

New and reconfirmed birds from Bertioga, coastal São Paulo state, with a catalogue of an overlooked and important bird collection made by Emílio Dente

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The coastal region of São Paulo and Rio de Janeiro states has been the subject of recent ornithological surveys, revealing an extremely rich avifauna, including many Atlantic Forest endemics distributed among different lowland habitats (beaches, mangroves, restingas) and forests along the elevational gradient of the Serra do Mar (e.g., Browne 2005, Cavarzere *et al.* 2010, 2014, Simpson *et al.* 2012, Mallet-Rodrigues *et al.* 2015).

One of these inventories, conducted in the municipality of Bertioga, coastal São Paulo, has recorded a total of 420 species, of which 330 were properly documented by records based on specimens, photographs and/or voice recordings.

Here, we present additional and documented records of birds for this municipality and comment on an important overlooked collection made in this area.

MFV visited the Bertioga municipality between 3 and 8 January 2016, and all bird records were noted in a field notebook. Whenever possible photographs were also obtained. We also searched for bird specimens collected by Emílio Dente between October 1969 and July 1971 from “Rio Guaratuba” (formerly in Santos municipality, but now in Bertioga) that have been deposited in the Universidade Federal de Minas Gerais in two departments: Departamento de Zoologia (DZUFMG) and Museu de História Natural e Jardim Botânico (MHNJB), both located in Belo Horizonte, Minas Gerais state. All specimens were perso-

nally checked and photographed by the authors. This collection was not checked in the recent revision of the regional avifauna (Cavarzere *et al.* 2014). Since these overlooked specimens constitute the most important part of Dente’s collection from this locality, we also present a catalogue of birds deposited in UFMG (taxonomy follows Piacentini *et al.* 2015) for documentation and further research on the avifauna of coastal São Paulo state.

New bird records

Glaucidium brasilianum (Gmelin, 1788) - Ferruginous Pygmy-Owl

A male specimen (DZUFMG-293 – Figure 1) from Rio Guaratuba, collected on 19 April 1971 (Appendix) represents the single known record of this species for the municipality of Bertioga. Despite the presence of its congener - *G. minutissimum* - which is the most expected species occurring in the lowlands of Serra do Mar (Lia Nahomi Kajiki 2016, pers. comm.), including undocumented records (Cavarzere *et al.* 2014), *G. brasilianum* has sparse records from this region, such as Iguape (Arasaki 2013), Itanhaém (Gruijters 2011, Esclarski 2013, Linhares 2014, Abreu 2015, Gomyde 2015), Mongaguá (Freitas 2014), Peruíbe (Lima 2009, Silva 2014), and Ubatuba (Simpson *et al.* 2012, Luccia 2013, Nave 2013).

Carpornis cucullata (Swainson, 1821) - Hooded Berryeater

Despite recorded in several ornithological surveys conducted in the Serra do Mar (Straube 2003, Browne 2005, Cavarzere *et al.* 2010, Amorin *et al.* 2012, Simpson *et al.* 2012), the only kno-



Figure 1. Specimen of Ferruginous Pygmy-Owl *Glaucidium brasilianum* (DZUFMG-293) collected in Rio Guaratuba: (A) lateral view; (B) diagnostic top of head with streaks. Photos: Marcelo Ferreira de Vasconcelos.



Figure 2. Specimens of Hooded Berryeater *Carpornis cucullata* collected in Rio Guaratuba: DZUFMG-1169, 1170, 1171. Photo: Marcelo Ferreira de Vasconcelos.

own records of this species in Bertioga are represented by three specimens (DZUFMG-1169, 1170, 1171 – Figure 2) obtained by E. Dente in Rio Guaratuba in 1970 (see Appendix). Despite sometimes being considered a montane species (Ridgely & Tudor 1994), with records in the higher altitudes of Serra do Mar (Camargo 1946), the Hooded Berryeater reaches sea-level in the Serra da Bocaina (Mallet-Rodrigues *et al.* 2015). Nevertheless, since the precise locality of collection (with elevation) was not provided by the collector on the original specimens' labels, it is impossible to know if these specimens were obtained in higher elevations along the trail of Rio Guaratuba (Vagner Cavarzere 2016, pers. comm.).

***Serpophaga nigricans* (Vieillot, 1817) - Sooty Tyrannulet**

The only municipal record for this species is a male (DZUFMG-1622 – Figure 3) taken on 19 April 1971 along Rio Guaratuba (Appendix). Despite it not being uncommon in eastern São Paulo based on records from the WikiAves platform (WikiAves 2016), the species has not been found in the lowlands of Serra do Mar (Straube 2003, Browne 2005, Simpson *et al.* 2012, Amorin *et al.* 2012, Mallet-Rodrigues *et al.* 2015), but it is also possible that it has been collected at higher elevations along the main trail of Rio Guaratuba (Vagner Cavarzere 2016, pers. comm.).



Figure 3. Specimen of Sooty Tyrannulet *Serpophaga nigricans* (DZUFMG-1622) collected in Rio Guaratuba. Photo: Marcelo Ferreira de Vasconcelos.

***Xolmis cinereus* (Vieillot, 1816) - Gray Monjita**

Between 3 and 8 January 2016, MFV observed and photographed a single individual of Gray Monjita at Praia da Enseada



Figure 4. Gray Monjita *Xolmis cinereus* photographed on 7 January 2016 at Praia da Enseada. Photo: Marcelo Ferreira de Vasconcelos.

