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Type specimens of birds in the collections of the Natural History Museum of Geneva

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Abstract: We present an annotated list of the 63 type specimens of birds held in the collections of the Natural History Museum of Geneva, Switzerland. These specimens originate mainly from the collections of two ornithologists, Henri Jouard who worked on European passerines, and Thomas Horsfield who collected and described birds from Java.

Keywords: Aves - Horsfield - Java - Jouard - Natural History Museum of Geneva - type specimens.

INTRODUCTION

The bird collection of the Natural History Museum of Geneva (hereafter MHNG) currently holds (January 2015) over 45 600 items, of which ca. 24 000 are study skins or mounted specimens. The collection is rich in specimens acquired during the 19th century from renowned collectors such as Henri de Saussure (1829-1905), Victor Fatio (1838-1906), and Thomas Horsfield (1773-1859). We present here an annotated list of the type specimens of birds held in the MHNG. This work complements a first list published by Baud (1977), in which only 15 type specimens of birds were identified. The type list now includes 63 bird specimens, a large proportion of which were not considered in that previous study.

The type specimens came from two main sources. Firstly, 27 type specimens (i.e. 43% of the total number) correspond to European passerines described by Henri Jouard (1896-1938) in various papers published between 1925 and 1936. A detailed account of Jouard's life and a complete list of his publications can be found in the obituaries written by Meylan (1938) and Poty (1938). Most of his work dealt with passerines, for which he described many subspecies, especially in the Paridae, Aegithalidae and Certhiidae. After his death, part of his collection was included in that of Olivier Meylan (1896-1946), and was eventually donated to the MHNG and registered in the main collection in 1957. Jouard's type specimens in the MHNG correspond to subspecies from France and Switzerland. The other type specimens mentioned in Jouard's papers might be conserved in other institutions; for instance part of Jouard's collection is currently at the Muséum National d'Histoire Naturelle, Paris (Jérôme

Fuchs pers. comm.). Although all of Jouard's names have been subsequently placed in synonymy, they represent a fine account of the clinal morphological variation for several species throughout Europe and are still available in bird nomenclature. The MHNG specimens were either collected by Jouard himself or by his correspondents, principally Henri Heim de Balsac, Paul Poty and Louis Bureau. Jouard corresponded and exchanged specimens also with the Swiss ornithologist Gustave von Burg, one of the co-authors of the "Catalogue des oiseaux de la Suisse" (Fatio et al., 1889-1956): von Burg introduced names based on three of these and sent them back to Jouard.

The second main source of bird types in the MHNG correspond to 21 specimens from Java described by Thomas Horsfield (1773-1859) in his work "Systematic arrangement and description of birds from the island of Java", published in 1821, a work in which Horsfield did not mention how many specimens he had examined. For some species, the fact that several specimens were collected was mentioned in a later publication (Horsfield, 1824), but this was not done systematically. A full list of Horsfield's publications and a summary of his life can be found in McNair (1942). Horsfield was appointed in 1820 keeper of the Museum of the Honourable East India Company, a position he kept until his death. He corresponded with several museums in Europe and donated specimens to the Natural History Museum, Tring, U.K. (NHM) (Sharpe, 1906: 388) and to the University Museum of Zoology, Cambridge, U.K. (UMZC) (Benson, 1999: 7-10). After his death, the collections of the India museum were ultimately transferred to the NHM, between 1860 and 1880 (Sharpe, 1906: 395-397). In 1830, Horsfield corresponded with the Swiss scientist

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Augustin Pyrame de Candolle (1778-1841), who was at that time rector of the Geneva Academia of Science and president of the Academic Museum (Weber, 1985). Originally, Horsfield donated 84 birds to the Academic Museum. They were registered in 1831 with the mention "Compagnie des Indes Orientales" (East India Company), and prepared as mounted specimens at some point. The specimens were then relaxed at the beginning of the 20th century and new MHNG labels (Fig. 1) with the mention "Cie Angl. Indes Or." replaced the original ones that were not kept [figure 1 in Benson (1999) provided an example of these original labels]. Forty-four specimens were eventually destroyed (probably damaged by insect attacks), most of them during the first half of the 20th century, including 19 syntypes (listed at the end of this article). The NHM (Warren, 1966; Warren & Harrison, 1971, 1973) and UMZC (Benson, 1999) have earlier listed Horsfield types, including several species represented by single specimens. In such occasions, the NHM assumed that they held holotypes, although the International Code of Zoological Nomenclature (ICZN, 1999; hereafter the Code) recommended against such assumptions "...when it is possible that the nominal species-group taxon was based on more than one specimen" (recommendation 73F in the Code). In such cases Art. 74.6 of the Code is likely to apply and designations as a holotype in these catalogues causes them to become lectotypes when further specimens are found, and those further specimens to become paralectotypes.

Finally, the other 15 type specimens of birds held in collections of the MHNG correspond to taxa described by the following authors (number of specimens in parentheses): H. de Saussure (5), G. von Burg (3), A. Boucard (1), O. Salvin (1), O. Salvin & F. D. Godman (1), R. C. McGregor (1), G. Fatio (2), and O. Finsch & A. B. Meyer (1). In total, the 63 MHNG type specimens represent 4 holotypes, 36 syntypes, 12 paratypes, 1 lectotype, 10 paralectotypes, corresponding to 44 names. According to recent taxonomic accounts (Dickinson & Remsen, 2013; Dickinson & Christidis, 2014), 28 of them are now placed in synonymy, while 16 are valid names. Images illustrating all type specimens, along with a few additional specimens mentioned in the list, are available on demand and will be presented online in the MHNG website.

COMMENTED LIST OF MHNG TYPE SPECIMENS OF BIRDS

The systematic arrangement and current valid combination of each type specimen are listed according to Dickinson & Remsen (2013) for the non-passerines and to Dickinson & Christidis (2014) for the passerines. The names are given first with their original orthography. The age and sex are indicated according to the specimen label, with a comment when a discrepancy with the phenotype

was found. Authorities for a name being in synonymy or in a new genus combination are provided (the first author who recognized this synonymy, or a recent authoritative work). Institution acronyms: AMNH American Museum of Natural History, NHM Natural History Museum, Tring, U.K., UMZC University Museum of Zoology, Cambridge, U.K., MHNG Muséum d'histoire naturelle de la ville de Genève, Switzerland.

ANSERIFORMES

Anatidae

Anas Javanica Horsfield, 1821

1821 Transactions of the Linnean Society of London 13: 199-200.

Now *Dendrocygna javanica* (Horsfield, 1821). See Salvadori, 1895: 144.

Syntype: MHNG 130.011, unsexed juvenile, collected in Java between 1811 and 1817 by T. Horsfield.

Comment: Although the specimen is discolored, the presence of rufous scapular fringes suggests that it might not be a juvenile. The NHM holds a syntype (Warren, 1966: 146).

GALLIFORMES

Phasianidae

Gallus Javanicus Horsfield, 1821

1821 *Transactions of the Linnean Society of London* 13: 185.

Now *Gallus varius* (Shaw, 1798). See Ogilvie-Grant, 1893: 352.

Syntype: MHNG 130.001, adult male, collected in Java between 1811 and 1817 by T. Horsfield.

Comment: The NHM holds a syntype (Warren, 1966: 147).

CAPRIMULGIFORMES

Caprimulgidae

Caprimulgus affinis Horsfield, 1821

1821 Transactions of the Linnean Society of London 13: 142

Now Caprimulgus affinis Horsfield, 1821.

Syntype: MHNG 129.038, adult female, collected in Java between 1811 and 1817 by T. Horsfield.

Comment: The NHM holds a syntype in "very bad condition" (Warren, 1966: 4).

Apodidae

Acanthylis semicollaris de Saussure, 1859

1859 Revue et Magasin de Zoologie pure et appliquée, 2º série, vol. 11: 118, pl. 3, fig. "2" (= 6).

Now *Streptoprocne semicollaris* (de Saussure, 1859). See Morony *et al.*, 1975: 51.

