

# Birds collected by P. W. Lund and J. T. Reinhardt in south-eastern Brazil between 1825 and 1855, with notes on P. W. Lund's travels in Rio de Janeiro

Niels Krabbe

Zoological Museum, University of Copenhagen, Universitetsparken 15, DK-2100, Copenhagen, Denmark

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**RESUMO:** Aves coletadas por P. W. Lund e J. T. Reinhardt no sudeste do Brasil entre 1825 e 1855, com notas sobre as viagens de P. W. Lund no Rio de Janeiro. Dados sobre a coleção de aves feita por P. W. Lund e J. T. Reinhardt, entre 1825 e 1855, no sudeste do Brasil são divulgados. Incluindo-se 500 espécimes coletados nos estados do Rio de Janeiro e São Paulo, muitos dos quais ainda inéditos. Um relato detalhado sobre o itinerário de Lund no estado do Rio de Janeiro é fornecido, baseado em informações de seus rótulos de espécimes, seu catálogo de aves coletadas e correspondências pessoais.

**PALAVRAS-CHAVE:** P. W. Lund e J. T. Reinhardt; coleção de aves no sudeste do Brasil.

**ABSTRACT:** Data are given for birds collected in south-eastern Brazil by P. W. Lund and J. T. Reinhardt between 1825 and 1855, including 500 specimens from the states of Rio de Janeiro and São Paulo, many of which had remained unpublished. A detailed account is given of Lund's itinerary in Rio de Janeiro state, based on information from his specimen labels, bird catalogue, and personal letters.

**KEY-WORDS:** P. W. Lund and J. T. Reinhardt; bird collection from southeast Brazil.

## BACKGROUND

The naturalist Peter Wilhelm Lund was born in Denmark in 1801. He visited Brazil from 1825 to 1829, staying in the state of Rio de Janeiro, where he studied the flora and fauna and collected specimens for the Royal Natural History Museum in Copenhagen. This collection included 758 bird specimens, of which 436 are still intact today. In 1833 he returned to Brazil where he met the German botanist Ludwig Riedel (1790-1861) who at the time collected plants for the Botanical Garden of St. Petersburg. They traveled together through the states Rio de Janeiro, São Paulo, Minas Gerais and Goiás. In Minas Gerais Lund met with his countryman Peter Claussen, who had recovered subfossil bones of unknown species in calcareous caves. Lund became interested and proceeded to study the subfossils found in these caves, an effort for which he is widely known (Lund 1836-37, 1838-43, 1839a,b, 1840). He settled in Lagoa Santa in Minas Gerais and remained there until his death in 1880. He collected altogether 1,662 bird specimens in Brazil. From June to November 1847 and again from September 1850 to March 1852 and from November 1854 to November 1855 the zoologist Johannes Theodor Reinhardt (1816-1882), who in 1848 took over his father's job as 'inspector' of Lund's collections at the Royal Natural History Museum in Copenhagen, joined him and collected 800 more bird specimens. Reinhardt later published data on most of the birds that he and Lund had collected, in his book on the birds of the "campos" (Cerrado) region (Reinhardt 1870).

Much of Reinhardt's text is repeated here, including all his notes on soft part colors, breeding information and stomach contents of the specimens. As the book was published in Danish, this is done for the data to become accessible to a wider audience.

Lund collected 932 specimens in the states of Rio de Janeiro and São Paulo. Reinhardt (*op. cit.*) did not publish data on these specimens except for those pertaining to species that also occur in the "campos" region of Minas Gerais.

Pinto (1950) mapped Lund's journeys and collecting sites from information given by Reinhardt (*op. cit.*) and Mattos (1939) and provided more up-to-date scientific names of the majority of the specimens published by Reinhardt.

## METHODS

The present study includes a revision of the entire collection. Incomplete label data were complemented by information from Lund's bird catalogue, which is still kept in the Zoological Museum of the University of Copenhagen. Additional information on Lund's itinerary in Rio de Janeiro were obtained from reading 12 letters that Lund wrote to friends and family in Denmark, letters that are now kept in the Royal Library of Copenhagen, and through the study of Reinhardt's book (*op. cit.*). A few bird specimens were sent to Louisiana State University for identification.

Coordinates and elevations for the collecting sites were found in Paynter and Traylor (1991) and Vanzolini (1992), in



FIGURE 1. Some birds collected by P. W. Lund. (watercolour by Jon Fjeldså)

Top left to right:

*Calyptura cristata*, ad. male, Rosário, Rio de Janeiro, 1 Aug 1827

*Calyptura cristata*, imm. male, Rosário, Rio de Janeiro, 3 Jan 1828

*Tyrannus albogularis*, juv. male, Lagoa Santa, Minas Gerais, 5 Dec 1835

*Empidonomus aurantioatrocristatus*, juv. female, Lagoa Santa, Minas Gerais, 12 Dec 1836

Centre left top to bottom and right:

*Sporophila (bouvreuil) saturata*, off-season male, Mogi das Cruzes, São Paulo, 20 Nov 1833

*Sporophila (bouvreuil) saturata*, male, Mogi das Cruzes, São Paulo, 16 Nov 1833

*Thripophaga macroura*, male, Aldeia da Pedra, Rio de Janeiro, 5 Jul 1828

Bottom:

*Pardirallus sanguinolentus zeledori*, female, Itaipu or Piratininga, Rio de Janeiro, 1 Dec 1828





and most have no label data. Until reports of a recent sighting (Pacheco and da Fonseca 2000, 2001), it was feared long extinct. The information that two of the three specimens collected by Lund had eaten insects and that one gave an almost sparrow-like chirp, as well as that they were taken at Rosário, adds to the little that is known about the species (Figure 2).

*Sporophila [bouvreuil] saturata* was only known from 4 specimens, the most recent collected in 1900, and was feared long extinct until reported by A. Ribeiro in 2007 (<http://tinyurl.com/y862q9>).

Further notes on these and some other specimens are given in the species account (Appendix 1).

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## APPENDIX 1

### List of bird specimens collected in south-eastern Brazil by P. W. Lund and J. T. Reinhardt. Locality data are given in Appendix 2.

Taxonomy and sequence follows Dickinson (2003). Parentheses around a locality indicate that the specimens have perished or are among the ones with no locality data on the label, or, if so stated, that the species was only observed, not collected at the locality. Breeding data, soft part colours and notes include the perished specimens. Only enlarged gonads are included in the gonad data. The number in parenthesis after the species number is that used by Reinhardt (1870), an asterix indicating that the taxon was not treated by him. Author's notes are in brackets.

Abbreviations are: m = male(s), f = female(s), uns = unsexed, ad. = adult(s), imm. = immature(s), juv. = juvenile(s), pull. = downy young. **Br.** = Breeding data, **SP** = Soft part colours, **St.** = Stomach contents. Names of months are abbreviated by their first three letters. An entry like “**SP**: 1-11:...” means that the data given on soft parts is based on at least one, but perhaps as many as eleven specimens.

1 (50) *Rhea americana americana* (Andrequicé); eggs Taboleira Grande; eggs Lagoa Santa; 1 juv.m locality? **Br.**: Eggs 28 Jul, Aug and early Sep (Minas Gerais). **St.**: One full of grass and leaves, another with many grasshoppers, beetles, fruits of *Cocos flexuosa* (Palmae) and a fruit of *Andira anthelminthica* (Leguminosae-Papilionoideae).

2 (53) *Crypturellus obsoletus obsoletus* 2m 1f Lagoa Santa; 1f São Bento; 1f 1juv.m Sumidouro; 1m Lagoa dos Pitos. **Br.**: 1f: Ovary large late Aug (Minas Gerais). **SP**: 1-8: Iris red, bill grayish black, feet gray with liverbrown wash. **St.**: Several had only seeds and pebbles.

3 (52) *Crypturellus undulatus vermiculatus* 1m Retiro. **Br.**: 1m: Testes large 20 May. **SP**: 1m: Iris chestnut, bill black, feet light olive-green. **St.**: Aromatic seeds and pebbles. **Notes**: [On the label and in Lund's catalogue as “Retiro 20-9-34”, a date when Lund collected at Lagoa Dourada and Santa Ana dos Alegres. Presumably a penslip for “20-5-34” when Lund was at Retiro in São Paulo.]

4 (51) *Crypturellus noctivagus noctivagus* 1uns Paraíba near Aldeia da Pedra; 2m Lagoa dos Pitos. **Br.**: Male with flock of young 7 Jul (Parahyba). **SP**: 1-3: Iris red, feet dirty yellow. **Notes**: Widespread and common (Reinhardt).

5 (55) *Crypturellus parvirostris* 3m 1uns Lagoa Santa; 1f Rio São Francisco. **Br.**: 2: Gonads enlarged 1 Oct (Rio São Francisco) and 18 Jun (Lagoa Santa). **SP**: 1-6: Iris pale yellowish brown or reddish brown. **St.**: 1: Seeds and pebbles.

6 (54) *Crypturellus tataupa tataupa* 2uns Rio; 1juv.m 1juv.f Rosário; 1m 1f 1juv.uns Lagoa Santa. **Br.**: 3: Gonads



- large 6 Sep (Lagoa Santa), 2 Aug and 2 Dec (Rosário). Juv. 17 May and 21 Jun (Rosário). **SP:** 1-12: Iris pale chestnut, bill coral red, feet dirty reddish violet. **St.:** 2: Seeds, berries and pebbles, and in one also a few insects.
- 7 (60) *Nothura minor* 1f 1juv./pull.uns Lagoa Santa. **Br.:** The half grown chick was taken 4 Jan.
- 8 (59) *Nothura maculosa major* 1f 1pull./juv.uns Lagoa Santa; 1uns Curvelo; 1uns Fazenda Pindaibas. **Br.:** Half grown chick 24 Dec (Lagoa Santa). **SP:** 1-5: Iris isabelline yellow, feet whitish horn. **St.:** 1-5: Seeds.
- 9\* *Dendrocygna bicolor* 1f Campinas. **SP:** 1f: Iris dark brown, bill and feet dusky blue gray.
- 10 (9) *Amazonetta brasiliensis brasiliensis* 1m Limeira; 2f Lagoa dos Pitos; 1f Lagoa dos Porcos. **SP:** 1m: Iris black, bill dull cinnabar red, reddest on maxilla. 2-3f: Bill black, feet dirty gray. **Notes:** [All pertaining to the nominate race (small size).]
- 11\* *Anas bahamensis rubrirostris* 1f Rio; 2m “São Paulo?”.
- 12 (7) *Nomonyx dominicus* 1juv.m Lagoa Santa. **Notes:** Only common during the rainy season (Reinhardt).
- 13 (62) *Penelope supercilialis jacupemba* 1f Rancho Podrinho; 5m 1f 1uns Lagoa Santa; 1f Lagoa dos Pitos; 2f Sumidouro; 1m Rasgão do Açude; (Riberão de Almoço); (Curvelo, observed only). **SP:** 1-14: Iris blood red or dark carmine, bill black, ocular skin and chin blackish gray, gular skin bright cinnabar red, feet violaceous gray brown. **St.:** 3-14: Seeds, yellow flowers of “Pao d’Arco” *Bignonia* sp. (Bignoniaceae), once an ant.
- 14\* *Penelope obscura bronzina* 1uns Rio. **SP:** 1: Bill black, gular skin orange, feet gray brown. **St.:** 1: Berries. **Notes:** Often kept as a pet (Lund).
- 15\* *Pipile jacutinga* 1m Rio. **Br.:** 1m moulting 7 Apr. **SP:** 1m: Bill black, facial skin bright blue around eye, violet on throat, dewlap orange, feet red. **Notes:** Generally fatter and much better tasting than *Penelope obscura*, and in some places even the commoner of the two; hunted, and with reason (Lund).
- 16 (61) *Odontophorus capueira capueira* 2f Rosário; 1m Lagoa dos Pitos; 2uns Lagoa Santa; (Curvelo); (Araras, heard only). **SP:** 1-6: Iris brown, bill blackish gray, bare facial skin orange yellow, feet brownish gray. **St.:** 1-6: Seeds, berries and pebbles.
- 17 (1) *Tachybaptus dominicus speciosus* 1f Rio Grande near Cantagalo; 1f Lagoinha; 1uns Lagoa Santa; 1f Lagoa dos Porcos; 1f Curvelo; 1m 1pull./juv.uns Lagoa dos Pitos; 1f Sumidouro. **Br.:** Chicks Aug and Jan (Minas Gerais). **SP:** 1f: Iris light grayish yellow, maxilla horn gray with a light spot at base, mandible horn white, feet dark plumbeous. **St.:** 1: Insects.
- 18 (2) *Podilymbus podiceps antarcticus* 1m Lagoa Santa.
- 19 (6) *Phalacrocorax brasilianus brasilianus* (Lagoa dos Pitos [sic=Lagoa Dourada]).
- 20 (5) *Anhinga anhinga anhinga* 1imm.m Riberão do Mato; (Lagoa Santa); (Sumidouro); (Rio Taquaruçu).
- 21\* *Fregata magnificens* (Rio).
- 22 (22) *Tigrisoma lineatum marmoratum* 1juv.uns Sete Lagoas.
- 23 (19) *Cochlearius cochlearius cochlearius* 1f Lagoa Santa. **SP:** 1f: Iris black, maxilla dark gray, cutting edge and mandible dirty pale yellow, longitudinal dark gray band at base of mandible, bare facial skin olive green, skin under mandible pale greenish yellow, feet pale yellowish green.
- 24 (20) *Nycticorax nycticorax hoactli* 1juv.m Sumidouro; 1f Lagoa dos Pitos.
- 25 (23) *Butorides striata striata* 1f 1juv.f 1juv.uns Lagoa Santa; 1f Pertininga; 1 uns Sete Lagoas; 1uns Fazenda da Sacco de Franca; 1f Lagoa dos Pitos. **SP:** 1f: Iris orange yellow, bare facial skin yellow green, maxilla black, cutting edge light olive yellow, mandible light olive yellow, edge of base black, feet sulphur yellow, underside of toes orange yellow. **St.:** 2: Odonata and various aquatic worms.
- 26 (24) *Ardea cocoi* 1f Rio das Velhas 2.
- 27 (26) *Ardea alba egretta* 1f Sumidouro; (Venda Nova). **Br.:** Ovary small 27 Aug. **St.:** 1: Small fish, especially *Tetragonopterus* sp. (Characidae).
- 28 (21) *Pilherodius pileatus* 2f Lagoa Santa; 1m Lagoinha; 1uns Andrequicé; (Sete Lagoas). **SP:** 2f: Iris citrine, bare facial skin and sides of bill blue, central part of mandible pale rosy, feet bluish.
- 29 (25) *Egretta thula thula* 3uns Rio; 1juv.f Lagoa Santa; (Sete Lagoas). **SP:** 1f: Iris dull yellow, eye-ring greenish edged wax yellow, bill black, base of maxilla whitish, lores and base of mandible yellow, feet black in front, greenish behind, toes yellow.
- 30 (15) *Plegadis chihi* (Lagoa Santa).
- 31 (13) *Phimosus infuscatus nudifrons* (Lagoa dos Pitos).
- 32 (14) *Theristicus caudatus hyperorius* 1f Lagoa dos Porcos. **Notes:** [With pronounced steel green reflections on the tail, characteristic of *hyperorius*.]
- 33 (18) *Ciconia maguari* 1juv.uns Sumidouro.
- 34 (17) *Jabiru mycteria* 2uns Sete Lagoas; 1juv.uns Lagoa Santa.
- 35 (75) *Cathartes aura ruficollis* 1m Fazenda do Engenho. **Br.:** Newly hatched chicks Sep (Minas Gerais) (Reinhardt).
- 36 (76) *Coragyps atratus brasiliensis* 1uns Rio; 1pull. Lagoa Santa. **Br.:** Newly hatched chick 27 Jul (Lagoa Santa). Also breeds Nov-Dec in Minas Gerais (Reinhardt).
- 37 (77) *Sarcoramphus papa* 1m 1juv.uns Fazenda Jaguaré.
- 38 (84) *Leptodon cayanensis monachus* 1m 1juv.m 1juv.f Lagoa Santa. **SP:** 1-5: Iris yellow, bill black, cere yellow, lores pale yellow, feet yellow.
- 39 (81) *Elanoides forficatus yetapa* 2uns Lagoa Santa.
- 40 (80) *Elanus leucurus leucurus* 1m 1imm.m Lagoa Santa. **SP:** 1-2: Iris cinnamon, bill black, cere sulphur yellow, feet gray. **St.:** 2: Mice (*Calomys?*).
- 41 (83) *Rostrhamus sociabilis sociabilis* 1uns Ilicaba; (Sumidouro). **SP:** 1-2: Bill black, cere yellow. **St.:** 1-2: Snails.

- 42 (82) *Ictinia plumbea* 1m 1f 1juv.m Lagoa Santa. **SP:** 1juv. f: Iris dull dark yellow, bill black, cere wax yellow, feet dull yellow, toes black. **St.:** 2: Insects.
- 43\* *Circus buffoni* 1f dark morph Rosário. **SP:** 1f: Iris pale yellow, cere light green, feet yellow.
- 44\* *Accipiter superciliosus superciliosus* 1f Lagoa Santa. **SP:** 1f: Iris lemon yellow, bill black, cere green, orbital skin pale sulphur yellow, feet wax yellow, claws black. **St.:** 1f: a small bird.
- 45 (88) *Accipiter bicolor pileatus* 1juv.f Rio; 1m Pai Joaquim. **SP:** 1-2: Iris yellow, bill grayish black, pale at base, cere and loreal region sulphur yellow, feet yellow.
- 46 (90) *Geranospiza caerulescens flexipes* 1f Lagoa Santa.
- 47 (95) *Buteogallus urubitinga urubitinga* 1juv.f Sumidouro. **St.:** 1: Water insects and larvae.
- 48 (96) *Buteogallus meridionalis* 2juv.f 1pull.f Lagoa Santa. **SP:** 1-4: Iris orange red, bill black, cere lemon yellow, lores pale gray, feet lemon yellow, claws black. **St.:** 3: Birds and grasshoppers.
- 49\* *Parabuteo unicinctus unicinctus* 1juv.f Rio.
- 50 (89) *Buteo magnirostris magniplumis* 1f Rio; 1m Rancho Queimado; 2m 1f Lagoa Santa; 1uns Sete Lagoas. **St.:** 6: Insects, especially grasshoppers and crickets, occasionally mice, lizards and snakes.
- 51 (97) *Buteo albicaudatus albicaudatus* 1f Capãozinho; 1m Tolda; (Lagoa Santa). **St.:** 2: Grasshoppers and crickets. **Notes:** Also takes lizards (Reinhardt).
- 52\* *Spizaetus tyrannus tyrannus* (Morro Queimado).
- 53 (98) *Spizaetus ornatus ornatus* 1m Lagoa Santa. **St.:** 1: Dove (*Leptotila* sp.).
- 54 (79) *Caracara plancus* 1f Sumidouro; 1f 1juv.uns Lagoa Santa. **SP:** 1-6: Iris gray, bill pale bluish, whitish at tip, feet bluish white. **St.:** 3: Insects, especially grasshoppers, and lizards.
- 55 (78) *Milvago chimachima chimachima* 3m 1f 1uns 2juv.f Lagoa Santa; (Itaipu). **SP:** 1m: Iris yellowish brown, bill bluish tipped white, feet pallid gray. **St.:** 6-8: Ticks (*Ixodes*), insects, especially termites and wasps, larvae, small mammals, once a chick of *Porzana albicollis*, twice (Apr) full of fruit of the "murici"-tree *Byrsonima* (Malpighiaceae).
- 56 (87) *Micrastur ruficollis ruficollis* 1f 1uns Morro Queimado; 1uns Lagoa Santa; (Lapa do Baú). **St.:** 2: Snakes and insects.
- 57 (86) *Micrastur semitorquatus semitorquatus* 1juv.f Morro Queimado; 1f Sumidouro. **SP:** 1f: Bill gray, cere greenish, feet yellow. **St.:** 1: Snake.
- 58 (94) *Falco sparverius cearae* 2m Rio; 1f Campinas; 1m São Bento; 1f Batatais; 4f Lagoa Santa; 1m 2f Sete Lagoas. **St.:** 4-12: Insects, especially grasshoppers.
- 59 (93) *Falco ruficularis ruficularis* 1m Lagoa Santa. **SP:** 1m: Iris black, maxilla blackish, whitish basally on sides, mandible pale olive tipped grayish, cere and orbital skin sulphur yellow, feet wax yellow, toes blackish. **St.:** 1m: Insects.
- 60 (92) *Falco femoralis femoralis* 1f São Bento; 1m Capãozinho; 1m 1f 1juv.f Lagoa Santa. **SP:** 1-5: Iris black, bill blue black, sulphur yellow at base, cere, orbital skin and feet lemon yellow. **St.:** Small birds and large beetles (1f), insects (1f).
- 61 (45) *Aramides cajanea cajanea* 1uns Rio; 1uns Sumidouro; 1f Engenho; (Lagoa dos Pitos). **SP:** 1-6: Iris and bare orbital skin bright blood red, bill green at base, wax yellow towards tip, feet bright coral red.
- 62 (46) *Aramides saracura* 1uns Rio de Janeiro; (Lagoa Santa); (Sumidouro). **SP:** 1-3: Iris blood red with a narrow white ring around the pupil, bare orbital skin blood red, bill green, feet carmine. **St.:** 1: Insects, seeds and gravel.
- 63 (43) *Laterallus melanophaius melanophaius* 1m Sampaio. **SP:** 1m: Bill greenish black, feet yellow brown.
- 64\* *Porzana flaviventer flaviventer* 1m Lagoa Santa. **Br.:** 1m: testes large 6 Apr. **SP:** 1m: Iris coral red (narrow), bill dark olive brown, feet grayish yellow. **St.:** 1m: Insects.
- 65 (44) *Porzana albicollis albicollis* 2uns Rio; 1f Lagoa Santa. **SP:** 1-3: Iris red, bill green, ridge darker, feet brown. **Notes:** [Rio specimens taken 6 and 8 Dec, probably at Itaipu in 1828.]
- 66 (48) *Pardirallus nigricans nigricans* 1f Itaipu; 1m Pertinanga; 1 uns Engenho; 1m Lagoa Santa; (Sumidouro). **SP:** 1-5: Iris coral red, bill blue green at tip, yellowish green at base, feet pale carmine. **Notes:** [The specimen labeled "Engenho" is in Lund's catalogue as "Cap. Teixeira".]
- 67\* *Pardirallus sanguinolentus zelebori* 1f Itaipu or Piratininga. **SP:** 1f: Iris red, bill green, base of maxilla sky blue with scarlet spot on sides, mandible scarlet at base, feet red (Fig. 1). **Notes:** Flushed in grass in a swamp, flew into the water (Lund). [No locality given, but taken 1 Dec [1828], when Lund collected and labeled another specimen "Itaipu". Presumably from Lagoa de Itaipu or the immediately adjacent Lagoa de Piratininga, where Lund also collected while living in Itaipu. Lagoa de Piratininga and Baía de Sepetiba 70 km further west are the only recorded localities for this taxon, which is known from only two or three specimens (see Discussion). It is distinctive from other races by its very small size, much slenderer bill, and darker coloration. It is also supposed to differ by having a yellowish green bill, but the bill was described as green (as in other races) for the present specimen, which is the first known female of the taxon.]
- 68 (39) *Gallinula chloropus galeata* 1juv.f Lagoa Santa; 3m Itaipu; 1pull.uns Lagoa do Defunto; 3f Rasgão do Açude de Jaguaré. **Br.:** 1juv./pull 7 Nov (Lagoa do Defunto). **SP:** 1juv./pull.: Bill and poorly developed frontal shield pale olive brown, a dark band in front of nostrils, feet olive green with a dirty yellow band just below feathering.

