

Extinct and endangered ('E&E') birds in the ornithological collection of Le Beffroi Musée Boucher de Perthes-Manessier, Abbeville, France

Authors: Gouraud, Christophe, and Jansen, Justin J. F. J.

Source: Bulletin of the British Ornithologists' Club, 144(3): 244-268

Published By: British Ornithologists' Club

URL: https://doi.org/10.25226/bboc.v144i3.2024.a6

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

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

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

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

Extinct and endangered ('E&E') birds in the ornithological collection of Le Beffroi Musée Boucher de Perthes-Manessier, Abbeville, France

by Christophe Gouraud 🕑 & Justin J. F. J. Jansen 🕑

Received 25 February 2024; revised 14 May 2024; published 2 September 2024 http://zoobank.org/urn:lsid:zoobank.org:pub:0EC5B87F-01A9-41D1-A0A7-2FB833E03524

Summary.—Le Beffroi Musée Boucher de Perthes-Manessier, Abbeville, France, houses an ornithological collection totalling 2,597 mounted birds, principally from the 19th century. According to the current IUCN Red List of threatened species, the mounts represent 112 extinct or endangered ('E&E') bird taxa (156 specimens in total). We list the specimens of 'E&E' taxa that merit special curatorial attention. The list includes nine Extinct taxa (Greater Prairie Chicken Tympanuchus c. cupido, Passenger Pigeon Ectopistes migratorius, Snail-eating Coua Coua delalandei, Great Auk Pinguinus impennis, Norfolk Island Kaka Nestor productus, Carolina Parakeet Conuropsis carolinensis, Nuku Hiva Monarch Pomarea nukuhivae, South Island Piopio Turnagra c. capensis and Slender-billed Grackle Quiscalus palustris), one Extinct in the Wild (Guam Kingfisher Todiramphus cinnamominus) and 38 threatened species and subspecies. In addition to IUCN status, the EDGE (Evolutionary Distinctiveness and Globally Endangered) score for each species is specified.

Museums play a crucial role in preserving the world's biological heritage and disseminating knowledge (Meineke et al. 2019, Norris et al. 2024), especially as biodiversity is undergoing a major crisis (Barnosky et al. 2011, Kolbert 2014, Ceballos et al. 2015, 2017, Cooke et al. 2023). Specimens are increasingly being used, e.g. through analysis of ancient DNA, to answer questions on the biogeography, systematics, conservation and evolution of species (Holmes et al. 2016), including of extinct taxa (Feigin et al. 2018, Oswald et al. 2023). While Critically Endangered species are very difficult to access in the wild (some are known only from a few museum specimens), extinct species are, by definition, knowable only in collections (Adams et al. 2003). It is therefore essential for ecologists and conservationists to know 'what is where' in collections. For birds, this question was tackled at the start of the 20th century by Rothschild (1907) and many authors since the middle of the last century (e.g., Greenway 1958, 1967, Hahn 1963, Collar & Stuart 1985, Fuller 1987, 2000, Collar et al. 1992, Hume & Walters 2012, Hume 2017). However, with a few exceptions, these works list only specimens housed in major institutions. Moreover, because they are rare and sometimes irreplaceable, specimens of extinct or endangered ('E&E') taxa are often considered to be the 'jewels' of museums concerned and require special attention (Cooper & Adams 2005).

Le Beffroi Musée Boucher de Perthes-Manessier, Abbeville, France (hereafter Abbeville Museum) houses an important collection of natural history objects². The inventory of ornithological material, which was undertaken between June 2021 and May 2023, led to the identification of 2,597 mounted specimens of more than 1,560 species, the vast majority originally assembled by Jules Duchesne de Lamotte (1786–1860) (Gouraud 2023), including



¹ Several authors have attempted to determine when and on what evidence a species should be declared extinct, see e.g. Butchart et al. (2006, 2018) and Mace et al. (2008).

² Labitte (1869: 17) listed a total of 112,656 items in this category.

several types (Gouraud & Absalon 2023). Photographs of all of the specimens listed here are available via the GBIF portal by searching their database.

All continents are represented, including Antarctica. However, Duchesne de Lamotte does not seem to have travelled outside a few European countries, thus non-European species were therefore acquired by purchase or exchange with other institutions (e.g., MNHN; for museum acronyms and their explanation, see Table 1) and contemporary collectors, of which there are many traces in documents archived at the museum. However, these archives are very incomplete and rarely permit us to make a direct link with a particular specimen. The only information concerning the collector and/or date and place of collection are the rare original labels formerly attached to the legs³ of some specimens (Gouraud & Absalon 2023).

We present here a catalogue of 'E&E' bird species and subspecies in the Abbeville Museum. According to the Red List of threatened species (IUCN 2023), the Abbeville Museum holds 156 specimens of extinct or globally threatened taxa, comprising nine Extinct taxa (EX, nine specimens), one Extinct in the Wild (EW, one specimen) and 102 threatened taxa, of which 15 are Critically Endangered (CR), 25 are Endangered (EN) and 62 are Vulnerable (VU). Taxa listed below follow the filters proposed by Adams et al. (2003: table 2), with the following additions (totalling 38 threatened species and subspecies):

Under the CR category, we included all species, i.e. 15.

Under EN and VU, we included seven and 11 taxa, respectively, comprising those with (1) a restricted geographic range, either Extent of Occurrence or Area of Occupancy (IUCN criterion B), and/or (2) a small and declining population (IUCN criterion C), see Table 2.

The list of 'E&E' taxa provided here follows the taxonomy and nomenclature of del Hoyo & Collar (2014, 2016), which is the basis for the Abbeville Museum ornithological collection. IUCN status is taken from the IUCN Red List of threatened species consulted during the inventory and updated on 21 December 2023 (IUCN 2023).