Syntypes: MHNG 505.048 and MHNG 512.049, unsexed adults, collected in Mexico by H. de Saussure and F. Sumichrast in 1855. The specimen labels indicate the year 1856 (also in Hellmayr, 1942), but the authors' correspondence proved that their expedition was active in the Mexico City area from May to July 1855 (de Roguin, 1978). Both specimens are from the Sumichrast collection and were acquired by the MHNG in 1859.

Comments: The type locality in the original description was "Les grandes forêts du Mexique" [The large forests of Mexico]. It was corrected to "Les plaines du plateau" [The plains of the plateau] by de Saussure (1861: 3), and finally by Sumichrast (1881: 250) to "los potreros de San Joaquin, cerca de la capital" [the pastures of San Joaquin, near the capital]. Because both authors were also the original collectors, their statements should be seen as corrections of the erroneous original description of the type locality, as recommended in the Code (Article 76A.2.A).

Trochilidae

Lesbia aequatorialis Boucard, 1893

1893 Humming Bird 3: 6.

Now *Lesbia victoriae victoriae* (Bourcier & Mulsant, 1846). See Zimmer, 1951: 53-54.

Syntype: MHNG 868.051, adult male, collected in Ecuador at Rio Napo by Buckley in 1880. From the A. Vaucher collection, acquired by the MHNG in 1941.

Comments: Boucard obtained "over one hundred" specimens collected together, but he did not specify which ones constitute the type series (Boucard, 1893: 6). We follow here the interpretation of Greenway (1978: 190) who considered an AMHN specimen from the same locality, date, and collector, as a syntype.

Aglæctis aliciæ Salvin, 1896

1896 Bulletin of the British Ornithologists' Club 5(33): 24

Now Aglaeactis aliciae Salvin, 1896.

Syntype: MHNG 865.084: adult male, collected in Peru (Succha) on 22 March 1895 by O. F. Baron. From the A. Vaucher collection, acquired by the MHNG in 1941.

Comment: Vaucher's label indicated "ex. Coll. O.F. Baron", so it was presumably part of the type series. Salvin wrote (p. 25) "[Baron] *obtained several specimens of both sexes, some of which he sent to Mr. Godman and others to Mr. Rothschild*", but he did not specify which birds he examined himself. The NHM has several syntypes (Warren, 1966: 11).

Amazilia cupreicauda Salvin & Godman, 1884

1884 *Ibis*, *Fifth series*, 2: 452

Now *Amazilia viridigaster cupreicauda* Salvin & Godman, 1884. See Dickinson & Remsen, 2013: 130.

Syntype: MHNG 868.075, adult male, collected in Guyana, Sierra Roraima in November 1883. From the A. Vaucher collection, acquired by the MHNG in 1941.

Comments: Although the name of the collector is missing on the specimen's label, the locality and date suggest that this bird belonged to Whitely's collection, and that it was presumably part of the type series examined by Salvin & Godman (1884: 443). The NHM holds seven other syntypes (Warren, 1966: 73).

GRUIFORMES

Rallidae

Porphyrio Indicus Horsfield, 1821

1821 Transactions of the Linnean Society of London, 13: 194

Now *Porphyrio porphyrio indicus* Horsfield, 1821. See Taylor, 1996: 197.

Syntype: MHNG 130.008, adult male, collected in Java between 1811 and 1817 by T. Horsfield.

Comment: The NHM has a syntype (Warren, 1966: 137), and the UMZC another (Benson, 1999: 41).

PELECANIFORMES

Phalacrocoracidae

Carbo Javanicus Horsfield, 1821

1821 Transactions of the Linnean Society of London 13: 197.

Now *Microcarbo niger* (Vieillot, 1817). See Peters, 1931: 83, and Dickinson & Remsen, 2013: 195.

Paralectotype: MHNG 130.010, adult male (?), collected in Java between 1811 and 1817 by T. Horsfield.

Comment: The NHM claimed the "holotype" (Warren, 1966: 147), which becomes the lectotype with the discovery of this additional specimen (see details in the introduction).

CHARADRIIFORMES

Laridae

Larus ridibundus minor, Fatio 1904 (junior homonym of *Larus ridibundus minor* Schlegel, 1844).

1904 Faune des vertébrés de la Suisse, p. 1507.

Now *Chroicocephalus ridibundus* (Linnaeus, 1766). See Dickinson & Remsen, 2013: 226.

Syntypes: MHNG 705.047, adult male, collected in Switzerland (Geneva) in 1844 by G. Fatio; MHNG 813.029, unsexed adult, collected in Switzerland (Geneva, unknown date) by L. Roget.

Comment: Fatio's name, being established in combination with the same generic name as Schlegel's, is a junior objective homonym and an invalid name (Art. 53.3 of the Code).

ACCIPITRIFORMES

Accipitridae

Falco Ichthyaetus Horsfield, 1821

1821 Transactions of the Linnean Society of London 13: 136

Now *Ichthyophaga ichthyaetus* (Horsfield, 1821). See Peters, 1931: 259.

Paralectotype: MHNG 129.028, unsexed adult, collected in Java between 1811 and 1817 by T. Horsfield. **Comment:** The NHM claims the "holotype" (Warren, 1966: 134), which becomes the lectotype with the discovery of this additional specimen (see details in the introduction).

Falco Bido Horsfield, 1821

1821. Transactions of the Linnean Society of London 13: 137.

Now *Spilornis cheela bido* (Horsfield, 1821). See Peters, 1931: 272.

Paralectotype: MHNG 129.029, unsexed adult, collected in Java between 1811 and 1817 by T. Horsfield. **Comment:** The NHM claims the "holotype" (Warren, 1966: 35), which becomes the lectotype with the discovery of this additional specimen (see details in the introduction).

STRIGIFORMES

Strigidae

Strix Ketupu Horsfield, 1821

1821 Transactions of the Linnean Society of London 13: 141

Now *Ketupa ketupu* (Horsfield, 1921). See Peters, 1940: 122.

Syntype: MHNG 129.036, unsexed adult, collected in Java between 1811 and 1817 by T. Horsfield.

Comment: The NHM has three syntypes (Warren, 1966: 151).

Strix Lempiji Horsfield, 1821

1821 Transactions of the Linnean Society of London 13: 140

Now *Otus bakkamoena lempiji* (Horsfield, 1821). See Wells, 1999: 471-419.

Syntype: MHNG 129.037, adult male, collected in Java between 1811 and 1817 by T. Horsfield.

Comment: An individual of the grey-brown morph. The NHM has two syntypes (Warren, 1966: 157).

PICIFORMES

Ramphastidae

Bucco Javensis Horsfield, 1821

1821 *Transactions of the Linnean Society of London* 13: 181.

Now *Megalaima javensis* (Horsfield, 1821). See Peters, 1948: 35.

Syntype: MHNG 129.086, adult male, collected in Java between 1811 and 1817 by T. Horsfield (Fig. 1).

Comment: The NHM has three syntypes (Warren, 1966: 147).



Fig. 1. Bucco Javensis Horsfield, 1821 (syntype). MHNG 129.086.

CORACIIFORMES

Meropidae

Merops Urica Horsfield, 1821

1821 Transactions of the Linnean Society of London 13: 172.

Now *Merops leschenaulti quinticolor* Vieillot, 1817. See Hartert, 1892: 55.

Paralectotype: MHNG 129.075, unsexed individual collected in Java between 1811 and 1817 by T. Horsfield. **Comment:** The NHM claims the "holotype" (Warren, 1966: 302), which becomes the lectotype with the discovery of this additional specimen (see details in the introduction). The UMZC claims a "syntype" (Benson, 1999: 62), which should be a paralectotype like the specimen in Geneva.

Alcedinidae

Alcedo melanoptera Horsfield, 1821

1821 Transactions of the Linnean Society of London 13: 174.

Now *Halcyon cyanoventris* (Vieillot, 1818). See Hartert, 1892: 228.

Paralectotype: MHNG 129.089, adult female, collected in Java between 1811 and 1817 by T. Horsfield.

