophilidae) with additional notes on its natural history. *Aranajuba*, 9:163-165.
- Borges, S. H. and Carvalhaes, A. (2000).** Bird species of black water inundation forests in the Jaú National Park (Amazonas state, Brazil): their contribution to regional species richness. *Biodiversity and Conservation*, 9:201-214.
- Borges, S. H.; Cohn-Haft, M.; Carvalhaes, A.; Henriques, L. M.; Pacheco, J. F. and Whittaker, A. (2001).** Birds of Jaú National Park, Brazilian Amazon: Species check-list, biogeography and conservation. *Ornithologia Neotropical*, 12:109-140.
- Borges, S. H.; Henriques, L. M. and Carvalhaes, A. (2004a).** Density and habitat use by owls in two Amazonian forest types. *Journal of Field Ornithology*, 75:176-192.
- Borges, S. H.; Iwanaga, S.; Durigan, C. C. and Pinheiro, M. R. (2004b).** *Janelas para a biodiversidade no Parque Nacional do Jaú: Uma estratégia para o estudo da biodiversidade na Amazônia*. Fundação Vitória Amazônica, Manaus.
- Carvalhaes, A. (1996).** *Avifauna do Parque Nacional do Jaú, AM, como subsídio para elaboração do Plano de Manejo*. Dissertação de mestrado. Universidade Estadual Paulista/Instituto de Biociências, Botucatu.
- Cohn-Haft, M.; Pacheco, A. M.; Bechtoldt, C.; Torres, M. F.; Fernandes, A. M.; Sardelli, C. H. and Macêdo, I. T. (2007).** Capítulo 10. Inventário ornitológico, 145-178. Em: Py-Daniel, L.; Deus, C. P.; Henriques, A. L.; Pimpão, D. M. and Ribeiro, O. M. (orgs.). *Biodiversidade do médio Madeira: bases científicas para propostas de conservação*. INPA: Manaus.
- Cohn-Haft, M.; Whittaker, A. and Stouffer, P. C. (1997).** A new look at the "species-poor" Central Amazon: the avifauna north of Manaus, Brazil. *Ornithological Monographs*, 48: 205-235.
- Ferreira, L. V. (1997).** Effects of the duration of flooding on species richness and floristics composition in three hectares in Jaú National Park in floodplain forest in Central Amazonia. *Biodiversity and Conservation*, 6:1353-1363.
- Ferreira, L. V. and Prance, G. T. (1998).** Species richness and floristic composition in four hectares in the Jaú National Park in upland forests in Central Amazonia. *Biodiversity and Conservation*, 7:1349-1364.
- Ferreira, L. V. and Prance, G. T. (1999).** Ecosystem recovery in *terra firme* forest after cutting and burning: a comparison on species richness, floristic composition and forest structure in the Jaú National Park, Amazonia. *Botanical Journal of Linnean Society*, 130: 97-110.
- Forsberg, B. R.; Hashimoto, Y.; Rosenqvist, A. and Miranda, F. P. (2000).** Tectonic fault control of wetland distributions in the Central Amazon revealed by JERS-1 radar imagery. *Quaternary International*, 72:61-66.
- FVA. (1998).** *Plano de manejo do Parque Nacional do Jaú*. Fundação Vitória Amazônica/Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis, Manaus.
- FVA. (2003).** *Lista Ilustrada das aves do Parque Nacional do Jaú (An illustrated check-list of birds of Jaú National Park)*. Fundação Vitória Amazônica, Manaus.
- FVA. (2005).** *Diagnóstico para a criação da Reserva Extrativista do Rio Unini, Barcelos, Amazonas*. Fundação Vitória Amazônica, Manaus.
- Grantsau, R. and Camargo, H. F. (1989).** Nova espécie de *Amazona* (Aves, Psittacidae). *Revista Brasileira de Biologia*, 49:1017-1020.
- Haffer, J. (1990).** Avian species richness in tropical South America. *Studies in Neotropical Fauna and Environment*, 25:157-183.
- Isler, M. L. and Isler, P. R. (2003).** Species limits in the pygmy antwren (*Myrmotherula brachyura*) complex (Aves: Passeriformes: Thamnophilidae): 1. The taxonomic status of *Myrmotherula brachyuran ignota*. *Proceedings of the Biological Society of Washington*, 116: 23-28.
- Isler, M. L.; Isler, P. R.; Whitney, B. M.; Zimmer, K. J. and Whittaker, A. (2009).** Species limits in antbirds (Aves: Passeriformes: Thamnophilidae): an evaluation of *Frederickena unduligera* (Undulated Antshrike) based on vocalizations. *Zootaxa*, 2305:61-68.
- Martuscelli, P. and Yamashita, C. (1997).** Rediscovery of the White-cheeked Parrot *Amazona kawalli* (Grantsau and Camargo 1989), with notes on its ecology, distribution, and taxonomy. *Aranajuba*, 5:97-113.

- Naka, L. N.; Cohn-Haft, M.; Mallet-Fodrigues, F.; Santos, M. P. and Torres, M. F. (2006). The avifauna of the Brazilian state of Roraima: bird distribution and biogeography in the Rio Branco basin. *Revista Brasileira de Ornitologia*, 14:197-238.
- Naka, L. N.; Cohn-Haft, M.; Whittaker, A.; Barnett, J. M. and Torres, M. F. (2007). Avian biogeography of amazonian flooded forests in the Rio Branco basin, Brazil. *The Wilson Journal of Ornithology*, 119: 439-449.
- Novaes, F. C. (1978). Sobre algumas aves pouco conhecidas da Amazônia Brasileira. *Boletim do Museu Paraense Emílio Goeldi (Nova Série – Zoologia)*, 90:1-16.
- Novaes, F. C. (1980). Observações sobre a avifauna do alto curso do Rio Paru de Leste, Estado do Pará. *Boletim do Museu Paraense Emílio Goeldi (Nova Série – Zoologia)*, 100:1-59.
- Oren, D. C. and Albuquerque, H. G. (1991). Priority areas for new collections in Brazilian Amazonia. *Goeldiana (Zoologia)*, 6:1-11.
- Patterson, B. D.; Stotz, D. F. and Solari, S. (2006). Biological surveys and inventories in Manu. *Fieldiana: Zoology*, 110:3-12.
- Payne, R. B. (1997). Family Cuculidae (Cuckoos), 508-607. Em: J. Del Hoyo, A. Eliott and D. A. Christie (eds.). *Handbook of the birds of the world*, v. 4. Lynx Editions, Barcelona.
- Rahbek, C. and Graves, G. R. (2001). Multiscale assessment of patterns of avian species richness. *Proceedings of the National Academy of Sciences of the United States of America*, 98:4534-4539.
- Rasmussen, P. C. and Collar, N. J. (2002). Family Bucconidae (puffbirds), 102-138. Em: J. Del Hoyo, A. Eliott and D. A. Christie (eds.). *Handbook of the birds of the world*, v. 7. Lynx Editions, Barcelona.
- Remsen, J. V. Jr.; Cadena, C. D.; Jaramillo, A.; Nores, M.; Pacheco, J. F.; Robbins, M. B.; Schulenberg, T. S.; Stiles, F. G.; Stotz, D. F. and Zimmer, K. J. (2010). *A classification of the bird species of South America*. American Ornithologists' Union (version 12). www.museum.lsu.edu/~Remsen/SACCBaseline.html
- Restall, R.; Rodner, C. and Lentino, M. (2006). *Birds of Northern South America – an identification guide (2 volumes)*. Yale University Press, New Haven and London.
- Ridgely, R. S. and Tudor, G. (1989). *The birds of South America. Volume 1: The Oscines Passerines*. University of Texas, Austin, Texas.
- Ridgely, R. S. and Tudor, G. (2009). *Field guide to the songbirds of South America – the passerines*. University of Texas Press, Austin.
- Sds/Fva. (2008). *Plano de gestão do Parque Estadual do Rio Negro – Setor Norte (2 volumes)*. Secretaria de Meio Ambiente e Desenvolvimentos Sustentável do Amazonas/Fundação Vitória Amazônica, Manaus.
- Snow, D. W. (2004). Family Cotingidae (Cotingas), 32-108. Em: J. Del Hoyo, A. Eliott and D. A. Christie (eds.). *Handbook of the birds of the world*, v. 9. Lynx Editions, Barcelona.
- Trolle, M. and Walther, B. A. (2004). Preliminary bird observations in the Rio Jauaperi region, Rio Negro basin, Amazonia, Brazil. *Cotinga*, 22:81-85.
- Vicentini, A. (2004). A vegetação ao longo de um gradiente edáfico no Parque Nacional do Jaú, 105-125. Em: S. H. Borges, S. Iwanaga, C. C. Durigan and M. R. Pinheiro (eds.). *Janelas para a Biodiversidade no Parque Nacional do Jaú: Uma estratégia para o estudo da biodiversidade na Amazônia*. Fundação Vitória Amazônica, Manaus.
- Voelker, G.; Rohwer, S.; Bowie, R. C. and Outlaw, D. C. (2007). Molecular systematics of a speciose, cosmopolitan songbird genus: Defining the limits of, and relationships among, the *Turdus* thrushes. *Molecular Phylogenetics and Evolution*, 42:422-434.
- Whittaker, A. (2009). Pousada Rio Roosevelt: a provisional avifaunal inventory in south-western Amazonian Brazil, with information on life history, new distributional data and comments on taxonomy. *Cotinga*, 31:20-43.
- Whittaker, A.; Carvalhaes, A. and Pacheco, J. F. (1995). Rediscovery of the chestnut-headed nunlet *Nonnula amaurocephala* in Amazonian Brazil. *Cotinga*, 3:48-50.
- Winkler, H. and Christie, D. A. (2002). Family Picidae (woodpeckers), 297-555. Em: J. Del Hoyo, A. Eliott and D. A. Christie (eds.). *Handbook of the birds of the world*, v. 7. Lynx Editions, Barcelona.
- Zimmer, K. J. and Isler, M. L. (2003). Family Thamnophilidae (typical antbirds), 448-681. Em: J. Del Hoyo, A. Eliott and D. A. Christie (eds.). *Handbook of the birds of the world*, v. 8. Lynx Editions, Barcelona.

APPENDIX: Bird species checklist of the Jaú National Park and three additional protected areas. Species marked with * are not listed in Borges *et al.* (2001). Species between parentheses are hypothetical records that need better documentation.

Abundance: c = common, f = frequent, i = infrequent, r = rare, am = austral migrant, nm = nearctic migrant.

Habitats: a = aerial, ca = white sand campina, cm = woody campinarana, dv = anthropogenic disturbed vegetation, ig = *igapó* flooded forest, fi = fluvial island, tf = *terra firme* forest, r = aquatic habitats including rivers, lakes and streams, rb = rock banks, sb = sand banks, bur = palm swamps (buritizais).

