

Birds of the Serra dos Órgãos, State of Rio de Janeiro, Southeastern Brazil: a review

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RESUMO. **Aves da Serra dos Órgãos, Estado do Rio de Janeiro, sudeste do Brasil: uma revisão.** É feita uma revisão da avifauna da Serra dos Órgãos, baseada em pesquisa na literatura, espécimes em coleções ornitológicas e trabalhos de campo. Um total de 458 espécies foi registrado na região. Entre essas espécies, 340 (74%) tiveram espécimes coletados e depositados em coleções ornitológicas. Noventa e uma espécies (20%) não foram anteriormente citadas para a região pela literatura ornitológica. Embora várias destas espécies sejam predominantemente florestais (incluindo vários endemismos da Mata Atlântica), a maioria pode ser encontrada em ambientes secundários e borda de mata. Espécies encontradas tanto em baixas quanto em elevadas altitudes são mais comuns que as espécies restritas às altitudes mais baixas ou aquelas registradas somente acima de 800m. No presente estudo, 140 espécies (30%) foram consideradas raras na Serra dos Órgãos e 21 espécies não têm sido recentemente registradas na região, embora somente a jacutinga (*Aburria jacutinga*) pode ser considerada extinta na Serra dos Órgãos. Aparentemente algumas espécies foram erroneamente citadas para a região. Entre as ameaças às aves da região estão o intenso desmatamento na parte baixa da serra, a atividade de caçadores, a captura de pássaros para gaiolas e o crescimento da ocupação humana na região.

PALAVRAS-CHAVE: Aves, Avifauna, Mata Atlântica, Serra dos Órgãos, Sudeste do Brasil

ABSTRACT. A review of the birds of the Serra dos Órgãos is based on a survey of the literature, specimens in ornithological collections and field study. A total of 458 species was recorded in the region. Specimens of 340 species are housed in ornithological collections. Ninety one species (20%) were not previously reported for the region. Although several of these species are predominantly forest birds (including several endemic Atlantic Forest species), the majority is found in second growth and forest borders. Birds of both lower and higher altitudes are more common than species restricted to lower altitudes or only recorded above 800m. In this study, 140 species (30%) were considered rare in Serra dos Órgãos, and 21 species have not been recently found in the region although only the Black-fronted Piping-Guan *Aburria jacutinga* can be considered extinct in the Serra dos Órgãos. Some species were apparently erroneously reported in the region. Threats to the birds of the region are the intensive deforestation at lower altitudes, hunting activity, captures of birds for the pet trade and the growth of human populations in the region.

KEY WORDS: Atlantic Forest, Avifauna, birds, Organs Mountains, Southeastern Brazil.

The southeastern Brazil has one of the richest and best-known avifaunas in South America. The Serra dos Órgãos (Organs Mountains), located in the central region of the state of Rio de Janeiro, is perhaps the ornithologically best-known region of the Serra do Mar Atlantic coastal mountain range. The region includes two Important Bird Areas in the Atlantic Forest region of Brazil (Bencke *et al.* 2006). Since the early nineteenth century the Serra dos Órgãos has been frequently visited by naturalists. Initially only the lower slopes were visited in the areas along the colonial road from Minas Gerais, through Petrópolis, to the Bay of Guanabara. After the construction of the road from Rio de Janeiro to Teresópolis in 1959, ornithologists and tourists have visited greatly to the region. However, no general ornithological study dedicated to the Serra dos Órgãos has been published, although more than a hundred publications have made references to birds observed and collected in the region.

Here, we review the birds of the Serra dos Órgãos based on a survey of the literature, specimens in ornithological collections and field study in several locations within the region.

Review of the zoological expeditions. The birds of the Serra dos Órgãos first became known in the early 1800s through the collections and reports of several foreign scientists (Johann Natterer, Johann B. von Spix, Carl Friedrich P. von Martius, Auguste St. Hilaire, and William Swainson) who visited the Fazenda Mandioca, owned by the Russian Consul Georg H. von Langsdorff (Pinto 1979, Sick 1997). Jean-René Constant Quoy and Joseph Paul Gaimard also visited the Serra dos Órgãos in 1818 (Menegaux and Hellmayr 1906a). On the invitation of Langsdorff, the Frenchman Edouard Ménétriès collected birds in the Serra da Estrela (southern foot of Serra dos Órgãos) and Teresópolis during his trip to Brazil in the early 1820s (Ménétriès 1835, Chrostowski 1921). Some spe-

cies collected by Ménétriès, such as White-fringed Antwren *Formicivora grisea* (formerly *Formicivora deluzae*) have not been found again anywhere in the Serra dos Órgãos. Several of the locations in which he collected (including the Serra dos Órgãos for some species, such as the White-fringed Antwren) are possibly erroneous (Pacheco 2004).

Peter Wilhelm Lund collected birds from the Serra dos Órgãos during his first visit to Brazil (1826, before he settled in Lagoa Santa, Minas Gerais) (Pinto 1950, Paynter and Traylor 1991). These birds are only labelled "Rio de Janeiro", and so the exact location is impossible to determine. However, Lund's field notebook (housed in the Zoological Museum of the Copenhagen University), contains more precise information. In that notebook, his two Kinglet Calyptura *Calyptura cristata* specimens were described as taken in the Serra dos Órgãos, including a brief description of their behaviour and stomach contents (J. Fjeldså, *in lit.* 2005).

During their voyage to South America (1843-1847) the Count Francis Castelnau and Emille Deville also visited the Serra da Estrela (Castelnau 1850-1859).

In 1865 the Thayer Expedition from the Museum of Comparative Zoology came to Brazil. Members of the expedition visited Petrópolis and Teresópolis, but no specimens of birds were collected there (Dick 1977).

Emil Goeldi studied birds mainly in Colônia Alpina (Teresópolis), between 1891 and 1894. Most of the bird records made by Goeldi were published in 1894 (volume 1) and 1900 (volume 2) in the classic *As aves do Brasil* (Goeldi 1894a-1900). Approximately 720 specimens collected by Goeldi in Teresópolis are housed in the Bern Museum (NMBE) (Güntert *et al.* 1993).

Other researchers visited the Serra dos Órgãos, including Bourgoin (Petrópolis, 1891) (Schneider and Sick 1962), Paulo Miranda Ribeiro (Teresópolis, 1899 and 1929) (Miranda-Ribeiro 1929), Ernst Garbe (Petrópolis, 1901) (Pinto 1938, Paynter and Traylor 1991), Paulo Schirch (Teresópolis, 1914-1915) (Schirch 1928, 1931), Victor de Miranda Ribeiro and Paulino Rocha (Teresópolis, 1920 and 1926) (FMR unpublished data), Emilie Snethlage (Petrópolis, 1922-1923) (Snethlage 1936), Alípio de Miranda-Ribeiro (Teresópolis, between 1916 and 1929) (Miranda-Ribeiro 1929, Paynter and Traylor 1991), George K. Cherrie and Leo E. Miller, of the American Museum of Natural History (Teresópolis, 1926) (Hellmayr 1929a), and José Hidasi (Petrópolis, 1951-1953 and 1957-1958) (Paynter and Traylor 1991).

Some unexpected birds (Yellow-chevronled Parakeet *Brotogeris chiriri*, Narrow-billed Woodcreeper *Lepidocolaptes angustirostris* and Black-throated Saltator *Saltator atricollis*) were attributed to Teresópolis from material collected by Heinrich Reinisch in 1905, 1914, and 1916 (Schneider and Sick 1962). Nowadays we know that the locations on the labels of those specimens is incorrect (Pacheco 1992).

One of the most important collections from the region (from the Fazenda Boa Fé, on the road from Rio to Teresópolis) was collected by Pedro de M. Britto in 1942-1943. This

was during the study by the Rio de Janeiro laboratory of the Yellow Fever Research Service. Specimens from this collection are in the Museu Nacional do Rio de Janeiro (MNRJ) and in the Museu de Zoologia da Universidade de São Paulo (MZUSP) (FMR *pers. obs.*). Several notable items for the region are included, such as the type specimen of Grey-winged Cotinga *Tijuca condita* and the latest specimens of Cinnamon-vented Piha *Lipaugus lanioides* from the Serra dos Órgãos.

During this investigation, David E. Davis published on the annual cycle of plants, mosquitoes, birds, and mammals (Davis 1945) and mixed-species bird flocks (Davis 1946).

Helmut Sick visited Teresópolis several times since 1940 and Margaret H. Mitchell also visited Teresópolis and Petrópolis in the early 1950s (Mitchell 1957, Paynter and Traylor 1991).

Herbert F. Berla collected birds in Guapi (=Guapi-Açu), Cachoeiras de Macacu, in 1956 and 1962, and Fazenda Boa Fé, Teresópolis, between March 1941 and July 1968. These specimens are now in the Los Angeles Museum (LACMH) collection (Christina Couroux *pers. com.* 2002).

Two trips to the Serra dos Órgãos National Park (in December 1980 and November-December 1981) were included in a series of surveys of endemic forest birds by the British Ornithologists' Union / World Wildlife Fund Project in southeast Brazil (Scott and Brooke 1985). Forested slopes below the park were also visited. Some threatened species were observed during the survey, including Mantled Hawk *Leucophernis polionotus* and Purple-winged Ground-Dove *Claravis godefrida*. A total of 203 species was recorded, including several forest endemics. The surprising absence of several common species in the Serra dos Órgãos region was also noted.

The most important result of the BOU/WWF Project was the rediscovery in the Serra dos Órgãos National Park of a small population of the recently described *Tijuca condita*, found in elfin forest between 1,800 and 1,950m (Scott and Brooke 1993).

The Serra dos Órgãos National Park and other conservation units in the region. Situated 60 km northeast of the city of Rio de Janeiro, the Serra dos Órgãos National Park (created in 30 November 1939) includes more than 10,000 ha and some of the highest peaks of the Serra do Mar massif with altitudes varying from 145 to 2,263 m (Drummond 1997). Another large conservation unit in the region is the Environmental Protection Area (Área de Proteção Ambiental - APA) of Petrópolis, located in the municipalities of Petrópolis, Duque de Caxias, Magé and Guapimirim, which comprises approximately 59,000 ha. The Três Picos State Park, encompassing the municipalities of Teresópolis, Guapimirim, Cachoeiras de Macacu, Nova Friburgo and Silva Jardim, is the largest state park in the state of Rio de Janeiro, with 46,350 ha. The APA Bacia do Rio dos Frades, located at Teresópolis, is another important conservation unit in the region, with 7,500 ha, while the Paraíso Ecological Station (4,920 ha) and the APA Floresta do Jacarandá (2,700 ha), both in Teresópolis, are also other important conservation units in the region.

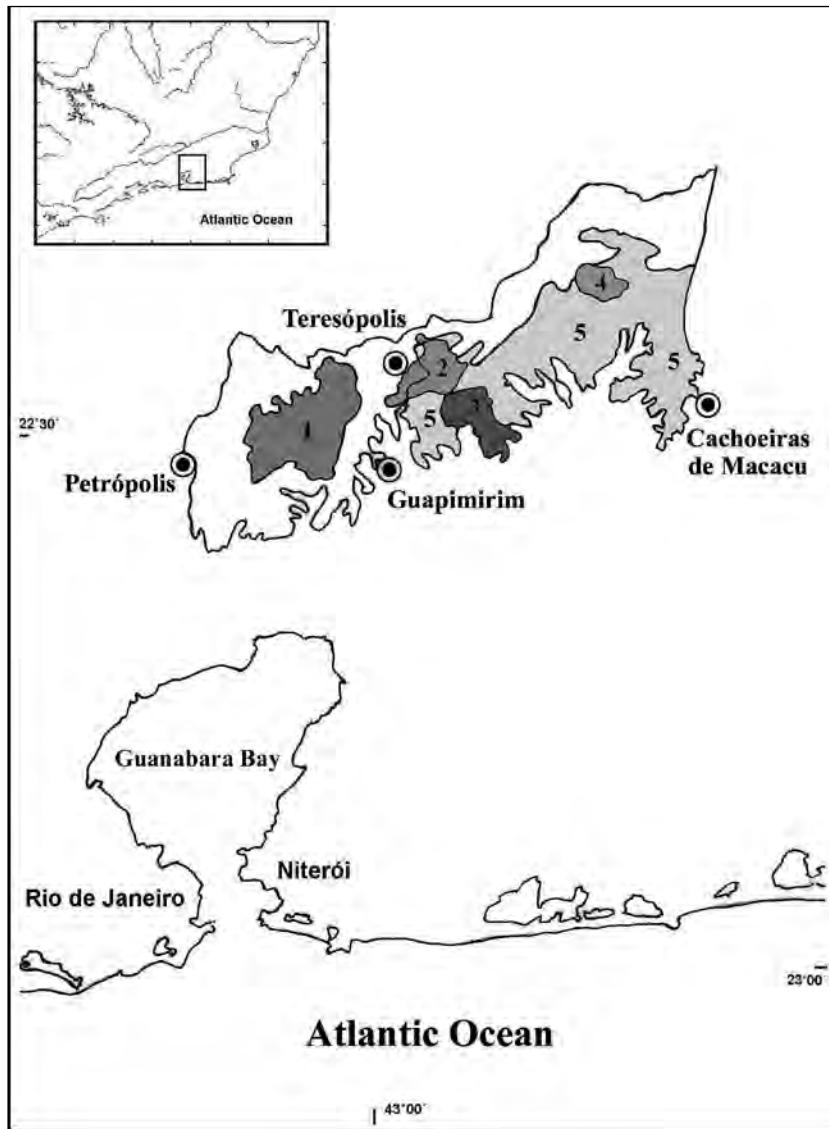


Figure 1. Map of the Serra dos Órgãos region (encircled area) in the State of Rio de Janeiro and local protected areas (1 - Serra dos Órgãos National Park, 2 - APA Floresta do Jacarandá, 3 - Paraíso Ecological Station, 4 - APA Bacia do Rio dos Frades, 5 - Três Picos State Park).

STUDY AREA AND METHODS

Study Area. The study area was defined as all regions above 100 m located between the BR-040 highway to the west, the Pico da Caledônia to the east and the BR-495 and RJ-130 highways to the north (Figure 1). This study includes fully the Important Bird Area (IBA) of the Serra dos Órgãos e partially the IBA Região Serrana do Rio de Janeiro (Bencke *et al.* 2006)

Average temperatures in the study area are slightly below the regional average annual temperature. At 1,000 m the average temperature is 18°C, and the annual average rainfall varies between 2,000 and 2,500 mm, gradually increasing with altitude to a maximum of 3,600 mm (Drummond 1997).

Four distinct types of vegetation exist in the region and vary with altitude. The dominant vegetation below 800 m is a slightly disturbed forest. On the lower slopes there are large areas of cleared land. Montane forests dominate from 800 to 1,800 m. Emergent trees >30 m are not uncommon and the understory is relatively dense. Elfin forest occurs between 1,800 and 2,000 m with a 5-10 m canopy, and is rich in epiphytic bromeliads. Highland grassy areas ('campos de altitude') occur above 2,000 m, where grasses, small trees and bushes predominate (Drummond 1997).

Methods. Records of birds were based on visual observations, captures in mist-nets, museum specimens and a survey of the ornithological literature.

Bird surveys were conducted since 1978 at several locations in the Serra dos Órgãos (Serra dos Órgãos National Park, APA Floresta do Jacarandá, Vale da Revolta, Paraíso, Frade, Bomsucesso, Garrafão, Subaio, Anil, Boca do Mato, Santo Aleixo, Corujas, Três Picos, APA of Petrópolis, Nhunguaçu and Inhomirim). More than 100 visits to the region totaled more than 8,000 h of field work.

Data from 166 publications with records of birds from the Serra dos Órgãos region (as defined here) were studied. The status of each species (in its proper habitat) is defined in the terms Common, Fairly common, Uncommon and Rare (See Appendix). Museum specimens

from the study region are indicated by the abbreviations of the institutions where they are housed (See Appendix). Taxonomy and systematic sequence follow CBRO (2006).

RESULTS AND DISCUSSION

The Birds of Serra dos Órgãos. A total of 458 bird species, from 63 families, was recorded in the Serra dos Órgãos region (Appendix). This represents 70% of the 653 species with confirmed records for the state of Rio de Janeiro (Alves *et al.* 2000). Several species (36%) are predominantly forest birds, but the majority (64%) may be found in second growth and forest edge. Species occurring at lower and higher elevations are common or fairly common (59%), while most species (74%) recorded exclusively above or below 800 m are uncommon or rare. Ninety one species (20%) had not previously been cited for the region in the ornithological literature.

The Serra dos Órgãos region holds 45 of the 100 bird species considered to be threatened or probably threatened in the state of Rio de Janeiro, five (20%) of the 25 species of unknown status and two (10%) of the 20 species probably

Table 1. Bird species not recently recorded in the Serra dos Órgãos region.

Species	Status
<i>Crypturellus variegatus</i>	Single unconfirmed record (Sick 1997)
<i>Aburria jacutinga</i>	No record for decades. Certainly extinct.
<i>Falco deiroleucus</i>	Single old specimen in NMBE
<i>Amazona rhodocorytha</i>	Single record (Wied 1832)
<i>Asio stygius</i>	Single old specimen in NMBE
<i>Nyctibius aethereus</i>	Two old specimens in NMBE (Goeldi 1894a-1900)
<i>Chordeiles acutipennis</i>	Old specimen in MNRJ
<i>Caprimulgus rufus</i>	Single old record (Goeldi 1894a-1900)
<i>Chrysolampis mosquitus</i>	Single old record (Des Murs 1855)
<i>Chloroceryle aenea</i>	Single unconfirmed record (Sick 1997)
<i>Campephilus robustus</i>	Six old specimens in NMBE (Goeldi 1894a-1900)
<i>Formicivora grisea</i>	Single old specimen in MACSP (Ménétriès 1835)
<i>Cercomacra brasiliiana</i>	Single old specimen in MACSP (Ménétriès 1835)
<i>Hylopezu s nattereri</i>	Probably a mistaken citation in Krabbe and Schulenberg (2003a)
<i>Phylloscartes oustaleti</i>	Old specimens in FMNH, MNRJ and MZUSP
<i>Onychorhynchus swainsoni</i>	Old specimens in MNRJ and MZUSP
<i>Lipaagus lanioides</i>	Last records in 1942 (specimens in MNRJ and MZUSP)
<i>Pyroderus scutatus</i>	Old specimen in MNRJ and Goeldi's record (Goeldi 1894a-1900)
<i>Anthus hellmayri</i>	Single unconfirmed record (Sick 1997)
<i>Poospiza lateralis</i>	Single unconfirmed record (Sick 1997)
<i>Sporophila angolensis</i>	Old specimens in MNRJ, MPEG and NMBE

extinct in the state of Rio de Janeiro (Alves *et al.* 2000). These constitute 11.5 % of all species recorded in the region. Some of these species have been frequently recorded from a number of localities, as Saw-billed Hermit *Ramphodon naevius* and Buff-throated Purpletuft *Iodopleura pipra*.