Gouraud (2021) mentioned the importance of the Evolutionary Distinctiveness and Globally Endangered score (hereafter EGDE score), first developed for mammals (Isaac et al. 2007) then extended to birds (Jetz et al. 2014), which is complementary to IUCN status (but note that taxa that are either Extinct or Extinct in the Wild are excluded). EDGE scores have been included based on the list compiled by Jetz et al. (2014: table S1). For a consistent assessment of the EDGE scores presented below, note that those calculated by Jetz et al. (2014) ranged from 0.58 (species with a low level of threat and low degree of genetic isolation) to 6.83 (those with a high degree of genetic isolation), and a 95th percentile of 3.94 (based on 9,993 bird species). The IUCN status of 13 species has changed since Jetz et al. (2014). We recalculated and updated their respective EDGE scores following the equation (1) in Isaac et al. (2007); they are denoted * herein.

In this catalogue, taxa are listed first in the following categories: (1) Extinct, (2) Extinct in the Wild, (3) Critically Endangered, (4) Endangered, and (5) Vulnerable. Within each category, taxa are then listed following the higher taxonomy of del Hoyo & Collar (2014, 2016). English and scientific names follow the same authors. Original combinations (protonyms) are also provided, followed by the inventory number of the specimen(s), and any collection data taken either directly from the specimens' labels or from the archives in the Abbeville and Paris museums, as well as in the literature. Finally, we provide information on population trends following data provided by BirdLife International (IUCN 2023) and, where relevant, representation in museums worldwide and in France

To avoid any risk of deterioration or loss, these labels were systematically detached from the specimens, clearly noting on them the inventory number of the corresponding specimen, and placed individually in plastic bags that are stored separately in a box.



TABLE 1 Museum acronyms mentioned in the text, listed in alphabetical order, together with any references listing or mentioning specimens of E&E species in these collections.

Museum acronyms	Museum names	References to specimens of E&E species
AMNH	American Museum of Natural History, New York	
AMS	Australian Museum of Sydney, Sydney (now Australian Museum)	
ANSP	Academy of Natural Sciences at Drexel University, Philadelphia.	Stone (1899), Meyer de Schauensee (1941), Ingersoll & Fisher (2006)
BMAG	Birmingham Museums and Art Gallery (Birmingham Ornithology Collections), Birmingham, UK.	Anon. (1899), Watson (2011)
MAN	Museum-Aquarium, Nancy	Besson & Fuchs (2019)
MCZ	Museum of Comparative Zoology, Harvard University, Cambridge, MA	
MDLV	Musée de la Vallée, Barcelonnette	Gouraud (2021)
MHH	Museum Heineanum, Halberstadt	Heine & Reichenow (1890), Nicolai (1993), Quaisser & Nicolai (2006)
MHNL	Muséum d'Histoire Naturelle, Lyon (now Musée des Confluences)	
MLC	Musée George Sand et de la Vallée Noire (Baillon Collection), La Châtre	Gouraud (2014b)
MNHN	Muséum national d'Histoire naturelle, Paris	Jouanin (1962)
MZS	Musée de Zoologie, Strasbourg	Besson & Fuchs (2019)
MZUF	Museo Zoologico de 'La Specola', Florence University, Florence	Violani <i>et al.</i> (1984)
Naturalis	Naturalis Biodiversity Center, Leiden (formerly Rijksmuseum van Natuurlijke Historie)	
NHMUK	Natural History Museum, London (Tring)	Knox & Walters (1994)
NKML	Naturkundemuseum Leipzig	
WML	National Museums Liverpool (now World Museum; alternatively NML)	Forbes & Robinson (1897, 1898), Morgan (1975), Fisher (1981)
NMP	National Museum, Prague	Mlíkovský (2012)
NMV	National Museum of Victoria, Melbourne (now Museums Victoria).	
NMW	Naturhistorisches Museum Wien, Vienna (alternatively NHMW)	Schifter (1973), Schifter et al. (2007)
RBINS	Royal Belgian Institute of Natural Sciences, Brussels	
SMF	Senckenberg Museum, Frankfurt am Main (now Forschungsinstitut und Naturmuseum Senckenberg)	von Mertens & Steinbacher (1955)
SMNS	Staatliches Museum für Naturkunde, Stuttgart	Benson & Schüz (1971), Woog (2005
SMTD	Staatliches Museum für Tierkunde, Dresden (now Senckenberg Museum Dresden)	
UMZC	University Museum of Zoology, Cambridge University, Cambridge, UK	Benson (1972)
USNM	National Museum of Natural History, Smithsonian Institution, Washington DC	
ZIMG	Zoologisches Museum, Göttingen	Roselaar (2003)
ZMA	Zoological Museum Amsterdam (now Naturalis)	
ZMK	Zoologisches Museum der Christian-Albrechts- Universität, Kiel	

TABLE 2

List of taxa included in the present study, additional to the list and filters proposed by Adams et al. (2003: table 2). Note: One species, Greater Adjutant Leptoptilos dubius, was categorised EN (IUCN criteria A2bcd+3bcd+4bcd;C2a(ii)) during the inventory but its status was reappraised as Near Threatened (NT) in August 2023. Thus, this species, represented by a unique specimen (2021.0.550) in the Abbeville Museum, is excluded herein.