Documentation: col = voucher specimens in ornithological collections, tr = tape recorded, ph = photographed, nd = recorded by observation (obs) or by voice (v) without physical documentation, vd = video recorded.

Regions: the numbers indicate the specific regions showed in Figure 1 and Table 1.

Protected areas: Jnp = Jaú National Park, Reuni = Rio Unini Extractive Reserve, Rdsa = Amaná Sustainable Development Reserve, Pern = Rio Negro State Park = Northern Sector.

SPECIES	ABUN- DANCE	HABITATS	DOCUMEN- TATION	REGIONS	JNP	REUNI	RDSA	PERN
Tinamidae								
<i>Tinamus major</i> (Gmelin, 1789)	i	tf	ph, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X		X
<i>Tinamus guttatus</i> Pelzeln, 1863*	r	tf	tr	2	X			
<i>Crypturellus cinereus</i> (Gmelin, 1789)	r	ig, cm	tr	2, 9	X	X	X	
<i>Crypturellus soui</i> (Hermann, 1783)	f	tf, dv, ig	tr	1, 2, 3, 4, 6, 9	X	X	X	X
<i>Crypturellus undulatus</i> (Temminck, 1815)	c	ig	tr	1, 2, 3, 4, 5, 9	X	X	X	
<i>Crypturellus duidae</i> Zimmer, 1938*	r	cm, ca	tr	2	X			
<i>Crypturellus variegatus</i> (Gmelin, 1789)	c	tf	tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
Anatidae								
<i>Dendrocygna autumnalis</i> (Linnaeus, 1758)	r	r	nd (obs)	2	X			
<i>Cairina moschata</i> (Linnaeus, 1758)	c	r	nd (obs)	1, 2, 3, 4, 6, 9, 10	X	X	X	X
Cracidae								
<i>Penelope jacquacu</i> Spix, 1825	c	tf, ig	ph	1, 2, 3, 4, 5, 6, 8, 9	X	X	X	X
<i>Aburria cumanensis</i> (Jacquin, 1784) ¹	r	tf, ig	nd (obs, v)	3, 9	X	X		
<i>Nothocrax urumutum</i> (Spix, 1825)	i	tf	ph, tr	2, 3, 4, 10	X			X
<i>Pauxi tomentosa</i> (Spix, 1825) ²	i	ig (fi)	tr	1	X			
<i>Pauxi tuberosa</i> (Spix, 1825) ³	i	tf	ph, tr	2, 10	X			X
Odontophoridae								
<i>Odontophorus gujanensis</i> (Gmelin, 1789)	f	tf, dv	col, tr	1, 2, 3, 4, 5, 8, 9	X	X	X	
Phalacrocoracidae								
<i>Phalacrocorax brasilianus</i> (Gmelin, 1789)	c	r	ph	1, 2, 3, 4, 6	X			X
Anhingidae								
<i>Anhinga anhinga</i> (Linnaeus, 1766)	f	r	nd (obs)	1, 2, 3, 4, 6	X			X
Ardeidae								
<i>Tigrisoma lineatum</i> (Boddaert, 1783)	i	r	ph	3, 4, 6	X			X
<i>Agamia agami</i> (Gmelin, 1789)	r	r	nd (obs)	1	X			
<i>Cochlearius cochlearius</i> (Linnaeus, 1766)	r	r	nd (obs, v)	1	X			
<i>Zebrilus undulatus</i> (Gmelin, 1789)*	r	r	vr	1	X			
<i>Nycticorax nycticorax</i> (Linnaeus, 1758)	r	r	nd (obs)	1	X			

SPECIES	ABUN- DANCE	HABITATS	DOCUMEN- TATION	REGIONS	JNP	REUNI	RDSA	PERN
<i>Butorides striata</i> (Linnaeus, 1758)	c	r	tr	1, 2, 3, 4, 9	X	X		
<i>Bubulcus ibis</i> (Linnaeus, 1758)	i	r	ph	1, 3, 4, 10	X			X
<i>Ardea cocoi</i> Linnaeus, 1766	c	r	ph	1, 2, 3, 4, 6, 9, 10	X	X		X
<i>Ardea alba</i> Linnaeus, 1758 ⁴	c	r	nd (obs)	2, 3, 4, 10	X			X
<i>Ptilerodius pileatus</i> (Boddaert, 1783)	f	r	nd (obs)	3, 4, 6, 9	X	X	X	X
<i>Egretta thula</i> (Molina, 1782)	i	r	nd (obs)	1, 4	X			
Threskiornithidae								
<i>Mesembrinibis cayennensis</i> (Gmelin, 1789)	c	r	tr	1, 2, 3, 4, 6, 9, 10	X	X	X	X
<i>Platalea ajaja</i> Linnaeus, 1758	am (r)	r	ph	2	X			
Ciconiidae								
<i>Jabiru mycteria</i> (Lichtenstein, 1819)	am (r)	r	nd (obs)	2	X			
<i>Mycteria americana</i> Linnaeus, 1758	am (f)	r	nd (obs)	4	X			
Cathartidae								
<i>Cathartes aura</i> (Linnaeus, 1758)	f	a	nd (obs)	1, 2, 3, 4, 9	X		X	
<i>Cathartes burrovianus</i> Cassin, 1845	f	a	nd (obs)	1, 2, 3, 4, 6, 10	X			X
<i>Cathartes melambrotus</i> Wetmore, 1964	c	a	nd (obs)	1, 2, 3, 4, 9	X		X	
<i>Coragyps atratus</i> (Bechstein, 1793)	c	a	nd (obs)	1, 2, 3, 4, 6	X			
<i>Sarcoramphus papa</i> (Linnaeus, 1758)	f	a	nd (obs)	1, 3, 4, 9	X		X	
Pandionidae								
<i>Pandion haliaetus</i> (Linnaeus, 1758)	nm (f)	r, ig	nd (obs)	1, 2, 4, 6	X			X
Accipitridae								
<i>Leptodon cayanensis</i> (Latham, 1790)	r	ig	nd (obs)	1	X			
<i>Elanoides forficatus</i> (Linnaeus, 1758)	am? (f)	tf, ca	nd (obs)	1, 2, 3, 4, 9	X		X	
<i>Harpagus bidentatus</i> (Latham, 1790)*	r	tf	nd (obs)	2	X			
<i>Ictinia plumbea</i> (Gmelin, 1788)	c	tf, dv, ig	ph	1, 2, 3, 4, 5, 8, 9	X	X		
<i>Accipiter bicolor</i> (Vieillot, 1817)	r	ig, dv	nd (obs)	1	X			
<i>Geranospiza caerulescens</i> (Vieillot, 1817)	r	ig	nd (obs)	4	X			
<i>(Leucopternis schistaceus)</i> (Sundevall, 1851)*	r	ig (fi)	nd (obs)	1	X			
<i>Leucopternis melanops</i> (Latham, 1790)*	r	tf	tr	6	X			X
<i>Buteogallus urubitinga</i> (Gmelin, 1788)	f	tf, ig	ph, tr	2, 3, 4, 5, 6, 9	X	X	X	
<i>Busarellus nigricollis</i> (Latham, 1790)	r	ig	nd (obs)	2	X			
<i>Rupornis magnirostris</i> (Gmelin, 1788)	c	tf, dv, ig, cm	tr	1, 2, 3, 4, 6, 10	X			X
<i>Buteo nitidus</i> (Latham, 1790) ⁵	i	ig, cm	nd (obs)	2, 3	X			
<i>Harpia harpyja</i> (Linnaeus, 1758)	r	tf, ig	nd (obs)	2, 5	X			

SPECIES	ABUN- DANCE	HABITATS	DOCUMEN- TATION	REGIONS	JNP	REUNI	RDSA	PERN
<i>Spizaetus tyrannus</i> (Wied, 1820)	r	ig	tr	7, 10	X			X
<i>Spizaetus ornatus</i> (Daudin, 1800)	r	tf, ig	nd (obs, v)	2, 3, 5, 8, 9	X		X	
Falconidae								
<i>Daptrius ater</i> Vieillot, 1816	c	ig, cm	ph, tr	1, 2, 3, 4, 5, 6, 7, 9	X	X	X	X
<i>Ibycter americanus</i> (Boddaert, 1783) ⁶	i	tf	nd (obs, v)	1, 4, 5, 6, 8	X			
<i>Milvago chimachima</i> (Vieillot, 1816)	c	ig, dv	tr	1, 2, 3, 6, 10	X			X
<i>Herpetotheres cachinnans</i> (Linnaeus, 1758)	r	tf	nd (obs, v)	1, 4, 9	X		X	
<i>Micrastur ruficollis</i> (Vieillot, 1817)	f	tf, dv	col, ph, tr	1, 2, 3, 4, 5	X			
<i>Micrastur gilvicollis</i> (Vieillot, 1817)	f	tf	col, tr	2, 4, 5, 6, 10	X			X
<i>Micrastur mirandollei</i> (Schlegel, 1862)	r	tf, ig	nd (v)	5, 8	X			
<i>Micrastur semitorquatus</i> (Vieillot, 1817)	i	tf, dv	tr	1, 2, 3, 9	X		X	
<i>Falco columbarius</i> Linnaeus, 1758	nm (r)	ig	nd (obs)	1	X			
<i>Falco ruficularis</i> Daudin, 1800	f	ig	tr	2, 3, 4, 5, 6, 9	X	X	X	X
Aramidae								
<i>Aramus guaranauna</i> (Linnaeus, 1766)	i	r	nd (obs, v)	3, 4, 6	X			
Psophiidae								
<i>Psophia crepitans ochroptera</i> Pelzeln 1857	f	tf, cm	col, ph, tr	2, 5, 6, 8, 9, 10	X	X	X	X
Rallidae								
<i>Aramides cajanea</i> (Statius Muller, 1776)	f	ig, dv	tr	1, 2, 4, 6, 9	X	X		X
<i>Laterallus viridis</i> (Statius Muller, 1776)*	r	ca	tr	2	X			
<i>Laterallus melanophaius</i> (Vieillot, 1819)	r	ig	nd (v)	3, 4	X			
Heliornithidae								
<i>Heliornis fulica</i> (Boddaert, 1783)	f	r, ig	tr	1, 2, 3, 4, 6	X			X
Eurypygidae								
<i>Eurypyga belias</i> (Pallas, 1781)	i	r, ig	tr	4, 9	X	X	X	
Charadriidae								
<i>Charadrius collaris</i> Vieillot, 1818*	nm (i)	ig	tr	1	X			
Scolopacidae								
<i>Gallinago paraguayana</i> (Vieillot, 1816)	r	r	nd (obs)	11(A)	X			
<i>Actitis macularius</i> (Linnaeus, 1766)	nm (f)	r (sb, rb)	nd (obs)	1	X			
<i>Tringa solitaria</i> Wilson, 1813	nm (f)	r (sb, rb)	nd (obs)	2	X			
<i>Tringa melanoleuca</i> (Gmelin, 1789)	nm (i)	r (sb, rb)	nd (obs)	2	X			
<i>Tringa flavipes</i> (Gmelin, 1789)	nm (i)	r (sb, rb)	nd (obs)	2	X			
<i>Calidris alba</i> (Pallas, 1764)	nm (i)	r (sb, rb)	nd (obs)	1	X			
<i>Calidris fuscicollis</i> (Vieillot, 1819)	nm (i)	r (sb, rb)	ph	2	X			