The Kinglet *Calyptura cristata* and Grey-winged Cotinga *Tijuca condita* are two of the most poorly known birds of the region. While *C. cristata* is known from only three recent sightings (Sick 1997, Pacheco and Fonseca 2000, Pacheco and Fonseca 2001), *T. condita* has been seen regularly by ornithologists and birdwatchers in elfin cloud-forest above about 1,800 m.

Thirty percent of the species (140 species) are considered rare in this study. Although 21 species have not been recently recorded, only one species, the Black-fronted Piping-Guan (*Aburria jacutinga*), should be considered extinct in the region. Other species, were apparently in error when reported (Table 1).

Among the species recorded in the Serra dos Órgãos, 340 (74%) are found in the ornithological collections which have been surveyed by us. Approximately 2,535 specimens collected in the Serra dos Órgãos region were found and included in this study. From the 118 species not in collections, 40 (34%) were cited in only one publication, as the records of Osprey *Pandion haliaetus*, Lesser Swallow-tailed Swift *Panyptila cayennensis*, Blackpoll Warbler *Dendroica striata*, and Pileated Finch *Coryphospingus pileatus* made by Scott

and Brooke (1985) and that of Long-tailed Potoo *Nyctibius aethereus*, Ocellated Poorwill *Nyctiphrynus ocellatus*, Rufous Nightjar *Caprimulgus rufus* and Robust Woodpecker *Campephilus robustus* made by Goeldi (1894a-1900). *Panyptila cayennensis* and *Nyctiphrynus ocellatus* have been recently recorded in the region by RP, and *Coryphospingus pileatus* by JFP. Sick (1997) was the only author to mention the Little Tinamou *Crypturellus soui* (also recorded by RP), Variegated Tinamou *Crypturellus variegatus*, American Pygmy Kingfisher *Chloroceryle aenea*, Hellmayr's Pipit *Anthus hellmayri* and Red-rumped Warbling-Finch *Poospiza lateralis* for the Serra dos Órgãos region.

Some species reported in the Serra dos Órgãos in several publications, were not represented in collections. These included the rare White-necked Hawk *Leucopternis lacernulatus*, the uncommon Buff-throated Purpletuft *Iodopleura pipra* and the now probably extinct in the region Black-fronted Piping-Guan *Aburria jacutinga*.

Seven important collecting sites were identified in the region during the study (Table 2). Teresópolis was predominant as collecting locality (53.1%). Other significant localities were Colônia Alpina (Teresópolis), Petrópolis, Fazendas Boá Fé and C. Guinle (Teresópolis), Ingá (Teresópolis), Guapiaçu and Corujas.

Species accounts

Solitary Tinamou *Tinamus solitarius*. This endemic tinamou is

considered a threatened (Collar *et al.* 1992, Alves *et al.* 2000, Brasil 2003) or near-threatened species (BirdLife International 2000). The Solitary Tinamou is threatened by hunting pressure and by severe habitat destruction (Sick 1997). It is possibly still found in Paraíso, on the middle slopes at Guapimirim (Coimbra Filho *pers. comm.* to JFP). The species is still recorded, but very infrequently, in the Serra do Tinguá Biological Reserve and on the lower slopes in the Cachoeiras de Macacu region.

Black-fronted Piping-Guan *Aburria jacutinga*. Probably extinct in the Serra dos Órgãos, this endangered species (BirdLife International 2000) has disappeared from Bahia, Espírito Santo and Rio de Janeiro, and nearly so from Minas Gerais (Collar *et al.* 1992, Alves *et al.* 2000, Brasil 2003). A common species in Serra dos Órgãos in the early 20th century, *P. jacutinga* has not been recorded in the last decades (Scott and Brooke 1985, Mallet-Rodrigues and Noronha 2003a). The species is still sometimes listed for the Serra dos Órgãos (Wege and Long 1995), but the possibility of its survival, even in reduced numbers, seems remote.

White-necked Hawk *Leucopternis lacernulatus*. Like the Mantled Hawk, this raptor is rare and threatened (Collar *et al.* 1992, Alves *et al.* 2000, Brasil 2003) or vulnerable (BirdLife International 2000). Endemic to the Atlantic Forest it is found from Alagoas to Santa Catarina. In Serra dos Órgãos, records are principally from below 400 m, but it may be found at higher elevations, sympatrically to the Mantled Hawk. Severe habitat destruction in the lowlands and on the lower slopes is the principal threat to the species. It has been recorded sporadically on the southern slopes of the Serra dos Órgãos (Guapimirim).

Mantled Hawk *Leucopternis polionotus*. A rare and local endemic forest hawk, the Mantled Hawk is currently classified as probably threatened in the state of Rio de Janeiro (Alves *et al.* 2000) and globally near-threatened (BirdLife International 2000). It seems to occur at lower densities than *L. lacernulatus*, but it is less threatened by deforestation because of its more extensive range at higher altitudes (above 600 m) (Ferguson-Lees and Christie 2001). More data are required on occurrence and population size in the Serra dos Órgãos region.

Crowned Eagle *Harpyhaliaetus coronatus*. An endangered species according to BirdLife International (2000). One individual was seen flying by RP over an open area in Campanha (Teresópolis) on 10 October 1999. Another bird was recorded in the Serra dos Órgãos National Park (1,800 m) on 02 November 1999 (RP). One specimen is known from Nova Friburgo (MNRJ).

Harpy Eagle *Harpia harpyja*. A single sighting from 27 January 1980, on the middle slopes, is the only record of this large bird in the Serra dos Órgãos region (Raposo *et al.* 1994, Pacheco *et al.* 2003). Globally near-threatened (BirdLife International 2000).

Orange-breasted Falcon *Falco deiroleucus*. One Goeldi specimen (in NMBE) of this rare falcon is the unique evidence of occurrence of this species in the Serra dos Órgãos region. Although Orange-breasted Falcon has been considered a probably extinct species in the state of Rio de Janeiro (Alves *et al.* 2000), it may be an overlooked and very rare vagrant species.

Purple-winged Ground-Dove *Claravis goedefrida*. Extremely rare in the forests of southeastern Brazil, this species is considered a threatened bird (Collar *et al.* 1992, Alves *et al.* 2000, Brasil 2003) or critically endangered (BirdLife International 2000). It is apparently associated with seeding bamboo (Sick 1997). The last published records (all near the Serra dos Órgãos National Park boundary) are from the 1980s (Collar *et al.* 1992, Scott and Brooke 1985). Forest fragmentation may have disturbed the bamboo seeding cycle, affecting this bamboo specialist, and others, such as Temminck's Seedeater (*Sporophila falcirostris*) and Blackish-blue Seedeater (*Amaurospiza moesta*).

Ruddy Quail-Dove *Geotrygon montana*. A fairly common species in the understory. It is apparently absent (or very scarce) on the lower slopes of the Serra dos Órgãos during the winter (FMR unpublished data).

Blue-throated Parakeet *Pyrrhura cruentata*. This threatened (Collar *et al.* 1992, Alves *et al.* 2000, Brasil 2003) or vul-

Table 2. Collecting localities in the Serra dos Órgãos region.

Localities	Specimens
Teresópolis	1,347 (53.1%)
Colônia Alpina (Teresópolis)	718 (28.3%)
Petrópolis	167 (6.6%)
Estrada Rio-Teresópolis (Fazendas Boa Fé and C. Guinle)	121 (4.8%)
Ingá (Teresópolis)	48 (1.9%)
Guapiaçu (Cachoeiras de Macacu)	41 (1.6%)
Corujas (Guapimirim)	36 (1.4%)
Mata do Quebra Frasco (Teresópolis)	23 (0.9%)
other localities	34 (1.3%)

nerable species (BirdLife International 2000) was only found in the Serra dos Órgãos (no specified locality) between May 1981 and August 1982 (Raposo *et al.* 1994).

Red-browed Amazon *Amazona rhodocorytha*. Globally endangered (BirdLife International 2000) and endemic to eastern Brazil, this rare and local parrot (Collar *et al.* 1992, Alves *et al.* 2000, Brasil 2003) was cited for the Serra dos Órgãos by Wied (1832). This record probably refers to “second-hand information or a misunderstanding of the name for a site” (Collar *et al.* 1992) because Wied seems to have not visited intensively the Serra dos Órgãos (Wied 1989).

Long-tailed Potoo *Nyctibius aethereus*. This rare potoo is known for the Serra dos Órgãos from two specimens (a pair) collected by E. Goeldi on December 1892 and October 1893 in Teresópolis. Both specimens are housed in NMBE. Long-tailed Potoo may be simply an overlooked species.

Stygian Owl *Asio stygius*. Poorly known, this owl has not been recorded in the Serra dos Órgãos since a male was collected in Teresópolis by E. Goeldi in 27 July 1893 (specimen in NMBE).

Robust Woodpecker *Campephilus robustus*. The largest Brazilian woodpecker is known for the Serra dos Órgãos from only six specimens (four males and two females in NMBE) taken in Teresópolis by E. Goeldi between June 1892 and January 1894 (Goeldi 1894a-1900). The species may now be extinct in the Serra dos Órgãos.

Cinereous Antshrike *Thamnomanes caesius*. Rare in the foothills and on the lower slopes of Serra dos Órgãos, this species is known from Guapi-Açu at Cachoeiras de Macacu (specimen in LACMNH) and Corujas, Guapimirim (Mallet-Rodrigues and Noronha 2003a). Previously considered a common species in the forested areas of the city of Rio de Janeiro (Sick and Pabst 1968), it is now probably extinct there and very scarce and locally distributed elsewhere in the state of Rio de Janeiro.

White-fringed Antwren *Formicivora grisea*. Like the Slaty Bristlefront, this species is known for the region on the basis of a single specimen (a female) collected by E. Ménétriès “not far from Serra dos Órgãos in the lands of Mr. Deluze”. Family Deluze was owner of the Fazenda Constância at Teresópolis in the early nineteenth century (Gonzaga and Pacheco 1990). Described as a new species, *Formicivora deluzae* (Ménétriès 1835), it was later considered to be indistinguishable from a typical female *Formicivora grisea* (Hellmayr 1929a), although Pinto (1978) cited *F. deluzae* as a subspecies of *F. grisea*.

This antwren has not been recorded again in Serra dos Órgãos except for a supposed voice record by Helmut Sick, in Teresópolis in 1949 (Gonzaga and Pacheco 1990). This is

probably another species erroneously ascribed to the Serra dos Órgãos region on the basis of a Ménétriès specimen. The type of *F. deluzae* could have been collected in north of Mato Grosso or southern Amazonia (Pacheco 2004). It seems unlikely that this antwren has become locally extinct as it is reasonably resistant to habitat disturbance.

Rio de Janeiro Antbird *Cercomacra brasiliiana*. This near-threatened species (BirdLife International 2000) is known for the foothills of the Serra dos Órgãos region from a Ménétriès’ specimen (Ménétriès 1835) collected in the Serra da Estrela (vide Slaty Bristlefront), and a female collected by Herbert F. Berla in Guapi-Açu at Cachoeiras de Macacu in August 1956 (specimen in LACMNH). Although it has not been recently recorded in the region, it may still occur locally.

Speckle-breasted Antpitta *Hylopezus nattereri*. Although this species occurs from Misiones (northern Argentina) to state of Minas Gerais (southeastern Brazil), it is known for the state of Rio de Janeiro in the Serra da Mantiqueira region (Itatiaia National Park, Visconde de Mauá) and Serra da Bocaina. Citation for the Serra dos Órgãos National Park (Krabbe and Schulenberg 2003a) is probably erroneous.

Slaty Bristlefront *Merulaxis ater*. This near threatened species (BirdLife International 2000) is known for long time in the region only from one old specimen collected by Ménétriès at the Serra da Estrela, near the Fazenda Mandioca of the Russian Consul George H. von Langsdorff. This specimen was used by Ménétriès (1835) as the type of *Malacorhynchus cristatellus*, now a synonym of *Merulaxis ater*, and is housed in the ornithological collection of the Museum of the Academy of Science of St. Petersburg (Russia) together with the majority of the specimens of Brazilian birds collected by Ménétriès. The species has been found again in the Serra dos Órgãos only in the region of Teodoro de Oliveira, northeast of the Três Picos State Park, in the boundary Cachoeiras de Macacu-Nova Friburgo and at the Guapi-Açu Ecological Reserve (REGUA) in the foothills of the Serra dos Órgãos.

Tawny-throated Leafcutter *Sclerurus mexicanus*. A song attributed to this species was heard by JFP (and Bret M. Whitney) from the understory of humid forest on 17 December 1994 in Anil, Cachoeiras de Macacu. This species is also known for the state of Rio de Janeiro in the Desengano State Park (Sick 1997).

Pale-breasted Spinetail *Synallaxis albescens*. This spinetail is uncommon in the area, the only records coming from open habitat near Frades (Teresópolis) on 25 October 1992 and 28 November 1992 (RP pers. obs.).

Gray-capped Tyrannulet *Phyllomyias griseocapilla*. This endemic and near threatened tyrannid (BirdLife International 2000) has been recorded by us between 200 and 1,900 m, al-

though more commonly above 800 m. The species has been recorded year round feeding on fruits of *Struthanthus sp.* (Loranthaceae). It was also seen feeding on *Alchornea triplinervia* (Euphorbiaceae) and *Schefflera sp.* (Araliaceae) (RP *pers. obs.*).

Grey Elaenia *Myiopagis caniceps*. The song of this species was heard in the Hotel Serra dos Tucanos, Boca do Mato (Cachoeiras de Macacu) on 30 November 2004 (RP *pers. obs.*).

Oustalet's Tyrannulet *Phylloscartes oustaleti*. The near threatened *P. oustaleti* (BirdLife International 2000) has not been recently recorded in the Serra dos Órgãos. This is another species that may now be extinct in the region, but its continued occurrence is not totally discarded. This tyrannulet can still be found in Tinguá and Macaé de Cima (west and east of the Serra dos Órgãos, respectively).

Russet-winged Spadebill *Platyrinchus leucoryphus*. This vulnerable species (BirdLife International 2000) was recorded by RP in the Sítio Rosemary in Anil (Cachoeiras de Macacu) on 09 November 1994, 10 December 1994, and 28 April 1995. Probably a very rare and local species in Serra dos Órgãos region.

Atlantic Royal Flycatcher *Onychorhynchus swainsoni*. Now an endangered bird (BirdLife International 2000), the apparently unique record of this rare tyrannid in the Serra dos Órgãos is from two specimens (MNRJ, MZUSP) collected in 1942 in Teresópolis. As this species still occurs up to 2000 m on the Serra do Itatiaia (FMR *pers. obs.*) is not improbable your occurrence in the Serra dos Órgãos nowadays.

Rufous-tailed Attila *Attila phoenicurus*. First recorded in Serra dos Órgãos by Pacheco and Parrini (1997) in February 1991 at the Fazenda Vale da Revolta (Teresópolis). Several singing birds were recorded simultaneously on 15 February 2001 by FMR at the Serra dos Órgãos National Park (at about 1,000 m). Other local records from the region are also from spring and summer (October to March) between 900 and 1,200 m (FMR *pers. obs.*). Probably a species expanding its geographical range from southern Brazil or a very local population overlooked in the past.

Black-headed Berryeater *Carpornis melanocephala*. This vulnerable cotinga (BirdLife International 2000) was recorded in locations in Cachoeiras de Macacu by RP. It was also recorded in the Sítio Rosemary, Anil (100 m) on 10, 17 and 31 December 1994 and 22 February 1995. Other record is from Fazenda Serra Queimada (100 m) on 25 March 1995.

Grey-winged Cotinga *Tijuca condita*. This uncommon inhabitant of elfin cloud forest is restricted to Serra dos Órgãos and the Serra do Tinguá (state of Rio de Janeiro), between 1,370 m and 2,040 m. Considered a vulnerable species due to its re-

stricted area (BirdLife International 2000), it was described in 1980 on the basis of a female collected in 1942 at the Fazenda Guinle (Teresópolis) (Snow 1980).

Grey-winged Cotinga has been recently recorded in areas of suitable habitat (J.M. Barnett *in litt.*, J. Minns *in litt.*), but it is an elusive bird, occurring at very low densities, and most records are by voice only, made by ornithologists and bird-watchers familiar with its vocalisation.

Kinglet Calyptura *Calyptura cristata*. This tiny, enigmatic and critically endangered bird (BirdLife International 2000) is known from 45 (or more) museum specimens collected in the 19th century in the state of Rio de Janeiro. Descourtilz (1854-1856) stated that Kinglet Calyptura inhabited secondary growth in abandoned clearings in mountainous regions, where it lived in pairs, climbing vines and exploring clumps of Tillandsia bromeliads in search of insects and small berries.

After more than a century with no records of the species, two birds were observed in forest border in 27, 29 and 30 October 1996 at Garrafão (Guapimirim), near the Rio de Janeiro-Teresópolis road (Sick 1997, Pacheco and Fonseca 2000, 2001). Further visits to the site have failed to locate Kinglet Calyptura again.

Cinnamon-vented Piha *Lipaugus lanioides*. This near threatened L. lanioides (BirdLife International 2000) has not been recorded in Serra dos Órgãos since the old record from Fazendas Boa Fé and Comarí (Teresópolis) in 1942 (Davis 1945). This record was documented by several specimens now housed in the ornithological collections of the MNRJ and MZUSP. There are eight specimens collected in Teresópolis between August 1891 and May 1893 in the Goeldi's Collection in NMBE. Cinnamon-vented Piha may now be extinct in the Serra dos Órgãos region.