- 69 (40) *Porphyrio martinica* 2uns Rio; 1m Itaipu; 1f 1uns 1juv.m 1juv.f Lagoa Santa. **SP:** 1-6ad.: Iris reddish brown, bill blood red, tip sulphur yellow, frontal shield grayish blue, feet wax yellow. 1-2juv.: Iris chestnut, maxilla brown with a paler, olive green tip, mandible olive green with a pale brown base, frontal shield brown, feet pale olive green. **St.:** 2: Seeds and insects.
- 70 (41) *Porphyrio flavirostris* 1m Lagoa Santa. **Br.:** Gonads large 23 Feb and 13 Mar. **SP:** 1-2: Iris orange, bill and frontal shield bright grass green, feet wax yellow. **St.:** 1m: Seeds.
- 71 (27) *Cariama cristata* 3m 5f 2juv.f 1juv.uns 2pull.uns Lagoa Santa; 1f Sumidouro; 1f Campinho; (Araraquara). **Br.:** Pulli Nov, Dec, Jan (Minas Gerais). **SP:** 1 downy young about two weeks old: Iris orange, bill reddish brown, feet grayish brown. 1f: Iris white with violet sheen, orbital skin light blue, bill and feet coral red. **St.:** 10: Beetles, especially Scarabaeoidea, Buprestidae, Elateridae and Curculionidae, grasshoppers, ants and termites, in some also a fair amount of resin and unidentified seeds.
- 72 (30) *Vanellus cayanus* 1f Lagoa Santa; 1uns Sete Lagoas. **SP:** 1-2: Iris black, eye-ring red, bill black, feet red.
- 73 (31) *Vanellus chilensis lampronotus* 1uns Rio; 1f 2uns Lagoa Santa; 1uns Sete Lagoas. **SP:** 1-5: Iris black, eye-ring rosy-violaceous, bill black, base rosy violaceous, toes and tarsus black, tibia rosy.
- 74 (28) *Pluvialis dominica* 2uns Lagoa Santa. **Notes:** Undated.
- 75 (29) *Charadrius collaris* (Lagoinha). **SP:** 1-4: Iris black, bill black, base of sides yellow, feet pale isabelline. **St.:** 4: Various small beetles (2), sand and small insect larvae (2).
- 76 (33) *Himantopus mexicanus* [ssp?] (Lagoa Santa); (Sumidouro). **Br.:** 1m: Testes large 8 Sep. **SP:** 1-7: Iris red (narrow), bill black, feet "dove red".
- 77 (38) *Gallinago paraguayae paraguayae* 1m Taubaté; 2m 2f 1juv.m Lagoa Santa. **Br.:** 1m: Large testes and nest 24 Oct (Lagoa Santa). **SP:** 1-6: Iris dark brown, bill black at tip, horn at base, feet pale yellowish olive.
- 78 (36) *Bartramia longicauda* 1uns Capivari. **Notes:** One taken 26 Oct.
- 79 (34) *Tringa flavipes* 1juv.f Lagoa Santa. **SP:** 1juv.f: Iris black, bill black, olive gray at base, feet wax yellow tinged greenish. **Notes:** 1juv.f taken 16 Apr.
- 80 (35) *Tringa solitaria solitaria* 2f Itaipu; 1f Taubaté; 3f Lagoinha; 1f locality? **SP:** 1-7: Iris black, bill olive, turning dark at tip or wholly black, feet pale olive to blue gray. **St.:** 3: insects and sand. **Notes:** Taken mid Apr and late Oct-early Nov. [It appears significant that all seven are females.]
- 81\* *Calidris fuscicollis* 1f Rio. **Notes:** 1f 7 Jan.
- xxx *Calidris bairdii* [?] (Taubaté). **Notes:** One taken 4 Nov.
- 82\* *Calidris melanotos* 1f Lagoa Santa; 1m Itaipu. **Notes:** 1f 26 Oct (Lagoa Santa), 1m 21 Nov (Itaipu).
- 83 (32) *Jacana jacana jacana* 2m 1juv.m 2juv.f Itaipu; 1f Paraíba at Aldeia da Pedra; 2m 1f 1uns 1juv.m 1juv.uns Lagoa Santa. **Br.:** 9: Gonads large 1 and 3 Aug (2; Lagoa Santa) and late Nov and Dec (7; Itaipu). **SP:** 1-21: Iris dark brown, bill wax yellow with red base, feet blue gray. **St.:** 2-5: Insects, plants, sand and gravel.
- 84\* *Nycticryphes semicollaris* 2f São Paulo. **Notes:** [Of typical Lund "make", but not in Lund's catalogue and labels secondary, possibly referring to the state rather than the city of São Paulo.]
- 85 (3) *Sternula superciliaris* 2f Lagoa Santa. **St.:** 1f: Fish.
- 86 (4) *Phaetusa simplex* 1uns Rio.
- 87 (67) *Columbina talpacoti talpacoti* 1m Rio de Janeiro; 1m Rio; 1f Rosário; 2m 3f 1uns Lagoa Santa; (Araras); (Campinas). **Br.:** 1m 1f: Gonads large 1 May (Rio; Lagoa Santa). **SP:** 1-14: Iris straw yellow, bill black, eye-ring pale yellow, orbital skin violet, feet pale carmine.
- 88 (65) *Columbina squammata squammata* (Franca); (Rio São Francisco); (Paracatu); (Curvelo); (Sete Lagoas); (Taboleira Grande).
- 89 (69) *Claravis pretiosa* (Lagoa Santa). **SP:** 1m: Iris orange, bill pale greenish, feet pale reddish.
- 90 (70) *Claravis godefrida* 4m Lagoa Santa. **SP:** 2-4m: Iris bright red (very narrow), bill black, feet "dove red" or carmine, toes black. **Notes:** Testes of male collected 7 Aug large and heavily infested with trematodes.
- 91 (64) *Uropelia campestris campestris* 1m Paracatu. **SP:** 1m: Iris bluish black, bill black, orbital skin yellow, feet wax yellow.
- 92 (74) *Patagioenas cayennensis sylvestris* 2m 1f Lagoa Santa. **SP:** 4-7: Iris with an outer narrow gray ring and an inner broader ring that is rosy pink in adults, orange in younger birds, bill black, feet carmine. **St.:** 2-7: Fruit and berries, e.g. *Loranthus* (Loranthaceae). **Notes:** Absent from Lagoa Santa late Nov and Dec (Reinhardt). Specimens taken Jan, Apr, Jun, Aug, Sep.
- 93 (73) *Patagioenas plumbea plumbea* 1m 1f Macaé; 1m 1f Lagoa Santa; (Santa Ana dos Alegres). **Br.:** 1m: Testes large 17 Jul (Lagoa Santa). **SP:** 1-7: Iris orange red, bill black, feet carmine. Minas Gerais specimens from Jul, Aug, Sep, Dec.
- 94 (66) *Zenaida auriculata chrysauchenia* 1m 1f Lagoa Santa. **SP:** 1-2: Iris black, bill black, orbital skin grayish blue, feet "dove red". **St.:** 1-2: Grass seeds.
- 95 (71) *Leptotila verreauxi decipiens* 1f Morro Queimado; 2f Lagoa Santa; 1m Sumidouro; 1m Mogi das Cruzes; (Itu); (Campinas); (Curvelo). **SP:** 2: Iris orange yellow, bill black, feet bright carmine. Orbital skin bluish with a red spot before and behind eye (1; Lagoa Santa) or colorless above and below eye, violet red in front, on rim and behind eye (1f; Morro Queimado). **Notes:** Common on Morro Queimado. [Not distinguished by Reinhardt (1870), who treated these specimens under previous species.]



- 96 (71) *Leptotila rufaxilla reichenbachii* 1f 1uns Lagoa Santa.
- 97 (72) *Geotrygon montana montana* 2m Lagoa Santa. **SP:** 1m: Iris yellowish brown, bill brownish, orbital skin and feet carmine.
- xxx *Ara chloropterus* (junction of Rio Mugi and Rio Pardo; seen only?).
- 98 (112) *Primolius maracana* 1uns Rosário; 1m Lagoa Santa. **Notes:** Flocks on Morro Queimado in Nov (Lund).
- 99 (113) *Aratinga leucophthalma leucophthalma* 1m Rosário; 1m Mocambo; 1m Pedra dos Indios; 1f Lagoa Santa. **SP:** 1-5: Iris orange yellow, bill whitish, feet pale gray.
- 100 (114) *Aratinga auricapillus aurifrons* 1f Limeira; (between São Carlos and Limeira); (Lagoa Santa). **SP:** 1-4: Iris grayish yellow, bill and feet blackish gray.
- 101 (116) *Aratinga aurea* 1f Lagoa Dourada; 1uns Lagoa Santa; 1uns Sete Lagoas; (Curvelo; seen only). **SP:** 1-5: Iris chestnut, bill black, orbital skin dark brown, feet gray.
- 102 *Pyrrhura frontalis*  
(117) *P. f. frontalis* 1uns Rio; 1m Mocambo; (Sumidouro); 1m Lagoa Santa; 1f locality?  
\* *P. f. chiripepe* 1uns Campinas.  
**Br.:** Absent from Morro Queimado Oct-Dec, to appear with young in Jan. **SP:** 1-9: Iris and bill blackish, cere yellow, orbital skin whitish, feet gray. **St.:** Seeds and flowers of *Vernonia* (Compositae) (1 uns Jul Sumidouro and 1-2 Aug Rosário).
- 103 (122) *Forpus xanthopterygius xanthopterygius* 1m Rio; 5m 3f Sete Lagoas; 1m 2f Rosário; 1m Catalão; 1m Lagoa Santa. **SP:** 1-14: Iris gray, bill whitish, feet pale gray. **St.:** 1m: Seeds.
- 104\* *Brotogeris tirica* (Macaé). **SP:** 1uns.: Bill and feet horn brown **Notes:** In small flocks (Lund).
- 105 (118) *Brotogeris chiriri chiriri* 2f Lagoa Santa; 1f Tijuco; (Uberaba); (Curvelo); (Andrequicé); (Sete Lagoas); (Rio das Velhas 1). **Br.:** 2 short-tailed young 22 Oct (Curvelo). Usually 4-5 young in a brood (Reinhardt). **SP:** 1-9: Iris gray brown, bill and feet whitish horn.
- 106\* *Pionopsitta pileata* 1m 1f Campinas; (Rosário; seen only?). **SP:** 1-2: Iris dark brown. **St.:** 1m: seeds. **Notes:** Seen commonly at Rosário (Reinhardt citing Lund).
- 107 (120) *Pionus maximiliani maximiliani* 1m 1uns Rio; (Lagoa Santa). **SP:** 1-3: Bill white with black spot on top, feet gray.
- 108\* *Amazona vinacea* 1juv.m Morro Queimado. **Br.:** 3 fledglings found in cavity on *Cedrela odorata* (Meliaceae) 20 Nov (Rosário). **SP:** 2-3juv: Bill dull carmine, feet gray. **Notes:** The commonest parrot, even the commonest bird at Nova Friburgo (Reinhardt citing Lund).
- 109\* *Coccyzus melacoryphus* 1f Rio.
- 110 (146) *Piaya cayana macroura* 2f Rosário; (Macaé); 1m Ressaquinha; 1m Lagoa Santa; (Itu). **SP:** 1-13: Iris and orbital skin blood red, bill pale green, feet gray blue. **St.:** 2-13: Hairy larvae and insect imagos, especially Hymenoptera and Hemiptera (*Lygaeus* group).
- 111\* *Crotophaga major* 1uns between Aldeia da Pedra and Campos.
- 112 (142) *Crotophaga ani* 1f 1juv.m Rio; 1m Rosário; 1f Lagoa Santa.
- 113 (143) *Guira guira* 1uns between Aldeia da Pedra and Campos; (Aldeia da Pedra); 1f 1uns Lagoa Santa; 1f Curvelo; (Campinas). **St.:** 1-7: Beetles, grasshoppers and larvae, sometimes hairy larvae.
- 114 (145) *Tapera naevia naevia* 1f 1uns Itaipu; 1m Aldeia da Pedra; 1f Lagoa Santa; 1juv.m locality? **SP:** 1-5: Iris brownish yellow, bill yellowish white with blackish brown tip, feet pale violet gray. **St.:** 2: Insects, especially grasshoppers, and partly seeds; not hairy larvae.
- 115 (144) *Dromococcyx phasianellus* 2f Sumidouro; 4f Lagoa Santa. **SP:** 1-9: Iris pale brown, maxilla brownish, mandible yellowish white, orbital skin green, feet brownish gray. **St.:** 2-3: Insects including hairy larvae.
- 116\* *Tyto alba tuidara* 2m 1f Lagoa Santa. **Br.:** 1f: Ovary large 7 Apr. **St.:** 1f: a mouse.
- 117 (103) *Megascops choliba decussatus* Rio; Lagoa Santa; Sumidouro; Sete Lagoas. **Br.:** 1f: Ovary large 19 Jul (Lagoa Santa). **SP:** 1-6: Bill bluish tipped white, toes bluish-plumbeous. **St.:** 1uns.: Insects, especially beetles.
- 118 (102) *Megascops atricapilla* (Lagoa Santa); (Sete Lagoas); (Sumidouro); (Curvelo). **St.:** 1-4: Mice (*Calomys* sp.).
- 119\* *Pulsatrix koenigswaldiana* 1uns Morro Queimado.
- 120 (104) *Ciccaba virgata borelliana* 1uns Lagoa Santa. **Br.:** Downy young 15 Oct. **SP:** 1uns.: Iris dark brown, bill white, toes pale rufous gray. **Notes:** Brought to Lund as a downy young 15 Oct 1836 and kept as a pet until it died 17 May 1837 (Reinhardt citing Lund).
- 121 (105) *Ciccaba huhula albomarginata* 1m Lagoa Santa. **SP:** 1m: Iris black, bill and toes wax yellow, claws light gray.
- 122 (108 and 109) *Glaucidium brasilianum brasilianum* 1uns Lagoa dos Pitos; 2m 2uns Morro Queimado; 2m Lagoa Santa; 1m Macaé. **SP:** 1-9: Iris lemon yellow, bill and toes horn yellow or yellowish green, claws blackish gray. **St.:** 3m: Insects, especially grasshoppers, occasionally a lizard. **Notes:** [The two colour morphs lead Reinhardt to believe that two sympatric species were involved.]
- 123 (106) *Athene cunicularia grallaria* 2f Lagoa Santa; 1uns Sete Lagoas; 1m Taubaté; 1m Ribeirão de Almoço; (Paracatu); (Franca). **SP:** Iris yellow, bill and feet whitish. **St.:** 3-5: Insects, especially grasshoppers and crickets but also beetles, occasionally a mouse.
- 124 (100) *Pseudoscops clamator clamator* 4f 1uns Lagoa Santa; 1m 1f Sumidouro. **Br.:** 1f: Ovary large 7 Apr. **St.:** 3-8: Rodents, marsupial rats, birds and large insects.
- 125 (101) *Asio stygius stygius* 1imm.f 1imm.uns Lagoa Santa; 1m Sumidouro. **Br.:** Two birds about 3 months old 8 Aug and 16 Sep (Lagoa Santa). **SP:** Iris bright yellow (2 imm.) or orange (1m), bill, cere and feet pale blue gray.