SPECIES	ABUN-DANCE	HABITATS	DOCUMEN-TATION	REGIONS	JNP	REUNI	RDSA	PERN
<i>Calidris melanotos</i> (Vieillot, 1819)	nm (i)	r (sb, rb)	nd (obs)	2	X			
Jacaniidae								
<i>Jacana jacana</i> (Linnaeus, 1766)	r	r	nd (obs)	11(B)	X			
Sternidae								
<i>Sternula superciliaris</i> (Vieillot, 1819) ⁷	f	r (sb, rb)	tr	1	X			
<i>Phaetusa simplex</i> (Gmelin, 1789)	f	r (sb, rb)	tr	1, 2, 3, 4, 6	X			X
Rynchopidae								
<i>Rynchops niger</i> Linnaeus, 1758	i	r (sb, rb)	tr	1	X			
Columbidae								
<i>Columbina passerina</i> (Linnaeus, 1758)	c	dv	tr	1, 2, 3, 9	X		X	
<i>Columbina talpacoti</i> (Temminck, 1811)	r	dv	nd (obs)	2	X			
<i>Patagioenas speciosa</i> (Gmelin, 1789) ⁸	f	dv, cm, ig	tr	1, 2, 3, 4, 6, 9	X	X		X
<i>Patagioenas cayennensis</i> (Bonnaterre, 1792) ⁹	c	ig, dv	ph, tr	1, 2, 3, 4, 5, 6, 8, 9, 10	X	X	X	X
<i>Patagioenas plumbea</i> (Vieillot, 1818) ¹⁰	c	tf, cm, dv	tr	1, 2, 3, 4, 6, 7, 8, 9, 10	X	X		X
<i>Patagioenas subvinacea</i> (Lawrence, 1868) ¹¹	c	tf, dv, ig	tr	1, 2, 3, 4, 5, 6, 7, 8, 9	X	X	X	X
<i>Leptotila verreauxi</i> Bonaparte, 1855	f	tf, dv	tr	1, 2, 4, 6, 9, 10	X	X	X	X
<i>Leptotila rufaxilla</i> (Richard and Bernard, 1792)	i	tf, ig, dv	tr	1, 4, 8, 9	X		X	
<i>Geotrygon montana</i> (Linnaeus, 1758)	c	tf, cm	ph, tr	1, 2, 3, 4, 5, 6, 8, 9, 10	X	X		X
Psittacidae								
<i>Ara ararauna</i> (Linnaeus, 1758)	c	tf, cm, ig	ph, tr	1, 2, 3, 4, 5, 6, 8, 10	X	X	X	X
<i>Ara macao</i> (Linnaeus, 1758)	f	tf, cm, ig	tr	1, 2, 3, 4, 5, 6, 9	X		X	X
<i>Ara chloropterus</i> Gray, 1859	i	tf, cm, ig	nd (obs)	2, 4, 6	X			X
<i>Orthopsittaca manilata</i> (Boddaert, 1783)	c	tf, cm	tr	2, 3, 4, 5, 6, 7, 8, 9	X		X	X
<i>Aratinga leucophthalma</i> (Statius Muller, 1776)	i	ig, dv	tr	1, 3, 4, 7, 6, 9	X		X	X
<i>Aratinga pertinax</i> (Linnaeus, 1758)	c	ig, cm	ph, tr, vr	1, 2, 3, 4, 5, 6, 9	X	X	X	X
<i>Pyrrhura melanura</i> (Spix, 1824)	f	ig, tf, cm	ph, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Brotogeris chrysoptera</i> (Linnaeus, 1766)	c	tf, cm	col, ph, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Brotogeris sanctithomae</i> (Statius Muller, 1776)	r	ig	nd (obs)	1, 3	X			
<i>Touit huetii</i> (Temminck, 1830)	r	tf	tr	1, 2	X			
<i>Touit purpuratus</i> (Gmelin, 1788)	i	tf	tr	2, 3, 4, 6, 10	X			X
<i>Pionites melanocephalus</i> (Linnaeus, 1758)	f	tf	tr	1, 2, 3, 4, 5, 6, 9, 10	X	X	X	X
<i>Pyrilia barrabandi</i> (Kuhl, 1820) ¹²	f	tf, ig, cm	tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Pionus menstruus</i> (Linnaeus, 1766)	c	tf, ig, dv	ph, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X

SPECIES	ABUN- DANCE	HABITATS	DOCUMEN- TATION	REGIONS	JNP	REUNI	RDSA	PERN
<i>Pionus fuscus</i> (Statius Muller, 1776)	i	tf	tr	1, 2, 3, 4, 6, 8, 9, 10	X	X		X
<i>Amazona autumnalis</i> (Linnaeus, 1758)	i	tf	tr	1, 2, 4, 5, 6, 10	X			X
<i>Amazona festiva</i> (Linnaeus, 1758)	c	ig	ph, tr	1, 2, 3, 4, 5, 6, 9, 10	X	X	X	X
<i>Amazona kawalli</i> Grantsau and Camargo, 1989*	r	ig	tr	5	X			
<i>Amazona amazonica</i> (Linnaeus, 1766)	c	ig, cm	ph, tr	1, 2, 3, 4, 5, 6, 9, 10	X	X	X	X
<i>Amazona farinose</i> (Boddaert, 1783)	f	tf, ig, cm	ph, tr	1, 2, 3, 4, 5, 6, 7, 9, 10	X	X	X	X
<i>Derophtyx accipitrinus</i> (Linnaeus, 1758)	r	tf	nd (obs, v)	4, 5, 7, 8	X			
Opisthocomidae								
<i>Opisthocomus hoazin</i> (Statius Muller, 1776)	r	ig	nd (obs)	4	X			
Cuculidae								
<i>Coccyzua minuta</i> (Vieillot, 1817) ¹³	r	ig, dv	nd (obs)	3	X			
<i>Piaya cayana</i> (Linnaeus, 1766)	c	ig, dv	tr	1, 2, 3, 4, 5, 6, 7, 9, 10	X	X	X	X
<i>Piaya melanogaster</i> (Vieillot, 1817)	f	tf, cm	tr	1, 2, 3, 4, 5, 6, 7, 8, 10	X			X
<i>Coccyzus melacoryphus</i> Vieillot, 1817*	r	ig	nd (obs)	9	X	X		
<i>Coccyzus americanus</i> (Linnaeus, 1758)	nm (i)	ig	nd (obs)	9	X	X	X	
<i>Coccyzus euleri</i> Cabanis, 1873	am (r)	ig	nd (obs)	3, 9	X	X		
<i>Crotophaga major</i> Gmelin, 1788	f	ig	tr	1, 2, 3, 4, 5, 6, 8, 7, 9	X	X	X	X
<i>Crotophaga ani</i> Linnaeus, 1758	c	ig, dv	nd (obs, v)	1, 2, 3, 4, 5	X			
<i>Tapera naevia</i> (Linnaeus, 1766)	r	ca	tr	2	X			
<i>Dromococcyx pavoninus</i> Pelzeln, 1870*	r	tf	tr, vr	10				X
Tytonidae								
<i>Tyto alba</i> (Scopoli, 1769)	r	dv, ca, cm	nd (obs, v)	3	X			
Strigidae								
<i>Megascops choliba</i> (Vieillot, 1817) ¹⁴	c	ig, cm	tr	1, 2, 3, 4, 6, 10	X			X
<i>Megascops usta</i> (Sclater, 1858) ¹⁵	c	tf	tr	1, 2, 3, 4, 5, 6, 7, 8, 10	X			X
<i>Lophotrix cristata</i> (Daudin, 1800)*	r	tf	tr	5	X			
<i>Pulsatrix perspicillata</i> (Latham, 1790)	f	tf, ig, dv	tr	1, 2, 3, 4, 5, 7, 9	X	X	X	
<i>Strix hubula</i> Daudin, 1800 ¹⁶	i	tf, ig	tr	1, 2	X			
<i>Glaucidium brasilianum</i> (Gmelin, 1788)	f	ig, dv	ph, tr	1, 3, 4, 5, 8	X			
<i>Asio stygius</i> (Wagler, 1832)	r	ig, ca, cm	tr	1, 2, 6	X			X
Nyctibiidae								
<i>Nyctibius grandis</i> (Gmelin, 1789)	f	tf, ig, dv	tr	1, 3, 5	X			
<i>Nyctibius aethereus</i> (Wied, 1820)*	r	tf, cm	tr	5	X			