(23°49'58"S, 46°06'54"W). The bird was seen perching on light towers of the beach and on post wires of the adjacent street (Figure 4). Since this species presents at least some migratory populations (Ridgely & Tudor 1994, Sick 1997), probably passing through Bertioga in short periods, it is possible that previous authors did not find it during their fieldwork (Cavarzere *et al.* 2014). Nevertheless, its occurrence is known in other coastal municipalities of São Paulo state, such as Ilha Comprida (Almeida 2014) and Ubatuba (Rizzo 2010, Silva 2010, Muscat 2011, Alexandre 2016), with all of these records coming from surveys conducted during austral spring and summer. The species has also been recorded in the lowlands of Serra da Bocaina (part of Serra do Mar), in Rio de Janeiro state (Mallet-Rodrigues *et al.* 2015).

***Haplospiza unicolor* Cabanis, 1851 - Uniform Finch**

A female (DZUFMG-2381 – Figure 5) collected on 22 June 1970 in Rio Guaratuba appears to be the first record of this species in Bertioga (Appendix). Despite found on other localities along the Serra do Mar, the Uniform Finch is usually associated to montane areas (Straube 2003, Browne 2005, Cavarzere *et al.* 2010, Amorin *et al.* 2012, Simpson *et al.* 2012; Mallet-Rodrigues *et al.* 2015). Thus, this record from Rio Guaratuba, in the lowlands, suggests that the species conducts elevational movements in the region, perhaps associated to mast-seeding bamboos (Olmos 1996, Andrade & Andrade 1997, Sick 1997, Vasconcelos *et al.* 2005).



Figure 5. Specimen of Uniform Finch *Haplospiza unicolor* (DZUFMG-2381) collected in Rio Guaratuba. Photo: Marcelo Ferreira de Vasconcelos.

New documented records by specimen evidence

The following species are represented by skins in the analyzed collection from Rio Guaratuba that lack specimen records in the recent revision of Bertioga avifauna (Cavarzere *et al.* 2014): Brown Tinamou *Crypturellus obsoletus* (Temminck, 1815), Rufous-breasted Hermit *Glaucis hirsutus* (Gmelin, 1788), Scale-throated Hermit *Phaethornis eurynome* (Lesson, 1832), Sombre Hummingbird *Aphantochroa cirrochloris* (Vieillot, 1818), Mealy Parrot *Amazona farinosa* (Boddaert, 1783), Streaked Xenops *Xenops rutilans* Temminck, 1821, Red-ruffed Fruitcrow *Pyroderus scutatus* (Shaw, 1792), Yellow-browed Tyrant *Satrapa icterophrys* (Vieillot, 1818), Chivi Vireo *Vireo chivi* (Vieillot, 1817), Masked Yellowthroat *Geothlypis aequinoctialis* (Gmelin, 1789), Fawn-breasted Tanager *Pipraeidea melanonota* (Vieillot,

1819), Green-winged Saltator *Saltator similis* d'Orbigny & Lafresnaye, 1837, and Black-throated Grosbeak *Saltator fuliginosus* (Daudin, 1800) (Figure 6, Appendix).

Other species were reported by Cavarzere *et al.* (2014) as recorded by skins from Bertioga, but those records were not directly checked by the authors and were based solely on the literature (Willis & Oniki 2003), which did not mention the institutions where the vouchers are available. In the analyzed collection we found skins of the following species: Solitary Tinamou *Tinamus solitarius* (Vieillot, 1819), Dark-billed Cuckoo *Coccyzus melacoryphus* Vieillot, 1817, Short-tailed Nighthawk *Lurocalis semitorquatus* (Gmelin, 1789), Long-trained Nightjar *Hydropsalis forcipata* (Nitzsch, 1840), Green Kingfisher *Chloroceryle americana* (Gmelin, 1788), Channel-billed Toucan *Ramphastos*