Comment: The NHM claimed the "holotype" (Warren, 1966: 183), which becomes the lectotype with the discovery of this additional specimen (see details in the introduction). The UMZC claims a "syntype" (Benson, 1999: 59), which should be a paralectotype like the specimen in Geneva.

FALCONIFORMES

Falconidae

Falco ferrugineus de Saussure, 1859 (junior homonym of *Falco ferrugineus* Lichtenstein, 1839).

1859 Revue et Magasin de Zoologie pure et appliquée, 2° série, vol. 11: 117, pl. 3, fig. 1.

Now *Falco sparverius sparverioides* Vigors, 1827, dark morph. See Hellmayr, 1942: 560-561.

Holotype: MHNG 507.072, adult female, collected in Saint-Domingue (see below) by H. de Saussure, acquired by the MHNG in 1859.

Comments: The locality of this specimen is in contradiction with its phenotype. This female (Fig. 2) is a dark morph of the subspecies *sparverioides* that occurs in South Bahamas, Cuba, Isla de la Juventud, and Jamaica. On the original description, de Saussure wrote "J'ai tué ce petit faucon dans l'île de Saint-Domingue" (I killed this little falcon on the island of Saint-Domingue = Hispaniola), where the endemic subspecies (dominicensis J.F. Gmelin, 1788) presents a different, lighter plumage. The description made by de Saussure of the new species



Fig. 2. Falco ferrugineus de Saussure, 1859 (holotype). MHNG 507.072.

corresponds however very well to the MHNG specimen, so we have no reason to doubt that this specimen is not the holotype. The mention "Cuba", written on one of the specimen's label (not the original label), was treated as a "transcription error" by Hellmayr (1942), based on de Saussure's mention of Hispaniola. Finally, de Saussure's name, being established in combination with the same

generic name than Lichtenstein's, is a junior objective homonym and an invalid name (Art. 53.3 of the Code), although both authors referred to different sub-genera (*Buteo* for Lichtenstein and *Hypotriorchis* for de Saussure).

PASSERIFORMES

Campephagidae

Ceblephyris Javensis Horsfield, 1821

1821 *Transactions of the Linnean Society of London* 13: 145.

Now *Coracina javensis* (Horsfield, 1821). See Mayr & Greenway, 1960: 171.

Syntype: MHNG 129.045, unsexed juvenile, collected in Java between 1811 and 1817 by T. Horsfield.

Comment: The bird could be an adult female rather than a juvenile because of the absence of a scaled pattern on the upperparts. The NHM has one syntype (Warren & Harrison, 1971: 273), and the UMZC has another (Benson, 1999: 97).

Dicruridae

Edolius cineraceus Horsfield, 1821

1821 Transactions of the Linnean Society of London 13: 145.

Now *Dicrurus leucophaeus leucophaeus* Vieillot, 1817. See Mayr & Greenway, 1962: 145.

Paralectotype: MHNG 129.044, unsexed individual, collected in Java between 1811 and 1817 by T. Horsfield. **Comment:** The NHM claims the "holotype" (Warren & Harrison, 1971: 116), which becomes the lectotype with the discovery of this additional specimen (see details in the introduction).

Laniidae

Lanius Bentet Horsfield, 1821

1821 Transactions of the Linnean Society of London 13: 144

Now *Lanius schach bentet* Horsfield, 1821. See Mayr & Greenway, 1960: 349.

Syntype: MHNG 129.041, adult female, collected in Java between 1811 and 1817 by T. Horsfield.

Comment: The NHM has at least one syntype (Warren & Harrison, 1971: 64), and the UMZC has another (Benson, 1999: 109).

Paradisaeidae

Paradisornis rudolphi Finsch & Meyer, 1885

Finsch O. & Meyer A. B. 1885 Zeitschrift für die gesammte Ornithologie 2(4): 385.

Now *Paradisaea rudolphi* (Finsch & Meyer, 1885). See Mayr & Greenway 1962: 201.

Syntype: MHNG 614.019, adult male, collected in Papua New Guinea (Maguli Range, Owen Stanley mountain Range, alt. 7000 ft = 2134 m) by K. Hunstein in 1884. From the Gustav Schneider collection, acquired by the MHNG in 1885.

Comment: The Naturhistorisches Museum Basel and the Naturhistorisches Museum Wien each have another syntype. Weber (1983) provided a full account on the origin of these three specimens.

Dicaeidae

Prionochilus parsonsi McGregor, 1927

1927 The Philippine Journal of Science. 32: 520.

Now *Prionochilus olivaceus parsonsi* McGregor, 1927. See Greenway *et al.*, 1967: 172.

Paratype: MHNG 889.027, adult female, collected in the Philippines (Malinao, Tayabas province, Luzon) on 9 January 1926 by Francisco Rivera. From the William Parsons collection, acquired by the MHNG in 1947 (Baud, 1976, 1978).

Comment: The holotype, a male collected on the same date by the same collector, was kept in the collection of the "Bureau of Science", Manila (specimen number 13345). That collection built by Richard C. McGregor was destroyed by war in 1945 (Dickinson *et al.*, 1991).

Irenidae

Meliphaga Javensis Horsfield, 1821

1821 Transactions of the Linnean Society of London 13: 152

Now *Chloropsis cochinchinensis* (J.F. Gmelin, 1789). See Dickinson & Christidis, 2014: 280.

Syntype: MHNG 129.056, adult male, collected in Java between 1811 and 1817 by T. Horsfield. Warren & Harrison (1971: 273) treated this name as a *nomen nudum*, and they did not give the NHM specimen a type status. Because Horsfield provided some "indications" (although less than for the other species), we follow Sherborn who listed this name in his *Index Animalium* (1927: 3285).

Ploceidae

Fringilla Manyar Horsfield, 1821

1821 Transactions of the Linnean Society of London 13: 160.

Now *Ploceus manyar* (Horsfield, 1821). See Mayr & Greenway, 1962: 53.

Syntype: MHNG 129.065, adult male, collected in Java between 1811 and 1817 by T. Horsfield.

Comment: The NHM has several syntypes (Warren & Harrison, 1971: 329).

Icteridae

Quiscalus sumichrasti de Saussure, 1859

1859 Revue et Magasin de Zoologie pure et appliquée, 2° série, vol. 11: 119, pl. 3, fig. 2-4.

Now *Dives dives* (Deppe, 1830). See Hellmayr, 1937: 97. **Syntypes:** MHNG 522.058, adult female collected in Mexico (Uvero "*9 lieues au N.-O de San Andrès Tuxtla*", Veracruz) on 3 March 1856 by H. de Saussure. MHNG 522.059A, adult male collected in Mexico (no collecting date). Both are from the Sumichrast collection that was acquired by the MHNG in 1861.

Comment: A third specimen from Mexico collected by H. de Saussure (MHNG 522.059B, male) was destroyed in 1901.

Paridae

Parus ater burgi Jouard, 1928

1928 Revue française d'Ornithologie 12: 365 (material), 372 (description).

1929 *Alauda* série I, 1: 58 (Jouard revised his own work and defined a lectotype and a paralectotype).

Now *Parus ater ater* Linnaeus, 1758. See Greenway *et al.*, 1967: 91.

Lectotype: MHNG 930.016, adult male, collected in Switzerland (Montana, Valais) on 14 January 1927 by H. Jouard.

Paralectotype: MHNG 930.017, adult male, collected in the same locality on 6 January 1927.

Comment: Baud (1977) erroneously indicated 950.016 and 950.017 for these two specimens.

Parus ater mediterraneus Jouard, 1928

1928 Revue française d'Ornithologie 12: 370 (material), 374 (description).

Now *Parus ater ater* Linnaeus, 1758. See Greenway *et al.*, 1967: 91.

Holotype: MHNG 930.010, adult male, collected in France (Peira-Cava, Alpes-Maritimes) on 16 April 1928 by H. Jouard.

Paratypes: Jouard (1928: 370) examined a total of four specimens (including the holotype). Two of them have been found in the collection: MHNG 930.011 and 930.012, unsexed adults, both collected in France (Mont-Boron, Alpes-Maritimes) on 15 April 1917 by H. Jouard.