SPECIES	ABUN- DANCE	HABITATS	DOCUMEN- TATION	REGIONS	JNP	REUNI	RDSA	PERN
<i>Nyctibius griseus</i> (Gmelin, 1789)	c	tf, ig, cm	col, tr	1, 2, 3, 4, 5, 7, 9	X	X		
<i>Nyctibius leucopterus</i> (Wied, 1821)	r	tf, cm	col, tr	1, 2, 3, 6	X	X		
<i>Nyctibius bracteatus</i> Gould, 1846	i	tf, cm, dv	tr	2, 7, 10	X			X
Caprimulgidae								
<i>Lurocalis semitorquatus</i> (Gmelin, 1789)	r	tf	nd (obs, v)	1, 2, 3, 4	X			
<i>Chordeiles pusillus</i> Gould, 1861	f	ca	col, tr	2	X			
<i>(Chordeiles acutipennis)</i> (Hermann, 1783)	r	dv	nd (obs, v)	1	X			
<i>Chordeiles minor</i> (Forster, 1771)	nm (i)	a	nd (obs, v)	1, 2, 3, 4	X			
<i>Nyctiprogne leucopyga</i> (Spix, 1825)	c	ig	col, ph, tr	1, 2, 3, 4, 5, 8, 9	X	X	X	X
<i>Nyctidromus albicollis</i> (Gmelin, 1789)	c	tf, ig, dv	tr	1, 2, 3, 4, 6, 9	X	X	X	X
<i>Caprimulgus rufus</i> Boddaert, 1783	f	ca	tr	2	X			
<i>Caprimulgus cayennensis</i> Gmelin, 1789	r	ca	tr	2	X			
<i>Caprimulgus nigrescens</i> Cabanis, 1848	f	tf, ig, dv	col, ph	1, 2, 3, 6	X			X
<i>Hydropsalis climacocerca</i> (Tschudi, 1844)	f	ig	tr	1, 2, 4	X			
Apodidae								
<i>Chaetura spinicaudus</i> (Temminck, 1839)	f	a	nd (obs)	1, 2, 3, 4	X			
<i>Chaetura cinereiventris</i> Sclater, 1862	c	a	tr	1, 2, 3, 4, 6, 9	X	X	X	
<i>Chaetura chapmani</i> Hellmayr, 1907	r	a	nd (obs)	2	X			
<i>Chaetura brachyura</i> (Jardine, 1846)	c	a	tr	1, 2, 3, 4, 6	X			
<i>Tachornis squamata</i> (Cassin, 1853)	f	a	tr	1, 3, 4, 9	X		X	
<i>Panyptila cayennensis</i> (Gmelin, 1789)	r	a	nd (obs)	1, 2, 3, 4	X			
Trochilidae								
<i>Glaucis hirsutus</i> (Gmelin, 1788)	r	tf	nd (obs)	1, 4	X			
<i>Threnetes leucurus</i> (Linnaeus, 1766)*	r	tf, dv	ph	5, 9	X		X	
<i>Phaethornis rufurumii</i> Boucard, 1892*	c	ig (fi)	col, ph	1	X			
<i>Phaethornis ruber</i> (Linnaeus, 1758)	f	tf, cm, dv	col, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Phaethornis bourcieri</i> (Lesson, 1832)	i	tf	col	1, 2, 3, 4, 8, 9, 10	X		X	X
<i>Phaethornis malaris</i> (Nordmann, 1835) ¹⁷	f	tf, ig, dv	col, ph, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Campylopterus largipennis</i> (Boddaert, 1783)	r	tf	nd (obs)	1, 2, 3	X			
<i>Florisuga mellivora</i> (Linnaeus, 1758)	c	tf, dv	col	1, 2, 3, 4, 6	X			X
<i>Anthracothorax nigricollis</i> (Vieillot, 1817)	i	tf, ig	tr	1, 2, 4	X			
<i>Topaza pyra</i> (Gould, 1846)	r	ca	ph, tr	2, 3, 6, 10	X			X

SPECIES	ABUN- DANCE	HABITATS	DOCUMEN- TATION	REGIONS	JNP	REUNI	RDSA	PERN
<i>Chrysolampis mosquitus</i> (Linnaeus, 1758)	r	ig	nd (obs)	1, 3	X			
<i>Chlorostilbon notatus</i> (Reich, 1793)*	r	cm, ig	ph	2	X			
<i>Chlorostilbon mellisugus</i> (Linnaeus, 1758)	r	ig, dv	col	1, 2	X			
<i>Thalurania furcata</i> (Gmelin, 1788)	c	tf, ig, cm, dv	col, ph, tr	1, 2, 3, 4, 5, 6, 7, 8, 10	X			X
<i>Hylocharis sapphirina</i> (Gmelin, 1788)	i	tf, cm, dv	col, ph	1, 2, 3, 4, 9	X	X	X	
<i>Hylocharis cyanus</i> (Vieillot, 1818)	f	tf, ig, cm, dv	col, ph	1, 2, 3, 4, 6	X			X
<i>Polytmus theresiae</i> (Da Silva Maia, 1843)	c	ca	col, ph	2	X			
<i>Amazilia versicolor</i> (Vieillot, 1818)	r	tf, dv	tr	1, 2, 6	X			X
<i>Amazilia fimbriata</i> (Gmelin, 1788)	f	tf, dv	nd (obs)	1, 2, 3, 4, 6	X			X
<i>Heliodoxa aurescens</i> (Gould, 1846) ¹⁸	r	tf	ph, tr	2, 4, 5, 7, 8, 9	X	X	X	
<i>Heliothryx auritus</i> (Boddaert, 1783)	i	tf, dv	col	1, 2, 3, 4, 7, 8, 9, 10	X	X	X	X
<i>Heliomaster longirostris</i> (Audebert and Vieillot, 1801)	r	tf, dv	nd (obs)	1, 2	X			
Trogonidae								
<i>Trogon melanurus</i> Swainson, 1838	i	tf, ig, cm, dv	col, tr	1, 2, 3, 4, 5, 6, 7, 9, 10	X	X	X	X
<i>Trogon viridis</i> Linnaeus, 1766	c	tf, ig, cm, dv	tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Trogon violaceus</i> Gmelin, 1788	i	tf, cm	tr	1, 2, 3, 6, 9, 10	X	X	X	X
<i>Trogon curucui</i> Linnaeus, 1766	f	ig	tr	1, 2, 3, 4, 5, 6, 7, 9	X	X	X	X
<i>Trogon rufus</i> Gmelin, 1788	f	tf, dv	col, ph, tr	1, 2, 3, 4, 5, 6, 7, 9, 10	X	X	X	X
<i>Pharomachrus pavoninus</i> (Spix, 1824)	i	tf	col, tr	1, 2, 3, 4, 5, 9, 10	X	X		X
Alcedinidae								
<i>Megaceryle torquata</i> (Linnaeus, 1766) ¹⁹	c	r	tr	1, 2, 3, 4, 6, 9, 10	X	X	X	X
<i>Chloroceryle amazona</i> (Latham, 1790)	c	r	nd (obs)	1, 2, 3, 4, 6, 9	X	X	X	X
<i>Chloroceryle aenea</i> (Pallas, 1764)	f	r	col, ph	1, 2, 3, 4, 6, 9	X	X		X
<i>Chloroceryle americana</i> (Gmelin, 1788)	f	r	tr	1, 2, 3, 4	X			
<i>Chloroceryle inda</i> (Linnaeus, 1766)	f	r	ph, tr	1, 2, 3, 4, 6, 9	X	X		X
Momotidae								
<i>Momotus momota</i> (Linnaeus, 1766)	f	tf, ig, cm	ph, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
Galbulidae								
<i>Galbula albirostris</i> Latham, 1790	f	tf, cm, dv	ph, tr	1, 2, 3, 4, 5, 6, 9, 10	X	X	X	X
<i>Galbula galbula</i> (Linnaeus, 1766)*	i	ig (fi)	ph, tr	1, 9	X		X	
<i>Galbula leucogastra</i> Vieillot, 1817	i	ig, cm	col, tr	1, 2, 4, 6, 9	X	X	X	X
<i>Galbula dea</i> (Linnaeus, 1758)	f	tf, ig, cm	col, tr	1, 2, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Jacamerops aureus</i> (Statius Muller, 1776)	i	tf	tr	2, 3, 4, 5, 6, 7, 9, 10	X	X	X	X

SPECIES	ABUN- DANCE	HABITATS	DOCUMEN- TATION	REGIONS	JNP	REUNI	RDSA	PERN
Bucconidae								
<i>Notharchus hyperrhynchus</i> (Sclater, 1856) ²⁰	i	tf, ig	tr	1, 2, 3, 6	X			X
<i>Notharchus macrorhynchus</i> (Gmelin, 1788)*a	i	ig (fi)	tr	1	X			
<i>Notharchus ordii</i> (Cassin, 1851)	r	tf, cm	col	2	X			
<i>Notharchus tectus</i> (Boddaert, 1783)	i	tf	nd (obs)	3, 4	X			
<i>Bucco macrodactylus</i> (Spix, 1824)*	r	ig	ph	11(C)	X			
<i>Bucco tamatia</i> Gmelin, 1788	f	tf, ig, cm	tr	2, 8, 10	X			X
<i>Bucco capensis</i> Linnaeus, 1766	i	tf, cm	ph, tr	2, 4, 6, 10	X			X
<i>Malacoptila fusca</i> (Gmelin, 1788)	r	tf	col, ph, tr	2, 3, 4, 5, 6, 7, 9, 10	X	X	X	X
<i>Micromonacha lanceolata</i> (Boddaert, 1783)	r	tf	nd (obs)	4	X			
<i>Nonnula rubecula</i> (Spix, 1824)	r	tf	col, ph	2, 4	X			
<i>Nonnula amaurocephala</i> Chapman, 1921	r	ig	col, ph	2, 4	X			
<i>Monasa atra</i> (Boddaert, 1783)*a	r	ig (fi)	nd (obs)	1	X			
<i>Monasa nigrifrons</i> (Spix, 1824)	c	ig	ph	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Monasa morphoeus</i> (Hahn and Küster, 1823)	i	tf, cm	col, ph, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Chelidoptera tenebrosa</i> (Pallas, 1782)	c	ig	ph	1, 2, 3, 4, 5, 6, 7, 9, 10	X	X	X	X
Capitonidae								
<i>Capito auratus</i> (Dumont, 1816) ²¹	f	tf, ig, cm	col, ph, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Eubucco richardsoni</i> (Gray, 1846)	r	tf	nd (v)	4	X			
Ramphastidae								
<i>Ramphastos tucanus</i> Linnaeus, 1758	c	tf, ig, cm	ph, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Ramphastos vitellinus</i> Lichtenstein, 1823	c	tf, ig, cm	col, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Selenidera nattereri</i> (Gould, 1836)	i	tf	col, ph, tr	2, 5, 8, 9	X	X		
<i>Pteroglossus azara</i> (Vieillot, 1819)	i	tf, ig	ph, tr	1, 2, 4, 5, 6, 8, 9	X		X	X
<i>Pteroglossus aracari</i> (Linnaeus, 1758)*a	r	ig (fi)	nd (obs)	1	X			
<i>Pteroglossus castanotis</i> Gould, 1834	r	tf	nd (obs)	4	X			
<i>Pteroglossus pluricinctus</i> Gould, 1835*	r	tf	nd (obs)	5	X			
Picidae								
<i>Picumnus lafresnayi</i> Malherbe, 1862*	r	ig	col, ph	2, 6, 9	X			X
<i>Melanerpes cruentatus</i> (Boddaert, 1783)	c	tf, ig, dv	tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Veniliornis cassini</i> (Malherbe, 1862)*a	r	ig (fi)	tr	4	X			
<i>Veniliornis affinis</i> (Swainson, 1821)	f	tf, cm	tr	1, 2, 3, 4, 6, 9, 10	X		X	X
<i>Piculus flavigula</i> (Boddaert, 1783)	f	tf, ig	col, tr	1, 2, 3, 4, 5, 7, 8, 9, 10	X		X	X