- 126 (175) *Nyctibius grandis grandis* (Lagoa Santa).
- 127 (176) *Nyctibius aethereus aethereus* 1f Lagoa Santa.
- 128 (178) *Chordeiles pusillus pusillus* 1f Lagoa Santa. **SP:** 1f: Iris and bill black, feet light reddish gray.
- 129\* *Chordeiles acutipennis acutipennis* 1f São Fidelis.
- 130 (177) *Podager nacunda nacunda* 1m Fazenda Lages; 1f Lagoa Santa; (Fazenda de Margarita, seen only). **Br.:** 1m: testes large 26 Sep (Lages). **SP:** 1-6: Iris brown, bill black, feet light gray brown.
- 131 (183) *Nyctidromus albicollis derbyanus* 1f Lagoa Santa; 1m Rio São Francisco; (Sete Lagoas). **Br.:** 1m: Testes large 2 Oct (Rio São Francisco). **SP:** 1-4: Bill brown tipped black, feet pale gray brown, toes black.
- 132 (180) *Nyctiphrynus ocellatus ocellatus* 1m Lagoa Santa **SP:** 1-2: Iris blackish brown, feet reddish brown.
- 133 (179) *Caprimulgus rufus rutilus* 1f Sete Lagoas; (Lagoa Santa).
- 134 (181) *Hydropsalis torquata torquata* 1f Campos de Goitacases; (Lagoa Santa).
- 135 (182) *Eleothreptus anomalus* 1f Lagoa Santa. **Notes:** 2 females both had medium enlarged ovaries 3 Aug.
- 136 (173) *Streptoprocne zonaris zonaris* 1m Lagoa Santa; 1uns Sete Lagoas. **SP:** 1-2: Bill and feet blackish. **St.:** 1m: insects. **Notes:** Absent at Lagoa Santa Apr-Sep (Reinhardt).
- 137 (174) *Streptoprocne biscutata biscutata* 1f Lagoa Santa. **Br.:** 1f: Ovary large 13 Oct.
- 138\* *Chaetura cinereiventris cinereiventris* 1m Rio de Janeiro.
- 139 (155) *Florisuga fusca* 6uns, 1imm.uns 2juv.uns Sete Lagoas.
- xxx\* *Ramphodon naevius* 1f "Rio". **Notes:** [Given to Lund by Count Gallean. Origin of specimen unknown.]
- 140\* *Glaucis hirsutus hirsutus* (1 m, 1 f, Rio). **SP:** Bill black, basal 2/3 (1m) or 1/2 (1f) of mandible yellow. **St.:** 2: insects (both 17 Jul).
- 141 (149) *Phaethornis squalidus* 1m 2f Rosário. **Br.:** 1m: testes large 23 May. **SP:** 1m 2f: Feet wax yellow.
- 142 (148) *Phaethornis ruber ruber* 1m Rosário; (Itaipu); 3uns Sete Lagoas. **SP:** 1-5: Bill black, basal half of mandible lemon yellow, feet wax yellow.
- 143 (147) *Phaethornis pretrei* 4uns Sete Lagoas; (Lagoa Santa). **SP:** 1-6: Iris and maxilla black, mandible red with blackish brown tip, feet reddish gray.
- 144\* *Phaethornis eurynome eurynome* 1m Rio de Janeiro; 2m Rio. **SP:** 1-3: Iris and maxilla black, mandible wax yellow tipped black, feet pale brown.
- 145 (157) *Colibri serrirostris* 1m 1juv.m Lagoa Santa; 16uns 1juv.uns Sete Lagoas; 1m São Bento; (Campinas); (Itu); (Paracatu). **Br.:** 1juv. 5 Oct. **SP:** 1-25: Bill and feet black. **Notes:** Present all year in the Campos region (Reinhardt).
- 146 (161) *Heliactin bilophus* 4m 2f Lagoa Santa; 13m Sete Lagoas; 1f Paracatu. **SP:** 1-20: Iris, bill and feet black.
- 147 (162) *Heliomyrta auritus auriculatus* 1f Sete Lagoas; 1uns locality?; (Rio). **SP:** 1-3: Bill black, feet gray.
- 148 (158) *Polytmus guainumbi thaumantias* 4uns 1juv.uns Sete Lagoas.
- 149 (152) *Anthracothorax nigricollis* 1m Mugi das Cruzes; 2m 1f Sete Lagoas.
- 150\* *Discosura langsdorffi langsdorffi* 1f Rio.
- 151 (163) *Lophornis magnificus* 1f 1juv.m Rio; Sete Lagoas; (Uberaba); (Campinas). **Br.:** Gonads large 18 Jun (1m; Rio) 1, 2, 5 Aug (3f; Rio). **SP:** Bill black (1-4f) or pink tipped black (1-5m). Feet black (2-11).
- 152 (160) *Clytolaema rubricauda* 2m 1juv.m Rio. **SP:** 2m: Iris and bill black.
- 153 (159) *Heliomaster squamosus* 1m Lagoa Santa; 4m Sete Lagoas; 1f Curvelo; 1juv.m locality? **SP:** 1-8: Iris, bill and feet black.
- 154 (164) *Calliphlox amethystina* 1m 1f 1juv.m Lagoa Santa; 10m Sete Lagoas; 1m 1f Catalão; 1f Paracatu; (Rio). **SP:** 1-19: Bill and feet black.
- 155 (172) *Chlorostilbon aureoventris pucherani* 3m 1f Rio; 2m Lagoa Santa; 4m Sete Lagoas; 2m 2juv.m locality?
- 156 (165) *Stephanoxis lalandi lalandi* 1juv.m Rio. **SP:** 1juv.m: Bill black.
- 157 (151) *Eupetomena macroura macroura* 3m Lagoa Santa; 25uns Sete Lagoas; (Paracatu). **Br.:** 3m: Testes large 4 Oct, 4 Nov, 7 Mar. **SP:** 1-32: Bill black. 158 (154) *Thalurania furcata eriphile* 1f Itu; 1m Curvelo; 2m Lagoa Santa; 16m 4f Sete Lagoas. **SP:** 1-26: Bill and feet black. **Notes:** [The Itu female clearly belongs here and not with *glaucoptis* (broad base of the bill and light green crown).]
- 159 (153) *Thalurania glaucopsis* 2m Rosário; 3f Rio; (Rio de Janeiro); 1f Campinas; (Lagoa Santa). **Br.:** 1m: Testes large 10 Sep (Rosário). **SP:** 1-18: Bill black, feet brown.
- 160 (150) *Aphantochroa cirrochloris* 1f Uberaba; 2uns Sete Lagoas; (Lagoa Santa).
- 161 (167) *Leucochloris albicollis* 1f Rosário; 1f Campinas; (Macaé). **SP:** 2f: Maxilla black, mandible white tipped black.
- 162 (168) *Amazilia versicolor versicolor* 2uns Rio; 1m Campinas; 1f Itu; 48uns Sete Lagoas.
- 163 (169) *Amazilia lactea lactea* 2m 3uns Lagoa Santa; 9uns Sete Lagoas. **SP:** 1-14: Maxilla black, mandible purple tipped black, feet black.
- 164\* *Hylocharis cyanus cyanus* 1m Rio. **Br.:** 1m: Testes large 17 July, 30 Oct. **SP:** 1m: Bill red tipped black, feet black.
- 165 *Trogon surrucura*  
(185) *T. s. surrucura*: 1m 1f Batatais.  
(184) *T. s. aurantius*: 3m 2f Rosário; 1m Lagoa Santa; (Sumidouro). **SP:** (*aurantius*) 1-10m: Iris brown, eye-ring orange yellow, bill white, feet gray; 1-3f: Eye-ring white. **St.:** 7: Insects, larvae, berries, seeds.
- 166\* *Trogon rufus chrysochloris* 2f Rosário; 1juv.m Aldeia da Pedra.

- 167 (192) *Megaceryle torquata torquata* 1f Pertinanga; 1f Lagoa Santa.
- 168 (193) *Chloroceryle amazona* 1uns 1juv.m Lagoa Santa. **SP:** 1-4: Bill black, feet blackish.
- 169 (194) *Chloroceryle americana mathewsii* 2f 1juv.f Rio de Janeiro; (Itaipu); 1m Sete Lagoas. **SP:** 1-5: Bill and feet black. **St:** 1f: *Gobius* sp.
- 170 (195) *Baryphthengus ruficapillus* 1uns Lagoa Santa; 1uns Sete Lagoas; 1m Paracatu; 1f Mocambo; 1m Catalão. **SP:** 1-7: Iris cinnamon, bill black, feet gray. **St:** 2-4 birds: Beetles, grasshoppers, Hemipterans. 2 birds (Jun, Jul): full of berries. **Notes:** [The specimen from Catalão has slightly greener back than the others.]
- 171 (190) *Brachygalba lugubris melanosterna* 1f São Domingos.
- 172 (191) *Jacamaralcyon tridactyla* 2m 2f 2uns 1juv.m Rio; (Lorena); 1f Campinas. **Br.:** 1m 2f: Gonads large 27 Nov (2; Rio), 5 Aug (1m; Rio) **SP:** 1-11: Iris dark brown, bill black, feet gray.
- 173 (189) *Galbula ruficauda rufoviridis* 1m Paracatu; 1m 2f Curvelo; (Lagoa Santa); (Sete Lagoas); (between Sampaio and São Fidelis). **SP:** 1-7: Bill black, feet gray.
- 174\* *Notharchus swainsoni* 1uns Rosário; 1uns Aldeia da Pedra. **SP:** 1-5: Bill and feet black. **Notes:** Found in both forest and single trees in open country (Lund).
- 175 (186) *Nystalus chacuru chacuru* 1m Campinas; 1m João Tollo near Itu; 3m 2f Lagoa Santa; 2uns Sete Lagoas. **SP:** 3-9: Iris pale yellow (once bright chestnut), feet olive brown.
- 176 (187) *Malacoptila striata striata* 2f Rio de Janeiro; 1juv.f Rosário; 1m 1f Lagoa Santa **SP:** 1-10: Iris dark red, bill black, feet pale greenish gray (not black).
- 177 (188) *Nonnula rubecula rubecula* 1m Rosário; 1f Mocambo; 1f Lagoa Santa. **SP:** 1-3: Iris black, bill blackish, base of mandible whitish, feet olive.
- 178\* *Chelidoptera tenebrosa brasiliensis* 1uns between Cantagalo and Aldeia da Pedra 3 July 1828. **SP:** Bill and feet black.
- 179 (137) *Ramphastos toco albogularis* 3juv.f Quebra; 1m 1uns Lagoa Santa; 1uns Sete Lagoas. **SP:** 1-6: Iris dull dark orange, orbital skin orange, eye-ring violet blue, bill orange red, redder on ridge, vertical darklines at base of bill and patch on sides of maxilla-tip, feet bluish, scutes on tarsus greenish blue. **St:** 1-6: Berries, seeds, fruit.
- 180 (138) *Ramphastos dicolorus* 1m 2uns Lagoa Santa; (Morro Queimado); (Capitão Mor). **St:** 2-4: Fruit, berries and seeds. **Notes:** Both in primary forest and coffee plantations (Reinhardt).
- 181 (141) *Selenidera maculirostris* 1m 1f Rosário; 1m Lagoa Santa; 1m Sete Lagoas; (Lagoa dos Pitos). **SP:** 1-7: Iris citrine with outer blue ring, orbital skin greenish, bill white, ridge bluish, maxilla with 4 black spots, mandible with a black bar, feet bluish.
- 182 (139) *Pteroglossus aracari aracari* 1juv.m Campinas; 1m Lagoa Santa; 1f Lagoa dos Pitos; 1m Campos de Goitacases. **SP:** 1-6: Iris brown, maxilla white, ridge black, mandible lack, feet gray blue, toes olive. **St:** 4: Fruit and berries, including *Phytolacca* berries (Phytolaccaceae) and “coffeebean” berries (Rubiaceae).
- 183 (140) *Pteroglossus castanotis australis* 1m 1f Uberaba.
- 184\* *Pteroglossus bailloni* 1m Rosário; (Bananal). **SP:** 1-3: Iris yellowish, orbital skin vermilion, bill green, paler, yellowish green towards tip, darker, blue green towards base, a cinnabar red patch on maxilla and mandible, “teeth” white, feet gray green. **St:** 1m: Berries. **Notes:** Absent at Rosário May-Sep, otherwise fairly common in small flocks (Lund).
- 185 (135) *Picumnus cirratus cirratus* 4m 4f 1juv.f Rio; 1m 1f Sete Lagoas. **SP:** 1-11: Iris black, bill and feet gray. **St:** 1f: insects (many ants).
- 186 (136) *Picumnus albosquamatus guttifer* 1f Lagoa Santa.
- 187 (133) *Melanerpes candidus* 2m 1f Lagoa Santa; 1m Campos; (Campinas); (Rio Jaguari); (Fazenda de João Pinto); (campos near Curvelo; seen only). **SP:** 1-9: Iris white, bill plumbeous black, base of mandible pale plumbeous, eye-ring pale yellow, feet pale bluish. **St:** 2m: Insects.
- 188 (132) *Melanerpes flavifrons* 2f Rio; (Macaé); 1m 1f Lagoa Santa; 1m 1f Sete Lagoas; (Curvelo). **SP:** 1-10: Iris black, bill and feet gray. **St:** 1f: Insects and berries.
- 189 (126) *Veniliornis mixtus cancellatus* 2m Sete Lagoas; (Lagoa Santa). **SP:** 1-3: Iris brown, bill horn gray, feet brownish gray.
- 190 (130) *Veniliornis maculifrons* 2m Rio; 1imm.f Lagoa Santa. **Br.:** 2m: Testes large 25 Jun and 1 Aug (Rio). **SP:** 2m: Iris dark brown, bill black, feet blue gray. 1imm.f: Maxilla blackish brown, mandible whitish tipped blackish brown, feet blue gray.
- 191 (128) *Piculus flavigula erythropis* 1m Sete Lagoas.
- 192 (131) *Colaptes melanochloros melanochloros* (Rio); (Macaé); 3m 2f Lagoa Santa; 2m 1f Sete Lagoas; (Sumidouro). **SP:** 1-11: Bill black, feet greenish gray.
- 193 (134) *Colaptes campestris campestris* 1m 1f Alferes Casinier; 1m Tolda; (Catalão); (Lagoa Santa). **SP:** 1-6: Iris dark brown, bill dark gray, feet pale greenish gray.
- 194 (127) *Celeus flavescens flavescens* 1m Rio; 1f Rosário; 1f Sorocaba; 1f Itu; 2m 1f Lagoa Santa; (Capitão Amaral); (Uberaba). **SP:** 1-9: Iris cinnamon brown, bill and feet blackish gray. **St:** 1f: Termites and seeds.
- 195 (125) *Dryocopus lineatus*  
*D. l. lineatus:* 1f Rasquão de Açude de Jaguaré; 1f Batatais.  
*D. l. erythropis:* 1m Rosário; 1m Sete Lagoas.  
**SP:** 1-4: Iris pale yellow, bill and feet gray. **St:** 1m: Ants and ant pupae.
- 196 (124) *Campephilus robustus* 1m Macaé; (Rosário); (Lagoa Santa). **SP:** 1-5: Iris yellow, bill and feet gray. **St:** 1m: Big larvae and small beetles. **Notes:** Common at Macaé and Rosário (Lund).
- 197 (123) *Campephilus melanoleucos cearae* 1f Lagoa Santa. **SP:** 1f: iris citrine, eye-ring blackish gray, bill and feet greenish gray, claws gray.



- 198 (296) *Sclerurus scansor scansor* 1m 2f Lagoa Santa. **SP:** 1-4: Iris black, bill blackish, base of mandible white, feet blackish. **St.:** 1-2: Insects.
- 199 (295) *Geositta poeciloptera* Retiro; Franca; Lagoa Santa; (Uberaba); (Paracatu; observed only?). **Br.:** 1juv. 8 Dec (Lagoa Santa). **SP:** 1-8: Iris dark brown, maxilla blackish, mandible whitish tipped blackish, feet yellowish. **St.:** 1-8: Insects.
- 200 (298) *Furnarius rufus albogularis* (Capelinha); 1f Paracatu; 2m Lagoa Santa. **SP:** 1-4: Iris yellowish gray, bill pale brown, feet greenish gray. **St.:** 1-4: Insects, larvae.
- 201\* *Synallaxis ruficapilla* 2f 1imm.f 1juv.uns Rosário. **Br.:** 1juv. 6 Feb.
- 202\* *Synallaxis cinerascens* 1f Rosário; 1juv.f Campinas. **Br.:** 1juv. 28 Jan (São Carlos).
- 203 (293) *Synallaxis frontalis frontalis* 1m Córrego Rico; 1uns Sete Lagoas; 2m 2f 2juv.uns Lagoa Santa. **Br.:** 2juv. 4 and 15 Mar (Lagoa Santa). **SP:** 1-8: Iris brown, maxilla blackish, mandible plumbeous, feet pale olive. **St.:** 1juv.: Insects.
- 204 (292) *Synallaxis spixi* 1m 1f Rosário. **Br.:** 1m: Testes large 14 Nov. **SP:** 1-2: Iris orange, maxilla black, mandible pale gray, feet pale grayish green.
- 205 (291) *Cranioleuca pallida* 1m Rio; 1f Morro Queimado; 1f Mugi das Cruzes; (Lagoa Santa). **Br.:** 1m: Testes large 8 Nov (Rio). **SP:** 1-4: Iris whitish with thin red ring around the pupil. maxilla blackish gray, mandible whitish, feet pale olive. **St.:** 1m: Insects.
- 206 (290) *Certhiaxis cinnamomeus russeolus* 1m 1f 1uns Morro Queimado; 1f 1juv.uns Lagoa Santa. **Br.:** 1juv. 2 Nov (Lagoa Santa). **SP:** 1-6: Iris brown, bill black, feet blue gray. **St.:** 3: Insects.
- 207\* *Thripophaga macroura* 1m Aldeia da Pedra (Fig. 1). [**Notes:** Only known specimen from the state of Rio de Janeiro (see Discussion).]
- 208 (288) *Phacellodomus rufifrons rufifrons* 1m Olhos d'Água; 1uns locality?; [1uns Lagoa Santa]. **Notes:** Uncommon at Lagoa Santa, but common and widespread from 20 km further north and northwards in Minas Gerais (Reinhardt). [The central Minas Gerais records seem to have been widely overlooked in the literature. The Lagoa Santa specimen was taken by Warming, who visited Lund and Reinhardt (see Gomes *et al.* 2006).]
- 209 (287) *Phacellodomus ruber* 1m Tolda. **SP:** 1m: Iris citrine, feet pale greyish brown.
- 210\* *Syndactyla rufosuperciliata rufosuperciliata* 1m Morro Queimado. **SP:** 1m: Maxilla dusky gray, mandible whitish gray, feet greenish gray.
- 211 (284) *Philydor lichtensteini* 1f Morro Queimado; 1m Campinas; (Capela Nova). **St.:** 1m: Insects. **Notes:** [Not listed for São Paulo by Ihering (1898), but there are later records from the state (Peters 1951).]
- 212 (286) *Philydor atricapillus* 1m Aldeia da Pedra.
- 213 (285) *Philydor rufum rufum* 1f Rosário; 1m Lagoa Santa; (Campinas); (São Bento); (Paracatu); (Capitão Amaral). **SP:** 1-10: Iris dark brown, maxilla dark (?), mandible pale olive, feet olive green. **St.:** 2: Insects.
- 214 (281) *Anabazenops fuscus* 1uns Rosário; (Macaé).
- 215 (282) *Automolus leucophthalmus sulphurascens* 1m Bataias; 1m Lagoa Santa.
- 216 (299) *Hylocryptus rectirostris* 1m Fazenda Lages; 1uns Lagoa Santa.
- 217 (297) *Lochmias nematura nematura* 2m Rosário; (Piraí); (Lagoa Santa). **SP:** 1-4: Iris dark brown, bill black, feet brown. **St.:** 1m: Insects.
- 218\* *Heliobletus contaminatus contaminatus* 1uns Rio; 1f Aldeia da Pedra. **SP:** 1f: Maxilla dark, mandible pale, feet greenish gray.
- 219 (280) *Xenops rutilans rutilans* 1f Morro Queimado; 1uns Coira; 1uns Sete Lagoas.
- 220\* *Dendrocincla fuliginosa turdina* 1uns Morro Queimado.
- 221 (279) *Sittasomus griseicapillus sylviiellus* 1m 1f 1uns Rosário; (Macaé); (Araraquara); (Capitão Amaral). **SP:** 1-10: Feet blue gray. **St.:** 1m: Insects.
- 222\* *Xiphocolaptes albicollis albicollis* 1m 2f (+1m skeleton) Rio. **SP:** 1-4: Iris pale brown, bill black, feet pale greenish gray.
- 223 (278) *Dendrocolaptes platyrostris platyrostris* 1m 1f Rosário; 1m Paracatu; (Lagoa Santa); 1uns Sete Lagoas. **SP:** 1-6: Iris brown, bill black, feet light greenish gray. **St.:** 1 full of different beetles, 1 almost only ants. **Notes:** [The specimen from Sete Lagoas and especially the one from Paracatu lighter and with less streaks on back, intermediate between nominate and *intermedius*.]
- 224\* *Xiphorhynchus fuscus fuscus* 1m Petrópolis.
- 225 (277) *Lepidocolaptes angustirostris bivittatus* 1m São Bento; 2m Lagoa Santa; 1uns Sete Lagoas; (Paracatu). **SP:** 1-9: Iris brown, bill and feet pale.
- 226\* *Lepidocolaptes squamatus squamatus* 2m Rio. **SP:** 1-2m: Iris dark brown, bill pale horn brown, feet greenish gray. **St.:** 1m: Insects.
- 227 (274) *Hypoedaleus guttatus* 1m near Gávea; 1f Retiro; 1f 1uns Lagoa Santa; (Sete Lagoas); (Campinas). **SP:** 1-7: Iris brown, bill black, feet blue gray. **St.:** 1-3: Insects, mostly beetles, and hairy larvae.
- 228\* *Batara cinerea cinerea* 1m 1f Rosário; 1f Macaé. **SP:** 1-3: Iris brown, bill blue gray with black ridge, feet blue gray. **St.:** 1 insects, 1 large insects and a frog. and seeds.
- 229\* *Mackenziaena severa* 1f 1juv.m Morro Queimado; 1f Itu. **SP:** 1-4: Bill and feet leaden gray.
- 230 (275) *Taraba major*  
*T. m. stagurus/major*: 1m Curvelo.  
*T. m. major*: 1m Rio São Francisco.  
**Br.:** 2m: Testes large 11 Oct (Curvelo), 2 Oct (Rio São Francisco). **SP:** 2m: Iris blood red, bill black, base of mandible leaden gray, feet pale gray. **Notes:** [The