Parus ater parisi Jouard, 1928

1928 Revue française d'Ornithologie 12: 368 (material), 373 (description).

Now *Parus ater ater* Linnaeus, 1758. See Greenway *et al.*, 1967: 91.

Syntypes: MHNG 930.013, adult male, collected in France (Montlouis, Pyrénées-Orientales) on 20 January 1928. MHNG 930.014, adult female, collected in France (Vernet-les-Bains, Pyrénées-Orientales) on 23 February 1928. Both collected by H. Jouard.

Additional material examined (not types): Jouard (1928, p. 368) examined a total of nine specimens (including the two syntypes). Because he explicitly defined a type series, we treat the seven specimens as additional material and not as syntypes (Art. 72.4.6 of the Code). Two of them are in the collection: MHNG 930.015, adult female (?), collected in France (Font-Romeu, Pyrénées-Orientales) on 28 February 1928; MHNG 930.043, adult male, collected in France (Montlouis, Pyrénées-Orientales) on 6 February 1928. All collected by H. Jouard.

Parus ater rapinensis Jouard, 1928 emended to Parus ater rapinei Jouard, 1929

1928 Revue française d'Ornithologie 12: 367 (material), 373 (description) – 1929 Alauda, série I, 1: 58 (corrigenda).

Now *Parus ater ater* Linnaeus, 1758. See Greenway *et al.*, 1967: 91.

Paratype: MHNG 930.009, adult male, collected in France (Riaillé, Loire-Atlantique) on 25 October 1919 by L. Bureau.

Comments: Jouard (1928) examined 4 specimens (including the holotype), of which only one paratype was found in the collection. The holotype might, perhaps, be in the collection of the Muséum National d'Histoire Naturelle, Paris, which has parts of Jouard's collection. Jouard dedicated this taxon to J. Rapine, and later corrected the name to *rapinei* (Jouard 1929a: 58).

Parus atricapillus festae von Burg, 1925

1925 Die Tierwelt, Zofingen: 149.

Now *Poecile montanus montanus* (Conrad, 1827). See Vaurie, 1959: 479, and Dickinson & Christidis, 2014: 429

Paralectotypes: MHNG 935.069, unsexed adult, collected in Italy (Padola, Comelico Superiore, 1700-2000 m alt.) on November 1906 by E. Festa n° 182; MHNG 935.070, unsexed adult, same locality, December 1907, E. Festa n°189.

Comments: Jouard (1936: 367) designated the lectotype, a male collected on November 1908, from the same series of 14 birds collected by E. Festa. These birds might be in the collection of the Muséum National d'Histoire Naturelle, Paris, with other specimens from Jouard's collection.

Parus atricapillus jouardi von Burg, 1924

1924 Der Weidmann, Bülach 17: 8 (description).

1925 in Jouard, Revue française d'Ornithologie, 9: 75 (material). Von Burg further described the taxon in 1925, Die Tierwelt, Zofingen, p. 180.

Now *Poecile montanus montanus* (Conrad, 1827). See Vaurie, 1959: 479, and Dickinson & Christidis, 2014: 429.

Syntype: MHNG 935.078, adult female, collected in Switzerland (Montana, Valais) on 31 January 1924 by

H. Jouard. The label of this specimen indicates that it was part of Stresemann's collection (Zoolog. Museum Berlin, n° 25.1673 according to a MHNG document), suggesting that it is probably one individual given by Jouard to von Burg ("*J'en ai donné un couple à M. von Burg*" [I gave a pair to Mr. von Burg] Jouard, 1925: 75).

Comment: Jouard (1936) later designated two specimens as "type" (MHNG 935.075) and "cotype" (MHNG 935.076) but they do not belong to the type series, which comprises specimens collected during the winter 1923-24, whereas the specimens designated by Jouard were collected in December 1924.

Parus cristatus albifrons Jouard, 1929

1929 *Alauda* série I, 1: 31 (material), 38 (description). Now *Lophophanes cristatus mitratus* (Brehm, 1831). See Greenway *et al.*, 1967: 97, and Dickinson & Christidis 2014: 428.

Syntypes: MHNG 927.061, adult male, collected in France (Font-Romeu, Pyrénées-Orientales) on 26 February 1928; MHNG 927.062, adult female, collected in France (Vernet-les-Bains, Pyrénées-Orientales) on 14 February 1928. Both were collected by H. Jouard.

Additional material examined (not types): Jouard (1929) examined a total of four specimens (including the holotype). Because he explicitly defined a type series, we treat the three following specimens as additional material and not as syntypes (Art. 72.4.6 of the Code): MHNG 927.063, unsexed adult, collected in France (Montlouis, Pyrénées-Orientales) on 16 January 1928; MHNG 927.064 and 927.048, unsexed adults, same locality, both collected on 21 January 1928. All collected by H. Jouard.

Parus cristatus heimi Jouard, 1929

1929 *Alauda* série I, 1: 32 (material), 38 (description). Now *Lophophanes cristatus mitratus* (Brehm, 1831). See Greenway *et al.*, 1967: 97, and Dickinson & Christidis, 2014: 428.

Holotype: MHNG 927.082, unsexed adult, collected in France (Mont-Chauve d'Aspremont, Alpes-Maritimes) on 15 April 1917 by H. Heim de Balsac.

Paratype: MHNG 927.083, unsexed adult, collected in France (Peïra-Cava, Alpes-Maritimes) on 16 January 1928 by H. Jouard.

Parus cristatus alpinus Heim de Balsac & Jouard, 1927

1927 Revue française d'Ornithologie 11: 292.

Parus cristatus poeninus Jouard, 1929

1929 Alauda série I, 1: 25 (material), 36 (description). Parus cristatus poeninus Jouard, 1929 is a new name for Parus cristatus alpinus Heim de Balsac & Jouard, 1927, preoccupied by Parus atricapillus alpinus Ghidini & von Burg, 1924 (described in Jouard 1925: 72).

Now *Lophophanes cristatus mitratus* (Brehm, 1831). See Dickinson & Christidis, 2014: 428.

Syntypes: MHNG 927.072, adult male, collected in

Switzerland (Montana, Valais) on 29 January 1927; MHNG 927.073, adult female, same locality, 23 January 1927, both collected by H. Jouard.

Additional material examined (not types): Heim de Balsac & Jouard (1927), followed by Jouard (1929), examined 12 specimens (including the syntypes). Because they explicitly defined a type series, we treat the 10 specimens as additional material and not as syntypes (Art. 72.4.6 of the Code). Two of them have been found in the collection: MHNG 927.075, adult male, same locality, 22 December 1926; MHNG 927.078, adult female, same locality, 2 January 1927. Both were collected by H. Jouard.

Pycnonotidae

Turdus analis Horsfield, 1821

1821 *Transactions of the Linnean Society of London* 13: 147.

Now *Pycnonotus goiavier analis* (Horsfield, 1821). See Mayr & Greenway, 1960: 246.

Syntype: MHNG 129.053, unsexed adult, collected in Java between 1811 and 1817 by T. Horsfield.

Comment: The NHM has three syntypes (Warren & Harrison, 1971: 24), and the UMZC has another (Benson, 1999: 100).

Aegithalidae

Aegithalos caudatus bureaui Jouard, 1929

1929 Bulletin de la Société zoologique de France 54(3): 246.

Now Aegithalos caudatus taiti Ingram, 1913. See Greenway et al., 1967: 54.

Syntypes: Jouard (1929c) defined two specimens as the type series ("Types"): MHNG 928.037, adult male, collected in France (Vernet-les-Bains, Pyrénées Orientales) on 20 February 1928; MHNG 928.038, adult female (?), collected in the same locality on 17 February 1928. Both were collected by H. Jouard.