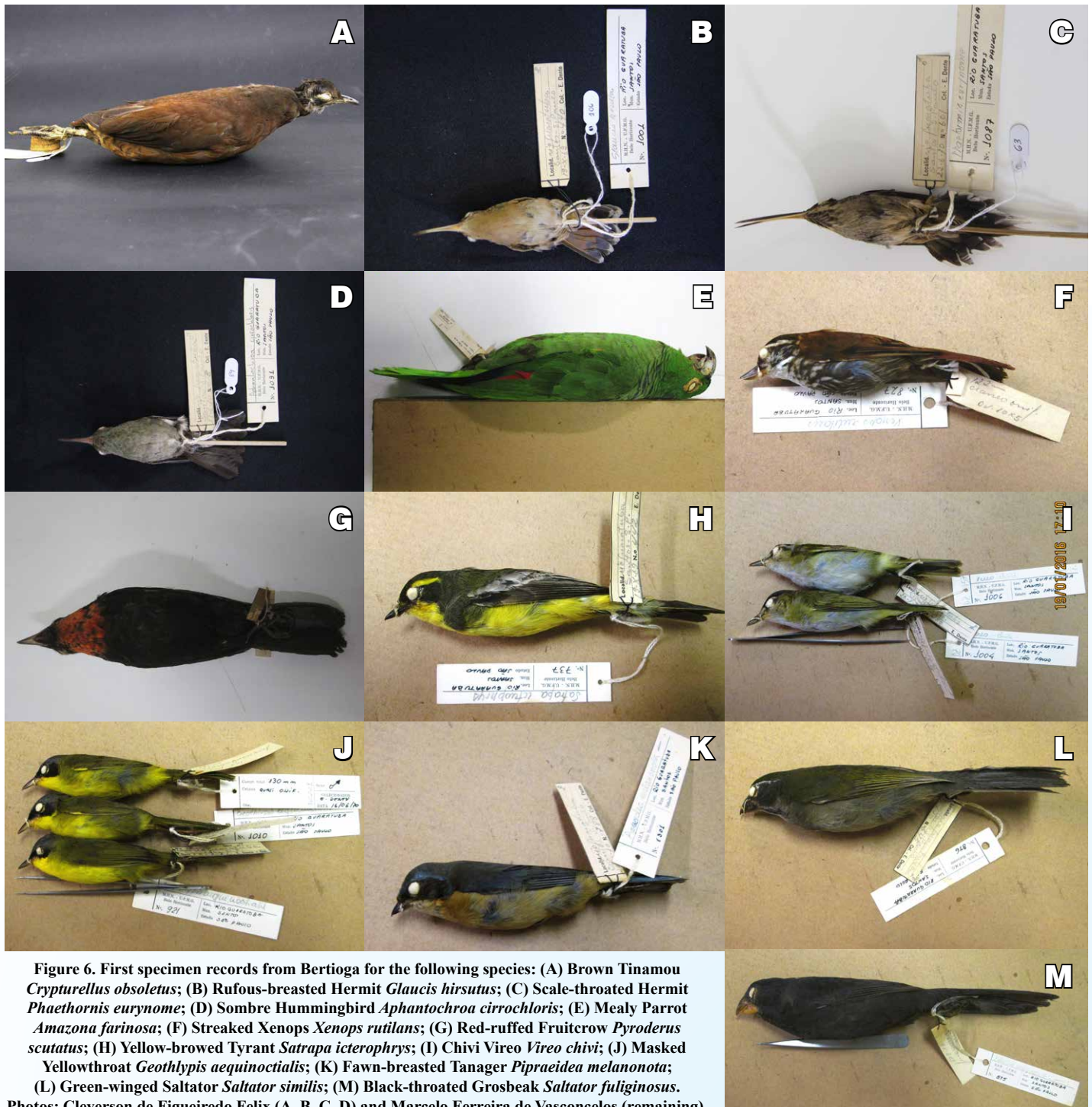


Figure 6. First specimen records from Bertioga for the following species: (A) Brown Tinamou *Crypturellus obsoletus*; (B) Rufous-breasted Hermit *Glaucis hirsutus*; (C) Scale-throated Hermit *Phaethornis eurynome*; (D) Sombre Hummingbird *Aphantochroa cirrochloris*; (E) Mealy Parrot *Amazona farinosa*; (F) Streaked Xenops *Xenops rutilans*; (G) Red-ruffed Fruitcrow *Pyroderus scutatus*; (H) Yellow-browed Tyrant *Satrapa icterophrys*; (I) Chivi Vireo *Vireo chivi*; (J) Masked Yellowthroat *Geothlypis aequinoctialis*; (K) Fawn-breasted Tanager *Pipraeidea melanonota*; (L) Green-winged Saltator *Saltator similis*; (M) Black-throated Grosbeak *Saltator fuliginosus*. Photos: Cleverson de Figueiredo Felix (A, B, C, D) and Marcelo Ferreira de Vasconcelos (remaining).



Figure 7. First referenced voucher specimens from Bertioga for the following species: (A) Solitary Tinamou *Tinamus solitarius*; (B) Dark-billed Cuckoo *Coccyzus melacoryphus*; (C) Short-tailed Nighthawk *Lurocalis semitorquatus*; (D) Long-trained Nightjar *Hydropsalis forcipata*; (E) Green Kingfisher *Chloroceryle americana*; (F) Channel-billed Toucan *Ramphastos vitellinus*; (G) Rufous-winged Antwren *Herpsilochmus rufimarginatus*; (H) White-shouldered Fire-eye *Pyrglena leucoptera*; (I) White-eyed Foliage-gleaner *Automolus leucophthalmus*; (J) White-winged Becard *Pachyramphus polychopterus*; (K) Crested Becard *Pachyramphus validus*; (L) Bare-throated Bellbird *Procnias nudicollis*; (M) Gray-hooded Flycatcher *Mionectes rufiventris*; (N) Sepia-capped Flycatcher *Leptopogon amaurocephalus*; (O) Gray-hooded Attila *Attila rufus*; (P) Piratic Flycatcher *Legatus leucophaeus*; (Q) Streaked Flycatcher *Myiodynastes maculatus*; (R) Fuscous Flycatcher *Cnemotriccus fuscatus*; (S) Rufous-bellied Thrush *Turdus rufiventris*; (T) Red-rumped Cacique *Cacicus haemorrhous*; (U) Blue-black Grassquit *Volatinia jacarina*; (V) Black-goggled Tanager *Trichothraupis melanops*; (W) Ruby-crowned Tanager *Tachyphonus coronatus*; (X) Blue Dacnis *Dacnis cayana*; (Y) Sooty Grassquit *Tiaris fuliginosus*. Photos: Cleverston de Figueiredo Felix (A, B) and Marcelo Ferreira de Vasconcelos (remaining).

vitellinus Lichtenstein, 1823, Rufous-winged Antwren *Herpsilochmus rufimarginatus* (Temminck, 1822), White-shouldered Fire-eye *Pyriglena leucoptera* (Vieillot, 1818), White-eyed Foilage-gleaner *Automolus leucophthalmus* (Wied, 1821), White-winged Becard *Pachyramphus polychopterus* (Vieillot, 1818), Crested Becard *Pachyramphus validus* (Lichtenstein, 1823), Bare-throated Bellbird *Procnias nudicollis* (Vieillot, 1817), Gray-hooded Flycatcher *Mionectes rufiventris* Cabanis, 1846, Sepia-capped Flycatcher *Leptopogon amaurocephalus* Tschudi, 1846, Gray-hooded Attila *Attila rufus* (Vieillot, 1819), Piratic Flycatcher *Legatus leucophaius* (Vieillot, 1818), Streaked Flycatcher *Myiodynastes maculatus* (Statius Muller, 1776), Fuscous Flycatcher *Cnemotriccus fuscatus* (Wied, 1831), Rufous-bellied Thrush *Turdus rufiventris* Vieillot, 1818, Red-rumped Cacique *Cacicus haemorrhous* (Linnaeus, 1766), Blue-black Grassquit *Volatinia jacarina* (Linnaeus, 1766), Black-goggled Tanager *Trichothraupis melanops* (Vieillot, 1818), Ruby-crowned Tanager *Tachyphonus coronatus* (Vieillot, 1822), Blue Dacnis *Dacnis cayana* (Linnaeus, 1766), and Sooty Grassquit *Tiaris fuliginosus* (Wied, 1830) (Figure 7, Appendix).