- specimen from Rio São Francisco typical of the nominate form, the one from Curvelo intermediate with *T. m. stagurus*.]
- 231\* *Thamnophilus palliatus vestitus* 1f Cantagalo; 1f near Aldeia da Pedra; (São Fidelis). **SP:** 2f: Bill and feet blue gray.
- 232 *Thamnophilus caerulescens*  
(270) *T. c. caerulescens*: 2m 4f 1imm.m Rosário; (Rio de Janeiro); (Itaipu); 3m 1f Lagoa Santa.  
(271) *T. c. caerulescens/gilvigaster*: 1imm.m Campinas. **Br.:** 1m: Testes large 25 Nov (Lagoa Santa). **SP:** 1-22: Iris dark brown, maxilla black, mandible and feet blue gray. **St.:** Insects (5), larvae and insects (1), seeds and insects (1). **Notes:** [The specimen from Campinas intermediate with *T. c. gilvigaster*.]
- 233 (273) *Thamnophilus torquatus* 1f Olaria; 1m 2f 1imm.m 1juv.m Lagoa Santa. **Br.:** 1 recently fledged young 21 Dec (Lagoa Santa). **SP:** 2-6: Iris cinnabar (brownish gray in recently fledged male), maxilla black, mandible leaden gray, feet gray.
- 234 (269) *Dysithamnus mentalis mentalis* 2m 1imm.m 1f Rosário; 1m 1f Itu; 1m Lagoa Santa. **St:** 1m: Insects.
- 235\* *Thamnomanes caesius caesius* 1m Aldeia da Pedra. **SP:** Iris, bill and feet dark blue gray.
- 236\* *Myrmotherula minor* 1m Rosário. **SP:** 1m: Iris black, bill blue black, feet blue. **St.:** 1m: Insects. **Notes:** The single specimen taken had small testes 17 May; it hopped about picking insects from leaves of *Euterpe oleracea* (Palmae) near a small stream deep in primary forest (Lund).
- 237\* *Myrmotherula unicolor* 1m “Delbois-Sanguark” [spelling?]. **Notes:** In a low tree in primary forest. Collected on 12 Jul 1828 “at Delbois-Sanguark [spelling?], two leagues [11 km] on other side of São Fidelis [towards Campos]”.
- 238 (268) *Herpsilochmus atricapillus* 2m Lagoa Santa; 1m Sete Lagoas. **SP:** 1-3: Iris black, maxilla black, mandible white, feet blue.
- 239\* *Herpsilochmus rufimarginatus rufimarginatus* 1m Rosário. **Br.:** 1m: Testes small 31 Jan. **SP:** 1m: Iris black, maxilla black, mandible bluish white, feet bluish gray. **St.:** 1m: Insects.
- 240 (263) *Formicivora serrana*  
*F. s. serrana*: 1f Lagoa Santa; 1m Sete Lagoas.  
*F. s. interposita*: 1f Aldeia da Pedra.  
**SP:** 1f (Aldeia da Pedra): Iris and bill black, base of mandible pale, feet plumbeous. **Notes:** Lives in forest where it hops about near the ground in search of insects; call a wailing whistled “peep” (Lund) (Aldeia da Pedra). [The specimen from Aldeia da Pedra in Rio de Janeiro was included as a paratype in the description of *Formicivora serrana*, the male type being from Minas Gerais. The population from Rio de Janeiro was separated as a distinct subspecies, *interposita* by Gonzaga and Pacheco (1990)].
- 241 (262) *Formicivora rufa rufa* 1m São Bento; 1m Santa Bárbara; 2f Capitão Amaral.
- 242\* *Drymophila ferruginea* 2m 1f Rosário; (Itu). **Br.:** 1m: Testes large 2 May (Rosário). **SP:** 19: Iris dark brown, maxilla black, mandible pale blue gray, feet greenish gray.
- 243 (265) *Drymophila ochropyga* 1m Rosário. **SP:** 1m: Feet light blue.
- 244 (264) *Drymophila squamata stictocorypha* 1f Aldeia da Pedra. **SP:** 1f: Maxilla black, mandible whitish, feet blue gray.
- 245\* *Terenura maculata* 2m Rosário. **Br.:** 1m: Testes large 31 Jan. **SP:** 1-2m: Maxilla black, mandible blue gray, feet blue gray. **St:** 1m: Berries and insects.
- 246 (260) *Pyriglena leucoptera* 1m Rosário; (Araras); 2m 1f Lagoa Santa. **SP:** 1-7: Iris red, bill black, feet plumbeous. **St.:** 1m: Insects (*Carabus* beetles, grasshoppers, ants).
- 247\* *Myrmeciza loricata* 2f Rio Grande [near Cantagalo] 27 Jul [1827]. **SP:** 1-2f: Maxilla black, mandible whitish tipped black, feet white. **Notes:** [Apparently taken near Rosário, where Lund collected two other birds the same day.]
- 248 (256) *Chamaeza campanisona campanisona* (Sumidouro). **SP:** 1f: Maxilla horn brown, mandible horn white, feet pale flesh. **Notes:** Gave a loud ringing “tobacco, tobacco” on the ground. [It is most unfortunate that this specimen collected by Lund 21 Apr 1842 has perished, as it apparently represents the only record of the species from Minas Gerais and because the genus holds several cryptic species. Hellmayr (in Cory and Hellmayr 1924), erroneously believed that this specimen was taken at a locality by the same name in Rio de Janeiro.]
- 249 (257) *Conopophaga lineata vulgaris* 1f 1juv.f Morro Queimado; 2m Itu; (São Clemente); Macaé; (Paracatu; seen only?). **SP:** 1-8: Iris brown, maxilla black, mandible white, feet yellowish gray. **St.:** 1juv.f: Insects. **Notes:** Common in Rio de Janeiro and São Paulo (Lund).
- 250\* *Scytalopus indigoticus* (Rosário). **SP:** 1juv.: Iris black, maxilla black, mandible yellow, feet yellowish gray. **Notes:** Taken 28 Jan 1828.
- 251 (294) *Melanopareia torquata rufescens* 2m Lagoa Santa; 1m Lages. **SP:** 1-5: Iris dark brown, maxilla black, blue gray at sides of base, mandible blue gray tipped black, feet pale rufescent. **St.:** 1-3: Insects and larvae.
- 252\* *Phyllomyias burmeisteri burmeisteri* 1f Rio.
- 253\* *Phyllomyias virescens virescens* 1f Lagoa Santa. **Br.:** 1m: Testes large 11 Jun. **SP:** 1-2: Iris brown, bill black with distinct pale spot at base of mandible, feet black.
- 254 (232) *Phyllomyias fasciatus brevisrostris* 1f 1uns 1juv.uns Rosário; 1m 1f Lagoa Santa. **Br.:** 1f: Ovary small 21 Jun (Rosário). **SP:** 1-9: Iris dark brown, bill and feet black. **St.:** Insects (2), *Loranthus* berries (Loranthaceae) (1).
- 255\* *Phyllomyias griseocapilla* 1m Rio **SP:** 1m: Iris light reddish brown with white outer ring, maxilla blackish gray, mandible whitish gray, feet blue gray.

- 256 (227) *Myiopagis caniceps caniceps* 1f Morro Queimado.
- 257 (224) *Elaenia flavogaster flavogaster* 1m 2f 2uns 2juv.uns Lagoa Santa. **Br.:** 1m: Large testes 31 Jul. **St.:** 3-4: Berries in the dry season, berries and insects in the rainy season (Reinhardt).
- 258\* *Elaenia spectabilis spectabilis* 1f Lagoa Santa. **Notes:** Taken on 27 Sep 1947.
- 259\* *Elaenia cristata cristata* 1m 1f 1uns 1juv.m Lagoa Santa. **Notes:** The male and the female were collected on 31 Oct and 8 Nov 1835. The unsexed specimen is undated.]
- 260 (226, 228) *Elaenia chiriquensis albivertex* 1m 1f 1uns 1juv.m Lagoa Santa; 1m Olhos d'Agua. **Notes:** [The juv.m is the type of *Elaenia lundii* (Reinhardt 1870), synonymized by Cory and Hellmayr (1927).]
- 261 (225) *Elaenia obscura sordida* 1f São Bento; 2m 1f 1uns Lagoa Santa. **Br.:** 2m: Testes large 31 Jul and 24 Oct (Lagoa Santa). **SP:** 1-6: Iris brown, bill blownish black, base of mandible paler, horn, feet blackish. **St.:** 1-3: Berries and insects.
- 262 *Camptostoma obsoletum*  
(229) *C. o. obsoletum*: 1uns Rio de Janeiro; 1m Campinas; 1m 1uns Lagoa Santa.  
(231) *C. o. cinerascens*: 1f Paracatu; (Andrequicé). **SP:** 1-7: Iris blackish brow, maxilla black, mandible with pale base and black tip, gape saffron yellow, feet leaden gray. **St.:** 1-7: Insects.
- 263 (223) *Suiriri suiriri affinis* 1m Paracatu; 1m Aldeia da Estiva.
- 264 (223) *Suiriri islerorum* 1m Paracatu; 1m 1f Lagoa Santa. **Notes:** [New localities for this recently described sibling species (Zimmer *et al.* 2001) and further evidence of sympatry.]
- 265 (236) *Serpophaga nigricans* 1m 1f Lagoa Santa; (Morro Queimado); (Capitão Mor); (Aguas Pretas). **Br.:** 2m: Testes large 24 Sep and 31 Oct (Minas Gerais). **SP:** 1-6: Iris brown, bill black, feet blackish gray. **St.:** 1-2: Insects.
- 266 (238) *Serpophaga subcristata straminea* 1f São Paulo; 1m Lagoa Santa. **Br.:** 1f: Ovary large 15 Dec (São Paulo). **St.:** 1: insects.
- 267 (230) *Phaeomyias murina murina* 1m Lagoa Santa. **Br.:** 1m: Testes large 18 Sep. **SP:** 1m: Iris brown, bill black, base of mandible light brownish red, feet black.
- 268 (235) *Capsiempis flaveola flaveola* 1m 1f 1uns Morro Queimado; (Lapa Vermelha). **SP:** 1-10: Iris dark brown, bill and feet black. **St.:** 2: Insects.
- 269 (256) *Corythopis delalandi* 1m Paracatu; 1f Lagoa Santa. **Br.:** 1f: Ovary small 15 Feb (Lagoa Santa). **SP:** 1-2: Iris dark brown, maxilla dusky, mandible pale, feet plumbeous. **St.:** 1: Insects.
- 270 (239) *Euscarthmus meloryphus meloryphus* 1m Lagoa Santa. **SP:** 1m: Iris blownish, maxilla blackish, mandible whitish tipped dusky, feet plumbeous.
- 271\* *Phylloscartes eximius* 1uns 1m Rosário; 1f Campinas. **Br.:** 1f: Ovary large 3 Apr (São Carlos). **SP:** 1-4: Iris reddish brown, maxilla black, mandible whitish gray, feet blue gray.
- 272\* *Mionectes rufiventris* 1m 1uns Rosário; (Rio de Janeiro). **Br.:** 1m: Testes large 15 Aug (Rio de Janeiro). **SP:** 1-4: Maxilla black, mandible yellow brown, feet dark gray. **St.:** 3: Berries, one of them with a single large red berry.
- 273 (234) *Leptopogon amaurocephalus amaurocephalus* 1m Pai Joaquim; 1 uns Rio de Janeiro; 1f Rosário; (Sete Lagoas). **SP:** 1-11: Iris brown, maxilla blackish brown, mandible brownish yellow tipped dark brown, feet blue gray.
- 274 (233) *Sublegatus modestus modestus* 1f Lagoa Santa; 1m Paracatu. **SP:** 1-2: Iris brown, bill and feet blackish brown. **St.:** 1: Insects.
- 275\* *Myiornis auricularis auricularis* 1m Rosário; 1m Campinas. **SP:** 1-5: Iris red, bill black, feet fulvous. **St.:** 1: Insects.
- 276\* *Hemitriccus diops* 2m 1f Rosário; 1f near Rio Grande. **Br.:** 1m: Testes large 12 May (Rosário). **SP:** 1-8: Iris red, maxilla black, mandible horn brown, feet blue gray. **St.:** 1: Insects.
- 277\* *Hemitriccus orbitatus* 1f Itu. **SP:** 1f: Maxilla black, mandible white, feet gray. **St.:** 1: Insects.
- 278\* *Hemitriccus nidipendulus paulistus* 1f Itu. **SP:** 1f: Iris greyish white, maxilla dark brown, mandible pale brown, feet plumbeous. **St.:** 1: Insects. **Notes:** Flew from bush to bush in a clearing near a forest (Lund).
- 279\* *Hemitriccus margaritaceiventer margaritaceiventer* 1uns Paracatu.
- 280\* *Todirostrum poliocephalum* 1m Rio de Janeiro; 1f Morro Queimado; (Campinas). **SP:** 1-5: Iris bright orange, bill black, feet blue gray. **St.:** 2: Insects.
- 281 (221) *Tolmomyias sulphurescens sulphurescens* 1f Rosário; 1m Itu; (Campinas); (Cachoeira do Campo); (near Rio Grande). **SP:** 1-10: Iris blackish brown, maxilla black, mandible yellowish white, feet leaden gray. **St.:** 3-4: Insects, especially beetles (one with "large and small beetles").
- 282 (241) *Platyrinchus mystaceus canromus* 1f Rio de Janeiro; 1f Ipanema; 1m Sete Lagoas; (Lagoa Santa). **SP:** 1-6: Iris black, maxilla black, mandible white, feet whitish. **St.:** 1: Small insects.
- 283 (214) *Myiophobus fasciatus flammiceps* 1f Tijuco; 1uns Morro Queimado; Itaipu; 3m Lagoa Santa; (Pertinanga). **SP:** 1-8: Maxilla black, mandible whitish horn, feet black. **St.:** 2: Insects.
- 284\* *Myiobius barbatus mastacalis* (São Clemente). **SP:** Bill and feet black.
- 285 (216) *Hirundinea ferruginea bellicosa* 2m Rosário; 1m Itaipu; 1m 3f Lagoa Santa; 1m Ressaquinha; (Rio Mogi Guaçu); (Santa Luzia). **Br.:** 1f: Ovary large 2 Dec (Lagoa Santa). **SP:** 1-12: Iris pale grayish yellow (not brown), bill and feet black.



- 286 *Lathrotriccus euleri*  
\**L. e. euleri*: 1m Rio; 1m Morro Queimado; (Rio de Janeiro).  
(213) *L. e. argentinus*(?): 1uns Sete Lagoas.  
**Br.**: 1m: testes large 12 Jul (Rio de Janeiro). **SP**: *L. e. euleri*: 1-5: Iris dark brown, maxilla black, mandible horn white. **Notes**: [The specimen from Sete Lagoas was taken in Aug. It is too faded to identify to subspecies with certainty, but it does seem somewhat drabber than the Rio specimens.]
- 287 (212) *Contopus cinereus cinereus* 1f 1uns Morro Queimado; (Rio de Janeiro); 1f Mocambo; 1uns Lagoa Santa. **Br.**: 1m: Testes large 14 Dec (Morro Queimado). **SP**: 1-7: Iris blackish brown, maxilla black, mandible reddish yellow at base, darker towards the tip, feet black. **St.**: 3: Insects, including small beetles and hymenopterans.
- 288 (215) *Pyrocephalus rubinus rubinus* 1f Paracatu; 1m Aldeia da Estiva; 1m Lagoa Santa; 1m Sete Lagoas.
- 289 (247) *Knipolegus cyanirostris* 1m Pai Joaquim; 1m 1f Morro Queimado; (Rio); (Lagoa Santa). **Br.**: Males present Apr-Aug [Minas Gerais] (Reinhardt). **SP**: 1-2m: Bill gray tipped black. 1f: Iris light red brown, bill bluish tipped black, feet black.
- 290 (246) *Knipolegus lophotes* 1m Paracatu; 4m 1f 1uns Lagoa Santa; 1m Ribeirão de Uberaba Legitima. **SP**: 1-7m: Iris blood red, bill black, gape saffron yellow, feet black.
- 291\* *Knipolegus nigerrimus nigerrimus* 1m Macaé; (Rosário). **SP**: 1-2m: Iris cherrie red, bill pale blue gray tipped black, feet black. **St.**: 1: Berries and insects.
- 292 (254) *Satrapa icterophrys* 7m 2f 2uns Lagoa Santa. **SP**: 1-11: Iris dark brown, bill and feet black. **St.**: 2-10: Insects and seeds. **Notes**: [Reinhardt states it is a resident at Lagoa Santa, as also suggested by a specimen collected on 30 Jul. All other 10 specimens, however, were collected during the rainy season (Oct-Apr).]
- 293 (252) *Xolmis cinereus cinereus* 1m 1f Mogi das Cruzes; 1m Paracatu; 1m Ressaquinha; 1f Lagoa Santa. **Br.**: 1m: testes large 4 Sep (Paracatu). **SP**: 1-6: Iris red, bill and feet black.
- 294 (253) *Xolmis velatus* 1f Santa Ana dos Alegres; 1m 2f Lagoa Santa; 2uns Sete Lagoas. **SP**: 1-7: Iris dark brown, bill and feet black. **St.**: 1-4: Insects.
- 295 (245) *Gubernetes yetapa* 1f Boa Vista; 3m 2f Lagoa Santa; (Franca; seen only); (between Franca and Rio Grande); (Uberaba). **Br.**: 3: Gonads large 29 Sep, 20 and 21 Oct (Lagoa Santa). **SP**: 1-9: Iris brown, bill grayish brown, feet black. **St.**: 4: Insects including beetles, sometimes only flying termites.
- 296 (249) *Arundinicola leucocephala* 1f São Fidelis; 2m Lagoa Santa; 1m Itaipu; (Aguas Pretas); (Sete Lagoas); (Rio de Janeiro). **Br.**: 2: Large gonads 1 Nov and 5 May. **SP**: 1-9: Iris dark brown, Bill black, base of mandible wax yellow, feet black. **St.**: 2: Insects and seeds.
- 297\* *Alectrurus tricolor* 1juv.m Batatais; 1m Uberaba; 3m Sete Lagoas.
- 298 (243) *Colonia colonus colonus* 2m 1juv.uns Rosário; 1m 2f Lagoa Santa; (Macaé); (Araras); (Campinas); (Itu); (Ipanema); (Nascimento). **St.**: 1: Insects.
- 299 (222) *Myiozetetes similis pallidiventris* 1f 1uns Rio de Janeiro; (Rosário); 1m 1uns Lagoa Santa; (Aguas Pretas), (Araras). **Br.**: 1m: Testes large 14 Apr (Lagoa Santa). **St.**: insects (1), seeds and berries (2), copaiform fruit (1).
- 300 (220) *Pitangus sulphuratus maximiliani* 1uns Rio; 1f Lagoa Santa; (Campinas); (Itu); (near Uberaba). **SP**: 1-5: Iris, bill and feet black. **St.**: 3: Insects, sometimes melastome berries.
- 301 (218) *Myiodynastes maculatus solitarius* 1f Rio de Janeiro; 1f Paracatu; 1f Lagoa Santa; 1 uns Sumidouro; (Curvelo). **SP**: 1-5: Bill and feet black. **St.**: 2: Insects, especially beetles.
- 302 (217) *Megarynchus pitangua pitangua* 1m Rio de Janeiro; 1f Lagoa Santa; 1uns Juiz de Fora; (Campinas); (Sumidouro). **Br.**: 1m: Testes large 1 Dec (Rio de Janeiro). **SP**: 1-5: Bill and feet black. **St.**: 3: Beetles and wasps, also water insects, shrimp and small fish, and berries.
- 303 (208) *Empidonomus aurantioatrocristatus aurantioatrocristatus* 1m 1f 2uns Lagoa Santa; (Sete Lagoas). **Br.**: 1f: Ovary large 2 Oct. 1juv. 12 Dec (Fig. 1). **SP**: 1-6: Iris brown. 1juv.: Bill and feet black, base of mandible whitish. **St.**: 1-6: Wasps. **Notes**: Only present in the Campos region during the breeding season (Reinhardt).
- 304 (210) *Tyrannus albogularis* 2m 2f 1juv.m Lagoa Santa (Fig. 1). **Br.**: 1m: Testes large 26 Sep. 1juv. 5 Dec. **SP**: 1-5: Bill and feet black. **St.**: 1: Insects. **Notes**: Only present in the Campos region during the breeding season (Reinhardt).
- 305 (209) *Tyrannus melancholicus melancholicus* 5m 2juv.m 1juv.f Lagoa Santa; (Rio de Janeiro); (Rosário); (Araras); (Aguas Pretas); (Itu); (Ipanema); (Rio das Velhas 1); (Corrego Rico). **Br.**: Gonads large Sep-Dec (4), juv. Jan and 3 Mar (2) (all Lagoa Santa). **SP**: 1-17: Bill and feet black. **St.**: 5-17: Insects, sometimes berries. **Notes**: Only present in the Campos region during the breeding season (Reinhardt).
- 306 (207) *Tyrannus savana savana* 7m 3f 1juv.m Lagoa Santa; 1m Paracatu; 10m 2f Sete Lagoas. **Br.**: 2-19: Gonads large early Oct, 1juv. 5 Dec. **SP**: 1-23: Iris brown, bill and feet black. **St.**: 4-24: Insects, some berries and seeds just after cold season. **Notes**: Only present in the Campos region during the breeding season (Reinhardt).
- 307\* *Rhytipterna simplex simplex* (Aldeia da Pedra). **SP**: 1: Bill and feet black.
- 308 (219) *Sirystes sibilator sibilator* 1f 1uns Morro Queimado; (Bem Fica). **Br.**: 1f: Ovary large 5 Oct (Morro Queimado). **SP**: 1-3: Iris brown, bill and feet black.
- 309 (255) *Casiornis rufus* 1f Mocambo; 1f Catalão; 1m Batatais. **Br.**: 1f: Ovary large 23 Aug (Catalão). **SP**: 1-4: Iris black, bill whitish horn tipped dusky, feet plumbeous.

