



Type specimens of birds in the Natural History Museum, University of Oslo, Norway

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Abstract

A list of all known bird type specimens in the collection of the Natural History Museum, University of Oslo, Norway is presented. The specimens originate from northern Australia, eastern Indonesia or Tristan da Cunha, and have either been collected and described by personnel associated with the museum or sent from other museums in exchange for other specimens. The catalogue is not intended as a taxonomic revision of the treated taxa, and consequently no taxonomic revisions are made, but the type status of some specimens formerly considered to be types is refuted. The collection holds name-bearing types of 11 taxa, comprising one holotype and 26 syntypes; two paratypes from the same type series as the holotype; and one paralectotype of a twelfth taxon. The catalogue also includes two specimens of one taxon here refuted as being type specimens.

Key words: Avian types, NHMO, Robert Collett, Yngvar Hagen, Adolf Bernhard Meyer, Tommaso Salvadori, Australia, Tristan da Cunha, New Guinea, Tanimbar Islands, Aru Islands

Introduction

The Bird Collection at the Natural History Museum in Oslo, Norway (NHMO) holds about 35,600 specimens. Most of these are preserved as study skins (17,600) or mounted specimens (4,100), but there is also an egg collection of about 10,200 sets, and smaller collections of ethanol-preserved specimens and skeletal material, each estimated to 500–1000 specimens. Most of the specimens originate from the period 1860–1920, but there are also a considerable number from 1950–1980. Since then, the growth of the voucher collection has mainly been based on salvage, except for a recent addition of Norwegian eggs in the last decade. Since about 1990, a large collection of avian blood, tissue and DNA (as part of the NHMO DNA Bank) and sperm (Lifjeld 2019) has also been built up at the museum, but this part of the Bird Collection will not be covered here.

The collection holds 27 name-bearing types (including nine eggs) of 11 taxa, including one holotype and 26 syntypes. Nine of these were originally described as new species, and two as new subspecies. Further, it holds two paratypes from the same type series as the holotype, and one paralectotype of an additional taxon. Finally, two specimens of one taxon were previously recorded as types but are here refuted.

Most of the types in the collection date back to a period when the naming and organization of the museum was different from the current situation. The Natural Museum (*'Naturalmusæet'* in Norwegian) was established in 1813 as part of the newly founded Royal Frederik's University (*'Det Kongelige Frederiks Universitet'*). It was located in the centre of the city of Christiania (later also spelled *'Kristiania'*). In 1910, the Zoological Museum opened in a new building in the Botanical Garden on the eastern outskirts of the city, where it is still located. In 1925, the name of the city was changed to Oslo; in 1939, the university changed its name to University of Oslo; in 1999, the Zoological Museum merged with the Geological Museum, Botanical Museum and Botanical Garden to form the current Natural History Museum.

The type specimens in the collection fall into three groups; 1) Australian specimens collected by Knut Dahl in 1895 and described as new species by Robert Collett, Director and Professor at the Natural Museum, in 1898; 2)

specimens collected during the Norwegian Tristan da Cunha Expedition in 1937–38 and described as new subspecies by Yngvar Hagen in his doctoral dissertation in 1952; 3) specimens from eastern Indonesia (Western New Guinea, the Tanimbar and Aru Islands) received in exchange from other museums in the last part of the 19th century.

Robert Collett (1842–1913; Wikidata: Q1111078 2021) was a Norwegian zoologist and the Director of the Natural/Zoological Museum from 1882 until his death in 1913. He started at the museum as an assistant of Professor Halvor Rasch in 1871, became the first Curator of zoology at the museum in 1874, assisting Director in 1882, was appointed as Professor in 1885, and Director in 1886 (Collett 1915; Broch 1954). As part of the preparations for the move to the new museum which opened in 1910, Collett organized several collecting expeditions. One of these was led by the Norwegian zoologist Knut Dahl (1871–1951), who together with his friend and taxidermist, Ingel Olsen Holm, travelled to southern Africa in 1893. After about a year of collecting in the Natal and Zulu regions (currently the KwaZulu-Natal province, South Africa), they travelled on to Australia and spent one and a half years in the northern part of the country, mostly in the areas near Port Darwin or Palmerston (currently Darwin), Northern Territory. This is also from where the specimens described as new species by Collett originate.

Yngvar Hagen (1909–1993; Wikidata: Q17094163 2021) was a Norwegian zoologist, working as an assistant at the Zoological laboratory at the University of Oslo during 1937–1942 and as a curator at the invertebrate collection 1952–1955. He was responsible for terrestrial zoology on the Norwegian expedition to the remote Tristan da Cunha archipelago in the Southern Atlantic during 1937–38. The ornithological results from the expedition formed the basis of Hagen's doctoral dissertation (Hagen 1952), in which he described two new subspecies.

The last group of type specimens were received in exchange for other specimens from museums in Dresden, Germany and Genoa, Italy. The former was sent by Adolf Bernhard Meyer (1840–1911; Wikidata: Q63167 2020) at the '*Königl. Zoologischen und Anthropologisch-Ethnographischen Museums zu Dresden*' (currently the Museum für Tierkunde, Senckenberg Naturhistorische Sammlungen Dresden) and arrived in Oslo in July 1886. The shipment contained 14 specimens of 12 species of parrots and pigeons from '*Timor laut*' (Tanimbar Islands, Maluku Islands, Indonesia). They were received in exchange for a couple of aberrant grouse specimens, '*T. lagopoides* & *T. tetrax alb.*', which Collett previously had sent to Meyer (see facsimile of accompanying letter in Figure 1; Meyer 1886). *Tetrao lagopoides* Nilsson 1832 is no longer a valid taxon on account of its hybrid origin; the other is an albino *Lyrurus tetrax* (Linnaeus, 1758). Several of the included taxa were described by Meyer in the preceding years (Meyer 1882; 1884), and four of the specimens were indicated in the accompanying letter from Meyer to be types of these. Another two specimens (*Eclectus riedeli* Meyer, AB, 1882) have also been labelled as types in the NHMO collection, but these were not indicated as types in the letter. As the current catalogue documents, these are not part of the type series of this taxon.

The other shipment arrived from Giacomo Doria (1840–1913; Wikidata: Q1219227 2021) at the '*Museo Civico di Storia Naturale di Genova*' (currently the Museo Civico di Storia Naturale 'Giacomo Doria') in Genoa in January 1888, containing a total of 92 specimens of 73 species '*della Nuova Guinea e delle Molucche*', i.e. from the island of New Guinea and the Maluku Islands, Indonesia. Four of these are type specimens of taxa described by Tommaso Salvadori (1835–1923; Wikidata: Q704169 2021) in 1876 and 1878. Again, this was part of an exchange of specimens between the museums, and Doria asked for specimens of Norwegian mammals like the harbor seal *Phoca vitulina* Linnaeus, 1758, wolverine *Gulo gulo* Linnaeus, 1758 and polar bear *Ursus maritimus* Phipps, 1774 in return (Doria 1888).

Methods

With the publication of the present catalogue, the NHMO Bird Collection finally complies with all the responsibilities for institutions holding name-bearing types, as identified by the Code published by the International Commission on Zoological Nomenclature (1999), Recommendation 72F:

- 72F.1 ensure that all are clearly marked so that they will be unmistakably recognized as name-bearing types;
- 72F.2 take all necessary steps for their safe preservation;
- 72F.3 make them accessible for study;
- 72F.4 publish lists of name-bearing types in its possession or custody; and
- 72F.5 so far as possible, communicate information concerning name-bearing types when requested.



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verehrter Herr Collett

Mein Dank für das Album - ♀ von *T. tetrix*,
ja, das ist ein Album, darauf zweifle ich nicht, aber das ist

Heute sandte ich per Post franco eine Kiste an
Ihre Adr. ab, welche folgende 14 Vogelstücken enthält

- Cacatua Joffini* (Fink) von Timorlaut
- Electurus Riedelii* Meyer ♂ u ♀ "
- Geoprogys timorlauris* Meyer ♂ u ♀ " Tappan
- Eos reticulatus* (S. Müll.) Timorlaut
- Calornis crassa* Sel ♀ "
- Artamus Mumbombai* Meyer " Tappan
- Carpophaga cucullata* Wall "
- Chalophaps chrys^{chlora}nota* (Wagl) "
- Ptilopus flavovirescens* Meyer " Tappan
- Pranealus minor* Sel - "

Sauropaki chloris (Bodd) aus
Ptilopus Enayi fls Timor

Dies bitte ich als Äquivalent für *T. lagopoides*
♂ *T. tetrix* alle 5 annehmen zu sollen.

Salvadori hat denn auch alle meine Arten von Timorlaut
ankannt & einen beseren Namen denn für sie gibt
es nicht.

Mit freundlichen Grüßen
A. B. Meyer

FIGURE 1. Facsimile of parts of the letter from A. B. Meyer to R. Collett 11 July 1886, including the section about the content of the shipment sent to Oslo the same day, plus the header and signature parts.

All specimens previously identified as types in the Bird Collection have been examined. All available label information has been collected and compared with the original descriptions and other publications about the type specimens. Exchange and collection catalogues at the museum, and correspondence with the contact persons at the museums with which some of the types were exchanged, have also been consulted. Finally, current staff at these same institutions have provided copies of labels and other information with which documentation in the NHMO collection could be compared. During these investigations, several new type specimens were discovered that previously had not been recognized as types in the NHMO collection.

Following article 74.7, Recommendation 74G, and article 75.2 of the Code (International Commission on Zoological Nomenclature 1999), stating that lectotypes or neotypes should not be designated merely for curatorial purposes, we have refrained from designating lectotypes or neotypes from the type series treated in this catalogue. In one case, however, the specimen designated as ‘*Type*’ in the original publication has been considered and listed as the holotype, and the remaining two specimens of that type series as paratypes, according to article 73.1.1 of the Code (International Commission on Zoological Nomenclature 1999).

Several acronyms and associated full names have been used previously for the Zoological Museum in Oslo, including UZMO (*Zoologisk Museum*), ZMK or ZMK-K (*Zoological Museum, Kristiania*) and ZMUN (*Zoology, Natural History Museum, University of Oslo*). At least one of these (ZMK) has also been used by other institutions. The current acronym for the Natural History Museum in Oslo is ‘NHMO’, and the collection code for the Bird Collection is ‘BI’ (ref. the *GBIF Registry of Scientific Collections*; <https://www.gbif.org/grscicoll>).

The Bird Collection went through a reorganization in 2014, when several subcollections were merged into one Bird Collection and a new collection management system was adopted. In this process, all specimens were assigned new, unique catalogue numbers with the prefix ‘NHMO-BI-’; these are the identifiers used to refer to the specimens in the current catalogue. Previous catalogue numbers, which may appear in older publications and are typically still used on labels applied before 2014, as well as any collection numbers or similar provided by the collector, are also included.

Collett distributed syntypes of the taxa he described to other museums. The current location of these has been verified and their catalogue numbers in the respective museums are provided. Similarly, additional specimens from the type series of Meyer and Salvadori of which there are types in the NHMO collection, have also been searched for in publications, online databases, and by direct contact with personnel at other museums and collections, and catalogue numbers and other details of these are included in so far as we have succeeded in locating these.

Format

The catalogue is organized taxonomically according to the IOC World Bird List (Gill *et al.* 2022) version 12.1. All taxa are listed under their original names, as published by the author, followed by the reference for the original publication and current name, according to the IOC v12.1 list.

In some publications year of publication (printing) may differ from the year of the issue; for nomenclatural purposes the former is the crucial one. To obtain correct dates of publication we have consulted Duncan (1937) for descriptions published in ‘*Proceedings of the Scientific Meetings of the Zoological Society of London*’ or ‘*Proceedings of the General Meetings for Scientific Business of the Zoological Society of London*’, and Poggi (1996) for descriptions in ‘*Annali del Museo civico di Storia naturale di Genova*’, 1875.

Specimens may often have several catalogue numbers, originating from various older, often no longer maintained, catalogues. Particularly, birds in the Dresden collection often have one catalogue number preceded by the letter ‘C’ and another without any prefix. The C-numbers are the main catalogue numbers, while the latter are numbers that were assigned to skins that were mounted (see Eck & Quaisser (2004) for details). All specimens therefore have a C-number, but only some the additional number. In tables 2, 4 and 5, providing details for specimens originating from the Dresden collection, the additional ‘*Mount*’ number has been included in a separate column if this is known, while additional catalogue numbers from other collections are included in parentheses after the current number. All specimens considered are listed according to their type status (including refuted types), presenting available information at the following format:

Type status

Cat. no. [Prev. cat. no.]; Preparation; Age Sex; Collector (Field no.), Coll. date; Country: Locality [current locality name]; Coordinates; Figure no.