SPECIES	ABUN- DANCE	HABITATS	DOCUMEN- TATION	REGIONS	JNP	REUNI	RDSA	PERN
<i>Piculus chrysochloros</i> (Vieillot, 1818)	i	tf, ig	col, tr	1, 2, 3, 4, 6	X			X
<i>Colaptes punctigula</i> (Boddaert, 1783)	i	ig	tr	1, 2, 3, 4	X			
<i>Celeus grammicus</i> (Natterer and Malherbe, 1845)	c	tf, ig, cm	col, ph, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Celeus elegans</i> (Statius Muller, 1776)	f	tf, ig, cm	col, tr	1, 2, 3, 4, 5, 7, 10	X			X
<i>Celeus flavus</i> (Statius Muller, 1776)	f	ig, dv	tr	1, 2, 3, 4, 5, 6, 9, 10	X	X	X	X
<i>Celeus torquatus</i> (Boddaert, 1783)	c	tf, ig, cm	col, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X		X
<i>Dryocopus lineatus</i> (Linnaeus, 1766)	f	tf, ig, dv	tr	1, 2, 3, 4, 5, 9	X	X	X	
<i>Campephilus rubricollis</i> (Boddaert, 1783)	f	tf, cm	tr	1, 2, 3, 4, 5, 8, 9, 10	X	X	X	X
<i>Campephilus melanoleucos</i> (Gmelin, 1788)	f	ig, dv	ph, tr	1, 2, 3, 4, 6, 9	X	X	X	X
Thamnophilidae								
<i>Cymbilaimus lineatus</i> (Leach, 1814)	f	tf, ig, cm	col, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Frederickena unduligera</i> (Pelzeln, 1868)*	r	tf	col, tr	6, 8	X			X
<i>Taraba major</i> (Vieillot, 1816)	r	ig, dv	tr	4, 5	X			
<i>Sakesphorus canadensis</i> (Linnaeus, 1766)	c	ig, dv	ph, tr	1, 2, 3, 4, 5, 6, 9	X	X	X	X
<i>Thamnophilus schistaceus</i> d'Orbigny, 1835	r	ig, tf	col, tr	4, 7	X			
<i>Thamnophilus murinus</i> Sclater and Salvin, 1868	c	tf, ig, cm	col, ph, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Thamnophilus nigrocinereus</i> Sclater, 1855	r	ig (fi)	ph, tr	1	X			
<i>Thamnophilus aethiops</i> Sclater, 1858	f	tf, cm	col, ph, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Thamnophilus amazonicus</i> Sclater, 1858	f	ig, cm, dv	col, ph, tr	1, 2, 3, 4, 5, 6, 7, 10	X			X
<i>Megascictus margaritatus</i> (Sclater, 1855)	i	tf, cm	col, ph, tr	2, 4, 5, 6, 8, 10	X			X
<i>Thamnomanes ardesiacus</i> (Sclater and Salvin, 1867)	r	tf	tr	2, 4, 5	X			
<i>Thamnomanes caesius</i> (Temminck, 1820)	c	tf, ig, cm	col, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Pygiptila stellaris</i> (Spix, 1825)	r	tf, ig (fi)	tr	1, 9	X		X	
<i>Epinecrophylla haematonota</i> (Sclater, 1857) ²²	f	tf, cm	col, ph, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Myrmotherula brachyura</i> (Hermann, 1783)	c	tf, ig	col, tr	1, 2, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Myrmotherula ignota</i> Griscom, 1929*	r	tf	tr	6	X			
<i>Myrmotherula ambigua</i> Zimmer, 1932	r	tf	col, ph, tr	5, 8, 9	X	X	X	
<i>Myrmotherula multostriata</i> Sclater, 1858 ²³	r	ig	tr	4	X			
<i>Myrmotherula cherriei</i> Berlepsch and Hartert, 1902	f	ig, ca	col, ph, tr	1, 2, 3, 4, 6, 7, 9	X	X	X	X
<i>Myrmotherula klagesi</i> Todd, 1927*	r	ig (fi)	col, ph, tr	1	X			
<i>Myrmotherula axillaris</i> (Vieillot, 1817)	c	tf, ig, cm, ca, dv	col, ph, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X		X

SPECIES	ABUN- DANCE	HABITATS	DOCUMEN- TATION	REGIONS	JNP	REUNI	RDSA	PERN
<i>Myrmotherula longipennis</i> Pelzeln, 1868	f	tf, cm	col, ph	1, 2, 3, 5, 6, 7, 8, 9, 10	X	X		X
<i>Myrmotherula menetriesii</i> (d'Orbigny, 1837)	f	tf, cm	col, ph, tr	1, 2, 3, 4, 5, 6, 7, 10	X			X
<i>Myrmotherula assimilis</i> Pelzeln, 1868	f	ig (fi)	ph, tr	1	X			
<i>Dichrozona cincta</i> (Pelzeln, 1868)*	r	tf	col, ph	5	X			
<i>Herpsilochmus dorsimaculatus</i> Pelzeln, 1868	c	tf, ig, cm	col, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Microrhopias quixensis</i> (Cornalia, 1849)*a	i	ig (fi)	tr	1	X			
<i>Formicivora grisea</i> (Boddaert, 1783)	f	ca	col, ph, tr	2	X			
<i>Terenura spodioptila</i> Sclater and Salvin, 1881	i	tf, ig, cm	tr	1, 2, 3, 6, 7, 8, 9, 10	X		X	X
<i>Cercomacra cinerascens</i> (Sclater, 1857)	f	tf, ig	col, ph, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Cercomacra tyrannina</i> (Sclater, 1855)	f	ig, dv	col, tr	1, 2, 3, 4, 6, 8, 9, 10	X	X	X	X
<i>Myrmoborus lugubris</i> (Cabanis, 1847)*	i	ig (fi)	ph, tr	1	X			
<i>Myrmoborus myotherinus</i> (Spix, 1825)	c	tf, cm	col, ph, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Hypocnemis cantator</i> (Boddaert, 1783)* a	r	ig (fi)	col	1	X			
<i>(Hypocnemis flavescens)</i> Sclater, 1864 ²⁴	r	ig, dv	nd (obs, v)	1, 2, 3, 4, 7, 8, 9	X	X	X	
<i>Hypocnemis hypoxantha</i> Sclater, 1869	f	tf	col, ph, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Hypocnemoides melanopogon</i> (Sclater, 1857)	c	ig	col, ph, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Sclateria naevia</i> (Gmelin, 1788)	i	ig	tr	1, 2, 4, 9	X	X	X	
<i>Percnastola minor</i> Pelzeln, 1868	i	tf	col, ph, tr	1, 2, 3, 4, 6, 10	X			X
<i>Percnastola rufifrons</i> (Gmelin, 1789)*a	r	ig (fi)	ph, tr	1	X			
<i>Schistocichla leucostigma</i> (Pelzeln, 1868)	i	ig, dv	col, ph	1, 2, 3, 4, 5, 7, 8, 9, 10	X	X	X	X
<i>Myrmeciza atrothorax</i> (Boddaert, 1783)	r	dv	tr	1, 3	X			
<i>Myrmeciza disjuncta</i> Friedmann, 1945	r	ca, ig	col, ph, tr	2	X			
<i>Pithys albifrons</i> (Linnaeus, 1766)	c	tf, cm	col, ph, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Gymnopathys leucaspis</i> (Sclater, 1855)	c	tf, cm	col, ph, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Rhegmatorhina cristata</i> (Pelzeln, 1868)	i	tf, cm	col, ph, tr	2, 4, 5	X			
<i>Hylophylax naevius</i> (Gmelin, 1789)	c	tf, cm	col, ph, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Hylophylax punctulatus</i> (Des Murs, 1856)	r	ig	tr	4	X			
<i>Willisornis poecilinotus</i> (Cabanis, 1847) ²⁵	c	tf, ig, cm	col, ph, tr	1, 2, 3, 4, 5, 6, 7, 8, 10	X	X	X	X
<i>Phlegopsis erythroptera</i> (Gould, 1855)	f	tf, cm	col, ph, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X		X
Conopophagidae								
<i>Conopophaga aurita</i> (Gmelin, 1789)	i	tf	ph, tr	3, 4, 5, 7, 8, 9	X	X	X	

SPECIES	ABUN- DANCE	HABITATS	DOCUMEN- TATION	REGIONS	JNP	REUNI	RDSA	PERN
Grallariidae								
<i>Grallaria varia</i> (Boddaert, 1783)	r	tf	nd (obs, v)	2, 6, 9, 10	X	X		X
<i>Hylopezus macularius</i> (Temminck, 1823)	r	ig, tf	ph, tr	1, 2, 3, 4, 9	X	X	X	
<i>Myrmothera campanisona</i> (Hermann, 1783)	f	tf	ph, tr	2, 3, 4, 6, 8, 9	X	X		X
Formicariidae								
<i>Formicarius colma</i> Boddaert, 1783	f	tf	col, ph, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Formicarius analis</i> (d'Orbigny and Lafresnaye, 1837)	r	tf, ig, cm	nd (v)	2, 3	X			
Scleruridae								
<i>Sclerurus rufigularis</i> Pelzeln, 1868	f	tf	col, ph, tr	2, 3, 6	X			X
<i>Sclerurus caudacutus</i> (Vieillot, 1816)	r	tf	col	5	X			
Dendrocolaptidae								
<i>Dendrocincla fuliginosa</i> (Vieillot, 1818)	f	tf, ig, cm, dv	col, ph, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Dendrocincla merula</i> (Lichtenstein, 1829)	f	tf, ig, cm	col, ph, tr	1, 2, 3, 4, 5, 6, 7, 8, 9	X	X		X
<i>Deconychura longicauda</i> (Pelzeln, 1868)	i	tf	col, tr	2, 5, 6, 7, 8, 10	X			X
<i>Deconychura stictolaema</i> (Pelzeln, 1868)	i	tf, ig	col, tr	1, 2, 3, 4, 5, 6, 7, 9, 10	X	X	X	X
<i>Sittasomus griseicapillus</i> (Vieillot, 1818)	f	tf, ig, cm	col, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Glyphorhynchus spirurus</i> (Vieillot, 1819)	c	tf, ig, cm	col, ph, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Nasica longirostris</i> (Vieillot, 1818)	f	ig	col, ph, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Dendrexetastes rufigula</i> (Lesson, 1844)	r	ig	tr	1, 2, 5, 6, 7	X			X
<i>Hylexetastes stresemanni</i> Snethlage, 1925	r	tf, ig	col, tr	2, 6, 8, 10	X			X
<i>Xiphocolaptes promeropirhynchus</i> (Lesson, 1840)	i	tf, ig	ph, tr	2, 3, 4, 5, 6, 7, 8, 9	X	X		X
<i>Dendrocolaptes certhia</i> (Boddaert, 1783)	c	tf, ig, cm	col, ph, tr	1, 2, 3, 4, 5, 6, 9, 10	X	X	X	X
<i>Dendrocolaptes picumnus</i> Lichtenstein, 1820	i	tf	col, tr	2, 6, 7, 8, 9, 10	X	X	X	X
<i>Dendroplex picus</i> (Gmelin, 1788) ²⁶	c	ig	col, ph, tr	1, 2, 3, 4, 5, 6, 9, 10	X	X		X
<i>Dendroplex kienerii</i> (Des Murs, 1855) ²⁷	i	ig	col, tr	1, 2	X			
<i>Xiphorhynchus ocellatus</i> (Spix, 1824)	c	tf, ig, cm	col, ph, tr	2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Xiphorhynchus obsoletus</i> (Lichtenstein, 1820)	c	ig	ph, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Xiphorhynchus guttatus</i> (Lichtenstein, 1820)	i	tf, cm, dv	col, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Lepidocolaptes albolineatus duidae</i> Zimmer, 1934	i	tf	col, tr	2, 6	X			
<i>Campylorhamphus procurvoldes</i> (Lafresnaye, 1850)* a	r	ig (fi)	nd (v)	1	X			
Furnariidae								
<i>Synallaxis rutilans</i> Temminck, 1823	f	tf	col, ph, tr	2, 4, 5, 6, 7, 10	X			X
<i>Cranioleuca vulpina</i> (Pelzeln, 1856)	r	ig	tr	1	X			