Red-ruffed Fruitcrow *Pyroderus scutatus*. This large cotinga was cited by Goeldi (1894a) as a rare bird in Serra dos Órgãos. He stated that recorded the species on only two occasions, but was unable to collect a specimen. We could find only an old Bourgain skin from Petrópolis (specimen in the MNRJ).

Red-ruffed Fruitcrow is now a rare and threatened species in the state of Rio de Janeiro (Alves et al. 2000). It has been recorded recently only in Itatiaia and on Ilha Grande. This is another species that may now be extinct in the Serra dos Órgãos.

Thrush-like Mourner *Schiffornis turdina*. This species has been uncommonly recorded by RP in the Sítio Rosemary in Anil (Cachoeiras de Macacu) and in the Centro de Primatologia do Rio de Janeiro (Guapimirim, 150 m).

Elegant Mourner *Laniisoma elegans*. This probably threatened (Collar et al. 1992, Alves et al. 2000) or near threatened cotinga (BirdLife International 2000) has been recorded on

the high slopes (above 800 m) of the Serra dos Órgãos, apparently only during the breeding season (Davis 1945, Collar et al. 1992). RP recorded the species on twelve occasions in the Fazenda Vale da Revolta and Vargem Grande (800 to 1,050 m) between October and December. Records from the lower slopes seem to be more common during autumn and winter (Collar et al. 1992, Mallet-Rodrigues and Noronha 2003a), but new data to confirm a possible altitudinal movement are desirable.

Yellow-legged Thrush *Platycichla flavigipes*. A common thrush in Serra dos Órgãos, it has been recorded by FMR on the lower slopes (near 300 m) only from April to September (autumn/winter) (Mallet-Rodrigues and Noronha 2003a), while on the higher slopes (900-1100 m) it is found mainly from October to March (spring/summer). However, new data are desirable to confirm a possible altitudinal or latitudinal movement.

Black-goggled Tanager *Trichothraupis melanops*. Another common species which probably makes seasonal movements. Records on lower slopes (below 400 m) are from February to September, being a very common species during the winter (Mallet-Rodrigues and Noronha 2003a). However, it has apparently been recorded throughout the year at higher altitudes (RP pers. obs.). Studies of possible local movements of this species would be welcome.

Black-legged Dacnis *Dacnis nigripes*. This near threatened and endemic bird of the Atlantic Forest of coastal southeastern Brazil (BirdLife International 2000) has a restricted range in which records are local and sporadic. Its resemblance to the much commoner Blue Dacnis *Dacnis cayana* may be a source of confusion, although females differ greatly. Black-legged Dacnis is poorly represented in museum collections.

Known for the Serra dos Órgãos region from two specimens in American Museum (AMNH) and Museu Paraense Emílio Goeldi (MPEG). It has also been recorded at the Serra dos Órgãos National Park and in the adjacent lowlands (Collar et al. 1992, Wege and Long 1995). Two males and five females were seen in a mixed flock together to Blue Dacnis and Fawn-breasted Tanager *Pipraeidea melanonota* in August 1996 at Posse (1,200 m), Teresópolis (RP pers. obs.). Apparently makes altitudinal movements in at least part of its range, but these possible movements are still poorly known.

Buffy-fronted Seedeater *Sporophila frontalis*. Although a rare and threatened species (Collar et al. 1992, Alves et al. 2000, Brasil 2003), there are several records, including specimens in Field Museum (FMNH), LACMH, MNRJ and MZUSP, from Serra dos Órgãos around Teresópolis (Collar et al. 1992). Often numerous when bamboo is seeding, when flocks of dozens of birds have been recorded, its population is now probably much reduced because of deforestation and the cagebird trade. It has been considered a globally vulnerable species (BirdLife International 2000).

Temminck's Seedeater *Sporophila falcirostris*. Another bamboo specialist with restricted range in southeastern Brazil, and adjacent Paraguay and Argentina, this rare seedeater (vulnerable species according BirdLife International 2000) is also a victim of habitat destruction and the cage bird trade.

We could not find any skin from Serra dos Órgãos region, but one individual was collected nearby in Tinguá in March 1955 (specimen in MNRJ) (Collar et al. 1992). We have never recorded Temminck's Seedeater in any locality in Serra dos Órgãos. As Buffy-fronted Seedeater, probably it is a sporadic visitor to the Serra dos Órgãos region, but further surveys are needed to clarify its status.

Lesser Seed-Finch *Sporophila angolensis*. Although not cited for Serra dos Órgãos by any author, there are four old skins of this species from the region in MNRJ (one specimen), MPEG (two specimens) and NMBE (one specimen).

Much valued as a cage bird, it has not recently been recorded (since 1950's) in the Serra dos Órgãos and may be extinct in the region. However, more information is required as it may possibly occur locally.

Bird conservation in the Serra dos Órgãos

The birds of Serra dos Órgãos are a rich sample of the Atlantic Forest avifauna in the state of Rio de Janeiro. From the 458 bird species recorded in the Serra dos Órgãos region at least 340 species are confirmed by museum specimens, 111 have been recently found (although not represented in collections) and only 21 species have not been recently recorded in the Serra dos Órgãos region.

The total number of species known to the Serra dos Órgãos region constitutes one of the largest local avifaunas for the state of Rio de Janeiro. Scott and Brooke (1985) cited 203 bird species for the Serra dos Órgãos National Park, 288 for the Serra do Tinguá Biological Reserve and 222 for the Poço das Antas Biological Reserve. Parker and Goerck (1997) reported 251 species for Itatiaia National Park and 127 species for Tijuca National Park, and Buzzetti (2000) recorded 333 species from 18 localities on the southern coast of the state of Rio de Janeiro. In an old article, Ihering (1900a) cited 368 species for Cantagalo and Nova Friburgo, while Pacheco et al. (1992) recorded 405 species in the Desengano State Park, north of the state of Rio de Janeiro. Only Pacheco (1988) has cited a larger number of bird species than the present study for a region in the state of Rio de Janeiro, reporting historical and contemporary records of 475 species in the municipality of Rio de Janeiro.

The difficulty of access to many areas has helped to conserve the magnificent forests of the Serra dos Órgãos, but essential for the preservation of the local wild life is the existence of several conservation units in the region.

The southern portion of the Serra dos Órgãos is now the critical area for the preservation of the highly diverse fauna of the region. To the north, the valley of the Rio Paraíba do Sul has been extensively deforested and lost part of its

original avifauna. Birds of open habitats and recent invaders have benefited from forest clearance and are now common in this region (Pacheco 1993). These include Laughing Falcon *Herpetotheres cachinnans*, White-eared Puffbird *Nystalus chacuru*, Tail-banded Hornero *Furnarius figulus*, Rufous Hornero *Furnarius rufus*, Rufous-fronted Thornbird *Phacellodomus rufifrons*, Masked Water-tyrant *Fluvicola nengeta*, Curl-crested Jay *Cyanocorax cristatellus*, Chalk-browed Mockingbird *Mimus saturninus*, Hooded Tanager *Nemosia pileata* and others.

At lower altitudes, intensive deforestation in the past has removed large tracts of lowland forest. The remaining forests are isolated fragments of distinct sizes and are unable to support the diversified original fauna. Large predators, like some birds of prey, are extremely rare in some regions. Cracids also have been intensively searched by hunters.

While the lowland forests are threatened, the montane forest has on the whole been well protected. Nevertheless, in several places there is a considerable hunting pressure from hunters that have used a wide variety of traps and also shot-guns. Several animals like armadillos, rodents, lizards, tinamous and guans are widely hunted. Solitary Tinamou *Tinamus solitarius* is a good example of a bird species threatened by hunting and is now a rare bird in the region.

Another problem is the capture of seedeaters, saltators and saffron finches as cage-birds. The populations of these birds have shown a substantial decline in the lowlands, where human pressure is particularly intense. Many passerines are captured by boys and sold locally at derisory prices.

The growth of human occupation of the region is extremely worrying, especially the proliferation of slums and clandestine settlements throughout the region. Several areas along the road from Teresópolis to Nova Friburgo (RJ-130) have been degraded by irregular human habitations.

Grey-winged Cotinga *Tijuca condita* is indubitably one of the most remarkable bird species in Serra dos Órgãos. Described by David Snow in 1980, this local and rare cotinga is found at a very low density in elfin forest above 1,800 m in the Serra dos Órgãos National Park. It may be located by its call from a hidden perch within the dense canopy. The highly restricted and inaccessible habitat of this species is not threatened, but the small size of its population gives cause for concern.

Of the birds species that have not been found recently in the Serra dos Órgãos, Black-fronted Piping-guan *Aburria jacutinga* was a fairly common bird in the region until the early twentieth century (Collar *et al.* 1992, Sick 1997) but is now locally extinct. The existence of old records of species that have not been recently recorded in the Serra dos Órgãos may indicate that other extinctions may have occurred in the region (*Campephilus robustus*, *Lipaugus lanioides*, *Pyroderus scutatus*, *Sporophila angolensis*). However, other factors may play a part. The antbird *Formicivora (grisea) deluzae*, described from Serra dos Órgãos, was never found again but the type locality has been considered to be incorrect (Naumburg 1939,

Pacheco 2004). Nevertheless, the rediscovery of the mysterious Kinglet *Calyptura cristata* in the region (Sick 1997, Pacheco and Fonseca 2000, 2001) made it clear that it is dangerous to make precipitated assumptions about the present status of the various bird species which have not recently been found in this spectacular massif in southeastern Brazil.

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REFERENCES

- Aguirre, A. C. and A. D. Aldrighi (1983) *Catálogo das aves do Museu da Fauna*. 1^a Parte. Rio de Janeiro: Companhia Souza Cruz Indústria e Comércio.
- ____ and ____ (1987) *Catálogo das aves do Museu da Fauna*. 2^a Parte. Rio de Janeiro: IBDF.
- Alves, M. A. S., J. F. Pacheco, L. A. P. Gonzaga, R. B. Cavalcanti, M. A. Raposo, C. Yamashita, N. C. Maciel and M. Castanheira (2000) *Aves*, p. 113-124. In: Bergallo, H. G., C. F. D. Rocha, M. A. S. Alves and M. Van Sluys (orgs.) *A fauna ameaçada de extinção do Estado do Rio de Janeiro*. Rio de Janeiro: EdUERJ.
- Baptista, L. F., P. W. Trail and H. M. Horblit (1997) Family Columbidae (Pigeons and Doves), pp. 60-243 In: *Handbook of the Birds of the World. Vol. IV. Sandgrouse to Cuckoos* (J. del Hoyo, A. Elliott and J. Sargatal, eds.). Barcelona: Lynx Edicions.
- Bencke, G.A., G.N. Maurício, P.F. Develey e J.M. Goerck (orgs.) (2006). *Áreas Importantes para a Conservação das Aves no Brasil. Parte I – Estados do Domínio da Mata Atlântica*. São Paulo: Save Brasil.
- Berla, H. F. (1946) Lista das aves colecionadas em Pernambuco, com descrição de uma subespécie n., de um alótipo [fêmea] e notas de campo. *Bol. Mus. Nac., Zool.*, 65: 1-35.

- _____. (1954) Um novo “Psittacidae” do nordeste brasileiro (Aves, Psittaciformes). *Rev. Brasil. Biol.* 14: 59-60.
- Berlepsch, H. G. von (1888) Descriptions of new species and subspecies of birds from the Neotropical Region. *Auk* 5: 449-460.
- Berlitz, J. (1934a) Notes ornithologiques au cours d'un voyage au Brésil. *Oiseau* 4: 238-266.
- _____. (1934b) Contribution à l'étude biogéographique des Trochilidés du Brésil oriental. *Oiseau* 4: 414-424.
- BirdLife International (2000) *Threatened birds of the world*. Barcelona and Cambridge: Lynx Edicions and BirdLife International.
- Brasil [Ministério do Meio Ambiente] (2003) *Lista da fauna brasileira ameaçada de extinção*. Instrução Normativa do Ministério do Meio Ambiente nº 03/2003. Diário Oficial da União nº 101, Seção 1 (dia 28.05.2003): 88-97.
- Brooke, M. de L. (1983a) Ecological segregation of woodcreepers (Dendrocolaptidae) in the state of Rio de Janeiro, Brazil. *Ibis* 125: 562-567.
- _____. (1983b) In search of the hidden cotinga. *Wildlife* 25: 344.
- Burmeister, H. (1856) *Systematische Übersicht der Thiere Brasiliens welche während einer Reise durch die Provinzen von Rio de Janeiro und Minas Geraës gesammelt oder beobachtet wurden von Dr. Hermann Burmeister, ö Prof. d. Zoologie und Direct. d. Zool. Mus. der Universität zu Halle*. Berlin: Georg Reimer.
- Buzzetti, D. R. C. (2000) *Distribuição altitudinal de aves em Angra dos Reis e Parati, sul do estado do Rio de Janeiro, Brasil*, p. 131-148. In: Alves, M.A.S., J.M.C. Silva, M. Van Sluys, H.G. Bergallo and C.F.D. Rocha (Orgs.) A ornitologia no Brasil: Pesquisa atual e perspectivas. Rio de Janeiro: EdUERJ.
- Castelnau, F., Comte de (1850-1859) *Expedition dans les parties centrales de l'Amérique du Sud, de Rio de Janeiro à Lima et de Lima au Para, executée en 1843 à 1847 sous la direction du Comte Francis de Castelnau*. Paris: Chez P. Bertrand.
- Chantler, P. (1999) Family Apodidae (Swifts), p. 388-457 In: *Handbook of the Birds of the World. Vol. V. Barn-Owls to Hummingbirds* (J. del Hoyo, A. Elliott and J. Sargatal, eds.). Barcelona: Lynx Edicions.
- Chróstowski, T. (1921) Sur les types d'oiseaux néotropicaux du Musée Zoologique de l'Academie des Sciences de Pétrograde. *Annales Zoologici Musei Polonici de Historiae Naturalis* 1: 9-30.
- Collar, N. J. (1997) Family Psittacidae (Parrots), pp. 280-477 In: *Handbook of the Birds of the World. Vol. IV. Sandgrouse to Cuckoos* (J. del Hoyo, A. Elliott and J. Sargatal, eds.). Barcelona: Lynx Edicions.
- _____. (2001) Family Trogonidae (Trogons), p. 80-127 In: *Handbook of the Birds of the World. Vol. 6. Mousebirds to Hornbills* (J. del Hoyo, A. Elliott and J. Sargatal, eds.). Barcelona: Lynx Edicions.
- _____, L. P. Gonzaga, N. Krabbe, A. Madroño Nieto, L. G. Naranjo, T. A. Parker III and D. C. Wege (1992) *Threatened birds of the Americas: The ICBP/IUCN Red Data Book*. Cambridge: ICBP.
- Comitê Brasileiro de Registros Ornitológicos (2006) *Listas das aves do Brasil. Versão 14/2/2006*. <http://www.cbro.org.br/CBRO/listabr.htm> (acesso em 04/03/2006).
- Cory, C. B. and C. E. Hellmayr (1924-1927) Catalogue of birds of the Americas. *Field Mus. Nat. Hist., Zool., Sér. 13 (3, 4, 5), Publ.* 223, 234, 242.
- Davis, D. E. (1945a) The annual cycle of plants, mosquitoes, birds, and mammals in two Brazilian Forests. *Ecol. Monogr.* 15: 243-295.
- _____. (1945b) The occurrence of the incubation-patch in some Brazilian birds. *Wilson Bull.* 57: 188-190.
- _____. (1946) A seasonal analysis of mixed flocks of birds in Brazil. *Ecology* 27: 168-181.
- Des Murs, O. (1856) Oiseaux. In: F.L.L. Castelnau. *Expedition dans les parties centrales de l'Amérique du Sud, de Rio de Janeiro à Lima et de Lima au Para, executée en 1843 à 1847 sous la direction du Comte Francis de Castelnau*. Tome 5, Part I. Paris: Chez P. Bertrand.
- Descourtilz, J. T. (1854-1856) *Ornithologie Brésilienne ou Histoire des Oiseaux du Bresil, remarquables par leur plumage, leur chant ou leurs habitudes*. Rio de Janeiro: Thomas Reeves.
- Dick, M. M. (1977) Stations of the Thayer Expedition to Brazil, 1865 – 1866. *Breviora* 444: 1-37.
- Drummond, J. A. (1997) O Parque Nacional da Serra dos Órgãos: Uma síntese da Serra do Mar, p. 183–207. In: *Devastação e preservação ambiental: Os parques nacionais do Estado do Rio de Janeiro*. Niterói: EDUFF.
- Ferguson-Lees, J. and D. A. Christie (2001) *Raptors of the World*. London: Christopher Helm.
- Fitzpatrick, J. W. (2004) Family Tyrannidae (Tyrant-Flycatchers), p. 170-462 In: *Handbook of the Birds of the World. Vol. IX. Cotingas to Pipits and Wagtails* (J. del Hoyo, A. Elliott and D. Christie, eds.). Barcelona: Lynx Edi-