<i>Cat. no.</i>	Current catalogue number in the NHMO bird collection;
<i>Prev. cat. no.</i>	Former catalogue number in the NHMO bird collection;
<i>Preparation</i>	Current preparation;
<i>Age</i>	Age as indicated in the original publication;
<i>Sex</i>	Sex as indicated in the original publication;
<i>Collector</i>	Collector according to the original publication;
<i>Field no.</i>	Collector's field identification number;
<i>Coll. date</i>	Collection date or year, or assumed earliest and latest year of collecting;
<i>Country</i>	Current name of country of origin;
<i>Locality</i>	Locality as provided in the original publication, alternatively with current name or additional information in square brackets;
<i>Coordinates</i>	Approximate coordinates, as assigned in the current publication;
<i>Figure no.</i>	Figure number of plate showing the specimen.

Coordinates were not originally recorded for any of the specimens but have been determined by L.E.J. based on information on labels, original description, field notes and various other publications. Some archaic locality names were located in old printed maps, assisted by elevation information if available ('*Giabu-lengan, Aru*', Australian Survey Corps (1945a); '*Mori 3500 p., Mte. Arfak*', Australian Survey Corps (1945b)), one was located based on a map in the original publication ('*Inaccessible, above Blenden Hall*'; Hagen (1952)), some based on descriptions in diaries, letters and the travelogue of the collector Knut Dahl ('*Mary River, Arnhem Land*' and '*South Alligator River*'; Dahl 1898; 1926), and the rest by *Google Maps* searches (<https://www.google.com/maps/>). As the exact locality is not known in any of the cases, no estimates of uncertainty are provided, and the coordinates are to be considered rough estimates of the true collecting locality.

Abbreviations and collection codes¹

Ad.	Adult
Imm.	Immature
Juv.	Juvenile
F	Female
M	Male
AMNH	American Museum of Natural History, New York, United States of America
BMNH	British Museum (Natural History), London and Tring, United Kingdom (currently NHMUK)
MSNG	Museo Civico di Storia Naturale di Genova, Genoa, Italy (currently the Museo Civico di Storia Naturale 'Giacomo Doria')
MNHN	Museum National d'Histoire Naturelle, Paris, France
MTD	Museum für Tierkunde, Dresden, Germany (currently a department of SNSD)
MRSN	Museo Regionale di Scienze Naturali, Turin, Italy (housing the ornithological collection formerly belonging to the MZUT)
MZUT	Museo e Istituto di Zoologia Sistemica dell'Università di Torino, Turin, Italy (now housed in the MRSN)
NHMUK	Natural History Museum UK, London and Tring, United Kingdom (formerly BMNH)
NHMW	Naturhistorisches Museum, Wien, Vienna, Austria
RMNH	Naturalis Biodiversity Center, Zoology Collections, Leiden, the Netherlands
SNSD*	Senckenberg Naturhistorische Sammlungen Dresden, Dresden, Germany (currently including MTD)
SNSB*	Staatliche Naturwissenschaftliche Sammlungen Bayerns, Munich, Germany (currently including ZSM)
USNM	Smithsonian Institution, National Museum of Natural History, Washington DC, United States of America
ZSM	Zoologische Staatssammlung München, Munich, Germany (currently a department of SNSB)

¹ Collection codes according to the *GBIF Registry of Scientific Collections* (<https://www.gbif.org/grscicoll>), except for codes followed by '*', which are according to the current web pages of the relevant institutions.

TABLE 1. Type specimens, including two refuted types, in the Bird Collection at the Natural History Museum, University of Oslo, Norway.

Taxon	Author	Original name	Original author	Specimens
<i>Petrophassa rufipennis</i>	Collett, 1898	<i>Petrophassa rufipennis</i>	Collett, 1898	1 syntype
<i>Ptilinopus alligator</i>	Collett, 1898	<i>Ptilinopus (Leucotreron) alligator</i>	Collett, 1898	1 syntype
<i>Ptilinopus regina xanthogaster</i>	(Wagler, 1827)	<i>Ptilinopus flavovirescens</i>	Meyer, AB, 1884	1 syntype
<i>Stercorarius antarcticus hamiltoni</i>	(Hagen, 1952)	<i>Catharacta skua hamiltoni</i>	Hagen, 1952	15 syntypes
<i>Geoffroyus geoffroyi timorlaeensis</i>	Meyer, AB, 1884	<i>Geoffroyus timorlaeensis</i>	Meyer, AB, 1884	2 syntypes
<i>Psephotellus dissimilis</i>	(Collett, 1898)	<i>Psephotus dissimilis</i>	Collett, 1898	2 syntypes
<i>Ptiloprora erythropleura erythropleura</i>	(Salvadori, 1876)	<i>Ptilotis erythropleura</i>	Salvadori, 1876	1 syntype
<i>Melanocharis nigra chloroptera</i>	Salvadori, 1876	<i>Melanocharis chloroptera</i>	Salvadori, 1876	1 syntype
<i>Artamus leucorynchus musschenbroeki</i>	Meyer, AB, 1884	<i>Artamus Musschenbroeki</i>	Meyer, AB, 1884	1 paralectotype
<i>Zosterops novaeguineae novaeguineae</i>	Salvadori, 1878	<i>Zosterops novae guineae</i>	Salvadori, 1878	1 syntype
<i>Dicaeum geelvinkianum misoriense</i>	Salvadori, 1876	<i>Dicaeum misoriense</i>	Salvadori, 1876	1 syntype
<i>Nesospiza acunhae dunnei</i>	Hagen, 1952	<i>Nesospiza wilkinsi dunnei</i>	Hagen, 1952	1 holotype; 2 paratypes
Refuted types				
<i>Eclectus rotatus riedeli</i>	Meyer, AB, 1882	<i>Eclectus riedeli</i>	Meyer, AB, 1882	2 refuted types

Types in the NHMO Bird Collection

Columbiformes

Columbidae

Petrophassa rufipennis Collett, 1898

Proceedings of the General Meetings for Scientific Business of the Zoological Society of London, 1898 (3): 354.

Current name: *Petrophassa rufipennis* Collett, 1898

Syntype NHMO-BI-77947; Mounted; Ad. M; Knut Dahl (1245), 19 June 1895; Australia: South Alligator River; 13.515° S 132.505° E; 8a.

Remarks: Collett (1898) based the original description on two adult males collected by Knut Dahl, without specifying any one of them as the holotype. One of the specimens was sent to the British Museum (Natural History) (BMNH; Sharpe 1906; Warren 1966), where it currently is catalogued as NHMUK 1898.10.10.1 (Natural History Museum 2014a; Hein van Grouw, pers. comm.).

The original label, written by the collector, is present at the base of the stand (Figure 2a). The species is here referred to simply as 'Columba'.

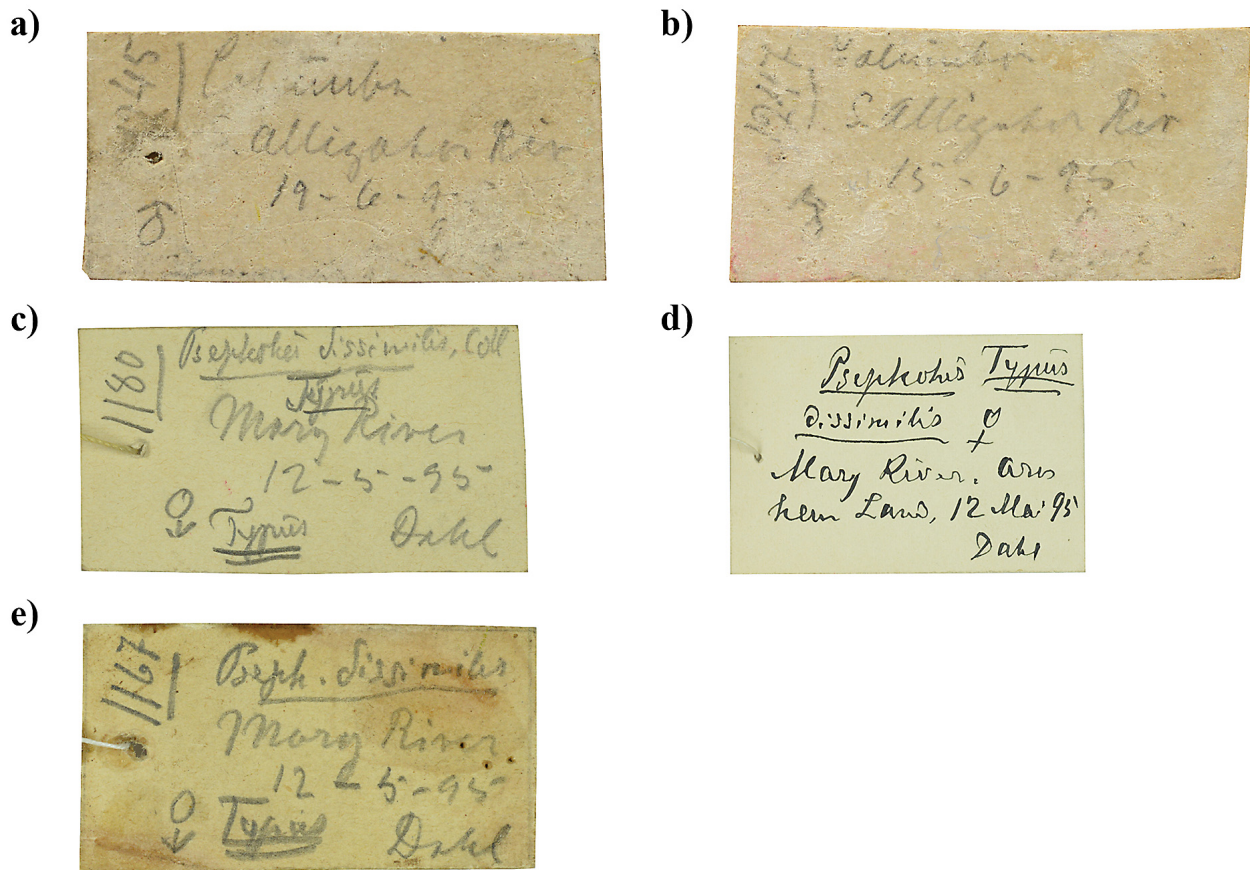


FIGURE 2. Labels of type specimens in the NHMO Bird Collection described by R. Collett. a) *Petrophassa rufipennis* NHMO-BI-77947 (collector's label); b) *Ptilopus (Leucotreron) alligator* NHMO-BI-77948 (collector's label); c) *Psephotus dissimilis* NHMO-BI-64125 (collector's label); d) *Psephotus dissimilis* NHMO-BI-64125 (NHMO label); e) *Psephotus dissimilis* NHMO-BI-85843 (collector's label).

***Ptilopus (Leucotreron) alligator* Collett, 1898**

Proceedings of the General Meetings for Scientific Business of the Zoological Society of London, 1898 (3): 354–355.

Current name: ***Ptilinopus alligator* Collett, 1898**

Syntype NHMO-BI-77948; Mounted; Ad. M; Knut Dahl (1247), 15 June 1895; Australia: South Alligator River; 13.515° S 132.505° E; 8b.

Remarks: Collett (1898) based the original description on two birds, a male and a female collected by Knut Dahl, without specifying any one of them as the holotype. The other specimen was sent to the BMNH (Sharpe 1906; Warren 1966), where it is currently catalogued as NHMUK 1898.10.10.2 (Natural History Museum 2014b; Hein van Grouw, pers. comm.). Based on a list of specimens collected by Dahl during his Australia expedition (unpublished), it is evident that the original collector's number of the NHMUK specimen must be 1248.

The original label, written by the collector, is present at the base of the stand (Figure 2b). The species is also here referred to simply as '*Columba*'.