Threatened taxa found in Dente's collection

The following threatened species in São Paulo state (following Silveira *et al.* 2009) are represented by specimens in Dente's collection from Rio Guaratuba deposited in UFMG: Solitary Tinamou (Figure 7A) – vulnerable; Yellow-legged Tinamou *Crypturellus noctivagus* (Wied, 1820) (Figure 8A) – endangered; Mealy Parrot (Figure 6E) – critically endangered; Unicolored Antwren *Myrmotherula unicolor* (Ménétrières, 1835) (Figure 8B) – vulnerable; Bare-throated Bellbird (Figure 7L) – vulnerable; and Red-ruffed Fruitcrow (Figure 6G) – vulnerable. The nominotypic subspecies of the Yellow-legged Tinamou is also vulnerable in Brazil (ICMBio 2014). At the global level (IUCN 2015), the Bare-throated Bellbird is treated as vulnerable, and the regional subspecies of the Channel-billed Toucan (in this system treated as a full species – the Ariel Toucan *Ramphastos ariel*) is endangered.

Concluding remarks

The bird collection from Bertioga deposited in UFMG is the largest collection known from this municipality, holding 218 specimens of 91 species. Cavarzere *et al.* (2014) reported 116 specimens of 64 species deposited in the Museu de Zoologia

da Universidade de São Paulo (MZUSP), and a total of only 20 species in the collections of Instituto Adolfo Lutz (IAL) and Museu de Zoologia da Universidade de Campinas (ZUEC). Thus, interestingly, the largest collection of birds from a municipality of São Paulo state is deposited in a regional collection of an adjacent state. We do not know how these specimens have been sent to UFMG, but other specimens collected by Dente (and deposited in MZUSP) from this same locality and period were presented by Cavarzere *et al.* (2014). It is probable that these specimens, gathered during the same sampling effort, were separately sold by the collector for MZUSP and UFMG. Since the analyzed collection includes new regional and documented records and several specimens represented by threatened species, we reinforce the need to study regional collections with more detail and check specimens that have been ‘forgotten’ through the decades (see also Willis 2003).

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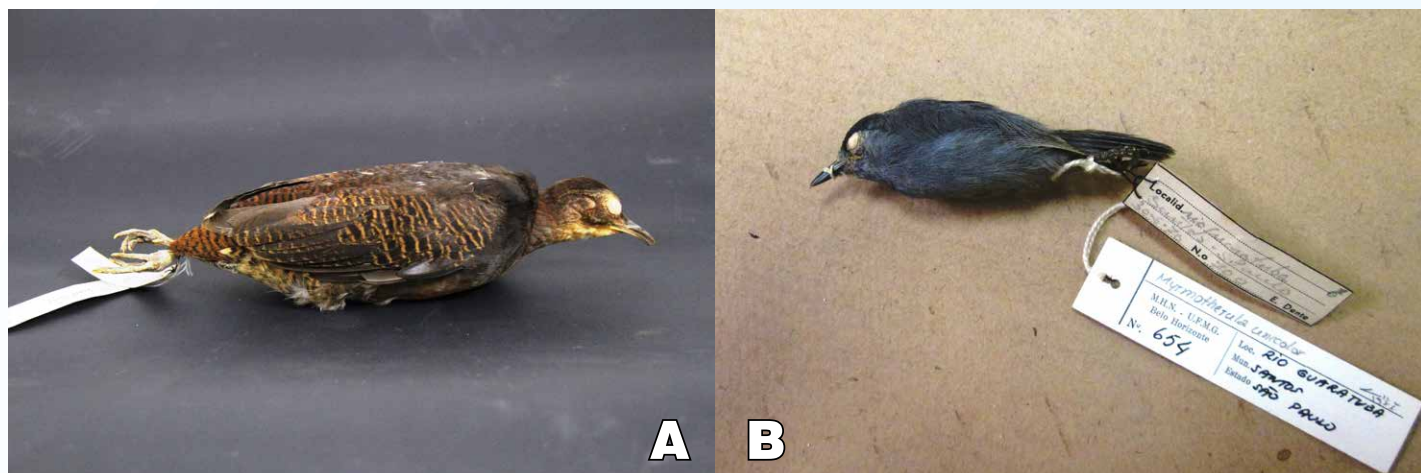


Figure 8. Specimens of two threatened taxa collected in Rio Guaratuba by Emilio Dente: (A) Yellow-legged Tinamou *Crypturellus noctivagus noctivagus*; (B) Unicolored Antwren *Myrmotherula unicolor*. Photos: Cleverson de Figueiredo Felix (A) and Marcelo Ferreira de Vasconcelos (B).

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Appendix – Catalogue of specimens collected by Emílio Dente in Rio Guaratuba, Bertioga, between October 1969 and July 1971.

Information regarding specimen data: current registration number (old registration number [if present], collector's number, date, sex).

Tinamiformes Huxley, 1872

Tinamidae Gray, 1840

Tinamus solitarius (Vieillot, 1819) - Solitary Tinamou
MHNJB-243 (1033, 506, 12 June 1970, male).

Crypturellus obsoletus (Temminck, 1815) - Brown Tinamou
MHNJB-231 (1193, 1050, 17 April 1971, male).

Crypturellus noctivagus (Wied, 1820) - Yellow-legged Tinamou
MHNJB-230 (1153, 907, 23 April 1970, female).