Additional material examined (not types): Jouard (1929c) examined a total of eleven specimens (including the two syntypes), all from the same locality and collector. Because he explicitly defined a type series, we treat the nine specimens as additional material and not as syntypes, even the specimen mentioned as "Cotype" by Jouard (Art. 72.4.6 of the Code). They are described in detail in Jouard (1929b), and three have been found in the collection: MHNG 928.039 (unsexed adult, 16 February 1928; the "Cotype"), MHNG 928.040 (adult female, 21 March 1928) and MHNG 928.041 (adult male, 22 March 1928). Two additional specimens correspond to the same locality and year, but the collecting day does not match the information given by Jouard (1929b): MHNG 928.042 (unsexed adult, 25 March 1928), MHNG 928.043 [adult female (?), 25 March 1928].

Comment: The specimen MHNG 928.037 and 928.038 are pictured on plates 1-2 in Jouard (1929b).

Aegithalos caudatus potyi Jouard, 1929

1929 Bulletin de la Société zoologique de France 54(3): 248

Now Aegithalos caudatus europaeus (Hermann, 1804). See Greenway et al., 1967: 53-54.

Holotype: MHNG 928.047, adult female (?), collected in France (Gemeaux, Côte-d'Or) on 7 December 1927 by H. Jouard.

Paratypes: Jouard (1929c) examined a total of 12 specimens (including the holotype). They are described in Jouard (1929b), and five of them have been found in the collection: MHNG 928.008, unsexed adult, collected in France (Branges, Saône-et-Loire) on 16 February 1927 by P. Poty. MHNG 928.009, adult male, collected in France (Savigny-sur-Seille, Saône-et-Loire) on 30 November 1926 by P. Poty. MHNG 928.010, adult male, collected in France (Devrouze, near Simard, Saône-et-Loire) on 30 September 1928 by H. Jouard. MHNG 928.045, adult female, collected in France (Savigny-sur-Seille, Saône-et-Loire) on 23 November 1926 by P. Poty. MHNG 928.046, adult male, collected in France (Bione swamp, near Simard, Saône-et-Loire) on 30 November 1926 by H. Jouard.

Comment: Jouard named the taxon for Paul Poty, who collected many birds for him. The specimen MHNG 928.010 is pictured on plates 1-2 in Jouard (1929b).

Certhiidae

Certhia brachydactyla parisi Jouard, 1929

1929 Bulletin de la Société zoologique de France 54(3): 249 (description). - 1930 Alauda série I, 1: 35-36 (material).

Now *Certhia brachydactyla brachydactyla* Brehm, 1820. See Greenway *et al.*, 1967: 157.

Syntypes: MHNG 1077.024, adult male, collected in France (Font-Romeu-Odeillo-Via, 1800 m alt., Pyrénées-Orientales) on 27 February 1928 by L. Bureau. MHNG 1077.022, adult female, collected in France (Vernet-les-Bains, 650 m alt., Pyrénées-Orientales) on 23 February 1928 by L. Bureau.

Additional material examined (not types): Jouard (1929) examined a total of seven specimens (including the syntypes), of which two have been found in the collection. Because he explicitly defined a type series, we treat the remaining specimens as additional material and not as syntypes (Art. 72.4.6 of the Code): MHNG 1077.026, adult male and MHNG 1077.027, adult female, same locality and collector as 1077.022, both collected on 16 February 1928.

Comment: Jouard named the taxon for Paul Paris (1875-1938). Both were involved in the creation of the French journal *Alauda*, together with Paul Poty, Henri Heim de Balsac and several other ornithologists.

Certhia familiaris fatioi Jouard, 1929

1929 Bulletin de la Société zoologique de France 54(3): 250 (description). - 1930 Alauda série I, 3-4: 184 (material).

Now *Certhia familiaris macrodactyla* Brehm, 1831. See Greenway *et al.*, 1967: 150.

Syntype: MHNG 1077.057, adult male, collected in Switzerland (Montana-Vermala plateau, Crans-sur-Sierre, Valais) on 23 December 1924 by H. Jouard. The second type (an adult female, from the same locality and collected on 8 January 1925) was not found in the MHNG collection.

Additional material examined (not types): Jouard (1929) examined 16 specimens (including the syntypes), all described in Jouard (1930: 23). Because he explicitly defined a type series, we treat the 14 specimens as additional material and not as syntypes (Art. 72.4.6 of the Code). Two have been found in the collection: MHNG 1077.060, adult male, same locality as types, 8 August 1928; MHNG 1077.058, juvenile, same locality as types, 3 September 1928. Both collected by H. Jouard.

Comment: Jouard named the taxon for Victor Fatio (1838-1906).

Certhia familiaris rufa Jouard, 1929

1929. Bulletin de la Société zoologique de France 54(3): 252 (description). - 1930 Alauda série I, 3-4: 182 (material).

Now *Certhia familiaris macrodactyla* Brehm, 1831. See Greenway *et al.*, 1967: 150.

Paratypes: MHNG 1077.046, juvenile female, collected in Germany (Wereinsalpe, 1400 m alt., Karwendelgebirge, Oberbayern) on 31 July 1919 by Stresemann & Baumgartner, formerly in the collection of the Zoologische Staatssammlung München n° 19.642, then exchanged and included in Jouard's collection. MHNG 1077.047, adult male, collected by Voit in Germany (Bischofswiesen, Berchtesgaden, Oberbayern) on 9 March 1910, formerly in the collection of the Zoologische Staatssammlung München n° 10.75, then exchanged and included in Jouard's collection.

Comment: The holotype (adult male from Salzberg, Berchtesgaden, Oberbayern, Germany, 23 February 1910) and the remaining six paratypes should be in the collection of the Zoologische Staatssammlung München.

Sturnidae

Pastor griseus Horsfield, 1821

1821 Transactions of the Linnean Society of London 13: 154.

Now *Acridotheres javanicus* Cabanis, 1851. See Sharpe, 1890: 90.

Paralectotype: MHNG 129.059, unsexed adult, collected in Java between 1811 and 1817 by T. Horsfield. **Comment:** See Horsfield and Moore (1858: 536) for the homonymy with *Gracula grisea* Daudin, 1800. The

NHM claims the "holotype" (Warren & Harrison, 1971: 221), which becomes the lectotype with the discovery of this additional specimen (see details in the introduction). The UMZC claims a "syntype" (Benson, 1999: 184), which should be a paralectotype like the specimen in Geneva.

Turdus chalybeus Horsfield, 1821

1821 Transactions of the Linnean Society of London 13: 148.

Now Aplonis panayensis strigata (Horsfield, 1821). See Amadon in Mayr & Greenway, 1962: 83 (Peters Checklist volume XV). Horsfield described both taxa on the same page, but *Turdus strigatus* was listed before *Turdus chalybeus*. Curiously, Amadon did not follow Sharpe (1890) who listed *chalybeus* and *strigata* and used *Calornis chalybea*, thus probably acting as First Reviser: this taxonomic issue is however outside the scope of our paper and might be treated in more details elsewhere (Edward Dickinson pers. comm.).

Syntypes: MHNG 129.051, unsexed adult, and MHNG 129.052, juvenile, both collected in Java between 1811 and 1817 by T. Horsfield.

Comment: They were incorrectly labelled as male and female on the basis of their distinct plumages. The NHM has two syntypes (Warren & Harrison, 1971: 104).

COMMENTS ON ADDITIONAL MHNG MATERIAL

Numididae

Numida meleagris callervaerti Chapin, 1932

1932 American Museum Novitates 570: 1.

Now *Numida meleagris galeatus* Pallas, 1767. See Martinez, 1994: 565.

MHNG 833.021, 834.093, and 834.094: collected in the Congo (now Democratic Republic of the Congo, Kasaï-Occidental, Luluabourg = Kananga) by R. P. Callervaert in March 1924. He sent 13 adults and three chicks from the same locality (collected the same year) to the AMNH. The MHNG specimens were probably part of the birds collected during the same expedition as the type series but we have no evidence that they were examined by Chapin (1932), who worked on the AMNH specimens.

Trochilidae

Trochilus Mosquera De Lattre & Bourcier, 1846

1846 Revue Zoologique par la Société Cuvierienne 6: 305.

Now *Eriocnemis mosquera* (De Lattre & Bourcier, 1846). See Peters, 1945: 111.