- cions. (Accounts of *Hemitriccus diops* and *H. orbitatus* by B.M. Clock and that of *Attila phoenicurus* by B.A. Walther)
- Gagliardi, R. L. (2006) Novo registro brasileiro para a mariquita-do-Canadá – Canada Warbler *Wilsonia canadensis* (Linnaeus, 1766). *Atualidades Ornitológicas* 132: 14-15.
- Goeldi, E. A. (1894a-1900) *As aves do Brasil*. Rio de Janeiro: Livraria Clássica de Alves and Cia.
- _____ (1894b) On the nesting of *Phibalura flavirostris* and *Lochmias nematura*. *Ibis*: 484-494.
- _____ (1896) On the nesting of *Nyctibius jamaicensis* and *Sclerurus umbretta*. *Ibis*, Sér. 7, 7: 299-309.
- _____ (1905) On *Myiopatis semifusca*, a small neotropical tyrant-bird, harmful to tree-culture as a disseminator of the parasitic Loranthaceae. *Ibis*, ser. 8, 5: 169-179.
- Gonzaga, L. P. (1989) Catálogo dos tipos na coleção ornitológica do Museu Nacional. I – não-Passeriformes. *Bol. Mus. Para. Emílio Goeldi*, Sér. Zool., 5: 9-40.
- _____ and J. F. Pacheco (1990) Two new subspecies of *Formicivora serrana* (Hellmayr) from southeastern Brazil, and notes on the type locality of *Formicivora delutae* Ménétriés. *Bull. B.O.C.* 110: 187-193.
- _____ and _____ (1995) A new species of *Phylloscartes* (Tyrannidae) from the mountains of southern Bahia, Brazil. *Bull. B.O.C.* 115: 88-97.
- Güntert, M., K. Gossenbacher, C. Huber, A. Aerni e H. U. Morgenthaler (1993) The E. A. Goeldi zoological collection in the Natural History Museum Bern: Comments on an inventory. *Jahrb. Naturhist. Mus. Bern* 11: 147-161.
- Harrison, B. G. (1928) Notes on a few days spent in Brazil and Uruguay. *Oolog. Rec.* 8: 19-24.
- Hellmayr, C. E. (1906) Revision der Spix'schen Typen brasilianischer Vögel. *Abhandl.*, 2, *Kl. Bayr. Ak. Wiss.* 22: 562-726.
- _____ (1908) An account of the birds collected by Mons. G.A. Baer in the State of Goyaz, Brazil. *Novit. Zool.* 15: 13-102.
- _____ (1929a) A contribution to the ornithology of northeastern Brazil. *Field Mus. Nat. Hist. Publ., Zool.*, 12: 235-501.
- _____ (1929b-1938) Catalogue of birds of the Americas. *Field Mus. Nat. Hist., Zool.*, Sér. 13 (6, 7, 8, 9, 11), *Publ.* 266, 330, 347, 365, 430.
- _____ and B. Conover (1942) Catalogue of birds of the Americas. *Field Mus. Nat. Hist., Zool.*, Sér. 13, Part 1, *Publ.* 514.
- Ihering, H. (1900a) Aves observadas em Cantagallo e Nova Friburgo. *Rev. Mus. Paulista* 4: 149-164.
- _____ (1900b) Catálogo crítico-comparativo dos ninhos e ovos das aves do Brasil. *Rev. Mus. Paulista* 4: 191-300.
- Krabbe, N. and T. Schulenberg (2003a) Family Formicariidae (Ground-antbirds), p. 682-731 In: *Handbook of the Birds of the World. Vol. VIII. Broadbills to Tapaculos* (J. del Hoyo, A. Elliott and D. Christie, eds.). Barcelona: Lynx Edicions.
- _____ and _____ (2003b) Family Rhinocryptidae (Tapaculos), p. 748-787 In: *Handbook of the Birds of the World. Vol. VIII. Broadbills to Tapaculos* (J. del Hoyo, A. Elliott and D. Christie, eds.). Barcelona: Lynx Edicions.
- Lencioni-Neto, F. (1996) Uma nova subespécie de *Knipolegus* (sic) (Aves, Tyrannidae) do estado da Bahia, Brasil. *Rev. Brasil. Biol.* 56: 197-201.
- Luigi, G. and J. Nacinovic (1991) Sobre a presença de *Buteo albonotatus* Kaup, 1847 (Falconiformes, Accipitridae) e *Cariama cristata* (Linnaeus, 1766) (Gruiformes, Cariamidae) na Serra dos Órgãos, RJ. *Resumos I Congr. Bras. Orn.*, Belém, R.61, P. 39.
- _____, M.A. Raposo and I.M. Schloemp (1996) Notas sobre a biologia de *Dysithamnus xanthopterus* (Burmeister, 1857[sic])(Aves, Formicariidae). *Iheringia, Sér. Zool.* 80: 21-26.
- Mallet-Rodrigues, F. (2001) Foraging and diet composition of the Black-capped Foliage-gleaner (*Philydor atricapillus*). *Ornitologia Neotropical* 12: 255-263.
- _____ (2003) Registro documentado do azulinho (*Passerina glaucoaerulea*) no Estado do Rio de Janeiro. *Atualidades Ornitológicas* 113: 3.
- _____ (2005) Molt-breeding cycle in passerines from a foothill forest in southeastern Brazil. *Rev. Brasil. Orn.* 13: 155-160.
- _____ and M. L. M. de Noronha (2001) Molt pattern in *Pyriglena leucoptera* with considerations about the study of molt. *Ararajuba* 9: 51-55.
- _____ and _____ (2003a) The avifauna of low elevations in the Serra dos Órgãos, Rio de Janeiro state, south-east Brazil. *Cotinga* 20: 51-56.
- _____ and _____ (2003b) Variação na taxa de captura de passeriformes em um trecho de mata atlântica de encosta, no sudeste do Brasil. *Ararajuba* 11: 111-118.

- _____, V. S. Alves and M. L. M. de Noronha (1997) O uso do tártaro emético no estudo da alimentação de aves silvestres no estado do Rio de Janeiro. *Ararajuba* 5: 219-228.
- _____, M. L. M. de Noronha and R. Parrini (2001). Alimentação do tiê-de-topete (*Trichothraupis melanops*) em um trecho de Mata Atlântica do Sudeste do Brasil. *Tangara* 1: 125-129.
- Marantz, C., A. Aleixo, L. Bevier and M. Patten (2003) Family Dendrocolaptidae (Woodcreepers), p. 358-447 In: *Handbook of the Birds of the World. Vol. VIII. Broad-bills to Tapaculos* (J. del Hoyo, A. Elliott and D. Christie, eds.). Barcelona: Lynx Edicions.
- Marín, M. (1997) Species limits and distribution of some New World Spine-tailed Swifts (*Chaetura* spp.). *Ornithol. Monogr.* 48: 431-443.
- Menegaux, A. and C. E. Hellmayr (1906a) Étude des espèces critiques et des types du groupe des Passareaux Trachéophones de l'Amérique Tropicale appartenant aux collections du muséum. *Bull. Soc. Hist. Nat. Autun* 19: 42-126.
- _____ and _____ (1906b) Étude des espèces critiques et des types du groupe des Passareaux Trachéophones de l'Amérique Tropicale appartenant aux collections du muséum. *Bull. Soc. Philomat. Paris* 8: 24-58.
- Ménétriès, E. (1835) Monographie de la famille de Myiotheriinae. *Mem. Acad. Imp. Sci. St. Petersb.*, 6th ser., *Sci. Math., Phys. Nat.* 3: 442-543.
- Miranda-Ribeiro, A. de (1920) Revisão dos psittacídeos brasileiros. *Rev. Mus. Paulista* 12: 1-82.
- _____ (1938) Notas ornitológicas. XIII. Tinamidae. *Rev. Mus. Paulista* 23: 667-788.
- Miranda-Ribeiro, P. de (1929) Da nidificação de *Chaetura cinereiventris*. *Bol. Mus. Nac.* 5: 101-103.
- Mitchell, M. H. 1957. *Observations on Birds of Southeastern Brazil*. Toronto: Toronto Univ. Press.
- Nacinovic, J. B. and I. M. Schloemp (1992) Apontamentos sobre a alimentação de algumas aves silvestres brasileiras. *Bol. CEO* 8: 6-15.
- Naumburg, E. M. B. (1930) The birds of Matto Grosso, Brazil. A report on the birds secured by the Roosevelt-Rondon Expedition. *Bull. Amer. Mus. Nat. Hist.*, 60: 1-432.
- _____ (1937) Studies of birds from eastern Brazil and Paraguay, based on a collection made by Emil Kaempfer. *Bull. Amer. Mus. Nat. Hist.*, 74: 139-205.
- _____ (1939) Studies of birds from eastern Brazil and Paraguay, based on a collection made by Emil Kaempfer. *Bull. Amer. Mus. Nat. Hist.*, 76: 231-276.
- Novaes, F.C. (1947) Notas sobre os Conopophagidae do Museu Nacional (Passeriformes, Aves). *Summa Brasilensis Biologiae* 1:243-250.
- _____ (1949) Variação nos tucanos brasileiros do gênero *Ramphastos* L. (Ramphastidae, Piciformes). *Rev. Brasil. Biol.* 9: 285-296.
- _____ (1953) A new race of tody-tyrant from southeastern Brasil (Tyrannidae, Aves). *Rev. Brasil. Biol.* 13: 235-236.
- _____ (1959) Variação geográfica e o problema da espécie nas aves do grupo *Ramphocelus carbo*. *Bol. Mus. Para. Emílio Goeldi*, 22: 1-63.
- _____ (1961a) Sobre as raças geográficas de *Philydor rufus* (Vieillot) no Brasil (Furnariidae, Aves). *Pap. Av. Zool.* 14: 227-236.
- _____ (1961b) Distribuição e diferenciação geográfica de "Automolus leucophthalmus" (Wied) e "Automolus infuscatus" (Sclater) (Furnariidae, Aves). *Rev. Brasil. Biol.* 21: 179-192.
- _____ (1965) Notas sobre algumas aves da Serra Parima, Território de Roraima (Brasil). *Bol. Mus. Para. Emílio Goeldi*, 54: 1-10.
- Pacheco, J. F. (1988) Acréscimos à lista de aves do município do Rio de Janeiro. *Bol. FBCN* 23: 104-120.
- _____ (1992) Sobre os registros de aves típicas do Brasil Central para a Serra dos Órgãos, RJ, a partir de coleções de H. Reinisch, depositadas no Museu Nacional do Rio de Janeiro. *Resumos II Congr. Bras. Orn.*, Campo Grande, R.7.
- _____ (1993) Expansões geográficas de aves do Rio de Janeiro. *Resumos III Congr. Bras. Orn.*, Pelotas, R. 42
- _____ (2004) Sabará ou Cuiabá? O problema das localidades de Ménétriès. *Atualidades Ornitológicas* 117: 4-5.
- _____ and C. Bauer (1995) Adolf Schneider (1881-1946). *Atualidades Ornitológicas* 65: 10-13.
- _____ and P.S.M. da Fonseca (2000) A admirável redescoberta de *Calyptura cristata* por Ricardo Parrini no contexto das preciosidades aladas da Mata Atlântica. *Atualidades Ornitológicas* 93: 6-7.
- _____ and _____ (2001) The remarkable rediscovery of the Kinglet *Calyptura cristata*. *Cotinga* 16: 48-51.

- _____ and _____ (2002) Resultados de excursão ornitológica a determinadas áreas dos Estados de São Paulo, Santa Catarina e Rio Grande do Sul em janeiro, 1990. *Atualidades Ornitológicas* 106: 3-5.
- _____ and L. P. Gonzaga (1995) A new species of *Synallaxis* of the ruficapilla/infuscata complex from eastern Brazil (Passeriformes: Furnariidae). *Ararajuba* 3: 3-11.
- _____ and R. Parrini (1997) O limite norte de distribuição do tinguaçu-castanho (*Attila phoenicurus*) na Mata Atlântica. *Atualidades Ornitológicas* 75: 4.
- _____ and _____ (1998) O status de algumas espécies não documentadas do estado do Rio de Janeiro. *Atualidades Ornitológicas* 84: 5.
- _____, C. E. S. Carvalho and P. S. M. Fonseca (1992) Contribuição ao conhecimento ornitológico do Parque Estadual do Desengano, RJ. *Resumos II Congr. Bras. Orn.*, Campo Grande, R.10.
- _____, P. S. M. Fonseca and R. Parrini (2003) Coletânea cronológica de registros recentes de *Harpia harpyja* (L.) para os estados do Rio de Janeiro e Espírito Santo. *Atualidades Ornitológicas* 111:7.
- Parrini, R. and J. F. Pacheco (2006) Comportamento alimentar de *Anabacerthia amurotis* (Passeriformes: Furnariidae) na Mata Atlântica Montana do Rio de Janeiro, Brasil. *Atualidades Ornitológicas* 132: 4-7.
- Parker III, T. A. and J. M. Goerck (1997) The importance of national parks and biological reserves to bird conservation in the atlantic forest region of Brazil. *Ornithol. Monogr.* 48: 527-541.
- Paynter, Jr., R. A. and M. A. Traylor Jr. (1991) *Ornithological gazeteer of Brazil*. 2 vols. Cambridge: Museum of Comparative Zoology, Harvard University.
- Pinto, O. M. O. (1938) Catálogo das aves do Brasil e lista dos exemplares que as representam no Museu Paulista. *Rev. Mus. Paulista* 22: 1-566.
- _____ (1944) *Catálogo das aves do Brasil e lista dos exemplares existentes na coleção do Departamento de Zoologia. 2ª Parte*. São Paulo: Sec. Agric. Ind. e Comércio.
- _____ (1949) Esboço monográfico dos Columbidae brasileiros. *Arq. Zool.* 7:241-324.
- _____ (1950) Peter W. Lund e sua contribuição à ornitologia brasileira *Pap. Av. Zool.* 9: 89-136.
- _____ (1952) Súmula histórica e sistemática da ornitologia de Minas Gerais. *Arq. Zool.* 8:1-51.
- _____ (1953) Sobre a Coleção Carlos Estevão de peles, ninhos e ovos das aves de Belém (Pará). *Pap. Av. Zool.* 11: 113-224.
- _____ (1954) Resultados ornitológicos de duas viagens científicas ao Estado de Alagoas. *Pap. Av. Zool.* 12: 1-97.
- _____ (1966) *Estudo crítico e catálogo remissivo das aves do Território Federal de Roraima*. Manaus: INPA.
- _____ (1978) *Novo Catálogo das Aves do Brasil*. Primeira Parte. São Paulo: Empresa Gráfica da Revista dos Tribunais.
- _____ (1979) *A Ornitológia do Brasil através das idades (Século XVI a Século XIX)*. Brasiliensia Documenta 13. São Paulo: Empresa Gráfica da Revista dos Tribunais.
- _____ and E. A. Camargo (1952) Nova contribuição à ornitologia do Rio das Mortes – Resultados da expedição conjunta do Instituto Butantan e Departamento de Zoologia. *Pap. Av. Zool.* 10: 213-234.
- _____ and _____ (1955) Lista anotada de aves coletadas nos limites ocidentais do Estado do Paraná. *Pap. Av. Zool.* 12(9): 215-234.
- _____ and _____ (1961) Resultados ornitológicos de quatro recentes expedições do Departamento de Zoologia ao Nordeste do Brasil, com a descrição de seis novas subespécies. *Arq. Zool.* 11: 193-284.
- Rajão, H. and R. Cerqueira (2006) Distribuição altitudinal e simpatria das aves do gênero *Drymophila* Swainson (Passeriformes, Thamnophilidae) na Mata Atlântica. *Rev. Brasil. Zool.* 23: 597-607.
- Raposo, M. A. (1997) A new species of *Arremon* (Passeriformes: Emberizidae) from Brazil. *Ararajuba* 5: 3-9.
- _____ and J. Nacinovic (1991) Novas adendas para a avifauna do Município de Teresópolis. *Resumos I Congr. Bras. Orn.*, Belém, p. 40.
- _____ and R. Parrini (1998) On the validity of the Half-collared Sparrow *Arremon semitorquatus* Swainson, 1837. *Bull. B.O.C.* 117: 294-298.
- _____ and D. M. Teixeira (1992) Revalidação de *Chamaezza meruloides* Vigors, 1825 (Aves, Formicariidae). *Bol. Mus. Nac. Zool.*, 350: 1-11.
- _____, J. B. Nacinovic and R. Parrini (1994) Notas sobre algumas aves raras ou ameaçadas de extinção no Município de Teresópolis, Rio de Janeiro. *Resumos IV Congr. Bras. Orn.*, Recife, p. 71.
- _____, R. Parrini and M. Napoli (1998) Taxonomia, morfometria e bioacústica do grupo específico *Hylophilus poicilotis/H. amaurocephalus* (Aves, Vireonidae). *Ararajuba* 6: 87-109.

