

Type Specimens of Birds In the American Museum of Natural History Part 10. Passeriformes: Emberizidae: Emberizinae, Catamblyrhynchinae, Cardinalinae, Thraupinae, and Tersininae

Author: LeCroy, Mary

Source: Bulletin of the American Museum of Natural History, 2012(368)

: 1-125

Published By: American Museum of Natural History

URL: https://doi.org/10.1206/775.1

The BioOne Digital Library (https://bioone.org/) provides worldwide distribution for more than 580 journals and eBooks from BioOne's community of over 150 nonprofit societies, research institutions, and university presses in the biological, ecological, and environmental sciences. The BioOne Digital Library encompasses the flagship aggregation BioOne Complete (https://bioone.org/subscribe), the BioOne Complete Archive (https://bioone.org/archive), and the BioOne eBooks program offerings ESA eBook Collection (https://bioone.org/esa-ebooks) and CSIRO Publishing BioSelect Collection (https://bioone.org/esa-ebooks) and CSIRO Publishing BioSelect Collection (https://bioone.org/csiro-ebooks).

Your use of this PDF, the BioOne Digital Library, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at www.bioone.org/terms-of-use.

Usage of BioOne Digital Library content is strictly limited to personal, educational, and non-commmercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

BioOne is an innovative nonprofit that sees sustainable scholarly publishing as an inherently collaborative enterprise connecting authors, nonprofit publishers, academic institutions, research libraries, and research funders in the common goal of maximizing access to critical research.

TYPE SPECIMENS OF BIRDS IN THE AMERICAN MUSEUM OF NATURAL HISTORY PART 10. PASSERIFORMES: EMBERIZIDAE: EMBERIZINAE, CATAMBLYRHYNCHINAE, CARDINALINAE, THRAUPINAE, AND TERSININAE

MARY LECROY

Division of Vertebrate Zoology (Ornithology) American Museum of Natural History

BULLETIN OF THE AMERICAN MUSEUM OF NATURAL HISTORY Number 368, 125 pp. Issued June 21, 2012

Copyright © American Museum of Natural History 2012

ISSN 0003-0090

ABSTRACT

This tenth part of "Type Specimens of Birds in the American Museum of Natural History" includes taxa in the family Emberizidae in volume 13 of Peters' *Check-list of birds of the world* (Paynter, 1970a). The original description of each taxon has been consulted and the currently accepted name of the taxon has been listed with reference to Dickinson (2003). In a few cases, more recent studies have been taken into account. Modern names and coordinates of type localities are given when possible and comments on taxonomic history are provided. In this part, 338 names are treated; types of 19 of these are not in AMNH or were not found.

This part of the type list, as well as all previous parts, are searchable and available for download from the AMNH Library website: http://digitallibrary.amnh.org/dspace/.

INTRODUCTION

This tenth part of "Type Specimens of Birds in the American Museum of Natural History" (AMNH) deals with taxa covered in Volume 13 of Peters' Check-list of birds of the world (Paynter, 1970a). As did earlier parts (Greenway, 1973, 1978, 1987; LeCroy and Sloss, 2000; and LeCroy, 2003, 2005, 2008, 2010, 2011), this part follows the order of Peters' Check-list series, which is the basis for the arrangement of the AMNH collection. There have been many modifications to this classification in recent years, particularly with the advent of DNA studies, and there is as yet no consensus regarding relationships and arrangement within the Emberizidae. As a result, the currently accepted name for the taxa, the types of which are listed herein, is usually accepted as that in Dickinson (2003), the most recent work that covers all of the species included in this list. A few more recent studies are listed, and their conclusions are followed, when applicable.

The format for this part follows that for the previous ones. The citation of the name and of the type locality is first given exactly as it appeared in the original description, which has been seen for each of the names covered herein. In the text portion for each taxon, the name of the type locality is updated when necessary, with the older name given in parentheses, and coordinates are given when found. Latitude and longitude are given in degrees and minutes separated by a period, as is done in the Times atlas of the world (Times of London, 1967). The series of gazetteers for South American countries produced by Paynter, Traylor, and Stephens have greatly simplified the process of providing coordinates for most of the collecting localities for types in this part. The careful and exhaustive research that went into their production makes them a valuable and unparalleled resource. They are individually referred to in the text that follows.

Hellmayr (1935, 1936, 1938) has covered the taxa named prior to his publications and included in part 10 of the AMNH type list. Reference to his careful and complete synonymies has been necessary as Paynter (1970b, c, d,) and Storer (1970) have not included synonyms listed by Hellmayr. The various Peruvian species discussed by Zimmer in his series of papers in the American Museum Novitates are particularly thorough and cover a far larger area than Peru.

Specimens from the Rothschild Collection, said in the older literature to be in the "Tring Museum," are here referred to as in the "Rothschild Collection"; that collection has been housed in AMNH since its purchase in 1932. The bird collection of the Natural History Museum (formerly the British Museum (Natural History), BMNH, London) is now housed at Tring on the former Rothschild estate, and this is a source of possible confusion. Most of the types in this part that came to AMNH with the Rothschild Collection were listed by Hartert (1918, 1919, 1928). In these type lists, Hartert was attempting to "fix" the types, and I have accepted his nomination of "types" as designation of lectotypes in cases where original descriptions implied syntypes, as has been done in all of the previous parts of the AMNH type list. For a fuller discussion see LeCroy (2003: 2-3, 2008: 2–3, 2010: 3–4). I have designated the following lectotypes in part 10: Certhidea olivacea ridgwayi, Tangara arulenta goodsoni, and Calliste margaritae.

MZB

Types that might be expected to be in AMNH, but were either not found or were found to be elsewhere are listed in brackets. Paratypes of taxa for which the primary type or types are not in AMNH are usually not listed, but for primary types shown to have been destroyed in museums that were damaged during World War II (e.g., Morioka et al., 2005, Eck and Quaisser, 2004), it is informative to list paratypes found to be in AMNH. These are also enclosed in brackets.

The following acronyms are used in the text:

AMNH	American Museum of Natural
	History, New York, NY.
ANSP	Academy of Natural Sciences,

Philadelphia, PA.

BIM Brooklyn Institute of Arts and Sciences Museum (now Brooklyn Museum), NY.

BMNH The Natural History Museum, formerly British Museum (Natural History), Tring, UK.

CM Carnegie Museum of Natural History, Pittsburgh, PA.

FMNH Field Museum of Natural History, Chicago, IL.

ICZN International Commission on Zoological Nomenclature.

LSUMNS Louisiana State University Museum of Natural Sciences, Baton Rouge, LA.

MCZ Museum of Comparative Zoology, Harvard University, Cambridge, MA.

MECN Museo Ecuatoriano y Ciencias Naturales, Quito, Ecuador.

MHNJP Museo del Historia Natural "Javier Prado," Lima, Peru.

MIZ Museum and Institute of Zoology, Polish Academy of Sciences, Warsaw Poland.

MLS Museo de la Instituto de La Salle, Bogota, Colombia.

MMNH James Ford Bell Museum of Natural History (formerly Minnesota Museum of Natural History), University of Minnesota,

Minneapolis, MN.

MNHN Muséum National d'Histoire Naturelle, Paris, France.

	ξ
	iense, Cibinong, Java, Indonesia.
MZUSP	Museo de Zoologia, Universi-
	dade de São Paulo, Brazil.
$\mathbf{N}\mathbf{M}\mathbf{W}$	Naturhistorisches Museum Wien,
	Vienna, Austria.
RMNH	Nationaal Centrum Voor Biodi-
	versiteit Naturalis (formerly Rijks-
	museum van Natuurlijke His-
	torie), Leiden, The Netherlands.
SMF	Forschungsinstitut und Natur-
	museum Senckenberg, Frankfurt
	am Main, Germany.
TA	Times Atlas, Times of London.
USNM	National Museum of Natural

Museum Zoologicum Bogor-

ZFMK Zoologisches Forschungsinstitut und Museum Alexander Koenig, Bonn, Germany.

History, Washington, DC.

ZMH Zoologisches Institut und Zoologisches Museum, Universität Hamburg, Germany.

ZSM Zoologische Staatssammlung, Munich, Germany.

EMBERIZIDAE

EMBERIZINAE

Alström et al. (2008) have recently studied the phylogeny and classification of Old World Emberizini based on mitochondrial and nuclear data.

Miliaria altirostris Brehm

Miliaria altirostris Brehm, 1841: cols. 56, 57 (Dresden, Lübs in Mecklenburg, Rügen, Alsdorf).

Now *Emberiza calandra calandra* Linnaeus, 1758. See Hartert, 1918: 15, and Dickinson, 2003: 777.

LECTOTYPE: **AMNH 456262**, adult male, collected at Dresden, 51.03N, 13.45E (Times Atlas), Germany, on 26 June 1835. From the Brehm Collection via the Rothschild Collection.

COMMENTS: In the original description, Brehm mentioned five specimens. The first, a male, collected on 26 June 1835 at Dresden, is the specimen that Hartert (1918: 15) listed as the type, thereby designating it the lectotype. It was labeled *altirostris* by Brehm. Three

additional Brehm specimens were cataloged as *altirostris* at AMNH and were exchanged to ZFMK; they may be paralectotypes if they are labeled *altirostris* by Brehm.

Miliaria crassirostris Brehm

Miliaria crassirostris Brehm, 1841: cols. 56, 57 (Mecklenburg).

Now *Emberiza calandra calandra* Linnaeus, 1758. See Hartert, 1918: 15, and Dickinson, 2003: 777.

LECTOTYPE: **AMNH 456256**, adult male, collected at Lübz, 53.28N, 12.03E (Times Atlas), Mecklenburg, Germany, on 5 May 1831, by H. Zander. From the Brehm Collection via the Rothschild Collection.

COMMENTS: In the original description, Brehm mentioned five specimens of *crassirostris* in his collection. The first was a male sent him by H. Zander from Mecklenburg, 5 May 1831, and is the specimen Hartert (1918: 15) listed as the type, thereby designating it the lectotype. It was labeled *crassirostris* by Brehm. Four additional Brehm specimens cataloged as *crassirostris* came to AMNH and were exchanged to ZFMK; they may be paralectotypes.

Miliaria meridionalis Brehm

Miliaria meridionalis Brehm, 1831: 1007 (Dalmatien). Now Emberiza calandra calandra Linnaeus, 1758. See Hartert, 1918: 16, Vaurie, 1956b: 1–3, and Dickinson, 2003: 777.

LECTOTYPE: **AMNH 456279**, male, collected in Dalmatia, Croatia, in January 1824. From the Brehm Collection via the Rothschild Collection.

COMMENTS: The above specimen was labeled *meridionalis* by Brehm, and Hartert's (1918: 15) listing it as the type designated it the lectotype. Paralectotype: **AMNH 456280**, female, Dalmatia, September 1824, labeled *meridionalis* by Brehm.

Miliaria septentrionalis Brehm

Miliaria septentrionalis Brehm, 1831: 291 (Schweden und Rügen).

Now *Emberiza calandra calandra* Linnaeus, 1758. See Hartert, 1918: 16, Vaurie, 1956b: 1–3, and Dickinson, 2003: 777.

LECTOTYPE: **AMNH 456269**, adult male, collected on Rügen Island, Germany, on 19 July 1819.

COMMENTS: Hartert (1918: 16) noted that the above specimen was probably collected by Schilling, "like most Rügen specimens in the [Brehm] collection" and by listing it as the type, designated it the lectotype. Hartert (1918: 16) also called attention to the fact that both Sweden and Rügen were localities mentioned in the original description, but that there were no Swedish specimens in the collection. Specimens from Brinnis and Mecklenburg noted by Hartert (1918: 16) as having been collected after the 1831 description of *septentrionalis*, were all exchanged by AMNH to ZFMK.

Miliaria valida Brehm

Miliaria valida Brehm, 1841: cols. 55, 56 (Orlthal, Roda R.).

Now *Emberiza calandra calandra* Linnaeus, 1758. See Hartert, 1918: 15, and Dickinson, 2003: 777.

LECTOTYPE: **AMNH 456241**, adult male, collected in the Orla Valley (= Orl[a]thal), Germany, on 10 January 1820. From the Brehm Collection via the Rothschild Collection.

COMMENTS: In the original description, Brehm mentioned a male specimen collected in a hard winter in "Orlthal"; Hartert (1918: 15), by listing the above specimen as the type of Miliaria valida, designated it the lectotype. There are five additional specimens collected before the publication of the name and cataloged as valida at AMNH. One of these, AMNH 456242, a male collected on 20 December 1819 at Renthendorf in the Roda Valley and labeled valida by Brehm, is a paralectotype. Another, AMNH 456244, a juvenile female collected 9 July 1838 at Lübz, is labeled minor by Brehm and is not considered a paralectotype. The other three specimens, AMNH 456243, 456245, and 456246, were exchanged to ZFMK and may be paralectotypes.

[Emberiza erythrogenys Brehm]

Hartert (1918: 16) was unable to fix a type of *E. erythrogenys* Brehm (1855: 414) from near Sarepta, nor was I able to find a possible type in AMNH.

Emberiza cia par Hartert

Emberiza cia par Hartert, 1904: 184 (Gudan, Transkaspien).

Now *Emberiza cia par* Hartert, 1904. See Dickinson, 2003: 777.

HOLOTYPE: **AMNH 716641**, adult male, collected at Gaudan (= Gudan), Turkmenistan, on 13 May 1892, by N. Zarudny (= Sarudny). From the Rothschild Collection.

COMMENTS: In the original description, Hartert designated as type specimen number 1767, bearing the above data. The following specimens from the Rothschild Collection are considered paratypes: AMNH 716636-716640, collected in Transcaspia in January 1900 by Schlüter; AMNH 716643-716645, collected in Issik-Kul, Turkestan, in February and March 1901 by Tancre; and AMNH 716648, collected in Punja Maklan, Afghanistan in April 1874, collector unknown. Other specimens were either collected after par was described or had incomplete data. Hartert (1904: 184) also noted that the form perhaps occurred in northern India in winter, but because he expessed doubt concerning its inclusion, I have not considered AMNH 716649 collected at Simla, India, on 17 November 1880 by Elwes a paratype (ICZN, 1999: 76, Art. 72.4.1). I was able to determine from Rothschild's partial list of purchases that he was buying specimens from Schlüter between 1899 and 1902 and that he purchased Tancre's Issik-Kul collection on 1 January 1903; therefore material from these collectors would have been available to Hartert.

Seltzer (1962: 666) identified Gaudan as a station on the Iran border, 20 mi south of Ashgabat (= Ashkhabad), 37.58N, 58.24E (Times Atlas).

Emberiza cia omissa Rothschild

Emberiza cia omissa Rothschild, 1921: 60 (Si Taipaishan, Tsin-ling Mountains).

Now *Emberiza godlewskii omissa* Rothschild, 1921. See Hartert, 1928: 197, LeCroy and Dickinson, 2001: 188, 189, and Dickinson, 2003: 777.

HOLOTYPE: **AMNH 716683**, female, collected at Si, Taipai Shan (= Taipaishang, as on label), Tsinling Mountains, China, on 2 November 1905, by Owston's Japanese collectors (O.C. no. 83). "No. 1791 Tring Mus." is written on the Owston label, apparently by Rothschild. From the Rothschild Collection.

COMMENTS: In the original description, Rothschild gave the number of the holotype as "No. 1791, Tring Museum" and the collecting locality as Si Taipaishan, Tsin-ling Mountains. AMNH 716683 is the only specimen to have this number added. There are eight paratypes: AMNH 716676–716682 and AMNH 716684, four males and four females, collected at the type locality between 22 July and 2 November 1905 by Owston's Japanese Collectors; all bear the O.C. number 83.

Emberiza cioides weigoldi Jacobi

Emberiza cioides weigoldi Jacobi, 1923: 36 (Peking, 30 km N von Balihanden).

Now *Emberiza cioides weigoldi* Jacobi, 1923. See Vaurie, 1956b: 19–20, Dickinson, 2003: 777.

SYNTYPE: **AMNH 716699**, female, collected at Pei-ching (= Peking), 39.55N, 116.25E (Times Atlas), China, on 8 March 1916, by H. Weigold on the Stötzner Expedition. From the Rothschild Collection.

COMMENTS: In the original description, Jacobi said that he had three male and seven female specimens from Pei-ching and 30 km N from Balihanden, collected between 15 January and 29 April. The above specimen bears the original label, which is marked "Cotypus," a Rothschild Collection label, and an AMNH type label. It was not listed as a type by Hartert; however, because Jacobi did not designate a type in the original description, it is a syntype of weigoldi. Eck and Quaisser (2004: 310) listed four syntypes of weigoldi that had been in SNSD, but were destroyed in World War II. The above specimen is a fifth syntype of the original ten.

Emberiza cioides vagans La Touche

Emberiza cioides vagans La Touche, 1927: 360 (Mouth of Sidemi, Amur Bay and Mid-Ussuri, Siberia).

Now *Emberiza cioides weigoldi* Jacobi, 1923. See Meise, 1938: 245–246, Vaurie, 1956b: 19–20, and Dickinson, 2003: 777.

SYNTYPES: **AMNH 716711**, adult male, collected at the Mouth of Sidemi, Amur Bay, Siberia, on 4 March 1884; and **AMNH 716715**, female, collected on the middle Ussuri River, Siberia, on 13 April 1882, both collected by the Dörries brothers. From the Rothschild Collection.

COMMENTS: Only AMNH 716715 had been included in the AMNH type collection; however, it is clear from the original description that LaTouche intended to designate both a male and a female as types and both are so labeled by him. The male, AMNH 716711, has been added to the type collection. They were not included in Hartert's (1928) list of types in the Rothschild Collection.

LaTouche listed four specimens of *vagans* in his collection, and a series of wintering birds from the Taipai Shan, Shensi, in the Rothschild Collection. These latter are marked "Co-type" by LaTouche, but because syntypes were designated in the original description, the other specimens listed are excluded from the type series (ICZN, 1999: 77, Art. 72.4.6).

There are other specimens in AMNH collected by the Dörries brothers in Siberia, but they were apparently not seen by La-Touche, as they are not marked "Co-type."

Emberiza antiquorum Brehm

Emberiza antiquorum Brehm, 1831: 297 (Italien). Now Emberiza hortulana Linnaeus, 1758. See Hartert, 1918: 16, Vaurie, 1956b: 10–11, and Dickinson, 2003: 778.

LECTOTYPE: **AMNH 456112**, adult male, collected in Italy, in spring. From the Brehm Collection via the Rothschild Collection.

COMMENTS: Hartert (1918: 16) listed this specimen as the type of *Emberiza antiquorum* Brehm, thereby designating it the lectotype. It is labeled *antiquorum* by Brehm. A second specimen labeled *antiquorum* by Brehm is from Dalmatia and undated. It is not considered a paralectotype, as Italy was the only locality given in the original description.

Fringillaria insularis Ogilvie-Grant and Forbes

Fringillaria insularis Ogilvie-Grant and Forbes, 1899: 2 (sea level to 3500 feet, Socotra).

Now *Emberiza tahapisi tahapisi* A. Smith, 1836. See Dickinson, 2003: 778, Fry and Keith, 2004: 574–577, and Kirwan, 2007: 143–144.

SYNTYPES: Collected on Hadibu Plain, ca. 12.36N, 53.59E (Times Atlas), Socotra, Yemen: **AMNH 716956**, adult male, on 13 December 1898; **AMNH 716957**, adult male, on 15 December 1898; **AMNH 716958**, adult

male, on 15 December 1898. Collected at Adho Dimello (= Adho Dimellus), 3500 ft, 12.33N, 54.03E (G.M. Kirwan, personal commun.), Socotra, Yemen, AMNH 716959, immature male, on 6 February 1899; AMNH 716960, female, on 15 February 1899, on the joint Liverpool Museum and British Museum expedition to Socotra (field nos. 136, 151, 150, 394, and 440, respectively). From the Rothschild Collection.

COMMENTS: Ogilvie-Grant and Forbes described both male and female in the original description but did not designate a type or say how many specimens they collected, only noting that insularis occurred from sea level to 3500 ft. Later, Ogilvie-Grant and Forbes (1903: pl. 3, fig. 2) illustrated it, but again did not give the number of specimens. Warren and Harrison (1971: 262) reported that the authors' selected male and female syntypes and other syntypes were in BMNH. The above specimens are also syntypes. Dickinson (2003: 778) and Fry and Keith (2004: 574– 577) recognized E. t. insularis, but the recent study by Kirwan (2007) did not support recognition of insularis.

Fringillaria socotrana Ogilvie-Grant and Forbes

Fringillaria socotrana Ogilvie-Grant and Forbes, 1899:2 (3500–4500 feet, Adho Dimellus, Socotra). Now Emberiza socotrana (Ogilvie-Grant and Forbes, 1899). See Dickinson, 2003: 778, Fry and Keith, 2004: 580–581.

SYNTYPE: **AMNH 716975**, adult male, collected at Adho Dimello (= Adho Dimellus), 3500 ft, 12.33N, 54.03E (G. Kirwan, personal commun.), Socotra, Yemen, on 10 February 1899, on the joint Liverpool Museum and British Museum expedition to Socotra. From the Rothschild Collection.

COMMENTS: In the original description, characters were given for both male and female, but no type was designated and the number of specimens was not indicated. Warren and Harrison (1971: 516) noted that a male and a female syntype were present in BMNH, the male syntype collected on 6 February 1899. Ogilvie-Grant and Forbes (1903: 32–33), reporting more fully on the expedition, listed five specimens of *socotrana* collected on the expedition. The male

collected on 10 February 1899 is the syntype listed above and is the single specimen in AMNH from the expedition. It had not previously been recognized as a syntype. The species is illustrated in Ogilvie-Grant and Forbes (1903: pl. 3, fig. 1).

Fringillaria Forbesi Hartlaub

Fringillaria Forbesi Hartlaub, 1882a (June): 92 (Langomeri).

Now *Emberiza affinis affinis* Heuglin, 1867. See Hartert, 1928: 197, Dowsett and Dowsett-Lemaire, 1993: 379, and Fry and Keith, 2004: 572–574.

HOLOTYPE: **AMNH 715683**, adult male, collected at Langomeri, 03.47N, 30.45E (Chapin, 1954), Sudan, on 18 August 1881, by Emin Pasha (= Emin Bey, no. 11). From the Rothschild Collection.

COMMENTS: The brief original description by Hartlaub gave no information on the sex or number of specimens examined; one set of measurements was given and no type was designated. AMNH 715683 is the only Emin specimen of this form in AMNH. It bears four labels: (1) the original Emin label with the data cited above, his notes on the reverse and a blue "533," significance unknown, and "Fring. Forbesi, n." in a different hand; (2) part of a card printed "Mus. W. Rothschild" marked "Emin coll." and "(Typus der E. Forbesi)" and "Or.siche. J.O. 1882" (apparently referring to both Ornithologische Centralblatt and Journal für Ornithologie), with the reverse annotated "Fringillaria Forbesi, Hart, ♂, Langomeri"; (3) a blank Rothschild Museum label; (4) a Rothschild type label, with reference to the description given as "J.O. 1882 p. 324."

This description is often cited as "Journal für Ornithologie, 1882 (July), 30: 324" as was done on the Rothschild type label. However, the earlier description (Hartlaub, 1882a: 211) is referred to there, and must have been published first. The Ornithologisches Centralblatt was a dated bulletin published soon after the meetings of the Deutsche Ornithologische Gesellschaft zu Berlin and often before the next issue of Journal für Ornithologie appeared. The reference to the description is correctly given by Paynter (1970b: 25).

Information about *forbesi* is expanded by Hartlaub (1882b: 324–326), where both male and female are described and where he (Hartlaub, 1882b: 325) noted that both of the specimens were from Langomeri, although he had some doubt that both belonged to the same species, as the female was larger than the male. Later, Hartlaub (1882c: 204–205, November) had become convinced that they represented the same form, and he repeated his description of the female.

Comparing measurements given of the single bird in the original description [total length, not given; wing, 72 mm; tail, 55; tarsus, 19] with measurements given for the two birds by Hartlaub (1882b: 325) [total length, δ , 150 mm, φ , 162; wing, δ , 72, φ , 72; tail, δ , 54, φ , 67; tarsus, δ , 18, φ , 20], it is apparent from the tail length that it was the male specimen that was described. My measurements of this male holotype agree closely with those of Hartlaub, except in total length: total length, 140 mm, wing, 73, tail, 54.5, tarsus, 19. It is the specimen listed as the type by Hartert (1928: 197).

Emberiza affinis omoensis Neumann

Emberiza affinis omoensis Neumann, 1905: 358 (Schetie in Koscha).

Now Emberiza affinis omoensis Neumann, 1905. See Hartert, 1919: 162, White, 1963: 97, Dowsett and Dowsett-Lemaire, 1993: 379, and Fry and Keith, 2004: 572–574.

HOLOTYPE: **AMNH 715690**, adult male, collected at Schetie in Koscha, Ethiopia, on 28 February 1901, by Oscar Neumann (no. 934). From the Rothschild Collection.

COMMENTS: In the original description, Neumann designated as the type his specimen no. 934 and listed three additional specimens. The three paratypes are: **AMNH 715691** (Neumann no. 1209), male, Pokodj am Gelo, 11 May 1901; **AMNH 715692** (un-numbered), male, Gelo, April–May 1901; **AMNH 715693** (474), female, Tomato in Gudji, östlich des Abaya-Sees, 24 December 1900.

I was unable to find the exact location of Schetie, but based on Neumann's (1902) map and his itinerary (Neumann, 1904:323), it appears that he crossed the Omo River in the vicinity of Singe (06.22N, 36.19E, Times Atlas) and that Koscha is the area just north of the Omo.

Emberiza Alleonis Vian

Emberiza Alleonis Vian, 1869: 97, 102–103 (Dahourie).

Now *Emberiza pallasi pallasi* (Cabanis, 1851). See Hartert, 1919: 161, and Dickinson, 2003: 780.

SYNTYPE: **AMNH 715309**, female, collected in Dauria (= Dahourie), in 1868, from Madam Verdey. From the Riocour Collection via the Rothschild Collection.

COMMENTS: In the original description, Vian did not designate a type, but said that he had five specimens: one male in breeding plumage, two males completing molt, and two females in summer plumage, all collected in October 1868. The adult male and one of the females were said to be in the Riocour Collection, one of the two males completing molt in the Count Boubers Collection, and the other male completing molt and one of the females in the Vian Collection. Hartert (1904: 194) listed E. alleonis as a synonym of E. pallasi. Later, he (Hartert, 1919: 161) gave more information on this syntype, which he listed as the type of the female, noting: "This specimen is marked 'Type' on the label under the stand in the Riocour Collection.... The type of the male, which was also in the Riocour Collection, appears to be lost. It is not in the [Rothschild Collection], where the greater part of the Riocour Collection seems to be now. It was bought from Boucard in 1890, after Sharpe had selected 148 specimens, among which were a number of types, and it is not among the latter." Warren and Harrison (1971) do not list it as now being in BMNH, either. See Sharpe (1906: 315) for a fascinating account of his visit to the Riocour Chateau to select the specimens for BMNH.

The Riocour label is now attached to AMNH 715309, and while not mentioned by Vian, it is labeled as having come from Madam Verdey, with only the year "1868" recorded. There are two additional female specimens of this form from Dauria at AMNH, one dated 16/5, with no year, and one dated 5/5/80, after the description of *alleonis* was published; they are not part of the type series. Neither bears Madam Verdey's name.

Cynchramus pseudo-pyrrhuloides Brehm

Cynchramus pseudo-pyrrhuloides Brehm, 1855: 115 (Triest).

Now *Emberiza schoeniclus schoeniclus* (Linnaeus, 1758). See Hartert, 1918: 17, Vaurie, 1956a, and Dickinson, 2003: 780.

LECTOTYPE: **AMNH 456164**, adult male, collected at Trieste, 45.39N, 13.47E (Times Atlas), Italy, on 19 October 1829. From the Brehm Collection via the Rothschild Collection.

COMMENTS: In the original description, Brehm said that this form lived at Trieste but gave no indication of how many specimens he examined. Hartert (1918: 17) listed the male, labeled *pseudo-pyrrhuloides* by Brehm and collected at Trieste on 19 October 1829 as the type, thereby designating it the lectotype. There are two paralectotypes in AMNH, both collected at Trieste and labeled *pseudo-pyrrhuloides* by Brehm: AMNH 456165, male, 10 October 1829, and AMNH 456166, female, 19 October 1829.

Cynchramus septentrionalis Brehm Emberiza schoeniclus steinbacheri Dementiev

Cynchramus septentrionalis Brehm, 1831: 302 (Er bewohnt das nördliche Europa, kommt in beiden Geschlechtern regelmässig nach Dänemark, im männlichen höchst selten nach Mitteldeutschland).

Emberiza schoeniclus steinbacheri Dementiev, 1937: 86, nomen novum.

Now *Emberiza schoeniclus schoeniclus* (Linnaeus, 1758). See Hartert, 1918: 16, Vaurie, 1956a, and Dickinson, 2003: 780.

HOLOTYPE: **AMNH 456197**, adult male, collected in Denmark, on 20 April 1820. From the Brehm Collection via the Rothschild Collection.

COMMENTS: As Hartert (1918: 16) noted, this was the only Brehm specimen in the Rothschild Collection collected before the description of *septentrionalis*, "and therefore it must be the type." If other specimens should be found, then Hartert by his action, designated AMNH 456197 the lectotype of *Cynchramus septentrionalis*.

Dementiev (1937: 86–87) provided the replacement name, *Emberiza schoeniclus steinbacheri*, for *Cynchramus septentrionalis* Brehm, preoccupied by *Emberiza septentrionalis* Brehm (1831: 295), a synonym of *Emberiza citrinella* Linnaeus, 1758 (Vaurie, 1959: 699). Dementiev (1937: 87) provided a new type for *steinbacheri*; however, because

it is a replacement name for Brehm's *C. septentrionalis*, it shares the same type (ICZN, 1999: 78, Art. 72.7), and Dementiev's type is invalid.

Emberiza schoeniclus pallidior Hartert

Emberiza schoeniclus pallidior Hartert, 1904: 197 (Aiderli in Turkestan).

Now *Emberiza schoeniclus pallidior* Hartert, 1904. See Vaurie, 1956a: 7, and Dickinson, 2003: 780.

HOLOTYPE: **AMNH 715254**, adult male, collected at Aiderli, Turkestan, on 11 November 1899 (Russian date, according to Hartert, 1919: 161), by Zarudny (no. 1298). From the Rothschild Collection.

COMMENTS: In the original description, Hartert cited the Zarudny number of the type. There are 17 paratypes of *pallidior* in AMNH: AMNH 715255–715271, seven males, seven females, and three unsexed, from Vernyi, Ilyisk, and the Djarkent River, Turkestan, collected in February, September, October, and November 1899, and March 1900, by Zarudny. A number of other Turkestan specimens by other collectors are undated and are not considered paratypes. Other localities were mentioned in the original description.

Cynchramus canneti Brehm

Cynchramus canneti Brehm, 1855: 115 (Dalmatien). Now Emberiza schoeniclus intermedia Degland, 1849. See Hartert, 1918: 16, Paynter, 1970b: 35, and Dickinson, 2003: 780.

LECTOTYPE: **AMNH 456231**, female ("hahnfedrig"), collected in Dalmatia, Croatia, on 8 July 1829, perhaps by Michahelles (Hartert, 1918: 16). From the Brehm Collection via the Rothschild Collection.

COMMENTS: In the original description, Brehm referred to Michahelles' manuscript name, *Emberiza intermedia*, not realizing that Degland had already formally introduced Michahelles' name in 1849. Hartert (1918: 16) listed the female collected on 8 July 1829 as the type of *canneti*, thereby designating it the lectotype. Brehm made no mention of the number of specimens he had, but a second specimen from Dalmatia is in AMNH and is labeled *canneti* by Brehm. It is a paralectotype: **AMNH 456195**, juvenile male, collected

in Dalmatia on 30 June 1830. Five additional specimens from other localities, cataloged as *canneti*, were exchanged to ZFMK; but none was cataloged as from Dalmatia.

Cynchramus arundinaceus Brehm

Cynchramus arundinaceus Brehm, 1831: 1012 (Triest).

Now Emberiza schoeniclus intermedia Degland, 1849. See Hartert, 1918: 17, Paynter, 1970b: 35, and Dickinson, 2003: 780.

LECTOTYPE: **AMNH 456237**, adult male, collected at Trieste, 45.39N, 13.47E (Times Atlas), Italy, on 3 October 1829. From the Brehm Collection via the Rothschild Collection.

COMMENTS: In the original description, Brehm credited Michahelles and Brehm for this name, and the name Emberiza intermedia Michahelles is included in parentheses on Brehm's label. Hartert (1918: 17) listed the Brehm specimen collected on 3 October 1829 as the type of *arundinaceus*, thereby designating it the lectotype, and commented that the specimen was collected by Michahelles. Michahelles' manuscript name, intermedius, was introduced by Degland in 1849 (Paynter, 1970b: 35), long after C. arundinaceus was introduced by Brehm, and years before Brehm's name, C. canneti was introduced. As Hartert (1918: 17) pointed out, arundinaceus Brehm (nec arundinacea Gmelin, 1774: 195) was preoccupied. Brehm's name, as a homonym of Gmelin's name, needs a replacement name, for which intermedia Degland is available.

Three additional specimens cataloged at AMNH as *arundinaceus* were not so labeled by Brehm; they were collected at Pisa, a locality not mentioned by Brehm.

Emberiza pyrrhuloides reiseri Hartert

Emberiza pyrrhuloides reiseri Hartert, 1904: 199 (Lamia, Thessalien).

Now *Emberiza schoeniclus reiseri* Hartert, 1904. See Vaurie, 1959: 704, and Dickinson, 2003: 780.

HOLOTYPE: **AMNH 715064**, male, collected at Lamia, 38.55N, 22.26E (Times Atlas), Greece, on 4 December 1901. From the Rothschild Collection.

COMMENTS: In the original description, Hartert gave the above data for the holotype and added the number 10009, which appears on the original label and may have been added by Hartert himself. Specimens in the Rothschild Collection were not cataloged, but occasionally Hartert would add a number, often a permutation of the date of collection, so that the type was uniquely identified.

There are three paratypes in AMNH: AMNH 715065, male, 6 December 1901; AMNH 715066, female, 8 February 1903, Strimeneas coll.; AMNH 715067, female, 23 January 1903, Strimeneas coll., all collected at Lamia, Greece. It is probable that all of the specimens came from the Strimeneas collection. There is another specimen of this form, AMNH 715242, from Lamia, labeled *Emb. tschusii tschusii* by Hartert and thus not part of his type series of *reiseri*; its label and handwriting exactly match that on the holotype and AMNH 715065. Unfortunately, the locality had been mistranscribed on the Rothschild label as Lermier, Greece.

Plectrophanes McCownii Lawrence

Plectrophanes McCownii Lawrence, 1851b: 122 (high prairies of Western Texas).

Now *Calcarius mccownii* (Lawrence, 1851). See Hellmayr, 1938: 639, With, 1994, and Dickinson, 2003: 780.

Syntypes: **AMNH 41711** and **AMNH 41712**, both unsexed, collected, according to Lawrence, on the high prairies of western Texas, undated, by J.P. McCown. From the George N. Lawrence Collection.

COMMENTS: In the original description, Lawrence said: "Two specimens were obtained by Capt. McCown on the high prairies of Western Texas. When killed, they were feeding in company with Shore Larks. Although procured late in the spring, they still appear to be in their winter dress...." No type was designated, although AMNH 41711 is labeled "Type" by Lawrence and annotated "Presented by Capt. J.P. McCown, Brownsville, March." AMNH 41712 is the second specimen mentioned by Lawrence.

Notes on birds he collected in Texas were published by McCown (1853: 14) but gave no further information on this species.

Plectrophanes groenlandicus Brehm [Emberiza subcalcarata Brehm]

Plectrophanes groenlandicus Brehm, 1831: 307 (Grönland)

Now Calcarius lapponicus subcalcaratus (Brehm, 1826). See Hartert, 1918: 17, Salomonsen, 1931b: 112–113, Vaurie, 1956b: 24–25, and Dickinson, 2003: 780.

LECTOTYPE: **AMNH 456317**, adult male, collected in Greenland, in June 1821. From the Brehm Collection via the Rothschild Collection.

COMMENTS: Hartert (1918: 17) listed the adult male Brehm specimen collected in Greenland in June 1821 as the type of Plectrophanes groenlandicus, thereby designating it the lectotype. He (Hartert, 1918: 17) further stated that, while no Brehm specimen in the Rothschild Collection was labeled subcalcarata by Brehm, he thought that this specimen from Greenland probably should be considered the type of *subcalcarata* as well. While this is perhaps true, the type of subcalcarata may well turn up in another collection. There is one paralectotype of groenlandicus in AMNH: AMNH 456316, female, collected in Greenland in June 1821. AMNH 456315 is also perhaps a paralectotype, but it bears no date.

Emberiza subnivalis Brehm Plectrophanes borealis Brehm

Emberiza subnivalis Brehm, 1826: col. 929 (Grönland, scheint dem islänischen sehr ähnlich).

Plectrophanes borealis Brehm, 1831: 305 (Grönland, wahrscheinlich auch Island).

Now Plectrophenax nivalis nivalis (Linnaeus, 1758). See Hartert, 1918: 17, Salomonsen, 1931a: 57–58, Vaurie, 1956b: 25, and Dickinson, 2003: 781.

LECTOTYPE of both names: **AMNH 456311**, adult male, collected in Greenland, on 15 June 1822. From the Brehm Collection via the Rothschild Collection.

COMMENTS: In the original description of *subnivalis*, Brehm said: "Ein Männchen im Herbstkleide aus Island stimmt mit den 3 grönländlichen meiner Sammlung vollformen überein...." In this case, Hartert (1918: 17, footnote) expressed no doubt that this one male specimen collected on 15 June 1822 was the type of both *E. subnivalis* and *Plectrophanes borealis*, thereby designating it the lectotype of both names.

There are two paralectotypes in AMNH: AMNH 456312, female, Greenland, 30 October

1822; and AMNH 456314, adult male, Iceland, 20 September 1823. This specimen from Iceland is from the range of *P. nivalis insulae* Salomonsen, 1931. AMNH 456313, female from Greenland, may be the third Greenland specimen and a paralectotype, but the Brehm label is missing and there is no date on the Rothschild label.

Melospiza fasciata ingersolli McGregor

Melospiza fasciata ingersolli McGregor, 1899a: 35 (Battle Creek, California).

Now *Melospiza melodia merrilli* Brewster, 1896. See Hellmayr, 1938: 599, Byers et al., 1995: 229–233, Arcese et al., 2002, Dickinson, 2003: 781, and Pruett and Winker (2010).

HOLOTYPE: **AMNH 405733**, adult male, collected at Battle Creek, California, on 19 October 1898, by R.C. McGregor (no. 2222). From the Dwight Collection (no. 39211).

COMMENTS: McGregor cited his unique number of the holotype in the original description and noted that he had six specimens, four (including the type) from Battle Creek, one from Enterprise, CA, and one from St. Helena, CA. The following are his five paratypes: AMNH 405734 (Dwight no. 39160, McGregor no. 2234), male, Battle Creek, 26 October 1898, "intermediate nearer ingersolli"; AMNH 405754 (39212, -), male, Battle Creek, 13 October 1898, marked "cotype" and "examined by R[obert] R[idgway]"; AMNH 405755 (39214, 2221), male, Battle Creek, 16 October 1898, marked "cotype"; AMNH 405758 (39221, 1345), female, St. Helena, 22 December 1897, all collected by McGregor; and AMNH 405765 (39222, 1564), male, Enterprise, 15 October 1896, by G.F. Breminger, the latter two specimens now identified as M. m. morphna.

There are many places in California named Battle Creek. McGregor said that his collecting locality was 2 mi from the Sacramento River, the nearest post office being Balls Ferry, Shasta County. Ball's Ferry on the Sacramento River is ca. 40.30N, 122.18W.

Melospiza sanaka McGregor

Melospiza sanaka McGregor, 1901[=1900]: 8 (Sanak Island, Alaska).

Now *Melospiza melodia sanaka* McGregor, 1900. See Hellmayr, 1938: 599–600, Byers et al., 1995: 229–233, Arcese et al., 2002, Dickinson, 2003: 781, and Pruett and Winker (2010).

HOLOTYPE: **AMNH 405699**, adult male, collected on Sanak Island, 54.26N, 162.40W (Times Atlas), Aleutian Islands, Alaska, on 13 June 1894, by Chase Littlejohn (nos. 582 and 721). From the collection of Richard C. McGregor (no. 3361) via the Dwight Collection (no. 39137).

COMMENTS: In the original description, McGregor cited his collection number of the holotype and noted that specimens came from Sanak and Popoff islands, Alaska. Apparently, all of McGregor's own specimens were in worn plumage and his description was based on Sanak Island specimens in fresh plumage collected by C. Littlejohn. Based on his table of measurements, he had at least five male and five female specimens of his new form. There are five paratypes in AMNH, all from Sanaka Island and all from the Dwight Collection, some of which appear to have been obtained from Littlejohn directly and to have no McGregor or Littlejohn numbers: AMNH 405697 (Dwight no. 39136, McGregor no. 1568, Littlejohn no. 954), male, 26 May 1894; **AMNH 405698** (30117, -, -), male, 29 May 1894; **AMNH 405700** (30118, -, -), female, 16 May 1894; AMNH 405701 (39135, 1569, 953), female, 18 May 1894; AMNH **405702** (39136, 3362, 60, and 582), female, 23 May 1894. There are no specimens from Popoff Island in AMNH. Dickinson (2003: 781) did not recognize this subspecies.

There is a note at the bottom of this description: "An author's edition of 100 copies was distributed Nov. 25, 1900," which was prior to the publication date of January 1901. This was also mentioned in American Ornithologists' Union (1957: 633).

Melospiza melodia cleonensis McGregor

Melospiza melodia cleonensis McGregor, 1899b: 87 (Westport, Mendocino Co., California).

Now *Melospiza melodia cleonensis* McGregor, 1899. See Hellmayr, 1938: 603, Byers et al., 1995: 229–233, Arcese et al., 2002, and Dickinson, 2003: 782

SYNTYPES: **AMNH 405820**, male, and **AMNH 405823**, female, collected at Westport, 39.39N, 123.45W (Times Atlas), Mendocino County, California, on 28 May 1889,

by Richard C. McGregor (nos. 287 and 288, respectively). From the Dwight Collection (nos. 39224 and 39223, respectively).

COMMENTS: In the original description, McGregor listed these two specimens as "Cotype" and "Type" in the sense of syntypes and also mentioned three additional specimens from Cleone, California, but these would have no type standing (ICZN, 1999: 80, Arts. 73.2.1 and 72.4.6). One of the Cleone specimens is in AMNH.

Melospiza melodia niceae Dickerman

Melospiza melodia niceae Dickerman, 1963: 51 (Tulancingo, Hidalgo, México).

Now *Melospiza melodia niceae* Dickerman, 1963. See Paynter, 1970: 52, Byers et al. 1995: 229–233, Arcese et al. 2002: 6, and Dickinson, 2003: 782

HOLOTYPE: **AMNH 817696**, male, collected at Tulancingo, 20.06N, 98.20W (Times Atlas), Hidalgo, Mexico, on 22 September 1956, by Robert W. Dickerman (no. 7427). On exchange from MMNH (no. 16897) to AMNH in 1986.

COMMENTS: In the original description, Dickerman cited his field number and the MMNH number of the holotype and examined 53 specimens of niceae. Of the 52 paratypes, four are in AMNH: 1 mi west of Tulancingo, AMNH 768846 (MMNH no. 16910), male, 29 April 1958, RWD no. 8716; Lago Zupitlan, AMNH 768847 (16913), imm. male, AMNH 768848 (16911), juvenile female, **AMNH** 768849 (16918), unsexed, all three collected on 22 September 1956, RWD nos. 7435, 7433, and 7448, respectively. See Dickerman (1963: 47, fig. 20) for a map showing the range of *niceae*. Arcese et al. (2002: 6) considered niceae a synonym of M. m. mexicana.

Melospiza melodia azteca Dickerman

Melospiza melodia azteca Dickerman, 1963: 46 (Lago de Zumpango, 19.46N, 99.05W (Times Atlas), Edo. México, Mexico).

Now *Melospiza melodia azteca* Dickerman, 1963. See Paynter, 1970: 52, Byers et al., 1995: 229–233, Arcese et al., 2002: 6, and Dickinson, 2003: 782.

HOLOTYPE: AMNH 817695, adult female, collected on Lago de Zumpango, Mexico,

Mexico, on 10 November 1956, by Robert W. Dickerman (no. 7640). On exchange from MMNH (no. 16870) to AMNH in 1986.

COMMENTS: Dickerman cited the MMNH and RWD nos. in the original description and noted that he had examined 144 specimens. Of the 143 paratypes the following are at AMNH: Lago de Zumpango, AMNH 768838 (MMNH no. 16864), female, AMNH 768839 (16866), adult, 10 November 1956; 1 mi west of Zumpango, AMNH 768840 (16858), male, 15 September 1956, RWD nos. 7635, 7637, and 7403, respectively. Lago de Zumpango is shown in Dickerman (1963: 14, fig. 8; 47, fig. 20); the town of Zumpango is at 19.46N, 99.05W (Times Atlas). Arcese et al. (2002: 6) synonymized azteca with M. m. mexicana.

Melospiza melodia villai Phillips and Dickerman

Melospiza melodia villai Phillips and Dickerman, 1957: 380 (6 miles north-northeast of Amoloya del Río (= 9 kilometers south-southeast of Lerma), State of México).

Now *Melospiza melodia villai* Phillips and Dickerman, 1957. See Paynter, 1970: 52, Byers et al., 1995: 229–233, Arcese et al., 2002: 6, and Dickinson, 2003: 782.

HOLOTYPE: **AMNH 817693**, adult male (?), collected 6 mi NNE of Amoloya del Rio (= 9 km SSE of Lerma), Mexico, Mexico, on 24 October 1956, by Robert W. Dickerman (no. 7560). Exchanged from MMNH (no. 12500) to AMNH in 1986.

COMMENTS: The MMNH and RWD numbers were cited for the holotype in the original description., and 19 specimens were examined. Of the 18 paratypes two are in AMNH: AMNH 768836 (MMNH no. 17003), immature?, El Rio (= San Bernabé), 14 November 1956, RWD no. 7644; AMNH 768837 (17005), immature male, km 100 Toluca-Norelia Rd., 24 October 1956, RWD no. 7567. Dickerman (1963: 40, fig. 19) illustrated the range of *villai* along the Rio Lerma.

Melospiza melodia yuriria Phillips and Dickerman

Melospiza melodia yuriria Phillips and Dickerman, 1957: 381 (Yuriria, Guanajuato).

Now *Melospiza melodia yuriria* Phillips and Dickerman, 1957. See Paynter, 1970: 52, Byers et al.,

1995: 229–233, Arcese et al., 2002: 6, and Dickinson, 2003: 782.

HOLOTYPE: **AMNH 817692**, male adult?, collected at Yuriria, 20.12N, 101.10W (Times Atlas), Guanajuato, Mexico, on 21 November 1956, by Robert W. Dickerman (no. 7723). Exchanged from MMNH (no. 12490) to AMNH in 1986.

COMMENTS: The MMNH and RWD nos. were cited in the original description; five specimens were examined. One paratype is in AMNH: AMNH 768828 (MMNH no. 16819), female, 1 mi SE Chamacuaro, Guanajuato, 3 August 1956, RWD no. 7188.

The authors queried whether the holotype was an adult specimen as the testes measured only 1.5 mm. See Dickerman (1963: 40, fig. 19) for a map of the distribution of *yuriria*. Arcese et al. (2002: 6) synonymized *yuriria* with *M. m. adusta*.

Melospiza melodia zacapu Dickerman

Melospiza melodia zacapu Dickerman, 1963: 40 (Zacapu, Michoacán, Mexico).

Now *Melospiza melodia zacapu* Dickerman, 1963. See Paynter, 1970: 53, Byers et al., 1995: 229–233, Arcese et al., 2002: 6, and Dickinson, 2003: 782.

HOLOTYPE: **AMNH 817694**, immature female, collected at Zacapu de Mier, 19.49N, 101.48W (Times Atlas), Michoacan, Mexico, on 12 December 1956, by Robert W. Dickerman (no. 7772). Exchanged from MMNH (no. 16678) to AMNH in 1986.

COMMENTS: The MMNH and RWD nos. were cited in the original description. Seventy-three specimens of *zacapu* were examined; of the 72 paratypes, the following four are in AMNH: Zacapu, AMNH 768821 (MMNH no. 16667), male, 30 July 1956, RWD no. 7152; AMNH 768822 (16696), female, 15 May 1958, RWD no. 8804; AMNH 768823 (16699), male, 10 December 1958, RWD no. 9237; AMNH 768824 (16704), immature female, 10 December 1958, RWD no. 9242. See Dickerman (1963: 40, fig. 19) for a map showing the distribution of *zacapu*. Arcese et al. (2002: 6) synonymized *zacapu* with *M. m. adusta*.

Zonotrichia capensis septentrionalis Griscom

Zonotrichia capensis septentrionalis Griscom, 1930: 12 (Chichicastenango, Guatemala).

Now Zonotrichia capensis septentrionalis Griscom, 1930. See Hellmayr, 1938: 571, Chapman, 1940: 390–391, Byers et al., 1995: 236–238, and Dickinson, 2003: 782.

HOLOTYPE: **AMNH 397976**, adult male, collected at Chichicastenango, 14.56N, 91.07W (USBGN, 1965), El Quiché, Guatemala; 27 January 1925, by Alfred W. Anthony. From the Dwight Collection (no. 60798).

COMMENTS: The Dwight Collection number of the holotype was given in the original description. Griscom mentioned that he examined 84 specimens from 15 localities in the Guatemalan highlands, without giving specifics. Later, he (Griscom, 1932b: 363) listed his localities and the number of specimens from each, but I count only 82 specimens on his list. Of these, 64 were cataloged at AMNH. The 63 AMNH paratypes are: AMNH 397959–397975, 397977–398022, 39 males, 20 females, 3 immatures, and 1 sex unknown; of these, I did not find AMNH 397959, sex?, from Antigua, in the collection.

Subsequent to the publication by Griscom (1932b) on the entire Guatemalan collection and before it was cataloged at AMNH, a large number of the specimens were retained at MCZ. The remaining paratypes are probably there.

Zonotrichia capensis costaricensis Allen

Zonotrichia capensis costaricensis Allen, 1891: 374 (San José, Costa Rica).

Now Zonotrichia capensis costaricensis Allen, 1891. See Hellmayr, 1938: 571–572, Chapman, 1940: 392–393, Byers et al., 1995: 236–238, and Dickinson, 2003: 782.

HOLOTYPE: **AMNH 48206**, adult male, collected at San José, 09.59N, 84.04W (Times Atlas), Costa Rica, on 14 September 1889, by C.F. Underwood (no. 410).

COMMENTS: The AMNH number of the holotype was given in the original description and the range was said to be southern Mexico, Central America, and south to Colombia (Bogota) and probably to Ecuador. Paratypes are the following specimens collected or cataloged before the 29 September 1891 publication date of *costaricensis*: AMNH 35370–35374, unsexed and undated Bogota, Colombia, specimens purchased from J.M. Southwick and cataloged 12 April

1889; AMNH 48203, male, 31 May 1889; AMNH 48204, male immature, 31 March 1889; AMNH 48205, female, 14 September 1889, the last three specimens collected at San José, Costa Rica, by C.F. Underwood, and cataloged 22 April 1890.

Zonotrichia capensis venezuelae Chapman

Zonotrichia capensis venezuelae Chapman, 1939: 13 (Carapas, 5600 ft., Mt. Turumiquire, N.E. Venezuela).

Now Zonotrichia capensis venezuelae Chapman, 1939. See Chapman, 1940: 397–398, Paynter, 1970: 55, and Dickinson, 2003: 782.

HOLOTYPE: **AMNH 188519**, adult male, collected at Carapas, 5600 ft, ca. 10.12N, 63.56W (Paynter, 1982), Mt. Turumiquire, northeast Venezuela, on 28 March 1925, by G.H.H. Tate and H.J. Clement (no. 415).

COMMENTS: The AMNH number of the holotype was given in the original description, and a type series of 37 specimens was listed. Of these, 34 of the 36 paratypes are in AMNH: Guacharo, Bermudez, AMNH **68111**, **AMNH 73387–73390**; Las Cienegas del Aguilon, AMNH 150766; Cocallar, AMNH 188513, 188514; Carapas, AMNH 188515–188518, 188520–188522; Junquito on Colonia Tovar Rd. AMNH 323146-323152: Los Palmales, AMNH 70363, AMNH 518950, 518951, 518952; Galipan, Cerro de Avila, **AMNH 518953–518956**; Cumbre de Valencia, AMNH 518957, 518958; and Quiribana de Caicera, AMNH 518959, 518960. Six specimens were listed for Galipan, but only four were cataloged.

Tate (1931) wrote about the ascent of Mt. Turumiquire and the various collecting localities he and Clement visited.

Brachyspiza capensis roraimae Chapman

Brachyspiza capensis roraimae Chapman, 1929a: 5 (Philipp Camp, 6000 ft., Roraima, Venezuela). Now Zonotrichia capensis roraimae (Chapman, 1929). See Hellmayr, 1938: 584, Chapman, 1940: 398–399, Byers et al., 1995: 236–238, and Dickinson, 2003: 782.

HOLOTYPE: **AMNH 237162**, adult male, collected at Philipp Camp, 6000 ft, ca. 05.09N, 60.47W (Paynter, 1982), Mt. Roraima, Venezuela, on 9 November 1927, by T.

Donald Carter on the Lee Garnett Day Expedition (no. 692).

COMMENTS: The AMNH number of the holotype was given in the original description, with 39 specimens from three localities listed as having been examined. However, a total of 45 specimens from these localities were cataloged in September and October 1928, and all would have been available to Chapman. The 44 paratypes are: AMNH 237133-237161, 237163-237177 (two males, one juvenile male from Paulo; four males, one juvenile male, five females from Rondon Camp; 16 males, four juvenile males, 11 females from Philipp Camp), all collected by T. Donald Carter on the Lee Garnett Day Expedition. Of these paratypes, AMNH 237135, male from Rondon Camp, was exchanged with USNM in September 1930, and AMNH 237161, male from Philipp Camp, was exchanged with FMNH in March 1941. Chapman (1931) published a joint report on the collections of the Lee Garnett Day Expedition to Mt. Roraima and the Tyler Duida Expedition to Mount Duida. He (1931: 7–10) described and pictured Philipp Camp. See also Tate (1928, 1930).

Zonotrichia capensis tocantinsi Chapman

Zonotrichia capensis tocantinsi Chapman, 1940: 399 (Baião, Rio Tocantins, Brazil).

Now Zonotrichia capensis tocantinsi Chapman, 1940. See Paynter, 1970: 56, Byers et al., 1995: 236–238, and Dickinson, 2003: 782.

HOLOTYPE: **AMNH 431446**, adult male, collected at Baião, 02.41S, 49.41W (Paynter and Traylor, 1991), Rio Tocantins, Pará, Brazil, 9 December 1931, by Alfonso M. Olalla.

COMMENTS: Chapman cited the AMNH number of the holotype in the original description and had a type series of six individuals from the Baião area. The five paratypes, all collected in 1931, are: Baião, AMNH 431444, male, 29 November, AMNH 431445, male, 1 December, AMNH 431447, female, 1 December; Pedral, AMNH 431448, male, and AMNH 431449, unsexed, 10 December. AMNH 431449 was exchanged to CM in March 1941.

Zonotrichia capensis carabayae Chapman

Zonotrichia capensis carabayae Chapman, 1940: 395 (Limbani, 10,000 feet, Carabaya, southeastern Peru).

Now Zonotrichia capensis carabayae Chapman, 1940. See Paynter, 1970: 59, Byers et al., 1995: 236–238, and Dickinson, 2003: 783.

HOLOTYPE: **AMNH 150012**, adult male, collected at Limbani, 10,000 ft, 14.08S, 69.42W (Stephens and Traylor, 1983), Puno, southeastern Peru, on 26 August 1918, by Harry Watkins (no. 1193).

COMMENTS: Chapman cited the AMNH number of the holotype in the original description and listed 45 adults as his type series, many of which were noted as having been borrowed from other institutions. I did not find either in the collection or the catalog the two specimens from El Cumbra and Pongo, Bolivia, indicated as being in AMNH. The other 23 paratypes in AMNH are: Bolivia, Incachacha, AMNH 138039-138041, two males and one female; Peru, Ollantaytambo, AMNH 145609, female; Machu Picchu, AMNH 145613, female; Huaracondo Cañon, AMNH 145614, unsexed; Limbani, AMNH 150011, 150013-150017, two males, four females; Perene, AMNH 169337, male; La Merced, AMNH 169338, 169339. two males; Utcuyacu, AMNH 169342, 169343, two males; Tulumayo, AMNH 170052-170056, four males, one female; and Rio Seco, AMNH 235103, female. Chapman listed only adults in his type series; AMNH 145612, juvenile male from Machu Picchu, is not considered a paratype of carabayae.

Zonotrichia capensis huancabambae Chapman

Zonotrichia capensis huancabambae Chapman, 1940: 393 (San Felipe, 5000 ft., Rio Huancabamba, n. Peru).

Now Zonotrichia capensis huancabambae Chapman, 1940. See Paynter, 1970: 59, Byers et al., 1995: 236–238, and Dickinson, 2003: 783.

HOLOTYPE: **AMNH 186111**, adult male, collected at San Felipe, 5900 ft (as on label), 05.46S, 79.19W (Stephens and Traylor, 1983), Rio Huancabamba, Cajamarca, northern Peru, on 3 October 1924, by Harry Watkins (no. 8634).

COMMENTS: The AMNH number of the holotype was given in the original description and 28 adults from 11 localities were listed in the type series. The 27 paratypes are: Peru, Huancabamba, AMNH 175665–175667, one

male, two females; El Tambo, AMNH 175668, male; Palambla, AMNH 175669–175674, four males, 1 female, 1 sex?; Hurandosa, AMNH 182240, female; Lomo Santo, AMNH 186109, 186110, 2 males; San Felipe, AMNH 186112, 186113, male, female; La Lejia, AMNH 235098–235102, three males, two females; Taulis, AMNH 236137, female; Seques, AMNH 236138, male; Chugur, AMNH 236139–236142, three males, one female; Cajabamba, AMNH 518982, male. Of these, AMNH 235101 was exchanged to FMNH in March 1941.

Junco hyemalis cismontanus Dwight

Junco hyemalis cismontanus Dwight, 1918: 295 (east of the Rocky Mountains).

Now *Junco hyemalis cismontanus* Dwight, 1918. See Miller 1941: 402–404, Phillips, 1962: 372–376, Paynter, 1970: 64, Byers et al., 1995: 246–249, Nolan et al., 2002, and Dickinson, 2003: 783.

LECTOTYPE: **AMNH 402559**, adult male, collected at Sumas, Washington, USA (= British Columbia, Canada, as on label), on 13 February 1905, by Allan Brooks. From the Dwight Collection (no. 12281).

COMMENTS: In his original description, no type was designated, because Dwight considered his cismontanus to be of hybrid origin, but he indicated that if his cismontanus could be restricted to a definite geographical area, it might be considered a subspecies. Miller (1941: 402-404) discussed this name at length, provided the necessary evidence for the existence of a stabilized population of hybrid origin, and designated a lectotype from Dwight's original series, albeit a wintering bird from outside the breeding range of the subspecies. As Miller (1941: 403) noted, Dwight's original series is in AMNH, with the specimens he considered *cismontanus* so labeled and initialed with a "D," and from among them Miller (1941: 403 [not 405, as in Paynter, 1970: 64]) designated AMNH 402559 the lectotype, citing the AMNH number. While it is confusing, especially in this case, to designate a lectotype from outside the breeding range of the taxon, the above specimen was part of the original series of birds that Dwight considered "cismontanus" and was available for lectotypification.

The collecting locality of the lectotype, Sumas, Washington, becomes the type locality of *cismontanus*. Sumas is on the United States-Canada border, 49.00N, 122.16W (Times Atlas).

As given by Miller (1941: 404), this lectotype bears two labels: (1) Allan Brooks' original label giving his name as collector and the sex, date, and place of collection; (2) Dwight Collection label with the Dwight no. 12281 and other collecting data on the front and on the reverse "hyemalis \times oreganus D"/" = cismontanus," and AMNH 402559. In addition, the specimen is identified as "Junco o [reganus] shufeldti" in pencil on the front and reference is given to Miller's lectotypification on the reverse. Junco oreganus shufeldti Coale, 1887, is the breeding bird in this part of Washington–British Columbia. I believe that Miller chose this specimen to be the lectotype because its characteristics most exactly matched those of the breeding population to the east of the mountains.

I found four additional specimens labeled "cismontanus" by Dwight and they are now identified as hybrid hyemalis × oreganus: AMNH 402160 (Dwight no. 41424), male, Ingram, Kerr Co., Texas; AMNH 402397 (38769), male, Dragoon Mts., Arizona; AMNH 402407 (38700), male, Battle Creek, California, 23 October 1898; and AMNH 402472 (20155), male, Okanagan, British Columbia, 29 April 1907. They are paralectotypes.

Contra Paynter (1970b: 64), Phillips did not provide J. hyemalis henshawi as a new name for cismontanus. Phillips (1962: 374) rejected Miller's use of a wintering specimen of Dwight's cismontanus as a lectotype for a subspecies of Junco hyemalis, accepting instead the specimens from the breeding population of juncos in British Columbia that Swarth (1922: 243) called Junco hyemalis connectens Coues. Coues' type locality was in Colorado Springs and this form has been generally considered to be of hybrid origin. Swarth's specimens from the Stikine River region in northern British Colombia would only include part of the range covered by connectens, and this left those birds without a name, for which Phillips provided *Junco* hyemalis henshawi, with the type from Bennett, British Columbia (59.49N, 135.01W,

Times Atlas). When *J. h. cismontanus* is accepted as a valid name, *J. h. henshawi* becomes a synonym of it.

Junco oregonus [sic] couesi Dwight

Junco oregonus [sic] couesi Dwight, 1918: 291 (Okanagan, British Columbia).

Now *Junco hyemalis montanus* Ridgway, 1898. See Hellmayr, 1938: 547, Miller, 1941: 408–409, Byers et al., 1995: 246–249, Nolan et al., 2002, and Dickinson, 2003: 783.

HOLOTYPE: **AMNH 402384**, adult male, collected in the Okanagan Valley, British Columbia, Canada, on 14 May 1906, by Allan Brooks. From the Dwight Collection (no. 16969).

COMMENTS: Dwight cited his collection number of the holotype in the original description. He did not give the number of specimens in his type series but listed localities from which they came. However, none of the specimens in AMNH are annotated with the name *couesi* and initialed by Dwight, so I was unable to determine which other specimens he might have considered to belong to that form.

Miller (1941: 408–409) studied Dwight's material and decided that *couesi* "is a synonym partly of *shufeldti* and partly of *montanus*, but the type is an example of *montanus*."

Junco ridgwayi Mearns

Junco ridgwayi Mearns, 1890: 243 (Whipple Barracks, Arizona).

Now considered an intergrade between *J. hyemalis caniceps* and *J. h. mearnsi*. See Miller, 1941: 406, Byers et al., 1995: 246–249, Nolan et al., 2002, and Dickinson, 2003: 783.

HOLOTYPE: **AMNH 52902**, adult male, collected at Whipple Barracks, Arizona, on 22 April 1884, by Edgar A. Mearns (no. 2770).

COMMENTS: In the original description, Mearns cited his number of the holotype. The single paratype is USNM 11187. Whipple Barracks was at ca. 34.34N, 112.26W.

Ammodramus halophilus McGregor

Ammodramus halophilus McGregor, 1898: 265 (Abreojos Point, Lower California).

Now *Passerculus sandwichensis guttatus* (Lawrence, 1867). See Hellmayr, 1938: 492, Paynter, 1970b: 73, Wheelwright and Rising, 1993, Byers

et al., 1995: 251–254, and Dickinson, 2003: 783–784

HOLOTYPE: **AMNH 400262**, adult male, collected at Punta Abreojos, 26.44N, 113.40W (Times Atlas), Baja California (= Abreojos Point, Lower California), Mexico, on 19 April 1897, by Richard C. McGregor (no. 1001). From the Dwight Collection (no. 38303).

COMMENTS: McGregor cited his collection number of the holotype in the original description. McGregor's (1898: 266) party secured 16 specimens on 19 April and additional specimens on 17 June. Fifteen paratypes, all from Punta Abreojos and collected on those dates, are in AMNH: AMNH 70325, male, was part of an exchange to AMNH from McGregor (field no. 1432). Eleven paratypes came with the Dwight Collection; in the following list the AMNH number is followed by the Dwight number, the third number was pencilled on each label and is evidently a field number, the fourth number was added in red ink and was only on specimens that came from Dwight: males, AMNH 400263 (38305, 553, 1003), AMNH **400264** (383307, 548, 1007), **AMNH 400265** (38312, 1436, 1010), **AMNH 400266** (38311, 1440, 1009), **AMNH 400267** (38306, 561, 1004); females, **AMNH 400268** (38307, 555, 1005), **AMNH 400269** (38308, 549, 1006), AMNH 400270 (38310, 1435, 1008), AMNH **400271** (38314, 1433, 1012), **AMNH 400272** (38315, 1428, 1013), **AMNH 400273** (38316, 1442, 1014). One paratype, AMNH 518721, male, was collected by Anthony, had the field no. 560, was purchased by Rothschild from the dealer C.K. Worthen, and came to AMNH with the Rothschild Collection. Two paratypes came with the Leonard C. Sanford Collection: females, AMNH 762159 (Sanford no. 9013, field no. 559), the numbers 8809 and 14540 also appear on this label; AMNH 762160 (9796, 1427), the number 15518 also appears.

Ammodramus maritimus peninsulae Allen

Ammodramus maritimus peninsulae Allen, 1888: 284 (Southwestern Florida (Tarpon Springs and Cedar Keys), [and Louisiana (Grand Isle)]). Now Ammodramus maritimus peninsulae Allen, 1888. See Hellmayr, 1938: 509, Zink and Avise,

1990, Post and Greenlaw, 1995, Byers et al., 1995: 254–256, and Dickinson, 2003: 784.

SYNTYPES: **AMNH 31209** and **AMNH 31210**, both females, collected at Tarpon Springs, 28.08N, 82.45W (Times Atlas), Florida, on 28 February 1888, by W.E.D. Scott.

COMMENTS: In the original description, Allen designated as syntypes of A. m. peninsulae the above two specimens and an additional specimen, a male, collected on Grand Isle, Louisiana, in June 1886, by A.K. Fisher (no. 2600). This additional syntype is also part of the type series of Ammodramus maritimus fisheri Chapman (1899: 10). Part of Fisher's collection was deposited in USNM, and in reply to a query, James Dean has responded that USNM received only two of Fisher's specimens of Ammodramus maritimus, the holotype of Ammodramus maritimus fisheri and one other, neither of them Fisher's male no. 2600. It is also not at LSUMNS (Steven Cardiff, personal commun.); thus its whereabouts are unknown.

Because syntypes of *peninsulae* were designated, additional specimens have no nomenclatural standing (ICZN, 1999: 77, Art. 72.4.6).

Passerherbulus maritimus juncicola Griscom and Nichols

Passerherbulus maritimus juncicola Griscom and Nichols, 1920: 25 (East Goose Creek, Wakulla Co., Florida).

Now *Ammodramus maritimus juncicola* (Griscom and Nichols, 1920). See Hellmayr, 1938: 509, Zink and Avise, 1990, Post and Greenlaw, 1995, Byers et al., 1995: 254–256, and Dickinson, 2003: 784.