MHNG 867.021: adult male, collected in Colombia (Narino, Pasto), unknown date and collector. Originally from the Boucard collection (Paris), it belonged to the Vaucher collection, which was acquired by the MHNG

in 1941. The locality corresponds to the type series', but we don't know if this specimen was collected by A. De Lattre. Boucard (1895: 260) did not provide specimen information for this species in his monograph on hummingbirds based on his personal bird collection.

Strigidae

Otus choliba caucae Hekstra, 1982

1982b (December) *Bulletin Zoölogisch museum Universiteit van Amsterdam*: 60. See also 1982a (May), Ph.D. thesis Vrije Univ. Amsterdam: 99.

Now *Megascops choliba cruciger* (von Spix, 1824). See Holt *et al.*, 1999: 175.

MHNG 1125.004, adult male, collected in Colombia [Chaguayaco (incorrectly labeled Charguayaco), El Tambo, Cauca] in August 1957 by K. von Sneidern, whose collection was bought by the MHNG during the 1960s. This specimen is much more rufous than others collected by von Sneidern in the same locality (four specimens in the MHNG, collected in September and November 1956, and in May 1957). But Holt *et al.* (1999) considered the taxon *caucae* as an individual variation (i.e. a morph) and placed it in synonymy with *cruciger*.

In his thesis dissertation (defended in May 1982), Hekstra (1982a) designated a holotype from a specimen held in the Rijksmuseum voor Natuurlijke Historic, Leiden (RMNHL 8091) and mentioned that paratypes exist in other museums, including the MHNG. However, the back of the cover of this publication includes a statement that it is not a valid publication for the purposes of nomenclature. In his publication of December 1982 where Hekstra (1982b) described formally the new taxon, these specimens are treated as "additional specimens examined", suggesting that he had changed his mind considering the paratypes.

Parulidae

Geothlypis speciosa Sclater, 1858

1858 Proceedings of the Zoological Society of London 26: 447

Now Geothlypis speciosa Sclater, 1858.

Two specimens were previously designated as types: MHNG 755.094 (male), suggested as "cotype" by Hellmayr (1942: 507), and MHNG 755.096 (female), suggested as probable paratype by Baud (1977: 219). However they cannot belong to the type series defined by Sclater, who referred to three specimens of the NHM obtained by exchange from the MHNG ("an adult male, a young male and a female", Sclater, 1858: 447). The NHM still has two of these syntypes (the adult male and the female) (Warren & Harrison, 1971: 521).

Paridae

Parus atriceps Horsfield, 1821

1821 Transactions of the Linnean Society of London, 13: 160.

Now *Parus major cinereus* Vieillot, 1818. See Sharpe, 1903: 329.

The specimen MHNG 129.064 was labelled "Parus atriceps, Java, Compagnie des Indes Orientales", suggesting that it belonged to the series collected in Java by T. Horsfield. However, the bird does not present the plumage characteristics of Parus major cinereus, the only Parus species found on Java, but that of a Poecile palustris (juvenile?). This specimen, of which the origin is unknown, was probably mislabelled and it probably does not belong to the birds collected by Horsfield. UMZC claimed the holotype of Parus atriceps (Benson, 1999: 135), which upon examination corresponds well to a Parus major cinereus individual (M. Brooke, pers. comm.). Dickinson et al. (2006: 90) suggested however that this specimen should be the lectotype and that paralectypes should be in other collections.

Aegithalidae

Aegithalos caudatus galliae Jouard, 1929

1929 Bulletin de la Société zoologique de France 54(3): 247 (description). - 1929 Alauda 1: 137-140 (material). Now Aegithalos caudatus aremoricus Whistler, 1929. See Greenway et al., 1967: 54.

The two syntypes (adults male and female collected during the winter 1923) are not in the MHNG collection. Two other specimens found in the collection are from the type locality (Chercorat, Haute-Vienne, France) and were examined by Jouard (1929b: 150) but they were collected at another time and they do not belong to the type series: MHNG 928.032 and 928.033, adult males collected both on 23 December 1928; all collected by R. d'Abadie.

LIST OF HORSFIELD'S DESTROYED TYPE SPECIMENS

19 specimens donated to the MHNG, which were later destroyed, correspond to some of the new names proposed by Horsfield. These specimens are listed here with their corresponding MHNG voucher number, the original combination, the current valid combination, and the page of description in Horsfield (1821). We also checked whether other specimens existed in the NHM and UMZC collections. All the following MHNG specimens were thought to be syntypes, however this does not hold in cases when the authors of the NHM type catalogues (Warren, 1966; Warren & Harrison, 1971) claimed an NHM specimen to be a holotype.

129.046 and 129.047, *Ceblephyris striga*, now *Lalage nigra striga* (Horsfield, 1821), p. 145.

129.057, Jora scapularis, now Aegithina tiphia

scapularis (Horsfield, 1821), p. 152. NHM has a syntype (Warren & Harrison, 1971: 495).

129.061 and 129.062 (paralectotypes), *Saxicola fruticola*, now *Saxicola caprata fruticola* (Horsfield, 1821), p. 157. NHM claims the holotype (Warren & Harrison, 1971: 193), which based on the evidence of these additional specimens must become the lectotype.

129.063, *Megalurus palustris*, now *Megalurus palustris* Horsfield, 1821, p. 159. NHM has a syntype (Warren & Harrison, 1971: 416).

129.066, *Fringilla punicea*, now *Amandava amandava punicea* (Horsfield, 1821), p. 160. NHM has three syntypes (Warren & Harrison, 1971: 453).

129.070, *Pomatorhinus montanus*, now *Pomatorhinus montanus* Horsfield, 1821, p. 165. NHM has a syntype and another was destroyed (Warren & Harrison, 1971: 363)

129.071 and 129.072, *Nectarinia Javanica*, now *Anthreptes malacensis* (Scopoli, 1786), p. 167. NHM has three syntypes (Warren & Harrison, 1971: 272).

129.074, *Merops Javanicus*, now *Merops philippinus javanicus* (Horsfield, 1821), p. 171. NHM has two syntypes (Warren, 1966: 147), and UMZC has another (Benson, 1999: 62).

129.076, *Alcedo Meninting*, now *Alcedo meninting* Horsfield, 1821, p. 172. UMZC has one syntype (Benson, 1999: 58).

129.077, *Alcedo Biru*, now *Alcedo coerulescens* Vieillot, 1818, p. 172. NHM has two specimens and one of them was considered by the authors as "holotype or syntype" (Warren, 1966: 36): we suggest to consider them both as syntypes.

129.084, *Picus tiga*, now *Dinopium javanense* (Ljungh, 1797), p. 177. NHM has two syntypes (Warren, 1966: 296), and UMZC has three (Benson, 1999: 69).

129.090, *Phænicophaus* [sic] *melanognathus*, now *Phaenicophaeus curvirostris* (Shaw, 1810), p. 178.

129.094, Centropus Bubutus, now Centropus nigrorufus (Cuvier, 1816), p. 180.

130.004 (paralectotype), *Ardea speciosa*, now *Ardeola speciosa* (Horsfield, 1821), p. 189. NHM claims the holotype (Warren, 1966: 277), which based on the evidence of this additional specimen must become the lectotype.

130.007, Totanus affinis, now Tringa glareola Linnaeus, 1758, p. 191. NHM has five syntypes (Warren, 1966: 5). 130.009, Gallinula Javanica, now Amaurornis phoenicurus (Pennant, 1769), p. 196. NHM has one syntype (Warren, 1966: 147) and UMZC has another (Benson, 1999: 41).