Collett placed this new taxon in the subgenus *Leucotreron* and used the spelling *Ptilopus* for the genus, while the original spelling was *Ptilinopus* (Swainson 1825). The form *Ptilopus* was apparently introduced by Strickland (1841: p. 36), posing the question '*Should not Ptilonopus [sic] be written Ptilopus?*', and in the period to follow this seemed to be the favoured spelling of the genus (e.g. Bonaparte 1857; Rowley 1877; Elliot 1878). Currently the original spelling is again used by all the major taxonomic lists, including the IOC World Bird List (Gill *et al.* 2022), and *Leucotreron* is no longer recognized as a subgenus. According to the Code (International Commission on Zoological Nomenclature 1999) these changes in the spelling of the genus name (Article 51.3.1) and rank (Article 51.3.2) do not warrant use of parentheses around the original author name.

For the NHMUK specimen, slightly different coordinates are provided for the South Alligator River locality (Warren 1966; Schodde & Mason 1997; Natural History Museum 2014b); 13° 30' S, 132° 50' E = 13.500° S 132.833° E, i.e. ca. 29 km further east than those provided above. While the location provided in the current publication is based on a detailed study of the travelogue of the collector (Dahl 1898; 1926), as well as his field diaries and letters to Collett, it has not been possible to find any documented source of the coordinates given in the NHMUK records. It is therefore assumed that they are added simply on the basis of the rather wide-ranging locality name (no coordinates are present, neither in the register book nor on any of the labels of the specimen; Hein van Grouw, pers. comm.). As Dahl in a letter to Collett stated that they had been travelling in the mountains between the Mary and South Alligator Rivers, we consider the coordinates presented here to be the more likely of the two sets (though still subject to the cautionary note provided in the *Format* section above).

***Ptilopus flavovirescens* Meyer, AB, 1884**

Sitzungsberichte und Abhandlungen der Naturwissenschaftlichen Gesellschaft Isis in Dresden, Abhandlungen 1884: 50.

Current name: ***Ptilinopus regina xanthogaster* (Wagler, 1827)**

Syntype NHMO-BI-59271 [I016967]; Study skin; Johann Gerard Friedrich Riedel, 1881–1883; Indonesia: Timorlaut [Tanimbar Islands]; 7.500° S 131.500° E; (10a).

Remarks: This specimen is labelled as '*Typus*' both in the accompanying letter from Meyer and on the label (Figure 3a), which seems to be in the same handwriting as the letter and therefore most likely written by Meyer. In the original description, Meyer (1884) stated that he based his description on a large series of specimens ('*grossen Serie*'); Eck & Quaiser (2004) specified the number of syntypes in this series more precisely as 16, which also corresponds with the contiguous series of specimens recorded in the MTD catalogue (C7114–C7129; Table 2). In addition to the six specimens for which current location is accounted for in Table 2, there are also three in NHMW (NMW 48.234–48.236; Pelzeln & Lorenz 1888; Schifter 1990; Schifter *et al.* 2007; Hans-Martin Berg, pers. comm.), but it is not known which numbers from the Dresden collection these correspond to. These three, and the NHMO specimen, must however be assumed to be among the 10 syntypes without known current location.

While no collection date was provided for the NHMO specimen, we have based the interval given for collection date (1881–1883) on information available in Meyer (1881) and Meyer (1884). In the former, presented in Wien on 7 December 1881, Meyer listed specimens of birds received from Riedel, collected by him during a round trip of the eastern Malay Archipelago in 1880. The only species included from the Tanimbar Islands were *Carpophaga concinna* Wallace, 1865 (currently *Ducula concinna* (Wallace, 1865); from both Tenimber and Cera) and *Eclectus riedeli* (currently *Eclectus roratus riedeli* Meyer, AB, 1882; only from Cera). As no *Ptilopus flavovirescens* specimens were included in this shipment, it can probably be assumed that he did not collect this species during the 1880 trip. We have therefore concluded that the *Ptilopus flavovirescens* specimens most likely have been collected at the earliest in 1881, and, as the paper in which the taxon was described is dated March 1884, they were probably collected no later than 1883. This also corresponds well with information provided by Büttikofer (1886), describing a collection of 35 bird skins, including *Ptilopus flavovirescens*, presented to the Leyden Museum by Riedel, collected by his hunters on ‘Timor-Laut’ in 1882.

TABLE 2. Catalogue numbers from the MTD/SNSD catalogues of all 16 specimens in the type series of *Ptilopus flavovirescens*. Current locations and catalogue numbers are included for specimens for which this is known. Dresden catalogue numbers are not known for the three NHMW specimens or the NHMO specimen.

Current cat. no. ^a	Mount cat. no. ^a	Current location	Cat. no. current location	References ^{b,c}	Comments
C7114	13442	?			
C7115		SNSD	C7115	1	
C7116		?			
C7117	13177	SNSD	C7117	1	
C7118	13440	?			
C7119		?			
C7120	13859	SNSD	C7120	1	
C7121		SNSD	C7121	1	
C7122		MNHN	ZO-MO-1890-293 (N.C. 172 B)	2, 3	Exchanged to MNHN 3 June 1890
C7123		?			
C7124		?			
C7125	13846	?			
C7126	13847	SNSD	C7126	1	
C7127		?			
C7128	13441	?			
C7129	13442	?			
?		NHMW	NMW 48.234 (1884.V.47)	4, 5, 6	
?		NHMW	NMW 48.235 (1884.V.47)	4, 5, 6	
?		NHMW	NMW 48.236 (1884.V.47)	4, 5, 6	
?		NHMO	BI-59271 (I016967)	7	

^a: See *Format* section of main text for details about different catalogue numbers.

^b: All MTD/SNSD data provided by Martin Päckert (pers. comm.)

^c: 1. Eck & Quaisser (2004); 2. Patrick Bousses, pers. comm.; 3. Muséum national d’Histoire naturelle Paris (France) (2020c); 4. Pelzeln & Lorenz (1888); 5. Schifter *et al.* (2007); 6. Hans-Martin Berg, pers. comm.; 7. Current publication.



FIGURE 3. Labels of type specimens (maintained and refuted) in the NHMO Bird Collection described by A.B. Meyer. a) *Ptilopus flavovirescens* NHMO-BI-59271 (original Dresden label); b) *Ptilopus flavovirescens* NHMO-BI-59271 (NHMO label); c) *Eclectus riedeli* NHMO-BI-64131 (original Dresden label); d) *Eclectus riedeli* NHMO-BI-64132 (original Dresden label); e) *Geoffroyus timorlaoensis* NHMO-BI-64130 (original Dresden label); f) *Geoffroyus timorlaoensis* NHMO-BI-64228 (original Dresden label); g) *Artamus musschenbroeki* NHMO-BI-68621 (original Dresden label).

In addition to the assumed original label mentioned above, there is also a label that has been added at the NHMO (Figure 3b), probably shortly after accessioning into the collection.

Order Charadriiformes

Family Stercorariidae

Catharacta skua hamiltoni Hagen, 1952

Birds of Tristan da Cunha. Results of the Norwegian scientific expedition to Tristan da Cunha 1937–1938, No. 20: 135–145.

Current name: *Stercorarius antarcticus hamiltoni* (Hagen, 1952)

- Syntype** NHMO-BI-67601 [I026282]; Study skin; Imm. F; Yngvar Hagen (80), 31 January 1938; SHN²: Nightingale; 37.427° S, 12.478° W; 13a.
- Syntype** NHMO-BI-67602 [I026283]; Study skin; Ad. M; Yngvar Hagen (260), 26 February 1938; SHN: Inaccessible; 37.300° S 12.673° W; 13b.
- Syntype** NHMO-BI-67603 [I026284]; Study skin; Juv. F; Yngvar Hagen (57), 20 January 1938; SHN: Inaccessible; 37.300° S 12.673° W; 13c.
- Syntype** NHMO-BI-67604 [I026285]; Study skin; Ad. M; Yngvar Hagen (3), 16 December 1937; SHN: Tristan da Cunha; 37.105° S 12.278° W; 14a.
- Syntype** NHMO-BI-67605 [I026286]; Study skin; Ad. F; Yngvar Hagen (75), 25 January 1938; SHN: Tristan da Cunha; 37.105° S 12.278° W; 14b.
- Syntype** NHMO-BI-85384; Study skin; Ad. F; Yngvar Hagen (2), 16 December 1937; SHN: Tristan da Cunha; 37.105° S 12.278° W; 14c.
- Syntype** NHMO-BI-92659; Blown eggshell; Egg; Yngvar Hagen (352), 1937; SHN: Tristan da Cunha; 37.105° S 12.278° W; 5a.
- Syntype** NHMO-BI-92660; Blown eggshell; Egg; Yngvar Hagen (356), 1937; SHN: Tristan da Cunha; 37.105° S 12.278° W; 5b.
- Syntype** NHMO-BI-92661; Blown eggshell; Egg; Yngvar Hagen (353), 1937; SHN: Tristan da Cunha; 37.105° S 12.278° W; 5c.
- Syntype** NHMO-BI-92662; Blown eggshell; Egg; Yngvar Hagen (357), 1937; SHN: Tristan da Cunha; 37.105° S 12.278° W; 5d.
- Syntype** NHMO-BI-92663; Blown eggshell; Egg; Yngvar Hagen (358), 1937; SHN: Tristan da Cunha; 37.105° S 12.278° W; 5e.
- Syntype** NHMO-BI-92664; Blown eggshell; Egg; Yngvar Hagen (355), 1937; SHN: Tristan da Cunha; 37.105° S 12.278° W; 5f.
- Syntype** NHMO-BI-92665; Blown eggshell; Egg; Yngvar Hagen (354), 1937; SHN: Tristan da Cunha; 37.105° S 12.278° W; 5g.
- Syntype** NHMO-BI-92666; Blown eggshell; Egg; Yngvar Hagen (351), 1937; SHN: Tristan da Cunha; 37.105° S 12.278° W; 5h.
- Syntype** NHMO-BI-92668; Blown eggshell; Egg; Yngvar Hagen (350), 1937; SHN: Tristan da Cunha; 37.105° S 12.278° W; 5i.

Remarks: Hagen (1952) based his description of this subspecies on a total of nine birds examined in the field, but only six of them were skinned and preserved. He did not assign any holotype among these, and all nine birds must therefore be considered syntypes. In addition, he also explicitly mentioned and provided average measurements for nine eggs. According to Article 72.5.1 of the Code (International Commission on Zoological Nomenclature 1999), '...any part of an animal...' is eligible to be a name-bearing type, and we therefore consider also these nine eggs to be part of the type series for this taxon. Dimensions of all nine eggs, based on measurements made by L.E.J., are provided in Table 3; the average dimensions of these (50.6 x 69.7 mm) match exactly those provided by Hagen (1952). All extant syntypes (i.e. six skins and nine eggs) are present in the NHMO collection.

TABLE 3. Dimensions of the nine eggs included in the type series of *Stercorarius antarcticus hamiltoni* Hagen, 1952, based on measurements taken by the authors (L.E.J.).

Catalogue number	Field no.	Width (mm)	Length (mm)
NHMO-BI-92668	350	49.7	74.2
NHMO-BI-92666	351	50.2	70.0
NHMO-BI-92659	352	52.8	69.6
NHMO-BI-92661	353	50.2	71.1
NHMO-BI-92665	354	50.5	67.1
NHMO-BI-92664	355	52.4	68.5
NHMO-BI-92660	356	49.8	70.2
NHMO-BI-92662	357	49.9	65.8
NHMO-BI-92663	358	50.1	70.8
Average		50.6	69.7

2 SHN: Saint Helena, Ascension and Tristan da Cunha



FIGURE 4. Labels (metal tags) of type specimens in the NHMO Bird Collection of *Catharacta skua hamiltoni* Hagen, 1952 (all collector's labels). a) NHMO-BI-67601; b) NHMO-BI-67602; c) NHMO-BI-67603; d) NHMO-BI-67604; e) NHMO-BI-67605; f) NHMO-BI-85384.

The skins are all labelled with metal tags with the collector's field number embossed into them (Figure 4), while the eggs are labelled with the field number written with pencil directly on their surface (Figure 5). One of the eggs (NHMO-BI-92664) is cracked and has previously been attempted to be repaired.

Order Psittaciformes

Family Psittacidae

Eclectus riedeli Meyer, AB, 1882

Proceedings of the Scientific Meetings of the Zoological Society of London, 1881 (4): 917–919 [printed April 1882].

Current name: *Eclectus roratus riedeli* Meyer, AB, 1882

Refuted NHMO-BI-64131 [I022717]; Mounted; F; Johann Gerard Friedrich Riedel, 1881–1886; Indonesia: Timorlaut [Tanimbar Islands]; 7.500° S 131.500° E; 10b, lower specimen.