HOLOTYPE: **AMNH 144885**, adult male, collected at East Goose Creek, 30.06N, 84.14W, Wakulla Co., Florida, on 29 March 1919, by Ludlow Griscom.

COMMENTS: In the original description, Griscom and Nichols gave the AMNH number of the holotype and said that they examined 13 specimens of their new subspecies, collected in northwestern Florida in September, November, March, and April (Griscom and Nichols, 1920: 30). They borrowed specimens from many museums for their study; paratypes in AMNH are: East Goose Creek, Wakulla Co., Florida,

AMNH 155381–155387, three adult males, one adult female, and three juveniles, collected 6–8 September 1919, by Ludlow Griscom. I did not find AMNH 155383, male, collected on 7 September 1919, in the collection.

The name of this subspecies is often misspelled *junicola*, e.g., by Paynter (1970b: 75) and Dickinson (2003: 784); it was spelled *juncicola* in the original description.

Ammodramus maritimus sennetti Allen

Ammodramus maritimus sennetti Allen, 1888: 286 (Gulf Coast of Texas (Corpus Christi)).

Now Ammodramus maritimus sennetti Allen, 1888. See Hellmayr, 1938: 511, Zink and Avise, 1990, Post and Greenlaw, 1995, Byers et al., 1995: 254–256, and Dickinson, 2003: 784.

SYNTYPES: **AMNH 83537** (Sennett no. 3304), male, and **AMNH 83538** (Sennett no. 3303), female, collected at Corpus Christi, 27.49N, 97.26W (Times Atlas), Texas, on 25 May 1886. From the collection of George B. Sennett.

COMMENTS: Because Allen designated the above two specimens syntypes of *Ammodramus maritimus sennetti* in the original description, other specimens have no nomeclatural standing (ICZN, 1999: 77, Art. 72.4.6).

Ammodramus caudacutus subvirgatus Dwight

Ammodramus caudacutus subvirgatus Dwight, 1887: 233 (Hillsborough, Albert Co., New Brunswick).

Now Ammodramus caudacutus subvirgatus Dwight, 1887. See Hellmayr, 1938: 504–505, Zink and Avise, 1990, Greenlaw and Rising, 1994, Byers et al., 1995: 256–257, and Dickinson, 2003: 784.

SYNTYPES: **AMNH 400757** (Dwight no. 1240), juvenile male, 15 July 1886; **AMNH 400767** (1500), adult male, 30 September 1886; **AMNH 400795** (1239), adult female, 15 July 1886; and **AMNH 400801** (1502), adult female, 30 September 1886, all collected at Hillsborough, 45.56N, 64.40W (Times Atlas), New Brunswick, Canada, by Jonathan Dwight, Jr. From the Dwight Collection.

COMMENTS: In the original description, Dwight (1887: 236) made it clear that the specimens he described and gave his collection numbers for should be considered his types. The above syntypes are four of the five specimens he listed by number. The fifth syntype, with his number 1261, adult male in breeding plumage, collected on 19 July 1886, at the same locality, did not come to AMNH with the Dwight Collection and I have found no record of where it might be. Because Dwight designated syntypes in the original description, other specimens have no nomenclatural standing (ICZN, 1999: 77, Art. 72.4.6).

Ammodramus savannarum caucae Chapman

Ammodramus savannarum caucae Chapman, 1912: 161 (Cali, Cauca, Colombia).

Now Ammodramus savannarum caucae Chapman, 1912. See Hellmayr, 1938: 501, Byers et al., 1995: 261–263, Vickery, 1996, and Dickinson, 2003: 784–785.

HOLOTYPE: **AMNH 110005**, adult male, collected at Cali, 3600 ft, 03.27S, 76.31W (Paynter, 1997), Valle del Cauca, Colombia, on 11 August 1911, by William B. Richardson and Leo E. Miller.

COMMENTS: The AMNH number of the holotype was given in the original description; two additional males are paratypes: **AMNH 108443** Cali, 3500 ft, 29 December 1910; and **AMNH 108444**, Cali, 3500 ft, 25 December 1910, both collected by Richardson.

Ammodramus savannarum intricatus Hartert

Ammodramus savannarum intricatus Hartert, 1907: 73 (El Valle, San Domingo).

Now Ammodramus savannarum intricatus Hartert, 1907. See Hellmayr, 1938: 497, Byers et al., 1995: 261–263, Vickery, 1996, and Latta et al., 2006: 203.

HOLOTYPE: **AMNH 518574**, adult male, collected at El Valle, Dominican Republic (= San Domingo), on 16 January 1907, by A. Hyatt Verrill (no. 4167). From the Rothschild Collection.

COMMENTS: Hartert cited Verrill's number of the holotype in the original description, saying that two pairs were collected (i.e., two pairs in the Rothschild Collection). The number 4167 appears on the holotype, which is the only specimen that bears a number, probably added by Hartert to distinguish it. The three paratypes are: AMNH 518572, female, 18 January; AMNH 518575, male, 17 January,

all collected at El Valle in 1907. Other specimens collected by Verrill on the same trip were purchased by AMNH in 1908 and are not part of the type series. Both the Rothschild and the AMNH series were purchased from the Kny-Scheerer Co., a New York City based source of scientific supplies, including natural history specimens. According to correspondence (late 19th and early 20th centuries) in the Department of Ornithology Archives, they also had a "European Establishment."

Coturniculus savannarum caribaeus Hartert

Coturniculus savannarum caribaeus Hartert, 1902: 298 (Bonaire).

Now Ammodramus savannarum caribaeus (Hartert, 1902). See Hellmayr, 1938: 495, Byers et al., 1995: 261–263, Vickery, 1996, and Dickinson, 2003: 784–785.

HOLOTYPE: **AMNH 518567**, adult male, collected on Bonaire Island, West Indies, on 11 July 1892, by Ernst Hartert (no. 164). From the Rothschild Collection.

COMMENTS: Hartert cited his field number of the holotype in the original description, giving the range of the new subspecies as Bonaire and Curação without mentioning the number of specimens he collected. In the earlier account of his trip to the West Indies, Hartert (1893b: 327), under Ammodramus savannarum, had mistakenly referred to his "Aruban specimens" when giving the measurements of his Bonaire specimens, but still without mentioning the number of specimens; here he also mentioned his collecting locality as Kralendijk, 12.09N, 68.16W (Times Atlas). There are in AMNH six Hartert specimens of caribaeus all collected in 1892, the following five being paratypes: Bonaire, AMNH 518566 (Hartert no. 220), male, 21 July; AMNH **518568** (167), male, 11 July; **AMNH 518569** (170), male, 11 July; **AMNH 518570** (165), female, 11 July; Beekenburg, Curaçao, **AMNH 518571** (260), male, 2 August.

Myospiza minimbe columbiana Chapman

Myospiza minimbe columbiana Chapman, 1912: 162 (Cali, Cauca, Colombia).

Now *Ammodramus humeralis humeralis* (Bosc, 1792). See Hellmayr, 1938: 476–477, Byers et al., 1995: 263–264, and Dickinson, 2003: 785.

HOLOTYPE: **AMNH 108446**, adult male, collected at Cali, 3500 ft, 03.27N, 76.31W (Paynter, 1997), Valle del Cauca, Colombia, on 27 December 1910, by W.B. Richardson and L.E. Miller.

COMMENTS: Chapman gave the AMNH number of the holotype in the original description. The type series included five specimens from Cali and one from Honda, Tolima; other specimens mentioned were not included in *columbiana*. The five paratypes are: within 20 mi of Honda, Tolima, AMNH 95121, sex?, 24 January 1907; Cali, Cauca, AMNH 108445 and AMNH 108447, males, 27 December 1910; AMNH 108448, female, 2 December 1910; AMNH 109219, sex?, 8 May 1911. AMNH 108447 was exchanged to USNM.

Most recent authors have included the species *humeralis* in the genus *Ammodramus*; Dickinson (2003: 785) recognized the genus *Myospiza* without comment.

Myospiza manimbe nigrostriata Cherrie

Myospiza manimbe nigrostriata Cherrie, 1916a: 189 (Rio Negro, Paraguayan Chaco).

Now Ammodramus humeralis xanthornus Darwin, 1839. See Hellmayr, 1938: 481, Byers et al., 1995: 263–264, and Dickinson, 2003: 785.

HOLOTYPE: **AMNH 127061**, female, collected on the Rio Negro, Paraguay, on 12 November 1913, by G.K. Cherrie (no. 16933) and L.E. Miller on the Roosevelt Expedition.

COMMENTS: Cherrie gave the AMNH number of the holotype in the original description but included no information on the size of his type series. According to the AMNH catalog, a single specimen was collected.

Cherrie (1916: 189, footnote) noted that the Rio Negro, a small tributary of the Rio Pilcomayo, 25.21S, 57.42W (Paynter, 1989), entered it about 35 or 40 mi from its mouth. This side-excursion on the Rio Pilcomayo, taking place before the Roosevelt-Rondon Expedition, is briefly described by Cherrie (*in* Naumburg, 1930: 6). The cryptic note on the reverse of the AMNH label, "Munich Mus. 1922," may refer to Naumberg having sent or taken this type specimen to Munich when she was working on the birds of the Roosevelt-Rondon Expedition, for she discussed it

under *Myospiza h. humeralis* (Naumburg, 1930: 353–355). She considered it to be an aberrant individual of *M. h. dorsalis*, a form considered a synonym of *M. h. xanthornus* by Hellmayr (1938: 480–482). Also on the reverse of the AMNH label is the identification *Myospiza h. dorsalis* with the initials "A[lexander] W[etmore]," who had compared the type of *dorsalis* with that of *nigrostriata* and considered them identical (Wetmore, 1926: 429–430).

Myospiza cherriei Chapman

Myospiza cherriei Chapman, 1914a: 183 (Villavicencio (alt. 1600 ft.), Llanos at eastern base of Eastern Andes, Colombia).

Now Ammodramus aurifrons cherriei (Chapman, 1914). See Hellmayr, 1938: 484, Byers et al., 1995: 264–265, Dickinson, 2003: 785.

HOLOTYPE: **AMNH 122770**, female, collected at Villavicencio, 1600 ft, 04.09S, 73.37W (Paynter, 1997), eastern base of the eastern Andes, Meta, Colombia, on 12 March 1913, by George K. Cherrie (no. 16562).

COMMENTS: The AMNH number of the holotype was cited in the original description. There is one paratype: **AMNH 122771**, juvenile, from the same locality on 11 March 1913 collected by Cherrie (no. 16545).

Although Chapman (1917: 567) listed three specimens of *cherriei*, there were only two specimens in the type series and they are the only two in AMNH collected before 1940. Chapman (1917: 567) had perhaps borrowed a third specimen for comparison when writing the later paper.

Myospiza aurifrons zamorae Chapman

Myospiza aurifrons zamorae Chapman, 1925a: 2 (Zamora, Rio Zamora, eastern Ecuador). Now Ammodramus aurifrons aurifrons (Spix, 1825). See Hellmayr, 1938: 483–484, Byers et al., 1995: 264–265, and Dickinson, 2003: 785.

HOLOTYPE: **AMNH 168146**, adult male, collected at Zamora, 04.04S, 78.58W (Paynter, 1993), Rio Zamora, Ecuador, on 26 November 1920, by George K. Cherrie (no. 22599).

COMMENTS: Chapman cited the AMNH number of the holotype in the original description and listed 28 specimens of *zamorae* from Colombia, Ecuador, and Peru

that he examined, including the holotype. Of the 27 paratypes, I found 26: Colombia, La Morelia, AMNH 117097–117101; Florencia, AMNH 117103, 117104, 117169–117171; Ecuador, Zamora, AMNH 130284–130287, AMNH 168143–168145, AMNH 168147–168151; Peru, La Merced, AMNH 169334, 169335; Perené, AMNH 169336; Perico, AMNH 182233. I did not find the juvenile specimen that Chapman listed from Monte Allegre, Peru. AMNH 168150 was exchanged to MCZ in 1928.

Aimophila ruficauda connectens Griscom

Aimophila ruficauda connectens Griscom, 1930: 9 (Progreso, Guatemala).

Now Aimophila ruficauda connectens Griscom, 1930. See Hellmayr, 1938: 519, Dickerman, 1987b: 81, Byers et al., 1995: 83–84, and Dickinson, 2003: 786.

HOLOTYPE: **AMNH 397867**, adult male, collected at Progreso, 17.18N, 90.08W (Times Atlas), Guatemala, on 8 July 1924, by Alfred W. Anthony (no. 331). From the Johathan Dwight Collection (no. 58485).

COMMENTS: Griscom cited the Dwight Collection number of the holotype in the original description and noted that his type series included 33 specimens from Progreso and one from Gualan (in MCZ). Of the 32 paratypes from Progreso, 22 came to AMNH: AMNH 397860 (Dwight no. 58476), female; AMNH 397861 (58478), female; AMNH 397862 (58481), male; AMNH 397863 (58479), male; AMNH **397864** (58482), male; **AMNH 397865** (58480), male; **AMNH 397866** (58483), male; **AMNH 397868** (58486), male; **AMNH 397869** (58487), male; **AMNH 397870** (58488), female, all collected 2-14 July 1924 by Anthony; **AMNH 397871** (59060) female; AMNH 397872 (59061), male; AMNH 397873 (59062), male; AMNH 397874 (59065), male; AMNH 397875 (59064), immature female; AMNH 397876 (59063) immature female; AMNH 397877 (59067) immature female; AMNH 397878 (59068), immature female; AMNH 397879 (59071), male; AMNH 397880 (59073), ? immature; **AMNH 397881** (59074), male; **AMNH 397882** (59075), female, all collected 5 September-3 November 1924 by Anthony.

A large portion of Dwight's Guatemalan collection was retained at MCZ after the

publication of Griscom's (1932b) report on the entire collection and before cataloging at AMNH. The remaining paratypes are probably in MCZ.

Aimophila ruficauda ibarrorum Dickerman

Aimophila ruficauda ibarrorum Dickerman, 1987a:5 (La Avellana, Department of Santa Rosa, Guatemala).

Now Aimophila ruficauda ibarrorum Dickerman, 1987. See Dickerman, 1987b: 81, Byers et al., 1995: 286–287, and Dickinson, 2003: 786.

HOLOTYPE: **AMNH 813904**, adult female, collected at La Avellana, 13.55N, 90.28W (USBGN, 1965), Santa Rosa, Guatemala, on 18 August 1971, by Robert W. Dickerman on the Virus Bird Project (no. VBP 8942).

COMMENTS: In the original description, Dickerman gave the AMNH number of the holotype and included specimens from the "arid lowlands and interior of Guatemala and adjacent El Salvador." Also included was USNM 352744 from Los Chilamates. Paratypes in AMNH are: AMNH 813903 (VBP 8978), male, 11 August 1971; AMNH 813905 (VBP 8978), female, 10 August 1971; AMNH 813906 (RWD 14367), male, 23 July 1972; AMNH 813907 (RWD 15014), immature female, 4 May 1974; AMNH 813908 (RWD 15092), male, 8 August 1974, all collected at La Avellana by R.W. Dickerman.

This subspecies was not mentioned by Byers et al. (1995: 287), and Dickinson (2003: 786) indicated that he had not found an evaluation of the name since it was proposed. Dickerman (1987b: 81) listed this name, but incorrectly cited the AMNH number as 813954; the correct number is AMNH 813904.

Aimophila botterii vulcanica Miller and Griscom

Aimophila botterii vulcanica Miller and Griscom, 1925: 2 (Volcan Viejo, 4500 ft., Chinandega, Nicaragua).

Now Aimophila botterii vulcanica Miller and Griscom, 1925. See Hellmayr, 1938: 534, Byers et al., 1995: 291–293, Dickinson, 2003: 786–787, and Martínez-Sánchez and Will, 2010: 2–3, 100.

HOLOTYPE: **AMNH 144624**, adult male, collected on Volcán San Cristóbal (= Volcan [El] Viejo or Volcan Chinandega, see Seltzer,

1962: 574), 4500 ft, 13.45N, 86.29W (USBGN, 1976), Chinandega, Nicaragua, on 2 June 1917, by W. DeW. Miller (no. 1029).

COMMENTS: The AMNH number of the holotype was cited in the original description and a series of 11 males and two females of *vulcanica* was examined, including the type. Paratypes in AMNH are: AMNH 144623 (W.B. Richardson no. 1028), AMNH 144625 (1030), AMNH 144626 (1031), AMNH 144627 (1040), AMNH 144628 (1041), all males, and AMNH 144629 (1046), female, all collected on Volcán San Cristóbal, between 3800 and 5200 ft, 2–4 June 1917, by W.B. Richardson. The remaining five paratypes are probably in MCZ.

Peucaea ruficeps scottii Sennett

Peucaea ruficeps scottii Sennett, 1888: 42 (Pinal County, Arizona).

Now *Aimophila ruficeps scottii* (Sennett, 1888). See Hellmayr, 1938: 529–530, Byers et al., 1995: 296–297, Collins, 1999: 4, and Dickinson, 2003: 787

SYNTYPES: **AMNH 28315**, adult male, collected on San Pedro Slope, Pinal County, Arizona, on 14 March 1885, by W.E.D. Scott (no. 1884), from the W.E.D. Scott Collection; and **AMNH 83926**, adult male, collected on San Pedro Slope, Pinal County, Arizona, on 27 March 1885, by W.E.D. Scott (no. 1979), from the collection of G.B. Sennett (no. 5247).

COMMENTS: Sennett designated the above two specimens as syntypes of *scottii* in the original description, citing Scott's original field number in each case. Other specimens have no nomenclatural standing (ICZN, 1999: 77, Art. 72.4.6).

Aimophila rufescens gigas Griscom

Aimophila rufescens gigas Griscom, 1930: 9 (Nebaj, 50 miles north of Quiché, alt. about 6700 ft., Guatemala).

Now Aimophila rufescens pectoralis Dickey and van Rossem, 1927. See Hellmayr, 1938: 525–526, Paynter, 1970a: 102, Dickerman, 1987b: 81, Byers et al., 1995: 298–300, and Dickinson, 2003: 787.

HOLOTYPE: **AMNH 397932**, adult male, collected at Nebaj, ca. 6700 ft, 15.24N, 91.08W (USBGN, 1965), 50 mi north of Quiché, Guatemala, on 29 April 1927, by

Alfred W. Anthony (no. 5576). From the Jonathan Dwight Collection (no. 62955).

COMMENTS: Griscom cited the Dwight Collection number of the holotype in the original description and listed the localities and number of specimens in his type series. Of the eight localities and 50 specimens listed, including the holotype, the following 37 paratypes are in AMNH: Antigua, AMNH 397904-397906, three males; La Montanita, AMNH 397907, male; Momostenango, AMNH 397908-397910, three males; Chichicastenango, AMNH 397911-397915, four males, one female; Panajachel, AMNH 397916-397928, AMNH 397931, three males, three females, eight immatures; San Lucas, AMNH 397929, AMNH 397933– **397938, AMNH 406710**, seven males, one female; Nebaj, AMNH 397930, male; Lake Amatitlan, AMNH 399315, AMNH 399316, two males.

For the complete report on this collection, see Griscom (1932b). After its publication and before the collection was cataloged at AMNH, a large number of the specimens were retained at MCZ. The remaining paratypes are probably there.

Phrygilus chloronotus Berlepsch and Stolzmann

Phrygilus chloronotus Berlepsch and Stolzmann, 1896: 350 (Ingapirca and Tarma).

Now *Phrygilus punensis chloronotus* Berlepsch and Stolzmann, 1896. See Hellmayr, 1938: 345–346, Paynter, 1970b: 104, Ridgely and Tudor, 1989: 444–445, and Dickinson, 2003: 788.

SYNTYPES: **AMNH 519840**, adult male, collected at Tarma, 11.25S, 75.42W (Stephens and Traylor, 1983), Junín, Peru, on 16 August 1893; **AMNH 519841**, immature male, collected at Tarma, Peru, on 30 October 1892, both by J. Kalinowski (nos. 1985 and 1785, respectively). From the Rothschild Collection.

COMMENTS: In the original description, no type was designated, Berlepsch and Stolzmann giving their type series as three individuals collected at Ingapirca in June 1890 and six individuals collected at Tarma in October 1892 and August and September 1893. Both of the AMNH specimens were collected within those dates, bear Kalinowski's original labels, and both are marked "Typus." They had not previously been recognized as types.

Mlíkovský (2009: 30) has recently discussed the list of types in MIZ published by Sztolcman (= Stolzmann) and Domaniewski (1927), noting that their listing of a type did not necessarily mean that they were using the term in the sense of the ICZN (1999). In the case of *Phrygilus chloronotus*, Mlíkovský (2009: 134) did not accept the listing of the type by Sztolcman and Domaniewski (1927: 175) and listed five syntypes of *chloronotus* that are, or had been, in MIZ, three of which were from Ingapirca and two of which were from Tarma. The above two syntypes account for two additional Tarma specimens.

P. chloronotus was first described as a full species, included as a subspecies of P. gayi by Hellmayr (1938: 345), included as a subspecies of P. atriceps by Paynter (1970b: 104), and, based on information supplied to them by F. Vuilleumier, included in the species P. punensis by Ridgely and Tudor (1989: 444, footnote).

Phrygilus unicolor grandis Chapman

Phrygilus unicolor grandis Chapman, 1915b: 651 (Paramo of Santa Isabel (alt. 12700 ft.), Central Andes, Columbia [sic]).

Now *Phrygilus unicolor geospizopsis* (Bonaparte, 1853). See Hellmayr, 1938: 354–355, Meyer de Schauensee, 1951: 1098, and Dickinson, 2003: 788.

HOLOTYPE: **AMNH 112797**, adult male, collected at Santa Isabel, 12700 ft, ca. 0447N, 7526W (Paynter, 1997), Quindio Andes, Colombia, on 20 September 1911, by A.A. Allen and L.E. Miller (no. 484).

COMMENTS: Chapman cited the AMNH number of the holotype in the original description and listed 43 specimens from three localities in his type series, including the holotype. The 42 paratypes are: Ecuador, Quito, AMNH 41384; Colombia, Santa Isabel, AMNH 112792–112796, 112798– 112807, 11 males, four females, 1 juvenile sex?; Ecuador, Mt. Chimborazo, AMNH **125056–125081**. 21 males, five females. Of these, AMNH 112793 and AMNH 112803 were exchanged with Outram Bangs in 1918 and are probably now in MCZ; AMNH 125066 was exchanged with MZUSP in 1917; AMNH 125074 was exchanged with MCZ in 1928. Three specimens were exchanged to

BIM in 1923, numbered there, and when the BIM collection was donated to AMNH in 1935, they were renumbered at AMNH. Original AMNH 125067, 125070, and 125078 were given BIM numbers 12582, 12580, and 12581 and were then renumbered AMNH 441631, 441632, and 441630, respectively. I did not find AMNH 112795, 112800, and 125077 in the collection, and they may have been exchanged with other institutions without the catalog having been marked.

See Chapman (1917) for a report on this and other collections from Colombia.

Phrygilus unicolor tucumanus Chapman

Phrygilus unicolor tucumanus Chapman, 1925a: 4 (above Tafi del Valle, 9500 ft., Prov. Tucuman, Argentina).

Now *Phrygilus unicolor tucumanus* Chapman, 1925. See Hellmayr, 1938: 353, and Dickinson, 2003: 788.

HOLOTYPE: **AMNH 142463**, adult female, collected above Tafi del Valle, 9500 ft, 26.52S, 65.41W (Paynter, 1995), Tucumán, Argentina, on 4 April 1916, by Leo E. Miller and Howarth S. Boyle (no. 15959).

COMMENTS: Chapman cited the AMNH number of the holotype in the original description and listed 17 specimens that he examined, all from the type locality. The 16 paratypes are in AMNH: AMNH 142449–142462, 142465, 142466, collected 1–4 April 1916. AMNH 142464 had been exchanged to BIM in 1923 and returned to AMNH in 1935 when the entire BIM bird collection was donated to AMNH; therefore it was not available to Chapman when he described *tucumanus* in 1925 and is not a paratype.

Phrygilus alaudinus venturii Hartert

Phrygilus alaudinus venturii Hartert (in Hartert and Venturi) 1909: 180 (Lagunita, Tucuman, 3000 m.).
Now Phrygilus alaudinus venturii Hartert, 1909.
See Hellmayr, 1938: 361, Ridgely and Tudor, 1989: 441–442, and Dickinson, 2003: 788.

HOLOTYPE: **AMNH 519928**, adult male, collected at Lagunita, 3000 m, 26.38S, 65.34W (Paynter, 1995), Tucumán, Argentina, on 31 January 1903, by G.A. Baer (no. 1352). From the Rothschild Collection.

COMMENTS: In the original description, Hartert gave Baer's field number for the holotype, listing four additional males and two females in his type series. Paratypes are: Lagunita, AMNH 519929, female, 4 February 1903, Baer (no. 1378); Las Cienagas, 1903, AMNH 519930, female, 1 February, Venturi (no. 937), AMNH 519931, male, 16 February, Venturi (no. 936), AMNH 519932, male, 19 February, Dinelli (no. 1955); Tafí del Valle, 1905, AMNH 519933, male, 19 February, Dinelli (no. 3458), AMNH 519934, male, 19 February, Dinelli (no. 3459).

Melanodera xanthogramma barrosi Chapman

Melanodera xanthogramma barrosi Chapman, 1923a: 12 (Rio Blanco, 9500 ft., Aconcagua, Chile).

Now *Melanodera xanthogramma barrosi* Chapman, 1923. See Helllmayr, 1932: 71–72, Jaramillo, 2003: 214–215, and Dickinson, 2003: 788.

HOLOTYPE: **AMNH 199967**, adult male, collected at La Lagunita, ca. 2900 m, Rio Blanco, 32.55S, 70.17W (Paynter, 1988), Cordillera Aconcagua, Chile, on 14 April 1921, by Rafael Barros V.

COMMENTS: Chapman cited the AMNH number of the holotype in the original description. Although Barros (1921: 190, under *Phrygilus xanthogrammus*) collected seven specimens of this form, Chapman's (1923: 12) type series comprised only the three specimens sent to AMNH. The two paratypes are: **AMNH 175858**, male, La Lagunita, 14 April 1921; and **AMNH 199968**, female, La Lagunita, 13 April 1921, both collected by Barros.

Haemophila personata Salvin

Haemophila personata Salvin, 1895: 8 (near Cajamarca).

Now *Incaspiza personata* (Salvin, 1895). See Hellmayr, 1938: 538, Ridgely and Tudor, 1989: 451, and Dickinson, 2003: 789.

SYNTYPES: AMNH 100260, female, 12 May; AMNH 518878, male, 14 May; AMNH 518879, male, 14 May; AMNH 518880, female, 15 May; AMNH 518881, female, 14 May; AMNH 518882, female, 12 May, all collected near Cajamarca, 10,000 ft, 07.10S, 78.31W (Stephens and Traylor, 1983), Cajamarca, Peru, in 1894, by O.T. Baron. From the Rothschild Collection.

COMMENTS: Salvin did not designate a type in the original description, but noted that his report on Baron's 1894 collection was based on specimens in both his own collection and in Rothschild's (Salvin, 1895: 1). AMNH 518879 was marked "Co-type" by Salvin. Additional syntypes are in BMNH (Warren and Harrison, 1971: 430). AMNH 100260 was exchanged to AMNH by Rothschild in 1907; AMNH 518881 was exchanged to Javier Ortiz de la Puente, MHNJP, in February 1952 and may have been in return for the type of *Incaspiza ortizi* (see below). These specimens had not previously been recognized as types.

Incaspiza ortizi J.T. Zimmer

Incaspiza ortizi J.T. Zimmer, 1952: 103 (near La Esperanza, Dept. Cajamarca, Perú; altitude 1,800 meters).

Now *Incaspiza ortizi* J.T. Zimmer, 1952. See Paynter, 1970b: 116, Ridgely and Tudor, 1989: 452, and Dickinson, 2003: 789.

HOLOTYPE: **AMNH 748395**, female, collected near La Esperanza, 1800 m, 06.36S, 78.54W (Stephens and Traylor, 1983), Cajamarca, Peru, on 24 April 1951, by Javier Ortiz de la Puente.

COMMENTS: Zimmer had the single specimen. The original label on this specimen is printed "Museo de Historia Natural 'Javier Prado'" (MHNJP) and bears the number M.H.N. 56.

Haemophila laeta Salvin

Haemophila laeta Salvin, 1895: 8 (Cajabamba (9,000 feet), Vina, Huamachuco (5,500 feet), Chusgon, Huamachuco (8,500 feet), Cajamarca (9,000 feet), Malea, Cajabamba (8,000 feet).

Now *Incaspiza laeta* (Salvin, 1895). See Hellmayr, 1938: 538, Ridgely and Tudor, 1989: 452, and Dickinson, 2003: 789.

SYNTYPES: **AMNH 100259**, male, Malca (= Malea), ca. 07.35S, 78.09W (Vaurie, 1972), Cajamarca, 24 April; **AMNH 518868**, female, Chusgon, 8500 ft, ca. 07.50S, 77.55W (Vaurie, 1972), La Libertad, February; **AMNH 518869**, male, Viñas (= Vina), 07.57S, 77.38W (Stephens and Traylor, 1983), La Libertad, March; **AMNH 518870**, male, Malca, 17 April; **AMNH 518871**, male, Malca, 18 April; **AMNH 518872**, male,

Malca, 27 April; **AMNH 518873**, male, Cajamarca, 9000 ft, 07.10S, 78.31W (Stephens and Traylor, 1983), 30 March, all collected in Peru in 1894 by O.T. Baron. From the Rothschild Collection.

COMMENTS: Salvin did not designate a type in the original description, but specimens covered in his paper included Baron's 1894 specimens in both his and Rothschild's collections (Salvin, 1895: 1). AMNH 100259 was exchanged to AMNH by Rothschild in 1907; AMNH 518872 was exchanged to Maria Koepcke, MHNJP, in January 1971. AMNH 518873 is marked "Co-type" by Salvin. There are other syntypes in BMNH (Warren and Harrison, 1971: 289). These specimens had not previously been recognized as types.

Incaspiza watkinsi Chapman

Incaspiza watkinsi Chapman, 1925a: 3 (Perico, arid Tropical Zone; Rio Chinchipe).

Now *Incaspiza watkinsi* Chapman, 1925. See Hellmayr, 1938: 539, and Dickinson, 2003: 789.

HOLOTYPE: **AMNH 182239**, adult male, collected at Perico, 05.15S, 78.45W (Stephens and Traylor, 1983), Cajamarca, Rio Chinchipe, northern Peru, on 15 August 1923, by Harry Watkins (no. 7668).

COMMENTS: Chapman cited the AMNH number of the holotype in the original description, his type series comprising one male and five females. The five female paratypes, all from Perico and collected 13–15 August 1923, are: AMNH 182234 (Watkins no. 7663), AMNH 182235 (7666), AMNH 182236 (7665), AMNH 182237 (7667), and AMNH 182238 (7669).

Poospiza alticola Salvin

Poospiza alticola Salvin, 1895: 7 (Huamachuco (10,400 feet)).

Now *Poospiza alticola* Salvin, 1895. See Hellmayr, 1938: 618, and Dickinson, 2003: 790.

SYNTYPE: **AMNH 518428**, adult male, collected at Huamachuco, 10,400 ft, 07.48S, 78.04W (Stephens and Traylor, 1983), La Libertad, Peru, in February 1894, by O.T. Baron. From the Rothschild Collection.

COMMENTS: Salvin did not designate types in the original description but noted (Salvin,

1895: 1) that he and Rothschild had both received specimens of birds collected by Baron in northern Peru in the first half of 1894 and that "the present paper is intended to give some account of the two sets of skins." Salvin (1895: 2) also commented that his collection contained specimens of all of the species listed, but those prefixed by an asterisk were also represented in the Rothschild Collection. The description of *Poospiza alticola* is prefixed by an asterisk and the above specimen is considered a syntype of the name; it had not previously been so recognized. There are also syntypes in BMNH (Warren and Harrison, 1971: 20).

Pseudochloris citrina antioquiae Chapman

Pseudochloris citrina antioquiae Chapman, 1917: 571 (Barro Blanco (7200 ft.), Antioquia, Colombia). Now Sicalis citrina browni Bangs, 1898. See Hellmayr, 1938: 308, Meyer de Schauensee, 1951: 1096, and Dickinson, 2003: 790.

HOLOTYPE: **AMNH 134194**, adult male, collected at Barro Blanco, 7200 ft, ca. 0615N, 75.23W (Paynter, 1997), Antioquia, Colombia, on 29 November 1914, by Leo E. Miller (no. 10317) and Howarth S. Boyle.

COMMENTS: Chapman cited the AMNH number of the holotype in the original description, giving his type series as three adult males and two adult females. The four paratypes, all collected at Barro Blanco in 1914 by Miller and Boyle, are: males, AMNH 134192, AMNH 134193, 27 November; females, AMNH 134195, AMNH 134196, 29 November.

Chapman (1917: 58–68) gave details of the expedition to the Antioquia region.

Pseudochloris sharpei Berlepsch and Stolzmann

Pseudochloris sharpei Berlepsch and Stolzmann, 1894: 386 (in Peruvia centrali (Junin et Ingapirca)). Now Sicalis uropygialis sharpei (Berlepsch and Stolzmann, 1894). See Hellmayr, 1938: 311, and Dickinson, 2003: 790.

SYNTYPES: **AMNH 519793**, adult male, collected at Cerro Incapirca (= Icaperia, as on label), 11.00S, 76.12W (Stephens and Traylor, 1983), Junín, Peru, on 13 May 1890; and **AMNH 519794**, adult male, collected at Cerro Incapirca, Junín, Peru,

on 23 May 1890, both by J. Kalinowski (nos. 512 and 565, respectively). From the Rothschild Collection.

COMMENTS: Mlíkovský (2009: 135) noted that six of the original 11 syntypes are in MIZ. A check of the AMNH collection turned up these two additional syntypes. Both are marked "Typus."

Pseudochloris olivascens sordida Chapman

Pseudochloris olivascens sordida Chapman, 1919b: 330 (Ticara [sic], alt. 8000 ft., Prov. Jujuy, Argentina).

Now Sicalis olivascens olivascens (d'Orbigny and Lafresnaye, 1837). See Hellmayr, 1938: 316, Paynter, 1970b: 125, and Dickinson, 2003: 790.

HOLOTYPE: **AMNH 142237**, adult male, collected at Tilcara, 8000 ft, 23.34S, 65.22W (Paynter, 1995), Jujuy, Argentina, on 10 February 1916, by Leo E. Miller (no. 15396) and Howarth S. Boyle.

COMMENTS: Chapman gave the AMNH number of the holotype in the original description and examined two adult males and five adult females from the type locality. The six paratypes, all collected at Tilcara 8–12 February 1916 by Miller and Boyle, are: AMNH 142233 (Miller no. 15378), female; AMNH 142234 (15379), female; AMNH 142235 (15375), male; AMNH 142236 (15331), female; AMNH 142238 (15468), [female]; AMNH 142239 (15453), female.

Sicalis columbiana leopoldinae Hellmayr

Sicalis columbiana leopoldinae Hellmayr, 1906a: 85 (Central Brazil: S. Leopoldina, Rio Araguay, province of Goiaz).

Now *Sicalis columbiana leopoldinae* Hellmayr, 1906. See Hellmayr, 1938: 318, and Dickinson, 2003: 791.

HOLOTYPE: **AMNH 516564**, adult male collected at Aruaña (= Santa Leopoldina), 14.54S, 51.05W (Paynter and Traylor, 1991), Rio Araguaia (= Araguay), Goiás, Brazil, on 15 August 1888, by K. von den Steinen (no. 100). From the Berlepsch Collection via the Rothschild Collection.

COMMENTS: Hellmayr gave the collector's field number of the holotype in the original description. Male and female were both described, but Hellmayr gave no indication of the size of his type series. There is one

paratype at AMNH: AMNH 516565, female, collected at the type locality on the same date by the same collector (bearing both the nos. 86 and 87). AMNH 516563, adult male, Rio Araguaia, Goiás, collected in June 1906 by G.A. Baer is not a paratype, as the description was published in May.

K. von den Steinen's name does not appear on any of the labels; rather the collector's name on the Berlepsch label is "Dr. Ehrenreich." Hartert (1919: 160) credits both as the collectors.

Sicalis flaveola holti Miller

Sicalis flaveola holti Miller, 1925: 254 (Monte Serrat, 2,700 feet, Serra do Itatiaya, Sao Paulo [sic], Brazil).

Now Sicalis flaveola brasiliensis (Gmelin, 1789). See Hellmayr, 1938: 323–324, Paynter, 1970b: 126–127, and Dickinson, 2003: 791.

HOLOTYPE: **AMNH 189299**, adult female, collected on Pico das Agulhas Negras (= Monte Serrat, 2700 ft, Serra do Itatiaia), 22.23S, 44.38W (Paynter and Traylor, 1991), Rio de Janeiro, Brazil, on 22 December 1921, by Ernest G. Holt (no. 136).

COMMENTS: Miller gave the AMNH number of the holotype in the original description; a typographical error in the description listed it as a male, but Miller's only two specimens from the type locality were adult females. Eleven specimens comprised the type series. Specimens that would have been available to Miller in 1925 are those from the Lawrence Collection and those collected by Rollo H. Beck in Bahia in 1916, as well as the additional female collected by Holt on Monte Serrat. The 10 paratypes are: Lawrence Collection, Bahia: immature [female], AMNH 41863; adult, AMNH 41864; Brazil, AMNH 41867 [female]. Beck collection, Bahia: males, AMNH 163560 (Beck no. 5841), 4 July; AMNH 163561 (5718), 2 June; AMNH **163562** (5732), 9 June; juvenile [male], **AMNH 163563** (5133), 9 June; females, **AMNH 163564** (5817), 22 June; **AMNH** 163565 (5751), 10 June. Monte Serrat, AMNH 189300, female, 29 December 1921, by Holt (no. 193).

Holt (1928) wrote a full report on his collecting in the Serra do Itatiaia and called attention to the fact that his collecting

locality was in the state of Rio de Janeiro, not São Paulo, as had been given by Miller (Holt, 1928: 253, 316).

Sicalis luteiventris bogotensis Chapman

Sicalis luteiventris bogotensis Chapman, 1924: 14 (Savanna of Bogotá, Colombia).

Now *Sicalis luteola bogotensis* Chapman, 1924. See Hellmayr, 1938: 334–335, and Dickinson, 2003: 791.

HOLOTYPE: **AMNH 122768**, adult male, collected in the Savanna of Bogota, 04.36N, 74.05W (Paynter, 1997), Colombia, on 19 February 1913, by Frank M.Chapman, George K. Cherrie, and others.

COMMENTS: Chapman gave the AMNH number of the holotype in the original description, listing his type series of 19 specimens, including the holotype; all of them were collected in 1913. The 12 paratypes from near Bogota comprised six adult male, five adult female, and one juvenile: Savanna of Bogota: AMNH **122765,** [female], 18 February; **AMNH** 122766, male juvenile, 19 February; AMNH 122767, female, 19 February, all collected by Chapman et al. Cundinamarca: AMNH 126708, male, 10 June; AMNH 126709, male, 22 May; **AMNH 126710**, female, 22 April; AMNH 126711, female, 10 June; AMNH **126712**, male, 22 June; **AMNH 126713**, female, 23 June, all collected by M. Gonzales on an AMNH expedition. Three male paratypes are unaccounted for, and they may have been among specimens borrowed from other institutions by Chapman (1924: 1). The Ecuadorian paratypes included the following: Valle de Cumbaya, AMNH 125015, male, 23 May; AMNH 125016, male, 22 May; AMNH **125017**, male, 22 May; **AMNH 125018**, male, 22 May, all collected by W.B. Richardson. The following two specimens are probably also paratypes, although Chapman (1924: 15) listed them as females: Mt. Pichincha, AMNH 125019, male, 12 June; **AMNH 155067**, male, 14 June, both collected by Richardson. Of these specimens AMNH 125016 was exchanged to ANSP in 1928, AMNH 125019 was exchanged to MCZ, and AMNH 126711 was exchanged to the Colección Phelps in 1945.

Chapman (1917: 50–58) gave details of this expedition and others to Colombia sponsored by AMNH.

Emberizoides macrourus hypochondriacus Hellmayr

Emberizoides macrourus hypochondriacus Hellmayr, 1906b: 28 (Frances, Volcano of Chiriqui, 2000 ft.).

Now Emberizoides herbicola hypochondriacus Hellmayr, 1906. See Hartert 1919: 162, Hellmayr, 1938: 613, Paynter, 1970b: 129, Wetmore et al., 1984: 616–618, and Dickinson, 2003: 791.

HOLOTYPE: **AMNH 519760**, adult male, collected at Francés, 08.37N, 82.25W (Siegel and Olson, 2008), Volcano of Chiriqui, 2000 ft, Panama, on 11 November 1905, by H. Watson. From the Rothschild Collection.

COMMENTS: Hellmayr cited the number, 110511, of the holotype in the original description. This number is written on both the original label and on the Rothschild label and is apparently a modified date and does not represent the collector's field number. Hartert (1919: 162), in listing this type, referred to the number as "110,511," but it is not a catalog number as the Rothschild Collection was never cataloged. Hellmayr had a type series of nine specimens, including males, females, and young, collected by Watson near Francés in October and November 1905; the implication was that they were all in the Rothschild Collection. However, only five of the eight paratypes came to AMNH with that collection: **AMNH 519761**, male; AMNH 519762, male; AMNH 519763, female; AMNH 519764, male; AMNH 519765, female.

Emberizoides sphenurus floresae Griscom

Emberizoides sphenurus floresae Griscom, 1924a: 8 (Cerro Flores, 3600 ft., eastern Chiriqui, Panama). Now Emberizoides herbicola hypochondriacus Hellmayr, 1906. See Hellmayr, 1938: 613, Wetmore et al., 1984: 616–618, and Dickinson, 2003: 791.

HOLOTYPE: **AMNH 182964**, female, collected on Cerro Flores, 3600 ft, Chiriqui, Panama, on 18 March 1924, by Ludlow Griscom and Rex R. Benson.

COMMENTS: Griscom had the single specimen, for which he gave the AMNH number in the original description. His type locality of Cerro Flores is discussed in depth by Siegel and Olson (2008: 168); they conclude that it may be the Cerro Flores that lies 4 km SSW of Cerro Santiago, 08.33N, 81.44W, and 4 km

NNE of Hato Chamí, 08.27N, 81.46W. Wetmore et al. (1984: 616–618) discussed this holotype, considering it to be in "non-adult" plumage, and synonymized *floresae* with *E. h. hypochondriacus*; Hellmayr (1938: 613) had also questioned its validity. Dickinson (2003: 791) recognized *floresae*, without comment.

Griscom (1924b) wrote a popular article about this expedition.

Emberizoides duidae Chapman

Emberizoides duidae Chapman, 1929b: 25 (Savanna Hills, Mt. Duida, Venezuela; 4400 ft.).

Now Emberizoides duidae Chapman, 1929. See Hellmayr, 1938: 612–613, Paynter, 1970: 130, Ridgely and Tudor, 1989: 471, and Dickinson, 2003: 791.

HOLOTYPE: **AMNH 245937**, adult male, collected on summit of Savanna Hills, 4400 ft, ca. 03.25N, 65.38W (Paynter, 1982), Mount Duida, Amazonas, Venezuela, on 2 February 1929, by George H.H. Tate on the Tyler Duida Expedition (no. 5965).

COMMENTS: Chapman cited the AMNH number of the holotype in the original description, noting that he had examined four males and one female from the type locality. Only four specimens were cataloged at AMNH, and there is no record in the catalog of a male specimen collected at 4700 ft. The following three specimens are paratypes: **AMNH 271605**, male, 4400 ft; **AMNH 271606**, male, 5100 ft; **AMNH 271607**, female, 6700 ft. Of these three, AMNH 271606 was exchanged to Colección Phelps, Caracas, probably before the description of this taxon was actually published, as Chapman (1929b: 26) only gave measurements of the two males from 4400 ft and the female from 6700 ft.

Hellmayr (1938: 612–613) recognized *duidae* as a subspecies of *E. herbicola* and considered it an altitudinal subspecies; this was followed by Paynter (1970b: 130). Ridgely and Tudor (1989: 471) and Dickinson (2003: 791) considered *duidae* a full species.

Chapman (1931) compared the higher altitude avifaunas of mounts Roraima and Duida and *E. duidae* is illustrated in figure 26, p. 41. See Tate and Hitchcock (1930) for a report on the Mt. Duida area.

Volatinia jacarini pacifica Chapman

Volatinia jacarini pacifica Chapman, 1924: 11 (Trujillo, Prov. La Libertad, Peru).

Now *Volatinia jacarina peruviensis* (Peale, 1848). See Hellmayr, 1938: 255–256, and Dickinson, 2003: 791.

HOLOTYPE: **AMNH 152677**, adult male, collected at Trujillo, 350 ft, 08.07S, 79.02W (Stephens and Traylor, 1983), La Libertad, Peru, on 11 April 1919, by Harry Watkins.

COMMENTS: Chapman cited the AMNH number of the holotype in the original description and listed a large number of specimens of pacifica examined. The paratypes are the following: Peru, Huaral, AMNH 152608-152642, 12 males, 11 immature males, 12 females; Huacho, AMNH 152643–152653, six adult males, three immature males, two females; Sayan, AMNH **152654**, **152655**, two immature males; Vitarte, AMNH 152656-152670, nine males, two immature males, four females; Trujillo, AMNH 152671-152676, 152678-152681, five adult males, two immature males, three immature females; Poroto, AMNH 152682, one adult male; Viru, AMNH 152683-152688, four adult males, two females; Paletillas, AMNH 152689, one female; Lima, **AMNH 166117–166121, 166136**, five adult males, one immature male; Moquegua, AMNH 170633-170635, one adult male, two females; Cocachacra, AMNH 170636, one female; Vitor, AMNH 170637-170639, one immature male, two females; Perico, Rio Chinchipe, AMNH 182217, 182218, two males. Ecuador, Chone, AMNH 120165-120167, two immature males, one female; Puna Island, AMNH 124984-124988, 3 adult males, two females; Daule, AMNH 124989, **124990**, one male, one female; Guayaquil, AMNH 124991, 130257, 130258, two adult males, one female; Santa Rosa, AMNH 130259, 130260, 172349–172355, four males, two immature males, three females; Rio Pindo, AMNH 168102, one male; Duran, AMNH 168104, one juvenile male; Bucay, **AMNH 172340–172347**, eight, all cataloged as males; Chongoncito, AMNH 172348, one juvenile male; Portovelo, AMNH 168103, 172356, 172357, two juvenile males, one female. Of these, AMNH 124986 from Puna Island and AMNH 172340, 172343, and

172347 were exchanged to MCZ in 1928. I did not find a specimen from Palamba, Peru, in the catalog or in the collection.

For relationships among species of *Sporophila* and *Oryzoborus* based on mtDNA sequence data, see Lijtmaer et al. (2004).

Spermophila schistacea Lawrence

Spermophila schistacea Lawrence, 1862: 474 (New Granada).

Now Sporophila schistacea schistacea (Lawrence, 1862). See Hellmayr, 1938: 174–175, Wetmore et al., 1984: 563–564; and Dickinson, 2003: 791–792.

HOLOTYPE: **AMNH 41269**, adult male, collected near Lion Hill, ca. 09.13N, 79.54W (Siegel and Olson, 2008), Panama (= New Granada), in 1862, by James McLeannan. From the George N. Lawrence Collection.

COMMENTS: Apparently, Lawrence had the single specimen. He (Lawrence, 1862: 474) first proposed the name for no. 341 of his list, a specimen that he questionably identified with *Spermophila cinerea* Lafresnaye but listed the differences between no. 341 and that species. Lawrence (1863: 10) referred to his earlier description, and having satisfied himself that it was distinct, accepted the name.

Lion Hill (Wetmore et al., 1984: 563–564) is the usually accepted type locality, as McLeannan was the station master at the Lion Hill station of the Panama railway that ran across the Isthmus. Most of his collecting was done on the Atlantic side.

Spermophila intermedia insularis Gilliard

Spermophila intermedia insularis Gilliard, 1946: 571 (Princestown, Trinidad).

Now *Sporophila intermedia intermedia* Cabanis, 1851. See Paynter, 1970b: 135, Stiles, 1996, and Dickinson, 2003: 792.

HOLOTYPE: **AMNH 59106**, adult male, collected at Princestown, 10.16N, 61.23W (Times Atlas), Trinidad, on 1 March 1893, by Frank M. Chapman (no. 2758).

COMMENTS: Gilliard cited the AMNH number of the holotype in the original description and based his description on adult males only, of which he listed 14 from Trinidad (Gilliard, 1946: 574). The 13 paratypes are: "Trinidad," AMNH 41265; Princestown,

AMNH 59105; Caparo, AMNH 514427-514431; Valencia, AMNH 514432, 514437; Leelet, AMNH 514433, 514434; Point Gourde, AMNH 514435; and Chaguaramas, **AMNH 514436**. Gilliard (1946: 574) said that the two males he listed from Princestown included the type; however, there are three specimens collected by Chapman in Princestown in 1903. The label on the third specimen, AMNH 59107, is stamped "First Series," which indicates that it was part of the reference series that Zimmer had separated out from the main collection to use while working on Peruvian birds. This series was in active use by Zimmer in 1946, when this form was named, and it is possible that Gilliard did not see it. I have not considered AMNH 59107 a paratype of *insularis*.

Spermophila intermedia bogotensis Gilliard

Spermophila intermedia bogotensis Gilliard, 1946: 572 (Las Lomitas, Cauca, Colombia).

Now *Sporophila intermedia bogotensis* (Gilliard, 1946). See Paynter, 1970b: 135, Stiles, 1996, and Dickinson, 2003: 792.

HOLOTYPE: **AMNH 108411**, adult male, collected at Las Lomitas, 5000 ft, 03.38N, 76.38W (Paynter, 1997), Valle del Cauca, Colombia, on 6 March 1911, by W.B. Richardson.

COMMENTS: Gilliard cited the AMNH number of the holotype in the original description and listed his type series (Gilliard, 1946: 574) of 15 adult males from Colombia. Paratypes are: Caldas, AMNH 107350; east of Palmyra, AMNH 109188, 109189; Popayan, AMNH 109991; Chicoral, AMNH 112715; Andalucia, AMNH 117038–117040; near San Augustin, AMNH 117042; Honda, AMNH 95108, 122696; Yeononzo, Bogota region, AMNH 132275; Media Luna, AMNH 514438, 514439; and Medellin, AMNH 514440. AMNH 122696 is slightly aberrant, with one white primary in each wing.

[Fringilla plumbea Wied]

Allen (1889b: 223) did not find a type specimen in AMNH of *Fringilla plumbea* Wied (1830: 579) nor did he find the name listed in Wied's manuscript catalog. I also did not find any Wied specimens of *plumbea*. It was said by Wied to be common in the

Campo Geral of Brazil. Now: Sporophila plumbea plumbea (Wied, 1830).

Spermophila fortipes Lawrence

Spermophila fortipes Lawrence, 1865b: 171 (New Granada, line of Panama Railroad).

Now considered part of a population intermediate between *Sporophila corvina corvina* and *S. c. hicksii*. See Hellmayr, 1938: 191, Olson, 1981b, Stiles, 1996, and Dickinson, 2003: 792.

HOLOTYPE: **AMNH 41303**, adult male, collected in 1862 by James McLeannan, presumably near the Lion Hill station of the Panama railway, where he was the stationmaster. From the George N. Lawrence Collection.

COMMENTS: Lawrence had the single specimen that he considered fortipes. Hellmayr (1938: 191) considered fortipes a synonym of what he called Sporophila a. aurita. Olson (1981b) studied "aurita" specimens at length, considering them an intergrading population between S. americana corvina and S. a. hicksii. He examined Lawrence's type of fortipes and it fell at HI 2 on his hybrid index of 0 (= pure *corvina*) to 5 (= pure *hicksii*). Stiles (1996) agreed with Olson concerning the hybrid origin of the central Panamanian birds, but elevated corvina to full species status. Dickinson (2003: 792) accepted corvina as an allospecies of Sporophila and recognized both S. c. corvina and S. c. hicksii.

Siegel and Olson (2008) discussed this type locality and place it at ca. 09.13N, 79.54W.

Spermophila semicollaris Lawrence

Spermophila semicollaris Lawrence, 1863: 10 (along the line of the Panama Railroad).
Now considered part of a population intermediate between Sporophila corvina corvina and S. c. hicksii. See Hellmayr, 1938: 191, Olson, 1981b, Stiles, 1996, and Dickinson, 2003: 972.

SYNTYPES: **AMNH 41301**, male, and **AMNH 41302**, female, collected along the line of the Panama railroad, in late 1860 or early 1861, by James McLeannan and John R. Galbraith. From the Lawrence Collection.

COMMENTS: In Part II of Lawrence's (1861b: 333) Catalogue, he listed at no. 276, male and female, which he tentatively identified as *Spermophila aurita* and noted (on pp. 315–316) that the collection was made

"during the past winter" by McLeannan and Galbraith, mostly on the Atlantic slope of the Isthmus. The exceptions to an Atlantic slope locality did not include no. 276. In the original description, Lawrence (1863: 10) described both male and female, and the above specimens are the only two specimens that Lawrence identified as *semicollaris*.

Spermophila semicollaris was synonymized with Sporophila aurita aurita by Hellmayr (1938: 191). Olson (1981b) found the male syntype of semicollaris to fall at HI 2 on his hybrid index and considered it part of the stable hybrid population he referred to as "auritis." As was the case with fortipes, above, both Olson and Stiles (1996) considered semicollaris to be an intergrade between corvina and hicksii in what is now the species Sporophila corvina.

Sporophila aurita murallae Chapman

Sporophila aurita murallae Chapman, 1915b: 649 (La Muralla (alt. 600 ft.), Caquetá, Colombia). Now Sporophila murallae Chapman, 1915. See Hellmayr, 1938: 193–194, Stiles, 1996, and Ridgely and Tudor, 2009: 636.

HOLOTYPE: **AMNH 117054**, adult male, collected at Morelia (= La Muralla and Murelia, as on field label), 600 ft, 01.31N, 75.41W (Paynter, 1997), Rio Bodoquera, Caquetá, Colombia, on 11 July 1912, by Leo E. Miller (no. 3605).

COMMENTS: Chapman cited the AMNH number of the holotype in the original description and based his description on three males from Morelia. The two paratypes are: AMNH 117052 and 117053, both collected by Miller on 12 July 1912. AMNH 117053 was exchanged to BMNH in May 1921.

Hellmayr (1938: 193) considered *murallae* a subspecies of *S. aurita*. Stiles (1996) discussed this form at length and suggested (Stiles, 1996: 103) that *murallae* be considered an allospecies in the superspecies *americana*. This was followed by Dickinson (2003: 792). Chapman (1917) published his major work on the distribution of birds in Colombia and included a report on this expedition by L. Miller. In this, he (Chapman, 1917: 48) correctly spelled the type locality, and Stiles (1996: 104) later called attention to the misspelling.

[Spermophila albigularis]

See *S. m. sharpei*, below, for a discussion of this specimen.

Sporophila morelleti sharpei Lawrence

Sporophila morelleti sharpei Lawrence, 1889: 53 (Lomita, Texas).

Now *Sporophila torqueola sharpei* Lawrence, 1889. See Hellmayr, 1938: 188–189, Eitniear, 1997, and Dickinson, 2003: 792.

SYNTYPES: **AMNH 84610**, adult male, 21 July 1880, and **AMNH 84611**, female, 19 March 1880, both collected at Lomita, Texas. From the George B. Sennett Collection (nos. 2160 and 2154, respectively).

COMMENTS: In the original description, Lawrence said that he had been loaned specimens of this new form by Sennett and that the types were in AMNH. Both of the above Sennett specimens bear an added label, written by Lawrence and marked "Type" by him. In his description, Lawrence detailed the history of the nomenclature of this form from Texas: In 1851, he (Lawrence, 1851c: 124) had attributed an immature male specimen, collected at Brownsville, Texas, by J.P. McCown, to Spermophila albigularis (Spix). Various subsequent authors had decided it should be included in S. morelleti or in S. parva; but Lawrence (1889: 53), being dissatisfied with any of these identifications, provided the name S. m. sharpei. In the description, he did not mention the immature male plumage of the original McCown specimen, considering only adult males and females.

The Sennett Collection was deposited in AMNH in 1884 (but not purchased until 1903 or 1904), so Lawrence knew that his types were housed at AMNH. Because Lawrence designated syntypes in the original description of *sharpei*, other Lomita specimens in Sennett's Collection have no nomenclatural standing.

Also in the AMNH type collection is McCown's Brownsville specimen, AMNH 41296, bearing a type label. However, someone has marked through "Type" and replaced it with "Original." This is correct, as Lawrence had no intention of providing a new name in 1851, and the specimen is not part of Lawrence's type series of *sharpei* and

has no nomenclatural standing. It remains in the type collection with an added label to explain its presence.

Sporophila morelleti mutanda Griscom

Sporophila morelleti mutanda Griscom, 1930: 7 (Hacienda California, near Ocos, Pacific slope, western Guatemala).

Now *Sporophila torqueola mutanda* Griscom, 1930. See Hellmayr, 1938: 188, Paynter, 1970b: 138, and Dickinson, 2003: 792.

HOLOTYPE: **AMNH 397557**, adult male, collected at Hacienda California, 14.33N, 92.10W (USBGN, 1965), near Ocós, Pacific slope, western Guatemala, on 9 June 1926, by Alfred W. Anthony (no. 3962). From the Dwight Collection (no. 63845).

COMMENTS: Griscom cited the AMNH number of the holotype in the original description and noted that he examined 35 specimens from the Pacific coastal plain of Guatemala. Part of this Guatemalan collection was retained at MCZ, the remainder being cataloged at AMNH. There are, in addition to the holotype, 27 paratypes of mutanda, all so labeled and initialed by Griscom: Finca El Cipres, AMNH 397543, 397545–397552, five males and four females; Carolina, **AMNH 397553–397555**, two males and one female; Hacienda California, AMNH 397556, 397558–397564, 397566, 397567, 397570-397572, nine males and four females; Ochos, AMNH 397568, 397569, one male and one female.

[Fringilla atricapilla Wied]

Allen (1889b: 224) did not find a type of *F. atricapilla* Wied (1830: 569) in AMNH, nor was it listed in Wied's catalog. I also did not find a Wied specimen in the collection. Hellmayr (1938: 197) considered the name a synonym of *Sporophila c. collaris* (Boddaert, 1783).

[Fringilla melanocephala Wied]

Allen (1889b: 223) did not find a type of *F. melanocephala* Wied (1830: 577) in AMNH, although he did find the name listed in Wied's manuscript catalog. I also did not find a type specimen. Hellmayr (1938: 205) considered the name a synonym of *Sporophila n. nigricollis* (Vieillot, 1823).

[Fringilla leucopogon Wied]

Neither Allen (1889b: 223) nor I found a type of *F. leucopogon* Wied (1830: 572) in AMNH. Allen (1889b: 223) found both male and female listed in Wied's manuscript catalog, but in the original description, Wied (1830: 574) said that he had seen only the male and that he had come across it first in the region of Rio de Janiero, where he collected it on the Guajintibo River. Hellmayr (1938: 201) considered the name a synonym of *Sporophila c. caerulescens* (Vieillot, 1817).

[Fringilla rufirostris Wied]

Allen (1889b: 223) did not find a type of *F. rufirostris* (Wied, 1830: 581) in AMNH, nor did I. In the original description, Wied (1830: 584) questioned his new name, saying that it differed only in bill color from *Pyrrhula cinerea* [cinereola?] Temm. and that his birds were perhaps younger. Hellmayr (1938: 181) considered the name a synonym of *Sporophila leucoptera cinereola* (Temminck, 1820).

Sporophila hypoleuca clara Cherrie

Sporophila hypoleuca clara Cherrie, 1916a: 188 (San Lorenzo River (below the mouth of the Cuyabá), Matto Grosso).

Now *Sporophila leucoptera leucoptera* (Vieillot, 1817). See Naumburg, 1930: 344–345, Hellmayr, 1938: 182, Dickinson, 2003: 793, and Ridgely and Tudor, 2009: 637–638.

HOLOTYPE: **AMNH 128119**, adult male, collected on the Rio São Lourenço (= San Lorenzo River), 17.53S, 57.27W (Paynter and Traylor, 1991), between its mouth and the mouth of the Rio Cuiabá (= Cuyaba River), 17.05S, 56.36W (Paynter and Traylor, 1991), Mato Grosso/Mato Grosso do Sul, Brazil, on 2 January 1914, by George K. Cherrie (no. 17624) on the Roosevelt–Rondon Expedition.

COMMENTS: Cherrie cited the AMNH number of the holotype in the original description. Two additional specimens are paratypes: AMNH 128120, immature male, and AMNH 128121, female, both collected at the same place and on the same day by Cherrie. Because Cherrie was doubtful about the inclusion in *clara* of the immature male

specimen collected by H.H. Smith, said to be similar to *clara* but browner, it is not part of the type series (ICZN, 1999: 76, Art. 72.4.1).

[Fringilla pyrrhomelas Wied]

Allen (1889b: 222) listed four Wied specimens of F. pyrrhomelas Wied, 1830: AMNH 4601, 4602, 6769, and 6770, and these bear AMNH type labels. However, Wied (1830: 586) did not introduce this name, but was using the name Pyrrhula pyrrhomelas Vieillot, 1823, for his birds: "Vieillot hat diese Species unter der Benennung Pyrrhula pyrrhomelas beschrieben. Spix's Abbildung ist schlecht, die Gestalt verfehlt, die Farben zu matt, auch passt die Benennung brevirostris auf mehrere ähnliche kleine Gimpel in demselben Grade, wesshalb ich den Namen des Vieillot beibehalte." (Wied, 1830: 591). Therefore, by using Fringilla pyrrhomelas, Wied was merely introducing a new combination by including pyrrhomelas in the genus Fringilla.

Allen (1889b: 222) considered this name a synonym of *Sporophila nigroaurantia* (Boddaert, 1783), but Hellmayr (1904: 520) designated Bahia, Brazil, the type locality of *Loxia bouvreuil* P.L.S. Mueller, 1776, and considered it the oldest name for the form. The current name is *Sporophila bouvreuil bouvreuil*. These four specimens have no type standing but because they bear Allen's AMNH type labels, they are retained in the type collection with an annotation on the labels.

Sporophila insulata Chapman

Sporophila insulata Chapman, 1921a: 12 (Tumaco, southwestern Colombia).

Now Sporophila telasco (Lesson, 1828). See Hellmayr, 1938: 214, Stiles, 2004, and Ridgely and Tudor, 2009: 637, 698.

HOLOTYPE: **AMNH 118142**, adult male, collected on Tumaco Island, 01.48N, 78.47W (Paynter, 1997), Nariño, western Colombia, on 28 July 1912, by William B. Richardson.

COMMENTS: In the original description, Chapman cited the AMNH number of the holotype, listing the three paratypes that he examined. Paratypes are: AMNH 118141, 118143, males, considered immature by Chapman, and AMNH 118144, female, all collected on Tumaco Island, on 28 July 1912.

Until recently considered a full (Dickinson, 2003: 793), and perhaps endangered, species, *Sporophila insulata* was studied by Stiles (2004) on Bocagrande Island. His conclusion was that *insulata* is best considered a subspecies or color morph of *S. telasco*, with further study needed to determine which.

[Fringilla crassirostris Wied]

No specimens were found in AMNH by Allen (1889b: 222) or by me. Wied (1830: 564) introduced *Fringilla crassirostris* and (p. 566) noted that he found it on the Rio Espirito Santo and at Caravellas. *F. crassirostris* of Wied was found to be different from and junior to *Loxia crassirostris* Gmelin, 1789. Cabanis (1851: 151, footnote) provided the new name *Oryzoborus Maximiliani*. Hellmayr (1938: 240) recognized the form as *Oryzoborus crassirostris maximiliani* Cabanis, 1851, accepting Gmelin's name for the species.

See Dickinson et al. (2011: 80–81) for the dating of Cabanis (1851).

Oryzoborus angolensis brevirostris Berlepsch

Oryzoborus angolensis brevirostris Berlepsch, 1908: 119 (Cayenne).

Now *Oryzoborus angolensis angolensis* (Linnaeus, 1766). See Hartert, 1919: 154, Hellmayr, 1938: 246–247, Olson, 1981a, Dickinson, 2003: 793, and Ridgely and Tudor, 2009: 634.

HOLOTYPE: **AMNH 514185**, adult male, collected at Cayenne, French Guiana, on 22 November 1902, by George K. Cherrie and Benjamin T. Gault. From the Rothschild Collection.

COMMENTS: In the original description, Berlepsch designated as type the male specimen collected at Cayenne on 22 November 1902, and bearing Cherrie's number 862. Unfortunately, Cherrie's number is blotted, but doesn't appear to have been 862. However, the specimen is the only one collected on 22 November 1902 and is the holotype. It bears a Rothschild type label on which Hartert has written "862," but when this was listed by Hartert (1919: 154) in his list of types in the Rothschild Collection, it was misprinted "882," as was the page number (not 115) on which Berlepsch's description appeared.

In the original description, Berlepsch also listed the ten specimens he examined, giving the Cherrie field numbers. Seven of the nine paratypes came to AMNH: Cayenne, **AMNH 514186** (Cherrie no. 948), male, 27 November; AMNH 514187 (885), male, 24 November; Roche-Marie, AMNH 514188 (537), male, 5 November; **AMNH 514189** (675), male, 10 November; AMNH 514190 (706), immature male, 11 November; AMNH **514191** (720), male, 12 November; and **AMNH 514192** (749), female, 13 November, all collected in 1902. Of these, I was unable to find AMNH 514186 in the collection. Cherrie's numbers of the paratypes that did not come to AMNH are 632 and 795.

Hellmayr (1938: 247) synonymized brevirostris with O. a. torridus. Olson (1981a) synonymized torridus with nominate angolensis, and most recent authors have followed him; his merging the genus Oryzoborus with Sporophila has not been widely followed, but see Lijtmaer et al. (2004). Ridgely and Tudor (2009: 634) considered O. angolensis monotypic.

Amaurospiza concolor grandior Griscom

Amaurospiza concolor grandior Griscom, 1934: 414 (Peña Blanca, humid Caribbean forest of eastern Nicaragua).

Now *Amaurospiza concolor concolor* Cabanis, 1861. See Hellmayr, 1938: 237, Paynter, 1970b: 151, and Dickinson, 2003: 794.

HOLOTYPE: **AMNH 103811,** adult male, collected at Peñas Blancas (= Peña Blanca), Jinotega, Nicaragua, on 5 June 1929, by William B. Richardson.

COMMENTS: Griscom cited the AMNH number of the holotype in the original description, noting that his type series comprised three males and one female from Peñas Blancas and Rio Tuma and "the adult male in the British Museum from Paraiso, Canal Zone." The three paratypes in AMNH are: Rio Tuma, AMNH 102649, 102650, adult males, both collected on 29 November 1907; and Peñas Blancas, AMNH 103812, female, 6 June 1929.

Griscom (1934: 414) noted that the type locality was in the humid, Caribbean forest of eastern Nicaraugua. However, Howell (*in* Martínez-Sánchez and Will, 2010: 99) found

that it was in the State of Jinotega, in the central highland region (see maps on pp. xii and xiii in that publication). It is not the Peñas Blancas on the border with Costa Rica in the far west.

Melopyrrha taylori Hartert

Melopyrrha taylori Hartert, 1896: 257 (Grand Cayman).