IUCN status	Species	IUCN criteria B & C
EN	Meller's Duck Anas melleri	C2a(ii)
	Indian Skimmer Rynchops albicollis	C1+2a(ii)
	Peruvian Tern Sternula lorata	C2a(i)
	Buff-throated Purpletuft Iodopleura pipra	C2a(i)
	Truk Monarch Metabolus rugensis	C2a(ii)
	Black-winged Myna Acridotheres melanopterus	C2a(i,ii)
	Java Sparrow Lonchura oryzivora	C2a(i)
VU	Western Tragopan Tragopan melanocephalus	C2a(i)
	Black Inca Coeligena prunellei	C2a(ii)
	Red-faced Malkoha Phaenicophaeus pyrrhocephalus	C2a(i)
	Australian Fairy Tern Sternula nereis	C1
	Andean Condor Vultur gryphus	C2a(i)
	Maroon-faced Parakeet Pyrrhura leucotis	C2a(i)
	Yellow-headed Manakin Chloropipo flavicapilla	C2a(i)
	White-winged Cotinga Xipholena atropurpurea	B2ab(i,ii,iii,iv,v)+C2a(i)
	Atlantic Royal Flycatcher Onychorhynchus swainsoni	C2a(i)
	Aquatic Warbler Acrocephalus paludicola	B2ab(i,ii,iii,iv,v)
	Martinique Oriole Icterus bonana	B1ab(v)

via the VertNet and GBIF databases. The number of specimens, either mounted or skins, is mentioned only if the results suggested fewer than 100 are held worldwide in one or other of these databases⁴, which were searched on 18 October 2023 and 12 January and 23 February 2024.

It is worth noting that Voisin & Voisin (1991: 107) listed a specimen (2021.0.1395) in Abbeville of the extinct Laysan Rail Zapornia palmeri, endemic to Laysan Island, Hawaii, which had been on display for c.20 years in the display dedicated to extinct species. However, this specimen is a White-browed Crake Amaurornis cinerea; it is too large to be a Laysan Rail, its tail is too long and its plumage is too grey. Voisin & Voisin (1991) noted that the specimen's plumage was quite faded for a Laysan Rail; they were probably also misled by the museum's archives, wherein it was reported to be 'Rallaria sandwicensis⁵?'.

Numbers of specimens in VertNet and GBIF can include eggs and/or tissues, as well as duplicates. Therefore, the real number of mounted specimens or skins can be less than that reported herein. This can also help explain the sometimes fairly significant differences between GBIF and VertNet totals.

The species epithet sandwicensis (or sandwichensis) is sometimes used for animals believed to come from Hawaii. It refers to the Sandwich Islands, the name used for the Hawaii archipelago prior to the 1840s.

Extinct

GALLIFORMES

Phasianidae

GREATER PRAIRIE CHICKEN (= HEATH HEN) Tympanuchus c. cupido

Tetrao cupido Linnaeus, 1758

2021.0.96 — mount, adult male. No information.

Remarks.—The species' IUCN status is Near Threatened, but the nominate subspecies is extinct since the last bird, a male, died shortly after 11 March 1932 (Hume 2017). In France, in addition to MNHN which has one specimen, to our knowledge only the Châteaudun collection has specimens (two) of this taxon (A. Rodriguez in litt. 2023).

COLUMBIFORMES

Columbidae

PASSENGER PIGEON Ectopistes migratorius

Columba migratoria Linnaeus, 1766

2021.0.1394—mount, adult female. No information.

Remarks.—The last bird recorded in the wild was in 1899 or 1900, and the last captive bird (a female named 'Martha') died in the Cincinnati Zoological Gardens on 1 September 1914, aged 29 (Hume 2017). Mlíkovský (2012, fide Hahn 1963 and Greenway 1967) stated there are more than 1,500 specimens held in collections worldwide.

CUCULIFORMES

Cuculidae

SNAIL-EATING COUA Coua delalandei

Coccycus [sic] Delalandei Temminck, 1827 2021.0.1396-mount, adult (Fig. 1). No information. Legs and tail damaged. Some damage between the legs, where the material used to stuff the specimen is visible.

Remarks.—Endemic north-east to Madagascar where the last definite record was in 1834 (Hume 2017). All specimens bearing original labels were collected on Île Sainte-Marie (Nosy Bohara). At least 16 specimens are known in collections worldwide (Greenway 1967, Hume 2017; GBIF, VertNet): two at MNHN including the holotype (Voisin & Voisin 1999), two at MCZ, two at NHMUK, one at RBINS, one at Naturalis⁶, one at WML, one (?) in Antananarivo, Madagascar, one at Figure 1. Adult Snail-eating Coua Coua delalandei, SMNS, one at NMW, one at MAN, and that Gouraud / Le Beffroi Musée Boucher de Perthesin Abbeville. The two specimens from the Manessier)



registration number 2021.0.1396 (Christophe

⁶ Naturalis Bioportal: https://bioportal.naturalis.nl/en/specimen/RMNH.AVES.110100 (accessed 13 December 2023).

Rivoli Collection (Maciet 1846: 25) are now at ASNP and AMNH. Voisin & Voisin (1991) stated that the Abbeville specimen was the third known in French collections, but they were unaware of the bird at MAN. They also reported that the number '26' was visible on the stand, but the wooden pedestal has been painted since then and it can no longer be seen.

CHARADRIIFORMES Alcidae

GREAT AUK Pinguinus impennis Alca impennis Linnaeus, 1758

2021.0.1009-mount, adult (Fig. 2). An undated and anonymous label on the base of the pedestal reads 'tué à Cherbourg en 1810 [shot in Cherbourg in 1810]'. A second label, also undated and anonymous, on the base reads on one side 'Pingouin [i.e. auk] / Abbeville / N°22 [strikethrough]' and on the reverse bears the number '7730'. An undated (probably post-1884 and pre-1934) note in the museum's archives mentions that the bird was collected in Cherbourg in 1811, with the following information (translated from French): 'Correspondence [?] from Hardy⁷, communicated by Mr. Goideau [sic] de Kerville. From a note sent by Mr. Moynier de Villepoix⁸. Undated'. The Abbeville specimen was first photographed by Henri Gadeau de Kerville (1892) (Fuller 1999: 167). It was photographed again when it was loaned to the 1965 Foire Internationale de Lille (see La Voix du Nord, 9 November 1965). The integrity of this specimen, which has sometimes been questioned (see Roncaglia 2015), was confirmed by X-ray on 6 May 2015. The Figure 2. Adult Great Auk Pinguinus impennis, specimen has lost some feathers at the base of the forehead and on the left side of the upper Moltke (Christophe Gouraud / Le Beffroi Musée breast. Right wing loosely attached; webs Boucher de Perthes-Manessier) slightly damaged.