- 310 (211?) *Myiarchus swainsoni* 1 un Rio; (Rio de Janeiro); (Rosário); 1 m Campinas; 1 f Lagoa Santa. **Br.:** 2: Gonads large 5 Oct and 3 Nov (Rio). **St.:** Insects (2), insects and berries (2). **Notes:** [Reinhardt did not distinguish this species from the following. The racial affinities of these old faded specimens are difficult to assess with certainty. The Rio specimen is undated, but only the nominate race is known from that state. The specimen from Campinas (São Paulo) can probably also be allocated to nominate as it was taken on 30 Jan, just after the end of the breeding season. The Lagoa Santa specimen was taken on 6 Oct, early in the breeding season, and probably represents *M. s. pelzelni*.]
- 311 (211?) *Myiarchus ferox* 1 un Lagoa Santa; 1 f Sete Lagoas; (Aguas Pretas); São Bento). **Br.:** 1 f: Ovary large 3 Nov (Sete Lagoas). **St.:** 3-6: Insects, occasionally seeds.
- 312\* *Attila rufus rufus* 1 m Rosário; 1 un Morro Queimado in scrub along Rio Bengala; (Araras). **SP:** 1-3: Iris light chestnut, bill horn brown, maxilla darkest, mandible palest, feet blue gray.
- 313\* *Oxyruncus cristatus cristatus* 1 m Macaé. **SP:** 1 m: Bill and feet blackish.
- xxx *Carpornis cucullata* (Macaé, seen only). **Notes:** In primary forest. Occasionally gives a scream "Paca-pataco" (Lund).
- 314 (197) *Procnias nudicollis* 1 m Itu; 1 m 1 juv. m Sete Lagoas; 4 m 1 f 1 juv. m Lagoa Santa. **SP:** 1-11: Iris gray brown, bill black, feet gray. **St.:** 3-11: Blue berries, once a snail in its shell.
- 315 (196) *Pyroderus scutatus scutatus* 1 m 1 un Rosário; (Uberaba); 3 m 1 f Lagoa Santa. **Br.:** 1-2: Gonads large mid Sep. **SP:** 1-9: Iris blue gray, bill pale leaden gray, feet blackish gray. **St.:** 3-9: Seeds and blue berries (Melastomataceae, Myrtaceae), insects, once a small bird.
- 316 (203) *Neopelma pallescens* 1 m Lagoa Santa. **St.:** 1: Seeds and blue berries.
- 317\* *Neopelma chrysolophum* 1 m Morro Queimado; 1 m Itu; (Campinas). **SP:** 1 m: Iris light brown, maxilla dusky, mandible whitish horn, feet violet. 1 m: Iris dirty orange, maxilla dusky, mandible paler, feet dark blue gray. **St.:** Blue berries (2), insects (1).
- 318 (200) *Ilicura militaris* 2 m 1 f Rosário; 4 m Sete Lagoas; 1 m Lagoinha. **Br.:** Gonads large 17 Oct (Rio), 4 Aug and 24 Jan (Rosário), 6 Sep (Lagoinha). **SP:** 1-9 m: Iris orange. 1 f: Iris orange, maxilla brown, mandible whitish, feet purplish brown.
- 319\* *Manacus manacus gutturosus* 2 m 1 juv. m Rio de Janeiro; 2 f Rosário; 1 m Pertinanga; (Araras); 1 un skeleton Campinas. **SP:** 1-3 m: Bill black, feet orange. 2-4 f and juv. m: Bill black, feet yellowish brown.
- 320 (198) *Antilophia galeata* 1 m Franca; (Catalão); 1 m 1 f 1 un Lagoa Santa; 10 m 2 juv. m Sete Lagoas. **Br.:** 3-6: Gonads large Oct and mid Jul. **SP:** 1-22: Iris and bill bluish black, feet violet. **St.:** 5-22: Blue berries (Rubiaceae).
- 321 (199) *Chiroxiphia caudata* 3 m 1 f 1 juv. m Rio; 1 f Ipanema; 1 m 1 juv. m Lagoa Santa; 1 m Lagoa dos Pitos. **St.:** 4: Seeds and blue berries, black berries.
- 322 (201) *Pipra fasciicauda scarlatina* 1 m Lagoa Dourada.
- 323 (320) *Tityra cayana braziliensis* 1 m Curvelo; (Lagoa Santa).
- 324\* *Schiffornis virescens* 1 m Rio de Janeiro; 1 f Ipanema; 2 m Rosário; (Itu; observed only?). **SP:** 1-9: Bill dark blue gray, basal half of mandible bluish white, feet dark blue gray. **St.:** Berries (5); spiderlegs and apparently *Plocitalus* wings [=?] (1).
- 325 (205) *Pachyramphus viridis viridis* 2 m 1 juv. m Lagoa Santa; (foot of Mt Gávea). **Br.:** 1 m: Testes large 10 Sep. **SP:** 1-3 m: Bill and feet blue gray. 1 juv. m: Iris black, bill almost black, feet bright pale blue. **St.:** 1: Insects and aromatic berries.
- 326\* *Pachyramphus castaneus castaneus* 1 f Rio. **SP:** 1 f: Iris dark brown, maxilla black, mandible whitish gray, feet blue gray. **St.:** 1: Insects. **Notes:** Very common in small noisy flocks actively searching for insects (Lund).
- 327\* *Pachyramphus polychopterus spixii* 1 m Rio de Janeiro; 1 m Itaipu. **Br.:** Testes large 2 Nov. **SP:** 1 m: Bill and feet blue gray. **Notes:** In tall forest (Lund).
- 328 (204) *Pachyramphus validus validus* 1 m Rio de Janeiro; 1 m 2 f Sete Lagoas. **SP:** 1 m: Bill and feet blue black. **St.:** 3: Insects, especially beetle-larvae and grasshoppers.
- xxx\* *Phibalura flavirostris* (Alferes Casinier, seen only); (Mogi das Cruzes, seen only). **Notes:** 3-4 individuals flew about in the treetops in an open capão (Lund).
- 329\* *Calyptura cristata* 1 m 1 imm. m Rosário. **SP:** 1-3 m: Iris black, bill plumbeous tipped black, feet plumbeous. **St.:** Small grains, apparently seeds (1), insects (2). **Notes:** An [adult] male collected on 1 August 1827 hopped about in shrubbery (Fig. 1). Another [immature] male was collected 3 Jan 1828 (Fig. 1). A third male [specimen now lost] collected 15 Jun 1828 hopped about in a tree giving an almost sparrow-like chirp (Fig. 2). [This species has been feared extinct and virtually nothing is known about its life history. Reports of a recent sighting gives hope for its survival. It should be searched for in the vicinity of Rosário.]
- 330 (366) *Cyclarhis gujanensis ochrocephala* 1 f 1 un Rio; (Gávea); 1 m 1 f Lagoa Santa; (Mocambo); (Paracatu). **Br.:** 1 m: Testes large 27 Sep (Lagoa Santa). **SP:** 1-11: Iris orange red, bill uniform brownish white (no lead-colored spot at base of mandible), feet leaden gray. **St.:** 4: Insects including larvae and pupae and hairy larvae, once also buds.
- 331 (368) *Vireo olivaceus agilis* 1 f Rio de Janeiro; 1 f Paraíba near Aldeia da Pedra; 1 un Lagoa Santa.
- 332 *Hylophilus poicilotis*  
\**H. p. poicilotis*: 1 m Itu; 1 m Macaé; 1 f São Bento.  
(382) *H. p. amaurocephalus*: 1 m Lagoa Santa. **SP:** Iris olive green, bill reddish brown, feet gray (1) or bill and feet purple (1) (Lagoa Santa). **St.:** 1: Insects.

- 333\* *Hylophilus thoracicus thoracicus* 1m Itaipu. **SP:** 1m: Iris white, bill and feet light gray.
- 334 (300) *Cyanocorax cristatellus* 3uns Lagoa Santa; 2f 1uns Sete Lagoas; (Catalão). **SP:** 1-9: Iris dark brown, bill and feet black. **St.:** 4-7: Seeds, insects, especially hymenopterans, oranges, bananas.
- 335\* *Cyanocorax chrysops* (Itu); (between Campinas and Itu); (Sorocaba); São Bento); (Capitão Amaral).
- 336 (301) *Cyanocorax cyanopogon* 1m Paracatu; 1m Rio das Velhas 1; (Lagoa dos Pitos). **Br.:** 1m: Testes large 13 Aug (Rio das Velhas 1).
- 337 (370) *Tachycineta albiventer* 2uns along the Paraíba between Sampaio and Rampoi. **Notes:** many along the Paraíba between Sampaio and Rampoi, and common in southern São Paulo Feb-Mar 1834 (Lund).
- 338 (371) *Tachycineta leucorrhoea* 1uns Franca; 1uns campos of Minas Gerais. **SP:** 1-2: Iris, bill and feet black.
- 339 (375) *Progne tapera fusca* 2f 1uns Lagoa Santa. **Br.:** 1f: Ovary large 8 Oct. **SP:** 1-4: Iris, bill and feet black.
- 340 (374) *Progne chalybea domestica* 1f Rio; 1juv.uns Campinas; 1m 1f Rio das Velhas 1; 1m Lagoa Santa; (Campinas); 1juv.m locality? **Br.:** 1m: Testes large 15 Oct (Lagoa Santa). **SP:** 1-8: Iris dusky, bill black, feet dusky.
- 341 (373) *Pygochelidon cyanoleuca cyanoleuca* 1m Rosário; 1f between Macaé and Bem Fica; 2m 1juv. 1juv./pull. Lagoa Santa. **Br.:** Juv./pull. 12 Jan, juv. 8 Jan, gonads large 8 Oct. **SP:** 1-7: Bill black, feet dusky.
- 342 (372) *Alopocheilidon fucata* 1m Franca; 2m Lagoa Santa; 1m Paracatu. **Br.:** 1m: Testes large 4 Sep. **SP:** 1-4: Bill black, feet dusky. **St.:** 2: Insects.
- 343 (369) *Stelgidopteryx ruficollis ruficollis* 1m Paraíba; (Itaipu); 1juv.uns Itu; 1f Lagoa Santa. **Br.:** 1juv. 16 Feb (Itu), ovary large 11 Oct. **SP:** 1-3: Iris, bill and feet black.
- 344 (384) *Troglodytes aedon musculus* 1f 2uns Rosário; 1uns Curvelo; 2f Lagoa Santa. **Br.:** Nest-building Apr (Lagoa Santa).
- 345 (385) *Cistothorus platensis polyglottus* 2m Curvelo; 1m 1uns Lagoa Santa.
- 346\* *Thryothorus longirostris longirostris* 1m Itaipu. **St.:** 1: Seeds.
- 347\* *Donacobius atricapilla atricapilla* 1m 4f 1uns Rio. **Br.:** Rio: 1m: Testes large 20 Dec. **SP:** 1-6: Iris yellow, bill black, feet grayish black.
- 348 (388) *Turdus flavipes flavipes* 1m Rosário; 1m Lagoa Santa; 1juv.m Capão at Mogi das Cruzes. **Br.:** 1juv. Nov (Mogi). **SP:** 1-2m: Iris blackish brown, eye-ring wax yellow.
- 349 (393) *Turdus rufiventris rufiventris* 1f Rio de Janeiro; 1m Lagoa Santa; (Rosário); (Araras); (Mogi das Cruzes); (Paracatu). **Br.:** 1m: Testes large 26 Sep (Rosário). **SP:** 1-11: Iris dark brown. **St.:** 2-4: Insects, worms, berries, fruits.
- 350 (389) *Turdus leucomelas leucomelas* 1m Itu; 1m 1uns Lagoa Santa. **Br.:** 1m: Testes large 9 Sep (Lagoa Santa). **St.:** 1-9: Berries, especially from the "Copahyba"-tree *Copaifera* (Leguminosae-Caesalpinioideae).
- 351 (390) *Turdus amaurochalinus* 1uns Rio de Janeiro; 1juv.m Campinas; 1m 1juv.m 1juv.uns Lagoa Santa; (Rosário); (Mogi das Cruzes). **SP:** 9juv.m 1juv.uns: Bill yellow. 1f 1juv.f: Bill olive brown. **Notes:** [Reinhardt (1870) listed a juvenile of this species under the heading '390 *Turdus crotopezus*'. He treated adults together with the previous species under the heading '*Turdus fumigatus*'.]
- 352 (387) *Mimus saturninus frater* 1f São Bento; 1f Uberaba; 3m 2uns Lagoa Santa. **SP:** 1-10: Iris sulphur yellow, bill black with a whitish spot at base of mandible, feet black in front, gray behind. **St.:** 1: Insects.
- 353 (383) *Anthus lutescens lutescens* 1m 1uns Rio de Janeiro; 1m Lagoa dos Porcos; 1uns Sete Lagoas. **Br.:** 3m: Testes large 1 Nov (Rio de Janeiro).
- 354 (331) *Orchesticus abeillei* 1f 1uns Morro Queimado; (Macaé). **SP:** 1-3: Bill black, feet gray blue.
- 355 (333) *Schistochlamys melanopsis* 1f[?sic=juv.m] 1uns Paracatu.
- 356 (332) *Schistochlamys ruficapillus* 1uns Sete Lagoas; (Lagoa Santa).
- 357 (337) *Cissopsis leverianus major* 2f Rosário; 1uns Macaé; (Rio); 1m 1uns Lagoa Santa; 1uns Sete Lagoas; 1f Andrequicé; 1f locality?; (Ressaquinha); (Lagoa dos Pitos); (Jacarei); (Uberaba); (Mocambo). **Br.:** Eggs late Dec (Minas Gerais). **SP:** 1-17: Iris yellow, bill and feet black. **St.:** 5: Berries and seeds.
- 358 (334) *Neothraupis fasciata* 1m 1f Franca; 2m 1f 1imm. m 1juv.f Lagoa Santa; 1juv.m between Bomjão and Retiro. **Br.:** 2-3: Gonads large late Jul and 31 Oct (Minas Gerais). **SP:** 1-11: Iris dark brown, maxilla black, mandible gray blue with dark tip, feet olive gray. **St.:** 7: Insects and a few seeds.
- 359 (343) *Nemosia pileata caerulea* 1m Paracatu; 1m Mocambo. **SP:** 1-2: Iris pale citrine, bill black, legs wax yellow (not leaden gray).
- 360\* *Orthogonys chloricterus* 1f Rosário. **Br.:** 1juv 29 Jan. **SP:** 1-4: Iris dark brown, bill blackish, feet yellowish gray. **St.:** 1: Insects. **Notes:** Small flocks in trees (Lund).
- 361 (340 and 341) *Thlypopsis sordida sordida* 2m 1f Lagoa Santa; 1uns Sete Lagoas. **Br.:** Gonads large 29 Aug and 2 Oct.
- 362\* *Pyrrhocomma ruficeps* 1f Rio. [Original label lost. The 'make' suggests that it was collected by Lund (open empty specimen with head turned to the side).]
- 363 (345) *Cypsnagra hirundinacea hirundinacea* 2f 1juv. f Lagoa Santa; 1m Itu; 1juv.m Franca; 1m 1uns Sete Lagoas; (Paracatu); (Sorocaba); (Retiro); (Santa Ana da Barra do Rio das Velhas). **Br.:** 1f: Ovary large 5 May (Lagoa Santa). **SP:** 1-12: Iris dark brown, bill and feet black. **St.:** 4-5: Insects, especially beetles, sometimes mixed with seeds.
- 364 (346) *Trichothraupis melanops* 3m 3f 1juv.f Rosário; (Macaé; seen only?); 1juv.f 1juv.uns Itu; (Lagoa