Now *Melopyrrha nigra taylori* Hartert, 1896. See Hellmayr, 1938: 168, Bradley, 2000: 21, 37, 195–196, and Dickinson, 2003: 794.

LECTOTYPE: **AMNH 515100**, adult male, collected on Grand Cayman Island, Cayman Islands, Greater Antilles, West Indies, on 25 March 1896, by C.B. Taylor (no. 70). From the Rothschild Collection.

COMMENTS: Hartert did not designate a type in the original description, merely noting that he had "a fine series" collected by Taylor that included males, females, and young. Hartert (1919: 154) listed as type Taylor's specimen no. 70, male adult, collected on Grand Cayman on 25 March 1896, thereby designating it the lectotype. Paralectotypes that came to AMNH are: AMNH 515101(Taylor no. 88), adult male; AMNH 515102 (2), adult male; AMNH 515103 (27), immature male; AMNH 515104 (48), immature male; AMNH 515105 (72), immature male; AMNH 515106 (110), adult male; AMNH **515107** (113), adult male; **AMNH 515108** (12), female (immature male plumage); AMNH 515109 (28), female, all collected on Grand Cayman in March and April 1896 by Taylor.

Dolospingus nuchalis Elliot

Dolospingus nuchalis Elliot, 1871: 402, pl. XI (Orinoco, on the borders of British Guiana). Now Dolospingus fringilloides (Pelzeln, 1870). See Berlepsch and Hellmayr, 1905: 23–24, Hellmayr, 1938: 240, Dickinson, 2003: 794, and Ridgely and Tudor, 2009: 631.

HOLOTYPE: **AMNH 6763**, adult male, collected on the "Orenoque" (as on label), from the collection of Madame Verday (no. 5427).

COMMENTS: When Elliot named this new genus and species, he had a single specimen, which he had purchased from Madame Verday in Paris. In 1869, Elliot bought

specimens from the Verday, Verreaux, and Wied collections for the newly founded American Museum of Natural History, and the birds are part of the founding collection. This specimen had been mounted and the AMNH label has what was apparently Verday's label glued to the back. Pelzeln's species name, based on the female, has priority over Elliot's species name, based on the male (Berlepsch and Hellmayr, 1905: 23–24).

Catamenia analoides schistaceifrons Chapman

Catamenia analoides schistaceifrons Chapman, 1915b: 649 (La Mar (alt. 8260 ft.), Cundinimarca [sic], Col.).

Now *Catamenia analis schistaceifrons* Chapman, 1915. See Chapman, 1917, Hellmayr, 1938: 231–232, Dickinson, 2003: 794, and Ridgely and Tudor, 2009: 649.

HOLOTYPE: **AMNH 126670**, adult male, collected at La Mar, ca. 04.55N, 74.10W (Paynter, 1997), alt. 2680 m, on label (8260 ft, given by Chapman), near Subachoque, Cundinamarca, Colombia, on 9 (not 13) June 1913, by Manuel Gonzalez.

COMMENTS: In the original description, Chapman cited the AMNH number of the holotype and based his description on an adult male and immature male from La Mar and a female from Suba in the Bogotá Savanna. Paratypes are AMNH 126671, male, La Mar, near Subachoque, 10 June 1913; and AMNH 130595, unsexed [female], Suba, 6 February 1914.

Paynter (1997: 229) discussed the various altitudes given for La Mar. On the original label, the altitude is given as 2680 m, which is close to the 2620 m given by Paynter.

Catamenia analoides söderstromi Chapman

Catamenia analoides söderstromi Chapman, 1924: 9 (El Paso, 9200 ft., Prov. Azuay, Ecuador). Now Catamenia analis soderstromi Chapman, 1924. See Chapman, 1926, Hellmayr, 1938: 231, Dickinson, 2003: 794, and Ridgely and Tudor, 2009: 649.

HOLOTYPE: **AMNH 168098**, adult male, collected at Hacienda El Paso (= El Paso), 9200 ft, 03.22S, 79.05W (Paynter, 1993), near Nabon, Rio Charcay, Azuay, Ecuador, on 14 January 1921, by George K. Cherrie (no. 23053).

COMMENTS: Chapman cited the AMNH number of the holotype in the original description. His type series comprised three males from Valle de Cumbaya, eight males from El Paso, and three males from Quito. Paratypes are: Valle de Cumbaya, AMNH 124972–124974, three males collected in May and July 1913; El Paso, AMNH 168093-168097, 168099, 168100, seven males collected in January 1921; and Quito, AMNH 173543, male, AMNH 173544, sexed as female, collected in August 1913. Chapman probably considered this specimen sexed as a female to be a male, and he certainly had it in hand when *soderstromi* was described. The third male from Quito is a problem. There is a specimen from "Lloa," Quito, cataloged as AMNH 173545 and identified in the catalog only as Catamenia (as were the other two specimens), but I was unable to find this specimen in the collection with any species of Catamenia. It is likely to be the third specimen that is a paratype of soderstromi because it was collected by Cherrie at the same time as the other two. However, AMNH 41405 from Quito, a specimen from the Lawrence Collection, was present in the collection when Chapman named soderstromi. It seems less likely that Chapman would have included this specimen as the locality may be suspect. The three specimens from Valle de Cumbaya (misspelled Cumbaza) had earlier been considered paratypes of griseiventris (see below). Of the above paratypes, AMNH 168095 and 124973 were exchanged to MCZ in 1928.

Söderstrom was Swedish, therefore the umlaut is dropped from the scientific name (ICZN, 1999; 40, Art. 32.5.2.1).

Catamenia analoides griseiventris Chapman

Catamenia analoides griseiventris Chapman, 1919a: 267 (Cuzco, Peru).

Now Catamenia analis griseiventris Chapman, 1919. See Hellmayr, 1938: 229–230, and Dickinson, 2003: 794.

HOLOTYPE: **AMNH 129178**, adult male, collected at Cuzco, 11,000 ft, 13.31S, 71.59W (Stephens and Traylor, 1983), Cuzco, Peru, on 16 November 1914, by Harry and Casimir Watkins.

COMMENTS: Chapman cited the AMNH number of the holotype in the original

description and listed 16 specimens in his type series. Paratypes in AMNH are: Valle de Cumbaya (spelled Cumbaza on label), **AMNH 124972–124974**, three males, May and July 1913; Cuzco, AMNH 129179, female, 16 October 1914; Huaracondo Cañon, AMNH 145565-145567, two males and one female, 23 July 1916; and Pisac, AMNH **166576**, male, **AMNH 166577**, female, 17 April 1917. The three paratypes from Valle de Cumbaya are also paratypes of Chapman's C. a. soderstromi (see above); AMNH 124973 was exchanged to MCZ in 1928. The two specimens from Pisac were exchanged to AMNH by USNM, and the other Pisac specimens are probably in USNM. The specimens listed from Chospyoc and Torontoy were apparently borrowed from other institutions.

Euetheia sharpei Hartert

Euetheia sharpei Hartert, 1893a: 37 (Bonaire, Curação, Aruba).

Now *Tiaris bicolor sharpei* (Hartert, 1893). See Hellmayr, 1938: 126, and Dickinson, 2003: 795.

LECTOTYPE: **AMNH 515275**, adult male, collected on Curaçao, on 28 July 1892, by Ernst Hartert (no. 246). From the Rothschild Collection.

COMMENTS: Hartert did not designate a type in the original description, describing male and female and giving the distribution as Bonaire, Curação, and Aruba. Hartert (1919: 154) listed as the type the male specimen from Curação bearing his number 246, thereby designating it the lectotype. The total number of specimens was not specified; a total of eight specimens from the three islands came to AMNH with the Rothschild Collection. The seven paralectotypes, all collected in June and July 1892 by Ernst and Claudia Hartert, now in AMNH are: Bonaire, AMNH 515270 (Hartert no. 177), female; Aruba, AMNH 515271 (117) adult male; Bonaire, AMNH 515272 (163), adult male; Curação, AMNH **515273** (18), **AMNH 515274** (40), juvenile males, AMNH 515276 (249) AMNH 515277 (80), adult males.

Hartert (1893b: 314–317) in his report on the birds collected on his 1892 trip, discussed the West Indian forms of *Euetheia* in detail.

Phonipara fumosa Lawrence

Phonipara fumosa Lawrence, 1874: 396 (Trinidad).
Now Tiaris fuliginosus fumosus (Lawrence, 1874).
See Hellmayr, 1938: 127, Bates, 1997: 99–100, and Dickinson, 2003: 795.

HOLOTYPE: **AMNH 41330**, unsexed [male plumage], collected on Trinidad Island, West Indies, by A.H. Alexander. From the George N. Lawrence Collection.

COMMENTS: The original description apparently applied to a single male specimen. AMNH 41330 is marked "Type" in Lawrence's hand, the measurements agree with those given by Lawrence, and it is the only specimen of this form that came to AMNH with the Lawrence Collection.

David and Gosselin (2002: 262) pointed out that the ending of the genus *Tiaris* is not gender indicative, but that it was originally described in combination with a masculine adjective and should be considered masculine.

A.H. Alexander was a friend of Lawrence's and, according to Wynne (1969: 14), a taxidermist in New York.

[Fringilla fuliginosa Wied]

Allen (1889b: 224) did not find the type of *Fringilla fuliginosa* Wied (1830: 628) in AMNH, nor was it listed in Wied's manuscript catalog. I also did not find it in the collection. Wied (1830: 630) noted that he had a single specimen, already made into a birdskin when he obtained it. Hellmayr (1938: 127) recognized it as *Tiaris fuliginosa fuliginosa* (Wied, 1830).

Loxigilla Chazaliei Oustalet

Loxigilla Chazaliei Oustalet, 1895: 184 (Barbuda). Now Loxigilla noctis ridgwayi (Cory, 1892). See Hellmayr, 1938: 163, and Dickinson, 2003: 795.

SYNTYPES: **AMNH 514322**, male, and **AMNH 514323**, male, collected on Barbuda Island, Lesser Antilles, West Indies, on 25 February 1895, by Comte de Dalmas (nos. 159 and 158, respectively). From the Rothschild Collection.

COMMENTS: In the original description, Oustalet did not designate a type, but noted that Dalmas had collected two specimens; Hartert (1919: 156) listed these two syntypes but with the incorrect date of 15 February.

The original labels of both are marked "Type." The species name was from Dalmas' yacht, "*Chazalie*." Hellmayr (1931: 163) noted that Rothschild had purchased most of Dalmas' collection.

Loxigilla noctis var. propinqua Lawrence

Loxigilla noctis var. propinqua Lawrence, 1878a: 58 (Guiana).

Now Loxigilla noctis grenadensis (Cory, 1892). See Hellmayr, 1938: 167, Paynter, 1970: 159–160, and Dickinson, 2003: 795.

SYNTYPES: **AMNH 41219**, adult male, "Guiana" (Br. Guiana on label), undated, and **AMNH 41220**, adult male, "Esequibo River," Guyana, in the winter of 1876/1877, both collected by A.H. Alexander. From the George N. Lawrence Collection.

COMMENTS: In the original description, Lawrence said that he examined three males in Alexander's collection. The above two syntypes are the only specimens of propingua that came to AMNH with the Lawrence Collection. The collecting locality has been questioned almost from the time the form was described (Hellmayr, 1938: 167, footnote 1). Bond (1939: 5, and in Paynter, 1970b: 160, footnote 1) thought that they were collected in Grenada, when Alexander was on his way to Guyana. Most authors accept this synonymy. Lawrence's label on AMNH 41219 has his pencilled measurements that are almost the same as those published in the original description: "L. 4 1/2, wing 2 5/8, tail 2, tarsi $\frac{3}{4}$ (rather than $\frac{5}{8}$)."

A.H. Alexander was a taxidermist in New York City (Wynne, 1969: 4). This serves to explain Lawrence's statement that "Mr. Alexander obtained quite a number of this small species in Guiana, but he had disposed of most of them before they came under my notice....I was unable to find a female among the birds collected by him: this is easily accounted for; his object in making collections being to secure the more showy and saleable males."

Ridgway was the first systematist to work on the G. Baur collection from the Galapagos and he named many of the new forms. Later, Rothschild bought some 1100 of the Baur specimens, including Ridgway's types (Rothschild and Hartert, 1899: 85), and these specimens came to AMNH in 1932 with the purchase of the Rothschild Collection. Many of the specimens from the Baur Galapagos collection (see below) were marked "ex spirits." This refers to specimens that were originally preserved in fluid but were later made into study skins. I have been unable to determine whether they were skinned before Ridgway worked on the collection or whether Rothschild had them prepared. To the difficulty of identifying the Galapagos finches to subspecies must be added the problem posed by the possibility that many were still wet when they were studied. Some of the specimens, but not all, bear numbers that are apparently Baur field numbers. I have found no mention of where a list of his numbers might be.

Geospiza pachyrhyncha Ridgway

Geospiza pachyrhyncha Ridgway, 1896a: 293 (Tower Island).

Now *Geospiza magnirostris* Gould, 1837. See Hellmayr, 1938: 130, Paynter, 1970b: 161, and Dickinson, 2003: 795.

SYNTYPES: **AMNH 516887**, **AMNH 516888**, unsexed [female plumage], Genovesa (= Tower) Island, 00.20N, 89.58W (Paynter, 1993), Galapagos Islands, Ecuador. From the G. Baur Collection via the Rothschild Collection.

COMMENTS: In the original description, Ridgway did not designate a type or mention the number of specimens he examined; nor did he (Ridgway, 1896b: 516) later provide additional information, except to say that he had returned the specimens to Dr. Baur. The above two specimens were certainly seen by Ridgway, as both have unnumbered USNM labels attached, the institution where Ridgway worked. The Rothschild label of AMNH 516887 is annotated: "Spec.A in ms notes of H.S. Swarth, May 16, 1930" [unsigned] and that of AMNH 516888 "Spec. B in ms notes of H.S. Swarth, May 16, 1930" [unsigned]. The USNM label of the latter bears the numbers "668," probably Baur's field number, and "Q-2" of unknown significance and on the reverse "Fig. 8, Pl. VI, N.Z. VI, 1899," a reference to Rothschild and Hartert (1899).

Rothschild and Hartert (1899: 85, 141, 156) noted that Rothschild had purchased

the bulk of the collection made by Baur and Adams, some 1100 specimens, also mentioning Ridgway's description of *pachyrhyncha* and considering it a synonym of *G. strenua*, now a synonym of *G. magnirostris*. Hartert (1919: 152–153) did not list these types and, even though Hellmayr (1938: 130) referred to their being in AMNH, they have lain unnoticed in the collection. The above two specimens are the only Baur specimens of *pachyrhyncha* that came to AMNH with the Rothschild Collection, but it is possible that Rothschild had exchanged others with another collection.

Geospiza bauri Ridgway

Geospiza bauri Ridgway, 1894: 362 (James Island). Now Geospiza fortis Gould, 1837. See Hellmayr, 1938: 131, Dickinson, 2003: 795.

HOLOTYPE: **AMNH 517124**, adult male, collected on Santiago (= San Salvador or James) Island, 00.14S, 90.45W (Paynter, 1993), Galapagos Islands, Ecuador, on 17 (not 7) August 1891. From the G. Baur Collection (no. 562) via the Rothschild Collection.

COMMENTS: In the original description, Ridgway cited Baur's unique field number of the holotype, but misread the date, which was correctly cited by Hartert (1919: 152). The specimen bears Baur's field label, an unnumbered USNM type label (undoubtedly attached by Ridgway), and a Rothschild type label. On the reverse of the USNM label is reference to "fig. 24, pl. VI, Novitates Zoologicae VI (1899)," pl. VI in Rothschild and Hartert (1899) on Galapagos birds. Ridgway listed an immature male and an immature female in Baur's collection in addition to the holotype; these two additional specimens were also cited by Ridgway (1896b: 519) and by Rothschild and Hartert (1899: 161). The paratypes are: AMNH **517122** and **517123**, both labeled female, from Santiago Island and both were marked "ex spirits."

Geospiza dubia simillima Rothschild and Hartert

Geospiza dubia simillima Rothschild and Hartert, 1899: 161 (Charles Island).

Now *Geospiza fortis* Gould, 1837. See Hellmayr, 1938: 131, and Dickinson, 2003: 795.

LECTOTYPE: **AMNH 517188**, adult male, collected on Floreana (= Charles) Island, 01.17S, 90.26W (Paynter, 1993), Galapagos Islands, Ecuador, on 4 November 1897, by C.D. Hull on the Webster-Harris Expedition (no. 2267). From the Rothschild Collection.

COMMENTS: No type was designated in the original description, the type series being listed as one adult male and four immatures. Hartert (1919: 152) listed the adult male as the type, thereby designating it the lectotype. Hull's name is there misspelled as "Hall." The paralectotypes are: AMNH 517190–517192, immature males, collected on Floreana Island in November 1897 by the Webster-Harris Expedition; and AMNH 517194, immature male, collected on Floreana Island in July 1891 by G. Baur (ex spirits).

Geospiza harterti Ridgway

Geospiza harterti Ridgway, 1901: 507 (Chatham Island).

Now *Geospiza fuliginosa* Gould, 1837. See Hellmayr, 1938: 132, Paynter, 1970b: 161, and Dickinson, 2003: 795.

HOLOTYPE: **AMNH 517667**, adult male (ex spirits), collected on San Cristóbal (= Chatham) Island, 00.50S, 89.26W (Paynter, 1993), Galapagos Islands, Ecuador, on 8 September 1891. From the G. Baur Collection via the Rothschild Collection.

COMMENTS: Rothschild and Hartert (1899: 163) listed as "Geospiza spec. inc." a single black male, skinned from spirits, collected on Chatham Island on 8 September 1891, with culmen 14.5 mm, bill from nostril to tip 9.8, and wing 69. They did not introduce a new name based on this single specimen, but it is this specimen that Ridgway (1901: 507) named G. harterti, citing the above information.

Rothschild and Hartert (1902: 397) accepted this name in light of additional specimens they had acquired and the holotype was listed by Hartert (1919: 153).

Geospiza fuliginosa minor Rothschild and Hartert

Geospiza fuliginosa minor Rothschild and Hartert, 1899: 162 (Bindloe and Abingdon Islands).

Now *Geospiza fuliginosa* Gould, 1837. See Hellmayr, 1932: 132, Paynter, 1970b: 161, and Dickinson, 2003: 795.

LECTOTYPE: **AMNH 517606**, adult male (ex spirits), collected on Marchena (= Bindloe) Island, 00.21N, 90.29W (Paynter, 1993), Galapagos Islands, Ecuador, on 5 September 1891. From the G. Baur Collection via the Rothschild Collection.

COMMENTS: No type was designated in the original description, Rothschild and Hartert only mentioning that they examined 43 specimens from Marchena and 73 specimens from Pinta (= Abingdon) islands. Hartert (1919: 152) listed Baur's adult male spirit specimen, collected on Marchena Island on 5 September 1891, as the type of *Geospiza fuliginosa minor*, thereby designating it the lectotype. The paralectotypes in AMNH are: AMNH 517593–517605, 517607 from Marchena Island, and AMNH 517608–517622 from Pinta Island, all collected on the Webster-Harris Expedition.

Geospiza acutirostris Ridgway

Geospiza acutirostris Ridgway, 1894: 363 (Tower Island, Galapagos).

Now *Geospiza difficilis difficilis* Sharpe, 1888. See Hellmayr, 1938: 132–133, Paynter, 1970b: 162, and Dickinson, 2003: 795.

HOLOTYPE: **AMNH 517637**, unsexed [black adult male plumage], collected on Genovesa (= Tower) Island, 00.20N, 89.58W (Paynter, 1993), Galapagos Islands, Ecuador. From the G. Baur Collection via the Rothschild Collection.

COMMENTS: In the original description, Ridgway gave only the measurements in inches of the type, which was stated to be from Tower Island and in G. Baur's collection, and mentioned that there were seven specimens, four of which were in black plumage. This description was repeated by Ridgway (1896b: 531-532) and the bill is illustrated in pl. LVII, fig. 21. AMNH 517637 bears an unnumbered USNM type label with the name, locality, Baur's name, and the number 661 (probably Baur's field number, but not cited in the description), indicating that it was the specimen Ridgway intended as the type. It bears as well a Rothschild type label with the name, locality, the number 661, and a reference to the description. Ridgway's measurements of the type were given in tenths of inches, which

Rothschild and Hartert (1899: 162) said were correctly given. Measurements in millimeters given by Ridgway (1901: 506) were not said to be of the type, but are a direct conversion from the inches given earlier. A footnote on p. 507 noted that the type was by that time in the Rothschild Collection. Hartert (1919: 152) listed the type without adding any information. Ridgway's measurements (in millimeters) of the type were: wing 62.23, tail, 40.13, culmen 13.97, depth of bill at base 7.62. My measurements of AMNH 517637 are: wing 63.0, tail 39.5, culmen 14.0, bill depth 8.0. Because the two type labels which AMNH 517637 bears indicate that it is Ridgway's selected type and the measurements are very close, I consider it the holotype. It is unclear whether Ridgway's wing measurement was made before or after skinning.

Contra Ridgway, there are eight Baur specimens of acutirostris in AMNH from the Rothschild Collection. All of them are "ex spirits." Three of them, including the type, are black males, one is unsexed but blackish, and four are females. Paratypes in AMNH are: **AMNH 517630–517636**. There seems to be no way to tell which three of the four females Ridgway examined, nor is it clear whether they were made into skins before Ridgway saw them or whether this was done by Rothschild. All of them are labeled acutirostris on the Rothschild label. In the absence of further information, I have considered the seven specimens in addition to the holotype to be paratypes of *acutirostris*.

Geospiza scandens septentrionalis Rothschild and Hartert

Geospiza scandens septentrionalis Rothschild and Hartert, 1899: 165 (Wenman and Culpepper Islands).

Now *Geospiza difficilis septentrionalis* Rothschild and Hartert, 1899. See Hellmayr, 1938: 133–134, and Dickinson, 2003: 795.

HOLOTYPE: **AMNH 517734**, adult male, collected on Wolf (= Wenman) Island, 01.23N, 91.49W (Paynter, 1993), Galapagos Islands, Ecuador, on 4 August 1894, by C.M. Harris (no. 311), on the Webster-Harris Galapagos Expedition. From the Rothschld Collection.

COMMENTS: Rothschild and Hartert gave Harris' unique field number "311" of the holotype in the original description and described young and adult males and females without giving the number of specimens in their type series. Specimens from both Wolf and Darwin (= Culpepper) islands were included. Paratypes in AMNH are: Wolf Island, males, AMNH 517723–517733, 517735, females, AMNH 517736, 517738–517743; Darwin Island, females, 517744–517746, males, 517747–517749, 517752–517755, all collected on the Webster-Harris Expedition in 1897.

Geospiza barringtoni Ridgway

Geospiza barringtoni Ridgway, 1894: 361 (Barrington Island).

Now *Geospiza scandens intermedia* Ridgway, 1894. See Hellmayr, 1938: 134, Rothschild and Hartert, 1899: 164, and Dickinson, 2003: 796.

HOLOTYPE: **AMNH 517834**, adult male, collected on Santa Fe (= Barrington) Island, 00.49S, 90.04W (Paynter, 1993), Galapagos Islands, Ecuador, in July 1891. From the G. Baur Collection (no. 596) via the Rothschild Collection.

COMMENTS: In the original description, Ridgway cited Baur's unique number of the holotype, noting that Baur had collected two adult males and a specimen in streaked plumage. He also gave the collecting date of the holotype as 9 July 1891, but this day does not appear on the labels now present on the specimen. The holotype bears an unnumbered USNM type label with Baur's number on it, placed there by Ridgway, a Rothschild type label, and a Rothschild Collection label. In addition to the holotype, there are now three Baur specimens in AMNH, ex spirits, all of which are in female or subadult male plumage and without any indication as to which Ridgway may have examined. These possible paratypes are: female, AMNH 517827, and males, AMNH 517837, 517838, all collected in July 1891 on Santa Fe Island.

Geospiza propinqua Ridgway

Geospiza propinqua Ridgway, 1894: 361 (Tower Island, Galapagos).

Now *Geospiza conirostris propinqua* Ridgway, 1894. See Rothschild and Hartert, 1899: 159–160, Hellmayr, 1938: 136, and Dickinson, 2003: 796. HOLOTYPE: **AMNH 517025**, adult male, collected on Genovesa (= Tower) Island, 00.20N, 89.58W (Paynter, 1993), Galapagos Islands, Ecuador, on 2 September 1891. From the G. Baur Collection (no. 597) via the Rothschild Collection.

COMMENTS: Ridgway gave Baur's unique field number of the holotype in the original description and that number is written on all three of its labels. It bears an unnumbered USNM type label attached by Ridgway, a Rothschild type label, and a Smithsonian Institution label noting that the specimen is from spirits. The size of the type series was not given, but measurements of five adult males were provided (Ridgway, 1894: 362, footnote). Paratype in AMNH is: AMNH 517026, adult male, Genovesa Island, 2 September 1891, Baur Collection, ex spirits. There are two additional possible paratypes: AMNH 517043, female, Genovesa Island, 2 September 1891, Baur Collection, ex spirits; and AMNH 517045, in immature plumage, not said to be a Baur specimen but bearing a USNM collection label with only the number "656" and the locality "Tower I." The number "656" is within the range of Baur's field numbers.

Geospiza darwini Rothschild and Hartert

Geospiza darwini Rothschild and Hartert, 1899: 158 (Culpepper Island, Galapagos).

Now *Geospiza conirostris darwini* Rothschild and Hartert, 1999. See Hellmayr, 1938: 130, Paynter, 1970b: 164, and Dickinson, 2003: 796.

HOLOTYPE: **AMNH 516980**, adult male, collected on Darwin (= Culpepper) Island, 01.39S, 92.00W (Paynter, 1993), Galapagos Islands, Ecuador, on 27 July 1897, by Rollo Beck on the Webster-Harris Expedition (no. 157). From the Rothschild Collection.

COMMENTS: No type was designated in the text of the original description, where measurements were given for four males and one female, but Beck's specimen no. 157 is designated as the type of *Geospiza darwini* in the same publication on pl. VI, fig. 21, a drawing of the beak of the holotype. Reference to this plate is also written on the reverse of the Rothschild type label of AMNH 516980. Paratypes in AMNH, all collected on Darwin Island on the Webster-Harris

Expedition in 1897, are: AMNH 516977, adult male, 26 July, by Harris; AMNH 516978, adult male, 26 July, by Hull; AMNH 516979, immature male, 27 July, by Drowne; AMNH 516785, adult male, 27 July, by Beck, the last three now identified as *magnirostris*. I think that Rothschild and Hartert considered the immature bird to be a female. The right wing of that specimen is missing feathers, but the measurement of the left wing is 84 mm, the measurement given for the female.

Camarhynchus bindloei Ridgway

Camarhynchus bindloei Ridgway, 1896a: 294 (Galapagos Archipelago (Bindloe Island)).

Now *Camarhynchus psittacula habeli* Sclater and Salvin, 1870. See Hellmayr, 1938: 138, and Dickinson, 2003: 796.

LECTOTYPE: **AMNH 518015**, adult male, collected on Marchena (= Bindloe) Island, 00.21N, 90.29W (Paynter, 1993), Galapagos Islands, Eduador, in September 1891. From the G. Baur Collection (no. 696) via the Rothschild Collection.

COMMENTS: In the original description, Ridgway's type was an adult male in Baur's collection, with measurements given in tenths of inches. No further information was included, nor was the size of his type series indicated. Ridgway (1896b: 556) added that the type was collected on 5 September 1891. However, the specimen upon which Ridgway had tied the USNM type label and filled in with the name Chamarhynchus bindloei, does not actually have the day in September on which it was collected. There are six Baur specimens of bindloei in AMNH, the other five of which are dated 5 September 1891, and probably all six were collected on the same day. Ridgway wrote the Baur number "696" on the reverse of this label, but nowhere mentioned it in his publications. In addition to the unnumbered USNM type label, AMNH 518015 also has a Rothschild type label bearing the number "696" and a reference to the description of bindloei. A third label is that of the Rothschild Collection, identifying the specimen as Geospiza habeli, a Baur specimen collected on Bindloe Island in September 1891. Hartert (1919: 153) identified the type as the male specimen without a day of collection on the label, thus

agreeing with the specimen bearing the type labels and thereby designating it the lectotype.

Paralectotypes in AMNH, all labeled as having been collected by Baur on 5 September 1891 on Marchena Island, are: AMNH 518016, male; AMNH 518017, male [immature plumage], Baur no. 699; AMNH 518018, female; AMNH 518019, female; AMNH 518020, female, Baur no. 698, II 2 (significance unknown).

Camarhynchus compressirostris Ridgway

Camarhynchus compressirostris Ridgway, 1896a: 294 (Jervis Island).

Now *Camarhynchus psittacula psittacula* Gould, 1837. See Hellmayr, 1938: 137, and Dickinson, 2003: 796.

HOLOTYPE: **AMNH 518005**, female, collected on Rabida (= Jervis) Island, 00.24S, 90.42W (Paynter, 1993), Galapagos Islands, Ecuador, on 8 August 1891. From the G. Baur Collection (no. 471) via the Rothschild Collection.

COMMENTS: In the original description, Ridgway gave Baur's unique field number of the holotype, but did not mention the number of specimens examined. The holotype bears an unnumbered USNM type label filled in by Ridgway, a Rothschild type label, with reference to the description and Baur's field no., a Rothschild Collection label, and Baur's original label. There are two paratypes in AMNH: AMNH 518003, male, and AMNH 518006, female, both collected on 8 August 1891, from the Baur Collection (no number, and no. 464 respectively).

Camarhynchus affinis Ridgway

Camarhynchus affinis Ridgway, 1894: 365 (Albemarle Island, Galapagos).

Now *Camarhynchus psittacula affinis* Ridgway, 1894. See Hellmayr, 1938: 137–138, Paynter, 1970b: 165, and Dickinson, 2003: 796.

HOLOTYPE: AMNH 518041, adult, collected on Cowly Bay, on mountains, Isabela (= Albemarle) Island, 00.30S, 91.06W (Paynter, 1993), Galapagos Islands, Ecuador, on 10 August 1891. From the G. Baur Collection (no. 598) via the Rothschild Collection.

COMMENTS: In the original description, Ridgway cited Baur's field number of the holotype and noted that he had two additional Baur specimens. The holotype bears an unnumbered USNM type label filled in by Ridgway with the number "598" on the reverse, a Rothschild type label with a reference to the description on the reverse, and a USNM printed collection label with the printing crossed out and "598" and locality data added. Paratypes at AMNH are: AMNH 518039 and AMNH 518040 (Baur no. 641), females, collected on Isabela in August 1891, from the Baur Collection.

Camarhynchus incertus Ridgway

Camarhynchus incertus Ridgway, 1896a: 294 (James Island).

Now *Camarhynchus psittacula psittacula* Gould, 1837. See Hellmayr, 1938: 138, and Dickinson, 203: 796.

HOLOTYPE: **AMNH 518058**, female, collected on Santiago (= San Salvador or James) Island, 00.14S, 90.45W (Paynter, 1993), Galapagos Islands, Ecuador, on 13 August 1891. From the Baur Collection (no. 521) via the Rothschild Collection.

COMMENTS: Baur's unique field number of the holotype was given in the original description with no information provided on the size of the type series. Ridgway (1896b: 560) noted that the male was unknown. The holotype bears three labels: an unnumbered USNM type label filled in by Ridgway, a Rothschild type label with Baur's field number and reference to the original description, and Baur's original label with full data. It was the single Baur specimen of this form that came to AMNH.

Camarhynchus productus Ridgway

Camarhynchus productus Ridgway, 1894: 364 (Albemarle Island, Galapagos).

Now *Camarhynchus pallidus productus* Ridgway, 1894. See Hellmayr, 1938: 141, Paynter, 1970b: 166, and Dickinson, 2003: 796.

HOLOTYPE: **AMNH 518207**, adult male, collected on Isabela (= Albemarle) Island, 00.30S, 91.06W (Paynter, 1993), Galapagos Islands, Ecuador, on 31 July 1891. From the G. Baur Collection (no. 404) via the Rothschild Collection.

COMMENTS: Ridgway gave Baur's field number of the holotype in the original description. Although he did not mention additional specimens there, later he (Ridgway, 1896b: 567) gave details for two additional specimens. Three additional Baur specimens from Isabela came to AMNH with the Rothschild Collection, and I consider all three probable paratypes: females, AMNH 518226, 518227, July 1891, and AMNH 518228, 23 July 1891, Baur no. 367.

Certhidea becki Rothschild

Certhidea becki Rothschild, 1898: 53 (Wenman Island).

Now *Certhidea olivacea becki* Rothschild, 1898. See Hellmayr, 1938: 143, and Dickinson, 2003: 796

LECTOTYPE: **AMNH 522618**, adult male, collected on Wolf (= Wenman) Island, 01.23N, 91.49W (Paynter, 1993), Galapagos Islands, Ecuador, on 31 July 1897, by C.D. Hull on the Webster-Harris Galapagos Expedition (no. 236). From the Rothschild Collection.

COMMENTS: Rothschild did not designate a type in the original description, only saying that he had a good series. Rothschild and Hartert (1899: 150) mentioned a series of ten specimens from Wolf Island but still did not designate a type. Hartert (1919: 172) listed as the type of *becki* male specimen no. 236 collected by Hull on Wenman Island on 31 July 1897, thereby designating it the lectotype. Of the nine paralectotypes, the following six came to AMNH: AMNH 522621–522626, three males and three females, collected on Wolf Island 31 July 1897–4 August 1897.

Certhidea drownei Rothschild

Certhidea drownei Rothschild, 1898: 53 (Culpepper Island).

Now *Certhidea olivacea becki* Rothschild, 1898. See Hellmayr, 1938: 143, and Dickinson, 2003: 796.

LECTOTYPE: **AMNH 522616**, adult male, collected on Darwin (= Culpepper) Island, 01.39N, 92.00W (Paynter, 1993), Galapagos Islands, Ecuador, on 27 July 1897, by Rollo H. Beck on the Webster-Harris Galapagos Expedition (no. 148). From the Rothschild Collection.

COMMENTS: Rothschild did not designate a type in the original description, noting that

he had only two specimens, both marked as males; Rothschild and Hartert (1899: 150) did not add further information. Hartert (1919: 172) listed as the type of *drownei* the specimen bearing the unique field no. 148, thereby designating it the lectotype. The paralectotype is: **AMNH 522617**, male, Darwin Island, 27 July 1897, by Beck.

Certhidea mentalis Ridgway

Certhidea mentalis Ridgway, 1894: 359 (Tower Island).

Now Certhidea olivacea mentalis Ridgway, 1894. See Hellmayr, 1938: 143, Paynter, 1970b: 167, and Dickinson, 2003: 796.

HOLOTYPE: **AMNH 522582**, unsexed, collected on Genovesa (= Tower) Island, 00.20N, 89.58W (Paynter, 1993), Galapagos Islands, Ecuador, on 2 September 1891. From the G. Baur Collection (no. 594) via the Rothschild Collection.

COMMENTS: Ridgway designated Baur specimen no. 594 the holotype in the original description and said that there were five specimens in the Baur Collection. The holotype bears an unnumbered USNM type label attached by Ridgway, a Rothschild type label with reference to the original description, and an USNM collection label with Baur data filled in.

Presumably, Ridgway (1894: 357) had the entire Baur Galapagos collection at his disposal for study soon after Baur returned from the Galapagos, but had apparently returned the specimens to Baur before the delayed publication of his paper (Ridgway, 1896a: 293). Rothschild then purchased some 1100 specimens from Baur (Rothschild and Hartert, 1899: 141), but it is not known whether this was the entire collection. Some of the specimens were turned over for sale to W.F.H. Rosenberg, a London dealer in natural history items. In the case of C. mentalis, Ridgway said that there were five specimens in Baur's collection. This may mean in addition to the type, for there are in fact five specimens now in AMNH that could be considered paratypes, two of which were exchanged to AMNH from W.F.H. Rosenberg before the Rothschild Collection was purchased. Details of the labeling of these five specimens, all from the 1891 collection, follow. Exchanged from Rosenberg: AMNH

156538, unnumbered USNM collection label only, marked "Certhidea mentalis sp. nov.," M-1 or Nr-1, Baur no. 638, ex spirits. AMNH 156539, Rothschild label only, marked Baur, ex spirits. From the Rothschild Collection: AMNH 522563, female, Rothschild label only, marked Baur, ex spirits. AMNH 522583, unnumbered USNM label, marked "Certhidea mentalis sp. nov.," Z-1, Baur no. 635; Rothschild label, Baur ex spirits. AMNH 522584, unnumbered USNM label, marked "Certhidea mentalis sp. nov.," A-2, Baur no. 634; Rothschild label, Baur ex spirits.

Certhidea salvini Ridgway

Certhidea salvini Ridgway, 1894: 358 (Indefatigable Island, Galapagos Archipelago).

Now Certhidea olivacea olivacea Gould, 1837. See Hellmayr, 1938: 144, and Dickinson, 2003: 796.

HOLOTYPE: **AMNH 522467**, adult male, collected on Santa Cruz (= Indefatigable) Island, 00.38S, 90.23W (Paynter, 1993), Galapagos Islands, Ecuador, on 6 August 1891. From the G. Baur Collection (no. 438) via the Rothschild Collection.

COMMENTS: Ridgway cited Baur's unique field number of the holotype in the original description and said the type series comprised seven specimens from Santa Cruz, two of which were in the USNM, but which were not said to be Baur specimens. The holotype bears Baur's original label, an unnumbered USNM type label affixed by Ridgway, and a Rothschild type label with a reference to the description. Of the six paratypes, three are in AMNH: females, AMNH 522482 (Baur no. 415), 5 August 1891; AMNH 522483 (414), 5 August 1891; and AMNH 522484, July 1891.

Certhidea albemarlei Ridgway

Certhidea albemarlei Ridgway, 1894: 360 (Albemarle Island).

Now *Certhidea olivacea olivacea* Gould, 1837. See Hellmayr, 1938: 144, and Dickinson, 2003: 796.

HOLOTYPE: **AMNH 522446**, unsexed, collected on Isabela (= Albemarle) Island, 00.30S, 91.06W (Paynter, 1993), Galapagos Islands, Ecuador, on 21 July 1891. From the Baur Collection (no. 633, not 595) via the Rothschild Collection.

COMMENTS: In the original description, Ridgway said that the type was collected on Albemarle Island on 21 July 1891 by Baur and cited Baur's number as "595." Hartert (1919: 172) noted that this number should be "633" and was mistakenly given by Ridgway. AMNH 522446 bears three labels: an unnumbered USNM type label with the name filled in by Ridgway, Rothschild type label with the number "633" and reference to the original description, and a USNM collection label with the number "633," Albemarle, July 21, and (b-2), the significance of which is unknown. The original label is not present. Because no specimen bearing Baur's no. 595 came to AMNH, because AMNH 522446 bears the USNM type label filled in by Ridgway, and because Hartert called attention to the error, AMNH 522446 is accepted as the holotype of Certhidea olivacea albe*marlei*. There are two paratypes that came to AMNH: AMNH 522447, and AMNH **522448**, both males, collected at La Tortuga, Isabela Island, in July 1891 by Baur. Another specimen mentioned in the original description, collected at Cowley Bay, East Isabela, on 10 August, as quite like the type, did not come to AMNH. It would also be a paratype.

Certhidea bifasciata Ridgway

Certhidea bifasciata Ridgway, 1894: 359 (Barrington Island).

Now *Certhidea olivacea bifasciata* Ridgway, 1894. See Hellmayr, 1938: 145, and Dickinson, 2003: 796.

HOLOTYPE: **AMNH 522649**, unsexed, collected on Santa Fe (= Barrington) Island, 00.49S, 90.04W (Paynter, 1993), Galapagos Islands, Ecuador, on 9 July 1891. From the G. Baur Collection (no. 593) via the Rothschild Collection.

COMMENTS: In the original description, Ridgway gave Baur's unique field number "593" of the holotype and mentioned that three additional specimens from Barrrington Island agreed with the type. AMNH 522649 bears three labels: an unnumbered USNM type label, with the name and Baur's number filled in by Ridgway; a Rothschild type label, with the locality, date of collection, Baur's number and reference to the description; and a USNM collection label with the number 593

(K-1), the significance unknown, and Tower I. marked out and replaced by Barrington. Only one additional specimen from Santa Fe came to AMNH with the Rothschild Collection. It is paratype **AMNH 522650**, unsexed and undated, with Baur no. 636.

Certhidea luteola Ridgway

Certhidea luteola Ridgway, 1894: 360 (Chatham Island).

Now Certhidea olivacea luteola Ridgway, 1894. See Hellmayr, 1938: 144–145, and Dickinson, 2003: 796.

HOLOTYPE: **AMNH 522540**, adult male, collected on San Cristobal (= Chatham) Island, 00.50S, 89.26W (Paynter, 1993), Galapagos Islands, Ecuador, on 17 June 1891. From the G. Baur Collection (no. 56) via the Rothschild Collection.

COMMENTS: Ridgway cited Baur's unique field number of the holotype in the original description and noted that he examined seven Baur and six USNM specimens of his new form. The holotype bears three labels: an unnumbered USNM type label with the name and Baur number filled in by Ridgway; a Rothschild type label with the locality, Baur number, and reference to the description of *luteola*; and Baur's original field label. Paratypes in AMNH: AMNH 522541–522544, males, AMNH 522554–522556, females, all collected on San Cristobal by Baur in 1891.

Certhidea olivacea ridgwayi Rothschild and Hartert

Certhidea olivacea ridgwayi Rothschild and Hartert, 1899: 149 (Charles Island).

Now *Certhidea olivacea ridgwayi* Rothschild and Hartert, 1899. See Hellmayr, 1938: 144, and Dickinson, 2003: 796.

LECTOTYPE: **AMNH 522557**, male, collected on Floreana (= Charles or Santa Maria) Island, 01.17S, 90.26W (Paynter, 1993), Galapagos Islands, Ecuador, on 5 November 1897, by C.D. Hull on the Webster-Harris Galapagos Expedition (no. 2308). From the Rothschild Collection.

COMMENTS: No type was designated in the original description but a type series of 10 specimens was mentioned. Hartert (1919: 172) listed this name in his list of types in the Rothschild Collection but failed to

include data for the type itself. AMNH 522557 bears the Rothschild type label, indicating that it was the choice of Rothschild and Hartert as the type. It was cataloged as the type when the Rothschild Collection came to AMNH and has always been so considered. In order to confirm the indicated specimen as the type, I hereby designate AMNH 522557 the lectotype of *Certhidea olivacea ridgwayi*. There are four male and one female paralectotypes in AMNH: AMNH 522558–522562, all collected on Floreana Island on 5 November 1897, by Hull.

Buarremon Ocai Lawrence

Buarremon Ocai Lawrence, 1865a: 126 (Mexico, Jalapa).

Now *Pipilo ocai ocai* (Lawrence, 1865). See Hellmayr, 1938: 452, Sibley, 1950: 145, Paynter, 1970b: 168, and Dickinson, 2003: 796.

SYNTYPES: **AMNH 41669**, adult male, collected in Mexico, and **AMNH 41670**, adult male, collected in "Jalapa," Mexico, received from R. Montes de Oca. From the G.N. Lawrence Collection.

COMMENTS: In the original description, Lawrence did not designate a type, but both of these specimens are marked "Type" by Lawrence and bear an AMNH type label. Only the male was described and only these two specimens of *ocai* came to AMNH with the Lawrence Collection. Sibley (1950: 145) discussed the type locality of *ocai*, and based on evidence provided by other montane species collected by Montes de Oca, restricted the type locality of this form to Las Vigas, 19.39N, 97.08W (Times Atlas), Veracruz, Mexico.

Pipilo maculatus falcifer McGregor

Pipilo maculatus falcifer McGregor, 1900: 43 (Palo Alto, California).

Now *Pipilo maculatus falcifer* McGregor, 1900. See Hellmayr, 1938: 457, Swarth, 1913, Greenlaw 1996, and Dickinson, 2003: 797.

SYNTYPES: **AMNH 368322**, adult male, collected on 9 April 1898 and **AMNH 368333**, female, collected on 3 March 1898, at Palo Alto, 37.26N, 122.10W (Times Atlas), California, by Richard C. McGregor (nos. 2274 and 882, respectively) and T.J.

Hoover. From the Jonathan Dwight, Jr. Collection (nos. 39484 and 39492, respectively).

COMMENTS: McGregor designated syntypes in the original description, giving his collection numbers for them, and the McGregor labels for both are marked "Type." Only the male syntype bears a type label, although I have found no evidence of lectotype designation. The female syntype has now been included in the AMNH type collection. Twenty-two McGregor specimens of this form from Palo Alto, collected before 1900, came to AMNH with the Dwight Collection, but because syntypes were designated, the remaining 20 specimens have no type standing (ICZN, 1999: 77, Art. 72.4.6).

Pipilo maculatus repetens Griscom

Pipilo maculatus repetens Griscom, 1930: 12
(Zanzon (alt. 8000 ft.) western Guatemala).
Now Pipilo maculatus repetens Griscom, 1930. See Hellmayr, 1938: 460, Sibley, 1950: 137, and Dickinson, 2003: 797.

HOLOTYPE: **AMNH 397247**, adult male, collected at Zanjon (= Zanzon), 8000 ft, Guatemala, on 8 January 1925, by Alfred W. Anthony (no. 1213). From the Dwight Collection (no. 59025).

COMMENTS: Griscom cited the Dwight Collection number of the holotype in the original description, having examined 39 specimens of repetens from various localities in the Pacific Cordilleras of Guatemala. Later, Griscom (1932b: 366) enumerated these 39 specimens, 29 of which came to AMNH. The 28 paratypes in AMNH are: collected by Anthony, Chichicastenango, AMNH 397243, male, AMNH 397251, female; Momostenango, AMNH 397244, 397248, females, AMNH 397249, 397250, males; Zanjon, AMNH 397245, male, AMNH 397246, female; Tecpam, AMNH 397252, 397253 (imm.), 397254, males, AMNH 397255, female; Panajachel, AMNH 397256, male; San Mateo, AMNH 397257, male; Barrillos, AMNH 397258, male; Nebaj, AMNH 397259, female, AMNH 397260-397262, males; Volcan San Lucas, AMNH 397263, 397264, 397264bis (imm.), 397265, males; collected by A.P. Smith, Quetzaltenango, AMNH 399323, female, AMNH 399324, 399325, 406726, males. The remaining paratypes are probably at MCZ. In Griscom's (1932: 425) gazetteer, Zanjon is listed as an Indian camp 15 mi west of Momostenango and is shown on the map as no. 78, at ca. 15.05N, 92.20W.

Pipilo fuscus carolae McGregor

Pipilo fuscus carolae McGregor, 1899c: 11 (Battle Creek, California).

Now *Pipilo crissalis crissalis* (Vigors, 1839). See Hellmayr, 1938: 463, Ridgway, 1901: 435–436, Kunzmann et al., 2002: 3–4, and Dickinson, 2003: 797.

HOLOTYPE: **AMNH 368511**, male, collected at Battle Creek, California, on 7 November 1898. From the collection of R. McGregor (no. 2200) via the Jonathan Dwight Collection (no. 39652).

COMMENTS: McGregor cited his collection number of the holotype in the original description and had seven specimens from Battle Creek in his collection. The six paratypes are: AMNH 368508–368510, males, and AMNH 368512–368514, females. Dickinson (2003: 797) recognized *carolae* as a valid subspecies of *P. crissalis*. For information on McGregor, see Palmer (1928: 287).

There are many places named "Battle Creek" in California; in the original description, McGregor said that his locality was 2 mi from the Sacramento River and that the nearest post office was Ball's Ferry. Ball's Ferry is at ca. 40.30N, 122.18W.

[Pipilo fuscus jamesi Townsend]

Hellmayr (1938: 466) said that the type of this subspecies was at AMNH, and, in fact, Townsend (1923: 20, pl. 1) gave AMNH 131854 for the holotype when he described the form. All of the specimens of birds collected on the expedition of the U.S. Fisheries steamship *Albatross* in 1911 to the Gulf of California came first to AMNH and were all given AMNH numbers. Only later was the collection divided and half sent to USNM, including this holotype, where it now bears USNM 305936 (see Deignan, 1961: 636).

Melozone leucotis nigrior Miller and Griscom

Melozone leucotis nigrior Miller and Griscom, 1925: 4 (Matagalpa, 2300 ft., Nicaragua).

Now *Melozone leucotis nigrior* Miller and Griscom, 1925. See Hellmayr, 1938: 474, Howell and

Webb, 1995: 696–697, and Dickinson, 2003: 798.

HOLOTYPE: **AMNH 144638**, adult male, collected at Matagalpa, 2300 ft, 12.52N, 85.58W (Times Atlas), Nicaragua, on 21 April 1917, by W. deW. Miller (no. 534), L. Griscom, and W.B. Richardson.

COMMENTS: The AMNH number of the holotype was cited in the original description. The type series was said to comprise eight males, seven females, three sex?, and one juvenile. There are, in fact, nine females in the series used, and perhaps the "7" was a misprint for "9," as I can see no way to exclude two of them. All of them would have been available to Miller and Griscom. The paratypes are: AMNH 103040, 103041, male and female, Chontales, February 1908; AMNH 103229-103234, two males, four females, Muy Muy, July 1908; AMNH 103498, 103499, male and female, Quilali, January 1909; AMNH **103821–103824**, two males, one female, one female juvenile, Uluce, July 1909; AMNH 144637, female, Matagalpa, March 1917; and AMNH 423592-423596, one male, one female, three sex?, Matagalpa, January-February 1917. All of these specimens were collected by W.B. Richardson except AMNH 144637, which was collected by Miller, Griscom, and Richardson.

Arremon aurantiirostris santarosae Chapman

Arremon aurantiirostris santarosae Chapman,1925a: 6 (Santa Rosa, Prov. del Oro, southwestern Ecuador).

Now Arremon aurantiirostris santarosae Chapman, 1925. See Hellmayr, 1938: 437, Dickinson, 2003: 799, and Ridgely and Tudor, 2009: 642.

HOLOTYPE: **AMNH 172480**, adult male, collected at Santa Rosa, 03.27S, 79.58W (Paynter, 1993), El Oro, Ecuador, on 22 October 1921, by Geoffrey Gill (no. 761).

COMMENTS: Chapman gave the AMNH number of the holotype in the original description and listed the 37 specimens he examined. The 36 paratypes are: Santa Rosa, AMNH 130307–130312, 172479, five males, two females; Duran, AMNH 130313, female; La Chonta, AMNH 172481–172489, four males, four females, one female?; La Puente, AMNH 172490, 172491, two males; Rio Pullango, AMNH 172492–172494, three

males; Rio Jubones, AMNH 172495, male; Cebollal, AMNH 172496, 172497, two males; Bucay, AMNH 172498–172504, seven males; Chimbo, AMNH 173565–173568, three males, one female. Of these paratypes, AMNH 172481–172483, and 172487 were exchanged to MCZ in July 1928; AMNH 172485 and 172489 were exchanged to ANSP in July 1928.

Arremon schlegeli canidorsum J.T. Zimmer

Arremon schlegeli canidorsum J.T. Zimmer, 1941: 133 (San Gil, south of Bucaramanga, eastern Colombia).

Now Arremon schlegeli canidorsum J.T. Zimmer, 1941. See Paynter, 1970b: 185, Ridgely and Tudor, 1989: 462–463, and Dickinson, 2003: 799

HOLOTYPE: **AMNH 325733**, adult male, collected at San Gil, 06.33N, 73.08W (Paynter, 1997), Santander, Colombia, in June 1939, by Brother Nicéforo Maria (no. 13).

COMMENTS: When Zimmer described this form, he gave the AMNH number of the holotype and studied two additional males, a female, and a young bird. The holotype was retained at AMNH and the four paratypes were returned to Brother Nicéforo and are in MLS.

Embernagra rufivirgata Lawrence

Embernagra rufivirgata Lawrence, 1851a: 112, pl. 5, fig. 2 (Rio Grande in Texas).

Now Arremonops rufivirgatus rufivirgatus (Lawrence, 1851). See Hellmayr, 1938: 439–440, and Dickinson, 2003: 798.

HOLOTYPE: **AMNH 3261**, collected in Brownsville (= Ft. Brown on the Rio Grande), 25.54N, 97.29W (Times Atlas), Texas, by J.P. McCown. From the G.N. Lawrence Collection.

COMMENTS: Although Lawrence did not confirm this, his description appears to be based on a single specimen. Lawrence's label is marked "Embernagra rufivirgata Lawr., Texas, a (or D?) 373, J.P. McC." and on the reverse "Type, Brownsville, Capt. J.P. McCown." The specimen was once mounted. Lawrence (1851a: 114) noted that this new species was "obtained by [McCown] during the past year, while stationed on the Rio Grande in Texas." It is the only specimen of

this form that came to AMNH with the Lawrence Collection.

Arremonops conirostris inexpectata Chapman

Arremonops conirostris inexpectata Chapman, 1914a: 184 (Western slope of Eastern Andes below Andalucia (alt. 3000 ft.)).

Now Arremonops conirostris inexpectatus Chapman, 1914. See Hellmayr, 1938: 445, and Dickinson, 2003: 798.

HOLOTYPE: **AMNH 117120**, adult male, collected on the western slope of the eastern Andes below Andalucia, 3000 ft, 01.54N, 75.40W (Paynter, 1997), Huila, Colombia, on 6 June 1912, by Leo E. Miller (no. 3120).

COMMENTS: Chapman cited the AMNH number of the holotype in the original description and had eight adult and five juvenile specimens. The 12 paratypes are: AMNH 117116–117119, 117121-117123, four males and three females; AMNH 117124-117128, one male, three female and one unsexed juvenile, all collected on the western slope of the eastern Andes below Andalucia. Of these, AMNH 117116 and 117119 were exchanged to the BMNH in May 1921, and AMNH 117118 and 117127 were exchanged with O. Bangs in September 1918 and are now in MCZ.

For an assessment of relationships among species of *Atlapetes* based on mtDNA sequence data, see Garcia-Moreno and Fjeldså (1999).

Atlapetes gutturalis griseipectus Dwight and Griscom

Atlapetes gutturalis griseipectus Dwight and Griscom, 1921: 3 (Quetzaltenango, Guatemala, altitude 8500 ft).

Now Atlapetes albinucha griseipectus Dwight and Griscom, 1921. See Griscom, 1932b: 368, Hellmayr, 1938: 389, Paynter, 1978: 327–330, and Dickinson, 2003: 800.

HOLOTYPE: **AMNH 399333**, adult male, collected at Quetzaltenango, 8500 ft, Guatemala, on 18 November 1919, by Austin Paul Smith (no. 19233). From the Dwight Collection (no. 52724, not 52725, as in description).

COMMENTS: In the original description, the type was said to be no. 52725 in the Dwight Collection, adult male, collected at Quetzaltenango, on 18 November 1919; the

Dwight number of this holotype and that of the holotype of A. g. parvirostis were apparently interchanged (see below). The above specimen is the only specimen of griseipectus in AMNH that bears the date 18 November and there is no specimen of this subspecies that bears the Dwight number 52725. The types of new forms from the Dwight Guatemalan collection were to come to AMNH and the remainder of the collection was to be divided between AMNH and MCZ. Dwight and Griscom (1921: 4) had five male, two female, and one unsexed specimen of their new form. Of the seven paratypes, five are in AMNH: Guatemala, AMNH 41064, unsexed and undated, from the G.N. Lawrence Collection; Quetzaltenango, AMNH 399331 (Dwight no. 56561), male, 15 November; **AMNH 399332** (56562), male, 17 November; **AMNH 399334** (56564), male, 21 November; AMNH 399335 (56565), female, 21 November, all from the Dwight Collection and collected in 1919 by Smith. The remaining paratypes are probably at MCZ. AMNH 41064 is also a paratype of A. g. brunnescens (see below) and was mentioned by Dwight and Griscom (1921: 2).

Atlapetes gutturalis fuscipygius Dwight and Griscom

Atlapetes gutturalis fuscipygius Dwight and Griscom, 1921: 3 (San Rafael del Norte, Nicaragua, altitude 4000 feet).

Now Atlapetes albinucha fuscipygius Dwight and Griscom, 1921. Hellmayr, 1938: 389, Paynter, 1978: 327–330, Dickinson, 2003: 800, and Martínez-Sánchez and Will (2010: 96–97).

HOLOTYPE: **AMNH 101517**, adult male, collected at San Rafael del Norte, 13.12N, 86.06W (Times Atlas), Nicaragua, on 14 April 1907, by William B. Richardson.

COMMENTS: Dwight and Griscom cited the AMNH number of the holotype in the original description and based their name on a type series of three males and three females with the range given as the "highlands of north central Nicaragua." Aparently Dwight and Griscom based *fuscipygius* on the same six specimens from Nicaragua that comprised part of the type series of *brunnescens* (see below). I did not find the third male. There are four paratypes in

AMNH: San Rafael del Norte, AMNH 101518, female, 13 April 1907, and AMNH 101519, female, 7 April 1907; Matagalpa, AMNH 102657, female, 12 September 1907, AMNH 103228, male, 22 June 1908, all collected by Richardson.

Atlapetes gutturalis parvirostris Dwight and Griscom

Atlapetes gutturalis parvirostris Dwight and Griscom, 1921: 3 (Aquinares, Costa Rica, altitude 4500 feet).

Now Atlapetes albinucha parvirostris Dwight and Griscom, 1921. See Hellmayr, 1938: 388–389, Paynter, 1978: 327–330, and Dickinson, 2003: 800.

HOLOTYPE: **AMNH 393030**, adult male, collected at Aquinares, south slope of Volcan Turrialba, 4500 ft, 10.02N, 83.48W (Times Atlas), Costa Rica, on 27 March 1920, by Austin Paul Smith (no. 20198). From the Dwight Collection (no. 52725, not 52724, as in description).

COMMENTS: See above under A. g. griseipectus; the Dwight number of this type and that of griseipectus were apparently interchanged. The remaining data are correct. Dwight and Griscom examined seven males, two females, and five juveniles. Of the 13 paratypes, nine are in AMNH: San José, **AMNH 48190**, male, 16 May 1889, C.F. Underwood; Irazu, AMNH 59830, male, 1 July 1892, A.H. Verrill; Aginares, AMNH **393031**(Dwight no. 56039, Smith no. 20314), male, 10 April; AMNH 393032 (56038, 20116), female, 20 March; Agua Caliente, **AMNH 393033** (56041, 20617), male, 25 May; AMNH 393034 (56042, 20691), male, 8 June; Navarrito, AMNH 393035 (56044, 20778), male juvenile, 2 July; AMNH 393036 (56043, 20761), female juvenile, 29 June; Irazú, AMNH 393042 (56040, -), male juvenile, 12 May, all collected by Smith in 1920. AMNH 48190 and 59830 are also paratypes of brunnescens (see below). Other paratypes may be in MCZ.

Atlapetes gutturalis brunnescens Chapman

Atlapetes gutturalis brunnescens Chapman, 1915a: 387 (Boquete, Chiriqui).

Now Atlapetes albinucha brunnescens Chapman, 1915. See Hellmayr, 1938: 388, Paynter, 1978:

327–330, Wetmore et al., 1984: 589–590, Dickinson, 2003: 800, and Martínez and Sánchez, 2010: 96–97.

HOLOTYPE: AMNH 77855 (not 77885), adult male, collected at Boquete, 08.47N, 82.26W (Siegel and Olson, 2008), Chiriqui, Panama, on 13 September 1901, by J.H. Batty.

COMMENTS: Due to a typographical error, the AMNH number of the holotype was cited incorrectly in the original description; the other data cited there are correct. Chapman examined 35 specimens of brunnescens, apparently in addition to the holotype. There are the following 26 paratypes in AMNH from Boquete, all collected by Batty in August-September 1901: AMNH 77854, 77856, 77857, 77862, 77863, 106594, and 106596-106615. There are two paratypes from Costa Rica: San Jose, AMNH 48190, male, 16 May 1889, C.F. Underwood; Irazu, AMNH 59839, male, 1 July 1892, A.H. Verrill (both are also paratypes of A. g. parvirostris, see above). One paratype is from Guatemala, AMNH 41064, unsexed and undated, from the G.N. Lawrence Collection (also a paratype of A. gutturalis griseipectus, see above). Of the six paratypes from Nicaragua, I found only five in AMNH: San Rafael del Norte, AMNH 101517, male, **101518**, female, **101519**, female, all collected in April 1907 by W.B. Richardson; Matagalpa, AMNH 102657, female, 12 September 1907, and **AMNH 103228**, male, 22 June 1908, both collected by W.B. Richardson (also holotype and paratypes, respectively, of A. g. fuscipygius, see above).

Of the above paratypes of *brunnescens* from Boquete, the following four had been exchanged to BIM in 1923, but would have been available to Chapman when *brunnescens* was named; they were returned to AMNH in 1935 and were at that time renumbered: AMNH 106607 (BIM no. 12626, AMNH new number 441699), AMNH 106613 (12624, 441701), AMNH 106615 (12625, 441702). I did not find AMNH 106595 in the collection; it may have been exchanged without the catalog having been marked, but I have no information as to whether or not it could have been part of Chapman's type series.

Atlapetes gutturalis coloratus Griscom

Atlapetes gutturalis coloratus Griscom, 1924a: 9 (Cerro Flores, 3600 ft., eastern Chiriqui, Panama).

Now Atlapetes albinucha coloratus Griscom, 1924. See Hellmayr, 1938: 387, Paynter, 1978: 327–330, Wetmore et al., 1984: 589–590, and Dickinson, 2003: 800.

HOLOTYPE: **AMNH 182967**, adult male, collected on Cerro Flores, 3600 ft, Chiriqui, Panama, on 13 March 1924, by L. Griscom, R. Boulton, and others (no. 223).

COMMENTS: Griscom cited the AMNH number of the holotype in the original description; his type series comprised one male, three females, and one sex? from Cerro Flores. The four paratypes are: females, AMNH 182968, 11 March; AMNH 182969, 13 March; AMNH 182970, 18 March; sex?, AMNH 182971, 5 March. Wetmore et al. (1984: 589–590) did not recognize *coloratus*.

The type locality, Cerro Flores, is discussed by Siegel and Olson (2008), and they conclude that it may be the Cerro Flores that lies 4 km SSW of Cerro Santiago, 08.33N, 81.44W, and 4 km NNE of Hato Chamí, 08.27N, 81.46W.

Buarremon sordidus Lawrence

Buarremon sordidus Lawrence, 1871: 138 (Bogota).Now Atlapetes pallidinucha pallidinucha (Boissonneau, 1840). See Chapman, 1914a: 186, and Hellmayr, 1938: 391.

HOLOTYPE: **AMNH 41062**, juvenile, collected in "Bogota," Colombia, by Ribon and Munoz. From the George N. Lawrence Collection.

COMMENTS: Lawrence apparently had a single juvenile specimen when he described *sordidus*. In addition to the collectors' names, the original Lawrence label has "Type" written by Lawrence, above which is written "yes, P.L.S[clater]." AMNH 41051 is an undated adult from the Lawrence Collection, labeled "Bogota," but this specimen would not have been part of the type series, as only the juvenile was described.

Atlapetes pallidinuchus obscurior Chapman

Atlapetes pallidinuchus obscurior Chapman, 1914a: 186 (Santa Isabel, alt. 12700 ft., Central Andes).

Now Atlapetes pallidinucha papallactae Hellmayr, 1913. See Chapman 1917: 576, Hellmayr, 1938: 392, Paynter, 1978: 355–356, and Dickinson, 2003: 800.

HOLOTYPE: **AMNH 113269**, adult male, collected at Santa Isabel, 12700 ft, Colombia, on 15 September 1911, by Arthur A. Allen and Leo E. Miller (no. 357).

COMMENTS: Chapman cited the AMNH number of the holotype in the original description with 13 specimens in his type series. The 12 paratypes are: Santa Isabel, AMNH 112818–112822, 113271, one male, five females, one female?; Laguneta, AMNH 112817, 113270, one female, one sex?; Almaguer, AMNH 117155–117158, two males, one female, one sex?. Of these paratypes, AMNH 112819 was exchanged to USNM; AMNH 112820 and 112822 were exchanged to O. Bangs in September 1918 and are probably in MCZ; AMNH 113270 was exchanged to MZUSP in 1917.

Paynter (1997: 484) listed both Santa Isabel, ca. 04.47N, 75.28W, and Paramo de Santa Isabel, ca. 04.47N, 75.26W, and noted that Chapman did not always distinguish between them. However, Chapman (1917: 32) noted that the altitude of 12700 ft was in paramo and (Chapman, 1917: 655) further explained that the Santa Isabel camp was at 12000 ft, at the border between temperate forest and paramo. The field labels of the specimens from 12700 ft are stamped "Par.Val."

Atlapetes latinuchus caucae Chapman

Atlapetes latinuchus caucae Chapman, 1927a: 6 (Cerro Munchique, 8325 ft., West Andes, Cauca, Colombia).

Now Atlapetes latinuchus caucae Chapman, 1927. See Hellmayr, 1938: 397, Garcia-Moreno and Fjeldså, 1999, Dickinson, 2003: 800, Ridgely and Tudor, 2009: 699, and Flórez-Rodríguez et al., 2011.

HOLOTYPE: **AMNH 110047**, adult male, collected at Cerro Munchique, 8325 ft, 02.32N, 76.57W (Paynter, 1997), Coast Range west of Popayan, Cauca, Colombia, on 26 May 1911, by William B. Richardson.

COMMENTS: Chapman's type series comprised eight specimens from Cerro Munchique, and he gave the AMNH number of the holotype in the original description. In

addition to the eight adult specimens, there are also two juvenile specimens that are from the same collection and would have been available to Chapman for the description of *caucae*. The nine paratypes are: AMNH 110040–110042, 110044–110046, 110048–110050, three males, three females, one sex?, and two juveniles, all collected on Cerro Munchique between 23 and 30 May 1911. The specimen that had been AMNH 110043 was exchanged to O. Bangs in September 1918 and would not have been available to Chapman when he named *caucae*.

Atlapetes latinuchus chugurensis Chapman

Atlapetes latinuchus chugurensis Chapman, 1927a: 5 (Chugur, 9000 ft., 40 miles northwest of Cajamarca, Peru).

Now Atlapetes latinuchus chugurensis Chapman, 1927. See Hellmayr, 1938: 395–396, Garcia-Moreno and Fjeldså, 1999, Dickinson, 2003: 801, Ridgely and Tudor, 2009: 699, and Flórez-Rodríguez et al., 2011.

HOLOTYPE: **AMNH 229333**, adult male, collected at Chugur, 9000 ft, 06.40S, 78.45W (Stephens and Traylor, 1983), Cajamarca, Peru, on 20 April 1926, by Harry Watkins (no. 10294).

COMMENTS: Chapman cited the AMNH number of the holotype in the original description and examined six specimens from Chugur and two from Taulis. I found only five specimens from Chugur in either the catalog or the collection. The following are paratypes of *chugurensis*: Chugur, **AMNH 236143–236146**, two males and two females, collected 12–23 April 1926; Taulis, **AMNH 236147**, **236148**, one male, one sex?, collected 11 and 17 June 1926.

Buarremon baroni Salvin

Buarremon baroni Salvin, 1895: 5, pl. 1, fig. 2 (Cajabamba (9,000 feet), Huamachuco (10,400 feet)). Now Atlapetes latinuchus baroni (Salvin, 1895). See Hellmayr, 1938: 395, Garcia-Moreno and Fjeldså, 1999, Dickinson, 2003: 801, Ridgely and Tudor, 2009: 699, and Flórez-Rodríguez et al., 2011.