registration number 2021.0.1009, possibly collected in Iceland in 1830 by Helmuth Karl Bernhard von

Remarks.—The specimen's origin has long been debated (see Canivet 1843, Degland 1849, Gadeau de Kerville 1892, Duchaussoy 1898, Voisin & Voisin 1991, Fuller 1999, Roncaglia 2015, Pons & CAF 2020). Despite being impossible to date, it seems to have been collected in Iceland by a certain Marskal V. Moltke in 1830 and sent from the Royal Museum in Copenhagen to Jules Duchesne de Lamotte on 15 May 1831 (see Fuller 1999: 167). This conclusion was reached by Duchaussoy (1898), eventually supported by Gadeau

 $^{^7}$ Jacques Josse Hardy (1798–1863) was a merchant and shipowner in Dieppe, Normandy, France. From 1821, he began to mount the birds he collected and expanded his collection with specimens from other hunters and fishermen. After 40 years, his collection numbered 1,253 birds and 2,210 eggs (Bouteiller 1878: 423-424, Vincent 1999).

⁸ The pharmacist René Moynier de Villepoix (1851–1934) became curator of Abbeville Museum in 1884 (P. Absalon in litt. 14 March 2023).

de Kerville⁹, who had postulated the Normandy provenance (i.e. Hardy) a few years earlier (Gadeau de Kerville 1892). Marskal von Moltke perhaps refers to Helmuth Karl Bernhard von Moltke (1800-91), an officer in the Prussian army who trained at the military academy in Copenhagen.

The last specimens were collected in early June 1844 on the Icelandic islet of Eldey and a single bird was seen in December 1852 on the Grand Banks of Newfoundland (Newton 1861: 397), which is considered the last sighting of a live Great Auk. The total number of specimens known comprises 81 mounted skins, c.75 eggs and 24 complete skeletons (Hume 2017). Thirteen specimens (mounts or skins) are held in French collections (Jouanin 1962, Besson & Fuchs 2019: table V).

PSITTACIFORMES

Strigopidae

NORFOLK ISLAND KAKA Nestor productus

Plyctolophus productus Gould, 1836

2021.0.1334-mount, presumably adult male (Fig. 3). No information. The specimen has lost some feathers around the bill base.

Remarks.—Endemic to Norfolk Phillip Islands, Australia. Date of extinction in the wild unknown but probably prior to the early 1850s (Gurney 1854). The last captive bird died in London after 1851 (Hume 2017).

Perhaps fewer than 30 specimens in collections worldwide. Our search of GBIF and VertNet, as well as the literature, has located 28 specimens in 19 different institutions: four at NHMUK, three at Naturalis (including one in ZMA prior to the merging of the collections in 2011 in Leiden, see van der Mije 2023: 4), two at WML, two at AMNH, two at AMS, two at USNM, one at BMAG, one at UMZC, one at SMTD, one at MZUF, one in SMF, one in ZIMG, one in ZMK (D. Brandis in litt. 2023), one at ANSP (the lectotype¹⁰), one at NMP, one at NMV, one at NMW (holotype of Nestor norfolcensis von Pelzeln, 1860, a junior synonym of Gould's name), one at MHH, and that in Abbeville.

A specimen owned by the Count Ercole Turati of Milan, later donated to the Museo Civico di Storia Naturale di Milano, was destroyed during World War II (Violani et al. 1984). Based on Greenway (1967), Hume Boucher de Perthes-Manessier)



Figure 3. Norfolk Island Kaka Nestor productus, presumably an adult male, registration number 2021.0.1334 (Christophe Gouraud / Le Beffroi Musée

© 2024 The Authors; This is an open-access article distributed under the terms of the Creative Commons Attribution-NonCommercial Licence, which permits unrestricted use,



See printed note entitled 'LE GRAND PINGOUIN du Musée d'Abbeville' dated 1898 and signed 'H. Duchaussoy, Membre de la Société Linéenne du Nord de la France' (Archives of the Abbeville Museum).

¹⁰ Stone (1899) designated the unique specimen in ANSP as the 'type' of this taxon, which act can be considered a lectotypification under the ICZN Code (1999, Art. 74.6); although Gould's original description was potentially based on a single specimen, his text is not unambiguous on this point.

(2017) listed the Besançon museum, France, as holding a Nestor productus. However, the only *Nestor* species in Besancon is *N. meridionalis* (O. Cucherousset in litt. 2022). Roselaar (2003: 274) suggested the presence of a specimen in Leipzig but staff at NKML have confirmed its absence (L. Wößner in litt. 2024). There is no specimen at MNHN (none listed by Jouanin 1962; confirmed by P. Boussès in litt. 2023). To our knowledge, the Abbeville specimen is the only one in French collections.

Psittacidae CAROLINA PARAKEET

Conuropsis carolinensis Psittacus carolinensis Linnaeus, 1758 2021.0.1436-mount, adult (Fig. 4). No information.

Remarks.—The specimen's coloration (rather green, lacking any blue tint) and its culmen length (24.8 mm) would suggest it involves C. c. ludovicianus (Hume 2017, Snyder & Russell 2020). However, there is substantial variation in the coloration of the two subspecies and, without any collection locality, we refrain from assigning it to subspecies. Endemic to the eastern USA. The last captive bird died in the Cincinnati Zoological Gardens on 21 February 1918. Nevertheless, small and isolated populations may have persisted until the 1930s (Burgio et al. 2017, fide Snyder 2004, Snyder & Russell 2020). Approximately 720 skins in collections worldwide (Hume 2017, fide Luther 1996), including 460 bearing original data (Burgio et al. 2018).