- Santa); (São Bento); (Campinas); (Capitão Amaral). **Br.:** Gonads large early Oct. **SP:** 1-18: Iris brown, bill blackish gray, feet blue gray. **St.:** 3-6: Ants, wasps and a few seeds. **Notes:** Common at Macaé (Lund).
- 365\* *Tachyphonus cristatus brunneus* 1f Aldeia da Pedra; 1juv.m Rio de Janeiro; 1m Morro Queimado. **Br.:** 1m: Testes large 6 Jul. **SP:** 1m: Bill and feet black. **St.:** 3: Berries, seeds and insects.
- 366 (347) *Tachyphonus coronatus* 3m Rio de Janeiro; 2f Rosário; 1m Campinas; 1m Sete Lagoas; 1m Lagoa Santa. **SP:** 1-11m: Maxilla black, mandible plumbeous, feet black. 1-4f: Feet plumbeous.
- 367 (348) *Tachyphonus rufus* (São Domingos).
- 368 (352) *Ramphocelus carbo centralis* 1m Sete Lagoas; 1juv.m Fazenda Amaral; (Mugi). **SP:** 1-3: Iris brown, bill dark horn brown, basal half of mandible pale, feet dark horn brown. **St.:** 1: Seeds.
- 369\* *Ramphocelus bresilius dorsalis* 2juv.m Rio de Janeiro. **Br.:** 2m: Testes large 6 Jul and 3 Dec. **SP:** 1-6: Bill and feet blackish gray. **Notes:** Common in Rio de Janeiro, not found at Rosário (Lund).
- 370 (354) *Thraupis sayaca sayaca* 1f Rio; (Pertinanga); (Itaipu); (Itu); 1f Córrego Rico; 1f Rio Mogi das Cruzes; 1f Lagoa Santa; (Campinas). **Br.:** 1m: Testes large 31 Oct (Itaipu). **SP:** 1-13: Iris dark brown, bill and feet plumbeous. **St.:** 3: Berries, fruit (and insects?).
- 371 (355) *Thraupis cyanoptera* (Rio).
- 372 (356) *Thraupis ornata* 1m 3f 2juv.f Rio de Janeiro; (Macaé; seen only?). **Br.:** Fledgling fed 23 Jan; testes large 10 Feb. **SP:** 1-10: Iris dark brown, bill black, feet blue gray. **St.:** 1: Berries and insects. **Notes:** In small flocks. Common at Macaé in Apr (Lund).
- 373 (353) *Thraupis palmarum palmarum* 1m Rio de Janeiro; 1m Itaipu; 1m 1f Rio das Velhas 1; (Paranaíba); (Lagoa Santa); Lapa Vermelha). **Br.:** 2m: Testes large 11 Sep and 2 Nov (Rio de Janeiro). **SP:** 1-8: Bill blackish, feet blue gray. **St.:** 1: seeds.
- 374\* *Pipraeidea melanonota melanonota* 1juv.m Rio de Janeiro. **SP:** 1juv.m: Iris dark brown, maxilla black, mandible horn white, feet blackish brown. **St.:** 1: Berries.
- 375\* *Tangara mexicana brasiliensis* 1m Aldeia da Pedra. **SP:** 1m: Bill and feet black.
- 376\* *Tangara seledon* 1f 2juv.f Rio; (Macaé). **Br.:** 1f: Ovary large 11 Sep. **SP:** 1-8: Bill black, feet gray. **St.:** 3: Seeds and berries. **Notes:** Common in small flocks at Macaé (Lund).
- 377\* *Tangara cyanocephala cyanocephala* (Gávea); (Macaé). **Br.:** 1m: Testes large 11 Sep (Gávea). **St.:** 1: Seeds. **Notes:** Common in noisy flocks at Macaé (Lund).
- 378\* *Tangara desmaresti* 1f Macaé. **SP:** 1f: Bill black, feet horn brown. **Notes:** In small flocks (Lund).
- 379\* *Tangara cyanoventris* 2m Rosário. **Br.:** 1m: Large testes 1 Jan. **SP:** 2m: Iris blackish, bill black, feet blue gray. **Notes:** In small flocks (Lund).
- 380 (357) *Tangara cayana chloroptera* 3m Sete Lagoas; 5m 1f Lagoa Santa; 1m 1juv.m Franca; 1f Uberaba; 1m Fernandoão; 1f Santa Ana dos Alegres; 1m São Bento; (Itu). **Br.:** 2m: Testes large 8 Feb and 5 Dec (Lagoa Santa). **SP:** 3-21: Iris blackish, maxilla blackish, mandible gray (tipped black in one specimen), feet pale blue gray. **St.:** 1: Insects.
- 381\* *Tangara peruviana* 1uns Rio de Janeiro. **SP:** 1uns: Bill black, feet gray. **Notes:** In small flocks (Lund).
- 382 (362) *Tersina viridis viridis* 2f 1juv.m Rio; 2juv.m Rio das Velhas 1; 11m 2f Sete Lagoas; 2m 1f Lagoa Santa; (Paracatu); (Curvelo; seen only). **SP:** 1f: Iris chestnut, bill black, feet gray brown. **St.:** 3-18: Berries, seeds, insects.
- 383 (364) *Dacnis cayana paraguayensis* 2m 1f Rosário; (Rio); 1f Itaipu; 1m 1f Lagoa Santa; 3m Sete Lagoas; 1m 1f locality?; (Uberaba); (Córrego Rico); (Nascimento); (Araras); (Itu). **Br.:** 1m: Testes large 21 Jul (Rosário). **SP:** 1-17m: Iris reddish brown, bill black, feet light reddish yellow brown. 1-8f: Bill black, feet yellow-gray. **St.:** 2-15: Insect larvae (especially dipterans), berries and seeds.
- 384\* *Cyanerpes cyaneus holti* (Itaipu). **Br.:** 1m: Testes large 7 Nov. **SP:** 1-3. Iris dark brown, bill black, feet coral red. **St.:** 1: Berries. **Notes:** In small flocks in restinga forest. [Unfortunately all three specimens, collected on 7 Nov 1828 are lost. The species had gone unrecorded in Rio de Janeiro until reported by Sick (1984)].
- 385 (342) *Hemithraupis ruficapilla ruficapilla* 2m Rosário; 1m Macaé; (Lagoa Santa). **Br.:** 6m: Testes large 21 Jun, 21 Jul, 21 Aug. **SP:** Iris black (1-5m) or brown (1-6f), maxilla black, mandible wax yellow, feet blue gray. **St.:** 6: Insects and larvae.
- 386 (351) *Piranga flava saira* 1f Curvelo; 1m 1imm.m 2juv.m Lagoa Santa; 4m Sete Lagoas; (Paracatu); (Campinas); (Rio Grande). **Br.:** 1m: Testes large 28 Sep (Lagoa Santa). **SP:** 1-6m: Iris brown, maxilla blackish, mandible plumbeous tipped blackish, feet plumbeous black. 1-2f: Mandible pale plumbeous tipped blackish. **St.:** 6: Seeds and insects, especially hemipterans and beetles, never only seeds.
- 387 (350) *Habia rubica rubica* 1m near Sampaio; 1m São Bento; (Itu). **SP:** 1-3: Bill black, base of mandible pale, feet brown.
- 388 (363) *Coereba flaveola chloropyga* 1m 1uns Macaé; 1m Itu; 1f Lagoa Santa; (Uberaba); (Catalão). **Br.:** 2: Gonads large late Sep and 15 Mar. **SP:** 2-10: Bill black, feet dark gray to light blue. **St.:** 1-8: Insects and nectar.
- 389 (316) *Zonotrichia capensis subtorquata* 2uns Rio de Janeiro; 1juv.uns Rosário; 1m São Bento; 1f Campinas; 2m Lagoa Santa. **Br.:** Testes large Aug and Sep (4; Rio de Janeiro) and 12 Oct (1; Lagoa Santa); 3 juv Nov (Rio and Lagoa Santa). **SP:** 1-12: Iris dark brown, bill gray, feet ashy gray. **St.:** Seeds (5), blue melastome berries (1).

- 390 (315) *Ammodramus humeralis humeralis* 1m Taubaté; 2m São Bento; 1f Uberaba; 1m Curvelo; (Lagoa Santa); (Sete Lagoas); (Mugi). **Br.**: Nest building mid Nov (Mugi?). **St.**: 1-8: Seeds and some insects.
- 391\* *Porphyrospiza caerulescens* 1m Campinas. **Notes**: In forest, hopping in the trees giving loud whistled notes.
- 392\* *Haplospiza unicolor* 1uns Bem Fica; 1m Rosário; 1m Campinas; (Capitão Mor). **Br.**: 3m: Testes large 28 Jan (Campinas), 17 Apr (Bem Fica) and 3 May (Rio de Janeiro). **SP**: 1-4m: Bill black, feet horn brown. **St.**: 1: Sand and seeds.
- 393 (317) *Poospiza cinerea cinerea* 2m 2f 1uns Lagoa Santa; 1uns Sete Lagoas. **Br.**: 1m: Testes large 19 Nov. **SP**: 1-8: Iris chestnut, bill black, feet blackish brown. **St.**: 1-8: Seeds and some small pebbles.
- 394 (310) *Sicalis flaveola brasiliensis* 1[juv.?]m Rosário; 1[juv.?]m Itaipu; 1m 1f Curvelo; 1m Lagoa Santa. **Br.**: 3m: Testes large 25 Oct (Rosário), 1 Nov (Itaipu), 23 Jan (Lagoa Santa).
- 395\* *Sicalis luteola luteiventris* 1m 1f 1imm.m Lagoa Santa.
- 396 (314) *Emberizoides herbicola herbicola* 2m 1uns Itaipu; (Itu); 1f Sorocaba; 1m Batatais; 1uns Curvelo; (Lagoa Santa). **Br.**: 1m: Testes large 16 Dec (Itaipu). **SP**: 1-9: Iris dark brown, maxilla blackish gray, mandible yellowish white, feet very pale gray brown. **St.**: 2: Seeds and a few insects.
- 397\* *Embernagra platensis platensis* 1m Olaria. **Notes**: Body mass 38 g.
- 398 (322) *Volatinia jacarina jacarina* 2uns 1juv.uns Rosário; 3m 1f Lagoa Santa. **Br.**: 2m: Testes large 20 Nov (Rosário). **SP**: 1-7m: Iris dark brown, maxilla blackish gray, mandible bluish white, feet brownish gray. 1f: Iris dark brown, maxilla horn brown, mandible horn white, feet fleshy gray. **St.**: 2: Berries.
- 399 (327) *Sporophila plumbea plumbea* 1m Mogi das Cruzes; 1m 1juv.m Franca; 2m 1f Lagoa Santa; (Campos). **SP**: Iris dark brown, bill almost black (1-5m), horn brown with yellow base of mandible (1f), or pale brown (dry skin of 1juv.m), feet dark gray (m) or dark brown (f). **St.**: 3-7: Grass seeds, once larvae.
- 400 (328) *Sporophila collaris collaris* 2m 1juv.m Rio de Janeiro; (Lagoa Santa). **Br.**: 2m: Testes large 20 Oct (Lagoa Santa), 16 Dec (Rio de Janeiro). **SP**: 1-5: Iris brown, bill smoky black, feet dark gray brown.
- 401 (324) *Sporophila nigricollis nigricollis* 2f Rio; 1uns Franca; 1m Curvelo; 5m 3f Lagoa Santa. **Br.**: 1f: Ovary large 4 Jan (Lagoa Santa). **SP**: 1-12: Iris blackish brown, bill leaden gray or dark blue gray (in dried specimens it turns yellowish white), feet grayish brown. **St.**: 1: Seeds and sand.
- 402 (323) *Sporophila caerulescens caerulescens* 1juv.m Rio de Janeiro; 1m Itu; (Rosário); (Campinas; seen); (Ipanema); (São Bento); (São Domingos); (São Paulo; seen). **Br.**: 4m: Testes large 30 Oct (2) and 5 Jan (Rio de Janeiro), 18 Nov (Rosário). **SP**: 1-10m: iris dark brown, bill greenish yellow, feet grayish black. 1imm.m: Bill gray, cutting edge of mandible yellow, feet dark gray. 1-5f and 1juv.m: Iris dark brown, bill and feet blackish gray. **St.**: 2: Berries. **Notes**: Common in São Paulo and at Campinas (Lund).
- 403 (326) *Sporophila leucoptera leucoptera* 2m 1f Lagoa Santa. **Br.**: 2: moulting 12 Apr. **SP**: Iris chestnut, bill pale rufous brown (1-2m) or blackish (1f), feet plumbeous black.
- 404 *Sporophila bouvreuil*  
(325) *S. b. bouvreuil*: 1m Lagoa Santa; 1m Sete Lagoas.  
\**S. b. saturata*: 1m 2“imm.”m Mogi das Cruzes.  
**SP**: 1-5: Iris, bill and feet blackish. **Notes**: [A male of *S. b. saturata* in breeding plumage was collected on 16 Nov, two males in non-breeding plumage on 20 Nov (Fig. 1). Otherwise this very distinctive taxon is known from only four male specimens (three of them in breeding plumage or nearly so), all taken in São Paulo, the type (cat. no. 7928 in Senckenberg Museum, Frankfurt am Main) by Duschanek in the early 1800s on an unspecified date and locality in São Paulo, one (cat. no. 20.334 in Vienna Museum) by Natterer on 18 Jan 1819 at ribeirão Goaió (Poá county, 2331/4620, 696 m) not far from Mogi das Cruzes (Hellmayr 1904), a male in nonbreeding plumage (São Paulo Museum) by H. Pinder at Ipiranga (2336/4637, 668 m) in the city of São Paulo on 28 December 1896, and one (São Paulo Museum) by Mr. Lima at Ipiranga (Vila Ema) on 31 January 1900 (Pinto 1944). The taxon was feared to be extinct until reported by A. Ribeiro in 2007 (<http://tinyurl.com/y862q9>). It was described as a full species by Hellmayr (1904) who later (1938) remarked that it “may prove to be a local race of *S. bouvreuil*”. Meyer de Schauensee (1966) ranked it as a race of *S. bouvreuil*, a treatment followed by subsequent authors. It is surrounded by the three other races of *S. bouvreuil* and differs distinctly by its chestnut instead of cinnamon color. The collecting of dull-plumaged males that bear no signs of being juveniles, within 4 days of the collecting of a brightly colored male suggests that *saturata*, like at least some congeners, attains a distinct non-breeding plumage. *S. bouvreuil crypta* (Ridgely and Tudor 1989) and *S. luctuosa* (own obs.) are known to begin breeding before attaining full plumage. The general similarity in plumage pattern suggests that the closest relative of *saturata* is *S. bouvreuil*.]
- 405 (329) *Oryzoborus angolensis angolensis* 1f Itaipu; (Campinas); (Lagoa Santa). **Br.**: 1m: Testes large 2 Nov (Itaipu). **SP**: 1f: Iris, bill and feet blackish brown.
- 406\* *Arremon taciturnus semitorquatus* 2f 2uns 1juv.m Rio. **SP**: 1-2f: Iris dark brown, maxilla black, mandible yellow, feet brownish gray, long hind-claw white. 1juv.m: Bill black.
- 407 (338) *Arremon flavirostris flavirostris* 2m Lagoa Santa; 1uns Sete Lagoas. **SP**: 1-6: Iris dark brown, bill reddish

- yellow, ridge blackish brown, feet pale grayish brown. **St.**: 3-6: Seeds, sometimes also small beetles and sand.
- 408 (321) *Charitospiza eucosma* 2m Santa Ana dos Alegres; 1f Curvelo; 3m 1f Lagoa Santa; 1m Sete Lagoas; (Andrequicé). **Br.**: 1m: Testes large 16 Nov (Lagoa Santa). **SP**: 1-12: Iris black, bill pale leaden gray, darker along ridge, feet brownish gray. **St.**: Insects (4), seeds? (1).
- 409 (313) *Coryphospiza melanotis* 2m 1imm.m Batatais; 1uns Sete Lagoas. **SP**: 3m: Iris chestnut, maxilla blackish, mandible plumbeous tipped black, feet gray brown. 1f: Iris brown, maxilla blackish, mandible whitish tipped blackish, feet grayish. **St.**: 2: Earth.
- 410 (319) *Coryphospingus pileatus pileatus* 6m 3f Lagoa Santa; 1m Sete Lagoas; (Curvelo). **Br.**: 3m: Testes large 24 Sep and 14 Oct (Lagoa Santa), 11 Oct (Curvelo). **SP**: 1-12m: Iris chestnut, maxilla plumbeous tipped black, mandible grey, feet dark grey.
- 411 (318) *Coryphospingus cucullatus rubescens* 1f Campinas; 1m 1f São Bento; 1f Uberaba.
- 412\* *Saltator fuliginosus* 1f Campinas.
- 413 (336) *Saltator similis similis* 2uns 1juv.m Rosário; 2m 1f 2uns Lagoa Santa; (Sete Lagoas); (Araras); (Capitão Mor). **Br.**: 2: Gonads large 29 Sep and 12 Apr. **SP**: 3-16: Iris dark brown, bill black with yellowish white spot on underside of mandible (in one unsexed entire mandible and tip of maxilla yellowish white), feet black. **St.**: 3-16: Seeds, insects.
- 414 (335) *Saltator atricollis* 2m São Bento; 2m 2f 3uns Lagoa Santa. **SP**: Iris brown (not orange red), bill bright orange red becoming blackish along ridge (1-5m), or maxilla blackish, cutting edge and mandible dull orange, spot on sides of mandible brown (1-2f). **St.**: Insects (4), seeds and insects (2).
- 415 (330) *Cyanocopsa brissonii sterea* 1f Rosário; 1f Campinas; 1m Lagoa Santa; (Capitão Mor). **Br.**: 1m: Testes large 30 Oct (Rosário). **SP**: 1m: Bill and feet black. **St.**: Seeds (2), insects (1).
- 416 (381) *Parula pitiayumi pitiayumi* 1m Itaipu; 1m Aldeia da Pedra; 1m Mogi das Cruzes; 1juv.m Uberaba. **Br.**: 2: Gonads large 29 Oct (Minas Gerais) and 9 Dec (Taipú). **SP**: 1-5: Bill black above, yellow below, feet yellowish brown. **St.**: 1: Insects and apparently vegetable matter.
- 417 (380) *Geothlypis aequinoctialis velata* 1m Rio de Janeiro; 1m Rosário; 1f Ipanema; 1f Santa Bárbara; 2m Lagoa Santa; 2m Sete Lagoas; (Uberaba). **Br.**: 2m: Testes large 11 Sep (Rio de Janeiro) and 30 Oct (Rosário). **SP**: 1-11: Maxilla blackish horn, cutting edge and mandible whitish horn, feet yellowish gray to whitish horn.
- 418 (379) *Basileuterus culicivorus azarae* 1m Rio; (Uberaba). **SP**: 1-5: Bill dusky, feet yellowish brown. **St.**: 1: Insects.
- 419 (378) *Basileuterus hypoleucus* 1f Rio; 1f Itu; 1f Lagoa Santa. **SP**: 1-5: Iris black, maxilla black, mandible blackish tipped black, feet dirty wax yellow. **St.**: 2: Insects.
- 420 (377) *Basileuterus leucoblepharus* 1uns Rosário; 1m Itu. **SP**: 1-5: Iris dusky, bill black, feet wax yellow.
- 421\* *Phaeothlypis rivularis rivularis* 1m Rosário; 1m Rio Grande [near Cantagalo] 28 Jun [1828?]. **SP**: 1-4: Iris dusky, bill black, feet wax yellow. **St.**: 1: Insects.
- 422 (309) *Psarocolius decumanus maculosus* 1f Córrego Rico; 1f Rio; (Indagotuba); (São Bento); (Santa Ana dos Alegres); 1m 1f Lagoa Santa. **SP**: 1-11: Iris sky blue, bill whitish, feet black. **St.**: 2-3: Berries, seeds, hairy larvae, oranges, bananas.
- 423 (308) *Cacicus haemorrhous affinis* 2m 2f 1uns Lagoa Santa; 1uns Sete Lagoas; (Araras). **Br.**: 1m: Testes large 19 Aug (Minas Gerais). **SP**: 1-10: Iris sky blue, bill yellowish white, feet black.
- 424 (307) *Icterus jamacaii* 1m 1f 1uns Rio São Francisco; 1m Porto das Barreiras; (Abaeté). **Br.**: 2: Gonads medium 2 and late Oct (Minas Gerais). **SP**: 1-6: Iris straw yellow, bill black, base of mandible whitish, feet blue gray. **St.**: Insects and various seeds.
- 425 (306) *Icterus cayanensis valenciobuenoi* 1m Uberaba; 1m Sete Lagoas; (Tijuco); (Paracatu). **Br.**: 1m: Testes large 3 Aug (Uberaba). **SP**: 1-5: Iris cinnamon, bill black with grayish spot at base of mandible, feet leaden gray. **St.**: 1-5: Insects.
- 426 (303) *Gnorimopsar chopi chopi* 1m Tolda; (Rio de Janeiro). **Br.**: 1m: Testes large 5 Oct (Tolda). **SP**: 1m: Iris brown, bill and feet black. **St.**: 1: Insects and seeds.
- 427 (302) *Pseudoleistes guirahuro* 1m 1uns Lagoa Santa. **SP**: 1-3: Iris brown, maxilla blackish, mandible white tipped blackish, feet blackish. **St.**: 1: Insects.
- 428 (304) *Molothrus bonariensis bonariensis* 1f Rio São Francisco. **Br.**: 1f: ovary large 2 Oct (Rio São Francisco). **SP**: 1-3: Iris, bill and feet black. **St.**: 1: Full of grass. **Notes**: Young found in nest of *Zonotrichia capensis* at Lagoa Santa.
- 429 (312) *Carduelis magellanica icteria* 1m Retiro; 1m Catalão; 1m Olaria; (Lagoa Santa); (Araraquara). **Br.**: 1f: Ovary large 29 Nov (Lagoa Santa). **SP**: 1-8: Iris, bill and feet blackish brown.
- 430 (358) *Euphonia chlorotica serrirostris* 1m Aldeia da Pedra; 1juv.m Rio; (Itaipu); 2m Lagoa Santa. **Br.**: 1m: Testes large 12 Mar (Lagoa Santa). **SP**: 1-3m: Bill pale bluish, ridge and tip black. **St.**: Seeds (1), green seeds (1).
- 431 (359) *Euphonia violacea aurantiicollis* 1m Aldeia da Pedra; 1f 1juv.m Rio; (Rio de Janeiro); (Brumado). **SP**: 1-6m: Maxilla black, mandible plumbeous tipped black, feet plumbeous. **St.**: Berries (1), seeds (1).
- 432 (360) *Euphonia cyanocephala aureata* 1m Rio da Prata.
- 433 (361) *Euphonia pectoralis* 1m Rosário; 1m Itaipu; 1m Lagoa Santa. **SP**: 1-3m: Iris dark brown, bill and feet blackish blue.
- 434\* *Chlorophonia cyanea cyanea* (Bem Fica). **Notes**: Collected from a canopy flock 19 Apr 1828 (Lund).