SYNTYPES: **AMNH** 100272, **AMNH** 520517, **AMNH** 520518, adult males, collected at Cajabamba, 9000 ft, 07.37S, 78.03W (Stephens and Traylor, 1983), Cajamarca,

Peru, in January 1894; **AMNH 520520**, adult male, collected at Huamachuco, 10,400 ft, 07.48S, 78.04W (Stephens and Traylor, 1983), La Libertad, Peru, on 25 March 1894, all collected by O.T. Baron.

COMMENTS: The 1894 Baron collection from Peru, reported on by Salvin (1895), was partly deposited in BMNH and partly in the Rothschild Collection, but types were not designated by Salvin for the new taxa. Thus all of Baron's 1894 specimens of *baroni* are syntypes of the name, the exact number not given by Salvin. AMNH 100272 was received in exchange from Rothschild in 1907; the other three syntypes came with the purchase of the Rothschild Collection in 1932 but were not listed by Hartert in any of his type lists. There are also two male and one female syntypes in BMNH (Warren and Harrison, 1971: 57).

Atlapetes rufinucha terborghi Remsen

Atlapetes rufinucha terborghi Remsen, 1993: 429 (Cordillera Vilcabamba, 2630 m, Departamento Cuzco, Peru, 12°37′S, 73°33′W).

Now Atlapetes terborghi Remsen, 1993. See Garcia-Moreno and Fjeldså, 1999, Dickinson, 2003: 801, and Ridgely and Tudor, 2009: 699.

HOLOTYPE: **AMNH 820436**, adult female, collected in the Cordillera Vilcabamba, 2630 m, 12.37S, 73.33W, Cuzco, Peru, on 22 July 1967, by John S. Weske (no. 1334) and John W. Terborgh.

COMMENTS: The AMNH number of the holotype was cited in the original description and the four paratypes were listed by AMNH number: AMNH 820437, male, 30 July 1967; AMNH 820438, male, 18 July 1967; AMNH 820609, female, 17 July 1968; and AMNH 820633, female, 31 July 1968, all collected on the Cordillera Vilcabamba by Weske and Terborgh.

Atlapetes flaviceps Chapman

Atlapetes flaviceps Chapman, 1912: 162 (Rio Toché, alt. 6800 ft., Quindio Trail, Central Andes).

Now Atlapetes flaviceps Chapman, 1912. See Hellmayr, 1938: 407, Chapman, 1917: 574, pl. 40, Dickinson, 2003: 800, and Ridgely and Tudor, 2009: 647.

HOLOTYPE: **AMNH 112816**, adult male, collected on the Rio Toché, 6800 ft, 04.26N,

75.22W (Paynter, 1997), Tolima, Colombia, on 24 October 1911, by Arthur A. Allen and Leo E. Miller (no. 1082).

COMMENTS: The AMNH number of the holotype was given in the original description; there is one paratype: AMNH 112815, female, Rio Toché, 25 October 1911, by Allen and Miller.

Atlapetes fusco-olivaceus Chapman

Atlapetes fusco-olivaceus Chapman, 1914a: 185 (San Agustin, alt. 5000 ft., Huila, Colombia). Now Atlapetes fuscoolivaceus Chapman, 1914. See Chapman, 1917: 575, pl. 40, Hellmayr, 1938: 398–399, Dickinson, 2003: 800, and Ridgely and Tudor, 2009: 647.

HOLOTYPE: **AMNH 117150**, adult male, collected near San Agustin, 5000 ft, 01.53N, 76.16W (Paynter, 1997), Huila, Colombia, on 17 April 1912, by Leo E. Miller (no. 2494).

COMMENTS: Chapman cited the AMNH number of the holotype in the original description, with a type series of three specimens from San Agustin and two from La Palma. There are, in fact, three specimens from La Palma that would have been available to Chapman. The five paratypes are: La Palma, AMNH 117146, male, 4 May 1912; **AMNH 117147**, female, 28 April 1912; AMNH 117148, male, 30 April 1912; San Agustin, AMNH 117149, male, 13 April 1912; **AMNH 117151**, female, 17 April 1912, all collected by Leo E. Miller. AMNH 117149 was exchanged to Rothschild in May 1921 and was renumbered AMNH 520398 when the Rothschild Collection came to AMNH in 1932. AMNH 117151 was exchanged to BMNH in May 1921.

Atlapetes celicae Chapman

Atlapetes celicae Chapman, 1925a: 7 (Celica, 6900 ft., southwestern Ecuador).

Now Atlapetes seebohmi celicae Chapman, 1925. See Hellmayr, 1938: 401, Paynter, 1970b: 197, Ridgely and Tudor, 1989: 433–434, and Dickinson, 2003: 801.

HOLOTYPE: **AMNH 168231**, adult male, collected at Celica, 6900 ft, 04.07S, 79.59W (Paynter, 1993), Loja, Ecuador, on 26 September 1920, by George K. Cherrie (no. 22117).

COMMENTS: Chapman gave the AMNH number of the holotype; it was his only

specimen, and apparently the only one known. Paynter (1970b: 197, footnote 2) placed it in the species *A. nationi* and discussed the possibility that it is an atypical specimen of *simonsi*. Ridgely and Tudor (1989: 433–434), giving their reasons in a footnote, included *celicae* in *A. seebohmi*, as did Dickinson (2003: 801).

Buarremon rufigenis Salvin

Buarremon rufigenis Salvin, 1895: 5, pl. 1, fig. 2 (Huamachuco, Cajabamba).

Now Atlapetes rufigenis rufigenis (Salvin, 1895). See Hellmayr, 1938: 403, Paynter, 1970b: 199, Dickinson, 2003: 801, and Schulenberg et al., 2007: 606.

SYNTYPES: **AMNH 519569**, female, and **AMNH 519570**, adult male, collected at Huamachuco, 10,400 ft, 07.48S, 78.04W (Stephens and Traylor, 1983), La Libertad, Peru, in February 1894; **AMNH 519572**, adult male, collected at Cajabamba, 11,000 ft, 07.37S, 78.03W (Stephens and Traylor, 1983), Cajamarca, Peru, on 2 April 1894, all by O.T. Baron.

COMMENTS: In his report on Baron's 1894 expedition to Peru, Salvin (1895) did not designate types but noted (Salvin, 1895: 1) that the collection was partly in the Rothschild Collection (now in AMNH) and partly in the Salvin and Godman Collection (now in BMNH). Of rufigenis, there are four syntypes in BMNH (Warren and Harrison, 1971: 478) in addition to the three in AMNH. While all three AMNH specimens are syntypes, AMNH 519569 and 519572 were marked "Co-type" by Salvin, even though they were not listed by Hartert in any of his lists of types in the Rothschild Collection and did not bear Rothschild type labels. Dickinson (2003: 801) has accorded full species status to both A. r. rufigenis and A. r. forbesi.

Atlapetes personatus collaris Chapman

Atlapetes personatus collaris Chapman, 1939: 13 (Auyan-tepui, Venezuela, alt. 1850 m.). Now Atlapetes personatus collaris Chapman, 1939. See Phelps and Phelps, 1963: 419, Paynter, 1970b: 200, and Dickinson, 2003: 800.

HOLOTYPE: **AMNH 323656**, adult male, collected on Auyán-tepuí Plateau, 1850 m, 05.55N, 62.32W (Paynter, 1982), Bolívar,

Venezuela, on 7 January 1938, on the Phelps Venezuela Expedition (no. 840).

COMMENTS: Chapman cited the AMNH number of the holotype in the original description and listed the following specimens in his type series, all from Auyán-tepuí: 1450 m, 1; 1500–1850 m, 11; 2000–2200 m, 5. The 16 paratypes are: AMNH 323646–323655, 323657–323662, seven males, two male?, four females, two female?, one sex?, collected between 12 December 1937 and 12 February 1938. AMNH 323660 was exchanged with the Colección Phelps.

See Tate (1938) for notes on this expedition.

Atlapetes duidae Chapman

Atlapetes duidae Chapman, 1929b: 26 (Cerros de Savanna, 4700 ft., tableland, Mt. Duida, Venezuela).
Now Atlapetes personatus duidae Chapman, 1929.
See Hellmayr, 1938: 410, Ridgely and Tudor, 1989: 432, Dickinson, 2003: 800.

HOLOTYPE: **AMNH 245936**, adult male, collected on Savanna Hills (= Cerros de Savanna), 4700 ft, ca. 03.25N, 65.38W (Paynter, 1982), Mt. Duida, Amazonas, Venezuela, on 27 February 1929, by the Olalla brothers on the Tyler Duida Expedition.

COMMENTS: Chapman gave the AMNH number of the holotype, examining 10 males and two females from Mount Duida. The 11 paratypes are: AMNH 271760–271770, eight males, two females, one sex? [apparently considered a male by Chapman], 4800–6200 ft, 20 December 1928–14 February 1929. Of these, AMNH 271765, male, and AMNH 271768, female, were exchanged to the Colección Phelps in August 1939. See Chapman (1931) for a joint report on the Lee Garnett Day Expedition to Mt. Roraima and the Tyler Duida Expedition to Mt. Duida. Tate and Hitchcock (1930) reported on the Mt. Duida region.

Because the molecular studies of Cadena et al. (2007) and Flórez-Rodriguez et al. (2011) have not always shown "Buarremon" species to be monophyletic, they are retained in the expanded genus Arremon.

Buarremon atricapillus tacarcunae Chapman

Buarremon atricapillus tacarcunae Chapman, 1923a: 11 (Mt. Tacarcuna, about 3500 ft., eastern Panama). Now Arremon torquatus tacarcunae (Chapman, 1923). See Hellmayr, 1938: 423, Wetmore et al.,

1984: 593–594, Dickinson, 2003: 799, Cadena et al., 2007, Banks et al., 2008: 764–765, Cadena and Cuervo, 2010: 152–176, and Flórez-Rodríguez et al., 2011.

HOLOTYPE: **AMNH 136268**, adult male, collected on Cerro Tacarcuna (= Mt. Tacarcuna), about 3500 ft, 08.11N, 77.17W (Siegel and Olson, 2008), Darién, Panama, on 24 March 1915, by William B. Richardson.

COMMENTS: Chapman cited the AMNH number of the holotype in the original description and said that a list of the specimens examined would be listed in a paper on the genus *Buarremon*, soon to be published. In it he (Chapman, 1923b: 277) listed four specimens of *tacarcunae*. The three paratypes are: **AMNH 136266**, **136267**, and **136269**, all males from Cerro Tacarcuna, collected in March–May 1915.

Buarremon atricapillus Lawrence

Buarremon atricapillus Lawrence, 1874: 396 (thought to be from Bogota).

Now Arremon torquatus atricapillus (Lawrence, 1874). See Hellmayr, 1938: 422, Wetmore et al., 1984: 594, Dickinson, 2003: 799, Cadena et al., 2007, Banks et al., 2008: 764–765, Cadena and Cuervo, 2010: 152–176, and Flórez-Rodríguez et al., 2011.

HOLOTYPE: **AMNH 41058**, adult sex?, "Bogota," from Alexander. From the G.N. Lawrence Collection.

COMMENTS: Lawrence apparently had a single specimen: "Thought to be from Bogota, and from the make-up of the skin I think the supposition is correct."

On the original Lawrence label, this specimen was said to have come from [A.H.] Alexander, who was a taxidermist in New York (Wynne, 1969) from whom Lawrence occasionally obtained specimens. It is also labeled "Type" in Lawrence's hand.

Buarremon assimilis nigrifrons Chapman

Buarremon assimilis nigrifrons Chapman, 1923a: 11 (Las Pinas, 3600 ft., Alamor Mts., Prov. Loja, Ecuador).

Now Arremon torquatus nigrifrons (Chapman, 1923). See Hellmayr, 1938: 418–419, Dickinson, 2003: 799, Cadena et al., 2007, Ridgely and Tudor, 2009: 644, 699, Cadena and Cuervo, 2010: 152–176, and Flórez-Rodríguez et al., 2011.

HOLOTYPE: **AMNH 172533**, adult male, collected at Las Piñas, 3600 ft, northeast of Alamor, 04.02S, 80.02W (Paynter, 1993), Alamor Range, Loja, Ecuador, on 11 September 1921, by George K. Cherrie (no. 23956) and Geoffrey Gill.

COMMENTS: Chapman gave the AMNH number of the holotype in the original description and the correct data relating to that specimen. Unfortunately, the type label was tied on the wrong specimen (AMNH 168238, with different data). An AMNH type label has been added to the holotype; the specimen with the incorrect type label, a paratype, remains in the type collection with a label explaining the problem because it has for so many years been accepted as the type. Chapman (1923b: 277) listed 45 specimens examined, including the type but omitting two unsexed specimens that would have been available to him when nigrifrons was described. There are thus 46 paratypes: Ecua-**AMNH** 168237–168242, Alamor, **172534-172537**, six males and four females; Guaniche. AMNH 172538–172540, two males, one unsexed specimen; Guachanomá, AMNH 168243, one male; Cebollal, AMNH 172541, one male; Las Piñas, AMNH 172532, one male; La Puente, AMNH 172546, one male; Punte Santa Ana, AMNH 168252-**168254**, three females; Loja, **AMNH 130361**, 130362, two males; Salvias, AMNH 168250, 168251, two females; Portovelo, AMNH **168244**–**168249**, **172542**–**172545**, six males, three females, one male?; Zaruma, AMNH 130357–130360, 130363, two males, one immature male, two females. Peru: Palambla, **AMNH 175702–175708,** six males, one sex?. Of these paratypes, the following have been exchanged: AMNH 130358, 168240, 172534, and 172536 to MCZ in July 1928; AMNH 168244 and 168248 to ANSP in July 1928; and AMNH 172540 to MECN in July 1984.

Buarremon fimbriatus Chapman

Buarremon fimbriatus Chapman, 1923a: 11 (Tujma, 8200 ft, near Mizque, Dept. Cochabamba, Bolivia).

Now Arremon torquatus fimbriatus (Chapman, 1923). See Hellmayr, 1938: 421–422, Dickinson, 2003: 799, Cadena et al., 2007, Ridgely and Tudor, 2009: 644, 699, Cadena and Cuervo, 2010: 152–176, and Flórez-Rodríguez et al, 2011.

HOLOTYPE: **AMNH 139751**, adult male, collected at Tujuma, 8200 ft, ca. 17.52S, 65.18W (Paynter, 1992), Cochabamba, Bolivia, on 24 September 1915, by Miller (no. 13807) and Boyle.

COMMENTS: Chapman cited the AMNH number of the holotype in the original description and (Chapman, 1923b: 278) listed the eight specimens he examined, including the type. The seven paratypes are all from the type locality: **AMNH 139749**, **139750**, **139752–139756**, one male, five females, one sex?.

Pselliophorus luteoviridis Griscom

Pselliophorus luteoviridis Griscom, 1924a: 10 (Cerro Flores, alt. 6000 ft., eastern Chiriqui, Panama).

Now *Pselliophorus luteoviridis* Griscom, 1924. See Hellmayr, 1938: 384, Wetmore et al., 1984: 588, and Dickinson, 2003: 801.

HOLOTYPE: **AMNH 182976**, female, collected on Cerro Flores, 5500 ft (as on label), 08.29N, 81.44W (Siegel and Olson, 2008), Chiriquí, Panama, on 14 March 1924, by Ludlow Griscom.

COMMENTS: The AMNH number of the holotype was given in the original description; it was the only specimen. Griscom (1924b: 509–519) wrote a popular account of this expedition. See Siegel and Olson (2008: 168–169) for a discussion of this type locality.

Fringilla ornata Wied Charitospiza eucosma Oberholser

Fringilla ornata Wied, 1821: 191 (Fazenda Valo).
Charitospiza eucosma Oberholser, 1905: 67.
Now Charitospiza eucosma Oberholser, 1905. See Hellmayr, 1938: 374–375, Sick, 1997: 778, and Dickinson, 2003: 801.

SYNTYPES: **AMNH 4622**, male, and **AMNH 4623**, female, collected in Brazil, by Maximillian, Prince of Wied. From the Maximillian Collection.

COMMENTS: Allen (1889b: 225) listed these two specimens as syntypes of *Fringilla ornata* Wied, under the then-current name *Tiaris ornata*. These specimens formerly had been mounted and the one original label had served for both specimens, with both male and female sex symbols. This label is pasted on the reverse of the label on the female.

The type locality was given by Wied as Fazenda Valo, near the frontier of Minas Gerais and Bahia. Allen (1889b: 225) gave the type locality as Barra da Vareda, interior of the "Province of Brazil." This was undoubtedly based on Wied (1830: 613): "Dieser niedliche Vogel lebt im inneren Brasilien. Ich fand ihn in den mit Gesträuchen abwechselnden Gegenden von Barra da Vareda im Sertog der Provinz Bahia, wo ich ein einziges Paar dieser Vögel erhielt." According to Hellmayr (1938: 374), these two localities are in the same district of Bahia. Paynter (1970b: 209) equated Fazenda Valo with Geral do Valo = Serra Geral, 15.25S, 42.48W (Paynter and Traylor, 1991). Wied (1830: 613) also mentioned that Temminck, 1823 (Temminck and Laugier de Chartrouse, 1820–1839), had illustrated these birds on plate 208.

Oberholser (1905: 67) introduced the generic name *Charitospiza* and provided the replacement name, *Charitospiza eucosma* for *Fringilla ornata* Wied, preoccupied by *Fringilla ornata* Vieillot, 1817. The two names share the same syntypes (ICZN 1999: 78, Art. 72.7).

Fringilla pileata Wied

Fringilla pileata Wied, 1821: 160 (Barra da Vareda).

Now *Coryphospingus pileatus pileatus* (Wied, 1821). See Hellmayr, 1938: 379–380, and Dickinson, 2003: 802.

SYNTYPES: **AMNH 4618**, [male]; **AMNH 4619**, [male]; **AMNH 4621**, male, collected at Barra da Vareda, Rio Pardo, southern Bahia, Brazil, by Maximilian, Prince of Wied. From the Maximilian Collection.

COMMENTS: Allen (1889b: 225–226) listed these three syntypes from the Maximilian Collection but gave the type locality as Campos Geraës, Bahia. This was undoubtedly based on Wied's (1830: 605) statement: "Dieser niedliche Fink lebt im inneren Brasilien, wo ich ihn in den grossen *Campos Geraës* im Sertong der Provinz *Bahiá*, an den Gränzen von *Minas Geraës* antraf." Only AMNH 4621 still bears an original label, which is pasted to the reverse of the AMNH label; the other two are in male plumage.

Paynter and Traylor (1991) equated Barra da Vareda with Inhobim, 15.15S, 40.57W.

Paroaria baeri Hellmayr

Paroaria baeri Hellmayr, 1907a: 43 (Rio Araguaya, State of Goyaz, Brazil).

Now *Paroaria baeri baeri* Hellmayr, 1907. See Hellmayr, 1938: 65, and Dickinson, 2003: 802.

HOLOTYPE: **AMNH 520205**, adult female, collected on the Rio Araguaia (= Rio Araguaya), Goiás, Brazil, in August 1906, by G.A. Baer (no. 2396). From the Rothschild Collection.

COMMENTS: Hellmayr gave Baer's unique field number of the holotype in the original description and noted that Baer obtained two adults and one young specimen. Later, Hellmayr (1908: 14, 36-37), in his full report on Baer's collection, gave more detail on the type series and stated that the collecting locality on the Rio Araguaia was near Leopoldina, 550 m altitude. Paynter and Traylor (1991) equated Leopoldina with Aruanã, 14.54S, 51.05W. The two paratypes are: AMNH 520206, immature female, collected in August 1906 by Baer (no. 2357); AMNH 520207, male, collected in June 1906 by Baer (no. 2212), both from the Rio Araguaia.

CATAMBLYRHYNCHINAE

The genus *Catamblyrhynchus* was included in the tribe Thraupini of the Emberizinae by Sibley and Monroe (1990: 738, 758). It was listed as *genus incertae sedis* by Dickinson (2003: 822) at the end of the Thraupidae and is often included within the Thraupidae (Ridgely and Tudor, 2009: 577). Because this type list follows the arrangement in Peters' Check-list (Paynter, 1970c: 215), *Catamblyrhynchus* is listed here as a subfamily within the Emberizidae.

Catamblyrhynchus diadema citrinifrons Berlepsch and Stolzmann

Catamblyrhynchus diadema citrinifrons Berlepsch and Stolzmann, 1896: 350 (Maraynioc).

Now Catamblyrhynchus diadema citrinifrons Berlepsch and Stolzmann, 1896. See Hellmayr, 1938: 5–6, Zimmer, 1949: 1–2, and Dickinson, 2003: 822.

SYNTYPE: **AMNH 515031**, adult male, collected at Maraynioc, 11.22S, 75.24W (Stephens and Traylor, 1983), Junín, Peru,

on 28 January 1893, by J. Kalinowski (no. 1856). From the Rothschild Collection.

COMMENTS: In the original description, Berlepsch and Stolzmann did not designate a type, but said that Kalinowski collected five specimens at Maraynioc in December 1891, September 1892, and January 1893. The above specimen bears Kalinowski's original label, marked "Typus" on the reverse. The second locality, Pariayacu, also on this label is close to Maraynioc, according to Stephens and Traylor (1983).

Mlíkovský (2009: 145–146) listed two of the five (not six) syntypes as present in MIZ. This syntype is a third.

CARDINALINAE

Pheuticus uropygialis terminalis Chapman

Pheuticus uropygialis terminalis Chapman, 1919a: 266 (San Miguel Bridge, Urubamba Cañon, 5000 ft., Peru).

Now Pheuticus aureoventris terminalis Chapman, 1919. See Hellmayr, 1938: 83–84, and Dickinson, 2003: 823.

HOLOTYPE: **AMNH 145557**, [male], collected at the foot of Machu Picchu, San Miguel Bridge, ca. 13.06S, 72.38W (Vaurie, 1972), Urubamba Cañon, 5000 ft, Cuzco, Peru, on 19 July 1916, by Harry Watkins.

COMMENTS: The AMNH number of the holotype was cited in the original description. Although the specimen was sexed in the field as a female, it was described as a [male] based on plumage. The second specimen, **AMNH 145558**, also published as [male] but sex? on field label, collected at Chauillay, Urubamba River, 3700 ft, is the paratype.

Cardinalis cardinalis canicaudus Chapman

Cardinalis cardinalis canicaudus Chapman, 1891: 324 (thirty miles west of Corpus Christi, Texas). Now Cardinalis cardinalis canicaudus Chapman, 1891. See Hellmayr, 1938: 68–69, Halkin and Linville, 1999, and Dickinson, 2003: 823.

SYNTYPES: **AMNH 54935**, male, and **AMNH 54937**, female, both collected 30 mi west of Corpus Christi, 27.47N, 97.26W (Times Atlas), Texas, on 23 April 1891, by Frank M. Chapman (nos. 2022 and 2024, respectively).

COMMENTS: The above two specimens were designated syntypes in the original description. Because Chapman designated syntypes, other specimens collected at the same time have no nomenclatural standing (ICZN, 1999: 77, Art. 72.4.6).

Cardinalis phoeniceus Bonaparte

Cardinalis phoeniceus (Gould MS) Bonaparte, 1838: 111 (received by Mr. Gould from the country south of the Bay of Honduras).

Now *Cardinalis phoeniceus* Bonaparte, 1838. See Hartert, 1919: 155, Hellmayr, 1938: 74–75, and Dickinson, 2003: 823.

HOLOTYPE: **AMNH 515537**, unsexed [male], collected in "the country south of the Bay of Honduras," undated. From the Rothschild Collection.

COMMENTS: Hartert (1919: 155) claimed that this specimen was the type of Bonaparte's name, based on a name written by Gould on the specimen in the collection of the Zoological Society of London but never published by Gould. There is no longer a label on the specimen indicating this, the earliest label being that of T.C. Eyton, who has written on his label that the specimen was from "Honduras" and came to him from the Zoological Society of London. He has also annotated it "or. of Bonaparte description." On the reverse, Hartert has documented the history of the specimen: Coll. Zool. Soc., Mus. T.C. Eyton, Coll. E. Bartlett, and to the Rothschild Collection and added "This is type, NOT the one in B.M. (E.H.)." This was accepted by Warren and Harrison (1971: 434).

Bonaparte named the genus *Cardinalis* at this time, and in the original description named two new species of the genus, both of which "come from Mexico." The entire description of *C. phoeniceus* was as follows: "A small but most splendid species, received by Mr. Gould from the country south of the Bay of Honduras." There is no indication that the specimen was ever in Gould's private collection, but he certainly might have annotated a specimen in the Zoological Society of London collection while he was working there.

The reverse of Eyton's label bears the number "3.a." and there is a small circular tag bearing the number "1501"; the significance of these numbers is unknown. The

correct collecting locality was probably Venezuela (Hellmayr, 1938: 74). The specimen was formerly mounted.

Pitylus canadensis frontalis Hellmayr

Pitylus canadensis frontalis Hellmayr, 1905a: 277 (S. Lourenço, Pernambuco, 28 to 60 metr. elev.). Now Caryothraustes canadensis frontalis (Hellmayr, 1905). See Hellmayr, 1938: 47, and Dickinson, 2003: 824.

HOLOTYPE: **AMNH 515637**, female, collected at São Lourenço da Mata, 28–60 m, 08.00S, 35.03W (Paynter and Traylor, 1991), Pernambuco, Brazil, on 29 July 1903, by Alphonse Robert (no. 1742). From the Rothschild Collection.

COMMENTS: In the original description, Hellmayr designated as type the specimen bearing Robert's no. 1742. He also included, as paratypes, two specimens in BMNH from Pernambuco collected by W.A. Forbes.

Pytilus [sic] (Caryothraustes) humeralis Lawrence

Pytilus [sic] (Caryothraustes) humeralis Lawrence, 1867b: 467 (New Granada, St. Fé de Bogota).
Now Parkerthraustes humeralis (Lawrence, 1867).
See Hellmayr, 1938: 50–51, Remsen, 1997: 89, and Dickinson, 2003: 824.

HOLOTYPE: **AMNH 41133**, unsexed, collected near Bogotá (= "St. Fé de Bogota"), 04.36S, 74.05W (Paynter, 1997), Cundinamarca, Colombia (= New Granada), obtained by Lawrence from "Dr. S." From the George N. Lawrence Collection.

COMMENTS: Apparently, Lawrence had the single specimen, which he may have received on exchange from Sclater or Salvin (=? Dr. S.). The Lawrence label on this specimen has only the locality "Bogota," Santa Fé de Bogota being the old name for Bogotá (see Sclater, 1855b: 131).

Saltator intermedius Lawrence

Saltator intermedius Lawrence, 1864b: 106 (New Granada, Isthmus of Panama).

Now Saltator maximus intermedius Lawrence, 1864. See Hellmayr, 1938: 10–11, Wetmore et al., 1984: 534–535, and Dickinson, 2003: 824.

SYNTYPES: **AMNH 41108**, juvenile male, collected by McLeannan (no. 58 Jr or Jv);

AMNH 41109, female, AMNH 41122, male, both collected by James McLeannan and John R. Galbraith (nos. 59F and 59M, respectively), all collected in Panama. From the George N. Lawrence Collection.

COMMENTS: In the original description, Lawrence did not designate a type or say how many specimens he had, noting only that he had earlier, in the first part of his Catalogue, assigned his single female specimen to Saltator magnus (Lawrence, 1861a: 297) but that he had more recently received specimens of both sexes. The specimens listed in the first part of his *Catalogue* had been collected by McLeannan alone. None of the specimens is dated. As the only female now in the collection is one collected later by McLeannan and Galbraith together, it seems likely that Lawrence considered the single specimen collected earlier to be a female as it has only a few feathers of the black breast band present. McLeannan's small square tag was present on this specimen and it appears to be marked "58 Jr or Jv," but this could have easily been misread by Lawrence. No type status is indicated on any of the three specimens. These specimens had not previously been recognized as types.

Saltator atripennis caniceps Chapman

Saltator atripennis caniceps Chapman, 1914a: 182 (Fusugasugá, alt. 6000 ft., Eastern Andes, Colombia).

Now Saltator atripennis caniceps Chapman, 1914. See Hellmayr, 1938: 14, and Dickinson, 2003: 824

HOLOTYPE: **AMNH 122733**, adult male, collected at Fusagasugá (= Fusugasugá), 8000 ft, 04.21N, 74.22W (Paynter, 1997), Cundinamarca, Colombia, on 29 March 1913, by P.G. Howes.

COMMENTS: Chapman cited the AMNH number of the holotype in the original description and accepted the following specimens as belonging to his new subspecies: four from Fusagasugá (including the type), one from "Bogota," and two from Gaulea, Ecuador. He expressed doubt concerning two Quito specimens and listed specimens from Ricaurte, Colombia, as intergrades; these are not included in the type series (ICZN, 1999: 76, Art. 72.4.1). The following paratypes are

in AMNH: AMNH 41099, a "Bogota" specimen with no data, from the Lawrence Collection; AMNH 125006 and 125007, males, Gaulea, Ecuador, collected 17 June 1913 and February 1913, respectively; and AMNH 122731, sex?, AMNH 122732, female, collected at Aguadita (above Fusagasugá) 26 and 27 March 1913, respectively. A third paratype from Fusagasugá was not cataloged at AMNH, nor is there such a specimen in the collection.

Tanagra superciliaris Wied

Tanagra superciliaris Wied, 1830: 518 (Campo Geral).

Now Saltator similis similis Lafresnaye and d'Orbigny, 1837. See Hellmayr, 1938: 14–16, Dickinson, 2003: 825.

SYNTYPE: **AMNH 6768**, male [female], collected at Campo Geral, Brazil, undated, by Maximilian, Prince of Wied. From the Maximilian Collection.

COMMENTS: When Allen (1889b: 221) listed the Wied types in AMNH, he listed two syntypes and commented: "The original description appears to have been based on a female and a young male. Of the former he says (Beitr., p. 520): 'Auch das oben beschriebene Weibchen schien noch nicht sein vollkommenes Gefieder zu tragen,' which seems to apply well to the bird given above as No. 6768." The specimen is in very worn plumage. Allen (1889b: 221) published it as a female adult even though the Wied label pasted to the back of the AMNH type label identified it as a male. The specimen was formerly mounted.

The second syntype, AMNH 6863, not marked in the AMNH catalog as a type, was exchanged to USNM and numbered USNM 76791. An unsexed, mounted specimen, it was destroyed in 1940, probably either as a result of insect infestation or extreme deterioration (James Dean, personal commun.).

Wied's name, *Tanagra superciliaris*, is a primary homonym of *Tanagra superciliaris* Spix, 1825. As such, Wied's name is permanently invalid (ICZN, 1999: 59, Art. 57.2) and is replaced by the next oldest name among the synonyms (ICZN, 1999: 26, Art. 23.3.5), *Saltator similis* Lafresnaye and d'Orbigny, 1837.

Paynter and Traylor (1991) thought it probable that the Campo Geral referred to by Allen (1889b: 221) was Serra Geral, on the Minas Gerais/Bahia border at 15.25S, 42.48W.

Saltator grandis hesperis Griscom

Saltator grandis hesperis Griscom, 1930: 8 (San José, Guatemala).

Now Saltator coerulescens hesperis Griscom, 1930. See Hellmayr, 1938: 19–20, and Dickinson, 2003: 824.

HOLOTYPE: **AMNH 399307**, adult male, collected at San José, 13.58N, 90.50W (Times Atlas), Guatemala, on 24 January 1920, by Austin Paul Smith (no. 19837). From the Dwight Collection (no. 56541).

COMMENTS: In the original description, Griscom cited the Dwight Collection number of the holotype and listed the material examined, but did not give all of the collecting locality names. Using the localities listed later by Griscom (1932b: 354), the following 25 paratypes are in AMNH: San Lucas, AMNH 397780-397782, three males; Finca El Cipres, **AMNH 397783**, **397785**, one male, one female; Finca El Espino, AMNH 397784, male; Hacienda California, AMNH **397786–397797**, **397799**, **397800**, nine males, three females, one immature male?, one immature sex?; Panajachel, AMNH 397798, male?; Ocos, AMNH 397801, female; San Felipe, Retalhulen, AMNH 399304, male; Lake Amatitlan, AMNH 399305, 399306, one male, one female. All of these paratypes were labeled "hesperis" or "nearest hesperis" and initialed by Griscom. AMNH 397779, an adult male from La Primavera, was labeled hesperis ± grandis by Griscom but was not included in the localities listed by him later (Griscom, 1932b: 354). I did not consider it a paratype. There are perhaps other paratypes at MCZ.

Pitylus nigriceps Chapman

Pitylus nigriceps Chapman, 1914b: 322 (Loja, alt. 7000 ft., Prov. Loja, Ecuador).

Now Saltator nigriceps (Chapman, 1914). See Hellmayr, 1938: 35–36, and Dickinson, 2003: 825.

HOLOTYPE: AMNH 130262, adult male, collected at Loja, 7000 ft, 04.00S, 79.13W

(Paynter, 1993), Loja, Ecuador, on 14 October 1913, by William B. Richardson.

COMMENTS: Chapman cited the AMNH number of the holotype in the original description; in addition he had a second unsexed specimen "possibly female." **AMNH 130263**, unsexed, from Loja, 7000 ft, 11 October 1912, by W.B. Richardson, is the paratype.

Saltator aurantiirostris iteratus Chapman

Saltator aurantiirostris iteratus Chapman, 1927b: 3 (Chugur, 9000 ft., 40 miles northwest of Cajamarca, northwestern Peru).

Now Saltator aurantiirostris iteratus Chapman, 1927. See Hellmayr, 1938: 35, and Dickinson, 2003: 825.

HOLOTYPE: **AMNH 229035**, adult male, collected at Chugur, 9000 ft, 06.40S, 78.45W (Stephens and Traylor, 1983), 40 miles northwest of Cajamarca, northwestern Peru, on 17 April 1926, by Harry Watkins (no. 10284).

COMMENTS: Chapman cited the AMNH number of the holotype in the original description and listed (Chapman, 1927b: 19) the specimens of *iteratus* that he examined, noting two paratypes in AMNH from the type locality but only one, **AMNH 229036**, was cataloged. He also had one FMNH paratype from Cajamarca.

Saltator aurantiirostris bolivianus Chapman Saltator aurantiirostris hellmayri Bond and Meyer de Schauensee

Saltator aurantiirostris bolivianus Chapman, 1927b: 3 (Tujma, 8200 ft., Dept. Cochabamba, Bolivia).

Now Saltator aurantiirostris hellmayri Bond and Meyer de Schauensee, 1939. See Hellmayr, 1938: 33, Paynter, 1970d: 234, and Dickinson, 2003: 825.

HOLOTYPE: **AMNH 139630**, adult male, collected at Tujma, 8200 ft, ca. 17.52S, 65.18W (Paynter, 1992), Cochabamba, Bolivia, on 25 September 1915, by Leo E. Miller (no. 13865) and Howarth Boyle.

COMMENTS: In the original description, Chapman gave the AMNH number of the holotype, and on pages 18–19 of the same publication listed the specimens examined. Of *bolivianus* he had nine from Parotani, AMNH 137983–137988, 148837–148839; five (only four cataloged) from Vinto, AMNH

137989-137992; two from Rio Cachimayo, AMNH 139621, 139622; eight (of which I found only five) from Rio Pilcomayo, **AMNH 139624–139628**; five (+ the type) from Tujma (of which I found only four), **AMNH 139629, 139631,139632, 139635**; two from California, AMNH 139638, 139639; one from Chilon, AMNH 139640; and four (actually five) from Pulque, AMNH 139641-**139645**. AMNH 139633 was apparently part of a large exchange to BIM in 1923, although the date is not entered in the catalog, and was not returned when the BIM collection was deposited at AMNH in 1935. It would not have been available to Chapman when bolivianus was described.

Hellmayr (1938: 33) noted that Chapman's name *Saltator aurantiirostris bolivianus* was preoccupied by *S. cayanus bolivianus* Chubb, 1921, a synonym of *S. m. maximus* Mueller, 1776. Bond and Meyer de Schauensee (1939: 2) then provided the replacement name *S. a. hellmayri*. The two names share the same type (ICZN, 1999: 78, Art. 72.7).

Saltator aurantiirostris tilcarae Chapman

Saltator aurantiirostris tilcarae Chapman, 1927b: 2 (Tilcara, 8000 ft., Prov. Jujuy, Argentina). Now Saltator aurantiirostris aurantiirostris Vieillot, 1817. See Hellmayr, 1938: 32–33, Paynter, 1970d: 234–235, and Dickinson, 2003: 825.

HOLOTYPE: **AMNH 142130**, adult male, collected at Tilcara, 8000 ft, 23.34S, 65.22W (Paynter, 1995), Jujuy, Argentina, on 12 February 1916, by Leo E. Miller (no 15439B) and Howarth S. Boyle.

COMMENTS: Chapman gave the AMNH number of the holotype in the original description and (on p. 18) noted the specimens of *tilcarae* that he examined. Paratypes in AMNH are: Perico, AMNH 142126, 142127; Tilcara, AMNH 142128, 142129; and Rosario de Lerma, AMNH 142137, 142138 and 142139. Chapman (1927b: 18) listed three specimens in addition to the type from Tilcara, but only two were cataloged.

Saltator aurantiirostris parkesi Silva

Saltator aurantiirostris parkesi Silva, 1990: 172 (Estância Vizcacheras, Santa Elena, Entre Rios, Argentina).

Now Saltator aurantiirostris parkesi Silva, 1990. See Dickinson, 2003: 825.

HOLOTYPE: **AMNH 780694**, adult male, collected at Estância Vizchacheras, 31.08S, 59.46W (Paynter, 1995), near Santa Elena, Entre Rios, Argentina, on 27 April (not May) 1961, by William H. Partridge and Philip S. Humphrey (no. 2761).

COMMENTS: Silva cited the AMNH number of the holotype in the original description and listed the following specimens as paratypes: adult males, AMNH 780688, 780690, and 780691; female, AMNH 780728, all from the type locality.

Silva is the correct way to list the author of this name.

Saltator cinctus J.T. Zimmer

Saltator cinctus J.T. Zimmer, 1943a: 33 (Cutucú [near Macas], eastern Ecuador; altitude 2,000 meters.).

Now Saltator cinctus J.T. Zimmer, 1943. See Paynter, 1970d: 235, and Dickinson, 2003: 825.

HOLOTYPE: **AMNH 748391**, adult female, collected near Macas, 02.19S, 78.07W (Paynter, 1993), Cordillera Cutucú, 2000 m, Morona-Santiago, Ecuador, on 28 December 1940, by Leopoldo Gomez.

COMMENTS: In the original description, Zimmer cited the AMNH number of the holotype. He had the single specimen. It is not certain which of the two ranges of the Cordillera Cutucú was visited by Gomez (Paynter, 1993: 58–59).

[Fringilla iugularis Wied]

This name, used by Wied (1830: 558), was apparently a recombination referring to *Tanagra jugularis* Lichtenstein (1823: 31), although Lichtenstein's name was not mentioned, and considered by Wied to be a synonym of *Tanagra atricollis* Spix, 1825 (= *Saltator atricollis* Vieillot, 1817). Allen (1889: 222) listed two specimens, AMNH 6766 and AMNH 6767, bearing the Wied name. These two specimens are in AMNH but are not types and have apparently never had type labels attached.

Saltator immaculatus Berlepsch and Stolzmann

Saltator immaculatus Berlepsch and Stolzmann, 1892: 375 (Lima et d'Ica).

Now Saltator striatipectus immaculatus Berlepsch and Stolzmann, 1892. See Hartert 1919: 155, Hellmayr, 1938: 43–44, and Dickinson, 2003: 825.

SYNTYPES: **AMNH 515928**, adult male, 16 September 1889, and **AMNH 515929**, female, 23 October 1889, both collected at Lima, 12.03S, 77.03W (Stephens and Traylor, 1983), Peru, by J. Kalinowski (nos. 62 and 197, respectively). From the Rothschild Collection.

COMMENTS: Kalinowski collected eight specimens of this form in September and October 1889 at Lima and d'Ica, and it was described by Berlepsch and Stolzmann without designating a type. The above two specimens in AMNH were marked "typus" by the authors. Hartert (1919: 375) listed only the male as a cotype (= syntype); the second syntype has been added to the type collection. There are also two syntypes present in MIZ and two additional ones that are lost (Mlíkovský, 2009: 141). A third specimen, AMNH 515930, was collected by Kalinowski at Lima on 14 November 1889, but because only September and October specimens were included in the type series, this specimen has no type standing, nor is it marked "typus."

Guiraca Rothschildii Bartlett

Guiraca Rothschildii Bartlett, 1890: 168 (Carimang River, British Guiana).

Now *Cyanocompsa cyanoides rothschildii* (Bartlett, 1890). See Hartert, 1919: 154, Hellmayr, 1938: 97–99, Paynter, 1970d: 239, and Dickinson, 2003: 825.

LECTOTYPE: **AMNH 514095**, adult male, collected on the Kamarang River (= Rio Carimang), 1500 ft, 05.54S, 60.35W (Stephens and Traylor, 1983), Guiana, on 22 April 1885, by Henry Whitely. From the Rothschild Collection.

COMMENTS: Bartlett did not designate a type in the original description, but described male and female; in his table of measurements of *rothschildii* as well as of related forms, he gave measurements separately for each specimen, therefore, he had only the two specimen

mens. Hartert (1919: 154) listed the male as the type, thereby designating it the lectotype. The female specimen, **AMNH 514096**, is the paralectotype.

The type bears three labels: the original Whitely label, a Rothschild type label, and a plain stiff paper label that is apparently Bartlett's label. On the front of this label is his new name and his number 7541A; on the reverse is the name, *G. cyanea*, crossed out, and the number "4, a." of unknown significance.

Cyanocompsa cyanea caucae Chapman

Cyanocompsa cyanea caucae Chapman, 1912: 163 (La Manuelita near Palmira, alt. 3500 ft., Cauca Valley, Colombia).

Now *Cyanocompsa brissoni caucae* Chapman, 1912. See Hellmayr, 1938: 104–105, Paynter, 1970d: 239, and Dickinson, 2003: 825.

HOLOTYPE: **AMNH 109175**, adult male, collected at La Manuelita near Palmira, alt. 3500 ft, 03.35N, 76.17W (Paynter, 1997), Valle del Cauca, Colombia, on 14 April 1911 by Frank M. Chapman and William B. Richardson.

COMMENTS: Chapman gave the AMNH number of the holotype in the original description, noting that he had seven specimens, including the type. The six paratypes are: AMNH 107345–107349, two males, one immature male, and two females, collected at Caldas, 2000 ft, between 18 and 29 November 1910; and AMNH 109176, female, collected at Palmira, 11 April 1911.

Paynter (1970d: 239) included both the genera Guiraca and Cyanocompsa in the genus Passerina. To avoid the resulting nomenclatural confusion that would have resulted from this merger, the ICZN (1979: 24–26) suppressed the specific name cyanea as published in the binomen Loxia cyanea Linnaeus, 1758 [= Cyanocompsa cyanea] for the purposes of both the Law of Priority and the Law of Homonymy in order to conserve the widely used name Passerina cyanea (Linnaeus, 1766) for the North American Indigo Bunting. The next available name for the South American Indigo Bunting, published as *Fringilla brissonii* Lichtenstein, 1823, was at that time placed on the Official List of Specific Names in Zoology with Name Number 2662, type locality Bahia, Brazil, and is now the correct specific name to use.

Cyanocompsa parellina dearborni Miller and Griscom

Cyanocompsa parellina dearborni Miller and Griscom, 1925: 1 (San Rafael del Norte, Nicaragua). Now Cyanocompsa parellina parellina (Bonaparte, 1850). See Hellmayr, 1938: 94, Paynter, 1970d: 241, and Dickinson, 2003: 826.

HOLOTYPE: **AMNH 103492**, adult male, collected at San Rafael del Norte, 4000–5000 ft, Nicaragua, on 5 February 1909, by William B. Richardson.

COMMENTS: Miller and Griscom cited the AMNH number of the holotype in the original description and listed the specimens examined. The six paratypes are: San Rafael del Norte, AMNH 101502, female, 7 April 1907, and AMNH 103491, male, 31 December 1908; Las Cañas, AMNH 144557, male, 12 April 1917; Matagalpa, AMNH 101501, female, 22 March 1907, AMNH 423598, immature male, 20 February 1917, AMNH 423599, female, 7 February 1917.

Guiraca caerulea interfusa Dwight and Griscom

Guiraca caerulea interfusa Dwight and Griscom, 1927: 4 (Fort Lowell, Arizona).

Now Passerina caerulea interfusa (Dwight and Griscom, 1927). See Hellmayr, 1938: 89–90, Ingold, 1993: 2–3, Klicka et al., 2001, and Dickinson, 2003: 826.

HOLOTYPE: **AMNH 364955**, adult male, collected at Fort Lowell, Arizona, on 31 May 1905, by H. Kimball. From the collection of Jonathan Dwight (no. 19356).

COMMENTS: Dwight and Griscom cited the Dwight number of the holotype in the original description and listed the specimens examined. I have considered only those specimens in AMNH that were labeled interfusa and initialed by Dwight to be paratypes. I have not included those that Dwight considered questionable. Paratypes in AMNH: A. Buller Collection, Zapothlau, Jalisco, Mexico, AMNH 36847-36849, three males. Mearns Collection, Fort Verde, Arizona, AMNH 53102-53115, 75093, 13 males, two females; Fort Hancock, Texas, AMNH **69259**, **69262**, two males; Fort Clark, Texas, AMNH 69261, male. Sennett Collection, Fort Davis, Texas, AMNH 84440, female. Batty

Collection, Escuinapa, Sinaloa, Mexico, AMNH 91797–91799, 92923, three males, one sex?; Arroyo de Lemones, Sinaloa, Mexico, AMNH 91800, male; Rancho Baillon, Durango, Mexico, AMNH 92396, male; Arroyo de Gavilan, Jalisco, Mexico, AMNH 104944–104947, four males; Ojo de Agua, Tepic, Mexico, AMNH 104948, male. Dwight Collection, Whetstone Mountains, Arizona, AMNH 364956, male; Fort Davis, Texas, AMNH 364958, male; Jose del Cabo, Baja California, Mexico, AMNH 364959, immature male. Other paratypes are probably in MCZ.

Passerina versicolor purpurascens Griscom

Passerina versicolor purpurascens Griscom, 1930: 12 (Progreso, Guatemala).

Now *Passerina versicolor purpurascens* Griscom, 1930. See Hellmayr, 1938: 110–111, Klicka et al., 2001, and Dickinson, 2003: 826.

HOLOTYPE: **AMNH 397359**, adult male, collected at Progreso, Guatemala, on 10 July 1924, by Alfred W. Anthony (no. 341). From the Jonathan Dwight Collection (no. 58453).

COMMENTS: Griscom cited the Dwight Collection number of the holotype in the original description and listed two adult males, including the type, and one immature female of his new subspecies. The paratype in AMNH is AMNH 397360, male, from Progreso. The immature female paratype may be at MCZ. Dickerman (1987b: 84) listed this type.

Tanagra caerulescens Wied

Tanagra caerulescens Wied, 1830: 541 (Campos Geraës des inneren Brasilien's).

Now *Porphyrospiza caerulescens* (Wied, 1830). See Allen, 1889b: 140, 225, Hellmayr, 1938: 114, Paynter, 1970d: 246, and Dickinson, 2003: 787.

HOLOTYPE: **AMNH 6764**, adult male, collected in Campos Geraës, Brazil, by Maximilian, Prince of Wied. From the Maximilian Collection.

COMMENTS: In the original description, Wied (1830: 544) noted that he had a single male specimen. Allen (1889b: 225) listed this specimen as the type of *T. caerulescens*, the original Wied label reading "*T. coerulescens*"

mihi." He discussed it in detail (Allen, 1889b: 140) but questioned whether it was a synonym of *Emberiza cyanella* Sparrman, 1787, as had been suggested. Hellmayr (1938: 114) noted that it was not the same; therefore, Wied's name was the correct one for the species. Wied's single specimen was formerly mounted and is in badly worn plumage. Paynter and Traylor (1991) suggested that Wied's "Campos Geraës" may be Serra Geral, 15.25S, 42.48W, Minas Gerais.

Paynter (1970d: 245) included the species in the genus *Passerina*.

THRAUPINAE

Tanagra capistrata Wied

Tanagra capistrata Wied, 1821: 179 (Fazenda von Ilha, Campos Geräes).

Now Schistochlamys ruficapillus capistrata (Wied, 1821). See Allen, 1889b: 222, Hellmayr, 1936: 443–444, Storer, 1970: 247, and Dickinson, 2003: 802.

SYNTYPE: **AMNH 6861**, adult male, collected at Fazenda von Ilha, Campos Geraës, Brazil, by Maximilian, Prince of Wied. From the Maximilian Collection.

COMMENTS: According to Allen (1889b: 222), the original label read: "Orchestichus capistratus Wied. Mas. Brasilia. M.R. T. leucophaea Licht." The label apparently was cut subsequently in order to allow it to be pasted on the back of the AMNH label and now only reads: "T. leucophaea Licht. ♂, Brasilia. M.R." The manuscript catalog, dated 1865, quoted by Allen (1889b: 222), listed three names: "Schistochlamis leucophaea Licht. Caban. (Tanagra capistrata Spix, Wied, Tanagra leucophaea Licht.)." Both the Lichtenstein and Spix names were published after Wied's publication of capistrata and are synonyms. Later, Wied (1830: 500-504) gave descriptions of both male and female and his catalog listed male and female, so there was at least one additional syntype.

This specimen had been inadvertently exchanged with USNM, possibly because Wied's name had been cut off of the original label, and it was returned to AMNH on 14 November 1889, apparently just before Allen's paper on the Wied types was published in December 1889. It had been given

the USNM no. 76789, which appears on the Wied label. The specimen was formerly mounted.

Paynter and Traylor (1991) equated Fazenda Ilha with Ilha Dentro, 15.06S, 41.41W, Bahia, about 5 km from the border with Minas Gerais. The generic name *Schistochlamys* Reichenbach, 1850, has been conserved, with *Tanagra capistrata* Wied, 1821, as its type species (see Gregory, 2000, and ICZN, 2004).

Schistochlamys melanopis amazonica J.T. Zimmer

Schistochlamys melanopis amazonica J.T. Zimmer, 1947b: 24 (Santarem, Rio Tapajoz, Brazil). Now Schistochlamys melanopis amazonica J.T. Zimmer, 1947. See Storer, 1970: 249, and Dickinson, 2003: 802.

HOLOTYPE: **AMNH 428965**, adult male, collected at Santarém, 02.26S, 54.42W (Paynter and Traylor, 1991), Rio Tapajós, Pará, Brazil, on 7 August 1931, by Alfonso M. Olalla.

COMMENTS: Zimmer cited the AMNH number of the holotype in the original description and listed 28 specimens, including the holotype, that he examined. The 27 paratypes are: Maranhão, AMNH 245684, female; Santa Rita do Araguaia, AMNH 270396, male; Rio Bonita, Fazenda Bejoy, AMNH 270397, sex?; Santarém, AMNH 428961–428964, 428966–428975, nine males, two females, three sex?; Rio Madeira, Humaythá, AMNH 511617, 511618, two males; Goias, AMNH 511619–511626, four males, two females, two sex?.

Cypsnagra ruficollis pallidigula Hellmayr

Cypsnagra ruficollis pallidigula Hellmayr, 1907b: 350 (Humaytha).

Now *Cypsnagra hirundinacea pallidigula* Hellmayr, 1907. See Hellmayr, 1936: 366, Isler and Isler, 1999: 48–49, and Dickinson, 2003: 805.

HOLOTYPE: **AMNH 511072**, adult male, collected at Humaitá (= Humaytha), 07.31S, 63.02W (Paynter and Traylor, 1991), Rio Madeira, Amazonas, Brazil, by Wilhelm Hoffmanns (no. 1290). From the Rothschild Collection.

COMMENTS: Hellmayr gave Hoffmanns' unique field number of the holotype in the

original description. In addition, Hellmayr had an adult female from Humaitá, paratype **AMNH 511071**, also collected by Hoffmanns (no. 1273), and he included two specimens from Luschnath, Bahia, in BMNH in his new subspecies as well.

Lamprospiza charmesi Penard and Penard

Lamprospiza charmesi Penard and Penard, 1910: 463 (Pararakweg, Surinam).

Now *Lamprospiza melanoleuca* (Vieillot, 1817). See Hellmayr, 1936: 437–438, Isler and Isler, 1999: 51–53, and Dickinson, 2003: 803.

?SYNTYPES: **AMNH 511552**, female, 12 January 1906; **AMNH 511553**, (Putscher no. 27), adult male, 14 December 1905; **AMNH 511554**, adult male, 4 January 1906, all collected in the interior of Surinam by H.R. Putscher. From the Rothschild Collection.

COMMENTS: In the original description, the Penards did not indicate the number of specimens in their type series, saying only that the new species was named for E. Charmes because the first specimens of the species were collected by him on the Pararakweg. There is no specimen collected by E. Charmes in AMNH, and the above three specimens are the only Surinam specimens of L. melanoleuca. Putscher is not mentioned by the Penards and there is nothing on the labels to indicate that they ever belonged to the Penards; in fact, the Rothschild labels on the Putscher specimens are printed "H.R. Putscher". Hartert did not mention L. charmesi in any of his lists of types in the Rothschild Collection. However, Hellmayr (1936: 437–438), in listing L charmesi as a synonym of L. melanoleuca, noted that the syntypes had been in the Rothschild Museum and were now in AMNH, and all three bear AMNH type labels, apparently attached by Zimmer (1947b: 22), who referred to these as syntypes.

T.E. Penard (1924: 145–168), Peters (1937: 232–234), Haverschmidt (1949: 56), and Haverschmidt and Mees (1994: 23) published important information on the Penards. The brothers F.P. and A.P. Penard suffered from leprosy. Unable to do fieldwork themselves, they depended on friends to collect birds for them. They, along with T.E. Penard, were three of four Penard brothers interested in

natural history. The W.A. Penard, who is noted below as corresponding with Rothschild, was probably the fourth brother and the William Penard who supplied data to both Peters and Haverschmidt. The Penard collection consisted of about 875 specimens, which had been purchased from them by Rothschild to enable volume one of their book to be published (in 1908). A printout of Surinam (Dutch Guiana) specimens in AMNH, kindly provided by T. Trombone, shows only 116 specimens attributed to Penard, collected between the years 1899 and 1902. These specimens have very distinctive trapezoidal labels and "W.A. Penard" written by Hartert on the reverse of the Rothschild label There is no record of a purchase of specimens from Penard in the partial list of Rothschild's purchases held in the Ornithology Department Archives. However, there is an entry on 20 August 1902, "Recd fr. Surinam" 123 specimens, which proved to relate to the Penard specimens. Further checking permitted other connections to be made, and it now seems probable that these three specimens considered syntypes were among the birds purchased by Rothschild to enable the Penards to publish volume one of their work. They probably were seen by the Penards, but this could not be verified.

Using the spreadsheet provided by T. Trombone, I obtained the names of W.A. Penard, B. Chunkoo, and H.R. Putscher, who were listed as collectors of Surinam birds for Rothschild between 1902 and 1908. Through the courtesy of Louise Clarke and Lorraine Portch, Archives and Records Management, BMNH, London, I received copies of letters written to Rothschild or Hartert between those years by the three correspondents. References to shipments of birdskins in the letters are compared in appendix 1 to Rothschild's purchases of Surinam birds between 1902 and 1908 (in Rothschild's partial list of purchases, Archives, Department of Ornithology, AMNH). From this comparison, it became evident that there was a close correspondence between the information in the letters and what Rothschild actually purchased. By early 1906, Rothschild had become reluctant to purchase large lots of specimens, apparently including many duplicates. The number of specimens selected by Rothschild up to May 1905 and the April 1906 shipment for which we know he paid, totals 892, indeed close to the 875 given by Haverschmidt and others. It isn't clear how many of the nearly 1000 birds shipped by Putscher in December 1905 or the 42 received from Chunkoo in May 1907 were kept by Rothschild (appendix 1).

Penard and Penard, in the original description, had doubtfully included Pará, Brazil, specimens in their new form. Hellmayr (1905: 276, not Hartert and Berlepsch, as said by Penard and Penard, 1910: 464) had published on a collection made by A. Robert in Pará and had reported that the two specimens collected by Robert had blood red bills and that two other specimens in the Rothschild Collection, collected earlier by Steere in Pará, had faded to yellow. As Hellmayr had not indicated that the specimens had black at the base of the bill, Penard and Penard had doubtfully included Pará specimens in their new species, which did have black at the base of the bill. Because these Pará specimens were doubtfully attributed to L. charmesi, they are not part of the type series (ICZN, 1999: 76, Art. 72.4.1).

Chlorornis riefferii diluta J.T. Zimmer

Chlorornis riefferii diluta J.T. Zimmer, 1947b: 20 (San Pedro, south of Chachapoyas, northern Perú; altitude 8600 to 9400 feet.).

Now *Chlorornis riefferii dilutus* J.T. Zimmer, 1947. See Storer, 1970: 252, Isler and Isler, 1999: 55, and Dickinson, 2003: 809.

HOLOTYPE: **AMNH 235729**, adult male, collected at San Pedro, 8600–9400 ft, south of Chachapoyas, 06.13S, 77.51W (Stephens and Traylor, 1983), Amazonas, northern Peru, on 26 January 1926, by Harry Watkins (no. 10055).

COMMENTS: In the original description, Zimmer cited the AMNH number of the holotype, but miscopied the number onto the type label as no. 170242; this has been corrected. The AMNH number cited above is the correct one. Zimmer (1947b: 22) listed the specimens that he examined. Paratypes are: La Lejia, AMNH 235355–235358, three males and one female, February through April 1925, Watkins; San Pedro, AMNH 235724–235728, four males and one female,

January and February 1926, Watkins; Levanto, **AMNH 511541**, **511542**, male and female, November 1894, O.T. Baron. Zimmer tentatively referred two birds from Cumpang to *dilutus*, but I have not considered these to be paratypes (ICZN, 1999: 76, Art. 72.4.1).

David and Gosselin (2002: 264) gave reasons for considering *Chlorornis* masculine, and this was followed by Dickinson, 2003: 809.

Chlorornis riefferii celata J.T. Zimmer

Chlorornis riefferii celata J.T. Zimmer, 1947b: 21 ("Camp 1," below Limbani, southeastern Perú). Now Chlorornis riefferii celatus J.T. Zimmer, 1947. See Storer, 1970: 253, Isler and Isler, 1999: 55, and Dickinson, 2003: 809.

HOLOTYPE: **AMNH 147838**, adult male, collected at Camp 1, below Limbani, 14.08S, 69.42W (Stephens and Traylor, 1983), Puno, Peru, on 10 March 1907, by Harry Watkins (no. 728).

COMMENTS: Zimmer gave the AMNH number of the holotype in the original description and on p. 22 listed the specimens that he examined. Paratypes are: Santo Domingo, AMNH 1465815, female, 23 September 1916, by Watkins; Camp 1, below Limbani, AMNH 147836, 147837, 147839, three males, undated on labels, by Watkins; Oconeque, AMNH 511545, male, 7 July 1904, by G. Ockenden.

[Chlorospingus? speculiferus Lawrence]

Lawrence (1875: 383) quite clearly stated that the type of this form came from Dr. Gundlach and was in USNM. Nevertheless, AMNH 3262 has a type label attached with reference to the description. On the reverse of the AMNH Lawrence Collection label, someone has written "According to Wetmore (Bds. of Porto Rico & V.I., 1927, 544, the type of this species is in U.S. Nat. Mus." This is correct, and it is listed by Deignan (1961: 588). Deignan (1961: 590) explained that the five new forms described by Lawrence in the paper cited above have their types in USNM. It is not stated in the description of C. speculiferus whether Lawrence had more than one specimen at that time, and because the

AMNH specimen has no original label, is undated, and has no information indicating that it came from Gundlach, I do not consider that it has any claim to type status. Because it bears an AMNH type label, it remains in the type collection with an additional label explaining its status. It was formerly mounted. This species is now in the monotypic genus *Nesospingus*.

Chlorospingus ophthalmicus dwighti Underdown

Chlorospingus ophthalmicus dwighti Underdown,
1931: 612 (Finca Sepur, Vera Paz, Guatemala).
Now Chlorospingus ophthalmicus dwighti Underdown,
1931. See Hellmayr,
1936: 399–400, Isler and Isler,
1999: 60–63, Dickinson,
2003: 817,
Sánchez-González et al.,
2007, and Wier et al.,
2008.

HOLOTYPE: **AMNH 294658**, adult male, collected at Finca Sepur, ca. 10 mi north of Sepacuite, 15.29N, 89.52W (Selander and Vaurie, 1962), Alta Verapaz, Guatemala, on 4 January 1926, by Alfred W. Anthony (no. 2997). From the Jonathan Dwight Collection (no. 61693).

COMMENTS: Prior to Underdown's publication of *C. o. dwighti*, Hellmayr had examined the type of Bonaparte's *Poospiza olivacea*, the type locality of which was suspect. As *Chlorospingus olivacea*, the name had been applied to eastern Guatemalan birds, but Hellmayr found that this immature type specimen most closely matched nominate *C. ophthalmicus*, thus leaving the eastern Guatemalan birds without a name. Underdown supplied this when he named *dwighti*.

In the original description, Underdown designated as the holotype AMNH 294658, but did not mention any other specimens. In his revision of *C. ophthalmicus*, he (Underdown, 1932: 643) listed the material he examined. It is difficult to recognize which specimens he borrowed to describe *dwighti*. The following are paratypes: AMNH 398484 (Anthony no. 5382, Dwight no. 63101), female, Barrillos, 21 March 1927; AMNH 398485 (5585, 63106), male, Nebaj, 29 April 1927; AMNH 398488 (5231, 63102), female, San Mateo, 15 February 1927; AMNH 398489 (5235, 63103), male, San Mateo, 16 February 1927. Underdown did not list the

female from Finca Sepur, and apparently did not have it in hand. Two males and two females from Finca Sepacuite were examined, but I have found no way to tell which specimens these were from among the many in AMNH from that locality, nor was it possible to identify the seven "Guatemala (Vera Paz skins with no data)" that he saw. He also listed a male and a female from Tumbala, Chiapas, which do not appear to be in AMNH.

Sánchez-González et al. (2007) recommended considering *dwighti* a full species. The type of this subspecies was listed by Dickerman (1987b: 79), but the AMNH number was incorrectly given as 492658; the correct number is AMNH 294658.

Chlorospingus ophthalmicus eminens J.T. Zimmer

Chlorospingus ophthalmicus eminens J.T. Zimmer, 1946: 389 (Gramalote, Department of Norte de Santander, Colombia).

Now Chlorospingus ophthalmicus eminens J.T. Zimmer, 1946. See Storer, 1970: 257, Isler and Isler, 1999: 60–63, and Dickinson, 2003: 817.

HOLOTYPE: **AMNH 748393**, adult female, collected at Gramalote, 07.53N, 72.48W (Paynter, 1997), Norte de Santander, Colombia, by Brother Nicéforo Maria (no. 81).

COMMENTS: Zimmer cited the AMNH number of the holotype in the original description. Zimmer listed the specimens of *eminens* he examined; only the holotype is in AMNH. Paratypes are in FMNH and in MLS. Wier et al. (2008) did not sample this subspecies.

Chlorospingus ophthalmicus macarenae J.T. Zimmer

Chlorospingus ophthalmicus macarenae J.T. Zimmer, 1947: 4 (Mt. Macarena, Colombia; plateau at 411 feet elevation).

Now *Chlorospingus ophthalmicus macarenae* J.T. Zimmer, 1947. See Storer, 1970: 257, Isler and Isler, 1999: 60–63, and Dickinson, 2003: 817.

HOLOTYPE: **AMNH 748394**, adult male, collected on the plateau at 4100 (not 411) ft, Serranía de la Macarena (= Mt. Macarena), 02.45N, 73.55W (Paynter, 1997), Meta, Colombia, on 24 January 1942, by E. Thomas Gilliard, on the Mt. Macarena Expedition.

COMMENTS: Zimmer cited the AMNH number of the holotype in the original description and listed (on p. 6) five males (plus the holotype) and four females examined, all from Mt. Macarena. There are nine paratypes, all collected on Mt. Macarena between 17 and 26 January 1942 by Gilliard, but according to the labels, they are three males, one male?, three females, and two sex?. Paratypes: AMNH 343895–343903. Gilliard (1942) published a summary of this expedition. Wier et al. (2008) did not sample this subspecies.

Chlorospingus albitempora nigriceps Chapman

Chlorospingus albitempora nigriceps Chapman, 1912: 166 (Miraflores, alt. 6800 ft., Central Andes, east of Palmira, Cauca, Colombia).

Now Chlorospingus ophthalmicus nigriceps Chapman, 1912. See Chapman, 1917: 618, Hellmayr, 1936: 405, Isler and Isler, 1999: 60–63, and Dickinson, 2003: 817.

HOLOTYPE: **AMNH 109326**, adult female, collected at Miraflores, 6800 ft, ca. 03.35N, 76.10W (Paynter, 1997), east of Palmira, Valle del Cauca, Colombia, on 29 April 1911, by William B. Richardson.

COMMENTS: Chapman gave the AMNH number of the holotype in the original description and examined eight specimens of his new form in addition to the type. The seven paratypes in AMNH are: Salento, **AMNH 113116**, male, 3 November 1911; El Eden, AMNH 113117, male, 20 October 1911; AMNH 113118, female, 19 October 1911; Rio Toché, AMNH 113119, male, 24 October 1911; AMNH 113120, male, 24 October 1911; AMNH 113121, female, 23 October 1911; AMNH 113122, female, 24 October 1911. AMNH 113116, 113119, and 113122 were exchanged with O. Bangs in 1918 and are now in MCZ; AMNH 113121 was exchanged with USNM. Apparently, the second specimen from Miraflores, a male collected by L.A. Fuertes (no. 2398), did not come to AMNH. Wier et al. (2008) did not sample this subspecies.

Chlorospingus tacarcunae Griscom

Chlorospingus tacarcunae Griscom, 1924a: 11 (Mt. Tacarcuna, east slope, alt. 4600 ft., eastern Panama).

Now *Chlorospingus tacarcunae* Griscom, 1924. See Hellmayr, 1936: 410–411, Zimmer, 1947b: 2–4, Wetmore et al., 1984: 494–495, Isler and Isler, 1999: 63–64, Dickinson, 2003: 818, and Wier et al., 2008.

HOLOTYPE: **AMNH 136365**, collected on the east slope of Mt. Tacarcuna, 4600 ft, 08.11N, 77.17W (Siegel and Olson, 2008), eastern Panama, on 14 April 1915, by Harold E. Anthony and D.S. Ball (no. 203).

COMMENTS: Griscom gave the AMNH number of the holotype in the original description and examined seven males (including the type) and three females. The nine paratypes are: AMNH 136362–136364, 136366–136370, all collected on Mt. Tacarcuna in March and April 1915 by Anthony and Ball.

Hellmayr (1936: 410–411) considered *tacarcunae* a subspecies of *C. flavigularis*, and Zimmer placed it in the species *C. ophthalmicus*, but most recently it has been retained as a monotypic species. The altitude cited above for the holotype is the altitude printed on the AMNH label and was cited in the original description. The small field label gives the altitude as 5200 ft.

Chlorospingus punctulatus Sclater and Salvin

Chlorospingus punctulatus Sclater and Salvin, 1869: 440 (cordillera of Chucu).

Now Chlorospingus ophthamicus punctulatus Sclater and Salvin, 1869. See Hellmayr, 1936: 407, Zimmer, 1947b: 2–4, Wetmore et al., 1984: 493–494, Isler and Isler, 1999: 64–65, Dickinson, 2003: 817, and Wier et al., 2008.