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REFERENCES

- Baud F. 1976. Oiseaux des Philippines de la collection W. Parsons. I. Cebu, Samar, Romblon, Tablas et Sibuyan. Revue suisse de Zoologie 83: 497-513.
- Baud F. 1977. Catalogue des types de mammifères et d'oiseaux du Muséum d'Histoire naturelle de Genève. *Revue suisse de Zoologie* 84: 201-220.
- Baud F. 1978. Oiseaux des Philippines de la collection W. Parsons. II. Luzon, Mindoro et Palawan. Revue suisse de Zoologie 85: 55-97.
- Benson C. W.1999. Type specimens of bird skins in the University Museum of Zoology, Cambridge, United Kingdom (Ed. Joysey K. A.). *British Ornithologists' Club Occasional Publications* 4: 1-221.
- Boucard A. 1893. Descriptions of several supposed new species of Humming-Birds. *The Humming Bird* 3: 6-10.
- Boucard A. 1892-95. Genera of humming birds, being also a complete monograph of these birds. *London*.
- Bourcier J., Mulsant E. 1846. Descriptions de vingt nouvelles espèces d'oiseaux-mouches. *Annales des Sciences Physiques et Naturelles d'Agriculture et d'Industrie* 9: 312-332.
- Brehm L. 1820. Beiträge zur Vögelkunde in vollständigen Beschreibungen mehrerer neu Entdeckter und vieler seltener oder nicht gehörig beobachteter deutscher Vögel. Vol. 1. Brehm & Wilhelm Schilling, Neustadt-an-der-Orla.
- Brehm L. 1831. Handbuch der Naturgeschichte aller Vögel Deutschlands. Bernhard Friedrich Voigt, Ilmenau.
- Cabanis J. 1851. Museum Heineanum, Th. 4, Heft 1. R. Franzt, Halberstadt.
- Chapin J.P. 1932. Fourteen new birds from Tropical Africa. *American Museum Novitates* 570: 1-18.
- Conrad T. 1827. Nachrichten über die Sumpf-Meise (Mönchs-Meise) (Parus palustris Linn.). Neue Alpina 2: 30-36.
- Cuvier G. 1817. Le règne animal distribué d'après son organisation: pour servir de base à l'histoire naturelle des animaux et d'introduction à l'anatomie comparée. T. 4. *Déterville, Paris*.
- Deppe F. 1830. Preis-Verzeichniss der Säugethiere, Amphibien, Vögel, Fische und Krebse, welche von den Herren Deppe und Schiede in Mexico gesammelt worden, und bei dem unterzeichneten Bevollmächtigten in Berlin gegen baare Zahlung in Preuss. Courant zu erhalten sind. Berlin. Privately printed. 3 pp. Document reprinted 1863 in *Journal of Ornithology* 11(1): 54-60.
- De Lattre A., Bourcier J. 1846. Description de quinze espèces nouvelles de Trochilidées, faisant partie des collections rapportées par M. A. De Lattre, dont les précédentes excursions ont déjà enrichi plusieurs branches de l'histoire naturelle, et provenant de l'intérieur du Pérou, des républiques de l'Equateur, de la Nouvelle-Grenade et de l'isthme de Panama. Revue Zoologique par la Société cuvierienne 6: 305-312.

- de Roguin L. 1978. In Parvo Multa ou le voyage du naturaliste Henri de Saussure [1829–1905] aux Antilles et au Mexique de 1854 à 1856. *Musées de Genève. Revue mensuelle des musées et collections de la ville de Genève* 19: 19-22.
- de Saussure M.H. 1859. Note sur quelques oiseaux du Mexique. *Revue et Magasin de Zoologie pure et appliquée*, 2° série 11: 117-120.
- de Saussure M.H. 1861. Note complémentaire sur quelques Mammifères du Mexique. *Revue et Magasin de Zoologie pure et appliquée*, 2° série 13: 3-5.
- Dickinson E.C., Kennedy R.S., Parkes K.C. 1991. The Birds of the Philippines: An annotated check-list. *British Ornithologists' Union, Herts*.
- Dickinson E., Loskot V., Morioka H., Somadikarta S., van den Elzen R. 2006. Systematic notes on Asian birds. 50. Types of the Aegithalidae, Remizidae and Paridae. *Zoologische Mededelingen* 80: 65.
- Dickinson E.C., Remsen J.V. Jr. 2013. The Howard & Moore complete checklist of the birds of the world. 4th edition, Vol. 1. Aves Press, Eastbourne, U.K.
- Dickinson E.C., Christidis L. 2014. The Howard & Moore complete checklist of the birds of the world. 4th edition, Vol. 2. *Aves Press, Eastbourne, U.K.*
- Fatio V., Studer T., von Burg G., Knopfli W. 1889-1956. Catalogue des oiseaux de la Suisse. *Georg, Genève, Berne*.
- Finsch O., Meyer A.B. 1885. Vögel von Neu Guinea. Zumeist aus der Alpenregion am Südostabhange des Owen Stanley-Gebirges (Hufeisengebirge 7000-8000' hoch), gesammelt von Karl Hunstein. Zeitschrift für die gesammte Ornithologie 2: 369-393.
- Gmelin J.F. 1788-1793. Systema naturae per regna tria naturae. 13th ed. 3 vols. *Lipsiae*.
- Greenway J.C., Mayr E., Moreau R.E., Rand A.L., Snow D.W., Paynter R. A. Jr. 1967. Check-list of birds of the world: a continuation of the work of James L. Peters. Vol. 12. Harvard University Press, Cambridge.
- Greenway J.C. Jr. 1978. Type specimens of birds in the American Museum of Natural History, Part 2. Bulletin of the American Museum of Natural History 161: 1-305.
- Hartert E. 1892. Catalogue of the Birds in the British Museum. Vol. XVII. *Trustees of the British Museum (Natural History), London.*
- Heim de Balsac H., Jouard H. 1927. Première révision des mésanges huppées auxquelles est appliqué le nom de *Parus cristatus mitratus* Brehm. *Revue française d'Ornithologie* 11: 290-296.
- Hekstra G.P. 1982a (May). A revision of the American screech owls (*Otus*, Strigidae). *Vrije Universiteit Amsterdam*.
- Hekstra G.P. 1982b (December). Description of twenty four new subspecies of American *Otus* (Aves, Strigidae). *Bulletin Zoölogisch Museum Universiteit van Amsterdam* 9: 49-63.
- Hellmayr C.E. 1937. Catalogue of birds of the Americas and the adjacent islands. Part. X. Icteridae. Vol. 14. Field Museum of Natural History, Chicago.
- Hellmayr C.E. 1942. Remarques sur quelques oiseaux du Muséum de Genève. Revue suisse de Zoologie 49: 559-569.
- Hermann J. 1804. Observationes Zoologicae. Koenig, Paris.
- Holt D.W., Berkley R., Deppe C., Enriquez Rocha P.L., Olsen P.D., Petersen J.L., Rangel Salazar J.L., Segars K.P., Wood K.L. 1999. Family Strigidae (pp. 76-242). *In:* del Hoyo J., Elliot A., Sargatal J. (eds). Handbook of the Birds of the World. Vol. 5. *Lynx Edicions, Barcelona*.