PASSERIFORMES Monarchidae NUKU HIVA MONARCH

Pomarea nukuhivae

Pomarea mendozae nukuhivae Murphy & Mathews, 1928

2021.0.1010-mount, adult female (Fig. 5A). Label (initially on the right leg, author unknown, Fig. 5B) reads 'muscicapa / m. nigra. Taiti' and bears on the reverse the number '18'. The real colour of the eyes in this species is dark.



Figure 4. Adult Carolina Parakeet Conuropsis carolinensis, registration number 2021.0.1436 (Christophe Gouraud / Le Beffroi Musée Boucher de Perthes-Manessier)



Figure 5A. Adult female Nuku Hiva Monarch Pomarea nukuhivae, registration number 2021.0.1010 (Christophe Gouraud / Le Beffroi Musée Boucher de Perthes-Manessier)







Figure 5B. Label initially attached to the right leg of specimen 2021.0.1010 (Nuku Hiva Monarch Pomarea nukuhivae). Top: front 'muscicapa / m. nigra. Taiti'. Below: reverse: 'no 18' (Christophe Gouraud / Le Beffroi Musée Boucher de Perthes-Manessier)

Remarks.—Mention of 'Tahiti' and the identification on the label are mistakes as the specimen is clearly an adult female P. nukuhivae, which is endemic to Nuku Hiva, Marquesas (females of P. nigra, endemic to Tahiti, are like males of the same species, i.e. black). The last observations of live birds were in the 1930s (Hume 2017). Searches of VertNet and GBIF produced 46 and 53 specimens, respectively, in museums worldwide (the vast majority at AMNH). Four specimens are also present at NHMUK (Knox & Walters 1994). In French collections, Gouraud (2014b) listed two specimens at MLC, and GBIF shows two specimens at MNHN (not mentioned by Jouanin 1962). The museum in Châteaudun also has a specimen (A. Rodriguez in litt. 2023). Thus, the Abbeville specimen seems to be the sixth known in France.

Oriolidae

SOUTH ISLAND PIOPIO Turnagra c. capensis

Tanagra capensis Sparrman, 1787

2021.0.1682—mount, adult. No information. Tail damaged.

Remarks.—Subspecies endemic to South Island, New Zealand, where the last specimen was collected in 1902 and the last confirmed observation occurred three years later (Hume 2017). A search of VertNet and GBIF located 85 and 138 specimens in collections worldwide

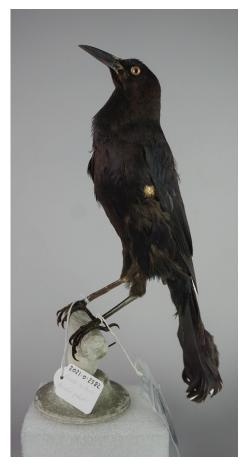






Figure 6A (left). Adult male Slender-billed Grackle Quiscalus palustris, registration number 2021.0.2382 (Christophe Gouraud / Le Beffroi Musée Boucher de Perthes-Manessier)

Figure 6B (above). Label initially attached to the right leg of specimen 2021.0.2382 (Slender-billed Grackle Quiscalus palustris). Top: front '1625 210071'. Below: reverse: 'Quiscalus tenuirostre / Swainson / Mexique' (Christophe Gouraud / Le Beffroi Musée Boucher de Perthes-Manessier)

(of all subspecies), including nine at MNHN (not listed by Jouanin 1962). In French collections, there are also two specimens at MZS (subspecies unknown).

Icteridae

SLENDER-BILLED GRACKLE Quiscalus palustris

Scaphidurus palustris Swainson, 1827

2021.0.2382 - mount, adult male (Fig. 6A). Label (initially on the right leg, author unknown, Fig. 6B) bears the number (or numbers) '1625 210071' and on the reverse is inscribed 'Quiscalus tenuirostre¹¹ / Swainson / Mexique'. Tail damaged, with part of a rectrix detached and placed in a plastic bag attached to one leg.

Remarks.-Endemic to the Valley of Mexico, in central Mexico, where the last bird was shot in 1910 (Hume 2017). However, R. Gordon reported an individual seen at Lerma marshes, México state, on 6 March 1953 (https://ebird.org/checklist/S1240039812). VertNet and GBIF list 30 and 38 specimens, respectively. Jouanin (1962) did not report this species at MNHN, but a female from the Boucard collection was found recently (P. Boussès in litt. 2023). The Abbeville and Paris specimens might be the only ones in French collections.

¹¹ Quiscalus tenuirostris Swainson, 1838, is a junior synonym of Scaphidurus palustris Swainson, 1827.

¹² Accessed 18 October 2023.

EDGE score: 5.23

EDGE score: 5.23

Extinct in the Wild

CORACIIFORMES

Alcedinidae

GUAM KINGFISHER Todiramphus cinnamominus

Halcyon cinnamomina Swainson, 1821

2021.0.1446—mount, adult female. The archive at MNHN lists a female Guam Kingfisher collected during the Astrolabe circumnavigation (1826–29) and exchanged with Duchesne de Lamotte in October 1837. Specimen 2021.0.1446 must be this bird. It was collected by/ for Joseph Paul Gaimard and Jean René Quoy, naturalists aboard L'Astrolabe, which called at Guam in May-August 1828. Only a single kingfisher was collected on Guam (Geoffroy Saint-Hilaire 1829: folio 253).