SYNTYPE?: **AMNH 40988**, female, collected in the Cordillera del Chucu, ca. 08.40N, 80.50W (Siegel and Olson, 2008), Veraguas, Panama, undated, by Enrique Arcé (no. 2463). From the G.N. Lawrence Collection.

COMMENTS: In the original description, no type was designated; the authors only mentioned that Arcé had obtained several specimens in the Cordillera Chucu. AMNH 40988 had been obtained by Lawrence from O. Salvin, and is so noted by Lawrence on the reverse of a label that was apparently Salvin's. The AMNH label, printed "Lawrence Collection," is annotated "may be a cotype" on the reverse in what appears to be Griscom's hand. It bears an AMNH type label marked

"Co-type," but because the specimen is undated, its type status is uncertain.

There are several syntypes in BMNH (Warren and Harrison, 1971: 452). Isler and Isler (1999: 64–65) considered *C. punctulatus* a monotypic species.

Chlorospingus pileatus diversus Griscom

Chlorospingus pileatus diversus Griscom, 1924a: 11 (Cerro Flores, alt. 6000 ft., eastern Chiriqui, Panama).

Now *Chlorospingus pileatus diversus* Griscom, 1924. See Hellmayr, 1936: 409, Wetmore et al., 1984: 497–498, Isler and Isler, 1999: 66–67, and Dickinson, 2003: 818.

HOLOTYPE: **AMNH 183044**, adult male, collected on Cerro Flores, 5500 ft, 08.29N, 81.44W (Siegel and Olson, 2008), Chiriqui, Panama, on 14 March 1924, by Ludlow Griscom and Rex Benson.

COMMENTS: Griscom cited the AMNH number of the holotype in the original description and noted that he had six specimens, including the type. The five paratypes are: AMNH 183043, 183045–183048, one male and four females, all from Cerro Flores, collected 14 to 18 March 1924. Some authors consider *diversus* a synonym of nominate *pileatus*. Griscom (1924b) wrote a popular account of this expedition.

See Siegel and Olson (2008: 168–169) for a discussion of this type locality. The altitude at which the holotype was collected was said in the original description to be 6000 ft, but both the field label and the AMNH label record this as 5500 ft.

Chlorospingus parvirostris medianus J.T. Zimmer

Chlorospingus parvirostris medianus J.T. Zimmer, 1947b: 8 (Utcuyacu, Junín, Perú, altitude 4800 feet). Now Chlorospingus parvirostris medianus J.T. Zimmer, 1947. See Storer, 1970: 260, Isler and Isler, 1999: 67–68, and Dickinson, 2003: 818.

HOLOTYPE: **AMNH 169537**, adult male, collected at Utcuyacu, 4800 ft, ca. 11.12S, 75.28W (Vaurie, 1972), Junín, Peru, on 1 December 1919, by Harry Watkins.

COMMENTS: Zimmer gave the AMNH number of the holotype in the original description and on page 10 listed the 11 specimens (including the type) of *medianus*

that he examined. The 10 paratypes are: **AMNH 145806–145810**, one male, one female, three sex?, Idma, 11–12 July 1916, by Chapman and Watkins; **AMNH 169533–169536, 169538**, two males and three females, Utcuyacu, 2–4 December 1919, by Watkins.

Chlorospingus flavigularis parvirostris Chapman

Chlorospingus flavigularis parvirostris Chapman, 1901: 227 (Inca Mine, Peru).

Now Chlorospingus parvirostris parvirostris Chapman, 1901. See Hellmayr, 1936: 412, Zimmer, 1947b: 6–10, Storer, 1970: 260, Isler and Isler, 1999: 67–68, and Dickinson, 2003: 818.

HOLOTYPE: **AMNH 74062**, adult male, collected at Santo Domingo (= Inca Mine), 13.51S, 69.41W (Stephens and Traylor, 1983), Puno, Peru, on 16 June 1900, by H.H. Keays (no. 29).

COMMENTS: Chapman cited the AMNH number of the holotype in the original description and noted that he had two specimens from Keays' collection. The paratype is: **AMNH 74065**, female, collected at Inca Mine on 7 September 1900, by Keays (no. 112).

Chlorospingus flavigularis marginatus Chapman

Chlorospingus flavigularis marginatus Chapman, 1914a: 189 (Buenavista (alt. 1200 ft.), Dept. Nariño, S.W. Colombia).

Now Chlorospingus flavigularis marginatus Chapman, 1914. See Chapman 1917: 619–620, Hellmayr, 1936: 411, Zimmer, 1947b: 6–10, Storer, 1970: 261, Isler and Isler, 1999: 68–69, and Dickinson, 2003: 818.

HOLOTYPE: **AMNH 118333**, adult male, collected at Buenavista, 1200 ft, 01.29N, 78.05W (Paynter, 1997), Nariño, Colombia, on 27 September 1912, by William B. Richardson.

COMMENTS: Chapman gave the AMNH number of the holotype in the original description and said that he had five specimens (including the type) from Buenavista, one from Ricuarte, and one from Cocal. The six paratypes are: Cocal, 4000 ft, AMNH 110287, female, 11 June 1911; Buenavista, AMNH 118331, 118332, 118334, 118335, one male and three females, 26–30 September 1912; Ricuarte, AMNH 118336, male, 14 September 1912. This last specimen was exchanged to BMNH in May 1921.

2012

Buarremon flavovirens Lawrence

Buarremon flavovirens Lawrence, 1867b: 467 (Ecuador).

Now *Chlorospingus flavovirens* (Lawrence, 1867). See Chapman, 1926: 685, Hellmayr, 1936: 435–436, Storer, 1970: 261, Isler and Isler, 1999: 69–70, and Dickinson, 2003: 818.

HOLOTYPE: **AMNH 41065**, unsexed, collected in Ecuador, undated, from "C.R.G." From the George N. Lawrence Collection.

COMMENTS: Lawrence apparently had only one specimen, the label of which is marked "Type" by Lawrence. It has no original label. Sclater (1885: 274–275) said of this specimen: "Mr. Lawrence kindly lent me his unique specimen. The skin is apparently of the ordinary 'Quito' make." Isler and Isler (1999: 69), commenting on this species, said that it was "originally known from 2 specimens collected in Pichincha," apparently failing to consider the type specimen.

Chlorospingus canigularis paulus J.T. Zimmer

Chlorospingus canigularis paulus J.T. Zimmer, 1947b: 11 (La Chonta, Province del Oro, Ecuador; altitude 2000 feet).

Now *Chlorospingus canigularis paulus* J.T. Zimmer, 1947. See Storer, 1970: 262, Isler and Isler, 1999: 70–71, and Dickinson, 2003: 818.

HOLOTYPE: **AMNH 172830**, adult male, collected at La Chonta, 2000 ft, 03.35S, 79.53W (Paynter, 1993), El Oro, Ecuador, on 22 July 1921, by Geoffrey Gill (no. 65).

COMMENTS: Zimmer gave the AMNH number of the holotype in the original description and on p. 12 listed the specimens examined. The four paratypes are: Pullango, AMNH 153045, adult male, collected 16 July 1919 by Harry Watkins; La Chonta, 2000 ft, AMNH 172831, adult male, collected 26 July 1921 by G.K. Cherrie (no. 23426); Las Piñas, 3600 ft, AMNH 172832, adult male, collected 9 September 1921 by Cherrie (no. 23925); Coco, Rio Chimbo, 2400 ft, AMNH 173641, female, collected 29 July 1922 by Chapman, Cherrie, and O'Connell.

Hemispingus parodii Weske and Terborgh

Hemispingus parodii Weske and Terborgh, 1974: 97 (Cordillera Vilcabamba, 12°36'S, 73°29'W, elevation 3,480 m, Dept. of Cuzco, Peru).

Now *Hemispingus parodii* Weske and Terborgh, 1974. See Isler and Isler, 1999: 75, and Dickinson, 2003: 803.

HOLOTYPE: **AMNH 810463**, adult male, collected in the Cordillera Vilcabamba, 3480 m, 12.36S, 73.29W, Cuzco, Peru, on 28 July 1968, by John S. Weske (no. 1849) and John W. Terborgh.

COMMENTS: The AMNH number of the holotype was given in the original description. The type series comprised six male and two female skin specimens, and one female skeleton in AMNH, and one unsexed alcoholic specimen in USNM. Paratypes in AMNH: AMNH 810464–810470, five males and two females, AMNH 9038 skeleton, female, all from the type locality. AMNH 810468 was exchanged to LSUMNS in June 1974.

[Chlorospingus nigrifrons Lawrence]

Lawrence (1875b: 384) named C. nigrifrons, now Hemispingus superciliaris nigrifrons, without stating where the type was held. No Lawrence specimen in AMNH had been claimed as the type, even though Berlepsch (1912: 1093) and Hellmayr (1936: 422) had said that it was held in the Lawrence Collection at AMNH. Deignan (1961: 589-590) listed the type in USNM, and this is undoubtedly correct. He noted (Deignan, 1961: 590) that the two forms that were named by Lawrence (1875), without mention of where the types were housed, had been in the collection of Wesleyan University and later were returned to USNM per agreement. The two specimens in AMNH that might have been considered types of nigrifrons are not marked "Type" in the usual way by Lawrence and, unlike the USNM specimen, neither has the published measurements written on its label.

Hemispingus superciliaris maculifrons J.T. Zimmer

Hemispingus superciliaris maculifrons J.T. Zimmer, 1947b: 13 (El Tambo, Dept. Piura, Perú; altitude 9400 feet).

Now *Hemispingus superciliaris maculifrons* J.T. Zimmer, 1947. See Storer, 1970: 264, Isler and Isler, 1999: 75–76, and Dickinson, 2003: 804.

HOLOTYPE: **AMNH 175796**, adult male, collected at El Tambo, 9400 ft, ca. 05.20S,

79.30W (Stephens and Traylor, 1983), Piura, Peru, on 1 December 1922, by Harry Watkins (no. 6716).

COMMENTS: In the original description, Zimmer gave the AMNH number of the holotype and, on page 17, listed the specimens he examined. The 23 paratypes are: Salvias, Ecuador, AMNH 168527, female, 26 August Taraguacocha, Ecuador, AMNH 1920; 168528, 168530–168533, 168535, 15–22 August 1920, three males and three females; El Peru, AMNH 175791–175795, 175797, 27 November-1 December 1922, one male, one "male" [?female], three females, one sex?; Taulis, Peru, AMNH 236260-236264, 11-21 June 1926, three males, two females; Chugur, Peru, AMNH 236265-236269, 13 April-1 May 1926, two males, two females, one sex?. AMNH 168529 was exchanged to ANSP in 1928, and AMNH 168534 was exchanged to MCZ in 1928; neither is a paratype.

Hemispingus superciliaris insignis J.T. Zimmer

Hemispingus superciliaris insignis J.T. Zimmer, 1947b: 15 (La Lejia, north of Chachapoyas, Perú; altitude about 9000 feet).

Now *Hemispingus superciliaris insignis* J.T. Zimmer, 1947. See Storer, 1970: 264, Isler and Isler, 1999: 75–76, and Dickinson, 2003: 804.

HOLOTYPE: **AMNH 235347**, adult male, collected at La Lejia, ca. 9000 ft, ca. 06.10S, 77.31W (Stephens and Traylor, 1983), north of Chachapoyas, Amazonas, northeastern Peru, on 10 March 1925, by Harry Watkins (no. 8979).

COMMENTS: Zimmer listed the AMNH number of the holotype in the original description, and on p. 17 listed the specimens of *insignis* that he examined. The nine paratypes in AMNH are: La Lejia, AMNH 235343–235345, 235352, three males and one female, March 1925 by Watkins; San Pedro, AMNH 235719, 235721–235723, 30 January–14 February 1926, two males, one "male" [female], and one female by Watkins, and AMNH 511481, male, 9 December 1894, by O.T. Baron (from the Rothschild Collection). Zimmer also examined two paratypes from Molinopampa in FMNH.

Hemispingus superciliaris urubambae J.T. Zimmer

Hemispingus superciliaris urubambae J.T. Zimmer, 1947b: 15 (Tocopoqueu, Occobamba Valley, Perú; altitude 9100 feet).

Now *Hemispingus superciliaris urubambae* J.T. Zimmer, 1947. See Storer, 1970: 265, Isler and Isler, 1999: 75–76, and Dickinson, 2003: 804.

HOLOTYPE: **AMNH 166621**, adult male, collected at Tocopoqueyu (= Tocopoqueu), 9100 ft, ca. 12.53S, 72.21W (Vaurie, 1972), Ocobamba valley, Cuzco, Peru, on 29 July 1915, by Edmund Heller (no. 397).

COMMENTS: Zimmer cited the AMNH number of the holotype in the original description. The specimen had been collected by Heller and Harry Watkins on the Yale-National Geographic Peruvian Expedition of 1915–1916. Correspondence in the Archives, Department of Ornithology, AMNH, with F.M. Chapman in 1916, indicates that specimens collected on this expedition were eventually to be deposited in USNM, but arrangements were made between Yale University and Chapman to identify the bird specimens, and in return a subset of specimens was to be given to AMNH. On 30 July 1921, 150 specimens were cataloged at AMNH and marked as exchanged from USNM. The specimens had never been cataloged at USNM and were apparently retained at AMNH by Chapman before the remainder was sent to USNM.

Zimmer (1947b: 17) noted that he had examined an additional male specimen from Tocopoqueyu now USNM 273425, and a female specimen from Torontoy, now USNM 273424 (James Dean, personal commun.)

Hemispingus frontalis iteratus Chapman

Hemispingus frontalis iteratus Chapman, 1925c: 13 (Carapas, Mt. Turumiquire, N.E. Venezuela). Now Hemispingus frontalis iteratus Chapman, 1925. See Hellmayr, 1936: 425, Isler and Isler, 1999: 77–78, and Dickinson, 2003: 804.

HOLOTYPE: **AMNH 188022**, adult male, colleted at Carapas, ca. 10.12N, 63.56W (Paynter, 1982), Mt. Turumiquire, Sucre, Venezuela, on 13 April 1925, by George H.H. Tate (no. 604).

COMMENTS: Chapman cited the AMNH number of the holotype in the original

description and noted that he examined nine specimens, all from the type locality. There are six paratypes in AMNH: **AMNH 188630–188635**, one male, one female, four sex?, collected 31 March–11April 1925 by Tate and Clements. Tate (1931) described the ascent of Mt. Turumiquire.

Hemispingus piurae Chapman

Hemispingus piurae Chapman, 1923a: 11 (Palambla, 4000 ft., Prov. Piura, western slope of Andes, east of Paita, Peru).

Now *Hemispingus melanotis piurae* Chapman, 1923. See Hellmayr, 1936: 427–428, Isler and Isler, 1999: 78–79, and Dickinson, 2003: 804.

HOLOTYPE: **AMNH 174541**, adult male, collected at Palambla, 4000 ft, 05.23S, 79.37W (Stephens and Traylor, 1983), western slope of the Andes, east of Paita, Piura, Peru, on 25 October 1922, by Harry Watkins (no. 6435).

COMMENTS: Chapman cited the AMNH number of the holotype in the original description and noted that his type series comprised a male and a female. The paratype is **AMNH 174542**, female, from Palambla, 25 October 1922, by Watkins (no. 6436).

Thlypopsis ornata macropteryx Berlepsch and Stolzmann

Thlypopsis ornata macropteryx Berlepsch and Stolzmann, 1896: 345 (Maraynioc).

Now *Thlypopsis ornata macropteryx* Berlepsch and Stolzmann, 1896. See Hellmayr, 1936: 392–393, and Dickinson, 2003: 804.

?SYNTYPE: **AMNH 511251**, female, collected at Maraynioc, 11.22S, 75.24W (Stephens and Traylor, 1983), Junín, Peru, on 7 January 1893, by J. Kalinowski (no. 1840). From the Rothschild Collection.

COMMENTS: When Berlepsch and Stolzmann named *macropteryx*, they noted that they had five specimens collected in October 1891 and in October and November 1892. AMNH 511251 is labeled "typus" in the same hand and ink as the new name entered on the reverse of Kalinowski's label, but the date is 7 January 1893. Measurements were listed for the new form, with only one measurement listed under female. It does not bear a Rothschild type label, nor was it

listed in any of Hartert's lists of types in the Rothschild Collection.

Stolzmann (= Sztolcman) and Domaniewski (1927: 187) listed without comment only one syntype in MIZ of *macropteryx*, a male collected on 7 January 1893. Mlíkovský (2009: 161) listed three of the original five (not six) syntypes as now in MIZ, one of which is the same specimen listed earlier by Stolzmann and Domaniewski.

Zimmer (1947a: 19) discussed AMNH 511251 and considered that it was probably a syntype, with the omission from the original description of the later date unintentional. It was he who added the AMNH type label. This seems particularly likely as the syntype listed by Stolzmann and Domaniewski (1927: 187) was also collected on 7 January 1893, and a second syntype, a female, was collected on 18 August 1892, a date also not included in the original description.

However, another complicating factor is that in the table of measurements given by Berlepsch and Stolzmann (1896: 345) only one measurement is given for a female while inclusive measurements are given for males. Both AMNH and MIZ (Mlíkovský, 2009: 161) have female "syntypes," neither of which was collected on the dates listed in the original description.

The whereabouts of other syntype(s) is not known. As Zimmer (1947a: 19) pointed out, Berlepsch and Stolzmann "presumably had the entire Maraynioc collection of Kalinowski before them" and errors in recording the data have led to questions concerning the status of the specimens.

Hemithraupis guira boliviana J.T. Zimmer

Hemithraupis guira boliviana J.T. Zimmer, 1947a: 10 (Todos Santos, Province of Cochabamba, Bolivia; altitude 1300 feet).

Now *Hemithraupis guira boliviana* J.T. Zimmer, 1947. See Storer, 1970: 272, and Dickinson, 2003: 814.

HOLOTYPE: **AMNH 138449**, adult male, collected at Todos Santos, 1300 ft, 16.48S, 65.08W (Paynter, 1992), Cochabamba, Bolivia, on 21 July 1915, by Leo E. Miller (no. 13041) and Howarth Boyle.

COMMENTS: Zimmer gave the AMNH number of the holotype in the original description and on p. 14 listed the specimens he examined. In

the text, he (Zimmer, 1947a: 14–15) doubtfully includes Brazilian birds in *boliviana*; therefore only the Bolivian birds listed are paratypes (ICZN, 1999: 76, Art. 72.4). Paratypes are: Mapiri, AMNH 30607, 30608, [male], [female]; Todos Santos, AMNH 138446, 138448, 138450–138460, 10 males, 3 females; Mission San Antonio, AMNH 138461, male; Vermejo, AMNH 139825, male; Prov. Sara, AMNH 511115, 511116 [two males]. AMNH 138447 had been mounted for Sanford Hall in 1945 and was not part of Zimmer's type series.

Hemithraupis guira amazonica J.T. Zimmer

Hemithraupis guira amazonica J.T. Zimmer, 1947a: 9 (Tauarý, Rio Tapajoz (right bank), Brazil). Now Hemithraupis guira amazonica J.T. Zimmer, 1947. See Storer, 1970: 272, and Dickinson, 2003: 814.

HOLOTYPE: **AMNH 288048**, adult male, collected at Tauari (= Tauarý), 03.05S, 55.06W (Paynter and Traylor, 1991), Rio Tapajós (right bank), Pará, Brazil, on 17 (not 14) April 1931, by Alfonso M. Olalla.

COMMENTS: Zimmer cited the AMNH number of the holotype in the original description and (Zimmer, 1947a: 13) listed the 13 specimens in addition to the type that he examined; 12 paratypes are in AMNH: Igarapé Auará, AMNH 280353, male, 27 February 1930, by the Olalla brothers; Rio Madeira, Borba, AMNH 281062–281066, three males, two females, 1-14 May 1930, by the Olalla brothers; Aramaynaý, AMNH **288047**, male, 2 April 1931, by A.M. Olalla; Piquiatuba, AMNH 288049, 288050, two males, 23–25 May 1931, by A.M. Olalla; Caxiricatuba, AMNH 288051-288053, three males, 11–20 May 1931, by A.M. Olalla. Zimmer had listed four males from Caxiricatuba, but only three were cataloged.

Hylophilus ruficeps Wied

Hylophilus ruficeps Wied, 1831: 725 (Prov. Bahiá und Cabo Frio).

Now Hemithraupis ruficapilla ruficapilla Vieillot, 1818. See Allen, 1889b: 221, Hellmayr, 1936: 372, Zimmer, 1947a: 12, Storer, 1970: 273, and Dickinson, 2003: 814.

SYNTYPE: **AMNH 4525**, [male], probably collected at Cabo Frio, 22.53S, 42.01W (Paynter and Traylor, 1991), Rio de Janeiro,

Brazil, undated, by Maximilian, Prince of Wied. From the Maximilian Collection.

COMMENTS: In the original description, Wied described an adult and a young male, and said that he had seen them in the Province of Bahia and in the area of Cabo Frio but did not say where he collected his specimens. Allen (1889b: 221) gave the collecting locality of this specimen, with no original label, as Province of Bahia. Following Allen, Hellmayr (1915: 131– 133) had applied Wied's name to the Bahian population without having examined the type himself. Zimmer (1947a: 12–13) discussed this type and showed that it belongs to the larger and darker-headed form from Rio de Janeiro and was likely to have come from Cabo Frio; then he (Zimmer, 1947a: 13) chose the nomenclaturally less disruptive alternative in this situation, accepting the one known syntype of ruficeps as determining the application of the name and changing the type locality to Cabo Frio "to accord with the known range of the pertinent form." This left the Bahia form without a name, which Zimmer supplied (see below).

This syntype had formerly been mounted.

Hemithraupis ruficapilla bahiae J.T. Zimmer

Hemithraupis ruficapilla bahiae J.T. Zimmer, 1947a: 13 (Jaguaquara, central-eastern Bahia, Brazil; altitude 2000 feet).

Now *Hemithraupis ruficapilla bahiae* J.T. Zimmer, 1947. See Storer, 1970: 273, and Dickinson, 2003: 814.

HOLOTYPE: **AMNH 245618**, adult male, collected at Jaguaquara, 2000 ft, 13.32S, 39.58W (Paynter and Traylor, 1991), Bahia, Brazil, on 1 September 1920, by Emil Kaempfer (no. 6134).

COMMENTS: Zimmer named Bahia birds *H. r. bahiae* after they were found to be without a name when the Wied type of *Hylophilus ruficeps* was found to have not come from Bahia (see above). Zimmer cited the AMNH number of the holotype in the original description and listed eight paratypes: Tambury, AMNH 245617, male, 21 October 1927, Kaempfer (no. 6611); Boa Nova, AMNH 245619, 245620, males, 4–5 June 1928, by Kaempfer (nos. 7028 and 7015, respectively); "Bahia" tradeskins, five males, AMNH 41011, 41012, from the G.N.

Lawrence Collection, and AMNH 511167, 511168, 511170, from the Rothschild Collection.

Hemithraupis flavicollis sororia J.T. Zimmer

Hemithraupis flavicollis sororia J.T. Zimmer, 1947a:15 (Chamicuros, Perú).

Now *Hemithraupis flavicollis sororia* J.T. Zimmer, 1947. See Storer, 1970: 274, Isler and Isler, 1999: 93–95, and Dickinson, 2003: 815.

HOLOTYPE: **AMNH 511173**, adult male, collected at Chamicuros, ca. 05.30S, 75.30W (Stephens and Traylor, 1983), Loreto, Peru, on 15 August 1867, by Edward Bartlett (no. 2647). From the collection of E. Bartlett (no. 6994.a) via the Rothschild Collection.

COMMENTS: The AMNH number of the holotype was cited in the original description and the specimens examined were listed (Zimmer, 1947a: 16). Paratypes are: Orosa, AMNH 232940, female, 2 October 1926, by Olalla and Sons; Chamicuros, AMNH 511171, female, undated, E. Bartlett (field no. 3697, collection no. 6994.c); AMNH 511172, male, 5 August 1867, E. Bartlett (field no. 2581, collection no. 6994.b).

Nemosia flavicollis centralis Hellmayr

Nemosia flavicollis centralis Hellmayr, 1907b: 350 (Humaytha).

Now *Hemithraupis flavicollis centralis* (Hellmayr, 1907). See Storer, 1970: 274, Isler and Isler, 1999: 93–95, and Dickinson, 2003: 815.

HOLOTYPE: **AMNH 511177**, adult male, collected at Humaitá (= Humaytha), 07.31S, 63.02W (Paynter and Traylor, 1991), Rio Madeira, Amazonas, Brazil, on 17 September 1906, by Wilhelm Hoffmanns (no. 1253). From the Rothschild Collection.

COMMENTS: Hellmayr cited Hoffmanns' unique field number of the holotype in the original description. Hellmayr (1907b: 352) listed his type series, only the holotype being in AMNH. A paratype is in BMNH and a second paratype in NMW.

Hemithraupis flavicollis aurigularis Cherrie

Hemithraupis flavicollis aurigularis Cherrie, 1916b: 389 (Suapure, Venezuela).

Now *Hemithraupis flavicollis aurigularis* Cherrie, 1916. See Hellmayr, 1936: 382–383, Isler and Isler, 1999: 93–95, and Dickinson, 2003: 815.

HOLOTYPE: **AMNH 75922**, adult male, collected at Suapure, 07.14N, 65.10W (Paynter, 1982), lower Rio Caura, Bolívar, Venezuela, on 9 September 1901, by S.M. Klages.

71

COMMENTS: Cherrie cited the AMNH number of the holotype in the original description and described both males and females without saying how many specimens he examined but noted that in addition to the Suapure specimens, he had a specimen of his new form from the Cunucunuma River, also in AMNH. He included in aurigularis Caura River specimens in the Rothschild Collection that had been reported on by Hellmayr (1907b: 351). Those specimens are now in AMNH. Paratypes, all from Venezuela, are: Suapure, AMNH 75661, male, 20 November 1900; **AMNH 75662**, female, 9 February 1901; AMNH 75923, one male?, 9 September 1901, by S.M. Klages. Boca de Sina, Cunucunuma River, Upper Orinoco, AMNH **121209**, male, 19 March 1913, by Miller and Iglseder. Suapure, AMNH 511178, female, 29 April 1899; AMNH 511179, female, 12 October 1900; AMNH 511180, male, 11 April 1900; AMNH 511181, male, 12 April 1899; **AMNH 511182**, male, 29 April 1899, (by Klages). Nicare, Caura River, AMNH 511183, male, AMNH 511184, male, AMNH 511185, "female" [male plumage], all 22 January 1901, by E. André.

Hellmayr (1907b: 351), working in the Rothschild Collection, had given measurements for two females and five males, and had probably omitted the specimen sexed as a female but in male plumage. Berlepsch and Hartert (1902: 22), in their report on Orinoco birds, listed the specimens collected by Klages and by André; a fourth male specimen collected by André was evidently exchanged away by Rothschild before Hellmayr studied these birds.

Nemosia rosenbergi Rothschild

Nemosia rosenbergi Rothschild, 1897b: 6 (Cachabé, N. Ecuador, 500 feet).

Now *Chrysothlypis salmoni* (P.L. Sclater, 1886). See Hartert, 1898: 483–484, Hartert, 1919: 148, Hellmayr, 1936: 386, and Dickinson, 2003: 815.

HOLOTYPE: **AMNH 511216**, adult male, collected at Cachabí, ca. 00.58N, 78.48W (Paynter, 1993). Esmeraldas, Ecuador, on

13 November 1896, by W.F.H. Rosenberg (no. 28). From the Rothschild Collection.

COMMENTS: In the original description, it seemed that Rothschild had only the single specimen. This was confirmed by Hartert (1898: 483), who figured it in pl. 2, fig. 1 and also suggested that it might be the male of *Chrysothlypis salmoni*, as did indeed prove to be the case. Keulemans' plate 2 is reproduced on the cover of this type list. Hartert (1898) reported on Rosenberg's entire collection from northwestern Ecuador.

Nemosia pileata surinamensis J.T. Zimmer

Nemosia pileata surinamensis J.T. Zimmer, 1947a: 5 (near Paramaribo, Surinam).

Now *Nemosia pileata surinamensis* J.T. Zimmer, 1947. See Storer, 1970: 276, and Dickinson, 2003: 803.

HOLOTYPE: **AMNH 511112**, adult male, collected near Paramaribo, Surinam, on 14 May 1899, from W.A. Penard. From the Rothschild Collection.

COMMENTS: Zimmer cited the AMNH number of the holotype in the original description and listed the specimens he examined (Zimmer, 1947a: 6). Paratypes are: Demarara, Guyana, AMNH 511103, 511104, two [males]; Little Wanica, Surinam, AMNH 511105, 511106, females; near Paramaribo, Surinam, AMNH 96445, 96446, 313675, 313676, 511107–511111, 511113, eight males and two females.

[Hylophilus caeruleus Wied and H. cyanoleucus Wied]

Allen (1889b: 220–221) discussed these two names, with *H. caeruleus* as the female and *H. cyanoleucus* as the male of *Nemosia pileata pileata*; these names were introduced by Wied (1831: 731 and 734, respectively). Hellmayr (1936: 368) agreed with Allen's determination. *Hylophilus caeruleus* was recognized by Storer (1970: 277) as *Nemosia pileata caerulea*. No specimens were found in the Wied Collection that might have served as his types.

Nemosia pileata interna J.T. Zimmer

Nemosia pileata interna J.T. Zimmer, 1947a: 4 (Igarapé Cacao Pereira, lower Rio Negro (left bank), Brazil).

Now *Nemosia pileata interna* J.T. Zimmer, 1947. See Storer, 1970: 277, and Dickinson, 2003: 803. HOLOTYPE: **AMNH 313348**, adult male, collected at Igarapé Cacao Pereira, lower Rio Negro, left bank, Brazil, on 21 January 1930, by the Olalla brothers.

COMMENTS: Zimmer gave the AMNH number of the holotype in the original description and listed as paratypes a female specimen from Igarapé Cacao Pereira and four male specimens from Frechal, Rio Surumú (Zimmer, 1947a: 6); however, there are in addition to the four males from Frechal, a female and two male?, all collected in September 1927, available to Zimmer, and labeled *interna* by him. They are considered paratypes. Paratypes: Frechal, Rio Surumú, males, AMNH 236458 (field no. 239), 5 September; AMNH 236459 (189), 8 September; AMNH 236460 (328), 15 September; **AMNH 236461** (127), 3 September; female, **AMNH 236462** (128), 3 September; males?, **AMNH 236463** (262), 9 September; **AMNH** 236464 (292), 12 September, all collected in 1927 by T. Donald Carter on the Lee Garnett Day Expedition. Igarapé Cacao Pereira, lower Rio Negro, female, AMNH 313349, 21 January 1920, Olalla brothers.

Calyptophilus tertius Wetmore

Calyptophilus tertius Wetmore, 1929: 2 (higher slopes of Morne La Hotte, Haiti).

Now Calyptophilus tertius tertius Wetmore, 1929. See Hellmayr, 1936: 359, Isler and Isler, 1999: 102–103, Dickinson, 2003: 820, and Latta et al., 2006: 197.

HOLOTYPE: **AMNH 166421**, adult male, collected on Morne La Hotte, Massif de la Hotte, 18.25N, 73.55W (Keith et al., 2003: 239), Haiti, on 22 June 1917, by Rollo H. Beck (no. 7702) on the Brewster-Sanford Expedition.

COMMENTS: Wetmore gave the AMNH number of the holotype in the original description and noted that he had seven specimens, all in AMNH, collected by Beck "from June 20 to July 4, 1917, back of Les Anglais on the higher ridges that lead up to the peak of Morne La Hotte...." The six paratypes are: Morne La Hotte, Haiti, AMNH 166418 (Beck's no. 7726), male, 4 July; AMNH 166420 (7691), male, 20 June; AMNH 166423 (7699), male, 23 June;

AMNH 166424 (7692), female, 20 June; AMNH 166525 (7732), female, 4 July, all collected by Rollo H. Beck on the Brewster-Sanford Expedition. AMNH 166418 was exchanged to USNM and is now USNM 311936 (James Dean, personal commun.).

AMNH 166422 from the same collection is neither in AMNH or USNM and was probably exchanged before Wetmore studied these specimens, without the catalog having been so marked. Wetmore and Swales (1931: 5, 19) discussed the locality Morne La Hotte and summarized Beck's itinerary.

For a discussion of the taxonomy and status of the critically endangered endemics *C. tertius* and *C. frugivorus*, often considered conspecific, see Latta et al. (2006: 197–198).

Tachyphonus Cassinii Lawrence

Tachyphonus Cassinii Lawrence, 1861a: 297 (New Grenada).

Now Mitrospingus cassinii cassinii (Lawrence, 1861). See Hellmayr, 1936: 353, Storer, 1970: 281–282, Wetmore et al., 1984: 481–483, and Dickinson, 2003: 803.

SYNTYPES: **AMNH 40924** (field no. 102), male, **AMNH 40925**, female, collected by James McLeannan and John R. Galbraith in Panama, and **AMNH 40926**, male, collected by J.R. Galbraith in Panama. From the George N. Lawrence Collection.

COMMENTS: Lawrence (1861a: 297) based his new name on a single specimen in ANSP that had been identified only as Tachyphonus? by Cassin (1860: 142, species no. 62) from the "falls of the Truando," on a single specimen in his own collection that had "puzzled [him] to know where to place it," and on "other specimens of both sexes, which I consider reliable" that he had received subsequently (Lawrence, 1861: 298). The specimens only have "Panama" as the locality, but it is generally accepted that the type locality of the specimens is the Lion Hill station of the trans-Isthmus railroad, ca. 09.13N, 79.54W (Siegel and Olson, 2008), the home station of James McLeannan.

There are two other syntypes in Philadelphia: Cassin's specimen, ANSP 7666, adult, Truando R., Isthmus, Panama, and ANSP 7667, an unsexed and undated specimen presented to ANSP by Lawrence probably

in 1864. It was labeled "*Tachyphonus cassinii*" by Lawrence (Nate Rice, personal commun.). This latter specimen is probably the one that had puzzled Lawrence originally.

In the original description, Lawrence did not designate a type. He had written "Type" on AMNH 40924 and 40925, the only two specimens previously included in the AMNH type collection, but this in and of itself does not serve as proof that a specimen has type status (ICZN, 2000: 77, Art. 72.4.7), and all of the specimens Lawrence had when the name was published are syntypes. AMNH 40926 has on the reverse of the Lawrence label the annotation "Belongs to G.N.L." and may indicate that Lawrence had at some time loaned the specimen; his original labels do not otherwise have his name on them, and his initials would have assured that the specimen was returned to him.

Chlorothraupis carmioli magnirostris Griscom

Chlorothraupis carmioli magnirostris Griscom, 1927: 18 (Santa Fé (2000 ft.), Veraguas, western Panama).

Now *Chlorothraupis carmioli magnirostris* Griscom, 1927. See Hellmayr, 1936: 298, Wetmore et al., 1984: 459–460, Isler and Isler, 1999: 107–108, and Dickinson, 2003: 820.

HOLOTYPE: **AMNH 187902**, adult female, collected at Santa Fé, 2000 ft, 08.31N, 81.05W (Siegel and Olson, 2008), Pacific slope of Veraguas, western Panama, on 30 March 1925, by Rex R. Benson (no. 1266).

COMMENTS: Griscom cited the AMNH number of the holotype in the original description and listed the specimens he examined. Paratypes are: Santa Fé, AMNH 187900, 187901, males, collected on 2 April 1925 by Benson; Rio Calovevora, Caribbean slope of Veraguas, AMNH 246997–247008, eight males and four females, collected 15 August–12 September 1926 by Benson and Gaffney.

Chlorothraupis carmioli lutescens Griscom

Chlorothraupis carmioli lutescens Griscom, 1927: 18 (Tacarcuna, eastern Panama).

Now *Chlorothraupis carmioli lutescens* Griscom, 1927. See Hellmayr, 1936: 298, Wetmore et al., 1984: 460, Isler and Isler, 1999: 107–108, and Dickinson, 2003: 820.

HOLOTYPE: **AMNH 136327**, adult male, collected at Tacarcuna, 08.05N, 77.17W (Siegel and Olson, 2008), Darién, eastern Panama, on 29 March 1915, by William B. Richardson.

COMMENTS: Griscom cited the AMNH number of the holotype in the original description and listed the specimens he examined: three males from Tapalisa and 11 males (in addition to the holotype) and six females from Tacarcuna. Paratypes are: Tapalisa, AMNH 136320–136322, males, 9–12 March by W.B. Richardson. Tacarcuna, AMNH 136323–136326, 136328–136340, nine males and eight females [according to sex determined by collector], 26 February–14 April 1915, by H.E. Anthony and D.S. Ball or W.B. Richardson.

Malacothraupis castaneiceps Chapman

Malacothraupis castaneiceps Chapman, 1901: 225 (Inca Mine, Peru).

Now *Creurgops dentatus* P.L. Sclater and Salvin, 1876. See Hellmayr, 1936: 347, Storer, 1970: 287, Isler and Isler, 1999: 120, and Dickinson, 2003: 803.

HOLOTYPE: **AMNH 72093**, adult male, collected at Santo Domingo (= Inca Mine), 6000 ft, 13.51S, 69.41W (Stephens and Traylor, 1983), Puno, Peru, on 4 December 1899, by H.H. Keays (no. 15).

COMMENTS: Chapman had the single specimen and cited the AMNH number of the holotype in the original description. He gave the coordinates of "Inca Mine" as 13.31S, 70.00W. See David and Gosselin (2002: 260) for masculine ending on *dentatus*.

Tachyphonus rubrifrons Lawrence Tachyphonus propinquus Lawrence

Tachyphonus rubrifrons Lawrence, 1865c: 106 (line of the Pan. R. Road, near Lion Hill Station). Now Heterospingus rubrifrons (Lawrence, 1865). See Hellmayr, 1936: 345, Storer, 1970: 288, Wetmore et al., 1984: 476–477, Sibley and Monroe, 1990: 744, American Ornithologists' Union, 1998: 575, Isler and Isler, 1999: 120–122, and Dickinson, 2003: 814.

SYNTYPES: **AMNH 409460**, male, collected by James McLeannan and John Galbraith, **AMNH 409461**, female, collected by McLeannan; **AMNH 40962**, female, collected by

McLeannan and Galbraith; AMNH 40963, male, collected by McLeannan, all from near the Lion Hill Station, ca. 09.13N, 79.54W (Siegel and Olson, 2008), of the trans-Panama railway. From the George N. Lawrence Collection.

COMMENTS: In the original description of rubrifrons, Lawrence stated that the first specimen he received was marked as a male, but that he believed it might be the female of T. xanthopygius. He had listed it (Lawrence, 1861b: 331) as "T. xanthopigius, Scl., ♂. Irides reddish brown; quite rare." This was probably AMNH 409463, as it was collected by McLeannan alone (as were all of the specimens reported in Lawrence (1861b). Afterwards, he had received another male and two females. The second male, AMNH 40960, is the bird described as the male in the original description of rubrifrons, as it is the specimen of the four that has the "front and part of crown dull red." However, no type was designated, so all four specimens are syntypes, even though only AMNH 409460 and 409461 were marked "Type" by Lawrence and only those had been included with the AMNH types. AMNH type labels have been added to the other two. All four specimens had been marked rubrifrons by Lawrence, and this had been marked out and propinguus added by him.

The name *Tachyphonus propinquus* was introduced by Lawrence (1867a: 94) as a replacement name for *T. rubrifrons*. He thought the dull red on the forecrown of the described male to be the result of a stain caused by some food item and considered the name "*rubrifrons*" therefore to be inappropriate. However, inappropriateness is not a reason to reject a name (ICZN, 1999: 21, Art. 18; p. 109, G), and the name *rubrifrons* is the valid name (ICZN, 1999: 26, Art. 23.3.7). Hellmayr (1936: 345) listed *propinquus* as a synomym of *rubrifrons*.

Tachyphonus cristatus fallax J.T. Zimmer

Tachyphonus cristatus fallax J.T. Zimmer, 1945: 18 (Puerto Indiana, mouth of the Río Napo, Perú). Now Tachyphonus cristatus fallax J.T. Zimmer, 1945, See Storer, 1970: 289–290, and Dickinson, 2003: 805.

HOLOTYPE: **AMNH 232913**, adult male, collected at Puerto Indiana, ca. 03.28S, 73.03W (Stephens and Traylor, 1983), mouth

of the Rio Napo, Loreto, Peru, on 3 August 1926, by Carlos Olalla and sons.

COMMENTS: Zimmer cited the AMNH number of the holotype in the original description and listed the specimens he examined (Zimmer, 1945: 19). Paratypes are: Ecuador, Rio Suno, above Avila, AMNH 179786–179790, three males, two females, 1-13 February 1923; below San José, AMNH **183267**, male, 3 April 1924, **AMNH 183272**, female, 18 April 1924; lower Rio Suno, AMNH 183270, female, 14 March 1924; mouth of Lagarto Cocha, AMNH 256990, male, 17 January 1926; AMNH 257126, female, 15 January 1926, all the the foregoing collected by the Olallas; El Loreto, AMNH 510816, male, 1896, from the Dalmas Collection via the Rothschild Collection; Sarayacu, AMNH 510817, 510818, males, undated, Buckley Collection via the Rothschild Collection. Peru, Sarayacu, Rio Ucayali, AMNH **238651**, male, 14 July 1927, collected by the Olallas; mouth of the Rio Curaray, AMNH **256983, 256984, 256986, 256988, 256989**, four males, one female, collected in March, October, December 1925, and January 1926, all collected by the Olallas; Rio Mazan, AMNH 407295, female, no date, from the Bassler Collection.

See Wiley (2010) for details concerning the Olalla's collecting localities in Peru and Ecuador.

Tachyphonus cristatus huarandosae Chapman

Tachyphonus cristatus huarandosae Chapman, 1925b: 8 (Huarandosa, 3000 ft., Chinchipe Valley, near the Rio Marañon, northern Peru). Now Tachyphonus cristatus huarandosae Chapman, 1925. See Hellmayr, 1936: 330, Zimmer, 1945: 15–17, and Dickinson, 2003: 805.

HOLOTYPE: **AMNH 182324**, male, collected at Huarandosa, 3000 ft, Rio Chinchipe valley, near the Rio Marañon, northern Peru, on 20 September 1923, by Harry Watkins (no. 7896).

COMMENTS: Chapman gave the AMNH number of the holotype in the original description and noted that he had two additional specimens. The paratypes are: Huarandosa, males, **AMNH 182322**, 15 September 1923, Watkins (no. 7863), **AMNH 182323**, 19 September 1923, Watkins (no. 7892). This locality is probably near Quebrada Huaran-

dosa, ca. 05.13S, 78.48W (Stephens and Traylor, 1983).

Tachyphonus cristatus madeirae Hellmayr

Tachyphonus cristatus madeirae Hellmayr, 1910: 277 (Calama).

Now *Tachyphonus cristatus madeirae* Hellmayr, 1910. See Hellmayr, 1936: 330–331, Zimmer, 1945: 17, and Dickinson, 2003: 805.

HOLOTYPE: **AMNH 510851**, adult male, collected at Calama, 08.03S, 62.53W (Paynter and Traylor, 1991), Rondônia, Brazil, on 21 August 1907, by Wilhelm Hoffmanns (no. 329). From the Rothschild Collection.

COMMENTS: In the original description, Hellmayr designated as type of madeirae Hoffmanns' specimen no. 329 and listed four additional specimens from Calama and a specimen from Humaytha obtained by Hoffmanns in 1906. Additionally, he had several examples, including an adult female, collected by Natterer and borrowed from NMW. Paratypes in AMNH are: Humaytha, AMNH 510849, 29 August 1906, Hoffmanns' no. 1183; Calama, AMNH 510850, 12 July 1907, Hoffmanns' no. 209; AMNH 510852, 12 August 1907, Hoffmanns' no. 386; **AMNH 510853**, 29 August 1907, Hoffmanns' no. 483, all males. The specimen bearing Hoffmanns' no. 249 did not come to AMNH with the Rothschild Collection and must have been exchanged by Rothschild prior to 1932.

Hellmayr (1910: 257) discussed Hoffmanns' collecting localities, Calama being on the right bank of the Rio Madeira, just below its junction with the Rio Jiparaná (= Giparana).

Tachyphonus cristatus pallidigula J.T. Zimmer

Tachyphonus cristatus pallidigula J.T. Zimmer, 1945: 18 (Mocajuba, Rio Tocantins, Brazil). Now Tachyphonus cristatus pallidigula J.T. Zimmer, 1945. See Storer, 1970: 290, and Dickinson, 2003: 805.

HOLOTYPE: **AMNH 431554**, adult male, collected at Mocajuba, 02.35S, 49.30W (Paynter and Traylor, 1991), Rio Tocantins, Pará, Brazil, on 24 November 1931, by Alfonso M. Olalla.

COMMENTS: Zimmer cited the AMNH number of the holotype in the original description and listed on pp. 19-20 the 17 specimens of pallidigula he examined, in addition to the type. Paratypes are: Peixe-Boi, AMNH 128955, male, 29 May 1908, Snethlage (no. 5649); Pará, AMNH 128956, male, 31 March 1906, Snethlage (no. 4508); Baião, AMNH 128957, female, 3 December 1910, Snethlage (no. 7504), AMNH 431559, **431560**, females, 28 and 29 November 1931, A.M. Olalla; Patagonia, AMNH 233670, female, 2 August 1927, Tate and Carter; Mocajuba, AMNH 431551-431553, 431555-431557, three males, three females, 20–24 November 1931, A.M. Olalla; Igarapé Assú, **AMNH 510832, 510833**, males, 23 January and 18 May 1904, A. Robert (nos. 1937 and 2175, respectively); Benevides, AMNH 510846, 510847, female and male, 24 August and 24 July 1876, J.B. Steere. The Snethlage specimens were part of a gift of some 600 specimens to AMNH by Emilie Snethlage in February 1915, and the Robert and Steere specimens were from the Rothschild Collection.

Tachyphonus Napensis Lawrence

Tachyphonus Napensis Lawrence, 1864a: 42 (Napo River).

Now *Tachyphonus surinamus napensis* Lawrence, 1864. See Chapman, 1917: 616, Hellmayr, 1936: 335, Zimmer, 1945: 20–21, Isler and Isler, 1999: 126–128, and Dickinson, 2003: 805.

LECTOTYPE: **AMNH 40945**, male, "Napo," collected by W.E. Moore. From the G.N. Lawrence Collection.

COMMENTS: In the original description, Lawrence described only the male, designated no type, and said that *napensis* was from the "Napo River" and in his collection. The above lectotype and the paralectotype listed below are both labeled "Napo" and "Type" by Lawrence. Chapman's (1917: 616) designation of a lectotype is explicit: "Lawrence (Ann. Lyc. N.H. VIII, 1864, p. 42) wrote the word 'type' on two specimens of *napensis* but neither is specifically designated in his description. I select therefore Am. Mus. No. 40945 'Napo, &, W.E. Moore' as the type of this form." This is a valid designation of a lectotype (ICZN, 1999:82, Art. 74.5). The

paralectotype is: **AMNH 40946**, male, "Napo," collected by "I and G" or "J and S," from the G.N. Lawrence Collection.

Zimmer (1945: 20–21), in a long discussion of napensis and the two "cotypes," recognized the composite nature of the two syntypes and preferred not to recognize Chapman's designation of a lectotype because of the restriction that this placed on subsequent "rearrangement." Zimmer admits that, due to the poor condition of the second "cotype," Lawrence's description must have been mostly based on AMNH 40945. The second specimen, AMNH 40946, has a lighter rump and is equated by Zimmer with T. s. brevipes. Most of the Napo River specimens that Zimmer saw were of the lighter-rumped form and he thought the darker-rumped of Lawrence's syntypes probably came from the Amazon near the mouth of the Napo, and not from the Napo itself. Zimmer himself preferred restriction of type locality to designation of a lectotype and attempted to reconcile the two approaches by restricting the type locality of napensis to Orissa, Peru, east of a point across the Amazon from the mouth of the Napo, a locality where the dark-rumped form is found. While Zimmer's restriction of the type locality is invalid in light of Chapman's prior lectotypification, his objective of having the name apply to the dark-rumped form is met by the specimen that Chapman had chosen as the lectotype. Both specimens bear AMNH type labels and remain in the type collection with an additional label on each clarifying its present status.

Tachyphonus surinamus insignis Hellmayr

Tachyphonus surinamus insignis Hellmayr, 1906c: 357 (Bemfica, Pará).

Now *Tachyphonus surinamus insignis* Hellmayr, 1906. See Hellmayr, 1936: 334, Isler and Isler, 1999: 126–128, and Dickinson, 2003: 805.

HOLOTYPE: **AMNH 510899**, adult male, collected at Benfica (= Bemfica), 01.18S, 48.18W (Paynter and Traylor, 1991), Pará, Brazil, undated, by J.B. Steere. From the Rothschild Collection.

COMMENTS: Hellmayr designated the only adult male he examined from "Bemfica" as the type of *insignis*. While the description was based only on adult males, Hellmayr exam-

ined other specimens from Pará and Borba, localities from which he had adult males. There are seven paratypes of *insignis* in AMNH from Pará, all of which have been labeled insignis by Hellmayr: AMNH 510900, sex? [immature male], Benfica, undated; AMNH 510901, female, Pará, 5 September [year not given], both collected by J.B. Steere; AMNH 510902, female, AMNH 510903, female, AMNH 510904, male, all three from Igarapé-Assú, in January or April 1904, by A. Robert; AMNH 510905, male, AMNH **510906.** female. Prata near Pará. in November and December 1905, by W. Hoffmanns. All of the paratypes came to AMNH with the Rothschild Collection. The three adult males, and perhaps other specimens, from Borba were collected by Natterer and are probably in NMW.

Paynter and Traylor (1991: 72), under the entry for Benfica, noted that Steere collected there in July and August, with year not given. Sclater and Salvin (1878: 135) traced Steere's movements in South America and said he left Belem (= Pará) in June 1871 and moved upriver to Santarem. It must have been during this period that he visited Benfica.

Tachyphonus atricapillus Lawrence Lanio lawrencii P.L. Sclater

Tachyphonus atricapillus Lawrence, 1868: 360 (The island of Trinidad).

Lanio lawrencii P.L. Sclater, 1885: 272, pl. 6, fig. 2. Now Tachyphonus luctuosus flaviventris (P.L. Sclater, 1856). See Hellmayr, 1936: 339, Zimmer, 1945: 24–25, Storer, 1970: 293, Isler and Isler, 1999: 128–130, and Dickinson, 2003: 805.

HOLOTYPE: **AMNH 40967**, male?, collected on Trinidad, undated, by A.H. Alexander. From the George N. Lawrence Collection.

COMMENTS: Lawrence had the single specimen. Sclater, having borrowed Lawrence's unique specimen, decided that is was a young male of a new species of *Lanio*. There already being a *Lanio atricapillus*, Sclater provided *Lanio lawrencii* as a replacement name for *Tachyphonus atricapillus* Lawrence, and they share the same type; the color of the bird in plate 6 bears little relationship to the actual appearance of the specimen. Zimmer (1945: 24–25) discussed

this type and considered it an abnormal adult. Both names are now in the synonymy of *T. l. flaviventris*, the type locality of which was restricted to Trinidad by Zimmer (1945: 24).

A.H. Alexander was a New York taxidermist known to Lawrence and from whom he obtained this specimen.

Chlorospingus leotaudi Chapman

Chlorospingus leotaudi Chapman, 1893: 342 (Princestown, Trinidad).

Now Tachyphonus luctuosus flaviventris (P.L. Sclater, 1856). See Chapman, 1894: 32, Hellmayr, 1936: 339, Zimmer, 1945: 24–26, Storer, 1970: 293, Isler and Isler, 1999: 128–130, and Dickinson, 2003: 805.

HOLOTYPE: **AMNH 59051**, female, collected at Princestown, Trinidad, on 28 March 1893, by Frank M. Chapman (no. 3067).

COMMENTS: Chapman gave the AMNH number of the holotype in the original description and later (Chapman, 1894: 32) noted that the bird described was the only one observed. Chapman (1893: 343) named *C. leotaudi* to honor A. Léotaud, author of "Oiseaux de l'Île de la Trinidad." Zimmer (1945: 24) restricted the type locality of *flaviventris* to Trinidad.

Tanagra auricapilla Wied

Tanagra auricapilla Wied, 1821: 212 (Arrayal da Conquista, Bahia).

Now *Trichothraupis melanops* (Vieillot, 1818). See Allen, 1889b: 220, Hellmayr, 1936: 363, Isler and Isler, 1999: 136–138, and Dickinson, 2003: 805.

?SYNTYPE: **AMNH 6864**, [adult male], said to be from the Maximilian Collection, original label lost.

COMMENTS: There is no original label on this specimen to connect it with the Maximilian Collection, only a notation in the catalog. Allen (1889b: 220) thought it might be the type of the male of *T. auricapilla*. It was exchanged to USNM and given USNM no. 76792, then returned to AMNH on 14 November 1889, shortly before Allen's work on the Maximilian types in AMNH was published in December 1889. On the reverse of the USNM label is the following note: "Original label lost. R.R[idgway]." The

specimen had been mounted. It was considered a synonym of *Trichothraupis melanops* (Vieillot, 1818) by Hellmayr.

Phaenicothraupis vinacea Lawrence

Phaenicothraupis vinacea Lawrence, 1867a: 94 (New Granada, line of the Panama Railroad). Now Habia rubica vinacea (Lawrence, 1867). See Hellmayr, 1936: 305–306, Storer, 1970: 296–297; Wetmore et al., 1984: 462–464, Isler and Isler, 1999: 139–142, and Dickinson, 2003: 819.

HOLOTYPE: **AMNH 40877**, male, collected on the Panama Railroad, Panama, undated, by James McLeannan and John Galbraith. From the George N. Lawrence Collection.

COMMENTS: In the original description, Lawrence said: "I have had this specimen for some years, and considered it different from any of its affines." He also thought that birds from Veraguas, referred to *rubica* by Salvin (1867: 139) were of his new species. They would be paratypes.

[Tanagra flammiceps Wied]

Allen (1889b: 220) thought that AMNH 4504, bearing no original Wied label, was "almost unquestionably one of Wied's original specimens." This is probably true, but the name *Tanagra flammiceps*, although a Wied manuscript name, was first proposed by Temminck (1823, pl. 177) and considerably before the date of Wied's (1830: 497 [not 407]) description cited by Allen. The types are in RMNH (Hellmayr, 1936: 300; Dekker and Quaisser, 2006: 35). The AMNH specimen, purchased from the family, has no nomenclatural standing. Now considered a synonym of *Habia rubica rubica* (Vieillot, 1817).

Phoenicothraupis salvini rooensis Griscom

Phoenicothraupis salvini rooensis Griscom, 1926: 17 (Chunyaxche, Quintana Roo, Mexico).

Now *Habia fuscicauda insularis* (Salvin, 1888). See Hellmayr, 1936: 311, Storer, 1970: 299–300, Isler and Isler, 1999: 142–144, and Dickinson, 2003: 819.

HOLOTYPE: **AMNH 254749**, adult male, collected at Chunyaxche, Quintana Roo, Mexico, on 31 January 1926, by Ludlow Griscom (no. 45).

COMMENTS: Griscom cited the AMNH number of the holotype in the original description and listed the six specimens in his type series. The five paratypes are: Belize (= British Honduras), AMNH 59871, male, 18 January 1890; AMNH 59872, female, 19 January 1890, both collected by D.P. Ingraham. Mexico, AMNH 254748, adult male, Chunyaxche, 31 January 1926; AMNH 254750, male immature, Palmul, 10 February 1926; AMNH 254751, female, Vigia Chica, 27 January 1926, all collected by L. Griscom.

Griscom designated AMNH 254749 as the type of *rooensis* but tied the type label on 254748. The two specimens differ in color, with AMNH 254749 darker. Both specimens are retained in the type collection, with a label added to AMNH 254748 to explain its paratype status.

Phoenicothraupis atrimaxillaris Dwight and Griscom

Phoenicothraupis atrimaxillaris Dwight and Griscom, 1924: 4 (Puerto Jimenez, Golfo Dulce, Prov. de Puntarenas, Costa Rica).

Now Habia atrimaxillaris (Dwight and Griscom, 1924). See Hellmayr, 1936: 315, Storer, 1970: 301, Isler and Isler, 1999: 144–145, and Dickinson, 2003: 819.

HOLOTYPE: **AMNH 392441**, adult male, collected at Puerto Jimenez, Golfo Dulce, Puntarenas, Costa Rica, on 16 July 1922, by Austin Paul Smith. From the Jonathan Dwight Collection (no. 55666).

COMMENTS: Dwight and Griscom cited the Dwight number of the holotype in the original description and noted that they had a type series of two adult males, three immature males, and two females, all from the type locality. The six paratypes, all collected by A.P. Smith in 1922, are: AMNH 392440 (Dwight no. 55665), immature male, 16 July; AMNH 392442 (55664), immature male, 16 July; AMNH 392443 (55667), adult male, 17 July; AMNH 392444 (55670), immature male, 22 July; AMNH 392445 (55668), female, 17 July; AMNH 392446 (55669), female, 19 July.

For information on Austin Paul Smith, see Casto and Burke (2010), and for a history of *Habia atrimaxillaris* (Dwight and Griscom), see Aubrecht (2008).

Phaenicothraupis cristata Lawrence

Phaenicothraupis cristata Lawrence 1875a: 70 (New Granada, Bogota).

Now *Habia cristata* (Lawrence, 1875). See Hellmayr, 1936: 316, Storer, 1970: 301, Isler and Isler, 1999: 146–147, and Dickinson, 2003: 819.

HOLOTYPE: **AMNH 40891**, adult male, collected in "Bogota," undated, obtained from H. Alexander.

COMMENTS: Lawrence had the single example.

Piranga leucoptera venezuelae J.T. Zimmer

Piranga leucoptera venezuelae J.T. Zimmer, 1947a: 21 (Galipán, Cerro de Avila, Venezuela).

Now *Piranga leucoptera venezuelae* J.T. Zimmer, 1947. See Storer, 1970: 308, Isler and Isler, 1999: 162–164, and Dickinson, 2003: 819.

HOLOTYPE: **AMNH 510292**, adult male, collected at Picacho de Galipán (= Galipán), 10.34N, 66.54W (Paynter, 1982), Pico Avíla (= Cerro de Avíla, Distrito Federal, Venezuela, on 30 December 1913, by S.M. Klages (no. 1579). From the Rothschild Collection.

COMMENTS: Zimmer cited the AMNH number of the holotype in the original description and on p. 23 listed the specimens he examined. The following 30 paratypes are in AMNH: Colombia, "Colombie," AMNH **40824**, male; east of Palmira, **AMNH 109315**, female, April 1911; "Bogota," **AMNH 510298**, [female], and **AMNH 510299**, [male]. Venezuela, Galipán, AMNH 510293, male, December 1913; AMNH 510294, 510295, females, January 1913; El Limón, AMNH **150849**, male, September 1918, AMNH **323123**, **323124**, males, November 1937; Loma Redonda, AMNH 510290, male, **AMNH 510291**, female, December 1913; Cumbre de Valencia, AMNH 510288, female, AMNH 510289, male, January 1910; Valley of Santa Ana, AMNH 510282, male, February 1898; Campos Alegre Valley, AMNH 510275, 510276, females, March and February 1898, AMNH 519277, male, February 1898; Los Palmales, **AMNH 510284, 510285**, males, AMNH 510287, female, February 1898; Los Dos Ríos, AMNH 510283, male, April 1898; Quebrada Seca, AMNH 70356, November 1898; AMNH 510278-510281, males, AMNH 510286, female, February and April 1898; San Antonio, Bermudéz, AMNH 73273, male, July 1896; Caripe, AMNH 510274, female, January 1894. The two females from Galipán were listed twice and the remaining paratypes were noted as being in the Phelps Collection, Caracas.

Ramphocoelus [sic] atrosericeus capitalis Allen

Ramphocoelus [sic] atrosericeus capitalis Allen, 1892: 51 (El Pilar, Venezuela).

Now *Ramphocelus carbo capitalis* Allen, 1892. See Hellmayr, 1936: 255, and Dickinson, 2003: 806.

SYNTYPES: **AMNH 56195**, male, and **AMNH 56196**, female, collected at El Pilar, 10.32N, 63.09W (Paynter, 1982), Sucre, Venezuela, on 5 November 1891, by Amelia Woolworth Smith (Mrs. H.H. Smith).

COMMENTS: Allen designated male and female syntypes of *capitalis* in the original description, and gave their AMNH numbers.

Allen (1892) only gave the collector's name as "Mrs. H.H. Smith." Her given name being Amelia, it was a puzzle, then, that her field labels (which were printed labels from the collection of O. S[alvin] and F.D. G[odman]) should have her initials printed as "D.W. Smith." This was solved by Wynne (1969: 196), who listed her as "Amelia (Daisy) Woolworth Smith," and by Sharpe (1906: 368), who noted that Brazilian specimens from the Salvin and Godman collection were "procured by those truly wonderful collectors Mr. Herbert Smith and Mrs. Daisy W. Smith."

Rhamphocelus jacapa connectens Berlepsch and Stolzmann

Rhamphocelus jacapa connectens Berlepsch and Stolzmann, 1896: 344 (La Merced).

Now *Ramphocelus carbo connectens* Berlepsch and Stolzmann, 1896. See Hellmayr, 1936: 250, Zimmer, 1945: 1–5, and Dickinson, 2003: 806.

SYNTYPE: **AMNH 509919**, adult male, collected at La Merced, 11.03S, 75.19W (Stephens and Traylor, 1983), Rio Chanchamayo valley, Junín, Peru, on 20 July 1890, by J. Kalinowski (no. 706). From the Rothschild Collection.

COMMENTS: In the original description, Berlepsch and Stolzmann said only that they had a number of individuals collected in July, September, and October 1890 and March 1891 at La Merced; they did not designate a type. This syntype had not been recognized previously. There are additional syntypes in SMF (Hellmayr, 1936: 250) and MIZ (Mlíkovský, 2009: 158).

Ramphocelus chrysopterus Boucard

Ramphocelus chrysopterus Boucard, 1891: 53 (State of Panama, Columbia [sic]).

Now considered an intergrade between *R. f. flammigerus* and *R. f. icteronotus*. See Hartert, 1919: 150, Griscom, 1932a, Hellmayr, 1936: 261–264, Isler and Isler, 1999: 175–176, and Dickinson, 2003: 806.

SYNTYPE: **AMNH 510037**, adult male. PROBABLE SYNTYPE: **AMNH 510038**, adult male. Both specimens said to have been collected in Panama, undated. From the Boucard Collection via the Rothschild Collection.

COMMENTS: When Boucard named this form, he described the male and said that he had received two that were exactly alike. Hellmayr (1936: 263, footnote), in commenting on R. chrysopterus, noted that he had seen the four specimens marked as "typical specimens" by Boucard and housed in Paris and in the Rothschild Museum. The above two specimens are the two that came to AMNH with the Rothschild Collection and are marked "typical specimen" by Boucard. Hartert (1919: 150) listed them as "Type (or cotypes, the author having had two specimens, both in the [Rothschild Collection], both marked by the author 'typical specimen')," and noted that Rothschild bought them both from Boucard in 1891. Reflecting Hartert's uncertainty, only AMNH 510037 had a Rothschild type label.

Boucard's annotations on his labels for the two specimens differ slightly: On AMNH 510037, he has written "Ramphocelus chrysopterus n. sp.," a reference to the description in "H Bird 1.53, 1891," and "Typical specimen" underlined in red, probably by Hartert as he often did when the specimen was important. On the reverse of this label in what appears to be Boucard's hand is written "Bought from Boucard, 1891."

AMNH 510038 is labeled by Boucard as "Ramphocelus chrysopterus," without a ref-

erence to the description, and "Typical specimen," not underlined in red. The reverse of the label is blank. An AMNH type label marked "probable syntype" has been added to this specimen.

C. Voisin (personal commun.) has checked the specimens of this form in MNHN and found that none are labeled "Typical specimen" by Boucard, even though he often so labeled specimens when they were not, in fact, part of a type series. H. van Grouw (personal commun.) also checked possible specimens at BMNH and found none that might have been one of Boucard's types.

Thus, I cannot explain Hellmayr's statement that he examined four specimens marked "typical specimen" and am tentatively accepting the above two specimens as the syntypes of *Ramphocelus chrysopterus* Boucard, 1891. There are seven additional Boucard specimens labeled *chrysopterus* with rumps of varying shades from red-orange to yellow-orange that were part of the Rothschild Collection. One was collected in 1896; the others are undated and have no indication that they might have been part of Boucard's type series.

Griscom (1932a) considered *R. chrysopterus* to be a hybrid between *R. flammigerus* and *R. icteronotus*. And this explanation seems to be generally accepted. Dickinson (2003: 806) retained *flammigerus* and *icteronotus* as subspecies of *R. flammigerus*, because of the widespread intergradation between them.

Rhamphocoelus [sic] dunstalli Rothschild

Rhamphocoelus [sic] dunstalli Rothschild, 1895: 481 (Central America and probably Panama).

Now Ramphocelus dimidiatus × R. icteronotus. See Hartert, 1919: 149, Griscom, 1932a, Hellmayr, 1936: 261–264, Olson and Violani, 1995: 304–305, and Dickinson, 2003: 806.

HOLOTYPE: **AMNH 510004**, unsexed [male], locality unknown, purchased from K. Dunstall. From the Rothschild Collection.

COMMENTS: When this bird was described, Rothschild had the single specimen; he commented: "By the make of the skin it evidently came from Central America, and probably Panama." Hartert (1919: 149) commented that later Rothschild had purchased a second similar specimen from Comte de Dalmas, who in 1896

had bought it from Sciama, a feather-dealer in Paris. This second specimen has no type standing.

Griscom (1932a) came to the conclusion that *R. dunstalli* was a hybrid between *R. dimidiatus* and *R. icteronotus*, and Olson and Violani (1995: 304–305) agreed with this assessment. Hellmayr (1936, 263, footnote) disagreed and thought that it was merely a "freaky" mutation of *R. passerinii*.

Rhamphocoelus [sic] inexpectatus Rothschild

Rhamphocoelus [sic] inexpectatus Rothschild, 1897a: 32 (Panama).

Now backcross *Ramphocelus icteronotus/dimidia-tus* × *icteronotus*. See Hartert, 1919: 149, Griscom, 1932a, Hellmayr, 1936: 266–268, Olson and Violani, 1995: 304–309, and Dickinson, 2003: 806.

HOLOTYPE: **AMNH 509649**, unsexed [male], locality unknown, purchased from K. Dunstall. From the Rothschild Collection.

COMMENTS: Rothschild had the single specimen when this form was described. Based on the method of preparation, the skin was thought to have come from Panama. Griscom (1932a) discussed this form and decided that it represented a hybrid between *R. chrysopterus* and *R. icteronotus* (but he considered *R. chrysopterus* a hybrid between *R. flammigerus* and *R. icteronotus*). Olson and Violani (1995: 304–309) also believed that *R. inexpectatus* represented a backcross, but between a hybrid *R. icteronotus/dimidiatus* and *R. icteronotus*. Hellmayr (1936: 263, footnote) considered *inexpectatus* to be an "individual mutation" of *R. icteronotus*.

Tanagra portoricensis Bryant

Tanagra portoricensis Bryant, 1866: 252 (Porto Rico).

Now *Spindalis portoricensis* (Bryant, 1866). See Bangs and Penard, 1925: 202, Hellmayr, 1936: 243, Garrido et al., 1997, Isler and Isler, 1999: 180, and Dickinson, 2003: 820.

HOLOTYPE: **AMNH 40802**, adult male, collected on Puerto Rico, undated, by Robert Swift. From USNM (no. 36502), via the H. Bryant Collection (no. 974), and the George N. Lawrence Collection.