SPECIES	ABUN- DANCE	HABITATS	DOCUMEN- TATION	REGIONS	JNP	REUNI	RDSA	PERN
<i>Cranioleuca gutturata</i> (d'Orbigny and Lafresnaye, 1838)*	r	ig (fi)	tr	1	X			
<i>Berlepschia rikeri</i> (Ridgway, 1886)	i	tf (bur), ig (bur)	tr	1, 5	X			
<i>Ancistrops strigilatus</i> (Spix, 1825)*	r	tf	col	7, 8	X			
<i>Hyloctistes subulatus</i> (Spix, 1824)	i	tf	col, tr	1, 4, 8	X			
<i>Philydor pyrrhodes</i> (Cabanis, 1848)	f	tf, ig, cm	ph	1, 2, 3, 4	X			
<i>Automolus ochrolaemus</i> (Tschudi, 1844)	r	tf, dv	ph	2	X			
<i>Automolus infuscatus</i> (Sclater, 1856)	f	tf, cm	col, ph, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Automolus rubiginosus</i> (Sclater, 1857)	r	tf	ph, tr	3, 9	X	X		
<i>Xenops milleri</i> (Chapman, 1914)	i	tf	col, tr	1, 2, 4, 7, 8	X			
<i>Xenops minutus</i> (Sparman, 1788)	f	tf, ig, cm	col, ph, tr	1, 2, 3, 4, 5, 6, 7, 8, 10	X			X
Tyrannidae								
<i>Mionectes oleagineus</i> (Salvin, 1886)	f	tf, ig, cm, dv	col, ph, tr	1, 2, 3, 4, 5, 6, 7, 9, 10	X	X	X	X
<i>Mionectes macconnelli</i> (Chubb, 1919)	i	tf	tr	2, 3	X			
<i>Corythopsis torquatus</i> (Tschudi, 1844)	f	tf, ig, cm	col, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>(Lophotriccus vitiosus)</i> (Bangs and Penard, 1921)*	r	dv	nd (v)	1	X			
<i>(Lophotriccus galeatus)</i> (Boddaert, 1783)*	r	dv	nd (v)	10,1	X			X
<i>Hemitriccus minor</i> (Sneath, 1907)	c	ig	col, tr	1, 2, 3, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Hemitriccus zosterops</i> (Pelzeln, 1868)	f	tf, cm	col, ph, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Hemitriccus minimus</i> (Todd, 1925)	r	ig, cm	col, ph, tr	2, 6, 9	X	X		X
<i>Myiornis ecaudatus</i> (d'Orbigny and Lafresnaye, 1837)	i	tf	tr	2, 6, 9, 10	X	X		X
<i>Todirostrum maculatum</i> (Desmarest, 1806)	c	ig, dv	ph, tr	1, 2, 3, 4, 6	X			X
<i>Todirostrum pictum</i> Salvin, 1897* a	r	ig (fi)	nd (v)	1	X			
<i>Todirostrum chrysocrotaphum</i> Strickland, 1850	i	tf, ig, cm	col, tr	1, 2, 3, 4, 6, 9, 10	X	X	X	X
<i>Tyrannulus elatus</i> (Latham, 1790)	c	tf, ig, cm, dv	ph, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Myiopagis gaimardii</i> (d'Orbigny, 1839)	c	tf, ig, cm, dv	tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Myiopagis caniceps</i> (Swainson, 1835)	f	tf, ig, cm	col, tr	2, 3, 6, 9, 10	X	X	X	X
<i>Myiopagis flavivertex</i> (Sclater, 1887)*	i	ig	col, ph	2, 9	X		X	
<i>(Elaenia parvirostris)</i> Pelzeln, 1868	am (r)	ca	nd (obs)	1	X			
<i>Elaenia cristata</i> Pelzeln, 1868*	am (r)	ca	tr	2	X			
<i>Elaenia ruficeps</i> Pelzeln, 1868	c	ca	col, ph, tr	2	X			
<i>Ornithion inerme</i> Hartlaub, 1853	f	tf, ig, cm	tr	1, 2, 3, 4, 6, 9, 10	X	X		X

SPECIES	ABUN- DANCE	HABITATS	DOCUMENT- TATION	REGIONS	JNP	REUNI	RDSA	PERN
<i>Camptostoma obsoletum</i> (Temminck, 1824)	f	ig, dv	tr	1, 2, 3, 4, 6, 7, 9	X	X	X	X
<i>Phaeomyias murina</i> (Spix, 1825)	i	ig, dv	nd (obs, v)	1, 2, 6, 10	X			X
<i>Zimmerius gracilipes acer</i> (Salvin and Godman, 1883)* a	r	ig (fi)	tr	1	X			
<i>Zimmerius gracilipes</i> cf. <i>gracilipes</i> (Sclater and Salvin, 1868) ²⁸	c	tf, ig, cm	col, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Inezia subflava</i> (Sclater and Salvin, 1873)	f	ig, dv	tr	1, 2, 3, 4, 6, 8, 9	X	X	X	X
<i>Cnipodectes subbrunneus</i> (Sclater, 1860)	i	tf, cm	col, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Tolmomyias sulphurescens</i> (Spix, 1825)	r	ig	tr	1	X			
<i>Tolmomyias assimilis</i> (Pelzeln, 1868)	f	tf, cm	col, tr	2, 4, 5, 6, 8, 9, 10	X	X	X	X
<i>Tolmomyias poliocephalus</i> (Taczanowski, 1884)	c	ig, dv	col, tr	1, 2, 3, 4, 5, 6, 7, 9	X	X	X	X
<i>Platyrrinchus coronatus</i> Sclater, 1858*	r	tf, ig	col, ph	1, 2, 5	X			
<i>Platyrrinchus platyrhynchos</i> (Gmelin, 1788)	i	tf, cm	col, ph, tr	2, 4, 5, 6, 7, 9, 10	X	X	X	X
<i>Onychorhynchus coronatus</i> (Statius Muller, 1776)	i	tf, ig	col, ph, tr	2, 4, 8, 9	X	X		
<i>Myiobius barbatus</i> (Gmelin, 1789)	i	tf, dv	col, tr	1, 2, 3, 5, 6, 7, 10	X			X
<i>Terenotriccus erythrurus</i> (Cabanis, 1847)	r	tf, cm	col, tr	1, 2, 3, 4, 5, 6, 7, 9, 10	X	X	X	X
<i>Neopipo cinnamomea</i> (Lawrence, 1869)	r	cm, ca	ph, tr	2	X			
<i>Lathrotriccus euleri</i> (Cabanis, 1868)	i	ig, dv	ph, tr	1, 2	X			
<i>Cnemotriccus fuscatus duidae</i> Zimmer, 1938	f	cm, ig	col, ph, tr	2, 6, 8	X			X
<i>Knipolegus poecilocercus</i> (Pelzeln, 1868) ²⁹	f	ig	ph, tr	1, 2, 6	X			X
<i>Legatus leucophaeus</i> (Vieillot, 1818)	f	ig, dv	tr	1, 2, 3, 6	X			X
<i>Myiozetetes cayanensis</i> (Linnaeus, 1766)	c	ig, dv	ph, tr	1, 2, 3, 4, 6	X			X
<i>Myiozetetes similis</i> (Spix, 1825)	r	ig, dv	nd (obs, v)	1, 3	X			
<i>Pitangus sulphuratus</i> (Linnaeus, 1766)	c	ig, dv	ph, tr	1, 2, 3, 4, 5, 6, 9	X		X	X
<i>Philohydor lictor</i> (Lichtenstein, 1823)	c	ig, dv	tr	1, 2, 3, 4, 5, 6, 9	X	X		X
<i>Conopias trivirgatus</i> (Wied, 1831)	i	ig	tr	1, 2, 3, 4, 6, 9, 10	X	X		X
<i>Conopias parvus</i> (Pelzeln, 1868)	f	tf, ig	tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Myiodynastes maculatus</i> (Statius Muller, 1776)	am (i)	tf, ig, dv	nd (obs)	2, 4	X			
<i>Megarynchus pitangua</i> (Linnaeus, 1766)	i	ig, dv	nd (obs, v)	3	X			
<i>Tyrannopsis sulphurea</i> (Spix, 1825)	i	tf (bur), ig (bur)	tr	1, 2, 3	X			
<i>Empidonomus varius</i> (Vieillot, 1818)	i	ig, dv	tr	1, 2, 3, 5, 10	X			X
<i>Tyrannus melancholicus</i> Vieillot, 1819	c	ig, dv	tr	1, 2, 3, 4, 5, 6, 9	X	X	X	X
<i>Tyrannus savana</i> Vieillot, 1808	am (f)	ig, dv	nd (obs)	1, 2, 3, 4, 6	X			X