## APPENDIX 2

### Details of collecting localities.

For each locality is listed "(State, coordinates, elevation). Collector, collecting dates, (no. species collected). Notes".

Coordinates are given in degrees and minutes in the manner of 1817/4459 meaning 18°17'S 44°59'W.

Abaeté (Minas Gerais, 1802/4511). Lund 1 Oct 1834 (1 species). Mouth of Rio Abaeté in central Minas Gerais. See also Rio São Francisco

Águas Pretas = Fazenda Água Preta.

Aldeia da Estiva (Minas Gerais). Lund 7 or 17 Aug 1834 (2 species). Not located. According to Reinhardt (1870) north of Uberaba in southwestern Minas Gerais, between Rio das Velhas and Paranaíba, which fits the date 17 Aug. Paynter and Traylor place it south of Rio das Velhas at 1935/4800, which fits with the date 7 Aug.

Aldeia da Pedra (Rio de Janeiro, 2141/4204, 185 m). Lund 5-9 Jul 1828 (20 species). A small town (now Itaocara) on the right bank of Rio Paraíba, between the mouths of Rio da Pomba and Rio das Arcas, 35 km west of São Fidelis in northern Rio de Janeiro. Also as "Paraíba near Aldeia da Pedra". See also São Fidelis.

Alferes Casinier (São Paulo). Lund 8 Nov 1833 (1 species). Not located. Campos site between Taubaté (2302/4533) and Jacaré (2319/4558), northeastern São Paulo.

Andrequicé (Minas Gerais, 1817/4459, 669 m). Lund 9 Oct 1834, Reinhardt 31 Oct 1855 (6 species). Village between the mouth of Rio Abaeté and Curvelo, central Minas Gerais. Not far from the small stream Tolda, that enters Rio São Francisco (Reinhardt). See also Fazenda Margarita, where Lund collected the same day.

Araraquara (São Paulo, 2147/4810, 651 m). Lund 5-17 May 1834, also as "São Bento de Araraquara" or "São Bento" (21 species). Town in central São Paulo. See also Santa Bárbara.

Araras (Rio de Janeiro). Lund 17 Oct 1833 (11-12 species). Between the city of Rio de Janeiro and the small river Pirai in southern Rio de Janeiro and eastern São Paulo. At 2240/4351 (Vanzolini 1992).

Bananal (São Paulo, 2241/4419, 484 m). Lund 23 Oct 1833 (1 species). Near the border of Rio de Janeiro. See also Capitão Mor.

Batatais (São Paulo, 2053/4737, 880 m). Lund 2-4 Jun 1834 (9 species). Town *ca.* 60 km south of Franca, in northern São Paulo.

Bem Fica = Benfica, a former swiss settlement near Nova Friburgo. See Macaé.

Boa Vista (Minas Gerais). Lund Aug 1834 (1 species). Not located. Southwestern Minas Gerais, between Rio das Velhas (1) and Rio Paranaíba, *ca.* 60 km south of

Catalão (Goiás), i.e. at *ca.* 1844/4757. See also Rio das Velhas (1).

Bom Jão see Retiro.

Brumado (Minas Gerais). Reinhardt Oct [sic=Sep]1850 (1 species). Not definitely located. Small town on Reinhardt's route from Rio de Janeiro to Lagoa Santa. Presumably the site now called Brumal (1959/4327, 750 m), but according to Barbosa (1971) a locality now called Entre Rios de Minas (2041/4404, 920 m).

Cachoeira do Campo (Minas Gerais, 2020/4340, *ca.* 1100 m). Reinhardt 30 Jun 1847 (1 species).

Campinas (São Paulo, 2254/4705, 734 m). Lund 24-30 Jan and 3-20 Apr 1834 (46 species). Also as "São Carlos" and "São Carlos de Campinas". Town in eastern São Paulo, *ca.* 100 km northwest of São Paulo city. See also Indagotuba.

Campinho (Minas Gerais). Reinhardt 11 Jun 1855 (1 species). Not located. Campos site, probably near Lagoa Santa (1938/4353), where Reinhardt collect on 3 and 14 June.

Cantagalo (Rio de Janeiro, 2158/4222, 376 m). Lund 2 Jul 1828 (4 species). Small town in the district of the same name in northern Rio de Janeiro. See also São Clemente.

Campos (Rio de Janeiro, 2145/4120, 0 m). Lund *ca.* 16 July 1828 at "Campos de Goitacases July 1828", "Campos de Goyatacazes 6 July 1828" [penslip for 16 July?], and "Campos July 1828" (4 species). Town on the Rio Paraíba in the northeasternmost district in Rio de Janeiro. Lund did not spend much time in Campos, but continued to stay at a nearby small goldwasher's village on the Paraíba (see Paraíba).

Campos de Goitacases = Campos.

Campos de Araraquara see Santa Bárbara and Retiro.

Capãozinho (Minas Gerais). Not located. Lund 1 Sep 1834 as "Capão Sinho" and "Capãozinho" (2 species). Between Catalão and Paracatu. Paynter and Traylor place it at *ca.* 1720/4700, Vanzolini at *ca.* 1720/4705. According to Lund's catalogue it is in southern Goiás, but coordinates place it in Minas Gerais.

Capela Nova (Minas Gerais, 2055/4337, *ca.* 750 m). Reinhardt 7 Nov 1854 (1 species). Forest site between Lagoa Santa and Rio de Janeiro.

Capelinha (Goiás or Minas Gerais). Lund 29 Aug 1834 as "near Capelinha" (1 species). Not definitely located. Between Catalão, Goiás (1810/4757) and Capãozinho, Minas Gerais (1720/4700), judging from the date closest to the latter, but in Goiás, according to Lund's catalogue.

Capitão Amaral see Santa Bárbara.

Capitão Mor (São Paulo, 2241/4427, 628 m). Lund 23 Oct 1833 (5 species). Also as "Capão Mor" and "Capitão Mor near Bananal". The place where the old road from Rio to São Paulo crossed the Ribeirão Capitão Mor, now the city of Arapeí. On Rio Paraíba, between Pirai

- and Bananal, closest to Bananal, eastern São Paulo near the border of Rio de Janeiro.
- Capivari (Minas Gerais). Reinhardt 25 or 26 Oct 1855 (1 species). Not located. Swamp with growth of Burití palms, not far from Andrequicé (1817/4459, 800 m), central Minas Gerais.
- Capueira Teixeira = Fazenda do Engenho
- Catalão (Goiás, 1810/4757, 842 m). Lund 23-24 Aug 1834 (10 species). Town in southern Goiás.
- Cachoeira do Campo (Minas Gerais, 2020/4340, *ca.* 1100 m). Reinhardt 30 Jun 1847 (1 species). Small town between Barbacena and Lagoa Santa, south-central Minas Gerais.
- Coira (São Paulo). Lund 27 May 1834 (1 species). Not located. Near Rio Mogi Guaçu (*ca.* 2121/4757), northern São Paulo, where Lund collected the same day.
- Córrego Rico (Minas Gerais, 1726/4632). Lund 17 and 19 Sep 1834 (4 species). Small river 5-10 km east-southeast of Paracatu, western Minas Gerais.
- Curvelo (Minas Gerais, 1845/4425, 633 m). Lund 11-21 Oct 1834 (24 species). Town *ca.* 100 km north of Sete Lagoas, central Minas Gerais.
- “Delbois” see São Fidelis.
- Engenho see Fazenda do Engenho.
- Fazenda Água Preta (São Paulo, 2301/4529, *ca.* 500 m). Lund 31 Oct 1833 (5 species). Close to Pindamonhangaba northeast of Taubaté, on Rio Paraíba, northeastern São Paulo. Correct coordinates probably 2256/4531, which is on the river.
- Fazenda Amaral see Santa Bárbara.
- Fazenda do Engenho (Minas Gerais, *ca.* 1938/4353). Lund 22 Apr 1836, Reinhardt 23 Jul (2 species). Fazenda near Lagoa Santa, central Minas Gerais. Local people collected here for Reinhardt 12 Aug 1851 (1 species).
- Fazenda do João Pinto (São Paulo). Lund May 1834 (1 species). Not located. Between Campinas (2254/4705) and Batatais (2053/4737), northeastern São Paulo.
- Fazenda do Saco de Franca (Minas Gerais). Reinhardt 15 Jan 1852 (1 species). Not located. In the valley of Rio Paraopeba, near Sete Lagoas (1927/4414), *i.e.* at *ca.* 1935/4424.
- Fazenda Jaguaré see Rasgão do Açude de Jaguaré.
- Fazenda Lages (Minas Gerais). Lund 26-27 Sep 1834 (2 species). Not located. According to Reinhardt *ca.* 100 km southeast of Paracatu and *ca.* 20 km from Santa Ana dos Alegres, western Minas Gerais. According to Vanzolini now Fazenda Lajes, Minas Gerais, 1758/4651, but that is nearly 80 km from Santa Ana dos Alegres.
- Fazenda de Margarita (Minas Gerais). Lund 9 Oct 1834 (1 species). Not located. Between Andrequicé (1817/4459) and Curvelo (1845/4425), judging from the date close to the former (where Lund collected the same day) and to Riberão da Tolda (*ca.* 1819/4506).
- Fazenda Montalegro see Ilicaba and Rio Jaguari.
- Fazenda Pindaíbas (Minas Gerais). Reinhardt 6 Nov 1855 (1 species). Not located. Fazenda near Curvelo (1845/4425), central Minas Gerais.
- Fazenda Rosário = Rosário
- Fernandão (São Paulo). Lund 26 May 1834 (1 species). Not located. Near Pai Joaquim, where Lund collected the same day, not far from Coira and Rio Mogi Guaçu (*ca.* 2121/4757), northern São Paulo.
- Franca (São Paulo, 2032/4724, 997 m). Lund 1-20 Jul 1834 (12 species), between Franca and Rio Grande 27 Jul 1834. Town in northern São Paulo.
- Gávea (Rio de Janeiro, 2300/4316). Lund 10-11 Sep 1826 as “foot of Gavea mt.”, “near Gavia”, “Gavia” and “montane forest near Gavia” (4 species). In the city of Rio de Janeiro, near the beach Praia da Gávea. Other specimens collected on the same day may have also been taken there.
- Gavia = Gávea.
- Hytu = Itu.
- Ilicaba (São Paulo). Lund (*ca.* 16 Apr and on) 28 Apr 1834 at “Ilicaba” and “Ilicaba, near Freguesia de Limeira” (2 species). Not located. Estate east of Rio Claro (2225/4733), north of Rio Piracicaba, *ca.* 50 km northwest of Campinas and *ca.* 25 km from Costa Carvalhos’ farm “Montalegro” on Rio Piracicaba, central São Paulo. Close to Limeira (2234/4724), with which collecting date overlaps. Reinhardt [in loose translation] stated that “After two days at the estate Ilicaba approximately 50 km north-west of Campinas they went south to Costa Carvalho’s Fazenda “Montalegro”, situated on the Piracicaba river, where Lund collected a bird 18 April and stayed four days, also visiting a Fazenda nearby by the name Taquará.” The only specimen in Lund’s catalogue and the collection with the name Piracicaba, is one collected on 25 Apr at “junction of rios Piracicaba and Jaguari” (see Rio Jaguari).
- Indagotuba (São Paulo). Lund 4 Feb 1834 as “Indagotuba between Campinas and Hytu 4-2-34” and “between Campinas and Hytu [undated]” (2 species). Not located. Between Campinas and Itu, eastern São Paulo. Probably = Indaiatuba (2305/4714, 609 m).
- Ipanema (São Paulo, 2326/4736, 950 m). Lund 6 Mar 1834 (6 species). Town *ca.* 100 km west of the capital of São Paulo.
- Itaipu (Rio de Janeiro, 2258/4302, 0 m). Lund 27 Sep 1828-Jan 1829 (29 species). In city of Rio de Janeiro, by Lagoa de Itaipu, a small coastal lagoon 5-6 km east-southeast of Lagoa de Piratininga.
- Itu (São Paulo, 2316/4719, 594 m). Also as “Ytu” and “Hytú”. Lund 13-25 Feb and 12-23 Mar 1834 at Itu, “between Campinas and Hytú” [undated], “cerrados of Ytu” 16 Feb, at “João Tollo near Ytu” 18 Feb, “between Hytu and Sorocaba” 25 Feb, and “capão between Sorocaba and Hytu” 12 Mar (35 species). Town *ca.* 100 km west-northwest of the capital of São Paulo.

- Jacaré (São Paulo, 2319/4558, 522 m). Lund 8 Nov 1833 (1 species). Small town on the big bend of Rio Paraíba, eastern São Paulo.
- Jaguaré = Rasgão do Açude de Jaguaré.
- João Tollo see Itu.
- Juiz de Fora (Minas Gerais, 2145/4320, 667 m). Reinhardt 21 Jun 1847 (1 species). Small town (now major city) east of Serra Mantiqueira, between Rio de Janeiro and Lagoa Santa, about half way between Rio de Janeiro and Barbacena, southeastern Minas Gerais.
- Lages see Fazenda Lages.
- Lagoa do Defunto (Minas Gerais). Reinhardt 7 Nov 1855 (1 species). Not located. Small lake *ca.* 20 km south of Curvelo (1845/4425), central Minas Gerais.
- Lagoa Dourada (Minas Gerais, 1738/4618, *ca.* 800 m). Lund 20 and 23 Sep 1834 (2 species). Reinhardt 1851 (1 species). Near Sete Lagoas and 10-20 km from Santa Ana dos Alegres, central Minas Gerais. One specimen perhaps mislabeled as "Lagoa dos Porcos 20-9-34" (according to Reinhardt taken at Lagoa Dourada), the other almost certainly so, as "Lagoa dos Pitos 23-9-34". Perhaps both were taken at Lagoa dos Porcos. See also Córrego Rico, where Lund collected on 17 and 19 Sep.
- Lagoa Doirada see Lagoa Dourada.
- Lagoa dos Frutas (Rio de Janeiro). Lund 25 Nov 1826 (1 species). Not located. Presumably in the city of Rio de Janeiro, where Lund lived and collected at the time, including on the following day.
- Lagoa dos Pitos (Minas Gerais, *ca.* 1938/4353). Lund Jul, 16 and 23 Aug, and Sep 1843, Aug 1844, 20 Aug 1847, Reinhardt 12-23 Aug 1847 (17 species). Lake 10-20 km from Sumidouro and Lagoa Santa, central Minas Gerais.
- Lagoa dos Porcos (Minas Gerais, *ca.* 1735/4630). Lund 18 Sep 1834 (3 species). Near Paracatu, towards Rio São Francisco. See also Lagoa Dourada.
- Lagoa Santa (Minas Gerais, 1938/4353, 760 m). Lund made his home here, from his arrival until his death in 1880. He collected his first Lagoa Santa bird specimen on 20 Oct 1835 and his last on 15 Oct 1847, a few months after Reinhardt had arrived. Reinhardt 9 Jul-11 Aug and 1 Sep-6 Nov 1847, Sep-Oct 1850, Jan-Feb and Jul-Dec 1851, Jan and Mar 1852, Nov 1854, and at various times in 1855 (250 species). Town by a lake, *ca.* 50 km southeast of Sete Lagoas, central Minas Gerais.
- Lagoinha (Minas Gerais). Lund 7-8 Apr 1836 and 14 April 1837, Reinhardt 6 Sep 1847 and 7 Oct 1851 (6 species). Not located. Pond 3-4 km from Lagoa Santa (1938/4353).
- Lapa do Baú (Minas Gerais). Lund 25-28 Sep 1843 (2 species). Not located. Cave in calcareous rock not far from Sumidouro (2024/4321).
- Lapa Vermelha (Minas Gerais, 1940/4355). Reinhardt 19 May and 7 Jun 1851 (2 species). Cave in calcareous rock 5-6 km from Lagoa Santa.
- Limeira (São Paulo, 2234/4724, 542 m). Lund "between São Carlos and Limeira" 23 Apr 1834 (1 species) and at "Limeira" 1 May 1834 (2 species). Town some 50 km northwest of Campinas, near and northeast of Illicaba, central São Paulo.
- Lorena (São Paulo, 2244/4508, 492 m). Lund 28 Oct 1833 (1-2 species). Between Bananal and Águas Pretas, southeastern São Paulo.
- Macaé (Rio de Janeiro, 2220/4225, 1000 m). Lund 12-30 Apr 1828 (28 species). = Macaé de Cima at the headwaters of the Macaé river, near Nova Friburgo. Lund at "Riberão do São José at Macaé" 14 Apr, "Bem Fica" 14, 17 and 19 Apr, and "between Macaé and Bem Fica" 14 and 17 Apr. Birds labeled "Macaé" are from 12, 13, 14, 15, 18, 26 and 30 Apr. On 2 May Lund again collected specimens at Rosário.
- Mocambo (Minas Gerais, 1932/4402, 805 m). Lund 28 Apr-18 May 1836 (one in Lund's catalogue as "10-5-36" mislabeled "20-5-36") (9 species). Fazenda 22 km west-northwest of Lagoa Santa. Now called Mocambeiro.
- Mogi see Mogi das Cruzes and Rio Mogi Guaçu.
- Mogi das Cruzes (São Paulo, 2331/4611, 737 m). Lund 15-25 Nov 1833 (14 species). Also as "Mugi", "Mugy das Cruzes" and Capão at Mogi das Cruzes". Near Rio Tietê, between the capital of São Paulo and Rio Paraíba, eastern São Paulo. Possibly by the town with the same name for which coordinates are given.
- Morro Queimado (Rio de Janeiro). Lund. Not located, but probably = Nova Friburgo (2217/4232, 913 m). By Rio Bengala and near Rosário (*ca.* 2206/4225). Only a few specimens are marked with this locality on the original label or in Lund's catalogue. See Rosário, where Lund lived while he "went on frequent hunting trips" to Morro Queimado, which at the most could have been a few hours walk from Rosário and may have been very close. The name Morro Queimado was sometimes used for Nova Friburgo at the time, so the birds may have been collected near the village. It is stated in Lund's correspondence and through Reinhardt (1870) that many or most of the specimens marked "Rozario" on the label or in Lund's catalogue were actually collected on Morro Queimado. For some specimens Lund wrote "Morro Queimado" on the label, but "Rozario" in his catalogue. Others he labeled "Rozario", but told Reinhardt that he had taken on Morro Queimado.
- Mugi = Mogi.
- Nascimento (Minas Gerais, 2120/4329). Reinhardt 23 Jun 1847 (3 species). Between Juiz de Fora and Ressaquinha, and *ca.* 20 km south of Barbacena, southeastern Minas Gerais, on the road from Rio de Janeiro to Lagoa Santa, over 100 km from the state border.