COMMENTS: When Bryant named portoricensis he gave the USNM number of the holotype in the original description, and according to his introduction (Bryant, 1866: 248), the specimens collected by Swift and George Latimer on Puerto Rico were presented to the Smithsonian Institution. Bangs and Penard (1925: 202) noted that the type of *portoricensis* could not be found in USNM and Hellmayr (1936: 243) considered it lost. According to James Dean (personal commun.), the specimen was sent to Bryant. Lawrence apparently acquired the specimen from Bryant, or more likely, from Mrs. Bryant after her husband's death. Other Bryant specimens from the Lawrence Collection were noted by Lawrence as being from Mrs. Bryant.

Because Lawrence at times obtained specimens from USNM and from the Bryant Collection, a check of his specimens of this species seemed worthwhile and did, in fact, uncover the type at AMNH. It had not previously been recognized as a type and was not so marked.

See Garrido et al. (1997) for a summary of systematic treatments of the genus *Spindalis* and evidence for considering *portoricensis* a full species.

[Tanagra berlepschi Dalmas]

Dalmas (1900b: 136) described *Tanagra berlepschi* based on specimens collected on Tobago in November and December 1898; he had both male and female specimens, but did not designate a type or say how many specimens he examined.

Hellmayr (1936: 211) said that the type of berlepschi from Tobago had been in the Dalmas Collection, was subsequently in the Rothschild Collection, and was, in 1936, in AMNH. This is incorrect, as there are no Dalmas specimens of berlepschi in AMNH and none came with the Rothschild Collection. However, this statement probably led Zimmer to look for the type. He had considered AMNH 509067 a possible type of Tanagra berlepschi and had written a note on the reverse of the AMNH type label: "The only one of the original series with the name on the original label. J.T.Z." However, the specimen was not part of the original series, nor was it collected by Dalmas. It was collected by E. André's collectors on 23 May 1903, three years after the name was introduced by Dalmas (1900b: 136). It has no

possible standing as type of *berlepschi*. In fact, the entire series of specimens collected by André's collectors is dated 1903. Because the specimen bears an AMNH type label and has perhaps been considered the type by some investigators, it remains in the type collection, with a label indicating that it has no standing as a type.

Hellmayr (1931: 163), in his obituary of Dalmas, noted that Dalmas had sponsored André's collecting trips to western Colombia and Venezuela, but I have found no evidence that André had been associated with Dalmas' earlier collecting in the West Indies from his yacht *Chazalie*. Hellmayr also noted that the surviving part of Dalmas' collection had been acquired by Rothschild and by the museum in Munich, but Hartert (1919: 150–151) said that the part of Dalmas' collection that had not been destroyed by moths was purchased by Rothschild, except for the hummingbirds, which remained in Simon's collection. It is possible that the types of this form are in ZSM.

Zimmer (1944: 10–16), in his discussion of this species did not treat the subspecies berlepschi, only listing specimens of it that he had examined; *Tanagra berlepschi* is now considered a subspecies of *Thraupis episcopus* (Dickinson, 2003: 807).

Thraupis episcopus mediana J.T. Zimmer

Thraupis episcopus mediana J.T. Zimmer, 1944: 10 (Manaos, Brazil).

Now *Thraupis episcopus mediana* J.T. Zimmer, 1944. See Storer, 1970: 319, Parkes, 1993: 313–316, and Dickinson, 2003: 807.

HOLOTYPE: **AMNH 233638**, adult male, collected at Manaus (= Manaos), 03.08S, 60.01W (Paynter and Traylor, 1991), Amazonas, Brazil, on 20 August 1927, by George H.H. Tate and T. Donald Carter (no. 68 [not 38]).

COMMENTS: Zimmer cited the AMNH number of the holotype in the original description and in the same publication (Zimmer, 1944: 14) listed 164 specimens in addition to the holotype that he examined. The three additional specimens he listed as doubtfully belonging to *mediana*, I have not considered to be paratypes. There are actually 166 specimens from the localities listed that were available to Zimmer and were labeled as *mediana* by him, and I have considered all of those paratypes.

Brazil, Rio Negro, Manaus, AMNH 233639, 238743, 238749, 248810–248812, 310089– 310107, 13 males and 12 females; Muirapinimá, AMNH 312743-312754, seven males and five females; Igarapé Cacao Pereira, AMNH 128932, 312335, 312719-312742, **313334**, 14 males, 10 females, and 1 sex?; Tauapessasu, AMNH 276474, male; Tahuapunto, AMNH 435418, male; Iauarete, AMNH 435417, male; Tatu, AMNH 435420, male; San Gabriel, AMNH 271985, 276473, two males; Santa Maria, AMNH 311486-311488, two males and one female; Tabocal, **AMNH 311489, 311490**, two females; Yavarari, AMNH 311474-311480, three males and four females; Yucabí, AMNH 311481-311385, four males and one female; Faro, AMNH 284680-284683, 285384-285386, 285386bis, 285387-285394, six males and ten females. Tapajoz, Tauarý, AMNH 287976– 287980, two males and three females; Aramanaý, AMNH 287981, female; Igarapé Brabo, AMNH 287982, 287983, two females; Santarem, AMNH 36298, one sex?. Villa Bella Imperatríz, Lago Andirá, AMNH 278343-278345, three females; Boca Rio Andirá, AMNH 278342, 278346, 278347, one male and two females; Santa Clara, AMNH 277396–277399, four females. Rio Madeira, Borba, AMNH 280241-280247, 280253, **281015, 509017**, eight males and two females; Igarapé Auará, AMNH 280248–280252, 280254-280257, four males and five females; Rosarinho, AMNH 282908–282920, ten males and three females; Santo Antonio de Guajará, AMNH 281016, 281017, two females; Porto Velho, AMNH 148902-148904, two males and one female; Calamá, AMNH **128230, 509016**, one male and one female. Rio Solimoës, AMNH 128231, male. Colombia, Rio Uaupés, opposite Tahuapunto, AMNH 435419, male. Venezuela, Rio Cassiquiare, El Merey, AMNH 433944-433946, two males and one female.

Parkes (1993: 313–316) has suggested that *T. e. mediana* may prove to be a synonym of *T. e. ehrenreichi* (Reichenow, 1915).

Tanagra coelestis major Berlepsch and Stolzmann

Tanagra coelestis major Berlepsch and Stolzmann, 1896: 343 (La Merced et Garita del Sol).

Now *Thraupis episcopus major* (Berlepsch and Stolzmann, 1896). See Hellmayr, 1936: 209–210, and Dickinson, 2003: 807.

SYNTYPES: AMNH 509022, male, collected at Garita del Sol, Vitoc Valley, ca. 11.18S, 75.20W (Vaurie, 1972), Junín, Peru, on 25 August 1891, by J. Kalinowski (no. 1435); AMNH 509023, male, 26 February 1891, and AMNH 509024, female, on 6 September 1890, both collected at La Merced, 11.03S, 75.19W (Stephens and Traylor, 1983), Chanchamayo valley, Junín, Peru, by J. Kalinowski (nos. 1161 and 991, respectively). From the Rothschild Collection.

COMMENTS: In the original description, Berlepsch and Stolzmann did not designate a type but said that Kalinowski had collected eight specimens at La Merced in July and September, 1890, and February 1891, and at Garita del Sol in August 1891. These syntypes were not listed by Hartert in any of his lists of types in the Rothschild Collection; AMNH 509022 and 509024 already bore AMNH type labels, filled in by Zimmer. AMNH 509023 is also a syntype and a type label has been attached to that specimen as well. There are two additional syntypes in MIZ (Mlíkovský, 2009: 159–160), and Zimmer (1944: 12) noted that SMF had syntype(s).

Thraupis episcopus urubambae J.T. Zimmer

Thraupis episcopus urubambae J.T. Zimmer, 1944: 13 (Santa Ana, Urubamba Valley, Perú; altitude 3500 feet).

Now *Thraupis episcopus urubambae* J.T. Zimmer, 1944. See Storer, 1970: 321, and Dickinson, 2003: 807.

HOLOTYPE: **AMNH 145784**, adult male, collected at Santa Ana, 3500 ft, 12.52S, 72.43W (Stephens and Traylor, 1983), Urubamba Valley, Cuzco, Peru, on 15 July 1916, by Frank M. Chapman and George K. Cherrie.

COMMENTS: Zimmer cited the AMNH number of the holotype in the original description and listed the specimens of *urubambae* that he examined (Zimmer, 1944: 15). The following paratypes are in AMNH: Idma, AMNH 145779–145783, one female and four males; Santa Ana, AMNH 145785, female; Chauillay, AMNH 145778,

male; Astillero, AMNH 146525, 146526, two females; Potrero, AMNH 509008, female; Cosñipata, AMNH 509014, 509015, female and male. Paratypes from Huiro are in ANSP.

Thraupis sayaca obscura Naumburg

Thraupis sayaca obscura Naumburg, 1924: 111 (Parotani, Dept. Cochabamba, Bolivia; alt. 8800 ft.).

Now *Thraupis sayaca obscura* Naumburg, 1924. See Hellmayr, 1936: 220–222, Isler and Isler, 1999: 186–188, and Dickinson, 2003: 807.

HOLOTYPE: **AMNH 138334**, adult male, collected at Parotani, 8800 ft, 17.34S, 66.21W (Paynter, 1992), Cochabamba, Bolivia, on 28 June 1915, by Leo E. Miller (no 12679) and Howarth S. Boyle.

COMMENTS: Naumburg cited the AMNH number of the holotype in the original description and listed her type series. Paratypes are: Bolivia, Cochabamba Dept., Parotani, AMNH 138333, 138335–138339, 148897 -148900, four males, six females; Todos Santos, AMNH 138340, 148342-138345, one male, four females; Tujima, AMNH 139790– 139792, three males; Vinto, AMNH 138330, 138332, male, female; Santa Cruz Dept., Vermejo, AMNH 139793, male; California, **AMNH 139785–139787**, male, two females; Valle Grande, AMNH 139794, male; Rio Grande, AMNH 139795, male; Chilon, AMNH 139788, 139789, two males; Sucre Dept., Rio Cachimayo, AMNH 139774-139780, three males, four females; Rio Pilcomayo, AMNH 139781, 139782, two males; Pulque, AMNH 139783, male; Aplobamba, AMNH 78972, 78973, male, female. Argentina, Salta Prov., Embarcacion, AMNH 142088-142090, 142104, three males, one female; Tucuman Prov., Tafi Trail, AMNH 142093–142095, 142101, 142102, two males, three females; Sariemento, AMNH 142091, **142092**, two males; above San Pablo, **AMNH 142096–142100**, four males, one female; Santiago del Estero Prov., Suncho Corral, AMNH 142103, female; Missiones Prov., Puerto Segundo, AMNH 154261, male; Buenos Aires Prov., **AMNH 154259, 154260**, two males, Barracas al Sur, AMNH 146797, female. Of these paratypes, I did not find AMNH 138330 in the collection. AMNH

138331, and 139784 were not part of the type series; they were exchanged to BIM in 1923, before *obscura* was described. The entire BIM bird collection was donated to AMNH in 1935, and they were returned to AMNH at that time.

Thraupis palmarum duvida Cherrie

Thraupis palmarum duvida Cherrie, 1916a:190 (Carapana, Rio Roosevelt, Amazonia, Brazil). Now Thraupis palmarum melanoptera (P.L. Sclater, 1857). See Hellmayr, 1936: 227–228, Isler and Isler, 1999: 192–194, and Dickinson, 2003: 807.

HOLOTYPE: **AMNH 128245**, adult male, collected at Cachoeira Carapaña (= Carapana), 07.45S, 60.34W (Paynter and Traylor, 1991), Rio Roosevelt, Amazonas, Brazil, on 24 April 1914, by George K. Cherrie on the Roosevelt-Rondon Expedition.

COMMENTS: Cherrie had the single specimen, for which he gave the AMNH number.

Tanagra palmarum Wied

Tanagra palmarum Wied, 1821: 76 (Canavieras, Bahia).

Now *Thraupis palmarum palmarum* (Wied, 1821). See Allen, 1889b: 219–220, Hellmayr, 1936: 224–226, Isler and Isler, 1999: 192–194, and Dickinson, 2003: 807.

SYNTYPE: **AMNH 6765**, adult male, collected at Canavieiras (= Canavieras), 15.39S, 38.57W (Paynter and Traylor, 1991), Bahia, Brazil, by Maximilian, Prince of Wied. From the Maximilian Collection.

COMMENTS: The Maximilian label glued to the reverse of the AMNH label, is annotated "T. palmarum mihi," and is listed as the type of the male by Allen (1889b: 219). As Allen noted, Wied described both male and female, but the female was not found in AMNH. The specimen had been mounted.

Thraupis cyanocephala annectens J.T. Zimmer

Thraupis cyanocephala annectens J.T. Zimmer, 1944: 17 (Cerro Munchique, Coast Range west of Popayan, Colombia; altitude 8325 feet).

Now *Thraupis cyanocephala annectens* J.T. Zimmer, 1944. See Storer, 1970: 324, Isler and Isler, 1999: 194–195, and Dickinson, 2003: 807.

HOLOTYPE: **AMNH 110256**, adult male, collected on Cerro Munchique, 8325 ft, 02.32N, 76.57W (Paynter, 1997), Coast Range west of Popayan, Cauca, Colombia, on 26 May 1911, by William B. Richardson.

COMMENTS: Zimmer cited the AMNH number of the holotype in the original description and listed the specimens he examined. The following specimens are paratypes: Cerro Munchique, Coast Range west of Popayan, AMNH 110253–110255, 110257, 110259, 110260, 110262, 110265, four males, three females, one sex?; Cocal, AMNH 110266, female; Salento, AMNH 113036, male; above Salento, AMNH 113035, female; Retiro, AMNH 509056, sex?; La Florida, **AMNH** 110263, 110264, male, female; El Eden, AMNH 113037-113040, 113042, 113043, one male, five females; La Sierra, **AMNH 117377, 117378**, male, female; Santa Elena, AMNH 134400bis, 134409, 134410, 134413, 134415, 134416, 154506, three males, three females, one sex?; Nóvita Trail, AMNH 113034, sex?; Medellin, AMNH 509454, 509055, male, female; Antioquia, AMNH 110810, sex? In three cases, the paratypes bear two AMNH numbers. They had been exchanged to the BIM and when, in November 1935, the BIM collection of birds was donated to AMNH, those specimens were renumbered. The three specimens, followed by their BIM and later AMNH nos. are: AMNH 110257 (12948, 441237), AMNH 113040 (12947, 441240), AMNH 113042 (12946, 441239). The paratypes cited here vary slightly in number from those given by Zimmer, but all of them were in AMNH when annectens was described, all are labeled annectens by Zimmer, and all are from localities cited by him.

Sporathraupis cyanocephala margaritae Chapman

Sporathraupis cyanocephala margaritae Chapman, 1912: 165 (Valparaiso, alt. 5000 ft., Sierra Nevada of Santa Marta, Colombia).

Now *Thraupis cyanocephala margaritae* (Chapman, 1912). See Hellmayr, 1936: 232–233, Isler and Isler, 1999: 194–195, and Dickinson, 2003: 807.

HOLOTYPE: AMNH 72469, adult male, collected at Cincinati (= Valparaiso, 5000

ft, 11.06N, 74.06W (Paynter, 1997), Sierra Nevada of Santa Marta, Magdalena, Colombia, on 1 April 1899, by Amelia Woolworth Smith (Mrs. Henry H. Smith) and G[race] H.H[ull].

COMMENTS: Chapman cited the AMNH number of the holotype in the original description and noted that he had only two specimens. The paratype is: **AMNH 72470**, female, El Libano, 11 May 1899, collected by G.H. Hull.

Allen (1900: 122) published a report on the Smiths' collection in Santa Marta and noted that most of the specimens were collected by Mrs. Smith with G.H. Hull. The initials "G.H.H." appear on the label of the holotype along with Mrs. Smith's printed name; on the label of the paratype, Mrs. Smith's name has a line through it and G.H. Hull's name written in. Grace H. Hull was Amelia Smith's niece and collected with her. Allen (1900: 168) listed these two specimens under Tanagra cyanocephala auricrissa. Chapman apparently enjoyed Allen's play on Âmelia Smith's nickname, "Daisy," and repeated the name margaritae here (see Calliste margaritae).

Thraupis bonariensis composita J.T. Zimmer

Thraupis bonariensis composita J.T. Zimmer, 1944: 20 (Vinto, Province of Cochabamba, Bolivia; altitude 8000 feet).

Now *Thraupis bonariensis composita* J.T. Zimmer, 1944. See Storer, 1970: 326, Isler and Isler, 1999: 195–197, and Dickinson, 2003: 807.

HOLOTYPE: **AMNH 138354**, adult male, collected at Vinto, 8000 ft, 17.26S, 66.19W (Paynter, 1992), Cochabamba, Bolivia, on 6 July 1915, by Leo E. Miller (no. 12937) and Howarth Boyle.

COMMENTS: Zimmer gave the AMNH number of the holotype in the original description and listed the specimens he examined. Paratypes are: Vinto, AMNH 138352, 138353, 138355, 138356, three males, one immature male; Parotani, AMNH 138349–138351, 148913, two males, two females; Tujma, AMNH 139809, male; Tarata, AMNH 139810, 139811, male, female; Arque, AMNH 148912; Valle Grande, AMNH 509288, male; Olgin, AMNH 509289, male; Pulque, AMNH 139807, 139808, males; Chilon, AMNH

139796–139803, seven males, one female; Rio Pilcomayo, AMNH 139804, male; Rio Grande, AMNH 139812, male; Rio Cachimayo, AMNH 139805, 139806, male, female. In his list of examined specimens, Zimmer listed two males from Rio Pilcomayo, but there is only one cataloged. The specimen from Rio Grande is from within the given range of *composita* and in the same series of specimens collected by Miller and Boyle; it is also labeled composita by Zimmer. I think the discrepancy in number of specimens examined from Rio Pilcomayo resulted from a misreading of the locality on the Rio Grande specimen and I have considered it a paratype. Two of the paratypes had been given to the BIM and renumbered when their bird collection was donated to AMNH in 1935: AMNH 139800 (BIM no. 12942, later AMNH no. 441236); AMNH 139804 (12941, 441232).

Buthraupis rothschildi Berlepsch

Buthraupis rothschildi Berlepsch, 1897: iii (Cachabé, N.W. Ecuador (500 feet)).

Now *Bangsia rothschildi* (Berlepsch, 1897). See Hellmayr, 1936: 195, Isler and Isler, 1999: 201, and Dickinson, 2003: 808.

HOLOTYPE: **AMNH 513878**, adult male, collected at Cachabí (= Cachabé), 500 ft, ca. 00.58N, 78.48W (Paynter, 1993), Esmeraldas, Ecuador, on 17 December 1896, by W.F.H. Rosenberg (no. 166). From the Rothschild Collection.

COMMENTS: Berlepsch had the single specimen. Later, Hartert (1898: 482), in his report on all of the birds collected by Rosenberg in northwestern Ecuador, discussed it and provided an illustration of it in pl. 2, fig. 2. The plate, by Keulemans, is reproduced on the cover of this type list. Hartert (1898: 477–478) also gave information on Rosenberg's collecting localities.

Buthraupis cucullata cyanonota Berlepsch and Stolzmann

Buthraupis cucullata cyanonota Berlepsch and Stolzmann, 1896: 342 (Maraynioc).

Now *Buthraupis montana cyanonota* Berlepsch and Stolzmann, 1896. See Hellmayr, 1936: 191, and Dickinson, 2003: 808.

SYNTYPE: **AMNH 513848**, female, collected at Maraynioc, 11.22S, 75.24W (Stephens and Traylor, 1983), Junín, Peru, on 13

June 1893, by J. Kalinowski (no. 1947). From the Berlepsch Collection via the Rothschild Collection.

COMMENTS: In the original description, Berlepsch and Stolzmann based *cyanonota* on five specimens collected at Maraynioc in November 1891, August 1892, and June 1893. The above specimen is marked "Typus" by Berlepsch and bears an AMNH type label filled in by Zimmer. There are two additional syntypes in MIZ (Mlíkovský, 2009: 142).

Buthraupis eximia zimmeri Moore

Buthraupis eximia zimmeri Moore, 1934: 2 (Paramillo, western Andes, Antioquia, Colombia; alt. 12,500 feet).

Now *Buthraupis eximia zimmeri* Moore, 1934. See Storer, 1970: 329, Isler and Isler, 1999: 204, and Dickinson, 2003: 808.

HOLOTYPE: **AMNH 134377**, adult male, collected on Cerro Paramillo (= Paramillo), 12,500 ft, 07.04N, 75.55W (Paynter, 1997), western Andes, Antioquia, Colombia, on 25 January 1915, by Leo E. Miller (no. 10914) and Howarth Boyle.

COMMENTS: Moore cited the AMNH number of the holotype in the original description and listed the additional specimens examined: one female from Paramillo; four males, two females from Santa Isabel; and one male, one female from Almaguer. The paratypes in AMNH are: Paramillo, AMNH 134379, female; Santa Isabel, AMNH 113008–113011, 113014, three males, two females; Almaguer, AMNH 117347, 117348, male, female.

AMNH 134378, also a female from Cerro Paramillo, is marked in the catalog as having been exchanged to O. Bangs at MCZ in September 1918. This specimen was given MCZ no. 124899, but was later returned to AMNH and then exchanged to BIM in July 1923 and given BIM no. 12919. It was returned to AMNH in November 1935, when the BIM bird collection was given to AMNH, and renumbered as AMNH 441193. Thus it was not in AMNH when Moore described this form and is not a paratype of *zimmeri*. The female from Cerro Paramillo, AMNH 134379, is not in the AMNH collection, and it may have been exchanged without the

catalog having been marked. It is not present in the MCZ collection (J. Trimble, personal commun.).

The fourth male from Santa Isabel listed by Moore was not cataloged or found; two additional specimens in this series from Santa Isabel had been exchanged, but in 1918, long before the description of this subspecies.

Poecilothraupis palpebrosa caerulescens Taczanowski and Berlepsch

Poecilothraupis palpebrosa caerulescens Taczanowski and Berlepsch (ex Berlepsch ms), 1885: 80 (San Rafael, Ecuador, and Cutervo, Peru).

Now Anisognathus lacrymosus caerulescens (Taczanowski and Berlepsch, 1885). See Berlepsch, 1912: 1046, Hellmayr, 1936: 187, Zimmer, 1944: 5–6, Isler and Isler, 1999: 207–208, and Dickinson, 2003: 808.

LECTOTYPE: **AMNH 138749**, adult male, collected at Cutervo, 06.22S, 78.51W (Stephens and Traylor, 1983), Cajamarca, northern Peru, on 5 December 1878, by Jean Stolzmann (no. 890). From the Berlepsch Collection (no. 6784).

COMMENTS: In the original description, Taczanowski and Berlesch had a male and two females from San Rafael that were intermediate between nominate specimens from Bogota and Antioquia and specimens from Cutervo, but closer to the latter. No type was designated, but apparently both San Rafael and Cutervo birds were included in *caerulescens*.

Zimmer (1944: 5–6) first identified this lectotype of *caerulescens* and discussed it at length. A note by Berlepsch on the front of his label reads: "Erhalten im Januar 1880 von L. Taczanowski in Warchau [ex. Jean Stolzmann, collector]." Zimmer (1944: 6) correctly noted that Berlepsch (1912: 1046) had designated this specimen the lectotype, by citing his collection number for it, and pointed out that Hellmayr (1936: 187) was incorrect in citing as the type a specimen from San Rafael in the Warsaw Museum. Mlíkovský (2009: 158) in his recent list of types in MIZ did not list this form.

This specimen did not come to AMNH with the Rothschild Collection but was acquired for AMNH, probably around 1922, by Elsie M.B. Reichenberger [Naumburg].

Compsocoma somptuosa baezae Chapman

Compsocoma somptuosa baezae Chapman, 1925a: 13 (Baeza, 5000 ft., eastern Ecuador).

Now Anisognathus somptuosus baezae (Chapman, 1925). Hellmayr, 1936: 200–201, Storer, 1970: 335, Isler and Isler, 1999: 210–211, and Dickinson, 2003: 808.

HOLOTYPE: **AMNH 173873**, adult male, collected at Baeza, 5000 ft, 00.27S, 77.53W (Paynter, 1993), Napo, Ecuador, on 12 September 1922, by Olalla and sons.

COMMENTS: Chapman cited the AMNH number of the holotype in the original description and listed five male and four female paratypes, all from the type locality. The paratypes are: AMNH 173871, 173872, 173874–173876, September 1922, and AMNH 180851–180854, October 1923.

Compsocoma somptuosa alamoris Chapman

Compsocoma somptuosa alamoris Chapman, 1925a: 12 (Alamor, 4550 ft., southwestern Ecuador).

Now Anisognathus somptuosus alamoris (Chapman, 1925). See Hellmayr, 1936: 202–203, Isler and Isler, 1999: 210–211, and Dickinson, 2003: 808.

HOLOTYPE: **AMNH 168453**, adult male, collected at Alamor, 4550 ft, 04.02S, 80.02W (Paynter, 1993), Loja, Ecuador, on 5 October 1920, by George K. Cherrie (no. 22267).

COMMENTS: Chapman gave the AMNH number of the holotype in the original description and listed 28 paratypes: Zaruma, AMNH 130479, 130480, 130482, 130483, 155161, 155162, three males, three females; Salvias, AMNH 168441–168445, four males, one female; El Chiral, AMNH 168446–168452, five males, two females; Alamor, AMNH 153118, 168454, 172719, 172720, three males, one female; Celica, AMNH 168455, male; San Bartolo, AMNH 172721–172725, four males, one female. AMNH 172721 was exchanged to MCZ in July 1928.

Iridosornis dubusia caeruleoventris Chapman

Iridosornis dubusia caeruleoventris Chapman, 1915b: 657 (Paramillo (12,500 ft.), northern end of Western Andes, Colombia).

Now *Iridosornis rufivertex caeruleoventris* Chapman, 1915. See Hellmayr, 1936: 175–176, Isler and Isler, 1999: 216–218, and Dickinson, 2003: 809.

HOLOTYPE: **AMNH 134364**, female, collected at Cerro Paramillo (= Paramillo), 12,500 ft, 07.04N, 75.55W (Paynter, 1997), northern end of western Andes, Antioquia, Colombia, on 24 January 1915, by Leo E. Miller (no. 10901) and Howarth Boyle.

COMMENTS: Chapman cited the AMNH number of the holotype; he had a single paratype, **AMNH 134365**, female, Paramillo, 30 January 1915, by Miller and Boyle.

Iridosornis dubusia ignicapillus Chapman

Iridosornis dubusia ignicapillus Chapman, 1915b: 656 (Andes west of Popayan (10,340 ft.), Colombia).

Now *Iridosornis rufivertex ignicapillus* Chapman, 1915. See Hellmayr, 1936: 177, Zimmer, 1944: 1–2, Isler and Isler, 1999: 216–218, and Dickinson, 2003: 809.

HOLOTYPE: **AMNH 110204**, adult male, collected in the Andes, 10340 ft, west of Popayan, 02.27N, 76.36W (Paynter, 1997), Cauca, Colombia, on 16 July 1911, by W.B. Richardson.

COMMENTS: Chapman cited the AMNH number of the holotype in the original description and said that he had a type series of 19 specimens. The 18 paratypes are: Colombia, Andes west of Popayan, AMNH 110200–110203, 110205–110211, five males, five females, one sex?; Almaguer, AMNH 117333-117338, four males, two females; Ecuador, Loja, AMNH 130474, male. Of these, AMNH 110201, 110209, 117334, and 117336 were exchanged to O. Bangs in September 1918 and are probably in MCZ; AMNH 110200 and 110205 were exchanged to BMNH in May 1921; AMNH 110211 and 117337 were exchanged to USNM; AMNH 117333 was exchanged to the Rothschild Collection in May 1921 and when that collection came to AMNH in 1932, it was renumbered AMNH 513717. I did not find AMNH 110202 and 117338 in the collection and they may have been exchanged without the catalog having been marked.

Iridosornis rufi-vertex subsimilis J.T. Zimmer

Iridosornis rufi-vertex subsimilis J.T. Zimmer, 1944: 1 (Mindo Valley, western Ecuador; altitude 9400 feet).

Now *Iridosornis rufivertex subsimilis* J.T. Zimmer, 1944. See Chapman, 1926: 666–667, Storer,

1970: 337, Isler and Isler, 1999: 216–218, and Dickinson, 2003: 809.

HOLOTYPE: **AMNH 173618**, adult male, collected in the Mindo Valley, 9400 ft, 00.02S, 78.48W (Paynter, 1993), Pichincha, Ecuador, on 4 September 1922, by Frank M. Chapman, G.K. Cherrie, and Geoffrey O'Connell.

Comments: Zimmer cited the AMNH number of the holotype in the original description, and listed 15 specimens in his type series. The 14 paratypes are: Nono, AMNH 30338, 30339, sex?; "Quito-skin," AMNH 40708, sex?; Gualea, **AMNH** 125180-**125182**, one male, two females; Verdecocha, AMNH 173619, 173620, one male, one female; "Chivinda" (ex Buckley), AMNH 513710, male; above Intac, AMNH 513712, 513713, two males; Mindo, AMNH 513714, male; west side Pichincha, AMNH 513715, female; Aloag, AMNH 513716, female.

Dubusia stictocephala Berlepsch and Stolzmann

Dubusia stictocephala Berlepsch and Stolzmann, 1894: 386 (Maraynioc (Pariayacu et Huarmipaycha)).

Now *Dubusia taeniata stictocephala* Berlepsch and Stolzmann, 1894. See Hellmayr, 1936: 198, Zimmer, 1944: 9, Isler and Isler, 1999: 218–219, and Dickinson, 2003: 809.

SYNTYPE: **AMNH 508974**, adult male, collected at Pariayacu, ca. 11.18S, 75.22W (Vaurie, 1972), Maraynioc, Peru, on 10 December 1891, by J. Kalinowski (no. 1571). From the Rothschild Collection.

COMMENTS: As noted by Zimmer (1944: 9), AMNH 508974 is marked "typus" on the original label. Berlepsch and Stolzmann, in the original description, noted that Kalinowski had collected three adult males and a young at Pariayacu and Huarmipaycha, but they did not designate a type. Of the four syntypes, one is the above specimen in AMNH; two are in MIZ (Mlíkovský, 2009: 153), and perhaps one is in SMF. Maraynioc is near Pariayacu and was used as the general location for several Kalinowski collecting localities (Stephens and Traylor, 1983: 128).

Euphonia purpurea Lawrence

Euphonia purpurea Lawrence, 1867b: 466 (South America, precise locality unknown).

Now *Euphonia violacea violacea* (Linnaeus, 1758). See Sclater 1885: 272, Hellmayr, 1936: 53–55, and Dickinson, 2003: 821.

HOLOTYPE: **AMNH 40501**, male, South America, undated. From the George N. Lawrence Collection.

COMMENTS: Lawrence apparently had a single specimen, the label of which is marked "Type" by Lawrence. The measurements given by Lawrence in his description are written on his label with the comment: "more intense violet, tail shorter." The initials I. & S. also appear and may represent a dealer from whom the specimen was purchased. A second label bears this comment: "Mr. Sclater Ibis 1885, p. 272, says it is *violacea*—it differs decidedly in my opinion." There are also a printed Lawrence Collection label and an AMNH type label.

Euphonia elegantissima vincens Hartert

Euphonia elegantissima vincens Hartert, 1913: 77 (San José, Costa Rica).

Now Euphonia elegantissima elegantissima (Bonaparte, 1838). See Hellmayr, 1936: 21–22, Storer, 1970: 348, Wetmore et al., 1984: 393–395; Isler and Isler, 1999: 241–242, and Dickinson, 2003: 821.

HOLOTYPE: **AMNH 511894**, adult male, collected at San José, 09.59N, 84.04W (Times Atlas), Costa Rica, on 20 January 1898, by C.F. Underwood. From the Rothschild Collection.

COMMENTS: In the original description, Hartert designated as the type of E. e. vincens a male specimen in the Rothschild Collection collected on 20 January 1898 at San José by Underwood and gave the range as Costa Rica and Chiriqui. The following are paratypes, all collected by Underwood in Costa Rica: AMNH 511889, female, La Estrella, 9 June 1893; **AMNH 511890**, male, Rancho Redondo, 20 July 1893; AMNH 511891, male, AMNH 511892, sex?, Azoban de Cartago, 19 March 1895 and 3 April 1895; AMNH 511893, male, Escazu, 17 September 1898; AMNH 511895, female, San José, 20 January 1898. AMNH 511885, an unsexed and undated specimen from Veragua, Panama, is the only possible Chiriqui specimen that came to AMNH with the Rothschild Collection; it is considered a paratype of vincens. Siegel and Olson (2008: 106) noted that the Province of Chiriqui was "formerly included under the old term 'Veragua."

Euphonia fulvicrissa omissa Hartert

Euphonia fulvicrissa omissa Hartert, 1913: 77 (Native-made Bogotá skin).

Now *Euphonia fulvicrissa omissa* Hartert, 1913. See Hellmayr, 1936: 30–31, and Dickinson, 2003: 821.

HOLOTYPE: **AMNH 512148**, adult male, "Bogotá" skin, from the collection of the Compte de Dalmas (N.III.19.b.1160). From the Rothschild Collection.

COMMENTS: Only the holotype came to AMNH with the Rothschild Collection. Nõanama in western Colombia was also mentioned as being in the range, but no specimen from that locality came to AMNH.

Euphonia fulvicrissa purpurascens Hartert

Euphonia fulvicrissa purpurascens Hartert, 1901: 370 (Pambilar, N.W. Ecuador).

Now Euphonia fulvicrissa purpurascens Hartert, 1901. See Hellmayr, 1936: 31, and Dickinson, 2003: 821.

HOLOTYPE: **AMNH 512147**, adult male, collected at Pambilar, 60 ft, northwestern Ecuador on 15 September 1900, by G. Flemming (no. 603). From the Rothschild Collection.

COMMENTS: In the original description, Hartert designated as the type his single specimen with the above data and listed an additional four specimens in his type series. The paratypes, all collected at S. Javier, northern Ecuador, by G. Flemming, are: AMNH 512143 (Flemming no. 915), female, 25 July; AMNH 512144 (376), male, 30 May; AMNH 512145 (293), male, 18 May; AMNH 512146 (536), male, 19 June.

Tanagra mesochrysa media J.T. Zimmer

Tanagra mesochrysa media J.T. Zimmer, 1943b: 19 (Chaupe, northern Perú; altitude 6100 feet). Now Euphonia mesochrysa media (J.T. Zimmer, 1943). See Storer, 1970: 351, Isler and Isler, 1999: 249–250, and Dickinson, 2003: 822.

HOLOTYPE: **AMNH 181666**, adult male, collected at Chaupe, 6100 ft, ca. 05.10S, 79.10W (Vaurie, 1972), northern Peru, on 19 February 1923, by Harry Watkins (no. 7026).

COMMENTS: Zimmer cited the AMNH number of the holotype in the original description; he had 13 specimens in his type series. Eight of the 12 paratypes, all from Peru, are in AMNH: Chaupe, AMNH 181661-181665, 181668, three males, three females, January-March 1923, H. Watkins; Uscho (= Uchco), about 50 mi east of Chachapoyas, AMNH 235200, male, 6 November 1925, Watkins; mouth of the Rio Curaray, AMNH 256859, male, 3 November 1925, Olallas. The remaining four paratypes are one female from Huachipa borrowed from FMNH and three males borrowed from ANSP by Zimmer. The holotype and paratypes of media from Chaupe are also paratypes of tavarae (see below).

Tanagra mesochrysa tavarae Chapman

Tanagra mesochrysa tavarae Chapman, 1925a: 9 (Rio Tavara, alt. 1600 ft.; long. 70°20′W., lat. 13°25′S., southeast Peru).

Now Euphonia mesochrysa tavarae (Chapman, 1925). See Hellmayr, 1936: 65, Isler and Isler, 1999: 249–250, and Dickinson, 2003: 822.

HOLOTYPE: **AMNH 147790**, adult male, collected on the Rio Tavara, 1600 ft, ca. 13.22S, 69.36W (Vaurie, 1972), Puno, Peru, on 18 June 1915, by Harry and Casimir Watkins.

COMMENTS: Chapman gave the AMNH number of the holotype in the original description and listed nine specimens in his type series. The eight paratypes are: Rio Tavara, AMNH 132808, male, 3 June 1915; Chaupe, AMNH 181661–181666, 181668, four males, three females. The Chaupe specimens are also the holotype and paratypes of *media* (see above).

Tanagra xanthogaster dilutior J.T. Zimmer

Tanagra xanthogaster dilutior J.T. Zimmer, 1943b: 6 (Orosa, south bank of the Rio Amazonas, northeastern Perú).

Now Euphonia xanthogaster dilutior (J.T. Zimmer). See Storer, 1970: 353, Isler and Isler, 1999: 252–254, and Dickinson, 2003: 822.

HOLOTYPE: **AMNH 232736**, adult male, collected at Orosa, 03.26S, 72.08W (Stephens and Traylor, 1983), south bank of the Rio Amazonas, Loreto, Peru, on 27 September 1926, by the Olallas.

COMMENTS: Zimmer cited the AMNH number of the holotype in the original description and listed the specimens he examined. The list includes 12 males and four females, but in the text he noted that he had 14 males. There are 13 males, plus the type, and four females that are now in AMNH and are marked *dilutior* by Zimmer. These 17 specimens are considered paratypes of dilutior: Peru, Orosa, AMNH 232737-**232739**, males, **AMNH 232762**, female; Puerto Indiana, AMNH 232740-232743, males, AMNH 232761, female; Apayacu, AMNH 232735, male; Sarayacu, AMNH 238583, 238584, 512006, males; Legarto, AMNH 239559, 239561, females. Colombia, Loretoyacu, AMNH 512003, 512004, males.

For a discussion of the Olalla locality of Orosa, see Wiley (2010: 39–40).

Euphonia xanthogastra brunneifrons Chapman

Euphonia xanthogastra brunneifrons Chapman, 1901: 226 (Inca Mine, Peru).

Now Euphonia xanthogaster brunneifrons Chapman, 1901. See Hellmayr, 1936: 27, Zimmer, 1943b: 7–8, Isler and Isler, 1999: 252–254; and Dickinson, 2003: 822.

HOLOTYPE: **AMNH 74058**, adult male, collected at Santo Domingo (= Inca Mine), 13.51S, 69.41W (Stephens and Traylor, 1983), Puno, southeastern Peru, on 25 June 1900, by H.H. Keavs.

COMMENTS: Chapman cited the AMNH number of the holotype in the original description. He had a second male, the paratype: **AMNH 72090**, adult male, Inca Mine, 6000 ft, 12 December 1899, H.H. Keays (no. 16).

Euphonia rufiventris carnegiei Dickerman

Euphonia rufiventris carnegiei Dickerman, 1988: 20 ("Rio Orinoco, orilla derecho, Boca del Rio Ocamo" [on the right-hand side of the mouth of the Rio Ocamo], Territorio Amazonas, Venezuela).

Now Euphonia rufiventris carnegiei Dickerman, 1988. See Dickinson, 2003: 833.

HOLOTYPE: **AMNH 433922**, adult male, collected on Río Orinoco, orilla derecho, boca del Río Ocamo, 02.48N, 65.14W (Paynter, 1982), Amazonas, Venezuela, on 25 March 1929, by the Olalla brothers.

COMMENTS: Dickerman gave the AMNH number of the holotype in the original description; the following specimens are paratypes: Venezuela, Mt. Duida, AMNH **271962–271965**, three males, one female; Río Orinoco, AMNH 512405, male; boca del Río Ocamo, AMNH 433923, 433924, females; boca de Sina, AMNH 121158, 121159, males; Río Cassiquiare, AMNH 433916, 433917, 433921, males; Río Caura, AMNH 512398-512401, males; Auyán-tepuí, AMNH 323986, male. Brazil, Rio Uapés, AMNH 435370, **435371, 435373, 435374**, two males, two females: Rio Negro, males, AMNH 276414, 276415, **276417–276426**, **311405–311412**, **435375**; females, AMNH 276427-276429, 276431-276433, 276435, 311415.

Chlorophonia flavirostris boehmi Conway

Chlorophonia flavirostris boehmi Conway, 1962: 61 ("Ecuador").

Now *Chlorophonia flavirostris* P.L. Sclater, 1861. See Storer, 1970: 355, Ingels, 1979: 77–80, and Dickinson, 2003: 822.

SYNTYPES: **AMNH 781690**, adult male, wing 58 mm, tail, 26 mm, **AMNH 648896**, immature male, wing 58, tail, 26.5 [Ecuador], from the Edward Boehm aviaries of Trenton, New Jersey, via the Bronx Zoo.

COMMENTS: Conway described this subspecies based on an immature male in the Bronx Zoo and an adult male that he saw and described at the Boehm aviaries. The syntypes had not previously been identified. AMNH has five specimens of C. flavirostris that originated in the Boehm avaries and no other specimens of the species for comparison. The above two specimens are considered syntypes for the following reasons: they were carefully sexed and prepared by Lee Crandall for AMNH 648896 and David Schwendeman for AMNH 781690, the bodies of both were preserved, and, as would be appropriate, they were deposited at AMNH. Conway (1962: 61) stated that the bird in immature plumage was sexed as a male when it died. The adult male is marked "Type-?, Conway" in hand unknown.

A third specimen, AMNH 763838, unsexed (but lacks any yellowish chin), wing 59, tail 27, is also in AMNH. There is no indication that this specimen came to AMNH via the Bronx Zoo; according to

the catalog, it came directly from Boehm aviaries. It was prepared by Charles Rogers, who at that time was at Princeton University and was thanked by Everitt (1973: 13) in his introduction for identifications Rogers had made. I do not consider that it has type status.

The other two specimens came to AMNH from the Cleveland Zoo but had originally come to them from Boehm: AMNH 701828, wing 62, tail 26, is unsexed but has a bit of the chestnut band apparent and is probably a male molting into adult plumage, and AMNH 768814, wing 58, tail 25, male by dissection. Ingels (1979) did not see any of these AMNH specimens and apparently was not told that both of these from Cleveland have a wash of blue over their green plumage, and AMNH 768814 has a decidedly blue patch on the upper breast, above the chestnut band. Conway emphasized that the birds he was describing had no blue, and I do not consider that these two specimens figure in the description. I wonder if other specimens of the species show this blue wash or if this is an artifact of captivity, but I have no comparative material.

Charles Everitt (1973: 226), who was curator at Boehm's aviaries, wrote about *C. flavirostris*, saying that Boehm had personally collected his specimens in Ecuador; as Ingels (1979: 79) noted, he transposed the sexes in his description. He gave no information with regard to *boehmi*.

Chlorophonia cyanea intensa J.T. Zimmer

Chlorophonia cyanea intensa J.T. Zimmer, 1943b: 3 (Primavera, western Colombia; altitude, 1700 meters).

Now *Chlorophonia cyanea intensa* J.T. Zimmer, 1943. See Storer, 1970: 356, Isler and Isler, 1999: 259–260, and Dickinson, 2003: 822.

HOLOTYPE: **AMNH 511681**, adult male, collected at Primavera, 1700 m, western Colombia, in 1904, by Raap (no. 333). From the Rothschild Collection.

COMMENTS: Zimmer cited the AMNH number of the holotype in the original description; he had one additional specimen, an immature male, collected by Raap at the same locality, the paratype: AMNH 511680. Paynter (1997) was not able to pinpoint this

type locality. A "Bogata" specimen, referred to *intensa* with a query, is not considered a paratype.

Chlorochrysa fulgentissima Chapman

Chlorochrysa fulgentissima Chapman, 1901: 225 (Inca Mine, Peru).

Now Chlorochrysa calliparaea fulgentissima Chapman, 1901. See Hellmayr, 1936: 76, Isler and Isler, 1999: 265–266, and Dickinson, 2003: 809.

HOLOTYPE: **AMNH 72089**, adult male, collected at Santo Domingo (= Inca Mine), 6000 ft, 13.51S, 69.41W (Stephens and Traylor, 1983), Puno, Peru, on 5 December 1899, by H.H. Keays.

COMMENTS: Chapman gave the AMNH number of the holotype in the original description and said that Keays had sent two males and one female, all from Inca Mine. The two paratypes are: AMNH 72087 (Keays no. 10), female, 2 December 1899, and AMNH 72088 (Keays no. 10a), male, 26 November 1899.

See Burns and Naoki (2004) for molecular studies of Neotropical *Tangara*.

Calliste mexicana media Berlepsch and Hartert

Calliste mexicana media Berlepsch and Hartert, 1902: 19 (Maipures).

Now *Tangara mexicana media* (Berlepsch and Hartert, 1902). See Hellmayr, 1936: 135, Storer, 1970: 360, Isler and Isler, 1999: 275–277, and Dickinson, 2003: 810.

HOLOTYPE: **AMNH 513316**, adult male, collected at Raudal Maipures (= Maipures), 05.10N, 67.47W (Paynter, 1982), Rio Orinoco, Amazonas, Venezuela, on 12 December 1898, by George K. and Stella M. Cherrie (no. 11451). From the Rothschild Collection.

COMMENTS: Berlepsch and Hartert gave Cherrie's field number of the holotype in the original description and listed Cherrie's numbers for 13 additional specimens from Maipures and Perico, as well as two specimens collected by André at La Prición. Of the 15 paratypes, the following seven came to AMNH with the Rothschild Collection: Perico, AMNH 513313 (Cherrie no. 11220), male, AMNH 513314 (11221), female, both 24 September 1898; Raudal Maipures, AMNH 513315 (11506), female, 17 Decem-

ber 1898; AMNH 513317 (11452), male, 12 December 1898; AMNH 513318 (11505), male, 17 December 1898; La Prición, collected by E. André, AMNH 513322, 513323, males, 13 December 1900. Cherrie specimens in AMNH that were not part of the Rothschild Collection are not paratypes. The remaining paratypes are probably in SMF in the Berlepsch Collection.

Tanagra rubricollis Wied

Tanagra rubricollis (ex Temminck ms) Wied, 1830: 456 (in der Nähe der Fazenda von Gurapina). Now Tangara cyanocephala cyanocephala (P.L.S. Müller, 1776). See Allen, 1889b: 219, Hellmayr, 1936: 88–89, Isler and Isler, 1999: 282, and Dickinson, 2003: 810.

HOLOTYPE: **AMNH 4427**, adult male, collected near Fazenda Gurapina, ca. 22.57S, 42.45W (Paynter and Traylor, 1991), Rio de Janeiro, Brazil, undated, by Maximilian, Prince of Wied. From the Maximilian Collection.

COMMENTS: Wied had a single male specimen that had been mounted; the left wing is missing.

Tanagra elegans Wied

Tanagra elegans Wied, 1820: 187 (Barra de Jucú). Now Tangara cyanoventris (Vieillot, 1819). See Allen, 1889b: 219, Hellmayr, 1936: 90, Isler and Isler, 1999: 283–285, and Dickinson, 2003: 810.

HOLOTYPE: **AMNH 4422**, adult male, collected near Rio Jucu (= Barra de Jucú), 20.24S, 40.19W (Paynter and Traylor, 1991), Espírito Santo, Brazil, undated, by Maximilian, Prince of Wied. From the Maximilian Collection.

COMMENTS: As Allen (1889b: 219) noted, the original label for this specimen is lost, but he considered AMNH 4422 to be "unquestionably the original of Wied's description." Wied (1830: 464-467) stated that he had a single male specimen, and considered *T. elegans* to be the same as *T. citrinella* Temminck, 1821. Both of these names are synonyms of *Tangara cyanoventris* (Vieillot, 1819); see Hellmayr (1936: 90). The specimen had been mounted.

Calliste johannae Dalmas

Calliste johannae Dalmas, 1900a: 36 (El Paillon, près de Buenaventura).

Now *Tangara johannae* (Dalmas, 1900). See Hellmayr, 1936: 95–96, Isler and Isler, 1999: 285–286, and Dickinson, 2003: 810.

LECTOTYPE: **AMNH 512804**, adult male, collected at Estero Pailón (= El Paillon), 03.53S, 77.04W (Paynter, 1997), Valle del Cauca, Colombia, undated, by E. André. From the Dalmas Collection via the Rothschild Collection.

COMMENTS: Dalmas did not designate a type in the original description, but said that he had two specimens, a male and a female. Hartert (1919: 150) listed the male as the type, thereby designating it the lectotype. The paralectotype did not come to AMNH with the Rothschild Collection. According to Hartert (1919: 151), "Comte de Dalmas had [when johannae was described] a fine collection of South American birds, but a few years later he gave it up, as part of it had been destroyed by moths. We were fortunate to acquire the rest, except all Humming Birds, which went into Mr. Simon's collection, for the [Rothschild Collection]." But, according to Hellmayr (1931: 163) part of Dalmas' collection was acquired by Rothschild and part by ZSM; the paralectotype, if extant, may be in ZSM.

The type locality was spelled "El Paillon" in the original description but it is spelled "El Pailon" on André's original label and given as Estero Pailón by Paynter (1997).

Tangara florida auriceps Chapman

Tangara florida auriceps Chapman, 1914a: 188 (Buenavista, alt. 1200 ft., Dept. Nariño, S.W. Colombia).

Now *Tangara florida auriceps* Chapman, 1914. See Hellmayr, 1936: 96, Wetmore et al., 1984: 411–412, Isler and Isler, 1999: 287–289, and Dickinson, 2003: 810.

HOLOTYPE: **AMNH 118247**, adult male, collected at Buenavista, 1200 ft, 01.29N, 78.05W (Paynter, 1997), Nariño, southwestern Colombia, on 30 September 1912, by W.B. Richardson.

COMMENTS: Chapman cited the AMNH number of the holotype in the original description and noted that he had four male, three female, and one immature specimens, including the type, all from the same locality and collected by Richardson. The seven

paratypes are: **AMNH 118248–118250**, males, **AMNH 118250 bis**, immature sex?, **AMNH 118251–118253**, females, 23–30 September 1912. **AMNH 118249** and 118252 were exchanged to BMNH in May 1921.

Wetmore et al. (1984: 411–412), followed by Isler and Isler (1999: 287–289), did not recognize *auriceps*; Dickinson (2003: 810), on the other hand, did recognize it. Further investigation seems warranted.

Tangara aurulenta occidentalis Chapman

Tangara aurulenta occidentalis Chapman, 1914a: 188 (San Antonio, alt. 6600 ft., Cauca, Colombia).

Now *Tangara arthus occidentalis* Chapman, 1914. See Hellmayr, 1936: 108–109, Isler and Isler, 1999: 289–290, and Dickinson, 2003: 810.

HOLOTYPE: **AMNH 108522**, adult male, collected at San Antonio, 6600 ft, 03.30N, 76.38W (Paynter, 1997), Valle del Cauca, Colombia, on 1 February 1911, by W.B. Richardson.

COMMENTS: Chapman cited the AMNH number of the holotype in the original description and said that he had 21 specimens of the new form. The 20 paratypes are: Las Lomitas, AMNH 108519-108521, 108523, two males, two females; San Antonio, AMNH 108524-108532, four males, four females, one juvenile female; Cocal, AMNH 110151, female, AMNH 110152, male; Gallera, AMNH 110150, 110153-110156, five males. Of these, AMNH 108520, 108526, 110150, and 110155 were exchanged to USNM, AMNH 108529 was exchanged to L.A. Fuertes, and AMNH 110154 was exchanged to MZUSP, in March 1917; and AMNH 108521, 108524, 108530, 108531, and 110153 were not found in the collection and may have been exchanged without the catalog having been marked.

Tangara aurulenta goodsoni Hartert

Tangara aurulenta goodsoni Hartert, 1913: 78 (Gualea).

Now *Tangara arthus goodsoni* Hartert, 1913. See Hellmayr, 1936: 109–110, Isler and Isler, 1999: 289–290, and Dickinson, 2003: 810.

LECTOTYPE: **AMNH 512903**, adult male, collected at Gualea, 00.07N, 78.50W (Payn-

ter, 1993), Pichincha, Ecuador, in August 1898, by Walter Goodfellow and Claud Hamilton. From the Rothschild Collection.

COMMENTS: In the original description, the type was said to be a male from Gualea collected in August 1898 from the Walter Goodfellow collection and the type series to comprise 15 specimens from western Ecuador. Twelve of the 15 specimens came to AMNH with the Rothschild Collection, three of which have the data ascribed to the type. Hartert (1919: 150) listed the type of goodsoni as being in the Rothschild Collection but did not distinguish among the three bearing the same data. AMNH 512903 bears a Rothschild type label, was Hartert's intended type, and was cataloged as the type at AMNH. I hereby designate AMNH 512903 as the lectotype of *Tangara aurulenta goodsoni*, thus removing any ambiguity. The 11 paralectotypes in AMNH are: Canzacoto, AMNH 512898, female, September 1898; Gualea, AMNH 512899-512902, two males, two females, August 1898; near Intag, AMNH **512904–512909**, six males, July 1898.

Hartert, in the original description, mentioned two "Bogota" specimens that seemingly agreed with *goodsoni*, but because he expressed doubt, I have not considered those specimens as paralectotypes.

Goodfellow (1901, 1902) wrote an account of his trip with Hamilton to Colombia and Ecuador.

Tangara parzudakii urubambae J.T. Zimmer

Tangara parzudakii urubambae J.T. Zimmer, 1943c: 10 (Idma, above Santa Ana, Urubamba Valley, Peru; altitude 5000 feet).

Now *Tangara parzudakii urubambae* J.T. Zimmer, 1943. See Storer, 1970: 369, Isler and Isler, 1999: 293–294, and Dickinson, 2003: 811.

HOLOTYPE: **AMNH 145750**, adult male, collected at Idma, 5000 ft, ca. 12.53S, 72.49W (Stephens and Traylor, 1983), above Santa Ana, Urubamba Valley, Cuzco, Peru, on 12 July 1916, by Frank M. Chapman and George K. Cherrie.

COMMENTS: Zimmer gave the AMNH number of the holotype in the original description and noted that he had five males in addition to the holotype, one female, and one sex? of his new subspecies, all from Idma. The paratypes

are: AMNH 145746–145749, 145751, 145752, 145754, all collected in July 1916 by Chapman and Cherrie. AMNH 145753 and 145755 were part of this same series but had been exchanged to USNM in July 1921 and were not part of Zimmer's type series.

Tangara xanthogastra phelpsi J.T. Zimmer

Tangara xanthogastra phelpsi J.T. Zimmer, 1943c: 5 (Mt. Auyan-tepui, Venezuela; altitude 1100 meters).

Now *Tangara xanthogastra phelpsi* J.T. Zimmer, 1943. See Storer, 1970: 369, Isler and Isler, 1999: 294–295, and Dickinson, 2003: 811.

HOLOTYPE: **AMNH 325062**, adult male, collected on Auyán-tepuí, 1100 m, 05.55N, 62.32W (Paynter, 1982), Bolívar, Venezuela, on 6 February 1938, by personel of the Phelps Venezuelan Expedition of the American Museum of Natural History (no. 1418).

COMMENTS: Zimmer cited the AMNH number of the holotype in the original description. His paratypes comprised three additional males, one female, and one sex? from the type locality, one young bird from Rio Caura, and specimens listed by Chubb (1921: 507) from Mt. Roraima and Mt. Kukenam. These last specimens are not in AMNH. The paratypes in AMNH are: Auyán-tepuí, **AMNH** 323977, 323978, 325059, 325063, 325065, three males, one female, one sex?; Nicaré, Rio Caura, AMNH **512867**, female. Three additional specimens had been collected on Auyán-tepuí, but had been sent to the Phelps Collection prior to Zimmer's description of *phelpsi*.

See Tate (1938) for notes on this expedition.

Tangara punctata zamorae Chapman

Tangara punctata zamorae Chapman, 1925a: 9 (Zamora, eastern Ecuador).

Now *Tangara punctata zamorae* Chapman, 1925. See Hellmayr, 1936: 97–98, Isler and Isler, 1999: 295–297, and Dickinson, 2003: 811.

HOLOTYPE: **AMNH 130432**, adult male, collected at Zamora, 2000 ft, 04.04S, 78.58W (Paynter, 1993), Zamora-Cinchipe, Ecuador, on 3 November 1913, by William B. Richardson.

COMMENTS: Chapman gave the AMNH number of the holotype in the original description and had, in addition to the holotype, five males and one female from Zamora and two males from below San José de Sumaco. The paratypes in AMNH are: Zamora, AMNH 130429, 130431, males, 19 and 25 October 1913, AMNH 130430, unsexed immature, 18 October 1913, all at 2000 ft, by Richardson; **AMNH 168363**, male, 3250 ft, by G.K. Cherrie; Guayaba, Rio Zamora, 4400 ft, **AMNH 168364**, female, **AMNH 168365**, male, 19 November 1920, by G.K. Cherrie; below San José de Sumaco, **AMNH 179759**, male, 15 March 1923, **AMNH 183802**, male, 9 April 1921, both by the Olallas. I did not find the fifth male paratype in the collection. The immature specimen was available to Chapman when he described zamorae although it was not listed.

Tangara punctata perenensis Chapman

Tangara punctata perenensis Chapman, 1925a: 9 (Utcuyacu, 4800 ft., Prov. Junin, eastern Peru). Now Tangara punctata perenensis Chapman, 1925. See Hellmayr, 1936: 98, Isler and Isler, 1999: 295–297, and Dickinson, 2003: 811.

HOLOTYPE: **AMNH 169444**, adult male, collected at Utcuyacu, 4800 ft, ca. 11.12S, 75.28W (Vaurie, 1972), Junín, Peru, on 24 November 1919, by Harry Watkins.

COMMENTS: Chapman cited the AMNH number of the holotype in the original description and listed five males and one female from Utcuyacu, and one female from Tulumayo examined in addition to the holotype. The paratypes are: Utcuyacu, AMNH 169443, 169445–169449, five males and one female, between 28 November and 5 December 1919; Tulumayo, AMNH 170142, female, 19 May 1921, all collected by Harry Watkins.

Tangara punctata annectens J.T. Zimmer

Tangara punctata annectens J.T. Zimmer, 1943c: 3 (Río Inambari, southeastern Perú; altitude 2200 feet).

Now *Tangara punctata annectens* J.T. Zimmer, 1943. See Storer, 1970: 370, Isler and Isler, 1999: 295–297, and Dickinson, 2003: 811.

HOLOTYPE: **AMNH 132820**, adult male, collected on the Rio Inambari, 2200 ft, 12.41S, 69.44W (Stephens and Traylor, 1983), Madre de Dios, Peru, on 24 April 1915, by Harry and Casimir Watkins.

COMMENTS: Zimmer gave the AMNH number of the holotype in the original description and listed the specimens he examined. Paratypes in AMNH are: Rio Inambari, AMNH 132819, 132821-132823, two males, one female, one immature female, collected in March and April 1915, by H. and C. Watkins; Rio Tavara, AMNH 132824, female (not male), 4 June 1915, by H. and C. Watkins; Santo Domingo, AMNH 150064, male, 2 August 1915, and AMNH 150066, female, 12 August 1915, by H. Watkins. I did not find a second male specimen from Santo Domingo. The three males and one female from La Oroya, Inambari, in ANSP, are also paratypes.

Tangara guttata tolimae Chapman

Tangara guttata tolimae Chapman, 1914a: 187 (about 20 miles west of Honda, Tolima, Colombia).

Now *Tangara guttata tolimae* Chapman, 1914. See Hellmayr, 1936: 102, Isler and Isler, 1999: 297–299, and Dickinson, 2003: 811.

HOLOTYPE: **AMNH 95087**, male, collected about 20 mi west of Honda, 05.12N, 74.45W (Paynter, 1997), Tolima, Colombia, on 20 February 1907, by Elizabeth L. Kerr.

COMMENTS: Chapman cited the AMNH number of the holotype in the original description and noted that he had two specimens. The paratype is: AMNH 95088, an unsexed and undated specimen, collected 20 mi west of Honda, Tolima, Colombia, by E.L. Kerr. Chapman (1917: 594) later mentioned a third specimen, but this was apparently a Bogota "make" specimen that came with Kerr's collection, is *T. g. bogotensis*, and is not part of the type series.

Tangara gyrola parva J.T. Zimmer

Tangara gyrola parva J.T. Zimmer, 1943d: 5 (Mt. Curycuryari, Rio Negro, Brazil; altitude 500 feet).

Now *Tangara gyrola parva* Zimmer, 1943. See Storer, 1970: 373, Isler and Isler, 1999: 301–303, and Dickinson, 2003: 811.

HOLOTYPE: **AMNH 311447**, adult male, collected on Serra Curicuriari (= Mt. Curycuryari), 500 ft, 00.20S, 66.50W (Paynter and Traylor, 1991), Rio Negro, Amazonas, Bra-

zil, on 26 August 1929, by the Olalla brothers.

COMMENTS: In the original description, Zimmer cited the AMNH number of the holotype and listed the specimens of parva he examined. Paratypes are: Peru, Orosa: AMNH 232835, male; Apayucu, AMNH **232829–232834**, three males, three females; Brazil. São Gabriel. AMNH 276457-276460. three males, one female; Serra Curicuriari, **AMNH 311446, 311448, 311449**, one male, females; Yucabi, AMNH 276456, 311450-311467, nine males, ten females; Tahaupunto, AMNH 435396, 435397, two males; Rio Uaupes, Iauarete (as on label), AMNH 435399, male; Venezuela, Río Huaynia, junction with the Cassiquiare, AMNH 433932, male. The four females from the mouth of the Río Curaray were considered indeterminable by Zimmer (1943d: 6) and are not included in the type series.

Calliste emiliae Dalmas

Calliste emiliae Dalmas, 1900a: 35 (San José et El Paillon, dans les environs de Buenaventura). Now Tangara lavinia lavinia (Cassin, 1858). See Hartert, 1919: 151, Hellmayr, 1936: 150–151, Isler and Isler, 1999: 303–304, and Dickinson, 2003: 811.

LECTOTYPE: **AMNH 513131**, adult male, collected at San José, 600 ft, 03.51N, 76.52W (Paynter, 1997), Valle del Cauca, Colombia, on 27 March 1899, by E. André. From the Dalmas Collection via the Rothschild Collection.

COMMENTS: Dalmas did not designate a type in the original description but said that he had 11 specimens collected in March and May 1899; Hartert (1919: 151) listed as the type the single adult male specimen collected on 27 "May" (= Mar., as on label), thereby designating it the lectotype. André's label on this specimen is annotated in what is probably Dalmas' hand, "Calliste Emiliae n. sp. type!" Six paralectotypes came to AMNH with the Rothschild Collection: AMNH 513128, adult male, Buenaventura, 21 March; AMNH 513129, immature male, Buenaventura, 20 March; AMNH 513130, immature male, San José, 27 March; AMNH 513132, immature male, San José, 28 March;

AMNH 513133, adult male, El Paillon, 9 May; AMNH 513134, immature male, El Paillon, 9 May, all collected in 1899 in Colombia by E. André.

See above, under *Calliste johannae*, for information concerning the fate of Dalmas' collection.

Calliste margaritae Allen

Calliste margaritae Allen, 1891: 351 (Chapada, Matto Grosso, Brazil).

Now *Tangara cayana margaritae* (Allen, 1891). See Hellmayr, 1936: 163–164, Isler and Isler, 1999: 304–306, and Dickinson, 2003: 811.

LECTOTYPE: **AMNH 31648**, adult male, collected at Chapada, Mato Grosso, Brazil, on 13 May 1885, by Mrs. H.H. Smith.

COMMENTS: In the original description, Allen did not designate a type, saying only that he had 137 specimens in his type series. In fact, there were 138 specimens of *margaritae* cataloged at AMNH. Type labels had been tied on AMNH 31648, adult male, and AMNH 31661, female. Berlepsch (1912: 1041), Naumburg (1930: 371), and Hellmayr (1936: 164) all state that the type is in AMNH, without giving catalog numbers. Thus, it appears that these two specimens have been considered the types, without actually having been designated as such.

The history of these 138 specimens is perhaps impossible to untangle at this late date. A great many of them are marked in the AMNH catalog as having been exchanged, but a number of those were apparently returned, reasons not given, and then some of the returned specimens were exchanged again. Specimens that were exchanged to Rothschild and to BIM came back to AMNH when those collections became part of the AMNH collection. Each of those specimens was renumbered and now bears two AMNH numbers.

Because Allen's types were deposited in AMNH unless otherwise stated; because Berlepsch, Naumburg, and Hellmayr noted that the types of *C. margaritae* were in AMNH; because the two specimens bearing AMNH type labels have been considered the types without having been so designated; and because the specimens have been so widely scattered, it is important to remove the

uncertainty with respect the type by designating a lectotype. Therefore, I select one of the two specimens that have been considered the types and designate it the lectotype of *Calliste margaritae*: AMNH 31648, adult male, collected at Chapada, Mato Grosso, Brazil, on 13 May 1885, by Mrs. H.H. Smith. The remaining 137 specimens become paralectotypes: AMNH 31596–31647, 31649–31697, and AMNH 58045–58080, only 68 of which are now in AMNH.

The female paralectotype, AMNH 31661 bearing an AMNH type label, has been left in the type collection with an added label referring to its paralectotype status and this lectotypification.

Allen (1891: 352) stated that this form was named in honor of Mrs. Smith, but her name was Amelia Woolworth Smith, usually called Daisy. I did not see the connection until I was reminded by Hans Winkler that the marguerite is a daisy!

Calliste versicolor Lawrence

Calliste versicolor Lawrence, 1878b: 152 (St. Vincent, West Indies).

Now *Tangara cucullata versicolor* (Lawrence, 1878). See Hellmayr, 1936: 154, Deignan, 1961: 378, Isler and Isler, 1999: 306, and Dickinson, 2003: 811.

SYNTYPES: **AMNH 40673** (Ober no. 468, USNM no. 74077), female, and **AMNH 40681** (465, 74080), male, collected on St. Vincent Island, West Indies, in February 1878, by Frederick A. Ober. From the George N. Lawrence Collection.

COMMENTS: When Lawrence described versicolor, he published descriptions of male and female and stated that Ober had collected five specimens and that the types were in the "National Museum, Washington," without designating a particular specimen as type. Deignan (1961: 578) noted that there were five syntypes, two of which were in USNM, but that the other three had "vanished from the collection without a trace." Two of the vanished three came to AMNH with the Lawrence Collection, but have not been previously recognized as types; the USNM numbers are written on Lawrence's label in the same ink as the label but without indicating to what the number refers. The still missing syntype is a male with USNM no. 74078. Because Lawrence and Cassin at ANSP frequently exchanged specimens, I thought the missing syntype might be in that institution, but N. Rice (personal commun.) did not find it after checking the collection.

Tangara ruficervix amabilis J.T. Zimmer

Tangara ruficervix amabilis J.T. Zimmer, 1943d: 1 (Uchco, about 50 miles east of Chachapoyas, northern Perú; altitude 5000 feet).

Now *Tangara ruficervix amabilis* J.T. Zimmer, 1943. See Storer, 1970: 378, Isler and Isler, 1999: 310–311, and Dickinson, 2003: 812.

HOLOTYPE: **AMNH 235263**, adult male, collected at Uscho (= Uchco), 5000 ft, ca. 06.11S, 77.13W (Vaurie, 1972), about 50 mi east of Chachapoyas, northern Peru, on 28 October 1925, by Harry Watkins (no. 9798).

COMMENTS: Zimmer cited the AMNH number of the holotype in the original description and listed the specimens he examined. The paratypes are: Uscho, AMNH 235264, male; Chaupe, AMNH 181692–181697, five males, one female. I did not find AMNH 181694 in the collection. Zimmer (1943d: 2) also included in *amabilis* an unsexed specimen from Nuevo Loreto, Peru, mentioned by Hellmayr (1936: 132, footnote 2); this specimen is also a paratype. Stephens and Traylor (1983) noted that it is uncertain whether Uscho is in San Martin or Amazonas province.