SPECIES	ABUN- DANCE	HABITATS	DOCUMEN- TATION	REGIONS	JNP	REUNI	RDSA	PERN
<i>Rhytipterna simplex</i> (Lichtenstein, 1823)	f	tf, ig, cm	col, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Rhytipterna immunda</i> (Sclater and Salvin, 1873)	r	cm, ca	ph, tr	2	X			
<i>Myiarchus tuberculifer</i> (d'Orbigny and Lafresnaye, 1837)	f	ig, cm, dv	tr	1, 2, 6, 7, 9, 10	X	X		X
<i>Myiarchus swainsoni</i> Cabanis and Heine, 1859	am (i)	ig, dv	tr	1, 2, 3, 4	X			
<i>Myiarchus ferrox</i> (Gmelin, 1789)	c	ig, cm, dv	tr	1, 2, 3, 4, 6, 9, 10	X	X	X	X
<i>Ramphotrigon ruficauda</i> (Spix, 1825)	f	tf, ig, cm	col, ph, tr	1, 2, 3, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Attila cinnamomeus</i> (Gmelin, 1789)	f	ig	tr	1, 2, 3, 4, 5, 6, 7, 9	X	X	X	X
<i>Attila citriniventris</i> Sclater, 1859	r	cm	tr	2, 10	X			X
<i>Attila spadiceus</i> (Gmelin, 1789)	r	tf	tr	3	X			
Cotingidae								
<i>Phoenicircus nigricollis</i> Swainson, 1832	i	tf	tr, vr	8, 9	X	X		
<i>Cotinga cayana</i> (Linnaeus, 1766)	i	tf, ig	nd (obs)	2, 3, 6, 9	X	X		
<i>Lipaugus vociferans</i> (Wied, 1820)	c	tf, ig, cm	tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Xipholena punicea</i> (Pallas, 1764)	f	tf, ig, cm	tr	1, 2, 3, 4, 5, 6, 8, 9, 10	X	X	X	X
<i>Gymnoderus foetidus</i> (Linnaeus, 1758)	f	ig	nd (obs)	1, 2, 3, 4, 6, 9	X	X	X	X
<i>Perissocephalus tricolor</i> (Statius Muller, 1776)	r	ig	nd (v)	2	X			
<i>Cephalopterus ornatus</i> Geoffroy Saint-Hilaire, 1809*	i	ig (fi)	nd (obs, v)	1, 4	X			
Pipridae								
<i>Neopelma chrysocephalum</i> (Pelzeln, 1868)	f	cm, ig, tf	col, ph, tr	1, 2, 3, 4, 6, 10	X			X
<i>Tyrannetes stolzmanni</i> (Hellmayr, 1906)	c	tf, ig, cm	col, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Piprites chloris</i> (Temminck, 1822)	c	tf, ig, cm	col, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Lepidothrix coronata</i> (Spix, 1825) ³⁰	c	tf, ig, cm	col, ph, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Chiroxiphia pareola</i> (Linnaeus, 1766)	i	tf	col, ph, tr	4, 5, 8, 9	X	X		
<i>Xenopipo atronitens</i> Cabanis, 1847	f	cm, ig	col, ph, tr	1, 2, 3, 6	X			X
<i>Heterocercus flavivertex</i> Pelzeln, 1868	f	ig, dv	ph, tr	1, 2, 3, 4, 5, 6, 7, 9	X		X	X
<i>Dixiphia pipra</i> (Linnaeus, 1758) ³¹	f	tf, ig, cm	col, ph, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X		X
<i>Pipra filicauda</i> Spix, 1825	i	ig	col, ph, tr	1, 4	X			
<i>Pipra erythrocephala</i> (Linnaeus, 1758)	f	tf, ig, cm	col, ph, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
Tityridae								
<i>Schiffornis major</i> Des Murs, 1856	i	ig (fi)	col, ph, tr	1, 2, 3, 4	X			
<i>Schiffornis turdina</i> (Wied, 1831)	f	tf, ig, cm	col, ph, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Laniocera hypopyrra</i> (Vieillot, 1817)	i	tf, ig	tr	1, 2, 3, 4, 5, 6, 9, 10	X	X	X	X

SPECIES	ABUN- DANCE	HABITATS	DOCUMEN- TATION	REGIONS	JNP	REUNI	RDSA	PERN
<i>Iodopleura isabellae</i> Parzudaki, 1847*	r	dv	nd (obs)	1	X			
<i>Tityra inquisitor</i> (Lichtenstein, 1823)	r	ig	nd (obs)	9	X	X		
<i>Tityra cayana</i> Pelzeln, 1863 (<i>Tityra semifasciata</i>) (Spix, 1825)	f	tf, ig, cm	tr	1, 2, 3, 4, 5, 6, 9, 10	X	X	X	X
<i>Pachyrampus rufus</i> (Boddaert, 1783)	i	dv	tr	1	X			
<i>Pachyrampus castaneus</i> (Jardine and Selby, 1827)	r	tf, dv	nd (obs, v)	2	X			
<i>Pachyrampus polychopterus</i> (Vieillot, 1818)	r	tf, dv	nd (obs, v)	1, 4	X			
<i>Pachyrampus marginatus</i> (Lichtenstein, 1823)	f	tf, ig, cm	tr	1, 2, 3, 4, 6, 7, 8, 9, 10	X	X	X	X
<i>Pachyrampus surinamus</i> (Linnaeus, 1766)	r	tf	tr	1, 2, 3, 6	X			X
Virionidae								
<i>Cyclarhis gujanensis</i> (Gmelin, 1789)	f	ig, dv	ph, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Vireolanius leucotis</i> (Swainson, 1838)	r	tf	nd (v)	2, 7	X			
<i>Vireo olivaceus</i> (Linnaeus, 1766)	am (f)	tf, ig, cm, dv	tr	2, 3	X			
<i>Vireo altiloquus</i> (Vieillot, 1808)	nm (r)	tf	nd (obs)	1	X			
<i>Hylophilus thoracicus</i> Temminck, 1822	i	tf, ig, cm	tr	1, 2, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Hylophilus semicinerus</i> Sclater and Salvin, 1867	f	ig, dv	ph, tr	1, 2, 3, 4, 6, 9	X	X	X	X
<i>Hylophilus brunneiceps</i> Sclater, 1866	i	cm, ig	col, tr	2, 6, 10	X			X
<i>Hylophilus hypoxanthus</i> Pelzeln, 1868	c	tf, cm	col, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
<i>Hylophilus ochraceiceps</i> Sclater, 1860	f	tf	col, ph, tr	1, 2, 3, 5, 6, 10	X			X
Hirundinidae								
<i>Pygochelidon melanoleuca</i> (Wied, 1820) ³²	r	r (rb)	nd (obs)	6	X			X
<i>Atticora fasciata</i> (Gmelin, 1789)	f	r	col	1, 2, 4, 6, 9, 10	X	X	X	X
<i>Stelgidopteryx ruficollis</i> (Vieillot, 1817)	f	r	ph	1, 2, 3, 4	X			
<i>Progne tapera</i> (Vieillot, 1817) ³³	c	r	nd (obs)	1, 2, 3, 4	X			
<i>Progne subis</i> (Linnaeus, 1758)	nm (c)	r	ph, tr	1, 2, 3, 4, 6	X			X
<i>Progne chalybea</i> (Gmelin, 1789)	c	r	ph, tr	2, 3, 4, 6, 9	X		X	X
<i>Tachycineta albiventer</i> (Boddaert, 1783)	c	r	ph, tr	1, 2, 3, 4, 6, 9, 10	X	X	X	
<i>Riparia riparia</i> (Linnaeus, 1758)	nm (f)	r	nd (obs)	1, 6	X			X
<i>Hirundo rustica</i> Linnaeus, 1758	nm (f)	r	nd (obs)	1, 6	X			X
Troglodytidae								
<i>Microcerculus bambla</i> (Boddaert, 1783)	f	tf	ph, tr	1, 2, 3, 4, 5, 7, 8, 9, 10	X	X	X	X
<i>Troglodytes musculus</i> Naumann, 1823 ³⁴	f	ig, dv, ca	col, tr	1, 2, 3, 4, 6, 9	X	X	X	X

SPECIES	ABUN- DANCE	HABITATS	DOCUMEN- TATION	REGIONS	JNP	REUNI	RDSA	PERN
<i>Pheugopedius coraya</i> (Gmelin, 1789) ³⁵	f	tf, dv	col, tr	1, 2, 3, 6, 8, 9, 10	X	X		X
<i>Cantorchilus leucotis</i> (Lafresnaye, 1845) ³⁶	c	ig	tr	2, 3, 4, 5, 7, 8, 9	X	X	X	
<i>Cyphorhinus arada</i> (Hermann, 1783)	r	tf, cm	col, tr	2, 4, 5, 6, 10	X			X
Poliophtidae								
<i>Microbates collaris</i> (Pelzeln, 1868)	f	tf, cm	col, tr	2, 4, 5, 6, 7, 9, 10	X	X		X
<i>Ramphocaenus melanurus</i> Vieillot, 1819	r	ig, tf	nd (obs, v)	2	X			
<i>Poliophtila plumbea</i> (Gmelin, 1788)	c	ig, dv	col, tr	1, 2, 3, 4, 6, 9	X	X	X	X
<i>Poliophtila facilis</i> Zimmer, 1942 ³⁷	r	tf	col, tr	2, 3, 4	X			
Turdidae								
<i>Catharus fuscescens</i> (Stephens, 1817)	nm (i)	tf, cm	col, ph	2	X			
<i>Turdus leucomelas</i> Vieillot, 1818	i	dv	nd (obs, v)	1, 2	X			
<i>Turdus hauxwelli</i> Lawrence, 1869*	r	tf	col	5	X			
<i>Turdus fumigatus</i> Lichtenstein, 1823	i	ig, dv	col, ph, tr	1, 2, 3, 4, 5, 6, 9, 10	X		X	X
<i>Turdus albicollis</i> Vieillot, 1818	f	tf	ph, tr	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	X	X	X	X
Coerebidae								
<i>Coereba flaveola</i> (Linnaeus, 1758)	f	ca, ig, dv, cm	tr	1, 2, 3, 4, 6, 9	X		X	X
Thraupidae								
<i>Schistochlamys melanopis</i> (Latham, 1790)	r	ca	ph, tr	2	X			
<i>Cissopis leverianus</i> (Gmelin, 1788)	r	dv	nd (obs)	3	X			
<i>Habia rubica</i> (Vieillot, 1817)	r	tf	col, ph, tr	2, 3, 4, 5	X			
<i>Eucometis penicillata</i> (Spix, 1825)*	i	ig (fi)	ph, tr	1	X			
<i>Tachyphonus cristatus</i> (Linnaeus, 1766)	i	tf, dv	col, ph	1, 2, 3, 4, 5, 6, 7, 8	X			X
<i>Tachyphonus surinamus</i> (Linnaeus, 1766)	i	tf, cm, dv	tr	2, 5, 7, 8, 9	X	X	X	
<i>Tachyphonus luctuosus</i> d'Orbigny and Lafresnaye, 1837	i	ig, dv	nd (obs)	1, 3	X			
<i>Tachyphonus phoenicius</i> Swainson, 1838	f	ca	col, ph, tr	2	X			
<i>Lanio fulvus</i> (Boddaert, 1783)	r	tf	tr	4, 5	X			
<i>Ramphocelus nigrogularis</i> (Spix, 1825)	i	ig	ph	4, 5, 6	X			X
<i>Ramphocelus carbo</i> (Pallas, 1764)	c	ig, dv	ph, tr	1, 2, 3, 4, 5, 6, 9, 10	X	X	X	X
<i>Thraupis episcopus</i> (Linnaeus, 1766)	c	ig, dv	tr	1, 2, 3, 4, 6, 9	X		X	X
<i>Thraupis palmarum</i> (Wied, 1823)	f	ig, dv	tr	1, 2, 3, 4, 5, 9	X		X	
<i>Tangara mexicana</i> (Linnaeus, 1766)	f	tf, ig	nd (obs)	1, 4, 5	X			
<i>Tangara chilensis</i> (Vigors, 1832)	f	tf, ig	col	1, 2, 4, 6, 7	X			X
<i>Tangara punctata</i> (Linnaeus, 1766)	f	tf, ig	tr	4, 7, 10	X			X