- Neu Freiburg see Rosário.
- Nova Friburgo see Rosário.
- Olaria (Minas Gerais, 2022/4323). Lund 3, 6 and 17 Jan 1835 (3 species). Near Mariana (2023/4325), a town in a marshy area in central Minas Gerais.
- Olhos d'Água (Minas Gerais). Lund 28 Sep 1834 (1 species). Not located. According to Reinhardt a Fazenda near Lagoa Santa, but date suggests vicinity to Fazenda Lages.
- Pai Joaquim (São Paulo). Lund 25-26 May 1834 (3 species). Not located. Near Franca, northern São Paulo, between Santa Bárbara and Coira. See also Fernandão, where Lund collected 26 May.
- Paracatu (Minas Gerais, 1713/4652, 710 m). Lund 3-15 Sep 1834 (31 species). Town on Rio Paracatu near the border of Goiás. Specimens from 13 Sep include 6 labeled "Paracatu" and one labeled "Rio da Prata".
- Paraíba (Rio de Janeiro). Lund 20 Jul 1828 at a small goldwashers' village on Rio Paraíba near Campos (2145/4120) (1 species). See also Sampaio and Aldeia da Pedra.
- Paraíba near Aldeia da Pedra see Aldeia da Pedra.
- Paraitinga According to Reinhardt, Lund 25 Oct 1833 at "Pertininga (Parahitinga)". According to Paynter and Traylor now São Luís do Paraitinga (São Paulo, 2314/4520). The specimen that Reinhardt reports from this locality (*Pardirallus nigricans*) is only labeled "Pertininga 25-10" in Lund's catalogue. It has a museum accession number from 1829, and was undoubtedly collected at Piratininga in Rio de Janeiro in 1828. Furthermore, the coordinates for São Luís do Paraitinga do not fit Lund's route in São Paulo.
- Paranahyba = Paranaíba.
- Paranaíba (Goiás). Lund 18 Aug 1834 (1 species). River on the Minas Gerais-Goiás border. Exact locality not known, but presumably at 1830/4756, just across the river from São Domingos.
- Pertininga = Piratininga.
- Pedra dos Índios (Minas Gerais, 1931/4400). Reinhardt Jul or Aug 1851 (1 species). 10-20 km north of Lagoa Santa.
- Petrópolis (Rio de Janeiro, 2231/4310, 850 m). Reinhardt 16 Jun 1847 (1 species). Town in Rio de Janeiro. Mislabelled July.
- Pirai (Rio de Janeiro, 2238/4354, ca. 400 m). Lund 18 Oct 1833 as "Pirahy" (1 species). Small river on Rio de Janeiro-São Paulo border. Lund probably at Barra do Pirai at the mouth of the river for which coordinates given.
- Piratininga (Rio de Janeiro, 2258/4307, 0 m). Lund 17 Sep (?) [year?] and 25-30 Oct 1828 as "Pertininga" (7 species). Coastal lagoon south of Niterói and west-northwest of Itaipu, at the very edge of the Bay of Rio de Janeiro.
- Porto das Barreiras (Minas Gerais, ca. 1753/4509). Reinhardt 29 Oct 1855 (1 species). Not located, but apparently neither the Porto das Barreiras of Paynter and Traylor (ca. 1817/4459) nor Vanzolini (1942/4350). According to Reinhardt himself it is near Andrequicé and ca. 20 km north of the mouth (1802/4511) of the diamond-rich Rio Abaeté in central Minas Gerais, i.e. at ca. 1751/4506.
- Quebra (Minas Gerais). Reinhardt 6 Jul 1855 (1 species). Not located. Small forest near Lagoa Santa.
- Rampoí (Rio de Janeiro). Lund Jul 1828 between Sampaio and Rampoí (1 species). Not located, on the way from Cantagalo to Aldeia da Pedra (2141/4204). Probably a misspelling, possibly for "Troubat", a farmer who owned "Fazanda da Aldeia" near Aldeia da Pedra.
- Rancho Podrinho (São Paulo). Lund 5 May 1834 (1 species). Near Araraquara (2147/4810), central São Paulo. Lund's assistant Roberto collected here on 5 May 1834.
- Rancho Queimado (São Paulo). Lund 19 May 1834 (1 species). Near Araraquara (2147/4810), central São Paulo. Lund probably just north of Araraquara and south of Rio Mogi Guaçu.
- Rasgão de Açude de Jaguaré (Minas Gerais, ca. 1927/4402, 500 m). Reinhardt Oct 1850, early 1951, and 28 Jun 1851 also as "Fazenda Jaguaré" (4 species). Fazenda near Sumidouro and ca. 20 km north of Lagoa Santa. Presumably the same as Fazenda Jaguará, for which coordinates given.
- Ressaquinha (Minas Gerais, 2104/4346, 1113 m). Reinhardt 26 Jun 1847 (3 species). On the road from Rio de Janeiro to Lagoa Santa, ca. 20 km north of the town Barbacena, southern Minas Gerais.
- Retiro (São Paulo). Lund 20-21 May 1834 (5 species). Not located. Near Araraquara (2147/4810), probably just north of the town and south of Rio Mogi Guaçu. One specimen labeled "Retiro 20-5-1834" entered in Lund's catalogue as "Campos de Araraquara 21-5-34", one labeled "Retiro 21-5-1834" in Lund's catalogue as "Campos de Araraquara 22-5-34", and one labeled "between Bomjão and Retiro 21-5-1834 in Lund's catalogue as "Retiro 21-5-34".
- Ribeirão da Tolda (Minas Gerais). Lund 5 Oct 1834, also as "Tolda", Reinhardt 27 Oct 1855 (4 species). Not located. Small stream entering Rio São Francisco. Near Andrequicé (1817/4459) and not far south of the mouth of Rio Abaeté (1802/4511), central Minas Gerais, i.e. at ca. 1819/4506.
- Ribeirão de Uberaba Legítima (Minas Gerais). Lund 9 Aug 1834 (1 species). Not located. Near the town Uberaba (1945/4755, 792 m) in western Minas Gerais, not far north of the border to São Paulo, but apparently not the same as Uberaba, as Lund distinguished between the two on his labels and the collecting date is later than at Tijuco north of Uberaba.
- Ribeirão de Almoço (Minas Gerais). Lund 8 Oct 1834 (3 species). Not located. Between Andrequicé (1817/4459) and Curvelo (1845/4425), central Minas Gerais.

- Ribeirão do Mato (Minas Gerais, *ca.* 1945/4350). Reinhardt 29 Sep 1851 (1 species). Near Lagoa Santa.
- Riberão do São José see Macaé.
- Rio (Rio de Janeiro). Lund 8 Dec 1825 – Jan 1829. Many of the specimens from Lund's first journey to Brazil were labeled "Rio", irrespective of where in the state of Rio de Janeiro they were collected. Additionally, Lund as often as not, left out the year of collecting in his catalogue during his first stay in Brazil and often gave no locality. Some were actually taken in the city of Rio de Janeiro (for which see), but most of the specimens labeled "Rio" were taken at Rosário (for which see). A few may have been taken at Macaé and Aldeia da Pedra, although Lund usually did specify those two places in his catalogue or on the labels. Reinhardt between Petrópolis (Rio de Janeiro, 2231/4310) and Juiz de Fora (Minas Gerais, 2145/4320) 18-21 Jun 1847.
- Rio Grande (São Paulo). Lund 26-27 Jul 1834 as "near Rio Grande" 26 Jul, "near shore of Rio Grande de Parana" 26 Jul, "Rio Grande" undated, and "between Franca and Rio Grande" 27 Jul [sic?] (4 species). The large river forming the border between São Paulo and Minas Gerais. Lund at *ca.* 1959/4747, 500 m between Franca and Uberaba. See also Rio Grande near Cantagalo.
- Rio Grande near Cantagalo (Rio de Janeiro). Lund 16 Apr 1827 as "Rio Grande near Cantagalo" and 27 Jul [1827] and 28 Jun [1828?] as "Rio Grande" (3 species), perhaps at various places along the river (on 27 Jul he also collected at Rosário). Rio Grande at its closest (2206/4226) is only some 6 km north of Rosário (perhaps the locality for 27 July) and flows northeast through Rio Grandina and Bom Jardim to near Cantagalo at Cordeiro (2159/4222, 613 m) (perhaps the locality for 16 Apr and 28 Jun).
- Rio Jaguari (São Paulo, 2241/4717, *ca.* 600 m). Lund near mouth of river at "junction of Rio Piracicaba and Rio Jaguari" 25 Apr 1834 (1 species).
- Rio de Janeiro (Rio de Janeiro, 2253/4305, sea level). Lund 8 Dec 1825 – 6 Feb 1827, first staying in Niterói (coordinates given) until 27 Aug 1826, then at the estate of Brander Brandis (not located, but also in the city) (75 species). Lund presumably collected near where he was staying during this entire period, except on 11 Sep 1826, when he was at Gávea, 17 Sep 1826, and 25 Nov 1826, when he was at Lagoa dos Frutas. He briefly visited Rio de Janeiro in early Nov 1827, apparently without collecting any birds. He returned to Rio de Janeiro Sep-Dec 1828, when he collected at Itaipu and Piratininga.
- Rio Mogi das Cruzes see Mogi das Cruzes.
- Rio Mogi Guaçu (São Paulo). Lund along river 27-28 May 1834 as "Mogi" 27 May, "shore of Rio Mugy" 28 May, and "junction of Rio Mugy and Rio Pardo" undated, the latter site being at 2340/4810, (3 species). River *ca.* 50 km north of Araraquara, central São Paulo.
- Rio Pardo see Rio Mogi Guaçu.
- Rio Piracicaba see Rio Jaguari.
- Rio da Prata (Minas Gerais). Lund 13 [sic = 18] Sep 1834 (1 species). Not located. Near Paracatu (1713/4652), western Minas Gerais.
- Rio São Francisco (Minas Gerais, 1802/4511). Lund 1-2 Oct 1834 (7 species). Large river, Lund at mouth of Rio Abaeté, central Minas Gerais. See also Abaeté.
- Rio Taquaruçu (Minas Gerais, *ca.* 1937/4350-55). Lund 27 May 1840 (1 species). An affluent of upper Rio das Velhas in Central Minas Gerais.
- Rio das Velhas (1) (Minas Gerais, 1902/4755, 830 m). Lund 11-13 Aug 1834 as "Rio das Velhas" and "Santa Anna da Barra do Rio das Velhas" (5 species). According to Reinhardt where Rio das Velhas (now Rio Araguari) enters Rio Paranaíba in western Minas Gerais near the Goiás border, sw of Catalão, but probably meant in a general sense, as the very mouth of the river is rather off the route. Paynter and Traylor state that Santa Anna da Barra do Rio das Velhas is the town now called Indaiópolis (for which coordinates given). Lund collected at Boa Vista (not located, but according to Reinhardt about 60 km south of Catalão) on 13 or 14 Aug. A specimen labeled "Paranaíba 14 Aug" and two others from Aldeia da Estiva, one labeled "7 Aug", the other "17 Aug" make the route and dates between Uberaba and Catalão difficult to assess.
- Rio das Velhas (2) (Minas Gerais). Reinhardt 27 Aug 1851 (1 species). Not located. River site near Lagoa Santa. Contrary to Paynter and Traylor, Lund did not collect at this locality.
- Rosário (Rio de Janeiro). Lund 8 Feb 1827 – late June 1828 (113 species). Not located. Fazenda *ca.* 100 km northeast of the city of Rio de Janeiro. Many or most of the birds labelled "Rozario" on the label or in Lund's catalogue were taken on the nearby forested mountain Morro Queimado, but only 28 species have "Morro Queimado" specified as the collecting locality on labels, in Lund's catalogue, or by Reinhardt. From Lund's personal correspondence it appears that Rosário was about half way between the Swiss colony Nova Friburgo (2217/4232, 913 m) and Cantagalo (2158/4222, 574 m), not as close to Nova Friburgo as indicated by Paynter and Traylor (*ca.* 2216/4232). The only other clue to its location is a note in Lund's catalogue, that *Attila rufus* was collected in scrub along the Rio Bengala at Morro Queimado. Rio Bengala flows through the town of Nova Friburgo and northeast. This places Rosário at or very close to 2206/4225. Lund stayed at Rosário during the entire period except for a trip to Rio Grande near Cantagalo 16 Apr 1827, Rio de Janeiro early November 1827, and Macaé April 1828. Some of the specimens collected at Rosário were labeled "Nova Friburgo" or

- “Neu Freiburg” by museum staff, and Reinhardt frequently used “Nova Friburgo” for Rosário specimens. There is no indication that any specimen was actually taken at the town of Nova Friburgo. See also Morro Queimado.
- Rozario = Rosário.
- Sampaio (Rio de Janeiro). Lund 2 Jul 1828 as “on the estate of Sampaio” [labeled 6 July, probably a penslip for 2 July], “near Sampaio between Cantagalo and Aldeia da Pedra”, and “along Rio Paraíba between Sampaio and Rampoi” (3 species). Presumably somewhere on the large Fazenda Boa Sorte (municipality of Cantagalo) owned by the Sampaio family (J. F. Pacheco, pers. comm.), between Cantagalo (2158/4222) and Aldeia da Pedra (2141/4204). See also São Clemente.
- Santa Ana dos Alegres (Minas Gerais, 1745/4610). Lund 20 and 23-24 Sep 1834 (5 species). About mid way between Paracatu (1713/4652) and the mouth of Rio Abaeté (1820/4549), near Lagoa dos Porcos (1735/4630) and Lagoa Dourado (1738/4618).
- Santa Ana da Barra do Rio das Velhas = Rio das Velhas (1).
- Sant’Ana dos Alegres see Santa Ana dos Alegres
- Santa Bárbara (São Paulo). Lund 22-24 May 1834, also as “Fazenda Amaral” and “Capitão Amaral” (8 species). Not located. Fazenda near, south of Batatais, northern São Paulo. Lund at Araraquara (2147/4810) until 17 May 1834 and in Batatais (2053/4737) from 2 Jun 1834.
- Santa Luzia (Minas Gerais, 1947/4352, 681 m). Lund Mar 1835 (1 species). Near Lagoa Santa (1938/4353), central Minas Gerais.
- São Bento = São Bento de Araraquara see Araraquara.
- São Carlos see Campinas.
- São Carlos de Campinas see Campinas.
- São Clemente (Rio de Janeiro). Lund 3-4 Jul 1828 as “between Cantagalo and Aldeia da Pedra 3 July”, “St Clemente” 3 and 4 July, and “between Sampaio and São Fidelis 4 July (4 species). Not located. Between Cantagalo (2158/4222) and Aldeia da Pedra (2141/4204). Possibly some farm of the rich and powerful ”Antonio Clemente Pinto”, owner of 15 properties in District of Cantagalo. Pinto’s son was Baron of S. Clemente after 1830 (J. F. Pacheco, pers. comm.).
- São Domingos (Minas Gerais). Lund 18 Aug 1834, also as “São Domingos near Paranaíba in Goiás” (3 species). Not located. Southwestern Minas Gerais, close to the Goiás border, south of Catalão in southern Goiás. Near Aldeia da Estiva (1935/4800) where Lund was until 17 Aug 1834 on the way to Catalão (Goiás, 1810/4757), where Lund was 23 Aug. Vanzolini (1992) tentatively places it along an old indigenous route (“estrada dos guayazes”) in Minas Gerais at 1832/4753. See also Paranaíba, where Lund collected the same day.
- São Fidelis (Rio de Janeiro, 2139/4144, near sea level). Lund 9-12 July 1828 as “between Aldeia da Pedra and Campos [9 July]”, “St Fidelis 10 July”, and at “Delbois-Sanguark [spelling?], two leagues [c.11 km] on other side of São Fidélis [towards Campos] 12 July” (6 species). Town on Rio Paraíba in northern Rio de Janeiro between Aldeia da Pedra and Campos, ca. 50 km west-northwest of Campos.
- São Paulo (São Paulo, 2332/4637, 637 m). Lund 15 Dec 1833 (2 species). Capital city of the state of São Paulo. Two more species collected by Lund only bear secondary labels with “São Paulo” and “São Paulo?”, probably referring to the state rather than to the city.
- Sete Lagoas (Minas Gerais, 1927/4414, 890 m). Reinhardt 1847 [?], 1851, and Aug and Oct 1855 (95 species). Town in central Minas Gerais. The vast majority of the specimens have no other label data than “Sete Lagoas” and a museum accession number. A statement by Reinhardt that he collected a juvenile *Plegadis chihi* here (now lost) in 1847, may be in error. 7 are labeled 1851 and have museum accession numbers from 1852. 12 others have accession numbers from 1852 but no year of collecting. 5 are labeled “Aug 1855” or “Sep 1855” and like the rest of the 355 “Sete Lagoas” specimens, they have accession numbers from 1856. Searches for the museum catalogue and Reinhardt’s notes, which could match these specimens with data, have been in vain.
- Sorocaba (São Paulo, 2329/4727, 595 m). Lund 27 Feb and 10 Mar 1834 (3 species). Central São Paulo, ca. 50 km south-southwest of Itu. Lund on the way to and from Ipanema. See also Itu.
- Sumidouro (Minas Gerais, 2024/4321, ca. 700 m). Lund 27 Jul-2 Aug 1840, 21 Apr 1842, 28 Sep 1843, Reinhardt 24-29 Aug and 11 Nov 1847, 4-6 Oct 1850, 26 Jun and early Jul 1851, 8, 24 and 30 Jul 1855 (27 species). Small village 10-20 km from Lagoa Santa. There is a lake there (Lagoa Sumidouro, Lund August 1840).
- Taboleira Grande (Minas Gerais). Reinhardt 15 Oct 1855 (2 species). Not located. Near and northwest of Sete Lagoas (1927/4414).
- Taipú. = Itaipu.
- Taquará see Ilicaba
- Taubaté (São Paulo, 2302/4533, 578 m). Lund 4-5 Nov 1833 (5 species). On Rio Paraíba in eastern São Paulo, between São Paulo city and the border of Rio de Janeiro State.
- Tijucu (Minas Gerais, 1923/4800). Lund 7-8 Aug 1834 (3 species). Fazenda 10-20 [sic=40] km north of Uberaba, western Minas Gerais near the border of São Paulo.
- Tolda see Ribeirão da Tolda.
- Uberaba (Minas Gerais, 1945/4755, 792 m). Lund 31 Jul-4 Aug 1834 (22 species). Town in western Minas Gerais.
- Venda Nova (Minas Gerais, 1949/4358, ca. 800 m). Lund 26 Apr 1840 (1 species). Not located. Near Lagoa Santa.
- Ypanema = Ipanema.



### APPENDIX 3

#### **Itinerary of Lund's travels in Rio de Janeiro (coordinates given in Appendix 2). For his travels in São Paulo, Minas Gerais and Goiás see Pinto (1950).**

On P. W. Lund's first journey to Brazil, he left his ship in Rio on 9 December 1825. He moved to Niterói, into the home of the representative of "March, Scaly, Walker and Co.", where he lived until 27 August 1826. During this period he mailed letters home from Campo S. Bento on 3 February 1826, and from Rio de Janeiro on 3 and 5 July. On 30 August 1826 he moved to the estate of Brander Brandis, the Dutch Minister in Rio de Janeiro. When Lund left the home of Brandis on 6 February 1827, he had already collected 75 species of birds. These birds must have been collected in or in the immediate vicinity of the capital. During this period he sent letters home 17 November and 3 February.

After four days of travel Lund arrived at Rosário, a farm midway between Nova Friburgo and Cantagalo, in the District of Cantagalo, north-east of the capital on 9 February 1827. He stayed there until late June 1828, making a trip to Rio in the beginning of November 1827, and to Macaé in April 1828. At Rosário he collected most of his bird specimens on the nearby mountain Morro Queimado. He sent letters home on 17 June, 30 September, 12 October and 27 December 1827, and on 1 January and 5 May 1828.

When Lund left Rosário he went north to the Paraíba river, which he then followed to its mouth. He first stayed at the

estate Sampaio, then passed through Rampoi and São Clemente, and on 5-9 July he was at Aldeia da Pedra (now Itaocara), the first town in the northernmost district, Campos de Goitacases. He then continued along the river to São Fidelis and Campos. He did not spend much time in Campos, but continued to a small gold-washer's village nearby. Subsequently he travelled to Rio. He mailed a letter from Rio on 25 September telling about this trip, saying that it lasted a month. On 27 September 1828 he moved into a cottage at Itaipu, a small fishermen's village south of Niterói, situated right outside the Bay of Rio de Janeiro. He stayed here until he left the country in the second half of January 1829, but did make smaller trips to collect plants and birds. He had started out for Serra dos Órgãos twice during this time, but apparently never made it there. He collected birds between 25 and 30 October 1828 at Lake Piratininga just west of Itaipu.

On 19 January 1833, Lund again arrived in Rio from Europe. He first stayed in the home of the Danish envoy Earl Reventlow until 23 May, and then moved to Engenho Velho, a suburb south of Rio, where he stayed at a beautiful estate with the company of the German-Russian botanist W. Riedel. They made trips together, but did not make it to Serra dos Órgãos (which they set out for on 23 March 1833) and Lund did not collect any birds during this time.

On 12 October 1833 they set out for the long journey through the interior of São Paulo and Goiás, and finally Minas Gerais, where Lund remained.