Tangara ruficervix inca Parkes

Tangara ruficervix inca Parkes, 1969: 19 (Utcuyacu, Dept. Junin, Peru (alt. 4,800 feet)).

Now Tangara ruficervix inca Parkes, 1969. See Storer, 1970: 378, Isler and Isler, 1999: 310–311, and Dickinson, 2003: 812.

HOLOTYPE: **AMNH 169467**, adult male, collected at Utcuyacu, 4800 ft, ca. 11.12S, 75.28W (Vaurie, 1972), Junín, Peru, on 12 December 1919, by Harry Watkins.

COMMENTS: Parkes cited the AMNH number of the holotype in the original description. Parkes found that *T. r. fulvicer-vix* described from northern Bolivia and applied to both northern Bolivian and southern Peruvian specimens did not apply to those from southern Peru, leaving them

without a name. He introduced the name inca for these birds and referred to Zimmer (1943d: 1) for a list of the localities in southern Peru from which fulvicervix (= inca) had been recorded: Paltaypampa, Ropaybamba, Garita del Sol, San Miguel Bridge, Ocobamba [Occobamba], Santa Ana, and Marcapata. All of these are in the provinces of Junin and Cuzco. Zimmer (1943d: 3) examined specimens from the following localities in Junin and Cuzco and the specimens are in AMNH. I consider them paratypes of inca: Chanchamayo, AMNH **513547–513549**, two males, one female; Utcuyacu, AMNH 169466, male; Idma, AMNH 145714-145728, 145731, 145734-145738, 513550, 513551, 17 males, six females; Cosnipata, AMNH 513455, male. All of these specimens were in AMNH when Zimmer examined them. AMNH 145729, 145730, 145732, and 145733 were exchanged to USNM in 1921, were not available to Zimmer in 1943, and would not have been part of Parkes' type series of inca.

Tangara labradorides chaupensis Chapman

Tangara labradorides chaupensis Chapman, 1925a: 10 (Chaupe, 6100 ft., northeast of Huancabamba, northern Peru).

Now *Tangara labradorides chaupensis* Chapman, 1925. See Hellmayr, 1936: 121, and Dickinson, 2003: 812.

HOLOTYPE: **AMNH 181698**, adult male, collected at Chaupe, 6100 ft, ca. 05.10S, 79.10W (Vaurie, 1972), northeast of Huancabamba, Cajamarca, Peru, on 27 January 1923, by Harry Watkins (no. 6815).

COMMENTS: Chapman cited the AMNH number of the holotype in the original description and listed three additional specimens. The paratypes are: **AMNH 181699–181701**, two males, one female, Chaupe, January–April 1923, by Watkins.

Tangara cyaneicollis [sic] gularis Chapman

Tangara cyaneicollis [sic] gularis Chapman, 1919b: 332 (Candamo, Tropical Zone, S.E. Peru).

Now *Tangara cyanicollis cyanicollis* (d'Orbigny and Lafresnaye, 1837). See Hellmayr, 1936: 121–122, Zimmer, 1943c: 11, Isler and Isler, 1999: 313–314, and Dickinson, 2003: 812.

HOLOTYPE: **AMNH 146510**, adult male, collected at Candamo, tropical zone, 13.31S, 69.41W (Stephens and Traylor, 1983), Puno, Peru, on 10 December 1916, by Harry Watkins (no. 417).

COMMENTS: Chapman gave the AMNH number of the holotype in the original description and listed the specimens he examined. The paratypes in AMNH are: Santo Domingo, AMNH 146508, female; La Pampa, AMNH 146509, male; Candamo, AMNH 146511, male; Astillero, AMNH 146512, female. La Pampa seems to be an uncertain locality, and the male from there was probably included with Candamo specimens by Chapman (1919b: 332), from which place he listed three males (including the type). Zimmer (1943c: 12) listed two males (including the type) from Candamo and a male from La Pampa. A male specimen from Rio San Miguel was also listed by Chapman as part of his type series. It was probably collected by Heller, who collected other specimens from Rio San Miguel and it may be among the specimens from Yale University-National Geographic Society Expeditions that went to USNM.

Chapman (1921b) reported on the birds collected on the Yale University–National Geographic Society Expeditions to the Urubamaba Valley, Peru, which Chapman and Watkins joined for a short time. According to correspondence in the Archives, Department of Ornithology, AMNH, Chapman had an agreement with Yale University to identify all of the bird specimens collected, and in return AMNH was to receive a subset of the specimens, most of which were to be deposited at USNM. On 30 July 1921, 150 specimens were cataloged at AMNH and marked as an exchange to AMNH from USNM, but they had never been cataloged at USNM.

Tangara cyanicollis melanogaster Cherrie and Reichenberger

Tangara cyanicollis melanogaster Cherrie and Reichenberger, 1923: 1 (Utiarity near Salto Bello, Papagaio River, alt. 1500–2500 ft., Matto Grosso, Brazil).

Now *Tangara cyanicollis melanogaster* Cherrie and Reichenberger, 1923. See Hellmayr, 1936: 123–124, Isler and Isler, 1999: 313–314; and Dickinson, 2003: 812.

HOLOTYPE: **AMNH 128220**, adult male, collected at Utiarity, 1500–2500 ft, 13.02S, 58.17W (Paynter and Traylor, 1991), near Salto Bello, Papagaio River, Mato Grosso, Brazil, on 30 January 1914, by George K. Cherrie (no. 17815) on the Roosevelt–Rondon Expedition.

COMMENTS: The AMNH number of the holotype was cited in the original description and the specimens examined listed. The following paratypes, all collected in January and February 1914, are in AMNH: Tapirapoan, AMNH 127201 (Cherrie no. 17758), female, AMNH 128219 (17773), male; Utiarity, AMNH 128221–128223 (17814, 17799, 17840), three females; Doze Octobre, AMNH 128224 (17900), female. The five paratypes from Engenho do Gama are probably in ZSM as all of the AMNH paratypes are marked as having been compared with specimens in ZSM in 1922, undoubtedly by E. Reichenberger [later, Naumburg].

Tangara phillipsi Graves and Weske

Tangara phillipsi Graves and Weske, 1987: 1 (Cerros del Sira 9°26'S, 74°45'W, 1300 m, Departamento de Huánuco, Peru).

Now *Tangara phillipsi* Graves and Weske, 1987. See Dickinson, 2003: 812.

HOLOTYPE: **AMNH 820969**, adult male, collected in the Cerros del Sira, 09.26S, 74.45W, 1300 m, Huánuco, Peru, on 26 July 1969, by John S. Weske (no. 2091).

COMMENTS: The AMNH number of the holotype was cited in the original description. There is one paratype in AMNH: AMNH 820998, female, collected at the same locality and on the same date as the holotype. There are two additional female paratypes in ZMH, collected by Maria Koepcke at the same time.

Tangrella velia signata Hellmayr

Tangrella velia signata Hellmayr, 1905c: 90 (Pará, N.E. Brazil).

Now *Tangara velia signata* (Hellmayr, 1905). See Hellmayr, 1936: 72, Isler and Isler, 1999: 325–327, and Dickinson, 2003: 813.

HOLOTYPE: **AMNH 512527**, adult male, collected at Belém (= Pará), 01.27S, 48.29W (Paynter and Traylor, 1991), northeastern Brazil, undated, by J.B. Steere. From the Rothschild Collection.

COMMENTS: In the original description, Hellmayr said that the type was an adult male from Pará in the Rothschild Collection and mentioned a female collected by Steere. The paratype is **AMNH 512528**, female. According to Sclater and Salvin (1878: 135), Steere was in the vicinity of Belém between November 1870 and June 1871.

[Tanagra cyanomelas Wied]

Apparently, the type material of this form, described by Wied (1830: 453) from the Rio Ilhéos, Brazil, was not received by AMNH with the Maximilian Collection. It was not found by Allen (1889b: 218) nor did I find any such material. It is now *Tangara velia cyanomelas* (Wied, 1830), see Hellmayr (1936: 72–73), Storer (1970: 386), and Dickinson (2003: 813). Berlepsch (1912: 1023) incorrectly stated that the type of this form was in AMNH.

Dacnis venusta Lawrence

Dacnis venusta Lawrence, 1862: 464 (New Granada).
Now Dacnis venusta venusta Lawrence, 1862. See Hellmayr, 1935: 281, Wetmore et al., 1984: 524–525, Isler and Isler, 1999: 332–334, and Dickinson, 2003: 813.

SYNTYPES: **AMNH 40376**, adult male, 1862; **AMNH 40377**, adult male, 1862; **AMNH 40378**, female, undated; **AMNH 40379**, female, 1862, all collected on the line of the Panama Railroad, Isthmus of Panama. From the George N. Lawrence Collection.

COMMENTS: In the original description, Lawrence did not designate a type or say how many specimens he had, but referred back to Lawrence (1861b: 319) where he had listed a female *Dacnis* as his no. 166. In this part of his catalog the collection was made by both James McLeannan and John R. Galbraith and this specimen is the undated AMNH 40378, above. Lawrence (1862: 461) noted that McLeannan had remained in the Isthmus and had sent further specimens. The three additional syntypes of venusta were collected by McLeannan alone in 1862. All four specimens are marked "Type" by Lawrence. AMNH 40376 has the number 372 on Lawrence's label; AMNH 40377 is numbered 303 and also bears a small tag with the no. 299 and M; AMNH 40378 has no. 416 and no small tag; AMNH 40379 has no. 303 and a

small tag with the no. 299 and F. The small tags were apparently McLeannan's field tags, but I did not discover the significance of the numbers.

The Lion Hill Station of the railroad across the Isthmus of Panama was the home station of McLeannan and is usually considered the type locality of his specimens.

Dacnis ultramarina Lawrence

Dacnis ultramarina Lawrence, 1864b: 106 (New Granada, Isthmus of Panama).

Now *Dacnis cayana ultramarina* Lawrence, 1864. See Hellmayr, 1935: 273–274, Isler and Isler, 1999: 334–336, Wetmore et al., 1984: 520–521, and Dickinson, 2003: 813.

SYNTYPES: **AMNH 40374**, adult male, **AMNH 40375**, female [?juv. male], collected in the Isthmus of Panama, undated, by James McLeannan and John Galbraith (nos. 11M and 11F, respectively). From the George N. Lawrence Collection (nos. 373 and 417, respectively).

COMMENTS: In the original description, Lawrence described male and female without giving the number of specimens he examined. The above two specimens came to AMNH with the Lawrence Collection and are marked "Type" by Lawrence. As in the species above, the small tags with sex indicated are apparently McLeannan's and Galbraith's field numbers, and I do not know the significance of the numbers written on Lawrence's labels. The type locality is usually considered to be the Lion Hill Station of the railroad that crossed the Isthmus of Panama, the home station of McLeannan.

Dacnis berlepschi Hartert

Dacnis berlepschi Hartert, 1900: 37 (Lita, Northwestern Ecuador).

Now *Dacnis berlepschi* Hartert, 1900. See Rothschild and Hartert, 1900: 44, Hellmayr, 1935: 282–283, Isler and Isler, 1999: 337, and Dickinson, 2003: 813.

HOLOTYPE: **AMNH 508739**, "male" [female], collected at Lita, 3000 ft, 00.52N, 78.28W (Paynter, 1993), Imbabura, Ecuador, on 13 October 1899, by G. Flemming (no. 339). From the Rothschild Collection.

COMMENTS: In the original description, Hartert had the single specimen, sexed by the collector as a male, but noted by Hartert as perhaps not fully adult. Subsequently, additional material was received, including an adult male (Rothschild and Hartert: 1900: 44–45), showing that the originally described specimen was missexed. Only the single specimen was present when the original description was published. Later, Hartert (1901: 371, pl. V) gave a description of the adult male, noted that the immature male was like the female but larger, and provided a plate picturing both male and female.

Cyanerpes caerulea cherriei Berlepsch and Hartert

Cyanerpes caerulea cherriei Berlepsch and Hartert, 1902: 16 (Munduapo).

Now *Cyanerpes caeruleus microrhynchus* (Berlepsch). See Hellmayr, 1935: 261–262, Storer, 1970: 395, and Dickinson, 2003: 814.

HOLOTYPE: **AMNH 522770**, adult male, collected at Monduapo (= Munduapo), 04.54N, 67.48W (Paynter, 1982), Río Orinoco, Amazonas, Venezuela, on 23 February 1899, by Stella M. and George K. Cherrie (no. 12087). From the Rothschild Collection.

COMMENTS: Berlepsch and Hartert cited Cherrie's field number in the original description. They had, in addition to the holotype, two males and a female from Monduapo and a female from Nericagua. Three paratypes came to AMNH with the Rothschild Collection: AMNH 522771, male, Monduapo, 20 February 1899, Cherrie no. 12017; AMNH 522772, female, Monduapo, 28 February 1899, Cherrie no. 12136; AMNH 522773, female, Nericauga, 8 April 1899, Cherrie no. 12480. The collection was divided between the Rothschild and Berlepsch collections (Berlepsch and Hartert, 1902: 1) and the remaining paratype may be in the Berlepsch Collection in SMF.

Cyanerpes cyaneus dispar J.T. Zimmer

Cyanerpes cyaneus dispar J.T. Zimmer, 1942: 10 (Buena Vista, Río Cassiquiare, southwestern Venezuela).

Now *Cyanerpes cyaneus dispar* J.T. Zimmer, 1942. See Storer, 1970: 397, Isler and Isler, 1999: 344–347, and Dickinson, 2003: 814.

HOLOTYPE: **AMNH 433789**, adult male, collected at Buena Vista, 01.58N, 66.42W (Paynter, 1982), left bank of the Brazo

Casiquiare (= Río Cassiquiare), Amazonas, Venezuela, on 30 April 1929, by the Olalla brothers.

COMMENTS: Zimmer cited the AMNH number of the holotype in the original description and listed the specimens he examined. The following are paratypes: Venezuela, Río Negro, San Gabriel, AMNH 276408, 276409, female, [male]; Igarapé Cacao Pereira, AMNH 312697, 312698, male, female; Tatú, AMNH 435307, male immature. Venezuela, Mt. Duida, Savana Grande, AMNH 275570, female; Río Huaynia, AMNH 433785, 433785bis, 433786-433788, three males, two females; Río Casiquiare, Buena Vista, AMNH 433790–433800, six males, four females, one sex?; Solano, **AMNH 433801–433828**, 18 males, eight females, two sex?. Colombia, "Bogota," AMNH 508798, male. Ecuador, Napo, AMNH 40318, male. Peru, Río Mazán, AMNH 407261-407263, one male, two females; Rioja, AMNH 508803, male.

Cyanerpes cyaneus violaceus J.T. Zimmer

Cyanerpes cyaneus violaceus J.T. Zimmer, 1942: 8 (Chapada, Matto Grosso, Brazil).

Now *Cyanerpes cyaneus violaceus* J.T. Zimmer, 1942. See Storer, 1970: 397, Isler and Isler, 1999: 344–347, and Dickinson, 2003: 814.

HOLOTYPE: AMNH 31363, adult male, collected at Chapada dos Guimarães (= Chapada), 15.26S, 55.45W (Paynter and Traylor, 1991), Mato Grosso, Brazil, on 28 August 1885, by Herbert H. Smith.

COMMENTS: Zimmer cited the AMNH number of the holotype in the original description and listed the specimens he examined: Chapada, 21 males in addition to the type, eight females; Abrilongo, two males; Tapirapoan, two males, one female; Utiarity, one female. Many of the original large series of these H.H. Smith specimens were exchanged with other collections long before Zimmer named violaceus, and apparently often the catalog was not so marked. The number of Smith specimens of violaceus now in AMNH corresponds to the number of specimens examined by Zimmer and I consider them paratypes of the name. Para-**AMNH** types: Chapada, 31348-31350, 31353, 31354, 31356, 31357, 31359, 3136431367, 31369, 31371–31374, 31376, 31379, 31382, 31384–31389, 57995, 57998, 57999, 21 males, eight females; Abrilongo, AMNH 31351, 31352, two males; Tapirapoan, AMNH 127196, 127197, 127199, two males, one female; Utiarity, AMNH 128202, female. AMNH 31365 had been exchanged to Clarence A. Smith and returned to AMNH with that collection in June 1896 and renumbered at that time as AMNH 67165.

Cyanerpes cyaneus pacificus Chapman

Cyanerpes cyaneus pacificus Chapman, 1915b: 655 (Barbacoas, Dept. Narino, Colombia). Now Cyanerpes cyaneus pacificus Chapman, 1915. See Hellmayr, 1935: 258, Isler and Isler, 1999: 344–347, and Dickinson, 2003: 814.

HOLOTYPE: **AMNH 118227**, adult male, collected at Barbacoas, 01.41N, 78.09W (Paynter, 1997), Nariño, Colombia, on 1 September 1912, by William B. Richardson.

COMMENTS: Chapman gave the AMNH number of the holotype in the original description and examined 15 specimens in addition to the type. Paratypes: Colombia, 118225, Barbacoas, **AMNH** 118226, 118228–118231, three males, three females; Tumaco, AMNH 118232, male; Los Cisneros, AMNH 108489, 108492, male, female; Buenaventura, AMNH 108490, 108491, male, female; San Jose, AMNH 108493, Ecuador, Esmeraldas. **AMNH** male. 118973, 118974, two males; Manavi, AMNH 120196, male. AMNH 108491 was exchanged to O. Bangs on 20 September 1918 and is probably in MCZ. I did not find a second male from San Jose and it is possible that it was also exchanged to Bangs; there are two dates entered into the AMNH catalog for the one specimen entered at 108493. The one now in AMNH was collected 10 December 1911; the other date is in March. Three additional specimens, AMNH 155102, 155103, 155109, were collected early enough but were not cataloged until 1920 and are not considered part of the type series.

Diglossa plumbea veraguensis Griscom

Diglossa plumbea veraguensis Griscom, 1927: 16 (Chitrá (5000 ft.), Veraguas, Pacific slope of western Panama).

Now *Diglossa plumbea veraguensis* Griscom, 1927. See Hellmayr, 1935: 221–222, Vuilleumier, 1969, Wetmore et al., 1984: 505–507, Isler and Isler, 1999: 353–354, and Dickinson, 2003: 816.

HOLOTYPE: **AMNH 257137**, adult female, collected at Chitra, 5000 ft, western Panama, on 30 January 1926, by Rex R. Benson (no. 2086).

COMMENTS: Griscom gave the AMNH number of the holotype in the original description but mistakenly said that it was an adult male. It is a female with ovary not enlarged. The type series comprised one female, two adult male, and two immature male specimens, all collected at Chitra in 1926 by Rex Benson. The following are paratypes: AMNH 246486, adult male, **AMNH 246487** immature male, 30 January; AMNH 246488, [immature] male, 25 February; AMNH 246489, adult male, 26 February. I did not find AMNH 246488 in the collection and it was possibly exchanged without the catalog having been marked. It should be the second immature male.

Diglossa gloriosissima Chapman

Diglossa gloriosissima Chapman, 1912: 165 (Andes, west of Popayan, alt. 10,340 ft.).

Now Diglossa gloriosissima gloriosissima Chapman, 1912. See Hellmayr, 1935: 236, Vuilleumier, 1969, Graves, 1990: 962–965, Isler and Isler, 1999: 356–358, and Dickinson, 2003: 816.

HOLOTYPE: **AMNH 110078**, adult male, collected in the coast range, west of Popayán, 10,340 ft, 02.27N, 76.36W (Paynter, 1997), Cauca, Colombia, on 18 July 1911, by William B. Richardson.

COMMENTS: Chapman cited the AMNH number of the holotype in the original description. He had ten specimens, five adult males, one adult female, and four young, all from the type locality and collected by Richardson and Leo Miller in July 1911. I have been able to find only eight specimens cataloged at AMNH from the type series, several of which were later exchanged with other collections. The seven paratypes are: AMNH 110079, male; AMNH 110080, female; AMNH 110081, male; AMNH 110082, male; AMNH 110083, female juvenile; AMNH 110117, juvenile; AMNH 110118, male juvenile. Of these, AMNH

110079 and 110118 were exchanged with O. Bangs whose collection is now in MCZ; AMNH 110081 was exchanged with USNM; and AMNH 110082 was exchanged with BMNH.

Diglossa pectoralis unicincta Hellmayr

Diglossa pectoralis unicincta Hellmayr, 1905b: 504 (Levanto, Northern Peru, 9000 ft. elev.).

Now *Diglossa mystacalis unicincta* Hellmayr, 1905. See Hellmayr, 1935: 227, Vuilleumier, 1969, Isler and Isler, 1999: 357–358, and Dickinson, 2003: 816.

HOLOTYPE: **AMNH 508217**, adult male, collected at Levanto, 9000 ft, 06.16S, 77.49W (Stephens and Traylor, 1983), Amazonas, Peru, on 13 November 1894, by Oskar T. Baron. From the Rothschild Collection.

COMMENTS: In the original description, Hellmayr designated as type the only Baron specimen in the Rothschild Collection to have been collected on 13 November 1894 and noted an additional two adults and one young in that collection and three specimens in BMNH. The three paratypes from the Rothschild Collection, now in AMNH, all collected at Levanto in 1894, are: AMNH 508218, adult male, 8 November; AMNH 508219, immature male, 2 December; AMNH 508220, adult male, 3 October. These specimens were included in a second collection made by Baron and were not included in the account of the first collection published by Salvin (1895).

Diglossa venezuelensis Chapman

Diglossa venezuelensis Chapman, 1925c: 11 (Carapas, alt. 5600 ft.).

Now *Diglossa venezuelensis* Chapman, 1925. See Hellmayr, 1935: 233–234, Vuilleumier, 1969, Isler and Isler, 1999: 362, and Dickinson, 2003: 816.

HOLOTYPE: **AMNH 188021**, adult male, collected at Carapas, 5600 ft, ca. 10.12N, 63.56W (Paynter, 1982), Cerro Turumiquire, Sucre, Venezuela, on 28 March 1925, by George H.H. Tate (no. 417).

COMMENTS: Chapman gave the AMNH number of the holotype in the original description. Under "Specimens Examined," Chapman said he had eight males and three females, all from Carapas, but only a total of eight specimens were cataloged at AMNH. The seven paratypes, all collected in 1925 by

Tate and Clement, are: AMNH 188544, female, 30 March; AMNH 188545, male, 30 March; AMNH 188546, adult male, 30 March; AMNH 188547, adult male, 31 March; AMNH 188548, female, 1 April; AMNH 188550, adult male, no day or month. Of these AMNH 188545 and 188547 were exchanged to Colección Phelps in July 1944. See Tate (1931) for an account of the ascent of Cerro Turumiquire.

Diglossa albilatera schistacea Chapman

Diglossa albilatera schistacea Chapman, 1925a: 7 (Chaupe, 6100 ft., northeast of Huancabamba, N. Peru).

Now *Diglossa albilatera schistacea* Chapman, 1925. See Hellmayr, 1935: 235–236, Vuilleumier, 1969, and Dickinson, 2003: 816.

HOLOTYPE: **AMNH 181651**, adult male, collected at Chaupe, 6100 ft, ca. 05.10S, 79.10W (Vaurie, 1972), northeast of Huancabamba, Cajamarca, Peru, on 2 February 1923, by Harry Watkins (no. 7118).

COMMENTS: Chapman cited the AMNH number of the holotype in the original description and listed the specimens he examined. The paratypes are: Ecuador, San Bartolo, AMNH 172565–172568, one male, three females, 3–6 September 1921, by Cherrie and Gill; Peru, Chaupe, AMNH 181652–181657, three males, three females, 17 February–3 April 1923, by Watkins.

Diglossa albi-latera affinis J.T. Zimmer

Diglossa albi-latera affinis J.T. Zimmer, 1942: 4 (Chachapoyas, Perú, 7,300 feet).

Now *Diglossa albilatera affinis* J.T. Zimmer, 1942. See Storer, 1970: 404, Vuilleumier, 1969, and Dickinson, 2003: 816.

HOLOTYPE: **AMNH 508295**, adult male, collected at Chachapoyas, 7300 ft, 06.13S, 77.51W (Stephens and Traylor, 1983), Amazonas, Peru, on 15 October 1894, by Oskar T. Baron. From the Rothschild Collection.

COMMENTS: Zimmer cited the AMNH number of the holotype in the original description. His type series included specimens from Chachapoyas, San Pedro, and La Lejia in AMNH and specimens from Leimebamba and Llui in ANSP. Paratypes in

AMNH: La Leija, AMNH 235141–235145, three males, two females, 18 February–30 April 1925, by Watkins; San Pedro, AMNH 235675–235678, four males, 21–24 January 1926, by Watkins; Chachapoyas, AMNH 508294, 508296, 508297, three males, 5–30 October 1894, by Baron.

Diglossa duidae Chapman

Diglossa duidae Chapman, 1929b: 26 (Mt. Duida, Venezuela, 6000 ft.).

Now Diglossa duidae duidae Chapman, 1929. See Hellmayr, 1935: 236, Vuilleumier, 1969, Isler and Isler, 1999: 364, and Dickinson, 2003: 817.

HOLOTYPE: **AMNH 245938**, adult male, collected on Cerro Duida (= Mt. Duida), 6000 ft, 03.25N, 65.40W (Paynter, 1982), Amazonas, Venezuela, on 23 January 1929, by the Olalla brothers on the Tyler Duida Expedition.

COMMENTS: Chapman cited the AMNH number of the holotype in the original description and said that he examined 49 specimens of the new species, apparently in addition to the type, from 550 ft (2), 3250 ft (2), 4700 ft (25), 5000–5500 ft (10), and 6000– 6700 ft (10). He did not list any specimens from 5800 ft, and these have not been included in the paratypes here listed. The only paratype I found from 550 ft was **AMNH 271849.** This specimen was originally identified as Diglossa duidae, but was later found to be a specimen of Thamnomanes caesius glaucus and resides with that form in the AMNH collection. The two paratypes from 3250 ft are **AMNH 271842** and **271843**. the latter of which was exchanged to Colección Phelps in August 1940. The 25 paratypes from 4700 ft are: AMNH 271813-271815, 271817–271821, 271845, 271848, 271852, 271854– 271857, 271864, 271873–271875, 271883–271886, **271889**, and **271891**. Of these, AMNH 271814 was exchanged to ANSP in May 1937, and AMNH 271875 was exchanged to Colección Phelps in April 1985. There were 18 specimens noted as having been collected between 5000 and 5500 ft, all of which I have considered paratypes, as they would have been available to Chapman: AMNH 271834, 271836–271840, 271847, 271859, 271862, 271863, 271865, 271867–271869, 271872, 271876, 271878, and 271881. Of these the following were exchanged: AMNH 271859 to Colección Phelps in August 1940, AMNH 271862 to ANSP in May 1937, AMNH 271872 to BMNH in June 1930, and AMNH 271881 to USNM in September 1930; I did not find AMNH 271868 in the collection. The ten paratypes from 6000–6700 ft are: AMNH 270305, 271812, 271841, 271846, 271850, 271851, 271858, 271877, 271879, and 271890. Of these, AMNH 270305 was presented to MCZ in May 1930 on behalf of Sydney Tyler, Jr, and AMNH 271858 was exchanged to Colección Phelps in August 1940.

The holotype of *D. duidae* was collected at Camp 15 on Mt. Duida. Chapman (1931) analyzed the zonal distribution of the birds collected on mts. Roraima and Duida. Tate and Hitchcock (1930) reported on the Mt. Duida region.

Diglossa duidae georgebarrowcloughi Dickerman

Diglossa duidae georgebarrowcloughi Dickerman,
1987c: 43 (La Cumbre, Cerro Jime (= Cerro de la Neblina), Territorio Amazonas, Venezuela).
Now Diglossa duidae georgebarrowcloughi Dickerman,
1987. See Dickinson,
2003: 817.

HOLOTYPE: **AMNH 815628**, adult male, collected at La Cumbre, Cerro Jime (= Cerro de la Neblina), 1900 m, Territorio Amazonas, Venezuela, on 22 January 1954, by Kathleen Deery de Phelps, Phelps no. 60224.

COMMENTS: Dickerman cited the AMNH number of the holotype in the original description and listed eight (not nine) paratypes: three in AMNH, AMNH 815627 (Phelps no. 70555), AMNH 815629 (60215), AMNH 815630 (60237), and five in Colección Phelps, Phelps nos. 60216, 60219, 60221, 60227, 60229. Paynter (1982) gave the coordinates of Cerro de la Neblina as ca. 00.50N, 66.00W.

Diglossa major gilliardi Chapman

Diglossa major gilliardi Chapman, 1939: 11 (plateau of Mt. Auyan-tepui, 2200 m., Venezuela).
Now Diglossa major gilliardi Chapman, 1939. See Vuilleumier, 1969, Storer, 1970: 404, and Dickinson, 2003: 817.

HOLOTYPE: AMNH 323595, adult male, collected on the plateau of Auyán-tepuí,

2200 m., 05.55N, 62.32W (Paynter, 1982), Bolívar, Venezuela, on 20 December 1937, by E. Thomas Gilliard on the Phelps Venezuela Expedition (no. 659).

COMMENTS: Chapman gave the AMNH number of the holotype in the original description and examined 20 male and 21 female specimens from the same locality. The 40 paratypes are: AMNH 323590–323594, 323596–323609, males; AMNH 323610–323630, females. Of these, AMNH 323594, 323598, and 323617 were sent to Colección Phelps and AMNH 323602 and 323621 were exchanged with LSUMNS in January 1981. I did not find AMNH 323596 in the collection, and it was perhaps exchanged without the catalog having been marked. See Gilliard (1941) and Tate (1938) for notes on this expedition.

Diglossa cryptorhis Chapman

Diglossa cryptorhis Chapman, 1912: 164 (Gallera, alt. 5700 ft., Andes west of Popayan, Cauca, Colombia).

Now *Diglossa indigotica* P.L. Sclater, 1856. See Hellmayr, 1930: 266–267, Hellmayr, 1935: 237, Vuilleumier, 1969, Isler and Isler, 1999: 365, and Dickinson, 2003: 817.

HOLOTYPE: **AMNH 110091**, adult female, collected at La Gallera (= Gallera), 5700 ft, ca. 02.35N, 76.55W (Paynter, 1997), Andes west of Popayan, Cauca, Colombia, on 2 July 1911, by William B. Richardson and Leo E. Miller.

COMMENTS: The AMNH number of the holotype was cited in the original description. Chapman had a single paratype: **AMNH 112860**, adult male, collected at 7200 ft on the trail between Cartago and Nóvita, Colombia, on 12 December 1911, by Arthur A. Allen and Leo E. Miller.

Chapman (1917) published the results of AMNH fieldwork in Colombia, with a history and itinerary of the various expeditions.

Diglossa glauca tyrianthina Hellmayr

Diglossa glauca tyrianthina Hellmayr, 1930: 266 (Lower Sumaco, eastern Ecuador).

Now *Diglossa glauca tyrianthina* Hellmayr, 1930. See Hellmayr, 1935: 238, Vuilleumier, 1969, Isler and Isler, 1999: 366, and Dickinson, 2003: 817.

HOLOTYPE: AMNH 183390, adult male, collected on the lower Volcan Sumaco,

00.34S, 77.38W (Paynter, 1993), Napo, Ecuador, on 16 January 1924, by Olalla and sons.

COMMENTS: Hellmayr cited the AMNH number of the holotype in the original description and listed the specimens he examined. The paratypes are: AMNH 180786, male, and AMNH 180787, female, from below Chaco, Rio Oyacachi, collected on 6 and 8 August 1923, respectively; AMNH 183391, male, and AMNH 183392, female, from the lower Volcan Sumaco, on 21 and 23 December 1923, respectively, all collected by the Olallas.

Diglossa indigotica incae Chapman

Diglossa indigotica incae Chapman, 1925a: 8 (Inca Mine, Santo Domingo, 6000 ft., southeastern Peru).

Now *Diglossa glauca glauca* P.L. Sclater and Salvin, 1876. See Hellmayr, 1930: 266–267, Hellmayr, 1935: 287–288, Isler and Isler, 1999: 366, and Dickinson, 2003: 817.

HOLOTYPE: **AMNH 150038**, adult male, collected at Santo Domingo (= Inca Mine), 6000 ft, 13.51S, 69.41W (Stephens and Traylor, 1983), Puno, Peru, on 6 August 1918, by Harry Watkins (no. E901).

COMMENTS: In the original description, Chapman cited the AMNH number of the holotype and noted that he examined nine male and three female specimens from the type locality. There are, however, 13 specimens collected at Santo Domingo, available to Chapman and labeled incae by him. The 12 specimens additional to the holotype are considered paratypes and are listed here with the sex as noted on the label: AMNH 72092, male, November 1899, H.H. Keays; AMNH 74081, 74082, females, August 1900, H.H. Keays; AMNH 146444–146449, three males, two females, one sex?, September 1916, H. Watkins; AMNH 150037, 150039, 150040, three males, August 1918, H.Watkins.

Diglossa caerulescens mentalis J.T. Zimmer

Diglossa caerulescens mentalis J.T. Zimmer, 1942: 6 ("Camp 1," below Limbani, southeastern Perú).

Now *Diglossa caerulescens mentalis* J.T. Zimmer, 1942. See Vuilleumier, 1969, Storer, 1970: 407, Isler and Isler, 1999: 367, and Dickinson, 2003: 817.

HOLOTYPE: **AMNH 147832**, adult male, collected at Camp 1, below Limbani, 14.08S,

69.42W (Stephens and Traylor, 1983), Puno, Peru, on 8 March 1917, by Harry Watkins (no. 712).

COMMENTS: Zimmer gave the AMNH number of the holotype in the original description and listed the specimens that he examined, some of which were on loan from ANSP. Paratypes in AMNH are: Inca Mine, AMNH 74079, 74080, males, 10 and 29 August 1900, H.H. Keays; Santo Domingo, AMNH 146450–146454, one male, four females, September 1916, H. Watkins; Camp 1, below Limbani, AMNH 147833, 147834, females, March 1917, H. Watkins.

Diglossa cyanea tovarensis J.T. Zimmer and W.H. Phelps

Diglossa cyanea tovarensis J.T. Zimmer and W.H. Phelps, 1952: 1 (Colonia Tovar, Aragua, Venezuela; altitude 1900 meters).

Now *Diglossa cyanea tovarensis* J.T. Zimmer and W.H. Phelps, 1952. See Vuilleumier, 1969, Storer, 1970: 407, Isler and Isler, 1999: 368–369, and Dickinson, 2003: 817.

HOLOTYPE: **AMNH 323079**, adult male, collected at Colonia Tovar, 1900 m, 10.25N, 67.17W (Paynter, 1982), Aragua, Venezuela, on 15 November 1937, by E. Thomas Gilliard, original no. 285.

COMMENTS: The AMNH number of the holotype was cited in the original description. Paratypes were listed as one male, one female, and two sex? in the Phelps Collection, Caracas.

A short trip over the coastal mountains in Venezuela, preliminary to the 1937 Phelps Expedition to Auyán-tepuí, included a stay at Colonia Tovar (see Gilliard, 1939).

Diglossa cyanea dispar J.T. Zimmer

Diglossa cyanea dispar J.T. Zimmer, 1942: 6 (Chugur, northwest of Cajamarca, northwestern Perú; altitude 9,000 feet).

Now Diglossa cyanea dispar J.T. Zimmer, 1942. See Vuilleumier, 1969, Storer, 1970: 407, Isler and Isler, 1999: 368–369, and Dickinson, 2003: 817

HOLOTYPE: **AMNH 236161**, adult male, collected at Chugur, 9000 ft, 06.40S, 78.45W (Stephens and Traylor, 1983), 40 mi northwest of Cajamarca, Cajamarca, Peru, on 29 April 1926, by Harry Watkins (no. 10362).

COMMENTS: Zimmer cited the AMNH number of the holotype in the original description and listed the specimens he examined. The paratypes are: Peru, El Tambo, AMNH 175717, male; Tamborape, AMNH 181648, male; Chaupe, AMNH 181649, 181650, female, male; Taulis, AMNH 236156–236159, two males, two females; Chugur, AMNH 236160, 236162, female, male. Ecuador, Loja, AMNH 130375, female; Zaruma, AMNH 130376, 130377, males; El Chiral, AMNH 168289-168292, one male, three females: Taraguacocha, **AMNH** 168294, female; Salvias, AMNH 168295, 168296, males. A male from Taraguacocha, AMNH 168293, was exchanged to MCZ in July 1928 and was not available to Zimmer when he named *dispar*.

TERSININAE

Procnias cyanotropus Wied

Procnias cyanotropus Wied, 1820: 187 (Bara de Jucú).

Now *Tersina viridis viridis* (Illiger, 1811). See Allen, 1889b: 218, Hellmayr, 1936: 1, and Dickinson, 2003: 813.

SYNTYPES: **AMNH 4368**, juvenile male, **AMNH 4369**, adult male, Rio Jucú (= Bara de Jucú), 20.24S, 40.19W (Paynter and Traylor, 1991), Espiritu Santo, Brazil, from the Maximilian Collection.

COMMENTS: In the original description, only the adult male is described, but both Wied specimens would have been in his possession when *cyanotropus* was described as they shared a Wied label, one side of which was marked "mas iuv" and the other "Mas." Allen considered these two formerly mounted male specimens to be syntypes, with both bearing AMNH type labels. The Wied label is glued to the back of the label on AMNH 4369.

Wied's (1820: 187) original description reads: "betrachtet man ihn gegen des Licht, so ist der ganze Vogel prachtvoll himmelblau, and vom Lichte abgewant erscheint er glänzend hellgrün; Zügel, Kehle und Kinn sind schwarz; der Unterlieb weiss; in Berliner Museum hat man ihn *Procnias ventralis* gennant."

ACKNOWLEDGMENTS

As in each of the previous parts of the AMNH type list, the staff of the AMNH Library has been unfailingly helpful; I am much indebted to each of them. I also thank the following individuals for their help with specific queries: Steven Cardiff, Louise Clarke, James Dean, Dale Dyer, Clare Flemming, Miriam Gross, Hein van Grouw, Guy Kirwan, Lorraine Portch, Robert Prys-Jones, Nathan Rice, Jeremiah Trimble, Thomas Trombone, Andrew Valelly, Claire Voisin, François Vuilleumier, and Hans Winkler, Edward Dickinson and Marcos Raposo read the manuscript, offered many helpful suggestions, and pointed out errors that I would otherwise not have caught. I am most grateful to them for the care they expended in my behalf. Editorial expertise was provided by Brenda Jones and Mary Knight and is much appreciated. Errors and misconceptions that remain are entirely my responsibility.

REFERENCES

- Allen, J.A. 1888. Descriptions of two new subspecies of the Seaside Sparrow (*Ammodramus maritimus*). Auk 5: 284–287.
- Allen, J.A. 1889. Descriptions of new species of South American birds, with remarks on various other little known species. Bulletin of the American Museum of Natural History 2 (13): 137–151.
- Allen, J.A. 1889. On the Maximilian types of South American birds in the American Museum of Natural History. Bulletin of the American Museum of Natural History 2 (19): 209–276.
- Allen, J.A. 1891. On a collection of birds from Chapada, Matto Grosso, Brazil, made by Mr. Herbert H. Smith. Part 1.—Oscines. Bulletin of the American Museum of Natural History 3 (24): 337–380.
- Allen, J.A. 1892. Notice of some Venezuelan birds collected by Mrs. H.H. Smith. Bulletin of the American Museum of Natural History 4 (5): 51–56.
- Allen, J.A. 1900. List of birds collected in the district of Santa Marta, Colombia, by Mr. Herbert H. Smith. Bulletin of the American Museum of Natural History 13 (14): 117–183.
- Alström, P. et al. 2008. Phylogeny and classification of the Old World Emberizini (Aves, Passeriformes). Molecular Phylogenetics and Evolution 47: 960–973.

- American Ornithologists' Union. 1998. Check-list of North American birds. 7th ed. Lawrence, KS: Allen Press, i–liv + 829 pp.
- Arcese, P., M.K. Sogge, A.B. Marr, and P.A. Patten. 2002. Song Sparrow (*Melospiza melodia*). *In A. Poole and F. Gill (editors)*, The birds of North America. No. 704. Philadelphia: Birds of North America, Inc.
- Aubrecht, G. 2008. *Habia atrimaxillaris* (Dwight & Griscom) 1924—the black-cheeked ant-tanager. History of an endemic bird species from SW Costa Rica, from discovery to endangered status. *In* A. Weissenhofer, et al. (editors). Natural history and cultural history of the Golofo Dulce Region, Costa Rica, pp. 381–394. Stapfia 88 (n.s. 80): 768 pp.
- Bangs, O., and T.E. Penard. 1925. The Henry Bryant types of birds. Bulletin of the Museum of Comparative Zoology at Harvard College 67: 197–207.
- Banks, R.C., and members of the American Ornithologists' Union Check-list Committee. 2008. Forty-ninth supplement to the American Ornithologists' Union *Check-list of North American Birds*. Auk 125: 758–768.
- Barros, V., and R. 1921. Aves de la Cordillera de Aconcagua. Revista Chilena de Historia Natura 25: 167–192.
- Bartlett, E. 1890. On a new species of *Guiraca*. Annals and Magazine of Natural History (6) 6: 168–169.
- Bates, J.M. 1997. Distribution and geographic variation in three South American grassquits (Emberizinae, *Tiaris*). *In* J.V. Remsen, Jr. (editor), Studies in Neotropical ornithology honoring Ted Parker. Ornithological Monographs 48: 91–110. Washington DC: American Ornithologists' Union, xiv + 918 pp.
- Berlepsch, H. 1897. [Count von Berlepsch exhibited a fine new tanager of the genus *Buthraupis* ... He diagnosed it as follows:—]. Bulletin of the British Ornithologists' Club 7: iii—iv.
- Berlepsch, H. 1908. On the birds of Cayenne. Novitates Zoologicae 15: 103–164.
- Berlepsch, H. 1912. Revision der tanagriden. Bericht ueber den V. Internationalen Ornithologen-Kongress, Berlin, 1910: 1001–1161.
- Berlepsch, H., and E. Hartert. 1902. On the birds of the Orinoco Region. Novitates Zoologicae 9: 1–134.
- Berlepsch, H., and C.E. Hellmayr. 1905. Studien über wenig bekannte typen neotropisches Vögel. Journal für Ornithologie 53: 1–33.
- Berlepsch, H., and J. Stolzmann. 1892. Résultats des recherches ornithologiques faites au Pérou par M. Jean Kalinowski. Proceedings of the Zoological Society of London 1892: 371–411.

- Berlepsch, H., and J. Stolzmann. 1894. Descriptions de quelques espèces nouvelles d'oiseaux du Pérou central. Ibis (6) 6: 385–405, pl. XI.
- Berlepsch, H., and J. Stolzmann. 1896. On the ornithological researches of M. Jean Kalinowski in central Peru. Proceedings of the Zoological Society of London 1896: 322–388.
- Bonaparte, C.L. 1838. [The Prince of Musignano laid before the meeting the following communication ...]. Proceedings of the Zoological Society of London 1837: 108–122.
- Bond, J. 1939. Notes on birds from the West Indies and other Caribbean islands. Notulae Naturae (Philadelphia) 13: 1–6.
- Bond, J., and R. Meyer de Schauensee. 1939.
 Descriptions of new birds from Bolivia. Part I.—
 Oscines. Notulae Naturae (Philadelphia) 12:
 1–5
- Boucard, A. 1891. Description of a supposed new species of tanager in Boucard's museum. The Humming Bird 1: 53.
- Bradley, P.E. 2000. The birds of the Cayman Islands. BOU Checklist No. 19. Tring, UK: British Ornithologists' Union, 253 pp., 71 pls.
- Brehm, C.L. 1826. Eine Vergleichung verwandter Vögelarten und zugleich eine Erweiderung auf herrn Fabers Bemerkungen über meine neuen Arten hochnordischer Schwimmvogel. Isis von Oken 19 (9): cols. 927–936.
- Brehm, C.L. 1831. Handbuch der Naturgeschichte aller Vögel Deutschlands. Ilmenau: Bernh. Friedr. Voigt, 1085 pp., XLVI pls.
- Brehm, C.L. 1841. [Treatment of the genus *Miliaria*]. Isis von Oken 34: cols. 54–58.
- Brehm, C.L. 1855. Der vollständige Vogelfang. Eine gründliche Unleitung, alle europäischen Vögel. Weimar: Bernh. Friedr. Voigt, 416 pp.
- Bryant, H. 1866. A list of birds from Porto Rico presented to the Smithsonian Institution, by Messrs. Robert Swift and George Latimer, with descriptions of new species or varities. Proceedings of the Boston Society of Natural History 10: 248–256.
- Burns, K.J., and K. Naoki. 2004. Molecular phylogenetics and biogeography of Neotropical tanagers in the genus *Tangara*. Molecular Phylogenetics and Evolution 32: 838–854.
- Byers, C., J. Curson, and U. Olsson. 1995. Sparrows and buntings of North America and the world. Boston: Houghton Mifflin, 334 pp., 39 pls.
- Cabanis, J. 1851. Museum Heineanum. Verzeichniss der ornithologischen Sammlung des Oberamtmann Ferdinand Heine, auf Gut St. Burchard vor Halberstadt. Pars I, Oscines. I. Theil, Die Singvögel. Halberstadt, Germany: R. Frantz, viii + 233 pp.

- Cadena, C.D., and A.M. Cuervo. 2010. Molecules, ecology, morphology, and songs in concert: how many species is *Arremon torquatus* (Aves: Emberizidae)? Biological Journal of the Linnean Society 99: 152–176.
- Cadena, C.D., J. Klicka, and R.E. Ricklefs. 2007. Evolutionary differentiation in the Neotropical montane region: Molecular phylogenetics and phylogeography of *Buarremon* brush-finches (Aves, Emberizidae). Molecular Phylogenetics and Evolution 44: 993–1016.
- Cassin, J. 1860. Catalogue of birds collected during a survey of a route for a ship canal across the Isthmus of Darien, by order of the government of the United States, made by Lieut. N. Michler, of the U.S. Topographical Engineers, with notes and descriptions of new species. Proceedings of the Academy of Natural Sciences of Philadelphia 12: 132–144.
- Casto, S.D., and H.R. Burke. 2010. Austin Paul Smith. The life of a natural history collector and horticulturist. Seguin, TX: Privately printed, 36 pp., 6 figs.
- Chapin, J.P. 1954. Gazetteer for "*The birds of the Belgian Congo*." Bulletin of the American Museum of Natural History 75B: 638–738.
- Chapman, F.M. 1891. On the birds observed near Corpus Christi, Texas, during parts of March and April 1891. Bulletin of the American Museum of Natural History 3 (22): 315–328.
- Chapman, F.M. 1893. Preliminary descriptions of one new species and two new subspecies of birds from the island of Trinidad. Auk 10: 342–343.
- Chapman, F.M. 1894. On the birds of the island of Trinidad. Bulletin of the American Museum of Natural History 6 (1): 1–86.
- Chapman, F.M. 1899. The distribution and relationships of *Ammodramus maritimus* and its allies. Auk 16: 1–12, 1 pl.
- Chapman, F.M. 1901. Descriptions of six apparently new birds from Peru. Bulletin of the American Museum of Natural History 14 (19): 225–228.
- Chapman, F.M. 1912. Diagnoses of apparently new Colombian birds. Bulletin of the American Museum of Natural History 31 (16): 139–166.
- Chapman, F.M. 1914a. Diagnoses of apparently new Colombian birds, II. Bulletin of the American Museum of Natural History 33 (12): 167–192.
- Chapman, F.M. 1914b. Descriptions of new birds from Ecuador. Bulletin of the American Museum of Natural History 33 (23): 317–322.
- Chapman, F.M. 1915a. Descriptions of proposed new birds from Central and South America.

- Bulletin of the American Museum of Natural History 34 (11): 363–388.
- Chapman, F.M. 1915b. Diagnoses of apparently new Colombian birds. IV. Bulletin of the American Museum of Natural History 34 (23): 635–662.
- Chapman, F.M. 1917. The distribution of bird-life in Colombia; a contribution to a biological survey of South America. Bulletin of the American Museum of Natural History 36: x + 729 pp., XLI pls.
- Chapman, F.M. 1919a. Descriptions of proposed new birds from Peru, Bolivia, Brazil, and Colombia. Proceedings of the Biological Society of Washington 32: 253–268.
- Chapman, F.M. 1919b. Descriptions of proposed new birds from Peru, Bolivia, Argentina and Chile. Bulletin of the American Museum of Natural History 41 (5): 323–333.
- Chapman, F.M. 1921a. Descriptions of proposed new birds from Colombia, Ecuador, Peru, and Brazil. American Museum Novitates 18: 1–12.
- Chapman, F.M. 1921b. The distribution of bird life in the Urubamba Valley of Peru. A report on the birds collected by the Yale University—National Geographic Society's Expeditions. United States National Museum Bulletin 117: 138 pp., 9 pls.
- Chapman, F.M. 1923a. Descriptions of proposed new birds from Panama, Venezuela, Ecuador, Peru and Bolivia. American Museum Novitates 67: 1–12.
- Chapman, F.M. 1923b. Mutation among birds in the genus *Buarremon*. Bulletin of the American Museum of Natural History 48 (9): 243–278.
- Chapman, F.M. 1924. Descriptions of new birds from Colombia, Ecuador, Peru and Bolivia. American Museum Novitates 143: 1–16.
- Chapman, F.M. 1925a. Descriptions of new birds from Colombia, Ecuador, Peru, and Argentina. American Museum Novitates 160: 1–14.
- Chapman, F.M. 1925b. Descriptions of new birds from Ecuador and Peru. American Museum Novitates 187: 1–9.
- Chapman, F.M. 1925c. Remarks on the life zones of northeastern Venezuela with descriptions of new species of birds. American Museum Novitates 191: 1–15.
- Chapman, F.M. 1926. The distribution of birdlife in Ecuador. Bulletin of the American Museum of Natural History 55: xiii + 784 pp., 30 pls.
- Chapman, F.M. 1927a. Descriptions of new birds from northwestern Peru and western Colombia. American Museum Novitates 250: 1–7.
- Chapman, F.M. 1927b. The variations and distributions of *Saltator aurantiirostris*. American Museum Novitates 261: 1–19.
- Chapman, F.M. 1929a. Descriptions of new birds from Mt. Roraima. American Museum Novitates 341: 1–7.

- Chapman, F.M. 1929b. Descriptions of new birds from Mt. Duida, Venezuela. American Museum Novitates 380: 1–27.
- Chapman, F.M. 1931. The upper zonal bird-life of Mts. Roraima and Duida. Bulletin of the American Museum of Natural History 63 (1): 1–135, 41 figs.
- Chapman, F.M. 1939. The upper zonal birds of Mt. Auyan-Tepui, Venezuela. American Museum Novitates 1051: 1–15.
- Chapman, F.M. 1940. The post-glacial history of Zonotrichia capensis. Bulletin of the American Museum of Natural History 77 (8): 381–438.
- Cherrie, G.K. 1916a. Some apparently undescribed birds from the collection of the Roosevelt South American Expedition. Bulletin of the American Museum of Natural History 35 (17): 183–190.
- Cherrie, G.K. 1916b. Two new birds from Venezuela. Bulletin of the American Museum of Natural History 35 (22): 389.
- Cherrie, G.K., and E.M.B. Reichenberger. 1923. Descriptions of proposed new birds from Brazil and Paraguay. American Museum Novitates 58: 1–8.
- Chubb, C. 1921. The birds of British Guiana, vol. 2. London: Bernard Quaritch, xcvi + 615 pp.
- Collins, P.W. 1999. Rufous-crowned Sparrow (*Aimophila ruficeps*). *In* A. Poole and F. Gill (editors), The birds of North America. No. 472. Philadelphia: Birds of North America, Inc.
- Conway, W. 1962. After 101 years—a Yellow-billed Chlorophonia. Animal Kingdom 65: 60–61.
- Dalmas, R. de. 1900a. [Comte R. de Dalmas sent the following descriptions of two new species of *Calliste* in his collection:—]. Bulletin of the British Ornithologists' Club 11: 35–36.
- Dalmas, R. de. 1900b. Note sur une collection d'oiseaux de l'ile de Tobago (mer des Antilles).
 Memoires de la Societe Zoologique de France 13: 132–144.
- David, N., and M. Gosselin. 2002. The grammatical gender of avian genera. Bulletin of the British Ornithologists' Club 122: 257–282.
- Deignan, H.G. 1961. Type specimens of birds in the United States National Museum. United States National Museum, Bulletin 221: x + 718 pp.
- Dekker, R.W.R.J., and C. Quaisser. 2006. Type specimens of birds in the National Museum of Natural History, Leiden. Part 3. Passerines: Pachycephalidae–Corvidae (Peters's sequence). Nationaal Natuurhistorisch Museum Technical Bulletin 9: 1–77.
- Dementiev, G. 1937. *Emberiza schoeniclus steinba-cheri* nom. nov. Ornithologische Monatsberichte 45: 86–87.

- Dickerman, R.W. 1963. The Song Sparrows of the Mexican plateau. Minnesota Museum of Natural History, Occasional Papers 9: ix + 79 pp.
- Dickerman, R.W. 1987a. Two new subspecies of birds from Guatemala. Western Foundation of Vertebrate Zoology, Occasional Papers 3: 1–6.
- Dickerman, R.W. 1987b. Type localities of birds described from Guatemala. Proceedings of the Western Foundation of Vertebrate Zoology 3: 51–107.
- Dickerman, R.W. 1987c. Notes on the plumages of *Diglossa duidae* with the description of a new subspecies. Bulletin of the British Ornithologists' Club 107: 42–44.
- Dickerman, R.W. 1988. An unnamed subspecies of *Euphonia rufiventris* from Venezuela and northern Brazil. Bulletin of the British Ornithologists' Club 108: 20–22.
- Dickinson, E.C. (editor), The Howard and Moore complete checklist of the birds of the world. 3rd ed. London: Christopher Helm, 1039 pp.
- Dickinson, E.C., L.K. Overstreet, R.J. Dowsett, and M.D. Bruce (editors). 2011. Priority! The dating of scientific names in ornithology. Northampton, UK: Aves Press, 319 pp.
- Dowsett, R.J., and F. Dowsett-Lemaire. 1993. Comments on the taxonomy of some Afrotropical bird species.. *In* R.J. Dowsett and F. Dowsett-Lemaire (editors), A contribution to the distribution and taxonomy of Afrotropical and Malagasy birds. Tauraco Research Report No. 5, Chap. 2, pp. 323–389. Liège, Belgium: Tauraco Press, 389 pp.
- Dwight, J. 1887. A new race of the Sharp-tailed Sparrow (*Ammodramus caudacutus*). Auk 4: 232–239.
- Dwight, J. 1918. The geographical distribution of color and of other variable characters in the genus *Junco*: a new aspect of specific and subspecific values. Bulletin of the American Museum of Natural History 38 (9): 269–309.
- Dwight, J., and L. Griscom. 1921. A revision of *Atlapetes gutturalis* with descriptions of three new races. American Museum Novitates 16: 1–4.
- Dwight, J., and L. Griscom. 1924. Descriptions of new birds from Costa Rica. American Museum Novitates 142: 1–5.
- Dwight, J., and L. Griscom. 1927. A revision of the geographical races of the Blue Grosbeak (*Guiraca caerulea*). American Museum Novitates 257: 1–5.
- Eck, S., and C. Quaisser. 2004. Verzeichnis der Typen der Vogelsammlung des Museums für Tierkunde in den Staatlichen Naturhistorischen Sammlungen Dresden. Zoologische Abhandlungen 54: 233–316.

- Eitniear, J.C. 1997. White-collared Seedeater *Sporophila torqueola*. *In* A. Poole and F. Gill (editors), The Birds of North America. No. 278. Philadelphia: Academy of Natural Sciences.
- Elliot, D.G. 1871. Description of a new genus and species of bird belonging to the family Fringilidae. Ibis (3) 1: 402–403, pl. XI.
- Everitt, C. 1973. Birds of the Edward Marshall Boehm aviaries. Trenton, NJ: Edward Marshall Boehm, 297 pp.
- Flórez-Rodríguez, A., M.D. Carling, and C.D. Cadena. 2011. Reconstructing the phylogeny of "Buarremon" brush-finches and near relatives (Aves, Emberizidae) from individual gene trees. Molecular Phylogenetics and Evolution 58: 297–303.
- Fry, C.H. and G.S. Keith (editors). 2004. The birds of Africa, vol. VII. Princeton, NJ: Princeton University Press, xxi + 666 pp.
- Garcia-Moreno, J., and J. Fjeldså. 1999. Reevaluation of species limits in the genus *Atlapetes* based on mtDNA sequence data. Ibis 141: 199–207.
- Garrido, O.H., K.C. Parkes, G.B. Reynard, A. Kirkconnell, and R. Sutton. 1997. Taxonomy of the Stripe-headed Tanager, genus *Spindalis* (Aves: Thraupidae) of the West Indies. Wilson Bulletin 109: 561–594, frontispiece.
- Gilliard, E.T. 1939. A "lost" German colony. Natural History, June, pp. 7–13.
- Gilliard, E.T. 1941. The birds of Mt. Auyan-tepui, Venezuela. Bulletin of the American Museum of Natural History 77 (9): 439–508.
- Gilliard, E.T. 1942. The Cordillera Macarena, Colombia. Geographical Review 32: 463–470, photographs and map.
- Gilliard, E.T. 1946. Two new Gray Seed-eaters from South America. Auk 63: 570–574.
- Goodfellow, W. 1901. Results of an ornithological journey through Colombia and Ecuador, pts. I—III. Ibis (8) 1: 300–319, 458–480, 699–715.
- Goodfellow, W. 1902. Results of an ornithological journey through Colombia and Ecuador, pts. IV, V. Ibis (8) 2: 59–67, 207–233.
- Graves, G.R. 1990. A new subspecies of *Diglossa gloriosissima* (Aves: Thraupinae) from the western Andes of Colombia. Proceedings of the Biological Society of Washington 103: 962–965.
- Graves, G.R., and J.S. Weske. 1987. *Tangara phillipsi*, a new species of tanager from the Cerros del Sira, eastern Peru. Wilson Bulletin 99: 1–6, frontispiece.
- Greenlaw, J.S. 1996. Spotted Towhee *Pipilo maculatus*. *In* A. Poole and F. Gill (editors), The birds of North America. No. 263. Philadelphia: Academy of Natural Sciences.
- Greenlaw, J.S., and J.D. Rising. 1994. Sharp-tailed Sparrow (*Ammodramus caudacutus*). *In A. Poole*

- and F. Gill (editors), The birds of North America. No. 112. Philadelphia: Academy of Natural Sciences.
- Greenway, J.C., Jr. 1973. Type specimens of birds in the American Museum of Natural History, Part 1. Tinamidae–Rallidae. Bulletin of the American Museum of Natural History 150 (3): 207–346.
- Greenway, J.C., Jr. 1978. Type specimens of birds in the American Museum of Natural History. Part 2. Otididae–Picidae. Bulletin of the American Museum of Natural History 161 (1): 1–306.
- Greenway, J.C., Jr. 1987. Type specimens of birds in the American Museum of Natural History. Part 4. Passeriformes: Tyrannidae–Atrichornithidae. American Museum Novitates 2879: 1–63
- Gregory, S.M.S. 2000. Schistochlamys Reichenbach, 1850 and Neothraupis Hellmayr, 1936 (Aves, Passeriformes): proposed conservation. Bulletin of Zoological Nomenclature 57: 162–165.
- Griscom, L. 1924a. Descriptions of new birds from Panama and Costa Rica. American Museum Novitates 141: 1–12.
- Griscom, L. 1924b. Bird hunting among the wild Indians of western Panama. Natural History 24: 509–519.
- Griscom, L. 1926. The ornithological results of the Mason–Spenden Expedition to Yucatan. American Museum Novitates 235: 1–19.
- Griscom, L. 1927. Undescribed or little-known birds from Panama. American Museum Novitates 280: 1–19.
- Griscom, L. 1930. Studies from the Dwight collection of Guatemala birds. III. American Museum Novitates 438: 1–18.
- Griscom, L. 1932a. Notes on imaginary species of *Ramphocelus*. Auk 49: 199–203.
- Griscom, L. 1932b. The distribution of bird-life in Guatemala. A contribution to a study of the origin of Central American bird-life. Bulletin of the American Museum of Natural History 64: ix + 439 pp., 11 figs., 2 maps.
- Griscom, L. 1934. The ornithology of Guerrero, Mexico. Bulletin of the Museum of Comparative Zoology 75: 367–422, 1 pl.
- Griscom, L., and J.T. Nichols. 1920. A revision of the seaside sparrows. Abstract of the Proceedings of the Linnaean Society of New York 32: 18–30.
- Halkin, S.L., and S.U. Linville. 1999. Northern Cardinal (*Cardinalis cardinalis*). In A. Poole and F. Gill (editors), The birds of North America. No. 440. Philadelphia: Birds of North America, Inc.
- Hartert, E. 1893a. [Mr. Hartert laid on the table some specimens of a new finch]. Bulletin of the British Ornithologists' Club 1: 37.

- Hartert, E. 1893b. On the birds of the islands of Aruba, Curaço, and Bonaire. Ibis (6) 5: 289–338.
- Hartert, E. 1896. Description of a new finch from the West Indies. Novitates Zoologicae 3: 257.
- Hartert, E. 1898. On a collection of birds from north-western Ecuador, collected by Mr. W.F.H. Rosenberg. Novitates Zoologicae 5: 477–505, 2 pls.
- Hartert, E. 1900. [Mr. Ernst Hartert exhibited some new South-American birds, which he described as follows:—]. Bulletin of the British Ornithologists' Club 11: 37–40.
- Hartert, E. 1901. On some birds from north-west Ecuador. Novitates Zoologicae 8: 369–371, pl. V.
- Hartert, E. 1902. Aus den Wanderjahren eines Naturforschers. II. Kapital. Die mit Sicherheit festgestellten Vögel der Inseln Aruba, Curaço und Bonaire. Novitates Zoologicae 9: 295–309.
- Hartert, E. 1904. Die Vögel der Paläarktischen Fauna., 1 (2): 113–240. Berlin: R. Friedländer und Sohn.
- Hartert, E. 1907. [Dr. Ernst Hartert exhibited an example of a new subspecies of *Ammodramus*, which he proposed to call–]. Bulletin of the British Ornithologists' Club 19: 73–74.
- Hartert, E. 1913. [Dr. Ernst Hartert exhibited and described examples of the following new subspecies of birds:—]. Bulletin of the British Ornithologists' Club 33: 76–79.
- Hartert, E. 1918. Types of birds in the Tring Museum. A. Types in the Brehm Collection. Novitates Zoologicae 25: 4–63.
- Hartert, E. 1919. Types of birds in the Tring Museum. B. Types in the general collection. Novitates Zoologicae 26: 123–178.
- Hartert, E. 1928. Types of birds in the Tring Museum. C. Additional and overlooked types. Novitates Zoologicae 34: 189–230.
- Hartert, E., and S. Venturi. 1909. Notes sur les oiseaux de la République Argentine. Novitates Zoologicae 16: 159–267.
- Hartlaub, G. 1882a. Diagnosen neuer Arten aus Centralafrika gesammelt von Dr. Emin Bey. Ornithologisches Centralblatt 7: 91–92.
- Hartlaub, G. 1882b. Ueber einige neue Vögel aus dem oberen Nilgebiete. Journal für Ornithologie 30: 321–329, pl. 1.
- Hartlaub, G. 1882c. Zweiter Beitrag zur Ornithologie de östlich-äquatorialen Gebiete Africa's.
 Abhandlungen Naturwissenschaftlicher Verein zu Bremen 8: 183–220.
- Haverschmidt, F. 1949. Biographical notes on the Penard brothers. Auk 66: 56–60.
- Haverschmidt, F., and G.F. Mees. 1994. Birds of Suriname. Paramaribo: Vaco, N.V., 584 pp, 45 pls., map.

- Hellmayr, C.(K.)E. 1904. Über neue und wenig bekannte Fringilliden Brasiliens, nebst Bermerkungen über notwendige Änderungen in der Nomenklatur einiger Arten. Verhandlungen der Zoologisch-botanischen Gesellschaft in Wien 54: 516–537.
- Hellmayr, C.E. 1905a. Notes on a collection of birds, made by Mons. A. Robert in the district of Pará, Brazil. Novitates Zoologicae 12: 269–305.
- Hellmayr, C.E. 1905b. Description of two new birds discovered by Mr. O.T. Baron in northern Peru. Novitates Zoologicae 12: 503–504.
- Hellmayr, C.E. 1905c. [Mr. C.E. Hellmayr exhibited examples of two new species of Neotropical birds, which he described as follows:—]. Bulletin of the British Ornithologists' Club 15: 90–91.
- Hellmayr, C.E. 1906a. [Mr. C.E. Hellmayr exhibited and described the following new neotropical birds:—]. Bulletin of the British Ornithologists' Club 16: 82–86.
- Hellmayr, C.E. 1906b. [Mr. C.E. Hellmayr exhibited and characterized a new subspecies of bunting from Volcano of Chiriqui:—]. Bulletin of the British Ornithologists' Club 19: 28–29.
- Hellmayr, C.E. 1906c. Notes on a second collection of birds from the district of Pará, Brazil. Novitates Zoologicae 13: 353–385.
- Hellmayr, C.E. 1907a. [Mr. C.E. Hellmayr described a new species of cardinal from the interior of Brazil as follows:—]. Bulletin of the British Ornithologists' Club 19: 43.
- Hellmayr, C.E. 1907b. On a collection of birds made by Mr. W. Hoffmanns on the Rio Madeira, Brazil. Novitates Zoologicae 14: 343–412.
- Hellmayr, C.E. 1908. An account of the birds collected by Mons. G.A. Baer in the state of Goyaz, Brazil. Novitates Zoologicae 15: 13–102.
- Hellmayr, C.E. 1910. The birds of the Rio Madeira. Novitates Zoologicae 17: 257–428.
- Hellmayr, C.E. 1915. Ein kleiner Beitrag zur Ornithologie des Staates Espirito Santo, Südostbrasilien. Verhandlungen der Ornithologischen Gesellschaft in Bayern 12: 126–159.
- Hellmayr, C.E. 1930. On two undescribed Neotropical birds. Novitates Zoologicae 35: 265–267.
- H[ellmayr], C.E. 1931. Raymond Compte de Dalmas [obituary]. Auk 48: 163.
- Hellmayr, C.E. 1932. The birds of Chile. Field Museum of Natural History Publications, Zoological Series 19: 1–472.
- Hellmayr, C.E. 1935. Catalogue of birds of the Americas and the adjacent islands. Part VIII. Alaudidae–Hirundinidae–Motacillidae–Bombycillidae–Ptilogonatidae–Dulidae–Vireonidae– Vireolaniidae–Cyclarhidae–Laniidae–Sturnidae–

- Coerebidae–Compsothlypidae. Field Museum of Natural History Publications, Zoological Series 13 (8): vi + 541 pp.
- Hellmayr, C.E. 1936. Catalogue of birds of the Americas and the adjacent islands. Part IX.
 Tersinidae–Thraupidae. Field Museum of Natural History Publications, Zoological Series 13 (9): v + 456 pp.
- Hellmayr, C.E. 1938. Catalogue of birds of the Americas and the adjacent islands. Part XI.
 Ploceidae—Catamblyrhynchidae—Fringillidae.
 Field Museum of Natural History Publications,
 Zoological Series 13 (11): vi + 662 pp.
- Holt, E.G. 1928. An ornithological survey of the Serra do Itatiaya, Brazil. Bulletin of the American Museum of Natural History 57 (5): 251–326.
- Howell, S.N.G., and S. Webb. 1995. A guide to the birds of Mexico and northern Central America.Oxford: Oxford University Press, xvi + 851 pp., 71 pls.
- Ingels, J. 1979. Remarks on specimens, holotype, description and subspecies of *Chlorophonia flavirost[r]is* Schlater (sic). Bulletin of the British Ornithologists' Club 99: 77–80.
- Ingold, J.L. 1993. Blue Grosbeak (*Guiraca caerulea*). In A. Poole and F. Gill (editors), The birds of North America. No. 79. Philadelphia: Academy of Natural Sciences.
- International Commission on Zoological Nomenclature. 1979. Opinion 1126. Tanagra cyanea
 Linnaeus, 1766 (Aves) conserved. Bulletin of Zoological Nomenclature 36: 24–26.
- International Commission on Zoological Nomenclature. 1999. International Code of Zoological Nomenclature. London: International Trust for Zoological Nomenclature 1999, 306 pp.
- International Commission on Zoological Nomenclature. 2002. Opinion 2004 (case 3167). Schistochlamys Reichenbach, 1850 and Neothraupis Hellmayr, 1936 (Aves, Passeriformes): conserved. Bulletin of Zoological Nomenclature 59: 151–152.
- Isler, M.I., and P.R. Isler. 1999. The tanagers. Washington, DC: Smithsonian Institution Press, 406 pp., 32 pls.
- Jacobi, A. 1923. Zoologische Ergebnisse der Walter Stötznerschen Expeditionen nach Szetschwan, Osttibet und Tschili auf Grund der Sammlungen und Beobachtungen Dr. Hugo Weigolds. 2. Teil. Aves: 4. Fringillidae und Ploceidae. Abhandlungen und Berichte der Museen für Tierkunde und Völkerkunde zu Dresden 16 (1): 22–37.
- Jaramillo, A. 2003. Birds of Chile. Princeton, NJ: Princeton University Press, 240 pp. + 96 pls.
- Kirwan, G.M. 2007. Studies of Socotran birds IV. Synonymization of six endemic bird taxa, with comments on the name *Onychognathus blythii creaghi*. Sandgrouse 29: 135–148, 11 pls.