- _____, R. Stopiglia, V. Loskot and G. M. Kirwan (2006) The correct use of the name *Scytalopus speluncae* (Ménétriès, 1835), and the description of a new species of Brazilian tapaculo (Aves: Passeriformes: Rhinocryptidae). *Zootaxa* 1271: 37-56.
- Remsen, J. V. (2003) Family Furnariidae (Ovenbirds), p. 162-357. In: *Handbook of the Birds of the World. Vol. VIII. Broadbills to Tapaculos* (J. del Hoyo, A. Elliott and D. Christie, eds.). Barcelona: Lynx Edicions.
- Ridgely, R. S. (1981) The current distribution and status of mainland Neotropical parrots, p. 233-384. In: Pasquier, R.F. (Ed.) *Conservation of New World parrots*. Washington: Smithsonian Institution Press for the ICBP (Techn. Publ. 1).
- _____ and G. Tudor (1994) *The birds of South America. Vol. 2, The Suboscines passerines*. Austin: University of Texas Press.
- Ruschi, A. (1951) Trochilideos no Museu Nacional. *Bol. Mus. Biol. Prof. Mello-Leitão, Biol.* 10: 1-111.
- _____ (1961) A coleção viva de Trochilidae do Museu de Biologia Prof. Mello Leitão, nos anos de 1934 até 1961. *Bol. Mus. Biol. Prof. Mello-Leitão, Biol.* 30: 1-41.
- Schirch, P. F. (1928) Observações sobre a nidificação de algumas aves do Brasil. *Bol. Mus. Nac.* 4: 47-50.
- _____ (1931) Uma colônia de ninhos de Guáxe, Therezópolis. *Bol. Mus. Nac.* 7: 29-30.
- Schneider, A. and H. Sick (1962) Sobre a distribuição de algumas aves do sudeste do Brasil segundo coleções do Museu Nacional. *Bol. Mus. Nac., Zool.* 239: 1-15.
- Schubart, O., A. C. Aguirre and H. Sick (1965) Contribuição para o conhecimento da alimentação das aves brasileiras. *Arg. Zool.* 12: 95-249.
- Schuchmann, K. L. (1999) Family Trochilidae (Hummingbirds), p. 468-680 In: *Handbook of the Birds of the World. Vol. V. Barn-Owls to Hummingbirds* (J. del Hoyo, A. Elliott and J. Sargatal, eds.). Barcelona: Lynx Edicions.
- Scott, D. A. and M. de L. Brooke (1985) The endangered avifauna of Southeastern Brazil: a report on the BOU/WWF expeditions of 1980/81 and 1981/82, p. 115-139. In: A.W. Diamond, and T.E. Lovejoy (Eds.) *Conservation of Tropical Forest Birds*. Cambridge: ICBP (Techn. Publ. 4)
- _____ and _____ (1993) Rediscovery of the Grey-winged Cotinga *Tijuca condita* in south-eastern Brazil. *Bird Cons. Intern.* 3: 1-12.
- Sick, H. (1950) Apontamentos sobre a ecologia de *Chaetura andrei meridionalis* Hellmayr no estado do Rio de Janeiro (Micropodidae, Aves). *Rev. Brasil. Biol.* 10: 425-436.
- _____ (1958a) Resultados de uma excursão ornitológica do Museu Nacional a Brasília, novo distrito federal, Goiás, com a descrição de um novo representante de *Scytalopus* (Rhinocryptidae, Aves). *Bol. Mus. Nac., Zool.* 185: 1-41.
- _____ (1958b) Notas biológicas sobre o gaudério, "Molothrus bonariensis" (Gmelin) (Icteridae, Aves). *Rev. Brasil. Biol.* 18: 417-431.
- _____ (1959a) O redescobrimento no Brasil do Bacurau *Caprimulgus longirostris* Bonaparte (Caprimulgidae, Aves). *Bol. Mus. Nac., Zool.* 204: 1-15.
- _____ (1959b) A invasão da América Latina pelo pardal, *Passer domesticus* Linnaeus 1758, com referência especial ao Brasil. *Bol. Mus. Nac., Zool.*, 207: 1-31.
- _____ (1960) Zur Systematik und Biologie der Bürzelsteller (Rhinocryptidae), speziell Brasiliens. *J. Orn.* 101: 141-174.
- _____ (1966) Sobre a espécie existente de *Estrilda* (Ploceidae, Aves), o chamado Bico-de-lacre, no Brasil. *Anais Acad. Brasil. Ciênc.* 38: 169-171.
- _____ (1970) Der Strohschwanz, *Oreophylax moreirae*, andiner Furnariide in Südostbrasiliens. *Bonn. Zool. Beitr.* 21: 251-268.
- _____ (1972) A ameaça da avifauna brasileira, p. 99-153. In: Academia Brasileira de Ciências (Ed.) *Espécies da fauna brasileira ameaçadas de extinção*. Rio de Janeiro: Academia Brasileira de Ciências.
- _____ (1997) *Ornitologia Brasileira*. Rio de Janeiro: Ed. Nova Fronteira.
- _____ and J. Ottow (1958) Vom brasiliischen Kuhvogel, *Molothrus bonariensis*, und seinen Wirten, besonders dem Ammerfinken, *Zonotrichia capensis*. *Bonn. Zool. Beitr.* 9: 40-62.
- _____ and L. F. Pabst (1968) As aves do Rio de Janeiro (Guanabara)(Lista sistemática anotada). *Arg. Mus. Nac.* 53: 99-160.
- _____ and D. M. Teixeira (1979) Notas sobre aves brasileiras raras ou ameaçadas de extinção. *Publ. Avuls. Mus. Nac.* 62.
- Silveira, E. K. P. (1991) Troncos evolutivos em aves. *Papéis avulsos* 1:1-4.
- Smith, E. T. (1960) Review of *Pionus maximiliani* (Kuhl). *Fieldiana Zoology* 39: 379-385.

- Snethlage, E. (1936) Catálogo das aves coleccionadas pela Dra. Emilie Snethlage, naturalista do Museu Nacional e pelos Snrs. Schumann, F. Lima e O. Martins. *Bol. Mus. Nac.* 12: 83-92.
- Snow, D. W. (1980) A new species of Cotinga from Southeastern Brazil. *Bull. B.O.C.* 100: 213-215.
- _____. (1982) *The Cotingas*. Ithaca: Cornell Univ. Press.
- _____. (2004a) Family Cotingidae (Cotingas), p. 32-108 In: *Handbook of the Birds of the World. Vol. IX. Cotingas to Pipits and Wagtails* (J. del Hoyo, A. Elliott and D. Christie, eds.). Barcelona: Lynx Edicions.
- _____. (2004b) Family Pipridae (Manakins), p. 110-169 In: *Handbook of the Birds of the World. Vol. IX. Cotingas to Pipits and Wagtails* (J. del Hoyo, A. Elliott and D. Christie, eds.). Barcelona: Lynx Edicions.
- _____. and D. Goodwin (1974). The Black-and-gold-Cotinga. *Auk* 91: 360-369.
- _____. and D. M. Teixeira (1982) Hummingbirds and their flowers in the coastal mountains of Southeastern Brazil. *J. Orn.* 123: 446-450.
- Spix, J.B. von (1825) *Avium species novae Brasilian*, II. Munique: Hübschmann.
- Teixeira, D. M. and L. P. Gonzaga (1985) Uma nova subespécie de *Myrmotherula unicolor* (Ménétrier, 1835) (Passeriformes, Formicariidae) do nordeste do Brasil. *Bol. Mus. Nac., n.s., Zool.*, 310: 1-16.
- _____. M. E. M. Puga and J. B. Nacinovic (1983) Notas sobre a biologia do Narcejão *Gallinago undulata gigantea* (Temminck, 1826). *Soc. Sul-Riograndense Ornit.* 4: 7-9.
- _____. J. B. Nacinovic and G. Luigi (1988) Notes on some birds of northeastern Brazil (3). *Bull. B.O.C.* 108: 75-79.
- Vieira, C. O. da C. (1935) Os Cotingídeos do Brasil. *Rev. Mus. Paulista* 19: 327-397.
- Vieillot, L. J. P. and P. L. Oudart (1825) *Galerie des Oiseaux*, Vol. 1, II.
- Vielliard, J. (1990) Estudo bioacústico das aves do Brasil: o gênero *Scytalopus*. *Ararajuba* 1: 5-18.
- _____. (1994) *Catálogo dos Troquilídeos do Museu de Biologia Mello Leitão*. Santa Teresa: Museu de Biologia Mello Leitão.
- Wege, D. C. and A. J. Long (1995) *Key areas for threatened birds in the Neotropics*. Cambridge: BirdLife International (Conservation Series no. 5).
- Whitney, B. M (2003) Family Conopophagidae (Gnateaters), p. 732-747 In: *Handbook of the Birds of the World. Vol. VIII. Broadbills to Tapaculos* (J. del Hoyo, A. Elliott and D. Christie, eds.). Barcelona: Lynx Edicions.
- _____. and J. F. Pacheco (1995) Distribution and conservation status of four *Myrmotherula* Antwrens (Formicariidae) in the Atlantic Forest of Brazil. *Bird Cons. Intern.* 5: 421-439.
- _____. J. F. Pacheco and R. Parrini (1995) Two species of *Neopelma* in southeastern Brazil and diversification within the *Neopelma/Tyranneutes* complex: implications of the subspecies concept for conservation (Passeriformes: Tyrannidae). *Ararajuba* 3: 43-53.
- Whittaker, A. and A. Foster (2005) First country record of Canada Warbler *Wilsonia canadensis*, in the Atlantic Forest of southeast Brazil. *Cotinga* 24: 115-116.
- Winkler, H. and D. Christie (2002) Family Picidae (Woodpeckers), p. 296-555 In: *Handbook of the Birds of the World. Vol. VII. Jacamars to Woodpeckers* (J. del Hoyo, A. Elliott and J. Sargatal, eds.). Barcelona: Lynx Edicions.
- Wied-Neuwied, M. (1832) *Beiträge zur Naturgeschichte von Brasilien. Vogel. Vol. IV*. Weimar: Landes-Industrie-Comptoirs.
- _____. (1989) *Viagem ao Brasil*. Belo Horizonte: Editora Itatiaia.
- Willis, E. O. (1992) Three *Chamaezza* Antthrushes in eastern Brazil (Formicariidae). *Condor* 94: 110-116.
- Zimmer, J. T. (1931) Studies of Peruvian Birds. № 2. Peruvian forms of the genera *Microbates*, *Ramphocaenus*, *Sclateria*, *Pyriglena*, *Pithys*, *Drymophilila* and *Liosceles*. Part I. *Am. Mus. Novit.* 509: 1-20.
- _____. (1933a) Studies of Peruvian Birds. № 9. The formicarian genus *Thamnophilus*. Part I. *Am. Mus. Novit.* 646: 1-22.
- _____. (1933b) Studies of Peruvian Birds. № 10. The formicarian genus *Thamnophilus*. Part II. *Am. Mus. Novit.* 647: 1-27.
- _____. (1935) Studies of Peruvian Birds. № 17. Notes on the genera *Syndactyla*, *Anabacerthia*, *Philydor*, and *Automolus*. *Am. Mus. Novit.* 785: 1-24.
- _____. (1936a) Studies of Peruvian Birds. № 20. Notes on the genus *Synallaxis*. *Am. Mus. Novit.* 861: 1-26.
- _____. (1936b) Studies of Peruvian Birds. № 22. Notes on the Pipridae. *Am. Mus. Novit.* 889: 1-29.

- ____ (1937) Studies of Peruvian Birds. N° 26. Notes on the genera *Agriornis*, *Muscisaxicola*, *Myiotheretes*, *Ochthoeca*, *Colonia*, *Knipolegus*, *Phaeotriccus*, *Fluvicola*, and *Ramphotrigon*. *Am. Mus. Novit.* 930: 1-27.
- ____ (1939a) Studies of Peruvian Birds. N° 30. Notes on the genera *Contopus*, *Empidonax*, *Terenotriccus* and *Myioibius*. *Am. Mus. Novit.* 1042: 1-13.
- ____ (1939b) Studies of Peruvian Birds. N° 31. Notes on the genera *Myiotriccus*, *Pyrrhomystis*, *Myiophobus*, *Onychorhynchus*, *Platyrinchus*, *Cnemidocetes*, *Sayornis*, and *Nuttallornis*. *Am. Mus. Novit.* 1043: 1-15.
- ____ (1939c) Studies of Peruvian Birds. N° 33. The genera *Tolmomyias* and *Rhynchocyclus* with further notes on *Ramphotrigon*. *Am. Mus. Novit.* 1045: 1-23.
- ____ (1940) Studies of Peruvian Birds. N° 34. The genera *Todirostrum*, *Euscarthmornis*, *Snethlagea*, *Poecilotriccus*, *Lophotriccus*, *Myiornis*, *Pseudotriccus*, and *Hemimacronyx*. *Am. Mus. Novit.* 1066: 1-23.
- ____ (1941a) Studies of Peruvian Birds. N° 36. The genera *Elaenia* and *Myiopagis*. *Am. Mus. Novit.* 1108: 1-23.
- ____ (1941b) Studies of Peruvian Birds. N° 39. The genus *Vireo*. *Am. Mus. Novit.* 1127: 1-20.
- ____ (1942) Studies of Peruvian Birds. N° 41. The genera *Hylophilus*, *Smagdolanius*, and *Cyclarhis*. *Am. Mus. Novit.* 1160: 1-16.
- ____ (1947) Studies of Peruvian Birds. N° 51. The genera *Chlorothraupis*, *Creurgops*, *Eucometis*, *Trichothraupis*, *Nemosia*, *Hemithraupis*, and *Thlypopsis*, with additional notes on *Piranga*. *Am. Mus. Novit.* 1345: 1-23.
- ____ (1949) Studies of Peruvian Birds. N° 54. The families Catamblyrhynchidae and Parulidae. *Am. Mus. Novit.* 1428: 1-59.
- ____ (1955) Studies of Peruvian Birds. N° 66. The Swallows (Hirundinidae). *Am. Mus. Novit.* 1723: 1-35.
- Zimmer, K. and M. Isler (2003) Family Thamnophilidae (typical antbirds), p. 448-681 In: *Handbook of the Birds of the World. Vol. VIII. Broadbills to Tapaculos* (J. del Hoyo, A. Elliott and D. Christie, eds.). Barcelona: Lynx Edicions.

Appendix. List of birds species recorded in the Serra dos Órgãos region. Taxonomy and systematic sequence follow CBRO (2006).

Species	Status	Habitat	Altitudinal level	Source	Ornithological Collections
Tinamidae					
<i>Tinamus solitarius</i> T	R	F	L	4, 29, 58	AMNH, MNRJ
<i>Crypturellus soui</i>	R	S	L	121	
<i>Crypturellus obsoletus</i>	C	F	LH	1, 18, 19, 25, 48, 58, 110, 121	LACMNH, MNRJ, MZUSP, NMBE
<i>Crypturellus variegatus</i> T	R	S	L	121	
<i>Crypturellus tataupa</i>	FC	S	LH	25, 48	LACMNH, MNRJ, NMBE
Anatidae					
<i>Dendrocygna viduata</i>	R	O	L	JFP	
<i>Amazonetta brasiliensis</i>	R	O	L	FMR, RP, JFP	
Cracidae					
<i>Penelope superciliaris</i>	U	FS	L	25, 48, 110	
<i>Penelope obscura</i>	U	F	H	97, 110, 121	MZUSP, NMBE
<i>Aburria jacutinga</i> E	PE	F	?	16, 25, 120, 121, 141	
Odontophoridae					
<i>Odontophorus capueira</i> PT	U	F	LH	18, 25, 48, 110	NMBE
Podicipedidae					
<i>Tachybaptus dominicus</i>	R	O	?	RP, JFP	MZUSP
Phalacrocoracidae					
<i>Phalacrocorax brasilianus</i>	U	O	L	RP, JFP	
Fregatidae					
<i>Fregata magnificens</i>	R	O	LH	124	
Ardeidae					
<i>Tigrisoma lineatum</i>	R	O	L	JFP	NMBE
<i>Nycticorax nycticorax</i>	U	O	LH	RP, JFP	
<i>Butorides striata</i>	U	O	L	25	MNRJ, NMBE
<i>Bubulcus ibis</i>	U	O	L	FMR, RP, JFP	
<i>Ardea cocoi</i>	R	O	L	JFP	
<i>Ardea alba</i>	U	O	L	18	NMBE
<i>Syrigma sibilatrix</i>	R	O	L	RP, JFP	
<i>Pilherodius pileatus</i> PT	U	O	L	RP	
<i>Egretta thula</i>	U	O	L	FMR, RP	
Threskiornithidae					
<i>Theristicus caudatus</i>	R	O	H	FMR, RP	
Cathartidae					
<i>Cathartes aura</i>	FC	O	L	48	
<i>Cathartes burrovianus</i>	U	O	L	RP, JFP	

Species	Status	Habitat	Altitudinal level	Source	Ornithological Collections
<i>Coragyps atratus</i>	C	OUr	LH	25, 48, 110	NMBE
Pandionidae					
<i>Pandion haliaetus</i>	R	O	?	110	
Accipitridae					
<i>Leptodon cayanensis</i>	U	F	LH	18, 46, 86, 121	MNRJ, MZUSP, NMBE
<i>Chondrohierax uncinatus</i>	R	S	L	1	MNRJ, NMBE
<i>Elanoides forficatus</i>	R	O	H	JFP	
<i>Elanus leucurus</i>	R	O	H	RP, JFP	
<i>Rostrhamus sociabilis</i>	R	O	L	25	
<i>Harpagus diodon</i>	U	FS	LH	25	MNRJ, NMBE
<i>Ictinia plumbea</i>	R	O	L	JFP	NMBE
<i>Accipiter superciliosus</i> PT	R	FS	?	JFP	MZUSP
<i>Accipiter striatus</i>	R	S	H	FMR, RP, JFP	NMBE
<i>Geranospiza caerulescens</i>	R	F	H	RP, JFP	MNRJ
<i>Leucopternis lacernulatus</i> T	R	F	L	16, 25, 48, 97, 141	
<i>Leucopternis polionotus</i> PT	R	F	LH	60, 97, 110, 121	MNRJ, NMBE
<i>Heterospizias meridionalis</i>	U	O	LH	60	
<i>Harpyhaliaetus coronatus</i> US	R	O	H	RP	
<i>Percnohierax leucorrhous</i>	R	FS	H	FMR, RP, JFP	MNRJ, NMBE
<i>Rupornis magnirostris</i>	C	SOUr	LH	18, 25, 48, 110	MNRJ, MZUSP, NMBE
<i>Buteo albicaudatus</i>	U	O	H	110	NMBE
<i>Buteo melanoleucus</i>	R	O	H	79, 136	
<i>Buteo brachyurus</i>	R	SO	H	RP	
<i>Buteo albonotatus</i>	R	SO	?	42	
<i>Harpia harpyja</i> T	R	F	(L?)	80, 97	
<i>Spizaetus tyrannus</i> PT	U	F	LH	1, 97	MNRJ, NMBE
<i>Spizaetus melanoleucus</i> T	R	F	L	RP	NMBE
Falconidae					
<i>Caracara plancus</i>	U	O	L	25, 110	NMBE
<i>Milvago chimachima</i>	C	O	LH	25, 48	MNRJ, NMBE
<i>Herpetotheres cachinnans</i>	U	O	L	48	
<i>Micrastur ruficollis</i>	FC	F	LH	18, 25, 48, 110	MZUSP, NMBE
<i>Micrastur semitorquatus</i>	R	F	L	48	
<i>Falco sparverius</i>	FC	SO	LH	25	FMNH, MNRJ, MZUSP, NMBE
<i>Falco rufigularis</i>	U	O	H	RP, JFP	
<i>Falco deiroleucus</i> E	R	O	?		NMBE
<i>Falco femoralis</i>	U	SO	LH	FMR, RP, JFP	MZUSP