Refuted NHMO-BI-64132 [I022718]; Mounted; M; Johann Gerard Friedrich Riedel, 1881–1886; Indonesia: Timorlaut [Tanimbar Islands]; 7.500° S 131.500° E; 10b, upper specimen.

Remarks: This mounted pair, a male and a female, have '(Typus)' written on their labels (with parentheses; Figure 3c and 3d), but this is not mentioned in the letter that accompanied the specimens when they arrived at the museum (Figure 1). While these labels are in a different style than the labels of *Ptilopus flavovirescens* (Figure 3a) and the *Geoffroyus timorlaoënsis* female (Figure 3f), they are very similar to those of the *Geoffroyus timorlaoënsis* male (Figure 3e) and *Artamus Musschenbroeki* (Figure 3g), and to labels written by Meyer and found on other specimens currently in the SNSD collection. They, hence, apparently represent a 'prettier' version of Meyer's handwriting, and also these labels are therefore considered to be original. 'Typus' and 'Mus. Dresd. 86', however, seem to have been added after the main text, probably by two different persons, and may likely have been added at NHMO.

The original description of this species (Meyer 1882) was, however, based on a single female specimen, which consequently should be regarded as the holotype. This was at the MTD (now SNSD) but was lost during WW2 (C6051; Eck & Quaisser 2004). Consequently, neither of the specimens in the NHMO collection can be the true holotype of this taxon. Most likely these specimens represent a similar case to the *E. roratus riedeli* (NMW 50.145) in NHMW, which was included in the type catalogue by Pelzeln & Lorenz (1888) and there described as a 'typical specimen' ('*typisches Exemplar*') but later dismissed as a type by Schifter (1990).

While no neotype, to our knowledge, has been assigned for this taxon, we refrain from doing so with reference to article 75.2 of the Code (International Commission on Zoological Nomenclature 1999).

No collecting date was provided for these specimens, but the same reasoning as explained for *Ptilopus flavovirescens* above has been applied. However, as the shipment containing these specimens was sent from Dresden in July 1886, and they are not part of the type series, they may have been collected as late as 1886.

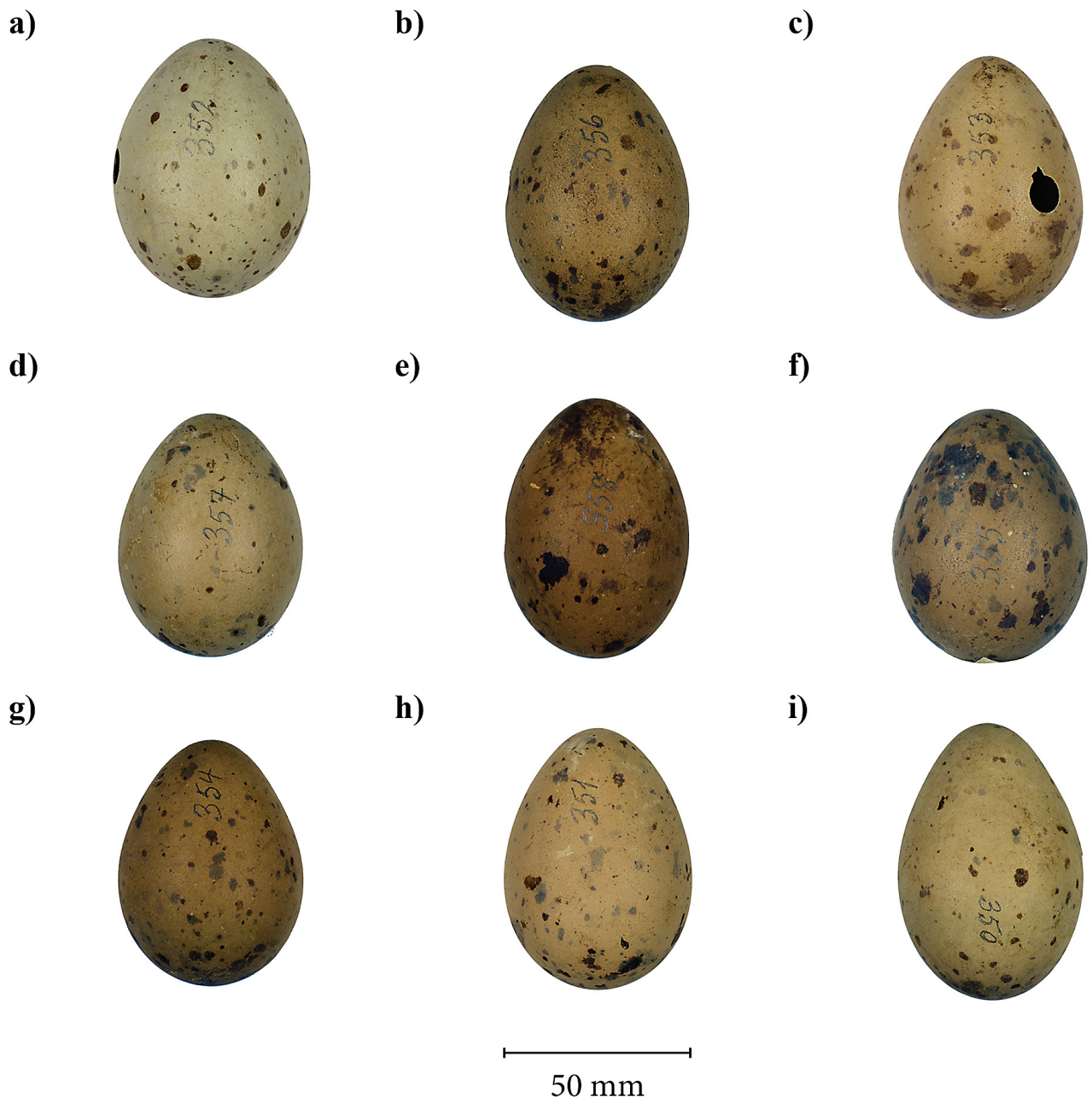


FIGURE 5. Eggs in the NHMO Bird Collection included as types of *Catharacta skua hamiltoni* Hagen, 1952 (labelled directly on the eggs by the collector). a) NHMO-BI-92659; b) NHMO-BI-92660; c) NHMO-BI-92661; d) NHMO-BI-92662; e) NHMO-BI-92663; f) NHMO-BI-92664; g) NHMO-BI-92665; h) NHMO-BI-92666; i) NHMO-BI-92668. All eggs are shown to the same scale.

***Geoffroyus timorlaoënsis* Meyer, AB, 1884**

Sitzungsberichte und Abhandlungen der Naturwissenschaftlichen Gesellschaft Isis in Dresden, Abhandlungen 1884: 15–16.

Current name: ***Geoffroyus geoffroyi timorlaoensis* Meyer, AB, 1884**

Syntype NHMO-BI-64130 [I022716]; Mounted; Ad. M; Johann Gerard Friedrich Riedel, 1881–1883; Indonesia: Timorlaut [Tanimbar Islands]; 7.500° S 131.500° E; 11a.

Syntype NHMO-BI-64228 [I022813]; Study skin; Ad. F; Johann Gerard Friedrich Riedel, 1881–1883; Indonesia: Timorlaut [Tanimbar Islands]; 7.500° S 131.500° E; 11b.

Remarks: These two parrots were indicated in the accompanying letter as ‘*Typen*’, and also have ‘*Typus*’ written on their labels (Figure 3e and 3f; on the female with the addition of ‘*fem*’). The label of the female is similar in style to that of *Ptilopus flavovirescens* mentioned above (Figure 3a), while that of the male is in the same style as the labels for *Eclectus* and *Artamus* (Figure 3c, 3d and 3g); both are assumed to be original and from before the specimens arrived in Oslo. In contrast to the *Eclectus* labels, ‘*Typus*’ and ‘*fem*’ seems to be in the same handwriting as the main text in the label for the female, while ‘*Typus*’ in the label for the male, and ‘*Mus. Dresd. 86*’ in both, are in a different handwriting. For reasoning behind the provided collecting date interval, see discussion under *Ptilopus flavovirescens* above.

Meyer (1884) based his description on a series of 11 specimens, and at least 10 of these seem to be well accounted for (Table 4). Seven are still present in SNSD, and three syntypes are each documented in the MTD (now SNSD) catalogues (Martin Päckert, pers. comm.) to have been exchanged to MNHN, ZSM (now SNSB) and USNM; the continued existence of these in their current collections has also been verified (Table 4).

TABLE 4. Catalogue numbers from the MTD/SNSD catalogues, and current locations and catalogue numbers, of specimens known, claimed or assumed to be part of the type series of *Geoffroyus timorlaoënsis*. Dresden catalogue numbers are not known for the two NHMW specimens or the two NHMO specimens.

Current cat. no. ^a	Mount cat. no. ^a	Current location	Cat. no. current location	References ^{b,c}	Comments
C7184		MNHN	ZO-MO-1890-287 (N.C. 195A)	1, 2, 3, 4	Exchanged to MNHN 3 June 1890
C7185		SNSD	C7185	1	
C7186		SNSD	C7186	1	
C7187		SNSB	ZSM-ORN00001538	1, 5	Exchanged to ZSM 1892
C7188	7734	USNM	317785	1, 6, 7	Exchanged to USNM 1930
C7189		SNSD	C7189	1	
C7190		SNSD	C7190	1	
C7191		SNSD	C7191	1	
C7192	7733	SNSD	C7192	1	
C7596		USNM	317784	1, 7	Exchanged to USNM 1930; type status uncertain
C7597	7732	SNSD	C7597	1	
?		AMNH	620706	8, 9	Arrived with the Rothschild collection from Tring
?		NHMW	NMW 50.142 (1884.V.33)	10, 11, 12	
?		NHMW	NMW 50.147 (1884.V.33)	10, 11, 12	
?		NHMO	BI-64130 (I022716)	10, 11, 12	
?		NHMO	BI-64228 (I022813)	13	

^a: See *Format* section of main text for details about different catalogue numbers.

^b: All MTD/SNSD data provided by Martin Päckert (pers. comm.)

^c: 1. Eck & Quaiser (2004); 2. Voisin & Voisin (2008); 3. Muséum national d’Histoire naturelle Paris (France) (2020a); 4. Patrick Bousses, pers. comm.; 5. Markus Unsöld, pers. comm.; 6. Deignan (1961); 7. Christopher Milensky, pers. comm.; 8. Hartert (1924); 9. Greenway (1978); 10. Pelzeln & Lorenz (1888); 11. Schifter *et al.* (2007); 12. Hans-Martin Berg, pers. comm.; 13: Current publication.

According to Eck & Quaisser (2004), another specimen that was part of the 1930 exchange to USNM, C7596, was also a syntype (USNM 317784; Eck & Quaisser 2004). There are, however, no indications in either the MTD/SNSD or USNM catalogues, or on the labels currently on the specimen in the USNM collection, of it being a type (in the USNM catalogue 'cotype' is noted for 317785, while for 317784 only 'new to mus.' is noted; Christopher Milensky, pers. comm.). Further, only 317785 is mentioned in the USNM type catalogue by Deignan (1961).

On the other hand, a specimen in the AMNH should probably be added to the type series. Greenway (1978) listed specimen AMNH 620706, originating from the Rothschild collection at Tring, as a lectotype, stating that Hartert (1924) had designated this type. As also pointed out by Eck & Quaisser (2004), this was a misinterpretation of Hartert's (1924) wording, as he referred to it as a 'cotype', but mentioned that Meyer had written 'Typus' on the label. While there is no evidence supporting that Meyer designated any holotype among the syntypes, the status of AMNH 620706 as a 'cotype', i.e. syntype, as stated by Hartert (1924), seems to be warranted.