- Horsfield T. 1821. A systematic arrangement and description of birds from the island of Java. *Transactions of the Linnean Society of London* 13: 133-200.
- Horsfield T. 1824. Zoological researches in Java, and the neighbouring islands. Kingsbury, Parbury & Allen, London.
- Horsfield T., Moore F. 1858. A catalogue of the birds in the Museum of the Hon. East-India Company. Vol. 2. W. M. H. Allen, London.
- I.C.Z.N. 1999. International Code of Zoological Nomenclature i-xxix, 1-306. (4th edition). The International Trust for Zoological Nomenclature, London.
- Imgram O. 1913. Description of a new form of a long-tailed tit. *The Zoologist* (4th ser.) 17: 187.
- Jouard H. 1925. La mésange alpestre (suite). Revue française d'Ornithologie 9: 72-79.
- Jouard H. 1928. De la variabilité géographique de Parus ater dans l'Europe Occidentale. Revue française d'Ornithologie 12: 355-374
- Jouard H. 1929a. Corrigenda. Alauda sér. I, 1: 58.
- Jouard H. 1929b. De la variabilité géographique d'Aegithalos caudatus dans l'Europe occidentale. Alauda sér. I, 3: 111-159.
- Jouard H. 1929c. Sous-espèces nouvelles de passereaux paléarctiques (Paridae et Certhiidae). Bulletin de la Société zoologique de France 54: 162-202.
- Jouard H. 1930. De la variabilité géographique de *Certhia brachydactyla* dans l'Europe occidentale. *Alauda* sér. I, 1: 3-49.
- Jouard H. 1936. Révision systématique des formes eurasiatiques et spécialement alpestres de *Parus atricapillus* avec un aperçu de ses formes « chinoises », japonaises et américaines. *Alauda* sér. VIII, 3-4: 342-471.
- Lichtenstein H. 1839. Beitrag für ornithologischen Fauna von Californien. Abhandlungen der Königlichen Akademie der Wissenschaften in Berlin 1838: 417-451.
- Linnaeus C. von 1758. Systema Naturae. Editio Duodecima, Reformata (Ed. 10). Impensis Direct Laurentii Salvii, Holmiae.
- Linnaeus C. von 1766. Systema Naturae. Editio Duodecima, Reformata (Ed. 12). Impensis Direct Laurentii Salvii, Holmiae.
- Ljungh S. I. 1797. Picus javanensis, en ny Fogel ifrån Java. Kungl. Svenska vetenskapsakademiens handlingar 18: 134-137.
- McNair J.B. 1942. Thomas Horsfield American Naturalist and Explorer. *Torreya* 42: 1-8.
- Martinez I. 1994. Family Numididae (Guineafowl) (pp. 376-429). *In:* del Hoyo J., Elliot A., Sargatal J. (eds). Handbook of the Birds of the World. Vol. 2. *Lynx Edicions, Barcelona*.
- Mayr E., Greenway J.C., Jr. 1960. Check-list of Birds of the World. Vol. IX. Harvard University Press, Cambridge, Massachusetts.
- Mayr E., Greenway J.C. Jr. 1962. Check-list of Birds of the World. Vol. XV. Harvard University Press, Cambridge, Massachusetts
- McGregor R.C. 1927. New or noteworthy Philippine Birds, V. *The Philippine Journal of Science* 32: 513-528.
- Meylan O. 1938. Henri Jouard, Ornithologiste. *Alauda* sér. X, 3-4: 236-258.
- Morony J.J. Jr., Bock W.J., Farrand J., Jr. 1975. Reference List of the Birds of the World. *The American Museum of Natural History, New York*.
- Ogilvie-Grant W.R. 1893. Catalogue of the Birds in the British

- Museum. Vol. XXIII. Trustees of the British Museum (Natural History), London.
- Pallas P.S. 1767. Spicilegia zoologica quibus novae imprimis et obscurae animalium species iconibus: descristionibus atque commentariis illustrantur. *Berlin*.
- Pennant T. 1769. Indian Zoology. Robert Faulder, London.
- Peters J.L. 1931. Check-list of Birds of the World Vol. 1. Harvard University Press, Cambridge, Massachusetts.
- Peters J.L. 1940. Check-list of Birds of the World Vol. 4. Harvard University Press, Cambridge, Massachusetts.
- Peters J.L. 1945. Check-list of Birds of the World Vol. 5. Harvard University Press, Cambridge, Massachusetts.
- Peter J.L. 1948. Check-list of Birds of the World Vol. 6. Harvard University Press, Cambridge, Massachusetts.
- Poty P. 1938. Henri Jouard. *Alauda* sér. X, 3-4: 231-235.
- Salvadori T.A. 1895. Catalogue of the Birds in the British Museum. Vol. XXVII. Trustees of the British Museum (Natural History), London.
- Salvin O., Godman F.D. 1884. Notes on birds from British Guiana. Part III. *The Ibis* 2: 443-452.
- Salvin O. 1896. New Species of Hummingbird from Northern Peru. *Bulletin of the British Ornithologists' Club* 33: 24-25.
- Sclater P.L. 1858. Characters of five new species of American birds. *Proceedings of the Zoological Society of London* 26: 446-449.
- Schlegel H. 1844. Abhandlungen aus dem Gebiete der zoologie und vergleichenden Anatomie (Vol. 4). A. Arnz & comp., Leiden.
- Sharpe R.B. 1890. Catalogue of the Birds in the British Museum. Vol. XIII. *Trustees of the British Museum (Natural History)*, London
- Sharpe R.B. 1903 (1899-1912). A hand-list of the genera and species of birds. Vol. IV. *Trustees of the British Museum (Natural History), London.*
- Sharpe R.B. 1906. The History of the Collections Contained in the Natural History Departments of the British Museum. Vol. 2. *British Museum, London*.
- Shaw G. 1798. The Naturalist's Miscellany. Vol. 10. *J. Cooper, London.*
- Shaw G. 1810. The Naturalist's Miscellany. Vol. 21. *J. Cooper, London.*
- Sherborn C. D. 1927 (1902-1933). Index Animalium. Sec. 2, part 13. Trustees of the British Museum (Natural History), London
- Sclater, P.L. 1858. Characters of five new species of American birds. *Proceedings of the Zoological Society of London* 26: 446-449.
- Scopoli G.A. 1787. Deliciae florae et faunae Insubricae [...] Pars II. Ticini : Ex Typographia Reg. & Imp. Monasterii S. Salvatoris. *Praesidib. Rei litter. Permittentibus*.
- Sumichrast F. 1881. Enumeración de las Aves observadas en el territorio de la República Mexicana. *La Naturaleza, Mexico* V: 227-250.
- Taylor P. B. 1996. Family Rallidae (rails, gallinules and coots) (pp. 108-209). *In:* Del Hoyo J., Elliott A., Sargatal J. (eds). Handbook of the Birds of the World. Vol. 3. *Lynx Edicions*, *Barcelona*.
- Vaurie C. 1959. The Birds of the Palearctic fauna. Order Passerifomes. *Witherby*, *London*.
- Vieillot L.J.P. 1817. Nouveau dictionnaire d'histoire naturelle, Vol. 7-18. Déterville, Paris.
- Vieillot L.J.P. 1818. Nouveau dictionnaire d'histoire naturelle, Vol. 19-27. Déterville, Paris.

Vigors N. A. 1827. Sketches in ornithology. *Journal of Zoology* 3: 432-448.

- von Burg G. 1924. Graumeisen. *Der Weidmann, Bülach* 17: 8. von Burg G. 1925. Die Südöstliche Alpenmeise. *Die Tierwelt*: 149
- Von Spix J.B. 1824. Avium species novae, quas Brasiliam anus MDCCCXVII MDCCCXX. Vol. 1. *Franc. Seraph., Hubschmann.*
- Warren R.L.M. 1966. Type-specimens of birds in the British Museum (Natural History). Vol. 1. Non-passerines. *Trustees of the British Museum (Natural History)*, *London*.
- Warren R.L.M., Harrison C.J.O. 1971. Type-specimens of birds in the British Museum (Natural History). Vol. 2. Passerines. Trustees of the British Museum (Natural History), London.
- Warren R.L.M., Harrison C.J.O. 1973. Type-specimens of birds in the British Museum (Natural History). Vol. 3. Systematic index. Trustees of the British Museum (Natural History), London.

- Weber C. 1983. Voyage muséologique autour d'un oiseau de paradis. *Musées de Genève* 238: 6-11.
- Weber C. 1985. Oiseaux et mammifères de la collection Horsfield au Muséum de Genève. *Musées de Genève* 258: 2-6.
- Wells D. R. 1999. The birds of the Thai-Malay Peninsula. Vol. 1 Non-passerines. *Academic Press, London*.
- Whistler H. 1929. Aegithalos caudatus aremoricus. Bulletin of the British Ornithologists' Club 49: 87.
- Zimmer J.T. 1951. Studies of Peruvian birds. No. 61. The genera Aglaeactes, Lafresnaya, Pterophanes, Boissonneaua, Heliangelus, Eriocnemis, Haplophaedia, Ocreatus and Lesbia. American Museum Novitates 1540: 1-55.