Remarks.—Extinct in the wild since 1986, when the last 29 remaining wild birds were taken into captivity for captive breeding. In 2013 the captive population numbered 124 individuals. VertNet, GBIF and Jouanin (1962) do not list any specimens in French collections. Nevertheless, one is held at MLC, and Besson & Fuchs (2019: table V) mentioned five specimens in three museums (including MLC). The Abbeville specimen is therefore the sixth known in French collections.

Critically Endangered

CHARADRIIFORMES

Charadriidae

SOCIABLE LAPWING Vanellus gregarius

Charadrius gregarius Pallas, 1811

2021.0.689 - mount, adult male. Right leg detached from the pedestal. Archives in Abbeville Museum mention two birds acquired from Prince Maximilian zu Wied-Neuwied (1782–1867) in 1854 that had been collected in Sarepta (nowadays Old Sarepta, Volgograd, Russia). These two specimens were listed under numbers 1594 and 4453. As specimen 2021.0.689 bears no information, it is impossible to link it to one of these (see Gouraud & Absalon 2023); the other specimen is now missing.

Remarks.-Breeds in south-central Russia and Kazakhstan; winters from Eritrea to Pakistan and north-west India. Number of mature individuals estimated at 11,200; population decreasing.

Scolopacidae

ESKIMO CURLEW Numenius borealis

Scolopax borealis J. R. Forster, 1772

2021.0.1407—mount, presumably adult. No information.

Remarks.—Little is known concerning the distribution of this species. Confirmed to breed in two areas of Northwest Territories, Canada; winter range southern South America. Number of mature individuals estimated at 1-49; population trend unknown. Not reported with certainty since 1963 and is probably extinct (Hume 2017). Searches in VertNet and GBIF revealed 323 and 345 specimens, respectively. Voisin & Voisin (1991) reported 369 (including this one) in museum collections. At least one other specimen has been discovered since, housed at MLC.

EDGE score: 5.22

EDGE score: 5.49

EDGE score: 4.63

EDGE score: 4.39

SLENDER-BILLED CURLEW Numenius tenuirostris

Numenius tenuirostris Vieillot, 1817

2021.0.1408-mount, presumably adult. Tip of tail and middle toe on right leg both damaged. Baillon (1834: 69) listed the species as having been found only once near Abbeville. Specimen 2021.0.1408 could be one of the two reported by Marcotte (1861: 327): one from Cayeux (now part of Cayeux-sur-Mer) and another from the marshes of Noyelles (now Noyelles-sur-Mer). The other could be that listed by Baillon and held at MLC (it bears no information, see Gouraud 2014b).

Remarks.—The only known breeding site is near Tara, Omsk Oblast, Russia. Based on stable-isotope analysis, Buchanan et al. (2018) suggested that the species' breeding grounds were in the steppes of northern Kazakhstan and parts of southern Russia. Winter records are available from North Africa east to the Persian Gulf. Number of mature individuals estimated at 1-49; population decreasing. Last seen with certainty in April 2001 (Hume 2017). In total, 420 specimens are known in museum collections worldwide, including 27 in France (Buchanan *et al.* submitted)¹³.

ACCIPITRIFORMES

Accipitridae

RED-HEADED VULTURE Sarcogyps calvus

Vultur calvus Scopoli, 1786

2021.0.1021 - mount, adult. No information. Tips of tail and wings damaged.

Remarks.—Now confined mainly to the northern Indian Subcontinent; rare in Bangladesh, Myanmar and Cambodia, and extinct or extremely rare in Pakistan, southern China, Thailand and Singapore. Number of mature individuals estimated at 2,500-9,999; population decreasing. VertNet and GBIF list 45 and 98 specimens, respectively.

WHITE-RUMPED VULTURE Gyps bengalensis

Vultur bengalensis J. F. Gmelin, 1788

2021.0.1022 - mount, adult. No information. Tips of tail and wings damaged. Some feathers missing from the tibial region.

Remarks.—The extant population ranges from south-east Pakistan across the Indian Subcontinent, Myanmar and Cambodia. Possibly extinct in Iran, Afghanistan, Laos, Thailand, Vietnam and Malaysia. Number of mature individuals estimated at 4,000-6,000; population decreasing.

SLENDER-BILLED VULTURE *Gyps tenuirostris*

Gyps tenuirostris G. R. Gray, 1844

2021.0.1024 - mount, presumably adult. No information. Tips of tail and wings damaged; claw on rear toe of left leg broken.

Remarks.—The extant population ranges across northern India, southern Nepal, Bangladesh, Myanmar, southern Laos and eastern Cambodia. Possibly extinct in north-west India, Thailand, western Laos, western Cambodia, and western and southern Vietnam. Number of mature individuals estimated at 730–870; population decreasing. VertNet and GBIF list just nine and five specimens, respectively. Not mentioned by Jouanin (1962) and Besson & Fuchs (2019); thus, the Abbeville bird is perhaps the only specimen in France and the second in Europe, after the holotype at NHMUK (Warren 1966: 293).

¹³ Not including the specimen in Châteaudun (A. Rodriguez in litt. 2023) or the three specimens housed in La Chaize-le-Vicomte (Vimpère 2019: 431).



EDGE score: 5.79*

EDGE score: 4.21

EDGE score: 4.22

BUCEROTIFORMES

Bucerotidae

HELMETED HORNBILL Rhinoplax vigil

Buceros vigil Pennant, 1781

2021.0.1081 - mount, presumably adult male. No information. Tail damaged and incomplete; legs also damaged.

Remarks.-From extreme southern Myanmar through the Thai-Malay Peninsula, Sumatra and Borneo. Number of mature individuals unknown, but population decreasing fast. VertNet and GBIF both list 65 specimens.