- Klicka, J., A.J. Fry, R.M. Zink, and C.W. Thompson. 2001. A cytochrome-*b* perspective on *Passerina* bunting relationships. Auk 118: 611–623.
- Kunzmann, M.R., K. Ellison, K.L. Purcell, R.R. Johnson, and L.T. Haight. 2002. California Towhee (*Pipilo crissalis*). *In A. Poole and F. Gill* (editors), The birds of North America. No. 632. Philadelphia: Birds of North America, Inc.
- Latta, S. et al. 2006. Birds of the Dominican Republic and Haiti. Princeton, NJ: Princeton University Press, 258 pp. + 57 pls.
- La Touche, J.D.D. 1925–1930. A handbook of the birds of eastern China, volume 1. London: Taylor and Francis, xxi + 500 pp.
- Lawrence, G.N. 1851a. Descriptions of new species of birds of the genera *Conirostrum*, D'Orb. et Lafr., *Embernagra*, Less. and *Xanthornus*, Briss., together with a list of other species not heretofore noticed as being found within the limits of the United States. Annals of the Lyceum of Natural History of New York 5: 112–117.
- Lawrence, G.N. 1851b. Descriptions of new species of birds, of the genera *Toxostoma* Wagler, *Tyrannula* Swainson, and *Plectrophanes* Meyer. Annals of the Lyceum of Natural History of New York 5: 121–123.
- Lawrence, G.N. 1851c. Additions to North American ornithology. No. 2. Annals of the Lyceum of Natural History of New York 5: 123–124.
- Lawrence, G.N. 1861a. Catalogue of a collection of birds, made in New Granada by James McLeannan, Esq., of New York, with notes and descriptions of new species. Part I. Annals of the Lyceum of Natural History of New York 7: 288–302.
- Lawrence, G.N. 1861b. Catalogue of a collection of birds made in New Granada, by James McLeannan, Esq., of New York, with notes and descriptions of new species. Part II. Annals of the Lyceum of Natural History of New York 7: 315–334.
- Lawrence, G.N. 1862. Catalogue of a collection of birds made in New Granada, by James McLeannan, Esq., of New York, with notes and descriptions of new species. Part III. Annals of the Lyceum of Natural History of New York 7: 461–479
- Lawrence, G.N. 1863. Catalogue of a collection of birds made in New Granada, by James McLeannan, Esq., of New York, with notes and descriptions of new species. Part IV. Annals of the Lyceum of Natural History of New York 8: 1–13.
- Lawrence, G.N. 1864a. Descriptions of new species of birds of the families Tanagridae, Cuculidae, and Trochilidae, with a note on

- Panterpe insignis. Annals of the Lyceum of Natural History of New York 8: 41–46.
- Lawrence, G.N. 1864b. Descriptions of new species of birds of the families Caerebidae, Tanagridae, Icteridae, and Scolopacidae. Proceedings of the Academy of Natural Sciences of Philadelphia 16: 106–108.
- Lawrence, G.N. 1865a. Descriptions of new species of birds of the families Tanagridae, Dendrocolaptidae, Formicariidae, Tyrannidae, and Trochilidae. Annals of the Lyceum of Natural History of New York 8: 126–135.
- Lawrence, G.N. 1865b. Descriptions of six new species of birds from Central America. Annals of the Lyceum of Natural History of New York 8: 170–173.
- Lawrence, G.N. 1865c. Descriptions of four new birds from the Isthmus of Panama, New Granada. Proceedings of the Academy of Natural Sciences of Philadelphia 17: 106–108.
- Lawrence, G.N. 1867a. Notes on certain birds from New Granada, with descriptions of new species. Proceedings of the Academy of Natural Sciences of Philadelphia 19: 94–95.
- Lawrence, G.N. 1867b. Descriptions of new species of American birds. Annals of the Lyceum of Natural History of New York 8: 466–482.
- Lawrence, G.N. 1868. Descriptions of seven new species of American birds from various localities, with a note on *Zonotrichia melanotis*. Proceedings of the Academy of Natural Sciences of Philadelphia 20: 359–361, 429–430.
- Lawrence, G.N. 1871. Descriptions of three new species of American birds, with a note on *Eugenes spectabilis*. Annals of the Lyceum of Natural History of New York 10: 137–140.
- Lawrence, G.N. 1874. Descriptions of six supposed new species of American birds. Annals of the Lyceum of Natural History of New York 10: 395–399.
- Lawrence, G.N. 1875a. Descriptions of two new species of birds of the families Tanagridae and Tyrannidae. Annals of the Lyceum of Natural History of New York 11: 70–72.
- Lawrence, G.N. 1875b. Descriptions of five new species of American birds. Ibis (3) 5: 383–387, pl. IX.
- Lawrence, G.N. 1878a. Catalogue of the birds of Dominica from collections made for the Smithsonian Institution by Frederick A. Ober, together with his notes and observations. Proceedings of the United States National Museum 1: 48–69.
- Lawrence, G.N. 1878b. Descriptions of seven new species of birds from the island of St. Vincent, West Indies. Annals of the New York Academy of Sciences 1: 147–153.

- Lawrence, G.N. 1889. A new name for the species of *Sporophila* from Texas, generally known as *S. morelleti*. Auk 6: 53–54.
- LeCroy, M. 2003. Type specimens of birds in the American Museum of Natural History. Part 5. Passeriformes: Alaudidae–Mimidae. Bulletin of the American Museum of Natural History 278: 1–156.
- LeCroy, M. 2005. Type specimens of birds in the American Museum of Natural History. Part 6. Passeriformes: Prunellidae–Polioptilidae. Bulletin of the American Museum of Natural History 292: 1–132.
- LeCroy, M. 2008. Type specimens of birds in the American Museum of Natural History. Part 7. Passeriformes: Sylviidae–Petroicidae. Bulletin of the American Museum of Natural History 313: 1–298
- LeCroy, M. 2010. Type specimens of birds in the American Museum of Natural History. Part 8.
 Passeriformes: Pachycephalidae–Nectariniidae.
 Bulletin of the American Museum of Natural History 333: 1–178.
- LeCroy, M. 2011. Type specimens of birds in the American Museum of Natural History. Part 9. Passeriformes: Zosteropidae and Meliphagidae. Bulletin of the American Museum of Natural History 348: 1–193.
- LeCroy, M., and E.C. Dickinson. 2001. Systematic notes on Asian birds. 17. Types of birds collected in Yunnan by George Forrest and described by Walter Rothschild. Zoologische Verhandlingen (Leiden) 335: 183–198.
- LeCroy, M., and R. Sloss. 2000. Type specimens of birds in the American Museum of Natural History. Part 3. Passeriformes: Eurylaimidae–Rhinocryptidae. Bulletin of the American Museum of Natural History 257: 1–88.
- Lichtenstein, H. 1823. Verzeichniss der Doubletten des zoologischen Museums der Köigl. Universität zu Berlin nebst Beschreibung vieler bisher unbekannter Arten von Säugethieren, Vögeln, Amphibien und Fischen. Berlin: T. Trautwein, x + 118 pp., 1 pl.
- Lijtmaer, D.A., N.M.M. Sharpe, P.L. Tubaro, and S.C. Lougheed. 2004. Molecular phylogenetics and diversification of the genus *Sporophila* (Aves: Passeriformes). Molecular Phylogenetics and Evolution 33: 562–579.
- Martínez-Sánchez, J.C. and T. Will (editors). 2010. Thomas R. Howell's check-list of the birds of Nicaragua as of 1993. Ornithological Monographs 68: xvi + 108 pp., 4 maps.
- McCown, J.P. 1853. Facts and observations from notes taken when in Texas. Annals of the Lyceum of Natural History of New York 6: 9–14.
- McGregor, R.C. 1898. Description of a new *Ammodramus* from lower California. Auk 15: 265–267.

- McGregor, R.C. 1899a. Description of a new California Song Sparrow. Bulletin of the Cooper Ornithological Club 1 (2): 35.
- McGregor, R.C. 1899b. Notes on California Song Sparrows. Bulletin of the Cooper Ornithological Club 1 (5): 87–88.
- McGregor, R.C. 1899c. A new race of the Brown Towhee. Bulletin of the Cooper Ornithological Club 1: 11.
- McGregor, R.C. 1900. Description of a new *Pipilo*. Bulletin of the Cooper Ornithological Club 2: 43.
- McGregor, R.C. 1901. New Alaskan birds. Bulletin of the Cooper Ornithological Club 3 (1): 8.
- Mearns, E.A. 1890. Descriptions of a new species and three new subspecies of birds from Arizona. Auk 7: 243–251.
- Meise, W. 1938. Ueber parallele geographische Variation in der Vogelwelt Ostasiens. *In* Compte Rendu IX Congrès Ornithologique International, Rouen: 233–248. Rouen: Secrétariat du Congress, 543 pp.
- Meyer de Schauensee, R. 1951. The birds of the Republic of Colombia. Part IV. Caldasia 5 (25): 873–1112.
- Miller, A.H. 1941. Speciation in the avian genus *Junco*. University of California Publications in Zoology 44 (3): 173–434, 33 text figs.
- Miller, W. DeW. 1925. A new race of *Sicalis flaveola* from southeastern Brazil. Auk 42: 253–255.
- Miller, W. DeW., and L. Griscom. 1925. Further notes on Central American birds, with descriptions of new forms. American Museum Novitates 184: 1–16.
- Mlíkovský, J. 2009. Types of birds in the collections of the Museum and Institute of Zoology, Polish Academy of Sciences, Warszawa, Poland. Part 3: South American birds. Journal of the National Museum (Prague), Natural History Series 178 (5): 17–180.
- Morioka, H., E.C. Dickinson, T. Hiraoka, D. Allen, and T. Yamasaki. 2005. Types of Japanese birds. Tokyo: National Science Museum Monographs No. 28, 154 pp.
- Moore, R.T. 1934. A review of the races of *Buthraupis eximia* (Boissonneau). American Museum Novitates 715: 1–8.
- Naumburg, E.M.B. 1924. *Thraupis sayaca* and its allies. Auk 41: 105–116.
- Naumburg, E.M.B. 1930. The birds of Matto Grosso, Brazil. A report on the birds secured by the Roosevelt-Rondon Expedition. Bulletin of the American Museum of Natural History 60 (1): i–vii, 1–432, xvii pls., 43 figs., 5 maps.
- Neumann, O. 1902. From the Somali coast through southern Ethiopia to the Sudan. Geographical Journal 20: 373–401, map.

- Neumann, O. 1904. Vögel von Schoa und Süd-Äthiopien. Journal für Ornithologie 52: 321–410.
- Neumann, O. 1905. Vögel von Schoa und Süd-Äthiopien. Journal für Ornithologie 53: 184–243, 335–360.
- Nolan, V., Jr., et al. 2002. Dark-eyed Junco (*Junco hyemalis*). *In* A. Poole and F. Gill (editors), The birds of North America. No. 716. Philadelphia: Birds of North America, Inc.
- Oberholser, H.C. 1905. Notes on the nomenclature of certain genera of birds. Smithsonian Miscellaneous Collections 48 (3): 59–68.
- Ogilvie-Grant, W.R., and H.O. Forbes. 1899. The expedition to Socotra. 1. Descriptions of the new species of birds. Bulletin of the Liverpool Museums 2: 1–3.
- Ogilvie-Grant, W.R., and H.O. Forbes. 1903. Zoology of Sokotra and Ābd-el-Kuri. Birds. *In* H.O. Forbes (editor), The Natural History of Sokotra and Ābd-el-Kuri, pp. 21–72. London: Henry Young and Sons, 598 pp.
- Olson, S.L. 1981a. A revision of the subspecies of *Sporophila* ("*Oryzoborus*") *angolensis* (Aves: Emberizinae). Proceedings of the Biological Society of Washington 94: 43–51.
- Olson, S.L. 1981b. The nature of the variability in the variable seedeater in Panama (*Sporophila americana*: Emberizinae). Proceedings of the Biological Society of Washington 94: 380–390.
- Olson, S.L., and C. Violani. 1995. Some unusual hybrids of *Ramphocelus*, with remarks on evolution in the genus (Aves: Thraupinae). Bollettino del Museo Regionale di Scienze Naturali-Torino 13: 297–312.
- Oustalet, E. 1895. Sur quelques fringillidés (*Loxigilla*) des Antilles. Bulletin de la Société Zoologique de France 20: 184.
- Palmer, T.S. 1928. Notes on persons whose names appear in the nomenclature of California birds. A contribution to the history of West Coast ornithology. Condor 30: 261–307.
- Parkes, K.C. 1969. Some undescribed subspecies of tanagers from South America. Bulletin of the British Ornithologists' Club 89: 17–20.
- Parkes, K.C. 1993. Thraupis episcopus ehrenreichi (Reichenow) is a valid subspecies. Boletim do Museu Paraense Emilio Goeldi. Zoologia 9: 313–316.
- Paynter, R.A., Jr. (editor) in consultation with E.
 Mayr. 1970a. Check-list of birds of the world.
 Volume 13. Cambridge, MA: Museum of Comparative Zoology, xiv + 443 pp.
- Paynter, R.A., Jr. 1970b. Emberizinae. *In* R.A. Paynter, Jr. (editor) in consultation with E. Mayr, Check-list of birds of the world. Volume 13, pp. 3–214. Cambridge, MA: Museum of Comparative Zoology, xiv + 443 pp.

- Paynter, R.A., Jr. 1970c. Catamblyrhynchinae. *In*R.A. Paynter, Jr. (editor) in consultation with E.
 Mayr, Check-list of birds of the world.
 Volume 13, p. 215. Cambridge, MA: Museum of Comparative Zoology, xiv + 443 pp.
- Paynter, R.A., Jr. 1970d. Cardinalinae. *In* R.A.
 Paynter, Jr. (editor) in consultation with
 E. Mayr, Check-list of birds of the world.
 Volume 13, pp. 216–245. Cambridge, MA:
 Museum of Comparative Zoology, xiv + 443 pp.
- Paynter, R.A., Jr. 1978. Biology and evolution of the avian genus *Atlapetes* (Emberizinae). Bulletin of the Museum of Comparative Zoology 148: 323–369.
- Paynter, R.A., Jr. 1982. Ornithological gazetteer of Venezuela. Cambridge, MA: Museum of Comparative Zoology, iii + 245 pp., 2 maps.
- Paynter, R.A., Jr. 1988. Ornithological gazetteer of Chile. Cambridge, MA: Museum of Comparative Zoology, v + 331 pp., 2 maps.
- Paynter, R.A., Jr. 1989. Ornithological gazetteer of Paraguay, 2nd ed. Cambridge, MA: Museum of Comparative Zoology, iv + 61 pp., 2 maps.
- Paynter, R.A., Jr. 1992. Ornithological gazetteer of Bolivia, 2nd ed. Cambridge, MA: Museum of Comparative Zoology, vi + 187 pp., 2 maps.
- Paynter, R.A., Jr. 1993. Ornithological gazetteer of Ecuador, 2nd ed. Cambridge, MA: Museum of Comparative Zoology, ix + 247 pp., 2 maps.
- Paynter, R.A., Jr. 1995. Ornithological gazetteer of Argentina, 2nd ed. Cambridge, MA: Museum of Comparative Zoology, x + 1045 pp., 2 maps.
- Paynter, R.A., Jr. 1997. Ornithological gazetteer of Colombia, 2nd ed. Cambridge, MA: Museum of Comparative Zoology, ix + 537 pp., 2 maps.
- Paynter, R.A., Jr, and M.A. Traylor, Jr. 1991. Ornithological gazetteer of Brazil, 2 volumes. Cambridge, MA: Museum of Comparative Zoology, viii + 789 pp., 2 maps.
- Penard, F.P., and A.P. Penard. 1910. De Vogels van Guyana (Suriname, Cayenne en Demerara), volume 2. 's-Gravenhage: Martinus Nijhoff, 587 pp.
- Penard, T.E. 1924. Historical sketch of the ornithology of Surinam. De West-Indische Gids 6: 145–168.
- Peters, J.L. 1937. Thomas Edward Penard [Obituary]. Auk 54: 232–234.
- Phelps, W.H., and W.H. Phelps, Jr. 1963. Liste de las Aves de Venezuela con su distribucion, tomo 1, Parte 2. Passeriformes, segunda edicion.
 Boletin de la Sociedad Venezolana de Ciencias Naturales 24 (104 and 105): 1–479, 1 map.
- Phillips, A.R. 1962. Notas sistematicas sobre aves Mexicanas. I. Anales del Instituto de Biologia (1861) 32 (1 & 2): 333–381.

- Phillips, A.R., and R.W. Dickerman. 1957. Notes on the Song Sparrows of the Mexican plateau. Auk 74: 376–382.
- Post, W., and J.S. Greenlaw. 1994. Seaside Sparrow (*Ammodramus maritimus*). *In A. Poole* and F. Gill (editors), The birds of North America. No. 127. Philadelphia: Academy of Natural Sciences.
- Pruett, C.L., and K. Winker. 2010. Alaska Song Sparrows (*Melospiza melodia*) demonstrate that genetic marker and method of analysis matter in subspecies assignments. *In* K. Winker and S. Haig (editors), Avian subspecies, pp. 162–171. Ornithological Monographs 67: viii + 200 pp.
- Remsen, J.V. [Jr.]. 1993. Zoogeography and geographic variation of Atlapetes rufinucha (Aves: Emberizinae), including a distinctive new subspecies, in southern Peru and Bolivia. Proceedings of the Biological Society of Washington 103: 429–435.
- Remsen, J.V., Jr. 1997. A new genus for the Yellow-shouldered Grosbeak. *In* J.V. Remsen, Jr., (editor), Studies in Neotropical ornithology honoring Ted Parker, pp. 89–90. Ornithological Monographs 48: xiv + 918 pp.
- Remsen, J.V., Jr., and W.S. Graves, IV. 1995. Distribution patterns of *Buarremon* brush-finches (Emberizinae) and interspecific competition in Andean birds. Auk 112: 225–236.
- Ridgely, R.S., and G. Tudor. 1989. The birds of South America. The oscine passerines. Austin: University of Texas Press, xvi + 516 pp., 31 pls.
- Ridgely, R.S., and G. Tudor. 2009. Field guide to the songbirds of South America. The passerines. Austin: University of Texas Press, viii + 750 pp., 121 pls.
- Ridgway, R. 1894. Descriptions of twenty-two new species of birds from the Galapagos Islands. Proceedings of the United States National Museum 17: 357–370.
- Ridgway, R. 1896a. Preliminary description of some new birds from the Galapagos Archipelago. Proceedings of the United States National Museum 18: 293–294.
- Ridgway, R. 1896b. Birds of the Galapagos Archipelago. Proceedings of the United States National Museum 19: 459–670.
- Ridgway, R. 1901. The birds of North and Middle America. Part 1. Family Fringillidae—the finches. Bulletin of the United States National Museum 50: xxx + 715 pp., 20 pls.
- Rothschild, W. 1895. A new species of tanager. Novitates Zoologicae 2: 481.
- Rothschild, W. 1897a. [The Hon. Walter Rothschild sent the following description of a new *Rhamphocoelus*, which he proposed to call:–]. Bulletin of the British Ornithologists' Club 6: 32.

- Rothschild, W. 1897b. [The Hon. Walter Rothschild sent for exhibition three new species of birds from northern Ecuador, which he described as follows:—]. Bulletin of the British Ornithologists' Club 7: 5–6.
- Rothschild, W. 1898. [The Hon. Walter Rothschild sent the following communication:—]. Bulletin of the British Ornithologists' Club 7: 51–53.
- Rothschild, W. 1921. On a collection of birds from west-central and north-western Yunnan. Novitates Zoologicae 28: 14–67.
- Rothschild, W., and E. Hartert. 1899. A review of the ornithology of the Galapagos Islands. With notes on the Webster–Harris Expedition. Novitates Zoologicae 6: 85–205, pls. V, VI.
- Rothschild, W., and E. Hartert. 1900. [The Hon. Walter Rothschild and Mr. Ernst Hartert read the following notes:—]. Bulletin of the British Ornithologists' Club 11: 44–45.
- Rothschild, W., and E. Hartert. 1902. Further notes on the fauna of the Galapagos Islands. Novitates Zoologicae 9: 373–418.
- Salomonsen, F. 1931a. On the geographical variation of the Snow-bunting (*Plectrophenax nivalis*). Ibis (13) 1: 57–70.
- Salomonsen, F. 1931b. Ueber die grönlandischen Fringilliden. Ornithologische Monatsberichte 39: 112–113.
- Salvin, O. 1867. On some collections of birds from Veragua. Proceedings of the Zoological Society of London, 129–161.
- Salvin, O. 1895. On birds collected in Peru by Mr. O.T. Baron. Novitates Zoologicae 2: 1–22, pls. I. II
- Sánchez-González, L.A., A.G. Navarro-Sigüenza, A.T. Peterson, and J. García-Moreno. 2007. Taxonomy of *Chlorospingus ophthalmicus* in Mexico and northern Central America. Bulletin of the British Ornithologists' Club 127: 34–49.
- Schulenberg, T.S., D.F. Stotz, D.F. Lane, J.P. O'Neill, and T.A. Parker, III. 2007. Birds of Peru. Princeton, NJ: Princeton University Press, 656 pp., 304 pls.
- Sclater, P.L. 1855a. Characters of some new or imperfectly-described species of tanagers. Proceedings of the Zoological Society of London (1854), 95–98, pls. LXIV, LXV.
- Sclater, P.L. 1855b. On the birds received in collections from Santa Fé di Bogotá. Proceedings of the Zoological Society of London (1855), 131–164.
- Sclater, P.L. 1885. On some little-known species of tanagers. Ibis (5) 3: 271–275.
- Sclater, P.L., and O. Salvin. 1869. Descriptions of three new species of tanagers from Veragua. Proceedings of the Zoological Society of London (1869), 439–440.

- Sclater, P.L., and O. Salvin. 1878. On the collection of birds made by Prof. Steere in South America. Proceedings of the Zoological Society of London (1878), 135–142.
- Selander, R.B., and P. Vaurie. 1962. A gazetteer to accompany the "Insecta" volumes of the "Biologia Centrali-Americana." American Museum Novitates 2099: 1–70.
- Seltzer, L.E. (editor). 1962. The Columbia Lippincott gazetteer of the world. New York: Columbia University Press, 2148 pp. + 22 p. suppl.
- Sennett, G.B. 1888. Notes on the *Peucaea ruficeps* group, with a description of a new subspecies. Auk 5: 40–42.
- Sharpe, R.B. 1906. The history of the collections contained in the natural history departments of the British Museum. Vol. II. Separate historical accounts of the several collections included in the Department of Zoology. 3. Birds, pp. 79–515. London: Trustees of the British Museum, 515 pp.
- Sibley, C.G. 1950. Species formation in the redeyed towhees of Mexico. University of California Publications in Zoology 50 (2): 109–194, pls. 11–16, 18 text figs.
- Sibley, C.G., and B.L. Monroe, Jr. 1990. Distribution and taxonomy of birds of the world. New Haven, CT: Yale University Press, xxiv + 1111 pp.
- Sick, H. 1997. Ornitologia Brasileira. Edição revista e ampliada por José Fernando Pacheco. Rio de Janeiro: Nova Fronteira, 862 pp. + 47 pls.
- Siegel, D.C., and S.L. Olson. 2008. The birds of the Republic of Panamá. Part 5. Gazetteer and bibliography. Shipman, VA: Buteo Books, 516 pp.
- Silva, José Maria Cardoso da. 1990. Description of a new subspecies of *Saltator aurantiirostris*, with comments on *S. maxillosus*. Bulletin of the British Ornithologists' Club 110: 171–175.
- Stephens, L., and M.A. Traylor, Jr. 1983. Ornithological gazetteer of Peru. Cambridge, MA: Museum of Comparative Zoology, vi + 273 pp., 2 maps.
- Stephens, L., and M.A. Traylor, Jr. 1985. Ornithological gazetteer of the Guianas. Cambridge, MA: Museum of Comparative Zoology, v + 123 pp., 2 maps.
- Stiles, F.G. 1996. When black plus white equals gray: the nature of variation in the variable seedeater complex (Emberizidae: *Sporophila*). Ornitologia Neotropical 7: 75–107.
- Stiles, F.G. 2004. The Tumaco Seedeater (*Sporophila insulata*, Emberizidae): A species that never was? Ornitologia Neotropical 15: 17–30.
- Storer, R.W. 1970. Thraupinae, pp. 246–408, and Tersininae, pp. 408–409. *In* R.A. Paynter, Jr.

- (editor) in consultation with E. Mayr, Check-list of birds of the world. Volume 13. Cambridge, MA: Museum of Comparative Zoology, xiv + 443 pp.
- Swarth, H.S. 1913. A revision of the California forms of *Pipilo maculatus* Swainson, with a description of a new subspecies. Condor 15: 167–175.
- Sztolcman, J., and J. Domaniewski. 1927. Les types d'oiseaux au Musée Polonais d'Histoire Naturelle. Annales Zoologici Musei Polonici Historiae Naturalis 6: 95–194.
- Taczanowski, L., and H. Berlepsch. 1885. Troisième liste des oiseaux recueillis par M. Stolzmann dans l'Ecuadeur. Proceedings of the Zoological Society of London 1885: 67–124.
- Tate, G.H.H. 1928. The "lost world" of Mount Roraima. Natural History 28: 318–328.
- Tate, G.H.H. 1930. Notes on the Mount Roraima region. Geographical Review 20: 53–68, photographs and map.
- Tate, G.H.H. 1931. The ascent of Mount Turumiquire. Natural History 31: 539–548, photographs and maps.
- Tate, G.H.H. 1938. Auyantepui. Notes on the Phelps Venezuelan Expedition. Geographical Review 28: 452–474, photographs and map.
- Tate, G.H.H., and C.B. Hitchcock. 1930. The Cerro Duida region of Venezuela. Geographical Review 20: 31–52, photographs and map.
- Temminck, C.J., and M. Laugier de Chartrouse. 1820–1839. Nouveau recueil de planches coloriées d'oiseaux.... Paris: G. Dourour & E. d'Ocagne [or] G. Levrault, 102 pp., 600 pls.
- Times of London. 1967. The Times atlas of the world. Comprehensive edition. Boston: Houghton Mifflin, 123 pls., 272 pp.
- Townsend, C.H. 1923. Scientific results of the expedition to the Gulf of California in charge of C.H. Townsend, by the U.S. Fisheries steamship "Albatross," in 1911. Commander G.H. Burrage, U.S.N., Commanding. IX. Birds collected in lower California. Bulletin of the American Museum of Natural History 48 (1), 1–26, 1 pl.
- Underdown, C.E. 1931. On the status of *Chlorospingus olivaceus* (Bonaparte). Auk 48: 612.
- Underdown, C.E. 1932. A study of *Chlorospingus ophthalmicus* (Dubus) and its allies. Ibis (13) 2: 638–655.
- United States Board on Geographic Names, Guatemala. Gazetteer no. 94. Washington, DC: Office of Geography, Department of the Interior, 213 pp.
- United States Board on Geographic Names. 1973. Haiti. Washington, DC: Defense Mapping Agency, Topographic Center, 211 pp.
- United States Board on Geographic Names. 1976. Nicaragua. 2nd ed. Washington, DC: Defense Mapping Agency, Topographic Center, 129 pp.

- Vaurie, C. 1956a. Systematic notes on Palearctic birds. No. 22. Fringillidae: Emberiza schoeniclus. American Museum Novitates 1795: 1–13.
- Vaurie, C. 1956b. Systematic notes on Palearctic birds. No. 23. Fringillidae: the genera *Emberiza*, *Calcarius*, and *Plectrophenax*. American Museum Novitates 1805: 1–27.
- Vaurie, C. 1959. The birds of the Palearctic fauna. Passeriformes. London: H.F. and G. Witherby, xii + 762 pp.
- Vaurie, C. 1972. An ornithological gazetteer of Peru (based on information compiled by J.T. Zimmer). American Museum Novitates 2491: 1–36.
- Vian, J. 1869. Bruant Alléon, Elmberiza Alleonis, mihi, espèce nouvelle. Revue et Magasin de Zoologie (2) 21: 97–105.
- Vickery, P.D. 1996. Grasshopper Sparrow (Ammodramus savannarum). In A. Poole and F. Gill (editors), The birds of North America. No. 239. Philadelphia: Academy of Natural Sciences.
- Vuilleumier, F. 1969. Systematics and evolution in *Diglossa* (Aves, Coerebidae). American Museum Novitates 2381: 1–44.
- Warren, R.L.M., and C.J.O. Harrison. 1971. Type-specimens of birds in the British Museum (Natural History). Volume 2. Passerines. London: Trustees of the British Museum (Natural History), 628 pp.
- Weske, J.S., and J.W. Terborgh. 1974. *Hemispingus parodii*, a new species of tanager from Peru. Wilson Bulletin 86: 97–103.
- Wetmore, A. 1926. Observations on the birds of Argentina, Paraguay, Uruguay, and Chile. United States National Museum, Bulletin 133: iv + 448 pp., 20 pls., map.
- Wetmore, A. 1929. Descriptions of four new forms of birds from Hispaniola. Smithsonian Miscellaneous Collections 81 (1): 1–4.
- Wetmore, A., R.F. Pasquier, and S.L. Olson. 1984. The birds of the Republic of Panamá. Part 4. Washington, DC: Smithsonian Institution Press, vi + 670 pp., frontispiece.
- Wheelwright, N.T., and J.D. Rising. 1993. Savannah Sparrow (*Passerculus sandwichensis*). In A. Poole and F. Gill (editors), The birds of North America. No. 45. Philadelphia: Academy of Natural Sciences.
- White, C.M.N. 1963. A revised check list of African flycatchers, tits, tree creepers, sunbirds, white-eyes, honey eaters, buntings, finches, weavers and waxbills. Lusaka: Government Printer, iv + 218 pp.
- Wied, Prince Maximilian of. 1820. Reise nach Brasilien in den Jahren 1815 bis 1817, vol. 1. Frankfurt: Heinrich Ludwig Brönner, 380 pp.
- Wied, Prince Maximilian of. 1821. Reise nach Brasilien in den Jahren 1815 bis 1817, vol. 2. Frankfurt: Heinrich Ludwig Brönner, 345 pp.

- Wied, Prince Maximilian of. 1830. Beiträge zur Naturgeschichte von Brasilien, vol. 3, pt. 1. Weimar: Gr. H.S. priv. Landes-Industrie-Comptoirs, 1–636.
- Wied, Prince Maximilian of. 1831. Beiträge zur Naturgeschichte von Brasilien, vol. 3, pt. 2. Weimar: Gr. H.S. priv. Landes-Industrie-Comptoirs, 637–1277.
- Wier, J.T., E. Bermingham, M.J. Miller, J. Klicka, and M.A. González. 2008. Phylogeography of a morphologically diverse Neotropical montane species, the Common Bush-Tanager (*Chloros*pingus ophthalmicus). Molecular Phylogenetics and Evolution 47: 650–664.
- Wiley, R.H. 2010. Alfonso Olalla and his family. The ornithological exploration of Amazonian Peru. Bulletin of the American Museum of Natural History 343: 1–68, 7 figs., 2 tables.
- With, K.A. 1994. McCown's Longspur (*Calcarius mccownii*). *In A. Poole and F. Gill (editors)*, The birds of North America. No. 96. Philadelphia: Academy of Natural Sciences.
- Wynne, O.E. 1969. Names of birds of the world. Biographical key to authors and those commemorated. Fordingbridge, England: privately published, 246 pp.
- Zimmer, J.T. 1941. A new subspecies of *Arremon schlegeli*. Proceedings of the Biological Society of Washington 54: 133–136.
- Zimmer, J.T. 1942. Studies of Peruvian birds. No. XLIV. Notes on the genera *Diglossa* and *Cyanerpes*, with addenda to *Ochthoeca*. American Museum Novitates 1203: 1–15.
- Zimmer, J.T. 1943a. A new species of finch from Ecuador. Proceedings of the Biological Society of Washington 56: 33–34.
- Zimmer, J.T. 1943b. Studies of Peruvian birds. No. XLV. The genera Tersina, Chlorophonia, Tanagra, Tanagrella, Chlorochrysa, and Pipraeidea. American Museum Novitates 1225: 1–24.
- Zimmer, J.T. 1943c. Studies of Peruvian birds. No. XLVI. The genus *Tangara*. Part 1. American Museum Novitates 1245: 1–14.
- Zimmer, J.T. 1943d. Studies of Peruvian birds. No. XLVII. The genus *Tangara*. Part 2. American Museum Novitates 1246: 1–14.
- Zimmer, J.T. 1944. Studies of Peruvian birds. No. XLVIII. The genera *Iridosornis, Delothraupis, Anisognathus, Buthraupis, Compsocoma, Dubusia*, and *Thraupis*. American Museum Novitates 1262: 1–21.
- Zimmer, J.T. 1945. Studies of Peruvian birds. No. L. The genera *Ramphocelus, Pirange, Habia, Lanio*, and *Tachyphonus*. American Museum Novitates 1304: 1–26.
- Zimmer, J.T. 1946. A new subspecies of tanager from northeastern Colombia. Journal of the Washington Academy of Sciences 36: 389–390.

- Zimmer, J.T. 1947a. Studies of Peruvian birds. No. 51. The genera *Chlorothraupis, Creurgops, Eucometis, Trichothraupis, Nemosia, Hemithraupis,* and *Thlypopsis*, with additional notes on *Piranga*. American Museum Novitates 1345: 1–23.
- Zimmer, J.T. 1947b. Studies of Peruvian birds. No. 52. The genera *Sericossypha, Chlorospingus, Cnemoscopus, Hemispingus, Conothraupis, Chlorornis, Lamprospiza, Cissopis*, and *Schistochlamys*. American Museum Novitates 1367: 1–26.
- Zimmer, J.T. 1949. Studies of Peruvian birds. No. 54. The families Catamblyrhynchidae and Parulidae. American Museum Novitates 1428: 1–59.

APPENDIX 1

ROTHSCHILD'S PURCHASES OF SURINAM BIRDS BETWEEN 1902 AND 1908 COMPARED WITH INFORMATION IN LETTERS FROM W.A. PENARD, B. CHUNKOO, AND H.R. PUTSCHER

20 August 1902: Rothschild receives 123 specimens from Surinam

Penard to Rothschild, May 1902: offers Rothschild birdskins and eggs.

Penard to Rothschild, August 1902: 121 skins sent. Penard to Hartert, 19 September 1904: thanks Hartert for obtaining payment for the skins sent two years before.

27 October 1904: Rothschild receives 319 specimens from Surinam

Chunkoo to Hartert, 19 September 1904: Penard gave Hartert's name to Chunkoo, who will try to supply species Rothschild desires. He will send specimens "in a fortnight or so" as well as some birds "his friends" wish to have identified. "I do not collect birds solely for money, but some of my friends are writing a book on the birds of Guiana and it is more for their benefit, that I am on the lookout." This undoubtedly refers to the Penards.

Chunkoo to Hartert, 3 October 1904: receipt of 319 birdskins acknowledged.

17 February 1905: Rothschild receives from Chunkoo 156 specimens

Chunkoo to Hartert, 22 January 1905: 155 bird-skins ready to ship.

Chunkoo to Hartert, 6 February 1905: 155 specimens sent two weeks previously.

Chunkoo to Hartert, 19 February 1905: requests that any new species be named *penardi*.

- Zimmer, J.T. 1952. A new finch from northern Peru. Journal of the Washington Academy of Sciences 42: 103–104.
- Zimmer, J.T., and W.H. Phelps. 1952. A new race of the honey-creeper *Diglossa cyanea* from Venezuela. American Museum Novitates 1603: 1–2.
- Zink, R.M., and J.C. Avise. 1990. Patterns of mitochondrial DNA and allozyme evolution in the avian genus *Ammodramus*. Systematic Zoology 39: 148–161.

13 May 1905: Rothschild receives from Chunkoo 328, but keeps only 224 specimens

Penard to Hartert, 8 May 1905: "something has happened" with Chunkoo, so Rothschild should send the money to Penard or wait until further notice.

Chunkoo to Hartert, 6 June 1905: amount for 328 birds shoud be sent to Putscher (noted as "224 selected" on this letter).

Putscher to Hartert, 12 June 1905: notes that he is to receive payment for the skins.

8 January 1906: Rothschild receives from Chunkoo 458 + 61 specimens

Putscher to Hartert, 24 July 1905: \sim 1000 specimens in next shipment.

Putscher to Hartert, 4 December 1905: enclosed bill of lading for 2 cases with 977 birdskins collected in Surinam; 100 still in Rothschild's possession from previous shipment makes 1077 specimens. This is the last time duplicates will be included and any that are not wanted should be kept or thrown away. In the future he will collect inland.

April 1906: Rothschild selects from Putscher 70

Putscher to Hartert, 2 July 1906: acknowledges payment of £100 for previous shipments and requests payment for the 70 skins selected from the last shipment. Again, says that he presents to Rothschild any that he had not selected. There is a note on this letter: "70 skins 4/6 £15.15.0."

26 May 1907: Rothschild selects from Chunkoo (Mus) 42 There is no letter relevant to this shipment.

It isn't clear how many of the nearly 1000 specimens shipped by Putscher in December 1905 or by Chunkoo in May 1907 were kept by Rothschild. He records receiving 561 specimens in those two shipments. The difference between the 1538 specimens now in AMNH and the 892 known to have been paid for is 646. From the correspondence, it is clear that he was free to deal with the remaining specimens in any way he wished.

INDEX

acutirostris, Geospiza, 38 adusta, Melospiza, 13 affinis, Camarhynchus, 40 affinis, Diglossa, 102 affinis, Emberiza, 7 Aimophila, 20 alamoris, Anisognathus, 87 alamoris, Compsocoma, 87 alaudinus, Phrygilus, 23 albemarlei, Certhidea, 42 albigularis, Spermophila, 30 albilatera, Diglossa, 102 albi-latera, Diglossa, 102 albinucha, Atlapetes, 46 albitempora, Chlorospingus, 65 Alleonis, Emberiza, 8 alticola, Poospiza, 24 altirostris, Miliaria, 3 amabilis, Tangara, 97 Amaurospiza, 33 amazonica, Hemithraupis, 70 amazonica, Schistochlamys, 61 americana, Sporophila, 29 Ammodramus, 16 analis, Catamenia, 34 analoides, Catamenia, 34 angolensis, Oryzoborus, 32 Anisognathus, 86 annectens, Tangara, 94 annectens, Thraupis, 84 antioquiae, Pseudochloris, 25 antiquorum, Emberiza, 6 Arremon, 45, 51 Arremonops, 46 arthus, Tangara, 93 arundinaceus, Cynchramus, 9 assimilis, Buarremon, 52 Atlapetes, 46 atricapilla, Fringilla, 31 atricapillus, Arremon, 52 atricapillus, Buarremon, 51 atricapillus, Tachyphonus, 77 atriceps, Phrygilus, 22 atricollis, Saltator, 58 atricollis, Tanagra, 58 atrimaxillaris, Habia, 78 atrimaxillaris, Phoenicothraupis, 78 atripennis, Saltator, 56 atrosericeus, Ramphocoelus, 79 aurantiirostris, Arremon, 45 aurantiirostris, Saltator, 57 aureoventris, Pheuticus, 54 auricapilla, Tanagra, 77 auriceps, Tangara, 92 auricrissa, Tanagra, 85 aurifrons, Ammodramus, 20 aurifrons, Myospiza, 20 aurigularis, Hemithraupis, 71 aurita, Sporophila, 29 aurulenta, Tangara, 93 azteca, Melospiza, 12 baeri, Paroaria, 54

baezae, Anisognathus, 87 baezae, Compsocoma, 87 bahiae, Hemithraupis, 70 Bangsia, 85 baroni, Atlapetes, 49 baroni, Buarremon, 49 barringtoni, Geospiza, 39 barrosi, Melanodera, 23 bauri, Geospiza, 37 becki, Certhidea, 41 berlepschi, Dacnis, 99 berlepschi, Tanagra, 81 bicolor, Tiaris, 35 bifasciata, Certhidea, 43 bindloei, Camarhynchus, 40 boehmi, Chlorophonia, 90 bogotensis, Sicalis, 26 bogotensis, Spermophila, 29 bogotensis, Sporophila, 29 bogotensis, Tangara, 95 boliviana, Hemithraupis, 69 bolivianus, Saltator, 57 bonariensis, Thraupis, 85 borealis, Plectrophanes, 10 botterii, Aimophila, 21 bouvreuil, Loxia, 32 bouvreuil, Sporophila, 32 Brachyspiza, 14 brasiliensis, Sicalis, 26 brevipes, Tachyphonus, 76 brevirostris, Oryzoborus, 32 brevirostris, Pyrrhula, 32 brissoni, Cyanocompsa, 59 brissonii, Fringilla, 59 browni, Sicalis, 25 brunneifrons, Euphonia, 90 brunnescens, Atlapetes, 47 Buarremon, 44 Buthraupis, 85 caerulea, Cyanerpes, 100 caerulea, Guiraca, 60 caerulea, Passerina, 60 caeruleoventris, Iridosornis, 87 caerulescens, Anisognathus, 86 caerulescens, Diglossa, 104 caerulescens, Passerina, 60 caerulescens, Poecilothraupis, 86 caerulescens, Porphyrospiza, 60 caerulescens, Sporophila, 31 caerulescens, Tanagra, 60 caeruleus, Hylophilus, 72 caesius, Thamnomanes, 103 calandra, Emberiza, 3 Calcarius, 10 calliparaea, Chlorochrysa, 91 Calliste, 91 Calyptophilus, 72 Camarhynchus, 40 canadensis, Caryothraustes, 55 canadensis, Pitylus, 55 canicaudus, Cardinalis, 54 caniceps, Junco, 16

caniceps, Saltator, 56 canidorsum, Arremon, 46 canigularis, Chlorospingus, 67 canneti, Cynchramus, 9 capensis, Brachyspiza, 14 capensis, Zonotrichia, 13 capistrata, Schistochlamys, 61 capistrata, Tanagra, 61 capistratus, Orchestichus, 61 capitalis, Ramphocelus, 79 capitalis, Ramphocoelus, 79 carabayae, Zonotrichia, 14 carbo, Ramphocelus, 79 Cardinalinae, 54 Cardinalis, 54 cardinalis, Cardinalis, 54 caribaeus, Ammodramus, 19 caribaeus, Coturniculus, 19 carmioli, Chlorothraupis, 73 carnegiei, Euphonia, 90 carolae, Pipilo, 45 Caryothraustes, 55 cassinii, Mitrospingus, 73 Cassinii, Tachyphonus, 73 castaneiceps, Malacothraupis, 74 Catamblyrhynchinae, 54 Catamblyrhynchus, 54 Catamenia, 34 caucae, Ammodramus, 18 caucae, Atlapetes, 49 caucae, Cyanocompsa, 59 caudacutus, Ammodramus, 18 cayana, Tangara, 96 cayanus, Saltator, 58 celata, Chlorornis, 63 celatus, Chlorornis, 63 celicae, Atlapetes, 50 centralis, Hemithraupis, 71 centralis, Nemosia, 71 Certhidea, 41 Charitospiza, 53 charmesi, Lamprospiza, 62 chaupensis, Tangara, 97 Chazaliei, Loxigilla, 35 cherriei, Ammodramus, 20 cherriei, Cyanerpes, 100 cherriei, Myospiza, 20 Chlorochrysa, 91 chloronotus, Phrygilus, 22 Chlorophonia, 90 Chlorornis, 63 Chlorospingus, 63, 77 Chlorothraupis, 73 chrysopterus, Ramphocelus, 80 Chrysothlypis, 71 chugurensis, Atlapetes, 49 cia, Emberiza, 4 cinctus, Saltator, 58 cinerea, Spermophila, 28 cinereola, Sporophila, 31 cioides, Emberiza, 5 cismontanus, Junco, 15 citrina, Pseudochloris, 25 citrina, Sicalis, 25 citrinella, Emberiza, 8

citrinella, Tanagra, 92 citrinifrons, Catamblyrhynchus, 54 clara, Sporophila, 31 cleonensis, Melospiza, 11 coelestis, Tanagra, 82 coerulescens, Saltator, 57 coerulescens, Tanagra, 60 collaris, Atlapetes, 51 collaris, Sporophila, 31 coloratus, Atlapetes, 48 columbiana, Myospiza, 19 columbiana, Sicalis, 25 composita, Thraupis, 85 compressirostris, Camarhynchus, 40 Compsocoma, 87 concolor, Amaurospiza, 33 conirostris, Arremonops, 46 conirostris, Geospiza, 39 connectens, Aimophila, 20 connectens, Junco, 16 connectens, Ramphocelus, 79 connectens, Rhamphocelus, 79 corvina, Sporophila, 29 Coryphospingus, 53 costaricensis, Zonotrichia, 13 Coturniculus, 19 couesi, Junco, 16 crassirostris, Fringilla, 32 crassirostris, Miliaria, 4 crassirostris, Oryzoborus, 32 Creurgops, 74 crissalis, Pipilo, 45 cristata, Habia, 79 cristata, Phaenicothraupis, 79 cristatus, Tachyphonus, 74 cryptorhis, Diglossa, 104 cucullata, Buthraupis, 85 cucullata, Tangara, 96 cyanea, Chlorophonia, 91 cyanea, Cyanocompsa, 59 cyanea, Diglossa, 105 cyanea, Loxia, 59 cyanea, Passerina, 59 cyaneicollis, Tangara, 97 cyanella, Emberiza, 60 Cyanerpes, 100 cyaneus, Cyanerpes, 100 cyanicollis, Tangara, 97 cyanocephala, Sporathraupis, 84 cyanocephala, Tanagra, 85 cyanocephala, Tangara, 92 cyanocephala, Thraupis, 84 Cyanocompsa, 59 cyanoides, Cyanocompsa, 59 cyanoleucus, Hylophilus, 72 cyanomelas, Tanagra, 99 cyanomelas, Tangara, 99 cyanonota, Buthraupis, 85 cyanotropus, Procnias, 105 cyanoventris, Tangara, 92 Cynchramus, 8 Cypsnagra, 61 Dacnis, 99 darwini, Geospiza, 39 dearborni, Cyanocompsa, 60

dentatus, Creurgops, 74 diadema, Catamblyrhynchus, 54 difficilis, Geospiza, 38 Diglossa, 101 diluta, Chlorornis, 63 dilutior, Euphonia, 89 dilutior, Tanagra, 89 dilutus, Chlorornis, 63 dimidiatus, Ramphocelus, 80 dispar, Cyanerpes, 100 dispar, Diglossa, 105 diversus, Chlorospingus, 66 Dolospingus, 33 dorsalis, Myospiza, 20 drownei, Certhidea, 41 dubia, Geospiza, 37 Dubusia, 88 dubusia, Iridosornis, 87 duidae, Atlapetes, 51 duidae, Diglossa, 103 duidae, Emberizoides, 27 dunstalli, Rhamphocoelus, 80 duvida, Thraupis, 84 dwighti, Chlorospingus, 64 ehrenreichi, Thraupis, 82 elegans, Tanagra, 92 elegantissima, Euphonia, 88 Emberiza, 3 Emberizidae, 3 Emberizinae, 3 Emberizoides, 27 Embernagra, 46 emiliae, Calliste, 95 eminens, Chlorospingus, 64 episcopus, Thraupis, 82 erythrogenys, Emberiza, 4 eucosma, Charitospiza, 53 Euetheia, 35 Euphonia, 88 eximia, Buthraupis, 86 falcifer, Pipilo, 44 fallax, Tachyphonus, 74 fasciata, Melospiza, 11 fimbriatus, Arremon, 52 fimbriatus, Buarremon, 52 fisheri, Ammodramus, 17 flammiceps, Tanagra, 78 flammigerus, Ramphocelus, 80 flaveola, Sicalis, 26 flaviceps, Atlapetes, 50 flavicollis, Hemithraupis, 71 flavicollis, Nemosia, 71 flavigularis, Chlorospingus, 66 flavirostris, Chlorophonia, 90 flaviventris, Tachyphonus, 77 flavovirens, Buarremon, 67 flavovirens, Chlorospingus, 67 floresae, Emberizoides, 27 florida, Tangara, 92 forbesi, Atlapetes, 51 Forbesi, Fringillaria, 7 fortipes, Spermophila, 29 fortis, Geospiza, 37 Fringilla, 29 Fringillaria, 6

fringilloides, Dolospingus, 33 frontalis, Caryothraustes, 55 frontalis, Hemispingus, 68 frontalis, Pitylus, 55 frugivorus, Calyptophilus, 73 fulgentissima, Chlorochrysa, 91 fuliginosa, Fringilla, 35 fuliginosa, Geospiza, 37 fuliginosa, Tiaris, 35 fuliginosus, Tiaris, 35 fulvicrissa, Euphonia, 89 fumosa, Phonipara, 35 fumosus, Tiaris, 35 fuscicauda, Habia, 78 fuscipygius, Atlapetes, 47 fusco-olivaceus, Atlapetes, 50 fuscoolivaceus, Atlapetes, 50 fuscus, Pipilo, 45 gayi, Phrygilus, 22 georgebarrowcloughi, Diglossa, 103 Geospiza, 36 geospizopsis, Phrygilus, 22 gigas, Aimophila, 21 gilliardi, Diglossa, 103 glauca, Diglossa, 104 glaucus, Thamnomanes, 103 gloriosissima, Diglossa, 101 godlewskii, Emberiza, 5 goodsoni, Tangara, 93 grandior, Amaurospiza, 33 grandis, Phrygilus, 22 grandis, Saltator, 57 grenadensis, Loxigilla, 36 griseipectus, Atlapetes, 46 griseiventris, Catamenia, 34 groenlandicus, Plectrophanes, 10 guira, Hemithraupis, 69 Guiraca, 59 gularis, Tangara, 97 guttata, Tangara, 95 guttatus, Passerculus, 16 gutturalis, Atlapetes, 46 gyrola, Tangara, 95 habeli, Camarhynchus, 40 Habia, 78 Haemophila, 23 halophilus, Ammodramus, 16 harterti, Geospiza, 37 hellmayri, Saltator, 57 Hemispingus, 67 Hemithraupis, 69 henshawi, Junco, 16 herbicola, Emberizoides, 27 hesperis, Saltator, 57 Heterospingus, 74 hicksii, Sporophila, 29 hirundinacea, Cypsnagra, 61 holti, Sicalis, 26 hortulana, Emberiza, 6 huancabambae, Zonotrichia, 15 huarandosae, Tachyphonus, 75 humeralis, Ammodramus, 19 humeralis, Myospiza, 19 humeralis, Parkerthraustes, 55 humeralis, Pytilus, 55

hyemalis, Junco, 15 Hylophilus, 70 hypochondriacus, Emberizoides, 27 hypoleuca, Sporophila, 31 ibarrorum, Aimophila, 21 icteronotus, Ramphocelus, 80 ignicapillus, Iridosornis, 87 immaculatus, Saltator, 59 inca, Tangara, 97 incae, Diglossa, 104 Incaspiza, 23 incertus, Camarhynchus, 41 indigotica, Diglossa, 104 inexpectata, Arremonops, 46 inexpectatus, Arremonops, 46 inexpectatus, Rhamphocoelus, 81 ingersolli, Melospiza, 11 insignis, Hemispingus, 68 insignis, Tachyphonus, 76 insularis, Fringillaria, 6 insularis, Habia, 78 insularis, Spermophila, 28 insulata, Sporophila, 32 intensa, Chlorophonia, 91 interfusa, Guiraca, 60 interfusa, Passerina, 60 intermedia, Emberiza, 9 intermedia, Geospiza, 39 intermedia, Spermophila, 28 intermedia, Sporophila, 28 intermedius, Saltator, 55 interna, Nemosia, 72 intricatus, Ammodramus, 18 Iridosornis, 87 iteratus, Hemispingus, 68 iteratus, Saltator, 57 iugularis, Fringilla, 58 jacapa, Rhamphocelus, 79 jacarini, Volatinia, 28 jamesi, Pipilo, 45 johannae, Calliste, 92 johannae, Tangara, 92 jugularis, Tanagra, 58 juncicola, Ammodramus, 17 juncicola, Passerherbulus, 17 Junco, 15 junicola, Ammodramus, 18 labradorides, Tangara, 97 lacrymosus, Anisognathus, 86 laeta, Haemophila, 24 laeta, Incaspiza, 24 Lanio, 77 lapponicus, Calcarius, 10 Laprospiza, 62 latinuchus, Atlapetes, 49 lavinia, Tangara, 95 lawrencii, Lanio, 77 leopoldinae, Sicalis, 25 leotaudi, Chlorospingus 77 leucophaea, Schistochlamis, 61 leucophaea, Tanagra, 61 leucopogon, Fringilla, 31 leucoptera, Piranga, 79 leucoptera, Sporophila, 31 leucotis, Melozone, 45

Loxigilla, 35 luctuosus, Tachyphonus, 77 luteiventris, Sicalis, 26 luteola, Certhidea, 43 luteoviridis, Pselliophorus, 53 lutescens, Chlorothraupis, 73 macarenae, Chlorospingus, 64 macropteryx, Thlypopsis, 69 macrourus, Emberizoides, 27 maculatus, Pipilo, 44 maculifrons, Hemispingus, 67 madeirae, Tachyphonus, 75 magnirostris, Chlorothraupis, 73 magnirostris, Geospiza, 36 magnus, Saltator, 56 major, Diglossa, 103 major, Tanagra, 82 major, Thraupis, 83 Malacothraupis, 74 manimbe, Myospiza, 19 margaritae, Calliste, 96 margaritae, Sporathraupis, 84 margaritae, Tangara, 96 margaritae, Thraupis, 84 marginatus, Chlorospingus, 66 maritimus, Ammodramus 17 maritimus, Passerherbulus, 17 maximiliani, Oryzoborus, 32 maximus, Saltator, 56 mccownii, Calcarius, 10 McCownii, Plectrophanes, 10 mearnsi, Junco, 16 media, Calliste, 91 media, Euphonia, 89 media, Tanagra, 89 media, Tangara, 91 mediana, Thraupis, 82 medianus, Chlorospingus, 66 melanocephala, Fringilla, 31 Melanodera, 23 melanogaster, Tangara, 98 melanoleuca, Lamprospiza, 62 melanopis, Schistochlamys, 61 melanops, Trichothraupis, 78 melanoptera, Thraupis, 84 melanotis, Hemispingus, 69 melodia, Melospiza, 11 Melopyrrha, 33 Melospiza, 11 Melozone, 45 mentalis, Certhidea, 42 mentalis, Diglossa, 104 meridionalis, Miliaria, 4 merrilli, Melospiza, 11 mesochrysa, Euphonia, 89 mesochrysa, Tanagra, 89 mexicana, Calliste, 91 mexicana, Melospiza, 12 mexicana, Tangara, 91 microrhynchus, Cyanerpes, 100 Miliaria, 3 minimbe, Myospiza, 19 minor, Geospiza, 37 Mitrospingus, 73 montana, Buthraupis, 85

montanus, Junco, 16 parodii, Hemispingus, 67 morelleti, Sporophila, 30 parva, Sporophila, 30 morphna, Melospiza, 11 parva, Tangara, 95 murallae, Sporophila, 30 parvirostris, Atlapetes, 47 parvirostris, Chlorospingus, 66 mutanda, Sporophila, 31 Myospiza, 19 parzudakii, Tangara, 93 mystacalis, Diglossa, 102 Passerculus, 16 napensis, Tachyphonus, 76 Passerherbulus, 17 Napensis, Tachyphonus, 76 Passerina, 59 paulus, Chlorospingus, 67 nationi, Atlapetes, 51 Nemosia, 71 pectoralis, Aimophila, 21 Nesospingus, 64 pectoralis, Diglossa, 102 niceae, Melospiza, 12 peninsulae, Ammodramus, 17 nigra, Melopyrrha, 33 perenensis, Tangara, 94 nigriceps, Chlorospingus, 65 personata, Haemophila, 23 nigriceps, Pitylus, 57 personata, Incaspiza, 23 nigriceps, Saltator, 57 personatus, Atlapetes, 51 nigricollis, Sporophila, 31 peruviensis, Volatinia, 28 nigrifrons, Arremon, 52 Peucaea, 21 nigrifrons, Buarremon, 52 Phaenicothraupis, 78 nigrifrons, Chlorospingus, 67 phelpsi, Tangara, 94 nigrifrons, Hemispingus, 67 Pheuticus, 54 nigrior, Melozone, 45 phillipsi, Tangara, 98 nigroaurantia, Sporophila, 32 phoeniceus, Cardinalis, 55 nigrostriata, Myospiza, 19 Phoenicothraupis, 78 nivalis, Plectrophenax, 10 Phonipara, 35 noctis, Loxigilla, 35 Phrygilus, 22 nuchalis, Dolospingus, 33 pileata, Fringilla, 53 obscura, Thraupis, 83 pileata, Nemosia, 72 obscurior, Atlapetes, 48 pileatus, Chlorospingus, 66 Ocai, Buarremon, 44 pileatus, Coryphospingus, 53 ocai, Pipilo, 44 Pipilo, 44 occidentalis, Tangara, 93 Piranga, 79 olivacea, Certhidea, 41 Pitylus, 55 olivacea, Chlorospingus, 64 piurae, Hemispingus, 69 olivacea, Poospiza, 64 Plectrophanes, 10 olivascens, Pseudochloris, 25 Plectrophenax, 10 omissa, Emberiza, 5 plumbea, Diglossa, 101 omissa, Euphonia, 89 plumbea, Fringilla, 29 omoensis, Emberiza, 7 plumbea, Sporophila, 29 ophthalmicus, Chlorospingus, 64 Poecilothraupis, 86 oreganus, Junco, 16 Poospiza, 24, 64 oregonus, Junco, 16 Porphyrospiza, 60 ornata, Fringilla, 53 portoricensis, Spindalis, 81 ornata, Thlypopsis, 69 portoricensis, Tanagra, 81 ortizi, Incaspiza, 24 Procnias, 105 Oryzoborus, 28, 32 productus, Camarhynchus, 41 propinqua, Geospiza, 39 pachyrhyncha, Geospiza, 36 propinqua, Loxigilla, 36 pacifica, Volatinia, 28 pacificus, Cyanerpes, 101 propinquus, Tachyphonus, 74 pallasi, Emberiza, 8 Pselliophorus, 53 pallidigula, Cypsnagra, 61 pallidigula, Tachyphonus, 75 Pseudochloris, 25 pseudo-pyrrhuloides, Cynchramus, 8 pallidinucha, Atlapetes, 48 psittacula, Camarhynchus, 40 pallidinuchus, Atlapetes, 48 punctata, Tangara, 94 punctulatus, Chlorospingus, 65 pallidior, Emberiza, 9 pallidus, Camarhynchus, 41 punensis, Phrygilus, 22 palmarum, Tanagra, 84 purpurascens, Euphonia, 89 purpurascens, Passerina, 60 palmarum, Thraupis, 84 palpebrosa, Poecilothraupis, 86 purpurea, Euphonia, 88 papallactae, Atlapetes, 49 pyrrhomelas, Fringilla, 32 par, Emberiza, 4 pyrrhomelas, Pyrrhula, 32 parellina, Cyanocompsa, 60 pyrrhuloides, Emberiza, 9 parkesi, Saltator, 58 Pytilus, 55 Paroaria, 54 Ramphocelus, 79

Ramphocoelus, 79 reiseri, Emberiza, 9 repetens, Pipilo, 44 Rhamphocelus, 79 Rhamphocoelus, 79 ridgwayi, Certhidea, 43 ridgwayi, Junco, 16 ridgwayi, Loxigilla, 35 riefferii, Chlorornis, 63 rooensis, Phoenicothraupis, 78 roraimae, Brachyspiza 14 roraimae, Zonotrichia, 14 rosenbergi, Nemosia, 71 rothschildi, Bangsia, 85 rothschildi, Buthraupis, 85 rothschildii, Cyanocompsa, 59 Rothschildii, Guiraca, 59 rubica, Habia, 78 rubricollis, Tanagra, 92 rubrifrons, Heterospingus, 74 rubrifrons, Tachyphonus, 74 ruficapilla, Hemithraupis, 70 ruficapillus, Schistochlamys, 61 ruficauda, Aimophila, 20 ruficeps, Aimophila, 21 ruficeps, Hylophilus, 70 ruficeps, Peucaea, 21 ruficervix, Tangara, 97 ruficollis, Cypsnagra, 61 rufigenis, Atlapetes, 51 rufigenis, Buarremon, 51 rufinucha, Atlapetes, 50 rufirostris, Fringilla, 31 rufiventris, Euphonia, 90 rufivertex, Iridosornis, 87 rufi-vertex, Iridosornis, 87 rufivirgata, Embernagra, 46 rufivirgatus, Arremonops, 46 salmoni, Chrysothlypis, 71 Saltator, 55 salvini, Certhidea, 42 salvini, Phoenicothraupis, 78 sanaka, Melospiza, 11 sandwichensis, Passerculus, 16 santarosae, Arremon, 45 savannarum, Ammodramus, 18 savannarum, Coturniculus, 19 sayaca, Thraupis, 83 scandens, Geospiza, 38 schistacea, Diglossa, 102 schistacea, Spermophila, 28 schistacea, Sporophila, 28 schistaceifrons, Catamenia, 34 Schistochlamys, 61 schlegeli, Arremon, 46 schoeniclus, Emberiza, 8 scottii, Aimophila, 21 scottii, Peucaea, 21 seebohmi, Atlapetes, 50 semicollaris, Spermophila, 29 sennetti, Ammodramus, 18 septentrionalis, Cynchramus, 8 septentrionalis, Geospiza, 38 septentrionalis, Miliaria, 4 septentrionalis, Zonotrichia, 13

sharpei, Euetheia, 35 sharpei, Pseudochloris, 25 sharpei, Sicalis, 25 sharpei, Sporophila, 30 sharpei, Tiaris, 35 shufeldti, Junco, 16 Sicalis, 25 signata, Tangara, 98 signata, Tangrella, 98 similis, Saltator, 56 simillima, Geospiza, 37 simonsi, Atlapetes, 51 socotrana, Emberiza, 6 socotrana, Fringillaria, 6 soderstromi, Catamenia, 34 söderstromi, Catamenia, 34 somptuosa, Compsocoma, 87 somptuosus, Anisognathus, 87 sordida, Pseudochloris, 25 sordidus, Buarremon, 48 sororia, Hemithraupis, 71 speculiferus, Chlorospingus, 63 Spermophila, 28 sphenurus, Emberizoides, 27 Spindalis, 81 Sporathraupis, 84 Sporophila, 28 steinbacheri, Emberiza, 8 stictocephala, Dubusia, 88 strenua, Geospiza, 37 striatipectus, Saltator, 59 subcalcarata, Emberiza, 10 subcalcaratus, Calcarius, 10 subnivalis, Emberiza, 10 subsimilis, Iridosornis, 87 subvirgatus, Ammodramus, 18 superciliaris, Hemispingus, 67 superciliaris, Tanagra, 56 surinamensis, Nemosia, 72 surinamus, Tachyphonus, 76 tacarcunae, Arremon, 52 tacarcunae, Buarremon, 51 tacarcunae, Chlorospingus, 65 Tachyphonus, 73 taeniata, Dubusia, 88 tahapisi, Emberiza, 6 Tanagra, 56, 60, 71, 81 Tangara, 91 Tangrella, 98 tavarae, Euphonia, 89 tavarae, Tanagra, 89 taylori, Melopyrrha, 33 telasco, Sporophila, 32 terborghi, Atlapetes, 50 terminalis, Pheuticus, 54 Tersina, 105 Tersininae, 105 tertius, Calyptophilus, 72 Thlypopsis, 69 Thraupinae, 61 Thraupis, 82 Tiaris, 35 tilcarae, Saltator, 58 tocantinsi, Zonotrichia, 14 tolimae, Tangara, 95

torquatus, Arremon, 52 torqueola, Sporophila, 30 torridus, Oryzoborus, 33 tovarensis, Diglossa, 105 Trichothraupis, 77 tucumanus, Phrygilus, 23 tyrianthina, Diglossa, 104 ultramarina, Dacnis, 99 unicincta, Diglossa, 102 unicolor, Phrygilus, 22 uropygialis, Pheuticus, 54 uropygialis, Sicalis, 25 urubambae, Hemispingus, 68 urubambae, Tangara, 93 urubambae, Thraupis, 83 vagans, Emberiza, 5 valida, Miliaria, 4 velia, Tangara, 98 velia, Tangrella, 98 venezuelae, Piranga, 79 venezuelae, Zonotrichia, 14 venezuelensis, Diglossa, 102 venturii, Phrygilus, 23 venusta, Dacnis, 99 veraguensis, Diglossa, 101 versicolor, Calliste, 96 versicolor, Passerina, 60

versicolor, Tangara, 96 villai, Melospiza, 12 vinacea, Habia, 78 vinacea, Phaenicothraupis, 78 vincens, Euphonia, 88 violacea, Euphonia, 88 violaceus, Cyanerpes, 100 viridis, Tersina, 105 Volatinia, 28 vulcanica, Aimophila, 21 watkinsi, Incaspiza, 24 weigoldi, Emberiza, 5 xanthogaster, Euphonia, 89 xanthogaster, Tanagra, 89 xanthogastra, Euphonia, 90 xanthogastra, Tangara, 94 xanthogramma, Melanodera, 23 xanthogrammus, Phrygilus, 23 xanthopygius, Tachyphonus, 74 xanthornus, Ammodramus, 19 yuriria, Melospiza, 12 zacapu, Melospiza, 13 zamorae, Myospiza, 20 zamorae, Tangara, 94 zimmeri, Buthraupis, 86 Zonotrichia, 13