So far, it therefore seems plausible that AMNH 620706 represents an 11th syntype of this taxon, rather than USNM 317784. The situation is, however, more complex, as there are in addition to the aforementioned specimens, also two specimens each in NHMW and NHMO that apparently are syntypes of this taxon. The two in NHMW are both included in type catalogues from the collection (Pelzeln & Lorenz 1888; Schifter *et al.* 2007), and although they are described as 'authentische Exemplare' by Pelzeln & Lorenz (1888), they are noted as 'type' in the acquisition catalogue (Hans-Martin Berg, pers. comm.; see Schifter (1990) and Schifter *et al.* (2007) for a discussion of the term 'authentische Exemplare' in NHMW). Regarding the two in NHMO, all available evidence in the NHMO, including original catalogue entries, the accompanying letter from Meyer and the labels, they both appear as valid, undebatable syntypes. The letter, in Meyer's original handwriting, clearly states that four of the specimens listed as included in the shipment (this pair of *Geoffroyus timorlaoënsis* plus single specimens of *Artamus Musschenbroeki* and *Ptilopus flavovirescens*) are types (Figure 1). As shown in the entries for the two other taxa, there seems to be no reason to doubt the authenticity of the type status of those. It is also worth noting that the pair of *Eclectus riedeli* included in the shipment (see above) are *not* indicated as types, lending credibility to the reliability of the information provided in the letter. No documentation of this exchange has, however, been found in the MTD/SNSD catalogues.

In conclusion, the number of alleged type specimens of this taxon exceed the 11 specimens on which Meyer based his description. As there seem to be reliable information supporting the type status of most or all of these (perhaps except C7596), we recommend more detailed investigations of all specimens allegedly included in the type series before any solid conclusions are made. We therefore maintain the two NHMO specimens as syntypes of this taxon.

***Psephotus dissimilis* Collett, 1898**

Proceedings of the General Meetings for Scientific Business of the Zoological Society of London, 1898 (3): 356–357.

Current name: ***Psephotellus dissimilis* (Collett, 1898)**

Syntype NHMO-BI-64125 [I022711]; Study skin; F; Knut Dahl (1180), 12 May 1895; Australia: Mary River, Arnhem Land; 13.700° S 132.000° E; 9a.

Syntype NHMO-BI-85843; Mounted; F; Knut Dahl (1167), 12 May 1895; Australia: Mary River, Arnhem Land; 13.700° S 132.000° E; 9b.

Remarks: Collett (1898) based the original description on four specimens collected by Knut Dahl, without specifying any holotype. Two of the specimens, a male and a female, were sent to the Australian collector Gregory Macalister Mathews (Mathews 1913; 1942; Greenway 1978). Later, they must have come to the Rothschild collection at Tring, London, before they ended up in the American Museum of Natural History in 1932 when a large part of the Rothschild collection was sold to the AMNH (Greenway 1973; 1978). These specimens are not mentioned in any of Hartert's publications on the types in the Mathews collection (Hartert 1929; 1931a; b), but none of these include the order of the parrots (Psittaci; currently Psittaciformes). Presumably, this order was planned to have been covered in a later publication, which never came out, probably due either to the sale of the collection to the AMNH or the death of Hartert in 1933. The specimens are currently in the AMNH with registration numbers AMNH 623431 (M) and AMNH 623432 (F) (Greenway 1978; American Museum of Natural History 2021; Paul R. Sweet, pers. comm.).

The original description mentions two fully grown birds with rather worn plumage, a male and a female, and

two younger and freshly moulted females (Collett 1898). Both NHMO specimens are females but there is no indication of their age, which is also the case for the female specimen in AMNH (Greenway 1978; American Museum of Natural History 2021; Paul R. Sweet, pers. comm.). However, the plumages of the two NHMO specimens appear relatively fresh and are also very similar in the two specimens, while that of the AMNH female appears worn, based on photos provided by Paul R. Sweet, AMNH. It, therefore, seems safe to conclude that the NHMO specimens are the two younger females, and the AMNH female is the fully grown female, as described by Collett (1898).

Based on the collection date of the two AMNH specimens (9 May 1895), and a list of specimens collected by Dahl during his Australia expedition (unpublished), it is also evident that the original collector's number must be 1181 and 1182 for the female and male, respectively.

The original labels, written by the collector, are present on both specimens (Figure 2c and 2e), and NHMO-BI-64125 also has another label (Figure 2d) which has been added at the NHMO, probably shortly after accessioning into the collection.

The locality was given as '*Mary River, Arnhem Land*' by Collett, but only '*Mary River*' on the original labels. In addition to referring to a rather large area, this locality name is probably also somewhat misleading, as it indicates that the birds were collected along the river. However, in his diary, Dahl noted that they stayed at '*Mt. Gardiner*' in the period 6–14 May, and according to his travelogue (Dahl 1924; 1926) they stayed in an area covered by '*small hills composed of enormous granite boulders*', some miles (7–8 miles, according to his diary) west of the old Eureka mine (approximately 40 km NE of Pine Creek). While Mt. Gardiner (13.738° S 132.233° E) on current maps (e.g. <https://mapcarta.com/>) is located 5–6 miles to the southeast of the abandoned Eureka mine (Eureka Creek Prospect, 13.687° S 132.168° E; Digital Atlas Pty Limited 2021), we consider an area dominated by numerous, small hilly outcrops about 10–12 miles west of the Eureka mine to be the most likely type locality for this taxon. This is based both on its location, being in general accordance with Dahl's notes (of which especially the cardinal direction indicated can be assumed to be reliable), and the topographic appearance of this area, which fits very well with both notes and images in Dahl's diary and travelogue. Finally, this is also in concordance with Collett's (1898) comment that '*This Parrot was met with here and there in small flocks in Arnhem Land, particularly between Pine Creek and Catherine River*', i.e. even further to the southwest from the upper reaches of Mary River.

Collett also described a new mammal species, *Pseudochirus dahlii* Collett, 1895 (currently *Petropseudes dahli* (Collett, 1895)), from specimens collected by Dahl during his stay at '*Mt. Gardiner*' (Wiig & Bachmann 2013), and a specimen sent by Collett to the British Museum (Natural History) in 1897 subsequently became the holotype of *Petrogale brachyotis signata* Thomas, 1926 (currently *Petrogale brachyotis* Gould, 1841).

Order Passeriformes

Family Meliphagidae

Ptilotis erythropleura Salvadori, 1876

Annali del Museo civico di Storia naturale di Genova, 1875 (7): 949 [printed March 1876].

Current name: *Ptiloprora erythropleura erythropleura* (Salvadori, 1876)

Syntype NHMO-BI-86778 [I021017]; Study skin; F; Odoardo Beccari (g), 3 May 1875; Indonesia: Mte. Arfak (Mori 3500 p.) [Arfak Mountains]; 1.357° S 134.160° E; 15a.

Remarks: The original collector's label (Figure 6a) is still attached, showing that this is specimen *g* of the type series (Salvadori 1881). The '*p.*' in the locality name is an abbreviation for '*piedi*', i.e. feet.

Arbocco *et al.* (1979) listed three syntypes in Genoa (C.E. 11455–11457), and according to Enrico Borgo at the MSNG (pers. comm.) these are specimens *b*, *h* and *i*, respectively, as listed by Salvadori (1881). The latter of these, specimen *i*, is not one of the syntypes; Salvadori (1881) stated that specimens *a–h* are the types, which is also in accordance with Salvadori (1876a) basing his description on eight individuals only. Another syntype (MZUT Av4127) is in MRSN³ in Turin (Aimassi *et al.* 2020); this corresponds to specimen *e* or *f* in Salvadori (1881), but its label does not indicate which of these it is (Luca Ghiraldi, pers. comm.).

3 The ornithological collection of the Zoological Museum of the Turin University (MZUT) has since the 1990s been hosted at the Museo Regionale di Scienze Naturali (MRSN) in Turin, but the specimens in this collection have retained their MZUT inventory numbers (Aimassi *et al.* 2020).

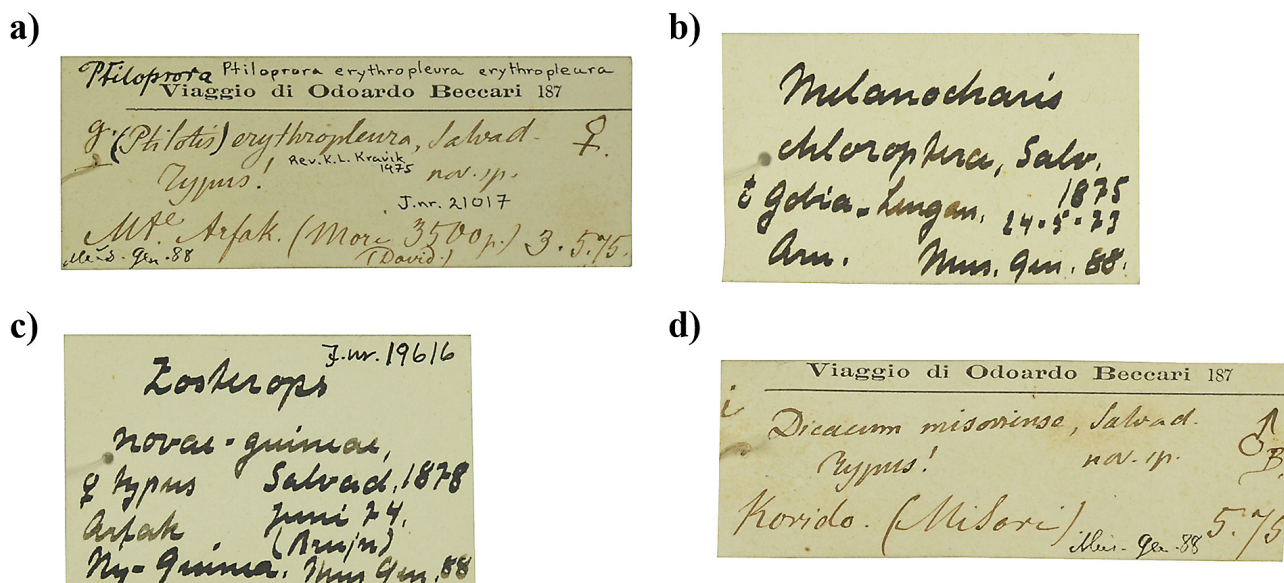


FIGURE 6. Labels of type specimens in the NHMO Bird Collection described by T. Salvadori. a) *Ptilotis erythropleura* NHMO-BI-86778 (collector's label); b) *Melanocharis chloroptera* NHMO-BI-61863 (NHMO label); c) *Zosterops novae guinae* NHMO-BI-86649 (NHMO label); d) *Dicaeum misoriense* NHMO-BI-61856 (collector's label).

Family Melanocharitidae

Melanocharis chloroptera Salvadori, 1876

Annali del Museo civico di Storia naturale di Genova, 1875 (7): 987 [printed March 1876].

Current name: *Melanocharis nigra chloroptera* Salvadori, 1876

Syntype NHMO-BI-61863 [I019655]; Study skin; Ad. M; Odoardo Beccari (d (414)), 24 May 1873; Indonesia: Giabu-lengan, Aru [Aru Islands]; 5.783° S 134.350° E; 15b.

Remarks: The original label has, unfortunately, been replaced by a new label (Figure 6b) after the arrival of the specimen in NHMO, and the information on this label is neither complete (e.g., no indication that the specimen is a type), nor fully correct (the locality is given as 'Gobia-Lengan, Aru'). It does, however, include information that the specimen was received from 'Mus. Gen. 88', an annotation that all the skins received from Genoa in 1888 have in common. Further, Collett received a printed list of specimens offered by the museum in Genoa ('*Duplicati della Nuova Guinea e delle Molucche*') together with the accompanying letter from Giacomo Doria, in which all the taxa in the shipment were ticked off (probably by Doria, based on his wording in the letter). In the list, *Melanocharis chloroptera* is indicated as 'tipico' and also ticked off, in the same way as for *Ptilotis erythropleura*, *Zosterops novae guinae* and *Dicaeum misoriense*. It must, therefore, be concluded that this specimen is part of the type series of this taxon.

Assuming that the locality on the label refers to Giabu-lengan on the Aru Islands, and the collection date (24 May 1873) is correct, the specimen can be either specimen *d* or *h* as listed by Salvadori (1881). Salvadori noted that the *h* specimen either must be a female or perhaps a young male, while specimen *d* was recorded as a male. As specimen *h* has been confirmed to be one of four specimens currently found in MSNG in Genoa (C.E. 11302, based on its original label; Enrico Borgo, pers. comm.), and the NHMO specimen clearly is an adult male (head and back shiny black; Gregory 2020), the latter must be concluded to be specimen *d*.

Of the eight specimens Salvadori (1876a) based his description on, four syntypes (C.E. 11300–11303) are in MSNG in Genoa (Arbocco *et al.* 1979). While Arbocco *et al.* (1979) did not specify which specimens in Salvadori (1881) these corresponded to, it has been confirmed by Enrico Borgo at the MSNG that their original labels indicate that they correspond to specimens *a*, *c*, *g* and *h*. Another two (MZUT Av3953 and MZUT Av3954) are in MRSN in Turin (Aimassi *et al.* 2020); these are specimens *b* and *f*, respectively, in Salvadori (1881) (Giorgio Aimassi, pers. comm.).