Species	Status	Habitat	Altitudinal level	Source	Ornithological Collections
Rallidae					
<i>Aramides saracura</i>	FC	S	LH	25, 48	NMBE
<i>Laterallus melanophaius</i>	R	SO	?	JFP	MNRJ
<i>Laterallus leucopyrrhus</i>	R	SO	?	37	FMNH, MNRJ
<i>Porzana albicollis</i>	U	SO	LH	RP, JFP	MZUSP
<i>Pardirallus nigricans</i>	U	SO	LH	FMR, RP, JFP	FMNH, MNRJ, MZUSP, NMBE
<i>Gallinula chloropus</i>	R	SO	?	RP, JFP	MZUSP
<i>Porphyrio martinica</i>	R	O	L	JFP	NMBE
Cariamidae					
<i>Cariama cristata</i>	U	O	H	42, 94	
Charadriidae					
<i>Vanellus chilensis</i>	U	O	L	48	
Scolopacidae					
<i>Gallinago paraguaiae</i>	R	O	L(H?)	25, 105	MZUSP, NMBE
<i>Gallinago undulata</i>	R	O	?	135	MNRJ, NMBE
<i>Tringa flavipes</i>	R	O	H	RP	
<i>Calidris fuscicollis</i>	R	O	H	RP	
Jacanidae					
<i>Jacana jacana</i>	R	O	L	FMR, RP, JFP	
Columbidae					
<i>Columbina talpacoti</i>	C	SOUr	LH	18, 25, 48, 110	FMNH, NMBE
<i>Claravis pretiosa</i>	R	S	L(H?)	25, 84	NMBE
<i>Claravis goedefrida</i> T	R	F	(L?)H	3, 16, 18, 84, 97, 110, 121, 123, 141	MNRJ, MZUSP
<i>Columba livia</i>	C	Ur	LH	FMR, RP, JFP	
<i>Patagioenas picazuro</i>	R	O	L	FMR, RP, JFP	
<i>Patagioenas cayennensis</i>	R	S	L(H?)	FMR, RP, JFP	NMBE
<i>Patagioenas plumbea</i>	C	F	LH	18, 25, 48, 84, 110	MZUSP, NMBE
<i>Leptotila verreauxi</i>	U	S	L	48	LACMNH, NMBE
<i>Leptotila rufaxilla</i>	FC	FS	LH	18, 25, 48, 84, 110	MNRJ, MZUSP, NMBE, UFRJ
<i>Geotrygon montana</i>	FC	FS	LH	18, 25, 48, 110	LACMNH, MNRJ, NMBE
Psittacidae					
<i>Primolius maracana</i>	U	FSO	H	RP, JFP	
<i>Aratinga leucophthalma</i>	FC	SO	H	FMR, RP, JFP	
<i>Pyrrhura cruentata</i>	R	FS	L?	97	
<i>Pyrrhura frontalis</i>	C	FSUr	LH	18, 19, 25, 48, 57, 110	MNRJ, MZUSP, NMBE
<i>Forpus xanthopterygius</i>	U	S	LH	18, 25, 48, 110	MNRJ, NMBE
<i>Brotogeris tirica</i>	C	FS	LH	18, 48, 110	MNRJ, MZUSP
<i>Touit melanotus</i> T	R	F	(L?)H	14, 16, 57, 97, 101, 141	MNRJ

Species	Status	Habitat	Altitudinal level	Source	Ornithological Collections
<i>Touit surdus</i> T	R	FS	L(H?)	5, 16, 57, 97, 141	MNRJ
<i>Pionopsitta pileata</i> PT	R	FS	H	25, 97, 110, 121	MZUSP, NMBE
<i>Pionus maximiliani</i>	FC	FS	LH	25, 29, 48, 57, 110, 125	MNRJ, MZUSP, NMBE
<i>Amazona rhodocorytha</i>	R	FS	?	147	
<i>Triclaria malachitacea</i> T	R	FS	LH	73	
Cuculidae					
<i>Coccyzus americanus</i>	R	S	L	110	
<i>Coccyzus euleri</i>	R	S	H	RP, JFP	
<i>Coccyzus melacoryphus</i>	R	S	L	JFP	
<i>Piaya cayana</i>	C	FS	LH	18, 19, 20, 25, 48, 110	LACMNH, MNRJ, MZUSP, NMBE, UFRJ
<i>Crotophaga ani</i>	C	SOUr	LH	1, 25, 48	FMNH, MNRJ, NMBE
<i>Guira guira</i>	C	SOUr	LH	19, 25	MNRJ, MZUSP
<i>Tapera naevia</i>	U	S	LH	25	FMNH, MNRJ, NMBE
Tytonidae					
<i>Tyto alba</i>	R	S	?	25	MNRJ, NMBE
Strigidae					
<i>Megascops choliba</i>	C	SUr	LH	1, 25, 48	FMNH, MNRJ, NMBE
<i>Megascops atricapilla</i>	R	F	H	110	
<i>Pulsatrix koeniswaldiana</i>	U	F	LH	18	MNRJ, NMBE
<i>Strix virgata</i>	U	S	L	FMR	MZUSP, NMBE
<i>Strix hylophila</i>	R	S	H	25	MNRJ, NMBE
<i>Glaucidium minutissimum</i>	R	FS	L	RP	MNRJ
<i>Glaucidium brasilianum</i>	FC	S	L	48	MNRJ, NMBE
<i>Athene cunicularia</i>	U	O	L	FMR, RP, JFP	
<i>Rhinoptynx clamator</i>	R	SO	LH	1	MNRJ, NMBE
<i>Asio stygius</i> US	R	S	?		NMBE
Nyctibiidae					
<i>Nyctibius aethereus</i> US	R	FS?	?	25	NMBE
<i>Nyctibius griseus</i>	U	FS	LH	27, 48	MNRJ, NMBE
Caprimulgidae					
<i>Lurocalis semitorquatus</i>	FC	FS	LH	48, 110	
<i>Chordeiles acutipennis</i>	R	?	?		MNRJ
<i>Nyctidromus albicollis</i>	C	SO	LH	25, 48, 60, 105	MNRJ, MZUSP, NMBE
<i>Nyctiphrynus ocellatus</i>	R	FS	H	25	NMBE
<i>Caprimulgus rufus</i>	R	?	?	25	
<i>Caprimulgus longirostris</i>	U	SOUr	LH	108, 110, 115, 121	MNRJ, NMBE
<i>Hydropsalis torquata</i>	R	SO	L	25	
<i>Macropsalis forcipata</i>	R	FS	H	1, 25, 97, 121	MNRJ, NMBE

Species	Status	Habitat	Altitudinal level	Source	Ornithological Collections
Apodidae					
<i>Cypseloides fumigatus</i>	R	?	?	12, 110	
<i>Streptoprocne zonaris</i>	FC	FSOUr	LH	12, 48, 62, 88, 110	AMNH, LACMNH, MNRJ, MZUSP
<i>Streptoprocne biscutata</i>	U	FSOUr	LH	1, 25, 110, 121	MNRJ
<i>Chaetura cinereiventris</i>	FC	FS	LH	48, 59, 110	MNRJ
<i>Chaetura meridionalis</i>	C	FSOUr	LH	12, 48, 53, 60, 108, 110, 112, 121	LSUMNS, MNRJ, MPEG, MZUSP
<i>Panyptila cayennensis</i>	R	FSO	L	110	
Trochilidae					
<i>Ramphodon naevius</i> PT	FC	FS	L	48, 110	LACMNH, MPEG
<i>Glaucis hirsutus</i>	U	S	L	48	
<i>Phaethornis squalidus</i>	FC	FS	L	48, 110	MNRJ
<i>Phaethornis ruber</i>	U	FS	LH	48, 60, 109	
<i>Phaethornis pretrei</i>	U	SO	H	8, 109	NMBE
<i>Phaethornis eurynome</i>	C	FS	H	18, 20, 25, 82, 103, 109, 110, 132	FMNH, MNRJ, MZUSP, NMBE
<i>Eupetomena macroura</i>	C	SUr	LH	8, 18, 19, 48, 103, 104	MNRJ, UFRJ
<i>Aphantochroa cirrhochloris</i>	U	SUr	LH	109	NMBE
<i>Florisuga fusca</i>	FC	SUr	LH	18, 25, 48, 103, 110	MNRJ, NMBE
<i>Colibri serrirostris</i>	U	SO	H	22, 103, 104, 110, 116, 121	MNRJ, NMBE
<i>Anthracothorax nigricollis</i>	R	S	?	JFP	MNRJ
<i>Chrysolampis mosquitus</i> US	R	?	?	21	
<i>Stephanoxis lalandi</i>	FC	S	H	25, 104, 109, 110, 132, 140	FMNH, MNRJ, MBML, NMBE
<i>Lophornis magnificus</i>	U	S	LH	25	MNRJ, NMBE
<i>Chlorostilbon lucidus</i>	FC	SUr	LH	8, 48, 60, 103, 110, 116	CMNH, FMNH, MNRJ, NMBE, UFRJ
<i>Thalurania glaucopis</i>	C	SUr	LH	18, 25, 48, 103, 109, 110	FMNH, MNRJ, MPEG, MZUSP, NMBE
<i>Hylocharis sapphirina</i>	R	?	?	25	
<i>Hylocharis cyanus</i>	U	S	L	48	MNRJ, NMBE
<i>Leucochloris albicollis</i>	C	SUr	H	18, 25, 60, 103, 104, 110	CMNH, FMNH, LSUMNS, MNRJ, NMBE, UMMZ
<i>Amazilia versicolor</i>	U	SUr	LH	103	FMNH, MNRJ
<i>Amazilia fimbriata</i>	U	SUr	L(H?)	FMR	MNRJ
<i>Amazilia lactea</i>	U	SUr	H	107	
<i>Clytolaema rubricauda</i>	C	FS	H	18, 25, 82, 103, 109, 110	CMNH, FMNH, MNRJ, MZUSP, NMBE
<i>Heliothryx auritus</i> PT	R	F	H	25, 103	MNRJ
<i>Calliphlox amethystina</i>	R	SUr	LH	25, 82, 110	FMNH, MNRJ, MZUSP, NMBE
Trogonidae					
<i>Trogon viridis</i>	R	FS	L	147	AMNH, MNRJ
<i>Trogon surrucura</i>	U	FS	LH	15, 18, 25, 110	MNRJ, MZUSP, NMBE
<i>Trogon rufus</i>	U	FS	LH	15, 18, 19, 20, 25, 48, 110	MNRJ, MZUSP, NMBE
Alcedinidae					

Species	Status	Habitat	Altitudinal level	Source	Ornithological Collections
<i>Ceryle torquatus</i>	U	O	L	48	
<i>Chloroceryle amazona</i>	U	O	LH	25	MNRJ, MZUSP, NMBE
<i>Chloroceryle americana</i>	U	SO	LH	18, 25	MNRJ, MZUSP, NMBE
<i>Chloroceryle aenea</i> US	R	S	LH	121	
Momotidae					
<i>Baryphthengus ruficapillus</i>	FC	FS	L	48, 50, 110	
Galbulidae					
<i>Galbula ruficauda</i>	U	S	L	48	MNRJ
Bucconidae					
<i>Notharchus swainsoni</i> PT	R	F	L	RP, JFP	
<i>Nystalus chacuru</i>	U	S	H	FMR, RP, JFP	
<i>Malacoptila striata</i>	FC	FS	LH	25, 48, 50, 110	LACMNH, MNRJ, MZUSP, NMBE
Ramphastidae					
<i>Ramphastos vitellinus</i>	U	FS	L	48, 110, 121	UFRJ
<i>Ramphastos dicolorus</i>	U	FS	H	25, 66, 121	MNRJ, NMBE
<i>Selenidera maculirostris</i>	U	FS	LH	1, 18, 25, 48, 50, 110	MNRJ, MZUSP, NMBE
<i>Pteroglossus bailloni</i>	U	FS	H	18, 25, 110, 121	LACMNH, MNRJ, MZUSP, NMBE
Picidae					
<i>Picumnus cirratus</i>	C	FSUr	LH	18, 20, 48, 110, 126	MNRJ, MZUSP, NMBE
<i>Melanerpes candidus</i>	R	SO	LH	25	NMBE
<i>Melanerpes flavifrons</i>	FC	FS	LH	25, 48	MNRJ, NMBE
<i>Veniliornis maculifrons</i>	FC	FS	LH	18, 20, 25, 48, 50, 110, 146	MNRJ, MZUSP, NMBE, UFRJ
<i>Piculus flavigula</i>	FC	FS	L	48, 110, 146	
<i>Piculus aurulentus</i>	FC	FS	H	18, 20, 25, 110, 146	FMNH, MNRJ, MZUSP, NMBE
<i>Colaptes melanochloros</i>	U	S	LH	25, 110	MNRJ, NMBE
<i>Colaptes campestris</i>	FC	O	LH	110	MNRJ, MZUSP, NMBE
<i>Celeus flavescens</i>	FC	FS	LH	48	MNRJ, NMBE
<i>Dryocopus lineatus</i>	U	S	LH	RP, JFP	
<i>Campephilus robustus</i> PT	R	?	?	25	NMBE
Thamnophilidae					
<i>Hypoedaleus guttatus</i>	U	FS	L	18, 20, 48	MNRJ
<i>Batara cinerea</i>	U	F	H	2, 18, 19, 25, 110, 166	MNRJ, NMBE
<i>Mackenziaena leachii</i>	U	FS	H	25, 110, 166	MNRJ, NMBE
<i>Mackenziaena severa</i>	FC	FS	LH	18, 20, 25, 48, 110, 166	LACMNH, MNRJ, NMBE
<i>Biatus nigropectus</i> PT	R	F	H	16, 121, 123, 141, 166	MNRJ
<i>Thamnophilus palliatus</i>	FC	S	L	48, 63, 150	AMNH, MNRJ
<i>Thamnophilus ambiguus</i>	FC	S	L	25, 48, 63, 151	AMNH, LACMNH
<i>Thamnophilus caerulescens</i>	C	S	H	18, 20, 33, 63, 110	AMNH, FMNH, MNRJ, NMBE

Species	Status	Habitat	Altitudinal level	Source	Ornithological Collections
<i>Thamnophilus ruficapillus</i>	FC	SO	H	25, 63, 110, 121, 166	AMNH, MNRJ, NMBE
<i>Dysithamnus stictothorax</i>	C	S	LH	18, 46, 48, 49, 64, 110	AMNH, LACMNH, MNRJ
<i>Dysithamnus mentalis</i>	C	S	LH	18, 20, 25, 46, 48, 49, 64, 110, 145	AMNH, LACMNH, MNRJ, NMBE
<i>Dysithamnus xanthopterus</i>	FC	S	H	18, 43, 110, 166	MNRJ
<i>Thamnomanes caesius</i>	R	FS	L	46, 48, 49	LACMNH
<i>Myrmotherula gularis</i>	C	FS	LH	18, 20, 46, 48, 49, 110, 166	LACMNH, MNRJ, UFRJ
<i>Myrmotherula axillaris</i>	U	S	L	46, 48, 49, 110	MNRJ, UFRJ
<i>Myrmotherula unicolor</i>	FC	S	LH	46, 48, 49, 110, 134, 143, 166	MNRJ
<i>Herpsilochmus rufimarginatus</i>	C	S	L	48	UFRJ
<i>Formicivora grisea^a</i>	R	?	?	17, 30, 56, 72	MACSP
<i>Drymophila ferruginea</i>	FC	FS	LH	11, 18, 19, 20, 48, 56, 64, 72, 92, 110, 166	AMNH, MACSP, MZUSP
<i>Drymophila rubricollis</i>	U	FS	H	76, 92, 166	
<i>Drymophila genei</i>	U	SO	H	92, 110, 166	
<i>Drymophila ochropyga</i>	C	S	H	18, 20, 64, 92, 102, 110, 166	AMNH, FMNH, LACMNH, MNRJ, NMBE
<i>Drymophila malura</i>	FC	S	H	18, 19, 92	LACMNH, MNRJ, NMBE
<i>Drymophila squamata</i>	C	FS	L	46, 48, 49, 92, 110	MPEG, UFRJ
<i>Terenura maculata</i>	FC	FS	L	48, 166	UFRJ
<i>Cercomacra brasiliiana</i> PT	R	S	L	56, 72	LACMNH, MACSP
<i>Pyriglena leucoptera</i>	C	FS	LH	18, 19, 20, 25, 46, 47, 48, 49, 50, 64, 110, 149, 166	AMNH, FMNH, LACMNH, MNRJ, NMBE, UFRJ
<i>Myrmeciza loricata</i>	C	FS	LH	18, 19, 20, 46, 48, 49, 50, 64, 110, 166	AMNH, CMNH, LACMNH, MNRJ
Conopophagidae					
<i>Conopophaga lineata</i>	FC	S	LH	18, 20, 25, 48, 63, 65, 110, 141	LACMNH, MNRJ, MZUSP, NMBE
<i>Conopophaga melanops</i>	FC	S	L	17, 46, 48, 49, 50, 63, 91, 110	AMNH, MNRJ, MZUSP
Grallariidae					
<i>Grallaria varia</i>	U	FS	LH	18, 25, 39, 48, 56, 72, 110	LACMNH, MNRJ, NMBE
<i>Hylopezus nattereri</i>	R	?	?	39	
Rhinocryptidae					
<i>Psilorhamphus guttatus</i>	U	FS	H	117	
<i>Merulaxis ater</i>	R	F	H	13, 56, 72	MACSP
<i>Scytalopus notorius</i>	FC	F	H	40, 99, 110, 113, 117, 121, 139	MNRJ
<i>Scytalopus indigoticus</i>	U	F	H	13, 56, 72, 117, 121	MACSP
Formicariidae					
<i>Formicarius colma</i>	FC	FS	LH	46, 48, 49, 50, 110	MNRJ, UFRJ
<i>Chamaezza campanisona</i>	U	F	H	25, 39, 55, 96, 110	LACMNH, MNRJ
<i>Chamaezza meruloides</i>	U	F	H	39, 96, 148	MNRJ
<i>Chamaezza ruficauda</i>	U	F	H	17, 18, 39, 64, 82, 96, 110, 121	AMNH, LACMNH, MNRJ, MZUSP, NMBE