Columbiformes Latham, 1790

Columbidae Leach, 1820

Leptotila rufaxilla (Richard & Bernard, 1792)
MHNJB-125 (1108, 681, 29 June 1970, male).

Cuculiformes Wagler, 1830

Cuculidae Leach, 1820

Coccyzus melacoryphus Vieillot, 1817 - Dark-billed Cuckoo
MHNJB-312 (1199, 1058, 20 April 1971, female).

Strigiformes Wagler, 1830

Strigidae Leach, 1820

Glaucidium brasilianum (Gmelin, 1788) - Ferruginous Pygmy-Owl
DZUFMG-293 (1197, 1054, 19 April 1971, male).

Caprimulgiformes Ridgway, 1881

Caprimulgidae Vigers, 1825

Lurocalis semitorquatus (Gmelin, 1789) - Short-tailed Nighthawk
DZUFMG-315 (1000, 439, 18 October 1969, male); DZUFMG-316 (1015, 467, 22 October 1969, male).

Hydropsalis forcipata (Nitzsch, 1840) - Long-trained Nightjar
DZUFMG-341 (1090, 612, 22 June 1970, female).

Apodiformes Peters, 1940

Apodidae Olphe-Galliard, 1887

Chaetura cinereiventris Sclater, 1862 - Gray-rumped Swift
DZUFMG-351 (1095, 643, 26 June 1970, female); DZUFMG-352

(1092, 620, 24 June 1970, female); DZUFMG-353 (1100, 659, 27 June 1970, female); DZUFMG-354 (1101, 660, 27 June 1970, male).

Trochilidae Vigors, 1825

Ramphodon naevius (Dumont, 1818) - Saw-billed Hermit
MHNJB-29 (1056, 539, 20 April 1970, male); MHNJB-32 (1172, 970, 28 February 1971, male).

Glaucis hirsutus (Gmelin, 1788) - Rufous-breasted Hermit
MHNJB-106 (1001, 440, 19 October 1969, female).

Phaethornis eurynome (Lesson, 1832) - Scale-throated Hermit
MHNJB-63 (1087, 601, 22 June 1970, male).

Aphantochroa cirrochloris (Vieillot, 1818) - Sombre Hummingbird
MHNJB-84 (1091, 613, 23 June 1970, male).

Thalurania glaucopsis (Gmelin, 1788) - Violet-capped Woodnymph
MHNJB-99 (1128, 743, 22 June 1970, female).

Amazilia fimbriata (Gmelin, 1788) - Glittering-throated Emerald
MHNJB-112 (1097, 650, 27 June 1970, male); MHNJB-113 (1080, 578, 20 June 1970, female); MHNJB-114 (1096, 649, 27 June 1970, male); MHNJB-115 (1171, 969, 28 February 1971, male).

Coraciiformes Forbes, 1844

Alcedinidae Rafinesque, 1815

Chloroceryle aenea (Pallas, 1764) - American Pygmy Kingfisher
DZUFMG-537 (1198, 1055, 19 April 1971, male).

Chloroceryle americana (Gmelin, 1788) - Green Kingfisher
DZUFMG-529 (1175, 975, 28 February 1971, female).

Chloroceryle inda (Linnaeus, 1766) - Green-and-rufous Kingfisher
DZUFMG-528 (1055, 537, 20 September 1970, male).

Piciformes Meyer & Wolf, 1810

Ramphastidae Vigors, 1825

Ramphastos vitellinus Lichtenstein, 1823 - Channel-billed Toucan
DZUFMG-2910 (1050, 532, 16 June 1970, female).

Selenidera maculirostris (Lichtenstein, 1823) - Spot-billed Toucanet
DZUFMG-584 (1195, 1052, 19 April 1971, female).

Picidae Leach, 1820

Picumnus cirratus Temminck, 1825 - White-barred Piculet
MHNJB-251 (1012, 458, 21 October 1969, male); MHNJB-252 (1037, 514, 14 June 1970, male); MHNJB-253 (1070, 559, 18 June 1970, female); MHNJB-254 (1122, 783, 18 June 1970, male); DZUFMG-599 (1107, 679, 29 June 1970, female).

Piculus flavigula (Boddaert, 1783) - Yellow-throated Woodpecker
MHNJB-269 (882, 619, 24 June 1970, male); MHNJB-270 (1052, 535, 20 April 1970, unsexed); MHNJB-271 (1102, 661, 27 June 1970, male); MHNJB-272 (1196, 1053, 19 April 1971, male); DZUFMG-593 (1053, 536, 20 April 1970, male).

Celeus flavescens (Gmelin, 1788) - Blond-crested Woodpecker
MHNJB-288 (1014, 461, 22 October 1969, male); MHNJB-290 (1067, 556, 18 June 1970, female); MHNJB-291 (1068, 557, 18 June 1970, male); MHNJB-292 (1114, 732, 14 June 1970, female); MHNJB-293 (1194, 1051, 17 April 1971, female).

Psittaciformes Wagler, 1830

Psittacidae Rafinesque, 1815

Pyrrhura frontalis (Vieillot, 1817) - Maroon-bellied Parakeet
DZUFMG-428 (1745, 630, 25 June 1970, male); DZUFMG-429 (1744, 631, 26 June 1970, female).

Brotogeris tirica (Gmelin, 1788) - Plain Parakeet
DZUFMG-439 (1746, 768, 22 June 1970, female); DZUFMG-440 (1742, 602, 22 June 1970, male).

Pionus maximiliani (Kuhl, 1820) - Scaly-headed Parrot
DZUFMG-457 (1741, 444, 20 October 1969, female); DZUFMG-458 (1743, 695, 30 June 1970, male).

Amazona farinosa (Boddaert, 1783) - Mealy Parrot
DZUFMG-466 (627, 533, 19 June 1970, female).