Warren & Harrison (1971) also list one syntype in the BMNH (currently NHMUK 1858.3.10.143), an adult male collected by A.R. Wallace in the Aru Islands. This specimen was not among the eight that Salvadori based his description directly on, as all of those were collected by Beccari (Salvadori 1876b; 1881). However, Salvadori stated that *M. chloroptera* replaces the *M. nigra* of New Guinea in the Aru Islands (Salvadori 1876b), referring to Gray (1858), who mentioned two specimens from the Aru Islands, a male and a female collected by Wallace. Although these were listed as *Prionichilus niger* in Gray (1858) (*Prionichilus niger* = *M. nigra*), Salvadori assumed that he had just overlooked the differences separating *M. chloroptera* from *M. nigra*, and by doing so suggested that also these specimens were to be considered *M. chloroptera*. The male NHMUK 1858.3.10.143 is one of these specimens, while the female was recently discovered to also be present in the NHMUK collection (NHMUK 1858.3.10.139), together with yet another male (NHMUK 1873.5.12.1052). The latter male arrived in the collection from Wallace in 1873, when he sold his private collection of birds to the museum (Hein van Grouw, pers. comm.). Both of the specimens mentioned by Gray (1858) are consequently mentioned in the original description. Further, both the previously known male (Warren & Harrison 1971) and the two recently discovered specimens (Hein van Grouw, pers. comm.) have labels in Salvadori's handwriting, and also have 'co-type' written on them. It, therefore, seems safe to conclude that Salvadori must have seen all three of these specimens. Based on this reasoning, and in accordance with Article 72.4.1.1 of the Code (International Commission on Zoological Nomenclature 1999), the three NHMUK specimens should probably also be considered syntypes of this taxon.

Family Artamidae

Artamus Musschenbroeki Meyer, AB, 1884

Sitzungsberichte und Abhandlungen der Naturwissenschaftlichen Gesellschaft Isis in Dresden, Abhandlungen 1884: 30.

Current name: *Artamus leucorhynchus musschenbroeki* Meyer, AB, 1884

Paralectotype NHMO-BI-68621 [I027304]; Mounted; Ad.; Johann Gerard Friedrich Riedel, 1881–1883; Indonesia: Timorlaut [Tanimbar Islands]; 7.500° S 131.500° E; 12a.

Remarks: A label (Figure 3g), in the same style as those of the specimens of *Eclectus* and *Geoffroyus* mentioned above, is glued under the base of the mount. A hole in this label indicates that it probably had been attached to the specimen by a string previously, which also fits well with the description of the birds from Dresden arriving as study skins ('*Vogelbälge*'). In line with the arguments provided for the similar labels above, this is likely to be the original label that accompanied the skin. For reasoning behind the provided collecting date interval, see discussion under *Ptilopus flavovirescens* above.

Meyer (1884) based his description on 17 specimens from '*Tenimber et Timorlaut*' (which he defined as the northern/western and southern islands in the Tanimbar Islands, respectively), without assigning any holotype. Meise (1929) assigned specimen C7136, a male from '*Tenimber*', as '*typus*' (i.e. a lectotype) and listed seven other paratypes [*sic*; should be paralectotypes] (all from '*Timorlaut*') as present in the MTD (now SNSD) (Table 5).

According to Eck & Quaiser (2004) only the lectotype (C7136) and one of the paralectotypes (C7134) are still present in the SNSD collection (Table 5). Four of the original type specimens are confirmed to have been exchanged from MTD to the USNM, MNHN and ZSM (now SNSB) collections, and to '*Gerrard*', which probably must be the taxidermy firm '*Edward Gerrard & Sons*' in London (dates of exchange were provided from the original catalogues by Martin Päckert at the museum in Dresden). The continued presence of all of these, except the '*Gerrard*' specimen, has been confirmed (Table 5). The current location of C21880 is not known, and also the type status of this specimen seems unclear; it was not mentioned by Eck & Quaiser (2004), is currently not to be found in the SNSD collection, and there is no indication in the MTD/SNSD catalogue of it being a type or that it has been exchanged or lost (Martin Päckert, pers. comm.). Finally, the four remaining paralectotypes mentioned by Meise (1929) were lost during WW2.

TABLE 5. Catalogue numbers from the MTD/SNSD catalogues (* indicates lectotype), inclusion in Meise (1929), and current locations and catalogue numbers (if known), of 15 of totally 17 specimens known, claimed or assumed to be in the type series of *Artamus Musschenbroeki*. Dresden catalogue numbers are not known for the three NHMW specimens or the NHMO specimen, and the status of C21880 and C7133 is uncertain (see main text for details). Nothing more is known about the remaining two type specimens.

Current cat. no. ^a	Mount cat. no. ^a	Meise (1929)	Current location	Cat. no. current location	References ^{b,c}	Comments
C7130	13624	X	Not extant		1, 5	Lost during WW2
C7131	13608	X	USNM	317790	1, 2, 5	Exchanged to USNM 1930
C7132	13657	X	Not extant		1, 5	Lost during WW2
C7133			?		1	Exchanged to Gerrard 18 February 1887
C7134	13786	X	SNSD	C7134	1, 5	
C7135	13656	X	Not extant		1, 5	Lost during WW2
C7136*		X	SNSD	C7136	1, 5	
C7137			MNHN	ZO-MO-1890-290 (A.C. 9598 D)	1, 3, 4	Exchanged to MNHN 3 June 1890
C7138	13609	X	Not extant		1, 5	Lost during WW2
C7139			SNSB	ZSM-ORN00002975 (A.627)	1, 6	Exchanged to ZSM, probably before 1929 ^d
C21880		X	?		5	Not accounted for; uncertain type status
?			NHMW	NMW 51.617 (1884.V.13)	7, 8, 9	
?			NHMW	NMW 51.618 (1884.V.13)	7, 8, 9	
?			NHMW	NMW 51.619 (1884.V.13)	7, 8, 9	
?			NHMO	BI-68621 (I027304)	10	

^a: See *Format* section of main text for details about different catalogue numbers.

^b: All MTD/SNSD data provided by Martin Päckert (pers. comm.)

^c: 1. Eck & Quaiser (2004); 2. National Museum of Natural History (2022); 3. Muséum national d'Histoire naturelle Paris (France) (2020b); 4. Patrick Bousses, pers. comm.; 5. Meise (1929); 6. Markus Unsöld, pers. comm.; 7. Pelzeln & Lorenz (1887); 8. Schifter (1990); 9. Hans-Martin Berg, pers. comm.; 10. Current publication.

^d Time of exchange not noted in the MTD/SNSD catalogues, but as this specimen is not mentioned by Meise (1929) it had most likely been removed from the MTD collection before 1929.

While Eck & Quaiser (2004) further noted that nothing was known about the remaining type specimens, there are apparently also three paralectotypes in NHMW (NMW 51.617–51.619; Pelzeln & Lorenz 1887; Schifter 1990), obtained through Meyer in 1884 (Hans-Martin Berg, pers. comm.). As for the *Geoffroyus* specimens discussed above, Pelzeln & Lorenz (1887) described them as ‘*authentische Exemplare*’ but they are noted as ‘*type*’ in the acquisition catalogue (Hans-Martin Berg, pers. comm.).

Based on information on the label and in the accompanying letter from Meyer, we conclude that the NHMO specimen should be considered one of the paralectotypes of this taxon.

Family Zosteropidae

Zosterops novae guineae Salvadori, 1878

Annali del Museo civico di Storia naturale di Genova, 1878 (12): 341.

Current name: *Zosterops novaeguineae novaeguineae* Salvadori, 1878.

Syntype NHMO-BI-86649 [I019616]; Study skin; F; Antonie Augustus Bruijn (b), June 1874; Indonesia: Arfak [Arfak Mountains]; 1.083° S 133.967° E; 16a.

Remarks: This specimen was received from Genoa in 1888 and is indicated as '*tipico*' in the accompanying list (see discussion of *Melanocharis chloroptera* above). The original label is not present, only a replacement label that has been added at NHMO (Figure 6c). Salvadori (1878) did not specify an exact number of specimens in his original publication, but in Salvadori (1881), he listed eight specimens (*a–h*) as types of the species. Based on the information available on the current label, the NHMO specimen corresponds to specimen *b*. Salvadori spelled the specific epithet in two words, '*novae guineae*', in both of the mentioned publications, but in accordance with article 32.5.2.2 of the Code (International Commission on Zoological Nomenclature 1999) it has later been changed to the current '*novae guineae*'.

Three other syntypes are in MSNG (C.E. 11526–11528; Arbocco *et al.* 1979), corresponding to specimens *e*, *g* and *h* in Salvadori (1881), and in MRSN specimen *a* is registered as MZUT Av4174 (Aimassi *et al.* 2020; Giorgio Aimassi, pers. comm.).

A fifth specimen is in RMNH (RMNH 90782, collected by Bruijn in Arfak, 30 January 1876; Dekker & Quaiser 2006). This was not listed by Salvadori (1881), but as Salvadori in his original description wrote that he had examined several specimens collected by Beccari and Bruijn in the Arfak mountains, also this RMNH specimen must be considered part of the type series.

Family Dicaeidae

Dicaeum misoriense Salvadori, 1876

Annali del Museo civico di Storia naturale di Genova, 1875 (7): 945 [printed March 1876].

Current name: *Dicaeum geelvinkianum misoriense* Salvadori, 1876.

Syntype NHMO-BI-61856 [I019648]; Study skin; Ad. M; Odoardo Beccari (i), 09 May 1875; Indonesia: Korido (Misori) [Supiori Island, New Guinea]; 0.750° S 135.500° E; 16b.

Remarks: The original collector's label is still attached (Figure 6d), showing that this is specimen *i* of the type series (Salvadori 1881).

Of the 10 specimens mentioned in the original description (Salvadori 1876a), one syntype (not two, as stated by LeCroy (2010)) is still in MSNG in Genoa (C.E. 11278; Arbocco *et al.* 1979), corresponding to specimen *c* in Salvadori (1881) (Enrico Borgo, pers. comm.). Two syntypes are in MRSN; MZUT Av3943 and MZUT Av3944 (Aimassi *et al.* 2020), corresponding to specimens *a* and *j*, respectively. The date on the original label of the latter (specimen *j*) is '8.5.75' (Giorgio Aimassi and Luca Ghiraldi, pers. comm.) while Salvadori (1881) reported it as 3 May 1875 ('3 Maggio 1875'); this may, however, be just a misreading of either the '3' as '8', or *vice versa*. Three more specimens (698077–698079, corresponding to specimens *e*, *g* and *d*, respectively, of Salvadori (1881)) are in AMNH (LeCroy 2010), having arrived there with the Rothschild collection from Tring (Rothschild & Hartert 1903).

Family Thraupidae

Nesospiza wilkinsi dunnei Hagen, 1952

Birds of Tristan da Cunha. Results of the Norwegian scientific expedition to Tristan da Cunha 1937–1938, No. 20: 172–177.

Current name: *Nesospiza acunhae dunnei* Hagen, 1952.

- Holotype** NHMO-BI-100346; In alcohol; Ad. F; Yngvar Hagen (250), 20 February 1938; SHN⁴: Inaccessible, above Blenden Hall; 37.294° S 12.694° W; 18a.
- Paratype** NHMO-BI-64842 [I023510]; Study skin; Imm.; Yngvar Hagen (270), 1 March 1938; SHN: Inaccessible, above Blenden Hall; 37.300° S 12.701° W; 17a.
- Paratype** NHMO-BI-100347; In alcohol; Imm.; Yngvar Hagen (249), 20 February 1938; SHN: Inaccessible, above Blenden Hall; 37.294° S 12.694° W; 18b.

Remarks: Hagen (1952) based his description of this new subspecies on one adult female, which he designated as the ‘*Type*’, and two immature specimens of unknown sex. The adult female is, therefore, considered to be the holotype of this taxon, according to article 73.1.1 of the Code (International Commission on Zoological Nomenclature 1999), and the immature specimens paratypes. All types are present in the NHMO collection.

All three specimens are labelled with metal tags having the collector’s field number embossed into them (Figure 7). The adult female and one of the immatures were originally preserved in formalin (Hagen 1952) but has later been transferred to 70% ethanol.