Species	Status	Habitat	Altitudinal level	Source	Ornithological Collections
Scleruridae					
<i>Sclarurus mexicanus</i>	R	F	L	JFP	
<i>Sclarurus scansor</i>	FC	FS	LH	18, 19, 25, 27, 46, 48, 49, 50, 91, 100, 110	MNRJ, MZUSP, NMBE
Dendrocolaptidae					
<i>Dendrocincla turdina</i>	C	FS	LH	9, 18, 20, 46, 48, 49, 50, 110	UFRJ
<i>Sittasomus griseicapillus</i>	C	FS	LH	9, 18, 20, 34, 46, 48, 49, 50, 110, 145	MNRJ
<i>Xiphocolaptes albicollis</i>	U	FS	LH	9, 18, 19, 20, 25, 48, 82, 110, 121	MNRJ, MZUSP, NMBE
<i>Dendrocolaptes platyrostris</i>	U	FS	LH	9, 17, 18, 20, 25, 46, 48, 49, 52, 110	NMBE
<i>Xiphorhynchus fuscus</i>	C	FS	LH	9, 18, 19, 20, 46, 48, 49, 50, 81, 110, 121	LACMNH, MNRJ
<i>Lepidocolaptes squamatus</i>	U	FS	LH	9, 17, 18, 20, 25, 46, 48, 49, 82, 110, 121	LACMNH, MNRJ, MZUSP, NMBE
<i>Campylorhamphus falcularius</i>	U	FS	LH	9, 18, 20, 25, 46, 48, 49, 52, 54, 85, 90, 110, 138	LACMNH, MZUSP, NMBE
Furnariidae					
<i>Furnarius figulus</i>	R	SOUr	LH	FMR, RP, JFP	
<i>Furnarius rufus</i>	FC	SOUr	LH	25, 105	FMNH, MNRJ
<i>Oreophylax moreirae</i>	FC	SO	H	60, 100, 107, 110, 119, 121	
<i>Synallaxis ruficapilla</i>	C	S	LH	18, 20, 46, 48, 49, 77, 100, 110	MNRJ, MZUSP
<i>Synallaxis cinerascens</i>	R	F	H	FMR, RP	MNRJ, NMBE
<i>Synallaxis albescens</i>	R	S	H	RP	
<i>Synallaxis spixi</i>	C	SO	LH	25, 48, 110, 153	AMNH, FMNH, LACMNH, MNRJ, NMBE
<i>Cranioleuca pallida</i>	FC	S	H	18, 20, 60, 100, 110	MNRJ, NMBE
<i>Certhiaxis cinnamomeus</i>	R	O	L	19	LACMNH
<i>Phacellodomus rufifrons</i>	U	O	LH	94	MNRJ
<i>Phacellodomus erythrophthalmus</i>	U	S	LH	18, 94, 100	MNRJ
<i>Anabacerthia amaurotis</i>	FC	FS	LH	18, 20, 46, 48, 49, 81, 100, 110	LACMNH, MNRJ
<i>Syndactyla rufosuperciliata</i>	FC	FS	H	17, 18, 19, 20, 25, 110, 152	AMNH, FMNH, LACMNH, MNRJ, NMBE
<i>Philydor lichtensteini</i>	R	FS	L	46, 48, 49	
<i>Philydor atricapillus</i>	FC	FS	LH	18, 44, 46, 48, 49, 50, 100, 110	LACMNH, MNRJ, UFRJ
<i>Philydor rufum</i>	C	FS	LH	18, 20, 25, 48, 69, 110	LACMNH, MNRJ, MZUSP, NMBE
<i>Anabazenops fuscus</i>	FC	FS	LH	18, 20, 25, 46, 48, 49, 50, 100, 110	LACMNH, MNRJ, NMBE
<i>Cichlocolaptes leucophrus</i>	FC	FS	LH	18, 19, 20, 46, 48, 49, 100, 110	LACMNH, MNRJ
<i>Automolus leucophthalmus</i>	C	FS	LH	18, 19, 20, 46, 48, 49, 50, 70, 100, 110	LACMNH, MNRJ, MZUSP
<i>Lochmias nematura</i>	FC	FS	LH	18, 25, 26, 48, 54, 110	FMNH, LACMNH, MNRJ, NMBE
<i>Heliobletus contaminatus</i>	FC	FS	H	18, 19, 20, 25, 100, 110	FMNH, LACMNH, MNRJ
<i>Xenops minutus</i>	FC	FS	LH	25, 46, 48, 49, 110	MNRJ
<i>Xenops rutilans</i>	FC	FS	LH	18, 25, 46, 48, 49, 110	MNRJ, NMBE
Oxyruncidae					
<i>Oxyruncus cristatus</i>	U	F	LH	18, 20, 110	LACMNH, MNRJ

Species	Status	Habitat	Altitudinal level	Source	Ornithological Collections
Tyrannidae					
<i>Mionectes oleagineus</i>	U	FS	L	46, 48, 49	UFRJ
<i>Mionectes rufiventris</i>	FC	FS	LH	18, 20, 25, 46, 48, 49, 110, 121	LACMNH, MNRJ, NMBE
<i>Leptopogon amaurocephalus</i>	C	FS	LH	18, 20, 46, 48, 49, 110, 121	MNRJ, UFRJ
<i>Corythopis delalandi</i>	U	S	L	46, 48, 49, 110	MNRJ
<i>Hemitriccus diops</i>	FC	FS	H	17, 18, 19, 20, 23, 83, 102, 110, 121	MNRJ, MZUSP, NMBE
<i>Hemitriccus orbitatus</i>	C	FS	L	23, 46, 48, 49, 110	MNRJ
<i>Hemitriccus nidipendulus</i>	R	S	LH	RP, JFP	MNRJ
<i>Poecilotriccus plumbeiceps</i>	U	S	H	18, 20, 67, 83, 110, 159	AMNH, LACMNH, MNRJ, MZUSP
<i>Todirostrum poliocephalum</i>	FC	S	LH	17, 25, 48, 83, 110	MNRJ, MZUSP, NMBE
<i>Todirostrum cinereum</i>	U	O	L	RP, JFP	
<i>Phyllosmyias burmeisteri</i>	U	S	LH	25, 110	
<i>Phyllosmyias virescens</i>	U	S	H	17, 18, 83	FMNH, MNRJ, MZUSP
<i>Phyllosmyias fasciatus</i>	FC	S	LH	17, 48, 83, 110	FMNH, MNRJ, MZUSP, NMBE
<i>Phyllosmyias griseocapilla</i>	FC	S	LH	17, 18, 19, 20, 25, 110	MNRJ, MZUSP, NMBE
<i>Myiopagis caniceps</i> cf.	R	S	H	RP	
<i>Elaenia flavogaster</i>	C	SUR	LH	25, 48, 160	AMNH, MNRJ, NMBE
<i>Elaenia albiceps</i>	R	FS	H	RP, JFP	
<i>Elaenia</i> cf. <i>parvirostris</i>	R	?	?		MNRJ
<i>Elaenia mesoleuca</i>	U	S	LH	19, 110	MNRJ, MPEG
<i>Elaenia obscura</i>	U	S	H	17, 110	FMNH, MNRJ, NMBE
<i>Camptostoma obsoletum</i>	FC	S	LH	17, 25, 48, 83, 110	FMNH, MNRJ, MZUSP, NMBE
<i>Serpophaga nigricans</i>	U	O	H	RP, JFP	MNRJ, NMBE
<i>Serpophaga subcristata</i>	FC	S	LH	17, 83	FMNH, NMBE
<i>Capsiempis flaveola</i>	U	FS	LH	48	MNRJ
<i>Phylloscartes ventralis</i>	FC	FS	H	17, 18, 20, 83, 110	FMNH, MNRJ, MZUSP
<i>Phylloscartes oustaleti</i> T	R	FS	H	18, 20, 31, 121	AMNH, MNRJ, MZUSP
<i>Phylloscartes difficilis</i>	FC	FS	H	110, 121	
<i>Myiornis auricularis</i>	U	FS	LH	17, 48, 83, 110	FMNH, MNRJ, MZUSP, NMBE
<i>Rhynchocyclus olivaceus</i> T	U	F	L	RP	LACMNH
<i>Tolmomyias sulphurescens</i>	C	S	LH	18, 20, 46, 48, 49, 62, 83, 110, 158	AMNH, MNRJ, MZUSP, NMBE
<i>Tolmomyias flaviventris</i>	U	S	LH	83, 88	MNRJ, MZUSP
<i>Platyrinchus mystaceus</i>	C	FS	LH	18, 20, 25, 46, 48, 49, 83, 87, 110, 157	AMNH, LACMNH, MNRJ, MZUSP, NMBE, UFRJ
<i>Platyrinchus leucoryphus</i> T	R	F	L	RP	
<i>Onychorhynchus swainsoni</i> T	R	F	H	18, 19, 25, 83	MNRJ, MZUSP
<i>Myiophobus fasciatus</i>	FC	S	LH	25, 48, 110, 157	AMNH, MNRJ, MPEG
<i>Myiobius barbatus</i>	C	FS	LH	18, 25, 46, 48, 49, 110	MNRJ
<i>Myiobius atricaudus</i>	U	FS	H	6, 17, 19, 83, 110, 156	AMNH, LACMNH, MNRJ, MZUSP, NMBE

Species	Status	Habitat	Altitudinal level	Source	Ornithological Collections
<i>Hirundinea ferruginea</i>	U	SOUr	LH	17, 18, 25, 48, 83, 110	FMNH, MNRJ, MZUSP, NMBE
<i>Lathrotriccus euleri</i>	C	FS	LH	18, 19, 46, 48, 49, 50, 83, 110, 156	AMNH, LACMNH, MNRJ, MZUSP, NMBE
<i>Cnemotriccus fuscatus</i>	R	Ur	L	25	MPEG
<i>Contopus cinereus</i>	U	S	LH	RP	MNRJ
<i>Pyrocephalus rubinus</i>	R	O	LH	RP	
<i>Knipolegus cyanirostris</i>	U	SO	H	17, 18, 20, 110	FMNH, MNRJ, NMBE
<i>Knipolegus lophotes</i>	R	O	H	25, 60	
<i>Knipolegus nigerrimus</i>	U	SO	H	17, 41, 83, 110	FMNH, MNRJ, MZUSP, NMBE
<i>Satrapa icterophrys</i>	R	S	LH	60	MNRJ, NMBE
<i>Xolmis cinereus</i>	R	SO	H	RP, JFP	MNRJ
<i>Xolmis velatus</i>	R	O	H	FMR, RP, JFP	MNRJ
<i>Muscicapa vetula</i>	U	S	H	25, 83	CMNH, FMNH, MNRJ, MZUSP, NMBE
<i>Fluvicola nengeta</i>	U	SOUr	LH	48	
<i>Arundinicola leucocephala</i>	R	?	?	25	
<i>Colonia colonus</i>	C	S	LH	17, 25, 48, 83, 110, 133, 155	AMNH, FMNH, MNRJ, MZUSP, NMBE
<i>Machaetornis rixosa</i>	FC	SOUr	LH	48	
<i>Legatus leucophaius</i>	FC	FS	L	48, 60, 110	
<i>Myiozetetes cayanensis</i>	U	S	LH	RP, JFP	NMBE
<i>Myiozetetes similis</i>	FC	Sur	LH	19, 25, 48, 110	MNRJ
<i>Pitangus sulphuratus</i>	C	SOUr	LH	18, 25, 48, 62, 110, 116	AMNH, LACMNH, MNRJ, NMBE
<i>Myiodynastes maculatus</i>	FC	S	LH	18, 19, 25, 48, 110	LACMNH, NMBE
<i>Megarynchus pitangua</i>	FC	FS	LH	25, 48	LACMNH, NMBE
<i>Empidonax varius</i>	U	S	LH	18, 20, 25, 110	NMBE
<i>Tyrannus melancholicus</i>	C	SOUr	LH	18, 20, 25, 48, 110	MNRJ, NMBE
<i>Tyrannus savana</i>	R	SO	LH	18	MNRJ, NMBE
<i>Rhytipterna simplex</i>	U	S	L	48	
<i>Sirystes sibilator</i>	R	S	H	18, 20	MNRJ
<i>Myiarchus tuberculifer</i>	U	S	L	48, 110	
<i>Myiarchus swainsoni</i>	U	S	LH	FMR, RP, JFP	MNRJ, NMBE
<i>Myiarchus ferox</i>	U	S	LH	18, 20, 25, 110	MNRJ, NMBE
<i>Ramphotreron megacephalum</i>	R	S	LH	107	MNRJ
<i>Attila phoenicurus</i>	U	S	H	23, 78	
<i>Attila rufus</i>	C	S	LH	18, 19, 20, 25, 48, 110	LACMNH, MNRJ, NMBE
Cotingidae					
<i>Phibalura flavirostris</i> PT	U	S	H	18, 25, 26, 36, 38, 83, 110, 129	FMNH, LACMNH, MNRJ, MZUSP, NMBE
<i>Carpornis cucullata</i>	FC	F	H	18, 20, 60, 110, 128, 129, 131, 137	MNRJ, MZUSP
<i>Carpornis melanocephala</i> T	U	F	L	RP, JFP	
<i>Procnias nudicollis</i> PT	U	FS	LH	18, 19, 25, 48	MNRJ, NMBE

Species	Status	Habitat	Altitudinal level	Source	Ornithological Collections
<i>Tijuca atra</i>	FC	F	H	2, 25, 36, 60, 83, 110, 111, 121, 128, 129, 131, 137 10, 16, 101, 110, 111, 121, 127, 128, 129, 141	MNRJ, MZUSP, NMBE MZUSP
<i>Tijuca condita</i> PT	U	F	H		
<i>Calyptura cristata</i> PT	R	S	L	74, 75, 102, 121, 129	Vide Collar <i>et al.</i> (1992)
<i>Lipaugus lanioides</i> T	R	F	H	16, 18, 25, 129, 141	MNRJ, NMBE
<i>Pyroderus scutatus</i> T	R	FS	?	25	MNRJ
Pipridae					
<i>Neopelma aurifrons</i>	R	F	L	144	
<i>Neopelma chrysolophum</i>	U	S	H	18, 25, 121, 144	AMNH, LACMNH, MNRJ, NMBE
<i>Ilicura militaris</i>	FC	F	LH	18, 20, 25, 36, 46, 48, 49, 83, 110, 130	LACMNH, MNRJ, MZUSP, NMBE
<i>Machaeropterus regulus</i>	U	F	L	RP, JFP	
<i>Manacus manacus</i>	C	FS	L	25, 46, 48, 49, 110, 154	AMNH, LACMNH, MNRJ, NMBE, UFRJ
<i>Chiroxiphia caudata</i>	C	F	LH	18, 20, 25, 46, 48, 49, 102, 110, 130	LACMNH, MNRJ, MPEG, NMBE, UFRJ
Tityridae					
<i>Schiffornis turdina</i>	U	F	L	RP	
<i>Schiffornis virescens</i>	U	S	LH	18, 20, 110	MNRJ, NMBE
<i>Laniisoma elegans</i> PT	R	F	LH	16, 18, 46, 48, 49, 137	MNRJ, MZUSP
<i>Iodopleura pipra</i> PT	U	FS	L	16, 48, 129, 141	
<i>Tityra inquisitor</i>	U	FS	L	RP	
<i>Tityra cayana</i>	R	S	L(H?)	18, 19, 25, 110	MNRJ, NMBE
<i>Pachyramphus viridis</i>	U	S	LH	FMR, RP, JFP	MNRJ, NMBE
<i>Pachyramphus castaneus</i>	FC	S	LH	18, 20, 25, 48, 110	LACMNH, MNRJ, NMBE
<i>Pachyramphus polychoterus</i>	FC	S	LH	18, 19, 20, 25, 48, 110	LACMNH
<i>Pachyramphus marginatus</i>	FC	F	L	48, 110	LACMNH
<i>Pachyramphus validus</i>	FC	S	LH	18, 20, 110	LACMNH
Vireonidae					
<i>Cyclarhis gujanensis</i>	C	FS	LH	18, 20, 25, 36, 46, 48, 49, 50, 83, 110, 162	AMNH, FMNH, MNRJ, MZUSP, NMBE
<i>Vireo olivaceus</i>	C	FS	LH	46, 48, 49, 110, 161	AMNH, MNRJ
<i>Hylophilus poicilotis</i>	C	F	H	18, 20, 25, 98, 110	LACMNH, MNRJ, NMBE
<i>Hylophilus amaurocephalus</i>	U	F	H	98	MNRJ
<i>Hylophilus thoracicus</i>	U	S	L(H?)	48, 162	AMNH, MNRJ
Corvidae					
<i>Cyanocorax cristatellus</i>	R	O	H	FMR, RP	
Hirundinidae					
<i>Tachycineta leucorrhoa</i>	U	O	LH	RP, JFP	
<i>Progne tapera</i>	FC	SO	LH	FMR, RP, JFP	LACMNH, MNRJ
<i>Progne chalybea</i>	U	SOUr	LH	25, 32	NMBE
<i>Pygochelidon cyanoleuca</i>	C	SOUr	LH	25, 36, 48, 83, 110, 116, 165	AMNH, FMNH, MNRJ, MZUSP, NMBE