Passeriformes Linnaeus, 1758

Thamnophilidae Swainson, 1824

Myrmotherula unicolor (Ménétrières, 1835) - Unicolored Antwren
DZUFMG-1035 (654, 700, 30 June 1970, male).

Herpsilochmus rufimarginatus (Temminck, 1822) - Rufous-winged Antwren
DZUFMG-1043 (764, 789, 20 August 1970, female); DZUFMG-1044 (639, 475, 23 October 1969, female).

Pyriglena leucoptera (Vieillot, 1818) - White-shouldered Fire-eye
DZUFMG-1137 (643, 541, 23 April 1970, male); DZUFMG-1138 (648, 647, 27 June 1970, male).

Drymophila squamata (Lichtenstein, 1823) - Scaled Antbird
DZUFMG-1112 (645, 575, 20 June 1970, male); DZUFMG-1113 (649, 673, 28 June 1970, male); DZUFMG-1114 (651, 680, 29 June 1970, male); DZUFMG-1115 (650, 675, 28 June 1970, female); DZUFMG-1116 (646, 584, 21 June 1970, female); DZUFMG-1117 (641, 516, 14 June 1970, male); DZUFMG-1118 (647, 590, 21 June 1970, male); DZUFMG-1119 (538, 20 April 1970, female).

Conopophagidae Sclater & Salvin, 1873

Conopophaga melanops (Vieillot, 1818) - Black-cheeked Gnateater
DZUFMG-1083 (1040, 518, 14 June 1970, male); DZUFMG-1084 (1110, 692, 30 June 1970, male); DZUFMG-1085 (1088, 610, 23 June 1970, male); DZUFMG-1086 (1109, 684, 29 June 1970, male); DZUFMG-1087 (1017, 469, 23 October 1969, female).

Formicariidae Gray, 1840

Formicarius colma Boddaert, 1783 - Rufous-capped Antthrush
DZUFMG-1157 (640, 502, 9 June 1970, male); DZUFMG-1158 (638, 452, 20 October 1969, male); DZUFMG-1159 (653, 697, 30 June 1970, female); DZUFMG-1160 (652, 688, 29 June 1970, male); DZUFMG-1161 (656, 786, 20 August 1970, male).

Scleruridae Swainson, 1827

Sclerurus scansor (Ménétrières, 1835) - Rufous-breasted Leaf-tosser
DZUFMG-886 (830, 674, 28 June 1970, female).

Dendrocolaptidae Gray, 1840

Dendrocincla turdina (Lichtenstein, 1820) - Plain-winged Woodcreeper
DZUFMG-610 (1075, 571, 20 June 1970, male); DZUFMG-611 (1066, 554, 18 June 1970, male); DZUFMG-612 (1030, 503, 9 June 1970, female).

Xiphorhynchus fuscus (Vieillot, 1818) - Lesser Woodcreeper

DZUFMG-368 (1099, 658, 27 June 1970, male); DZUFMG-668 (1074, 569, 19 June 1970, male); DZUFMG-669 (1103, 664, 28 June 1970, male); DZUFMG-670 (1121, 779, 18 June 1970, female).

Xiphocolaptes albicollis (Vieillot, 1818) - White-throated Woodcreeper
DZUFMG-622 (1082, 582, 21 June 1970, male).

Xenopidae Bonaparte, 1854
Xenops minutus (Sparrman, 1788) - Plain Xenops
DZUFMG-875 (823, 566, 19 June 1970, female).

Xenops rutilans Temminck, 1821 - Streaked Xenops
DZUFMG-883 (827, 609, 23 June 1970, female).

Furnariidae Gray, 1840
Automolus leucophthalmus (Wied, 1821) - White-eyed Foliage-gleaner
DZUFMG-730 (822, 564, 19 June 1970, female); DZUFMG-731 (824, 595, 22 June 1970, female).

Philydor atricapillus (Wied, 1821) - Black-capped Foliage-gleaner
DZUFMG-864 (829, 667, 28 June 1970, female); DZUFMG-865 (832, 740, 21 June 1970, female); DZUFMG-866 (825, 607, 23 June 1970, male); DZUFMG-867 (826, 608, 23 June 1970, female); DZUFMG-868 (815, 466, 23 October 1969, female); DZUFMG-869 (821, 532, 20 April 1970, male).

Synallaxis spixi Sclater, 1856 - Spix's Spinetail
DZUFMG-770 (828, 628, 25 June 1970, male).

Pipridae Rafinesque, 1815
Manacus manacus (Linnaeus, 1766) - White-bearded Manakin
DZUFMG-1228 (1131, 769, 8 June 1970, male); DZUFMG-1229 (1039, 517, 14 June 1970, male); DZUFMG-1230 (1132, 770, 14 June 1970, female); DZUFMG-1231 (1084, 597, 22 June 1970, female).

Chiroxiphia caudata (Shaw & Nodder, 1793) - Swallow-tailed Manakin
DZUFMG-1253 (1081, 580, 20 June 1970, male); DZUFMG-1254 (1115, 735, 16 June 1970, male); DZUFMG-1255 (1069, 558, 18 June 1970, male); DZUFMG-1256 (1308, 741, 21 June 1970, male).

Tityridae Gray, 1840
Pachyramphus polychopterus (Vieillot, 1818) - White-winged Becard
DZUFMG-1182 (1005, 448, 20 October 1969, female); DZUFMG-1183 (1007, 451, 20 October 1969, male); DZUFMG-1184 (1048, 531, 20 April 1970, female).

Pachyramphus validus (Lichtenstein, 1823) - Crested Becard
DZUFMG-1202 (1018, 474, 23 October 1969, male); DZUFMG-1203 (1016, 468, 23 October 1969, female).

Cotingidae Bonaparte, 1849
Carpornis cucullata (Swainson, 1821) - Hooded Berryeater
DZUFMG-1169 (1057, 540, 23 April 1970, female); DZUFMG-1170 (1106, 677, 29 June 1970, female); DZUFMG-1171 (1098, 656, 27 June 1970, male).