The subspecies has subsequently been transferred to the congeneric *N. acunhae*, as *Nesospiza acunhae dunnei* (Ryan 2008).



FIGURE 7. Labels (metal tags) of type specimens in the NHMO Bird Collection of *Nesospiza wilkinsi dunnei* Hagen, 1952 (all collector’s labels). a) NHMO-BI-100346; b) NHMO-BI-64842; c) NHMO-BI-100347.

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4 SHN: Saint Helena, Ascension and Tristan da Cunha

a)



b)



FIGURE 8. a) *Petrophassa rufipennis* NHMO-BI-77947; b) *Ptilopus (Leucotreron) alligator* NHMO-BI-77948.



FIGURE 9. a) *Psephotus dissimilis* NHMO-BI-64125; b) *Psephotus dissimilis* NHMO-BI-85843.

a)



b)



FIGURE 10. a) *Ptilopus flavovirescens* NHMO-BI-59271; b) *Eclectus riedeli* female (lower; red) NHMO-BI-64131 and male (upper; green) NHMO-BI-64132.

a)



b)

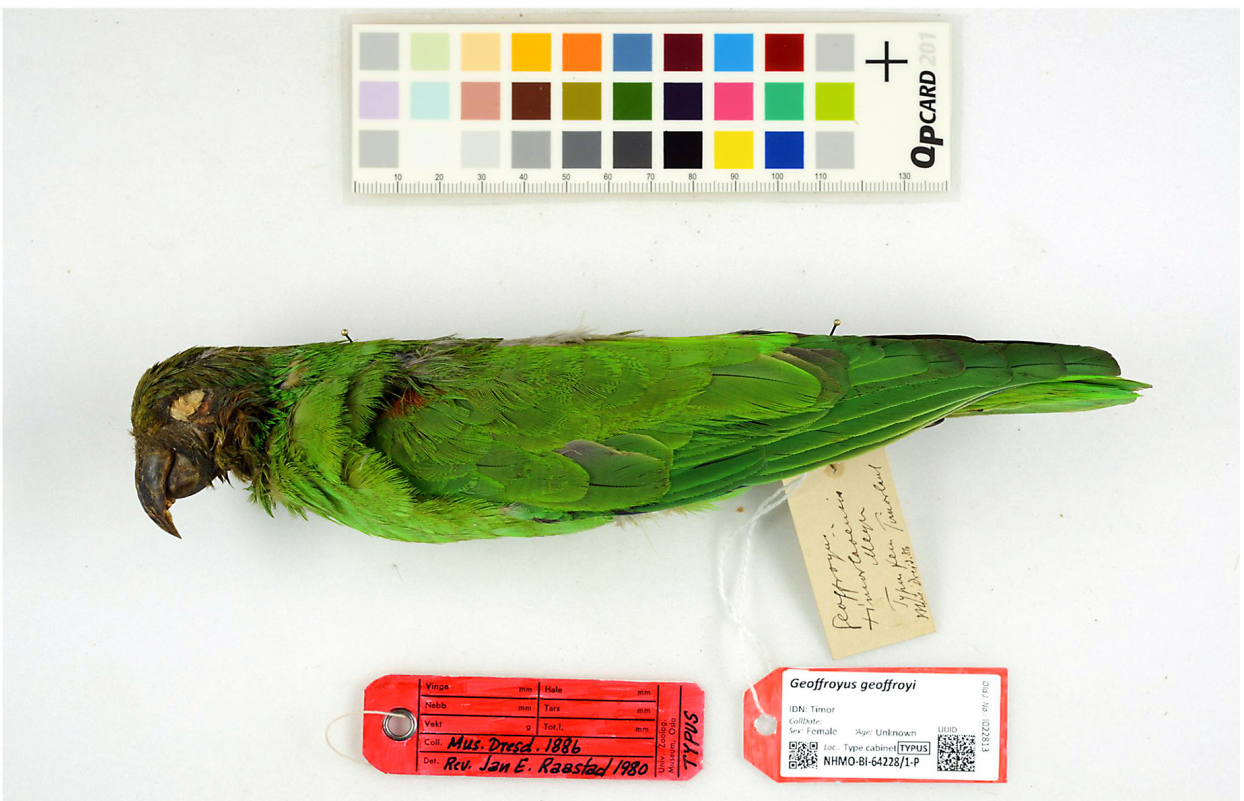


FIGURE 11. a) *Geoffroyus timorlaoensis* NHMO-BI-64130; b) *Geoffroyus timorlaoensis* NHMO-BI-64228.

a)



FIGURE 12. a) *Artamus Musschenbroeki* NHMO-BI-68621.

a)



b)



c)



FIGURE 13. a) *Catharacta skua hamiltoni* NHMO-BI-67601; b) *Catharacta skua hamiltoni* NHMO-BI-67602; c) *Catharacta skua hamiltoni* NHMO-BI-67603.

a)



b)



c)



FIGURE 14. a) *Catharacta skua hamiltoni* NHMO-BI-67604; b) *Catharacta skua hamiltoni* NHMO-BI-67605; c) *Catharacta skua hamiltoni* NHMO-BI-85384.



FIGURE 15. a) *Ptilotis erythropleura* NHMO-BI-86778; b) *Melanocharis chloroptera* NHMO-BI-61863.



FIGURE 16. a) *Zosterops novae guineae* NHMO-BI-86649; b) *Dicaeum misoriense* NHMO-BI-61856.

a)



FIGURE 17. a) *Nesospiza wilkinsi dunnei* NHMO-BI-64842.

a)



b)



FIGURE 18. a) *Nesospiza wilkinsi dunnei* NHMO-BI-100346; b) *Nesospiza wilkinsi dunnei* NHMO-BI-100347.

References

- Aimassi, G., Pulcher, C. & Ghiraldi, L. (2020) Type specimens of birds in the Museo Regionale di Scienze Naturali (Torino, Italy). *Journal of the National Museum (Prague), Natural History Series*, 189, 65–154.
<https://doi.org/10.37520/jnmpnhs.2020.007>
- American Museum of Natural History (2021) Vertebrate Zoology Collection Database, American Museum of Natural History Museum. Available from: <https://emu-prod.amnh.org/db/emuwebamnh/index.php> (accessed 19 January 2022)
- Arbocco, G., Capocaccia, L. & Violani, C. (1979) Catalogo dei tipi di uccelli del Museo Civico di Storia Naturale di Genova. *Annali del Museo Civico di Storia Naturale di Genova*, 82, 184–265.
- Australian Survey Corps (1945a) Aroe Islands (D C 22,8), Universitaire Bibliotheken Leiden. Available from: <http://hdl.handle.net/1887.1/item:814804> (accessed 19 January 2022)
- Australian Survey Corps (1945b) Vogelkop east (D D 57,6, sheet B), Universitaire Bibliotheken Leiden. Available from: <http://hdl.handle.net/1887.1/item:56016> (accessed 19 January 2022)
- Bonaparte, C.L. (1857) *Conspectus generum avium. Vol. 2*. E. J. Brill, Leyden, 232 pp.
- Broch, H. (1954) *Zoologiens historie i Norge. Til annen verdenskrig*. Akademisk Forlag, Oslo, 156 pp.
- Büttikofer, J. (1886) On a collection of birds from the Tenimber Islands. *Notes from the Leyden Museum*, 8, 58–68.
- Collett, A. (1915) *Familien Collett og Christianialiv i gamle dage. Med illustrationer*. J. W. Cappelens Forlag, Kristiania, 487 pp.
- Collett, R. (1895) On a new *Pseudochirus* from N.W. Australia. *Zoologischer Anzeiger*, 18, 464–468.
- Collett, R. (1898) On some pigeons and parrots from North and Northwest Australia. *Proceedings of the General Meetings for Scientific Business of the Zoological Society of London*, 1898, 353–357.
<https://doi.org/10.1111/j.1096-3642.1898.tb03152.x>
- Dahl, K. (1898) *Reiser i Nord-Vest-Australien*. Alb. Cammermeyers Forlag, Kristiania, 462 pp.
- Dahl, K. (1924) *Blandt Australiens vilde*. J. W. Cappelens Forlag, Kristiania, 307 pp.
- Dahl, K. (1926) *In savage Australia. An account of a hunting and collecting expedition to Arnhem Land and Dampier Land*. Philip Allan, London, 326 pp.
- Deignan, H.G. (1961) Type specimens of birds in the United States National Museum. *Bulletin of the United States National Museum*, 221, 1–718.
<https://doi.org/10.5479/si.03629236.221>
- Dekker, R.W.R.J. & Quaisser, C. (2006) Type-specimens of birds in the National Museum of Natural History, Leiden. Part 3. Passerines: Pachycephalidae – Corvidae (Peters's sequence). *NNM Technical Bulletin*, 9, 1–77.
- Digital Atlas Pty Limited (2021) Bonzle Digital Atlas of Australia. Available from: <http://www.bonzle.com> (accessed 19 January 2022)
- Doria, G. (1888) Letter from G. Doria to R. Collett 9 January 1888, National Library of Norway. Ms.fol. 4339. Available from: https://urn.nb.no/URN:NBN:no-nb_digimanus_178474 (accessed 19 January 2022)
- Duncan, F.M. (1937) On the dates of publication of the Society's 'Proceedings,' 1859–1926. *Proceedings of the Zoological Society of London*, A107 (1), 71–84.
<https://doi.org/10.1111/j.1469-7998.1937.tb08500.x>
- Eck, S. & Quaisser, C. (2004) Verzeichnis der Typen der Vogelsammlung des Museums für Tierkunde in den Staatlichen Naturhistorischen Sammlungen Dresden. *Zoologische Abhandlungen, Dresden*, 54, 233–316.
- Elliot, D.G. (1878) On the fruit-pigeons of the genus *Ptilopus*. *Proceedings of the Zoological Society of London*, 1878, 500–575.
<https://doi.org/10.1111/j.1469-7998.1878.tb07987.x>
- Gill, F., Donsker, D. & Rasmussen, P. (2022) IOC World Bird List (v12.1). Available from: <http://www.worldbirdnames.org/> (accessed 28 March 2022)
<https://doi.org/10.14344/IOC.ML.12.1>
- Gould, J. (1841) On two new species of kangaroos (*Macropus manicatus* and *M. brachyotis*) from Swan River. *Proceedings of the Zoological Society of London*, VIII, 127–128. [1840]
- Gray, G.R. (1858) A list of the birds, with descriptions of new species obtained by Mr. Alfred R. Wallace in the Aru and Ké Islands. *Proceedings of the Zoological Society of London*, 26, 169–198.
<https://doi.org/10.1111/j.1469-7998.1858.tb06363.x>
- Greenway, J.C.J. (1973) Type specimens of birds in the American Museum of Natural History. Part 1. Tinamidae, Spheniscidae, Gaviidae, Podicipedidae, Diomedidae, Procellariidae, Hydrobatidae, Pelecanoididae, Phaethontidae, Pelecanidae, Sulidae, Phalacrocoracidae, Anhingidae, Fregatidae, Ardeidae, Cochleariidae, Scopidae, Ciconiidae, Threskiornithidae, Phoenicopteridae, Anatidae, Cathartidae, Accipitridae, Falconidae, Megapodiidae, Cracidae, Tetraonidae, Phasianidae, Numididae, Meleagrididae, Turnicidae, Pedionomidae, Gruidae, Rallidae. *Bulletin of the American Museum of Natural History*, 150 (3), 207–346.
- Greenway, J.C.J. (1978) Type specimens of birds in the American Museum of Natural History. Part 2. Otididae, Jacanidae, Rostratulidae, Haematopodidae, Charadriidae, Scolopacidae, Recurvirostridae, Burhinidae, Glareolidae, Thinocoridae, Stercorariidae, Laridae, Alcidae, Pteroclididae, Columbidae, Psittacidae, Musophagidae, Cuculidae, Tytonidae, Strigidae,