Species	Status	Habitat	Altitudinal level	Source	Ornithological Collections
<i>Neochelidon tibialis</i>	U	S	LH	110	
<i>Stelgidopteryx ruficollis</i>	C	SO	LH	48, 110	MNRJ, NMBE
<i>Hirundo rustica</i>	U	O	LH	RP	
Troglodytidae					
<i>Thryothorus genibarbis</i>	U	S	L(H?)	48	LACMNH, MNRJ
<i>Thryothorus longirostris</i>	FC	S	L(H?)	48	MNRJ
<i>Troglodytes musculus</i>	C	SOUr	LH	19, 25, 36, 48, 83, 105, 110, 116	FMNH, MNRJ, MPEG, MZUSP, NMBE
Turdidae					
<i>Platycichla flavigipes</i>	C	F	LH	18, 19, 20, 25, 46, 48, 49, 50, 110, 121, 131	LACMNH, MNRJ, MPEG, NMBE, UFRJ
<i>Turdus rufiventrис</i>	C	SOUr	LH	18, 20, 25, 46, 48, 49, 50, 83, 105, 110, 131	FMNH, MNRJ, MPEG, MZUSP, NMBE
<i>Turdus leucomelas</i>	FC	Sur	LH	18, 48	MNRJ
<i>Turdus amaurochalinus</i>	U	SOUr	LH	110	MNRJ, NMBE
<i>Turdus albicollis</i>	C	F	LH	18, 20, 25, 46, 48, 49, 50, 110	MNRJ, NMBE, UFRJ
Mimidae					
<i>Mimus saturninus</i>	U	O	LH	19, 48	MNRJ
Motacillidae					
<i>Anthus hellmayri</i>	R	O	?	121	
Coerebidae					
<i>Coereba flaveola</i>	C	Sur	LH	46, 48, 49, 110	LACMNH, MNRJ
Thraupidae					
<i>Orchesticus abeillei</i>	U	F	H	18, 20, 25, 83, 110	
<i>Schistochlamys ruficapillus</i>	U	SO	H	19, 25, 36, 83, 89	FMNH, LACMNH, MNRJ, MZUSP, NMBE
<i>Cissopis leverianus</i>	R	S	H	25	MNRJ, NMBE
<i>Nemosia pileata</i>	R	S	L	JFP	
<i>Orthogonyx chloricterus</i>	R	F	LH	18, 20, 25	MNRJ, NMBE
<i>Thlypopsis sordida</i>	U	SOUr	LH	19, 48	MNRJ
<i>Pyrrhocoma ruficeps</i>	FC	FS	H	36, 83	FMNH, MZUSP, NMBE
<i>Trichothraupis melanops</i>	C	FS	LH	18, 19, 20, 25, 36, 46, 48, 49, 50, 51, 83, 110	LACMNH, MNRJ, MZUSP, NMBE
<i>Piranga flava</i>	U	O	H	RP, JFP	
<i>Habia rubica</i>	C	F	LH	18, 19, 20, 46, 48, 49, 50, 81, 110	LACMNH, MNRJ
<i>Tachyphonus cristatus</i>	C	F	L(H?)	46, 48, 49, 83, 110	MNRJ, MZUSP
<i>Tachyphonus coronatus</i>	C	Sur	LH	18, 20, 25, 36, 46, 48, 49, 50, 83, 110, 116	FMNH, LACMNH, MNRJ, MPEG, MZUSP, NMBE, UFRJ
<i>Ramphocelus bresilius</i>	FC	S	L	25, 36, 48, 68, 83	LACMNH, MNRJ, MZUSP
<i>Thraupis sayaca</i>	C	SOUr	LH	18, 20, 25, 35, 36, 48, 49, 83, 110, 116	LACMNH, MNRJ, MZUSP, NMBE
<i>Thraupis cyanoptera</i>	FC	S	LH	18, 36, 83, 110, 121	LACMNH, MNRJ, MPEG, MZUSP
<i>Thraupis ornata</i>	C	SOUr	LH	18, 19, 20, 25, 48, 110	LACMNH, MNRJ, NMBE

Species	Status	Habitat	Altitudinal level	Source	Ornithological Collections
<i>Thraupis palmarum</i>	C	SUr	LH	18, 25, 48, 83, 110	MNRJ, MZUSP
<i>Stephanophorus diadematus</i>	C	S	H	25, 36, 110	MZUSP, NMBE
<i>Pipraeidea melanonota</i>	FC	S	H	25, 36, 83, 110	FMNH, LACMNH, MNRJ, MZUSP, NMBE
<i>Tangara brasiliensis</i> T	R	S	L	48	AMNH, LACMNH
<i>Tangara seledon</i>	C	SUr	LH	7, 46, 48, 49, 110	MNRJ, UFRJ
<i>Tangara cyanocephala</i>	FC	SUr	L(H?)	7, 18, 20, 48, 110	LACMNH, MNRJ
<i>Tangara desmaresti</i>	C	S	H	7, 18, 20, 25, 36, 83, 110	FMNH, LACMNH, MZUSP, NMBE
<i>Tangara cyanoventris</i>	R	S	H	JFP	MNRJ
<i>Tangara cayana</i>	U	SUr	H	18, 60, 110	LACMNH, MNRJ
<i>Tersina viridis</i>	R	SUr	?	25, 28	NMBE
<i>Dacnis nigripes</i> PT	R	S	LH	16, 121, 141	AMNH, MPEG
<i>Dacnis cayana</i>	C	SUr	LH	18, 20, 25, 48, 110	LACMNH, MNRJ, MPEG, NMBE
<i>Hemithraupis ruficapilla</i>	FC	FS	LH	18, 20, 48, 110, 163	AMNH, LACMNH, MNRJ
<i>Hemithraupis flavicollis</i>	FC	FS	L	46, 48, 49, 110	
<i>Conirostrum speciosum</i>	FC	SUr	L	48	
Emberizidae					
<i>Zonotrichia capensis</i>	C	SOUr	LH	25, 36, 48, 62, 71, 83, 105, 110, 114, 122	AMNH, FMNH, LACMNH, MNRJ, MPEG, MZUSP, NMBE, UFRJ
<i>Ammodramus humeralis</i>	R	O	L	RP, JFP	
<i>Haplospiza unicolor</i>	U	F	LH	18, 19, 20, 36, 46, 48, 49, 83, 110	LACMNH, MNRJ, MZUSP, NMBE
<i>Donacospiza albifrons</i>	U	O	H	RP	
<i>Poospiza thoracica</i>	FC	S	H	36, 83, 110	MNRJ, MZUSP, NMBE
<i>Poospiza lateralis</i>	R	S	H?	121	
<i>Sicalis flaveola</i>	U	SOUr	LH	25, 35, 36, 48, 83	FMNH, MNRJ, MPEG, MZUSP, NMBE
<i>Sicalis luteola</i>	R	O	H	JFP	
<i>Emberizoides herbicola</i>	U	O	LH	FMR, JFP	
<i>Volatinia jacarina</i>	FC	SO	LH	25, 110	MNRJ, NMBE
<i>Sporophila frontalis</i> T	R	FS	LH	16, 18, 20, 141	FMNH, LACMNH, MNRJ, MZUSP
<i>Sporophila falcirostris</i> T	R	S	H	16, 121	
<i>Sporophila nigricollis</i>	R	SO	LH	25, 36, 83	FMNH, MZUSP
<i>Sporophila caerulescens</i>	FC	SO	LH	25, 48, 105, 110, 116	MNRJ, NMNBE
<i>Sporophila leucoptera</i>	R	SO	LH		MNRJ
<i>Sporophila angolensis</i> T	R	SO	?		MNRJ, MPEG, NMNBE
<i>Amaurospiza moesta</i> T	R	F	H	35, 36, 83, 121	FMNH, MNRJ
<i>Tiaris fuliginosus</i>	U	S	LH	FMR, RP, JFP	
<i>Arremon semitorquatus</i>	FC	S	LH	18, 25, 36, 48, 60, 83, 93, 95	LACMNH, MNRJ, MZUSP, NMBE
<i>Coryphospingus pileatus</i>	R	SO	L	110	

Species	Status	Habitat	Altitudinal level	Source	Ornithological Collections
Cardinalidae					
<i>Caryothraustes canadensis</i>	FC	FS	L	48, 110	MPEG
<i>Saltator fuliginosus</i>	FC	F	LH	25, 48	LACMNH, MNRJ
<i>Saltator maximus</i>	C	F	L	46, 48, 49, 50, 62	AMNH, MNRJ
<i>Saltator similis</i>	FC	F	(L?)H	18, 20, 25, 36, 83, 110, 121	MNRJ, MZUSP, NMBe
<i>Saltator maxillosus</i>	FC	F	H	36, 83, 110	MNRJ, MZUSP, NMBe
<i>Cyanoloxia glaucoacaerulea</i>	R	S	H	45	
<i>Cyanocompsa brissoni</i> T	R	S	LH	25, 35, 36, 83, 110	MNRJ, MZUSP, NMBe
Parulidae					
<i>Parula pitiyumi</i>	C	SUr	LH	36, 48, 83, 110	FMNH, LACMNH, MNRJ, MZUSP
<i>Dendroica striata</i>	R	S	L	110	
<i>Geothlypis aequinoctialis</i>	FC	SO	LH	25, 36, 48	FMNH, MNRJ, MZUSP, NMBe
<i>Wilsonia canadensis</i>	R	S	L	24, 145	
<i>Basileuterus culicivorus</i>	C	S	LH	18, 20, 25, 36, 46, 48, 49, 83, 110, 145, 164	AMNH, FMNH, MNRJ, MZUSP, NMBe
<i>Basileuterus leucoblepharus</i>	C	F	H	25, 36, 83, 110	FMNH, MNRJ, MZUSP, NMBe
Icteridae					
<i>Psarocolius decumanus</i>	U	FS	(L?)H	18, 19, 25, 83	MNRJ, MZUSP, NMBe
<i>Cacicus haemorrhous</i>	U	FS	LH	25, 48, 106, 110	NMBe
<i>Gnorimopsar chopi</i>	U	SO	?	25	MNRJ, NMBe
<i>Agelasticus cyanopus</i>	R	O	?	107	MNRJ
<i>Chrysomus ruficapillus</i>	R	O	L	JFP	
<i>Molothrus oryzivorus</i> PT	R	SO	?	25	NMBe
<i>Molothrus bonariensis</i>	U	SOUr	LH	19, 25, 83, 105, 110, 114, 116, 122	MNRJ, MZUSP, NMBe
<i>Sturnella superciliaris</i>	R	O	L	RP, JFP	
Fringillidae					
<i>Carduelis magellanica</i>	U	SO	H	25, 48	MNRJ, NMBe
<i>Euphonia chlorotica</i>	FC	SUr	L	48, 110	
<i>Euphonia violacea</i>	FC	SUr	LH	48, 110	
<i>Euphonia chalybea</i> PT	R	FS	H	19, 36, 83, 121	LSUMNS, MNRJ, MZUSP
<i>Euphonia cyanocephala</i> PT	R	FS	H	RP, JFP	
<i>Euphonia xanthogaster</i>	FC	FS	L	46, 48, 49, 110	
<i>Euphonia pectoralis</i>	C	FS	LH	18, 20, 48, 110	LACMNH, MNRJ
<i>Chlorophonia cyanea</i>	R	S	H	25	MNRJ
Estrildidae					
<i>Estrilda astrild</i>	C	OUR	L	48, 110, 118, 121	MNRJ
Passeridae					
<i>Passer domesticus</i>	C	U	LH	48, 110, 116	UFRJ

- a** – Includes *Formicivora deluzae*, following Hellmayr (1929a).
T – Threatened species in the Rio de Janeiro State (Alves *et al.* 2000).
E – Probably extinct in the Rio de Janeiro State (Alves *et al.* 2000).
PT – Probably threatened in the Rio de Janeiro State (Alves *et al.* 2000).
US – Unknown status in the Rio de Janeiro State (Alves *et al.* 2000).

Status: C = Common (Recorded on more than 75% of visits); FC = Fairly common (Recorded on 50-75% of visits); U = Uncommon (Recorded on 25-50% of visits); R = Rare (Recorded on less than 25% of visits or not recorded); PE = Probably extinct in the Serra dos Órgãos region.

Habitat: F = forest; S = forest edge and secondary growth; O = open areas; Ur = urban areas.

Altitudinal level: L = Records from lower slopes and foothills below 800m; H = Records from above 800m.

References: 1 – Aguirre and Aldrichi (1983); 2 – Aguirre and Aldrichi (1987), 3 – Baptista *et al.* (1997); 4 - Berla (1946); 5 - Berla (1954); 6 - Berlepsch (1888); 7 - Berlizot (1934a); 8 - Berlizot (1934b); 9 - Brooke (1983a); 10 - Brooke (1983b); 11 - Burmeister (1856); 12 - Chantler (1999); 13 – Chrostowski (1921); 14 - Collar (1997); 15 - Collar (2001); 16 – Collar *et al.* (1992); 17 – Cory and Hellmayr (1924-1927); 18 - Davis (1945a); 19 – Davis (1945b); 20 – Davis (1946); 21 - Des Murs (1856); 22 - Descourtilz (1854-1856); 23 - Fitzpatrick (2004); 24 - Gagliardi (2006); 25 - Goeldi (1894a-1900); 26 - Goeldi (1894b); 27 - Goeldi (1896); 28 - Goeldi (1905); 29 - Gonzaga (1989); 30 – Gonzaga and Pacheco (1990); 31 – Gonzaga and Pacheco (1995); 32 - Harrison (1928); 33 - Hellmayr (1906); 34 - Hellmayr (1908); 35 - Hellmayr (1929a); 36 - Hellmayr (1929b-1938); 37 - Hellmayr and Conover (1942); 38 - Ihering (1900b); 39 - Krabbe and Schulenberg (2003a); 40 - Krabbe and Schulenberg (2003b); 41 - Lencioni-Neto (1996); 42 - Luigi and Nacinovic (1991); 43 - Luigi *et al.* (1996); 44 - Mallet-Rodrigues (2001); 45 - Mallet-Rodrigues (2003); 46 - Mallet-Rodrigues (2005); 47 - Mallet-Rodrigues and Noronha (2001); 48 - Mallet-Rodrigues and Noronha (2003a); 49 - Mallet-Rodrigues and Noronha (2003b); 50 - Mallet-Rodrigues *et al.* (1997); 51 - Mallet-Rodrigues *et al.* (2001); 52 - Marantz *et al.* (2003); 53 - Marín (1997); 54 - Menegaux and Hellmayr (1906a); 55 - Menegaux and Hellmayr (1906b); 56 - Ménétrière (1835); 57 - A. de Miranda-Ribeiro (1920); 58 – A. de Miranda-Ribeiro (1938); 59 – P. de Miranda-Ribeiro (1929); 60 - Mitchell (1957); 61 – Nacinovic and Schloemp (1992); 62 - Naumburg (1930); 63 - Naumburg (1937); 64 - Naumburg (1939); 65 - Novaes (1947); 66 - Novaes (1949); 67 - Novaes (1953); 68 - Novaes (1959); 69 - Novaes (1961a); 70 - Novaes (1961b); 71 - Novaes (1965); 72 - Pacheco (2004); 73 - Pacheco and Bauer (1995); 74 - Pacheco and Fonseca (2000); 75 - Pacheco and Fonseca (2001); 76 - Pacheco and Fonseca (2002); 77 – Pacheco and Gonzaga (1995); 78 - Pacheco and Parrini (1997); 79 - Pacheco and Parrini (1998); 80 - Pacheco *et al.* (2003); 81 - Parrini and Pacheco (2006); 82 - Pinto (1938); 83 - Pinto (1944); 84 - Pinto (1949); 85 – Pinto (1952); 86 - Pinto (1953); 87 - Pinto (1954); 88 - Pinto (1966); 89 - Pinto and Camargo (1952); 90 - Pinto and Camargo (1955); 91 - Pinto and Camargo (1961); 92 – Rajão and Cerqueira (2006); 93 – Raposo (1997); 94 - Raposo and Nacinovic (1991); 95 - Raposo and Parrini (1998); 96 - Raposo and Teixeira (1992); 97 – Raposo *et al.* (1994); 98 – Raposo *et al.* (1998); 99 - Raposo *et al.* (2006); 100 - Remsen (2003); 101 - Ridgely (1981); 102 - Ridgely and Tudor (1994); 103 - Ruschi (1951); 104 - Ruschi (1961); 105 - Schirch (1928); 106 - Schirch (1931); 107 - Schneider and Sick (1962); 108 - Schubart *et al.* (1965); 109 - Schuchmann (1999); 110 - Scott and Brooke (1985); 111 - Scott and Brooke (1993); 112 - Sick (1950); 113 - Sick (1958a); 114 - Sick (1958b); 115 - Sick (1959a); 116 - Sick (1959b); 117 - Sick (1960); 118 - Sick (1966); 119 - Sick (1970); 120 - Sick (1972); 121 - Sick (1997); 122 - Sick and Ottow (1958); 123 - Sick and Teixeira (1979); 124 - Silveira (1991); 125 - Smith (1960); 126 - Snethlage (1936); 127 - Snow (1980); 128 - Snow (1982); 129 - Snow (2004a); 130 - Snow (2004b); 131 - Snow and Goodwin (1974); 132 - Snow and Teixeira (1982); 133 - Spix (1825); 134 - Teixeira and Gonzaga (1985); 135 - Teixeira *et al.* (1983); 136 – Teixeira *et al.* (1988); 137 - Vieira (1935); 138 - Vieillot and Oudart (1825); 139 - Vielliard (1990); 140 – Vielliard (1994); 141 - Wege and Long (1995); 142 - Whitney (2003); 143 - Whitney and Pacheco (1995); 144 – Whitney *et al.* (1995); 145 - Whittaker and Foster (2005); 146 - Winkler and Christie (2002); 147 - Wied-Neuwied (1832); 148 - Willis (1992); 149 - Zimmer (1931); 150 - Zimmer (1933a); 151 - Zimmer (1933b); 152 - Zimmer (1935); 153 - Zimmer (1936a); 154 - Zimmer (1936b); 155 - Zimmer (1937); 156 - Zimmer (1939a); 157 - Zimmer (1939b); 158 - Zimmer (1939c); 159 – Zimmer (1940); 160 - Zimmer (1941a); 161 - Zimmer (1941b); 162 - Zimmer (1942); 163 - Zimmer (1947); 164 - Zimmer (1949); 165 - Zimmer (1955); 166 - Zimmer and Isler (2003).

Ornithological collections: AMNH - American Museum of Natural History, New York; CMNH - Carnegie Museum of Natural History, Pittsburgh; FMNH - Field Museum of Natural History, Chicago; LACMNH - Los Angeles County Museum of Natural History, Los Angeles; LSUMZ - Museum of Natural Science, Louisiana State University; MACSP - Museum of the Academy of Science of St. Petersburg, St. Petersburg; MBML - Museu de Biologia Mello Leitão, Santa Teresa; MPEG - Museu Paraense Emílio Goeldi, Belém; MNRJ - Museu Nacional do Rio de Janeiro, Rio de Janeiro; MZUSP - Museu de Zoologia da Universidade de São Paulo, São Paulo; NMBE - Naturhistorisches Museum Bern, Bern; UFRJ - Instituto de Biologia, Universidade Federal do Rio de Janeiro, Rio de Janeiro; UMMZ - Museum of Zoology, University of Michigan, Ann Arbor.