Pyroderus scutatus (Shaw, 1792) - Red-ruffed Fruitcrow
DZUFMG-1201 (1032, 505, 12 June 1970, female).

Procnias nudicollis (Vieillot, 1817) - Bare-throated Bellbird
DZUFMG-1198 (1123, 784, 20 August 1970, female).

Platyrinchidae Bonaparte, 1854
Platyrinchus mystaceus Vieillot, 1818 - White-throated Spadebill
DZUFMG-1604 (754, 641, 26 June 1970, female).

Rhynchocyclidae Berlepsch, 1907
Mionectes rufiventris Cabanis, 1846 - Gray-hooded Flycatcher
DZUFMG-1710 (1298, 640, 26 June 1970, male); DZUFMG-1711 (753, 600, 22 June 1970, male); DZUFMG-1712 (763, 782, 21 June 1970, female).

Leptopogon amaurocephalus Tschudi, 1846 - Sepia-capped Flycatcher
DZUFMG-1693 (752, 596, 22 June 1970, female); DZUFMG-1694 (755, 671, 28 June 1970, male).

Todirostrum poliocephalum (Wied, 1831) - Gray-headed Tody-Flycatcher
DZUFMG-1660 (741, 470, 23 October 1969, male).

Tyrannidae Vigors, 1825
Serpophaga nigricans (Vieillot, 1817) - Sooty Tyrannulet
DZUFMG-1622 (792, 1059, 19 April 1971, male).

Attila rufus (Vieillot, 1819) - Gray-hooded Attila
DZUFMG-1494 (1093, 625, 25 June 1970, female); DZUFMG-1495 (1003, 445, 20 October 1969, male); DZUFMG-1496 (1071, 565, 19 June 1970, male).

Legatus leucophaeus (Vieillot, 1818) - Piratic Flycatcher
DZUFMG-1410 (784, 974, 28 February 1971, male).

Pitangus sulphuratus (Linnaeus, 1766) - Great Kiskadee
DZUFMG-1460 (756, 698, 30 June 1970, male).

Myiodynastes maculatus (Statius Muller, 1776) - Streaked Flycatcher
DZUFMG-1404 (740, 465, 22 October 1969, male).

Cnemotriccus fuscatus (Wied, 1831) - Fuscous Flycatcher
DZUFMG-1542 (785, 978, 28 February 1971, male).

Satrapa icterophrys (Vieillot, 1818) - Yellow-browed Tyrant
DZUFMG-1351 (737, 442, 19 October 1969, male).

Vireonidae Swainson, 1837
Vireo chivi (Vieillot, 1817) - Chivi Vireo
DZUFMG-154 (1004, 447, 20 October 1969, female); DZUFMG-157 (1006, 450, 20 October 1969, female).

Troglodytidae Swainson, 1831
Cantorchilus longirostris (Vieillot, 1819) - Long-billed Wren
DZUFMG-1780 (1009, 455, 21 October 1969, male); DZUFMG-1781 (1077, 573, 20 June 1970, male); DZUFMG-1782 (1058, 540, 17 June 1970, female).

Turdidae Rafinesque, 1815
Turdus flavipes Vieillot, 1818 - Yellow-legged Thrush
DZUFMG-24 (559, 657, 27 June 1970, male); DZUFMG-25 (561, 771, 9 June 1970, female); DZUFMG-49 (558, 632, 26 June 1970, female).

Turdus rufiventris Vieillot, 1818 - Rufous-bellied Thrush
DZUFMG-8 (556, 560, 18 June 1970, male); DZUFMG-13 (557, 583, 21 June 1970, male).

Turdus amaurochalinus Cabanis, 1850 - Creamy-bellied Thrush
DZUFMG-71 (563, 773, 28 June 1970, male).

Turdus albicollis Vieillot, 1818 - White-necked Thrush
DZUFMG-32 (560, 633, 26 June 1970, male); DZUFMG-36 (555, 513, 14 June 1970, male); DZUFMG-37 (550, 460, 21 October 1969, male).

Parulidae Wetmore, Friedmann, Lincoln, Miller, Peters, van Rossem, Van Tyne & Zimmer 1947

Setophaga pitiayumi (Vieillot, 1817) - Tropical Parula
DZUFMG-201 (1047, 530, 16 June 1970, male).

Geothlypis aequinoctialis (Gmelin, 1789) - Masked Yellowthroat
DZUFMG-206 (921, 5, 28 February 1971, male); DZUFMG-207 (1010, 456, 21 October 1969, male); DZUFMG-221 (1049, 531, 16 June 1970, male).

Myiothlypis rivularis (Wied, 1821) - Neotropical River Warbler
DZUFMG-273 (1083, 591, 21 June 1970, female); DZUFMG-274 (1008, 454, 21 October 1969, male); DZUFMG-275 (1076, 572, 20 June 1970, male).

Icteridae Vigors, 1825

Cacicus haemorrhous (Linnaeus, 1766) - Red-rumped Cacique
DZUFMG-137 (2235, 1060, 20 April 1971, male); DZUFMG-140 (2232, 906, 3 July 1970, male).

Thraupidae Cabanis, 1847

Pipraeidea melanonota (Vieillot, 1819) - Fawn-breasted Tanager
DZUFMG-1989 (1301, 788, 20 August 1970, female).

Tangara seledon (Statius Muller, 1776) - Green-headed Tanager
DZUFMG-1919 (619, 624, 25 August 1970, female); DZUFMG-1920 (577, 446, 20 October 1969, male).