- Podargidae, Nyctibiidae, Aegothelidae, Caprimulgidae, Apodidae, Hemiprocnidae, Trochilidae, Coliidae, Trogonidae, Alcedinidae, Momotidae, Meropidae, Leptosomatidae, Coraciidae, Upupidae, Phoeniculidae, Bucerotidae, Galbulidae, Bucconidae, Capitonidae, Indicatoridae, Ramphastidae, Picidae. *Bulletin of the American Museum of Natural History*, 161 (1), 1–306.
- Gregory, P. (2020) Black Berrypecker (*Melanocharis nigra*). Version 1.0. Cornell Lab of Ornithology, Ithaca, New York. Available from: <https://doi.org/10.2173/bow.blaber1.01> (accessed 19 January 2022)
- Hagen, Y. (1952) Birds of Tristan da Cunha. In: *Results of the Norwegian scientific expedition to Tristan da Cunha 1937–1938. Vol. 20*. Det Norske Videnskaps-Akademi, Oslo, pp. 1–248.
- Hartert, E. (1924) Types of birds in the Tring museum. B. Types in the general collection. IV. *Novitates Zoologicae*, 31, 112–134.
- Hartert, E. (1929) Types of birds in the Tring museum. D. Gregory M. Mathews' types of Australian birds. *Novitates Zoologicae*, 35, 42–58.
- Hartert, E. (1931a) Types of birds in the Tring museum. D. Gregory M. Mathews's types of Australian birds. II. *Novitates Zoologicae*, 36, 184–190.
- Hartert, E. (1931b) Types of birds in the Tring museum. D. Gregory M. Mathews's types of Australian birds. III. *Novitates Zoologicae*, 37, 35–52.
- International Commission on Zoological Nomenclature (1999) *International code of zoological nomenclature*. International Trust for Zoological Nomenclature, London, 306 pp.
- LeCroy, M. (2010) Type specimens of birds in the American Museum of Natural History. Part 8. Passeriformes: Pachycephalidae, Aegithalidae, Remizidae, Paridae, Sittidae, Neosittidae, Certhiidae, Rhabdornithidae, Climacteridae, Dicaeidae, Pardalotidae, and Nectariniidae. *Bulletin of the American Museum of Natural History*, 333, 1–169. <https://doi.org/10.1206/682.1>
- Lifjeld, J.T. (2019) The avian sperm collection in the Natural History Museum, University of Oslo. *Alauda*, 87 (3), 93–101.
- Linnaeus, C. (1758) *Systema Naturae per regna tria naturae, secundum classes, ordines, genera, species, cum characteribus, differentiis, synonymis, locis. Tomus I. Editio decima, reformata*. Impensis Direct. Laurentii Salvii, Holmiae, 824 pp. <https://doi.org/10.5962/bhl.title.542>
- Mathews, G.M. (1913) Exhibition and remarks on the type of *Psephotus dissimilis* Collett. *Bulletin of the British Ornithologists' Club*, 31, 55–56.
- Mathews, G.M. (1942) *Birds and books. The story of the Mathews Ornithological Library*. Verity Hewitt Bookshop, Canberra, 69 pp.
- Meise, W. (1929) Verzeichnis der Typen des Staatlichen Museums für Tierkunde in Dresden. 2. Teil, Vögel I. *Abhandlungen und Berichte des Zoologischen und Anthropologisch-Ethnographischen Museums zu Dresden*, 17 (4), 1–22.
- Meyer, A.B. (1881) Ueber Vögel von einigen der südöstlichen Inseln des malayischen Archipels, insbesondere über diejenigen Sumba's. *Verhandlungen der kaiserlich-königlichen zoologisch-botanischen Gesellschaft in Wien*, 31, 759–774.
- Meyer, A.B. (1882) On a new species of *Eclectus* from the Timorlaut Islands. *Proceedings of the Scientific Meetings of the Zoological Society of London*, 1881, 917–918. <https://doi.org/10.1111/j.1096-3642.1881.tb01348.x>
- Meyer, A.B. (1884) Ueber neue und ungenügend bekannte Vögel, Nester und Eier aus dem Ostindischen Archipel im Königl. Zoologischen Museum zu Dresden. *Sitzungsberichte und Abhandlungen der Naturwissenschaftlichen Gesellschaft Isis in Dresden*, Abhandlungen 1884, 3–64.
- Meyer, A.B. (1886) Letter from A. B. Meyer to R. Collett 11 July 1886, National Library of Norway. Ms.fol. 4339. Available from: https://urn.nb.no/URN:NBN:no-nb_digimanus_180183 (accessed 06.02.2022).
- Muséum national d'Histoire naturelle Paris (France) (2020a) Collection: Birds (ZO). Specimen MNHN-ZO-MO-1890-287. Available from: <http://coldb.mnhn.fr/catalognumber/mnhn/zo/mo-1890-287> (accessed 14 March 2022)
- Muséum national d'Histoire naturelle Paris (France) (2020b) Collection: Birds (ZO). Specimen MNHN-ZO-MO-1890-290. Available from: <http://coldb.mnhn.fr/catalognumber/mnhn/zo/mo-1890-290> (accessed 14 March 2022)
- Muséum national d'Histoire naturelle Paris (France) (2020c) Collection: Birds (ZO). Specimen MNHN-ZO-MO-1890-293. Available from: <http://coldb.mnhn.fr/catalognumber/mnhn/zo/mo-1890-293> (accessed 14 March 2022)
- National Museum of Natural History (2022) Division of Birds Collections database, National Museum of Natural History, Smithsonian Institution. Available from: <https://collections.nmnh.si.edu/search/birds/?nb=317790> (accessed 14 March 2022)
- Natural History Museum (2014a) Dataset: Collection specimens. Resource: Specimens. Specimen 1898.10.10.1, Natural History Museum Data Portal (data.nhm.ac.uk). Available from: <https://data.nhm.ac.uk/object/5995d71a-6dc0-4905-aa94-cc1ac3c79cd5/1642550400000> (accessed 14 March 2022)
- Natural History Museum (2014b) Dataset: Collection specimens. Resource: Specimens. Specimen 1898.10.10.2, Natural History Museum Data Portal (data.nhm.ac.uk). Available from: <https://data.nhm.ac.uk/object/74fe774f-0f7c-4784-9213-49d4606968f7/1642550400000> (accessed 14 March 2022)
- Nilsson, S. (1832–40) *Illuminerade figurer till Skandinaviens fauna. Vols. 1–2*. Academie-boktryckeriet hos C.F. Berling, Lund, 291 + 300 pp.

- Pelzeln, A.v. & Lorenz, L.v. (1887) Typen der ornithologischen Sammlung des k.k. naturhistorischen Hofmuseums. II. Theil. *Annalen des K.K. Naturhistorischen Hofmuseums*, 2 (3), 191–216.
- Pelzeln, A.v. & Lorenz, L.v. (1888) Typen der ornithologischen Sammlung des k.k. naturhistorischen Hofmuseums. IV. Theil (Schluss). *Annalen des K.K. Naturhistorischen Hofmuseums*, 3 (1), 37–62.
- Phipps, C.J. (1774) *A voyage towards the North Pole undertaken by His Majesty's command, 1773*. J. Nourse, London, 253 pp.
<https://doi.org/10.5962/bhl.title.15240>
- Poggi, R. (1996) Use of archives for nomenclatural purposes: clarifications and corrections of the dates of issue for volumes 1–8 (1870–1876) of the *Annali del Museo civico di Storia naturale di Genova*. *Archives of Natural History*, 23 (1), 99–105.
<https://doi.org/10.3366/anh.1996.23.1.99>
- Rothschild, W. & Hartert, E. (1903) Notes on Papuan birds. *Novitates Zoologicae*, 10, 65–116 + 196–231 + 435–480.
- Rowley, G.D. (1877) On the genus *Ptilopus*. In: Rowley, G.D. (Ed.), *Ornithological Miscellany. Vol. 2*. Trübner and Co., London, pp. 337–351.
- Ryan, P.G. (2008) Taxonomic and conservation implications of ecological speciation in *Nesospiza* buntings on Tristan da Cunha. *Bird Conservation International*, 18, 20–29.
<https://doi.org/10.1017/S095927090800004X>
- Salvadori, T. (1876a) Descrizione di cinquantotto nuove specie di uccelli, ed osservazioni intorno ad altre poco note, della Nuova Guinea e di altre Isole Papuane, raccolte dal D.r Odoardo Beccari e dai cacciatori del Sig. A. A. Bruijn. *Annali del Museo Civico di Storia Naturale di Genova*, 7, 896–976. [1875]
- Salvadori, T. (1876b) Descrizione di sei nuove specie di Uccelli delle Molucche, delle Kei e delle Aru e del maschio della *Pachycephala lineolata*, Wall. *Annali del Museo Civico di Storia Naturale di Genova*, 7, 983–990. [1875]
- Salvadori, T. (1878) Descrizione di trentuna specie nuove di uccelli della sottoregione papuana, e note intorno ad altre poco conosciute. *Annali del Museo Civico di Storia Naturale di Genova*, 12, 317–347.
- Salvadori, T. (1881) *Ornitologia della Papuasias e delle Molucche. Vol. 2*. Stamperia Reale della ditta G. B. Paravia E Comp., Torino, 705 pp.
- Schifter, H. (1990) Dr. Adolf Bernhard Meyer und die Vogelsammlung des Naturhistorischen Museums Wien. *Zoologische Abhandlungen, Dresden*, 46 (3), 63–73.
- Schifter, H., Bauernfeind, E. & Schifter, T. (2007) Die Typen der Vogelsammlung des Naturhistorischen Museums Wien. Teil I. Nonpasseres. *Kataloge der wissenschaftlichen Sammlungen des Naturhistorischen Museums in Wien*, 20 (Aves, Heft 1), 1–376.
- Schodde, R. & Mason, I.J. (1997) *Zoological Catalogue of Australia. Aves (Columbidae to Coraciidae). Vol. 37.2*. CSIRO Publishing, Melbourne, xiii + 440 pp.
- Sharpe, R.B. (1906) 3. Birds. In: *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*. Trustees of the British Museum, London, pp. 79–515.
- Strickland, H.E. (1841) Commentary on Mr. G. R. Gray's 'Genera of birds,' 1840. *The Annals and Magazine of Natural History*, Series 1, 7 (41), 26–41.
<https://doi.org/10.1080/03745484109442660>
- Swainson, W. (1825) On the characters and natural affinities of several new birds from Australasia; including some observations on the Columbidae. *The Zoological Journal*, 1 (4), 463–484.
- Thomas, O. (1926) On various mammals obtained during Capt. Wilkins' expedition in Australia. *The Annals and Magazine of Natural History*, Series 9, 17 (102), 625–635.
<https://doi.org/10.1080/00222932608633458>
- Voisin, C. & Voisin, J.-F. (2008) Liste des types d'oiseaux des collections du Muséum national d'Histoire naturelle de Paris. 16 : Perroquets (Psittacidae). *Zoosystema*, 30 (2), 463–499.
- Wagler, J. (1827) *Systema avium*. J. G. Cottae, Stuttgartiae et Tubingae, pp.
<https://doi.org/10.5962/bhl.title.137031>
- Wallace, A.R. (1865) On the pigeons of the Malay Archipelago. *The Ibis*, 7 (4), 365–400.
<https://doi.org/10.1111/j.1474-919X.1865.tb06057.x>
- Warren, R.L.M. (1966) *Type-specimens of birds in the British Museum (Natural History). Vol. 1. Non-Passerines*. Trustees of the British Museum, London, 320 pp.
- 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, London, 628 pp.
- Wiig, Ø. & Bachmann, L. (2013) The mammal type specimens at the Natural History Museum, University of Oslo, Norway. *Zootaxa*, 3736 (5), 587–597.
<https://doi.org/10.11646/zootaxa.3736.5.9>
- Wikidata: Q63167 (2020) Adolf Bernhard Meyer, *Wikidata*. Available from: <https://www.wikidata.org/w/index.php?title=Q63167&oldid=1323788534> (accessed 19 January 2022)
- Wikidata: Q704169 (2021) Tommaso Salvadori, *Wikidata*. Available from: <https://www.wikidata.org/wiki/Q704169> (accessed 19 January 2022)

Wikidata: Q1111078 (2021) Robert Collett, *Wikidata*. Available from: <https://www.wikidata.org/w/index.php?title=Q1111078&oldid=1382520264> (accessed 19 January 2022)

Wikidata: Q1219227 (2021) Giacomo Doria, *Wikidata*. Available from: <https://www.wikidata.org/w/index.php?title=Q1219227&oldid=1388668403> (accessed 19 January 2022)

Wikidata: Q17094163 (2021) Yngvar Hagen, *Wikidata*. Available from: <https://www.wikidata.org/w/index.php?title=Q17094163&oldid=1385459247> (accessed 19 January 2022)