SPECIES	ABUN- DANCE	HABITATS	DOCUMENT- TATION	REGIONS	JNP	REUNI	RDSA	PERN
<i>Tangara cayana</i> (Linnaeus, 1766)	r	ig	nd (obs)	11(B)	X			
<i>Tangara velia</i> (Linnaeus, 1758)	i	tf	nd (obs)	2, 7	X			
<i>Tersina viridis</i> (Illiger, 1811)	am? (r)	ig	nd (obs)	1	X			
<i>Dacnis flaviventer</i> d'Orbigny and Lafresnaye, 1837	i	ig, dv	nd (obs)	1, 2, 3, 4, 9	X	X		
<i>Dacnis cayana</i> (Linnaeus, 1766)	c	tf, ig, cm, dv	tr	1, 2, 3, 4, 6, 7, 8, 9	X	X		X
<i>Cyanerpes nitidus</i> (Hartlaub, 1847)	i	tf	nd (obs)	1, 2	X			
<i>Cyanerpes caeruleus</i> (Linnaeus, 1758)	i	tf, ig	col	1, 2, 5, 6, 9	X	X	X	X
<i>Cyanerpes cyaneus</i> (Linnaeus, 1766)	f	tf, ig	tr	1, 2, 4, 6, 9	X		X	
<i>Chlorophanes spiza</i> (Linnaeus, 1758)	f	tf, ig, cm, dv	nd (obs)	1, 2, 6, 7, 9	X	X		X
<i>Hemithraupis guira</i> (Linnaeus, 1766)*	r	ig	nd (obs)	1, 2	X			
<i>Hemithraupis flavicollis</i> (Vieillot, 1818)	f	tf	nd (obs)	1, 2, 4, 6, 8	X			X
Emberizidae								
<i>Ammodramus aurifrons</i> (Spix, 1825)	i	dv	nd (obs)	1	X			
<i>Sicalis columbiana</i> Cabanis, 1851	f	ig, dv	nd (obs)	1	X			
<i>Emberizoides herbicola</i> (Vieillot, 1817)	f	ca	col, ph, tr	2	X			
<i>Volatinia jacarina</i> (Linnaeus, 1766)	f	dv	nd (obs)	6	X			X
<i>Sporophila americana</i> (Gmelin, 1789)	r	dv	nd (obs)	2	X			
<i>Sporophila lineola</i> (Linnaeus, 1758)	r	dv	tr	1, 4, 6, 9,	X		X	X
<i>Sporophila nigricollis</i> (Vieillot, 1823)*	r	dv	vr	2	X			
<i>Sporophila castaneiventris</i> (Linnaeus, 1766)	i	dv, ig	nd (obs)	1	X			
<i>Sporophila angolensis</i> (Linnaeus, 1766) ³⁸	f	dv, ca	tr	1, 2, 3, 4, 6, 9	X	X	X	X
<i>Dolospingus fringilloides</i> (Pelzeln, 1870)	r	ca, ig	ph, tr	2	X			
<i>Arremon taciturnus</i> (Hermann, 1783)	r	dv	nd (obs, v)	2	X			
<i>Paroaria gularis</i> (Linnaeus, 1766)	f	ig, dv	ph, tr	2, 3, 4, 5	X			
Cardinalidae								
<i>Caryothraustes canadensis</i> (Linnaeus, 1766)	f	tf, ig, cm	col, tr	2, 6	X			X
<i>Saltator grossus</i> (Linnaeus, 1766)*	r	tf, ig	ph, tr	1	X			
<i>Saltator maximus</i> (Stadius Muller, 1776)	f	dv	ph, tr	1, 2, 3, 6, 9	X		X	X
<i>Cyanoloxia cyanooides</i> (Lafresnaye, 1847) ³⁹	f	ig, tf, cm	col, ph, tr	1, 2, 4, 5, 8, 9, 10	X		X	X
Parulidae								
<i>Dendroica fusca</i> (Stadius Muller, 1776)	nm (r)	tf	nd (obs)	4	X			
<i>Setophaga ruticilla</i> (Linnaeus, 1758)	nm (r)	dv	nd (obs)	11(B)	X			

SPECIES	ABUN-DANCE	HABITATS	DOCUMEN-TATION	REGIONS	JNP	REUNI	RDSA	PERN
<i>Seiurus noveboracensis</i> (Gmelin, 1789)*	nm (r)	ig	ph	2	X			
Icteridae								
<i>Psarocolius viridis</i> (Statius Muller, 1776)*	i	tf, ig, dv	tr	2, 3, 9	X	X	X	
<i>Psarocolius decumanus</i> (Pallas, 1769)	f	ig, dv	tr	1, 2, 3, 4, 5	X			
<i>Psarocolius bifasciatus</i> (Spix, 1824)	r	ig	tr	1, 2	X			
<i>Cacicus haemorrhous</i> (Linnaeus, 1766)	i	tf, ig	tr	2, 4, 5, 9	X		X	
<i>Cacicus cela</i> (Linnaeus, 1758)	c	ig, dv	ph, tr	1, 2, 3, 4, 5, 6, 9	X	X	X	X
<i>Icterus chryscephalus</i> (Linnaeus, 1766)	f	tf, ig, ca, dv	ph, tr	1, 2, 3, 4, 5, 6, 7, 9	X		X	X
<i>Lampropsar tanagrinus</i> (Spix, 1824)	r	ig	tr	4, 5	X			
<i>Molothrus oryzivorus</i> (Gmelin, 1788) ⁴⁰	am? (i)	ig, dv	nd (obs)	1, 6	X			X
<i>Sturnella militaris</i> (Linnaeus, 1758)	i	ca	nd (obs)	2	X			
Fringillidae								
<i>Euphonia plumbea</i> Du Bus, 1855	r	cm, ig	tr	1, 2	X			
<i>Euphonia chlorotica</i> (Linnaeus, 1766)	f	ig, dv	tr	1, 2, 3, 4, 6, 9	X		X	X
<i>Euphonia chrysopasta</i> Sclater and Salvin, 1869	i	tf, ig, cm, dv	tr	1, 2, 4	X			
<i>Euphonia minuta</i> Cabanis, 1849	i	ig	tr	2, 4	X			
<i>Euphonia rufiventris</i> (Vieillot, 1819)	f	tf, ig, cm	tr	1, 2, 3, 4, 5, 6, 7, 9, 10	X	X	X	X

Nomenclatural notes. Most species names modifications noted below are based on recent taxonomic revisions (consulted Remsen *et al.* 2010 for specific literature).

¹*Pipile cumanensis* in Borges *et al.* (2001), ²*Mitu tomentosa* in Borges *et al.* (2001), ³*Mitu tuberosa* in Borges *et al.* (2001), ⁴*Casmerodius albus* in Borges *et al.* (2001), ⁵*Asturina nitida* in Borges *et al.* (2001), ⁶*Daptrius americanus* in Borges *et al.* (2001), ⁷*Sterna superciliaris* in Borges *et al.* (2001), ⁸*Columba speciosa* in Borges *et al.* (2001), ⁹*Columba cayennensis* in Borges *et al.* (2001), ¹⁰*Columba plumbea* in Borges *et al.* (2001), ¹¹*Columba subvinacea* in Borges *et al.* (2001), ¹²*Pionopsitta barrabandi* in Borges *et al.* (2001), ¹³*Piaya minuta* in Borges *et al.* (2001), ¹⁴*Otus choliba* in Borges *et al.* (2001), ¹⁵*Otus watsonii* in Borges *et al.* (2001), ¹⁶*Ciccaba huhula* in Borges *et al.* (2001), ¹⁷*Phaethornis superciliosus* in Borges *et al.* (2001), ¹⁸*Polyplanchta aurescens* in Borges *et al.* (2001), ¹⁹*Ceryle torquata* in Borges *et al.* (2001), ²⁰*Notharchus macrorhynchos* in Borges *et al.* (2001), ²¹*Capito niger* in Borges *et al.* (2001), ²²*Myrmotherula haematonota* in Borges *et al.* (2001), ²³*Myrmotherula surinamensis* in Borges *et al.* (2001), ²⁴This identification is only tentative since the species could be potentially confused with *Hypocnemis peruviana*, ²⁵*Hylophilax poecilinota* in Borges *et al.* (2001), ²⁶*Xiphorhynchus picus* in Borges *et al.* (2001), ²⁷*Xiphorhynchus necopinus* in Borges *et al.* (2001), ²⁸This identification is only tentative since the species needs a better taxonomic resolution (see Remsen *et al.* 2010), ²⁹*Phaeotriccus poecilocercus* in Borges *et al.* (2001), ³⁰*Pipra coronata* in Borges *et al.* (2001), ³¹*Pipra pipra* in Borges *et al.* (2001), ³²*Atticora melanoleuca* in Borges *et al.* (2001), ³³*Phaeoprogne tapera* in Borges *et al.* (2001), ³⁴*Troglodytes aedon* in Borges *et al.* (2001), ³⁵*Thryothorus coraya* in Borges *et al.* (2001), ³⁶*Thryothorus leucotis* in Borges *et al.* (2001), ³⁷*Polioptila guianensis* in Borges *et al.* (2001), ³⁸*Oryzoborus angolensis* in Borges *et al.* (2001), ³⁹*Cyanocompsa cyanooides* in Borges *et al.* (2001), ⁴⁰*Scaphidura oryzivora* in Borges *et al.* (2001). ^aSpecies recorded only on Jussara Island within the limits of JNP but very near the left margin of Rio Negro. ^bSpecies recorded only on Onças Island within the limits of JNP but very near the left margin of Rio Negro.