PICIFORMES

Picidae

IVORY-BILLED WOODPECKER Campephilus p. principalis

Picus principalis Linnaeus, 1758

2021.0.1429 - mount, adult male. No information. Front toes of right leg damaged; left side of the body and crown have lost some feathers. Voisin & Voisin (1991) mentioned illegible inscriptions on the base of the pedestal, which could not be checked because the stand has been painted since.

Remarks.—Subspecies endemic to the south-east USA. Recent observations in Arkansas (Fitzpatrick et al. 2005), Florida (Hill et al. 2006) and Louisiana (Collins 2011) are controversial, hotly debated (Dalton 2010, Lynch 2011) but still being reported (Latta et al. 2023, plus references therein). Number of mature individuals estimated at 1-49; population trend unknown. Despite the number of reports, including supposed photographic evidence and sound-recordings, there are no undisputed sightings since 1944, and this subspecies is generally believed to have survived until no later than the 1960s. The subspecies bairdii was last definitely reported in March 1988 (Kirkconnell et al. 2020).

Voisin & Voisin (1991, fide Greenway 1958) reported that specimens are known in only 11 museums worldwide, but noted that a few more could probably be added. Hume (2017) mentioned that many specimens are held in museums worldwide, but did not report a total. Kirkconnell et al. (2020) listed a total of 32 specimens of bairdii in European, North American and Cuban museums.

IMPERIAL WOODPECKER Campephilus imperialis

Picus imperialis Gould, 1832

2021.0.1430 - mount, adult male (Fig. 7). Label (initially on the right leg) reads 'Dryocopus imperialis (Gould) / Amer. Sept.'

Remarks. - Endemic to the highlands of western Mexico. Last confirmed observation in 1956 (Hume 2017). Number of mature individuals estimated at 1-49; population trend unknown. Work by Brown & Clark (2009) and, more recently, by Leese et al. (2022) yielded a total of 189 specimens in museums worldwide, of which 40 are complete mounts or skins, and the majority are incomplete or partial skins and skeletons. The Abbeville specimen is thus the 41st complete specimen. VertNet, GBIF, Jouanin (1962) and Besson & Fuchs (2019) all suggest that the specimen in Abbeville is the only one in France. The original label mentions the genus Dryocopus. As this species was not transferred to Campephilus until 1849, although Gould described it in Picus, this suggests the label can be dated prior to 1849. Pre-1860 specimens are rare in collections and involve only the six syntypes identified by Prŷs-Jones (2011) and the four specimens attributed to the Rivoli collection, collected in 1836, and now at ANSP (K. Clark in litt. 2024). Therefore, it



Figure 7. Adult male Imperial Woodpecker Campephilus imperialis, registration number 2021.0.1430 (Christophe Gouraud / Le Beffroi Musée Boucher de Perthes-Manessier)

is possible that this specimen is a seventh syntype or that it emanates from the Massena collection¹⁴.

PSITTACIFORMES

Psittacidae

ULTRAMARINE LORIKEET Vini ultramarina

Psittacus ultramarinus Kuhl, 1820

2021.0.1440 — mount, presumably adult. No information.

Remarks.—Endemic to the Marquesas, French Polynesia, where probably confined to Ua Huka. Number of mature individuals estimated at 1,000-2,499; population stable. VertNet and GBIF list 34 and 52 specimens, respectively. Voisin & Voisin (1991) listed one specimen in Abbeville with the following annotation on the pedestal's base: 'Psittacus / Coriphylus Gompili [sic] / & / Nouka-Hiva / Mr. Massie 141-5'. Specimen 2021.0.1440 is the only example of this species in the collection and therefore is presumably the same one. 'Coriphylus Gompili' refers undoubtedly to Coryphilus goupilii Hombron & Pucheran, 1853, a junior synonym of Psittacus ultramarinus Kuhl, 1820. 'Massie' could refer to Auguste-

EDGE score: 4.07*

¹⁴ Moreover, Jules Duchesne de Lamotte travelled to London sometime between 1829 and 1839 (Gouraud & Absalon 2023), during which period Gould was selling specimens (K. Clark in litt. 2024). Other Gould specimens have also been identified in the Abbeville collection (Gouraud & Absalon 2023).

EDGE score: 4.76*

EDGE score: 4.81

EDGE score: 4.90

Samuel Massieu de Clerval (1785-1847), a French naval officer. The Baillon Collection at MLC comprises more than 80 specimens from Massieu de Clerval, five of them from Nuku-Hiva (see Gouraud 2014b). Baillon's specimens mention either 'Mr. Massieu de Clerval' or 'Mr. Massieu'. Why the inscription mentioned by Voisin & Voisin is now missing is unknown; it may have been written on a label that has since been lost.

PASSERIFORMES

Cotingidae

BANDED COTINGA Cotinga maculata

Ampelis maculatus Statius Müller, 1776

2021.0.1554—mount, adult male. No information. Tail missing.

Remarks. - Endemic to the Atlantic Forest of Brazil and now confined to a handful of protected areas. Number of mature individuals estimated at 50–249; population decreasing. VertNet and GBIF list 31 and 55 specimens in collections worldwide, respectively, including two in French collections, one each at MHNL and MLC. A third specimen has been found in Châteaudun (A. Rodriguez in litt. 2023). The Abbeville specimen seems to be the fourth known in France.

Meliphagidae

REGENT HONEYEATER Anthochaera phrygia

Merops phrygius Shaw, 1794

2021.0.1677 — mount, presumably adult. No information.

Remarks.—Endemic to south-east Australia, with a very patchy breeding range. Number of mature individuals estimated at 350-400; population decreasing. VertNet and GBIF list ten and 415 specimens in collections worldwide, respectively. In addition to one at MNHN and the five listed by Besson & Fuchs (2019: table V), there is another specimen in Châteaudun (A. Rodriguez in litt. 2023) and one in La Chaize-le-Vicomte (Vimpère 2019: 457). The Abbeville specimen is therefore the ninth specimen known in France.