Tangara cyanocephala (Statius Muller, 1776) - Red-necked Tanager
DZUFMG-1924 (625, 696, 30 June 1970, female); DZUFMG-1925 (1321, 1057, 19 April 1971, male); DZUFMG-1926 (1310, 746, 27 June 1970, male); DZUFMG-1927 (1309, 790, 20 August 1970, female); DZUFMG-1928 (622, 623, 25 June 1970, female).

Tangara sayaca (Linnaeus, 1766) - Sayaca Tanager
DZUFMG-1964 (614, 646, 27 June 1970, female).

Tangara cyanoptera (Vieillot, 1817) - Azure-shouldered Tanager
DZUFMG-2005 (613, 644, 27 June 1970, male); DZUFMG-2006 (599, 676, 28 June 1970, male); DZUFMG-2007 (596, 689, 30 June 1970, female).

Tangara palmarum (Wied, 1821) - Palm Tanager
DZUFMG-2012 (609, 642, 26 June 1970, male); DZUFMG-2013 (1313, 785, 20 August 1970, male).

Haplospiza unicolor Cabanis, 1851 - Uniform Finch
DZUFMG-2381 (892, 742, 22 June 1970, female).

Chlorophanes spiza (Linnaeus, 1758) - Green Honeycreeper
DZUFMG-1821 (1218, 1314, 7 July 1971, male); DZUFMG-1822 (1104, 670, 28 June 1970, male); DZUFMG-1823 (1051, 534, 20 April 1970, female).

Volatinia jacarina (Linnaeus, 1766) - Blue-black Grassquit
DZUFMG-2218 (854, 183, 29 June 1970, male); DZUFMG-2219 (883, 691, 30 June 1971, female).

Trichothraupis melanops (Vieillot, 1818) - Black-goggled Tanager

DZUFMG-2131 (1311, 774, 17 June 1970, female); DZUFMG-2132 (601, 669, 28 June 1970, female).

Lanio cristatus (Linnaeus, 1766) - Flame-crested Tanager
DZUFMG-2144 (587, 511, 14 June 1970, female); DZUFMG-2145 (578, 449, 20 October 1969, female); DZUFMG-2146 (615, 639, 26 June 1970, female); DZUFMG-2147 (608, 745, 27 June 1970, female).

Tachyphonus coronatus (Vieillot, 1822) - Ruby-crowned Tanager
DZUFMG-2097 (1297, 581, 21 June 1970, female); DZUFMG-2098 (595, 687, 29 June 1970, female); DZUFMG-2099 (620, 594, 22 June 1970, male); DZUFMG-2100 (626, 561, 18 June 1970, male); DZUFMG-2101 (591, 528, 16 June 1970, female); DZUFMG-2102 (1306, 734, 10 June 1970, male).

Ramphocelus bresilius (Linnaeus, 1766) - Brazilian Tanager
DZUFMG-2037 (579, 453, 21 October 1969, male); DZUFMG-2038 (581, 463, 22 October 1969, male); DZUFMG-2039 (582, 464, 22 October 1969, female); DZUFMG-2040 (598, 678, 29 June 1970, female); DZUFMG-2041 (618, 626, 25 June 1970, female); DZUFMG-2042 (2228, 538, 17 June 1970, male).

Dacnis cayana (Linnaeus, 1766) - Blue Dacnis
DZUFMG-1851 (1129, 747, 27 June 1970, female); DZUFMG-1852 (1124, 787, 20 August 1970, male); DZUFMG-1853 (1073, 568, 19 June 1970, male); DZUFMG-1854 (1094, 627, 25 June 1970, female).

Coereba flaveola (Linnaeus, 1758) - Bananaquit
DZUFMG-1835 (1060, 542, 17 June 1970, male); DZUFMG-1836 (1118, 738, 17 June 1970, male).

Tiaris fuliginosus (Wied, 1830) - Sooty Grassquit
DZUFMG-2235 (881, 579, 20 June 1970, female).

Saltator similis d'Orbigny & Lafresnaye, 1837 - Green-winged Saltator
DZUFMG-2318 (876, 645, 27 June 1970, female).

Saltator fuliginosus (Daudin, 1800) - Black-throated Grosbeak
DZUFMG-2251 (875, 555, 18 June 1970, female).

Cardinalidae Ridgway, 1901

Habia rubica (Vieillot, 1817) - Red-crowned Ant-Tanager
DZUFMG-2076 (580, 462, 22 October 1969, female); DZUFMG-2077 (1314, 749, 28 June 1970, female); DZUFMG-2078 (1299, 663, 28 June 1970, female); DZUFMG-2079 (600, 666, 28 June 1970, male); DZUFMG-2080 (607, 665, 28 June 1970, male).

Fringillidae Leach, 1820

Euphonia violacea (Linnaeus, 1758) - Violaceous Euphonia
DZUFMG-2053 (597, 690, 30 June 1970, male); DZUFMG-2054 (1319, 973, 28 February 1971, male); DZUFMG-2055 (604, 685, 29 June 1970, male); DZUFMG-2056 (1300, 748, 27 June 1970, male); DZUFMG-2057 (583, 471, 23 October 1969, male); DZUFMG-2058 (593, 686, 29 June 1970, female); DZUFMG-2059 (584, 472, 23 October 1969, female); DZUFMG-2060 (594, 648, 27 June 1970, female).

Euphonia pectoralis (Latham, 1801) - Chestnut-bellied Euphonia
DZUFMG-1995 (623, 535, 17 June 1970, female); DZUFMG-1996 (588, 515, 14 June 1970, male); DZUFMG-1997 (628, 533, 20 April 1970, male); DZUFMG-1998 (1295, 512, 14 June 1970, male); DZUFMG-1999 (592, 529, 16 June 1970, male); DZUFMG-2000 (1312, 775, 13 June 1970, male); DZUFMG-2001 (585, 473, 23 October 1969, female); DZUFMG-2002 (2229, 541, 17 June 1970, female).