Corvidae

JAVAN GREEN MAGPIE Cissa thalassina

Kitta thalassina Temminck, 1826

2021.0.1618 - mount, presumably adult. No information. Tip of tail slightly damaged.

Remarks. — Endemic to Java, Indonesia, where it is confined to montane forest in the west of the island. Number of mature individuals estimated at 50-249; population decreasing. VertNet and GBIF list 30 and 84 specimens, respectively.

The taxonomy of *C. thalassina* has changed since Jetz *et al.* (2014) published their work. This species was previously lumped with Bornean Green Magpie C. jefferyi. However, the increase in extinction risk (i.e. the IUCN status) due to the split should be balanced against the decrease in evolutionary distinctiveness, resulting in an EDGE score that is little changed (Jetz et al. 2014: 4). We therefore maintain the EDGE score assigned by Jetz et al. (2014), i.e. 4.90.

Emberizidae

YELLOW-BREASTED BUNTING Emberiza aureola

Emberiza aureola Pallas, 1773

2021.0.2311 – mount, presumably adult male E. a. aureola. No information. Tail missing and bill tip broken; right toe on left leg damaged.

EDGE score: 4.55*

2021.0.2312 - mount, presumably adult male E. a. aureola. Label (initially on the left leg) reads 'Kasan. May. 1833 / E. aureola. mas'.

2021.0.2313 - mount, presumably adult male E. a. aureola. Label (initially on the right leg) reads 'Emberiza / aureola mâle / N 8. Sibirien'. Right leg damaged and claw of middle toe on left leg missing.

2021.0.2314 - mount, presumably adult male E. a. aureola. No information. Claw of rear toe on left leg missing.

2021.0.2315 — mount, presumably immature (second-year) male *E. a. aureola*. No information. Bill tip broken and left leg detached from body.

Remarks.-Breeds from western Russia east to Kamchatka, the Kuril Islands and northern Japan, south to northern Mongolia and north-east China; winters mainly in southern China and South-East Asia. No estimate as to the number of mature individuals. Across its range, it is precautionarily estimated that the rate of decline over three generations could be 80-99%, mainly due to persistent hunting and trapping, but also the ongoing negative impacts of agro-industrial farming and the use of herbicides and pesticides. As a result, the species is now listed as Critically Endangered.

Dated May 1833, specimen 2021.0.2312 could have been collected by the explorer and naturalist Eduard Friedrich von Eversmann (1794–1860), who died in Kazan, Volga, Russia. He became a Professor of Zoology and Botany at the University of Kazan in 1828 (Mearns & Mearns 2022).

Leiotrichidae

RUFOUS-FRONTED LAUGHINGTHRUSH Garrulax r. rufifrons

EDGE score: 4.21*

EDGE score: 2.99

Garrulax rufifrons Lesson, 1831

2021.0.1886 — mount, presumably adult. No information.

Remarks. - Subspecies endemic to West Java. Number of mature individuals estimated at 50–249; population decreasing. VertNet and GBIF list 32 and 140 specimens, respectively.

Endangered

ANSERIFORMES

Anatidae

MELLER'S DUCK Anas melleri

Anas melleri P. L. Sclater, 1865

2021.0.252 - mount, adult. No information. Right leg damaged.

Remarks.-Endemic to Madagascar. Number of mature individuals estimated at 1,300-3,300; population decreasing. VertNet and GBIF list 68 and 97 specimens, respectively.

CHARADRIIFORMES

INDIAN SKIMMER Rynchops albicollis

EDGE score: 4.28*

Rhynchops albicollis Swainson, 1838

2021.0.809—mount, adult. No information. Tips of wings and tail damaged.

Remarks.—Patchily distributed from eastern Pakistan to western Myanmar. Number of mature individuals estimated at 2,450-2,900; population decreasing. VertNet and GBIF list 29 and 42 specimens, respectively.

EDGE score: 3.75

EDGE score: 4.50*

EDGE score: 3.45

EDGE score: 3.30

PERUVIAN TERN Sternula lorata

Sterna lorata Philippi & Landbeck, 1861

2021.0.878—mount, adult. No information. Tips of wings and tail damaged.

Remarks.-Breeds in fewer than ten colonies in Peru and northern Chile. Number of mature individuals estimated at 600–1,700; population decreasing.

PASSERIFORMES

Tityridae

BUFF-THROATED PURPLETUFT Iodopleura pipra

Pardalotus pipra Lesson, 1831

2021.0.1561 - mount, presumably adult male. No information. Some feathers missing on its right side; right leg damaged.

Remarks.-Endemic to eastern Brazil. Number of mature individuals estimated at 1,000–2,499; population decreasing. VertNet and GBIF list 51 and 77 specimens, respectively, including one in France at MDLV. A second specimen has been found in Châteaudun (A. Rodriguez in litt. 2023) and a third, originally housed in La Chaize-le-Vicomte, was sent to MNHN in 1947 (Vimpère 2019: 279). The Abbeville specimen is therefore the fourth known in French collections.

Monarchidae

TRUK MONARCH Metabolus rugensis

Muscicapa rugensis Hombron & Jacquinot, 1841

2021.0.1716—mount, adult male. Label (initially on the right leg) reads '3. yeux noirs / Carolines. / Hogoleu [an old name for the Chuuk Islands].' and on the reverse 'J [?]'. Tail slightly damaged.

Remarks. - Endemic to Chuuk (formerly Truk) Atoll, in the Caroline Islands, Federated States of Micronesia. Number of mature individuals estimated at 1,000-2,499; population decreasing. VertNet and GBIF list 48 and 70 specimens, respectively. MNHN holds five specimens¹⁵, making the Abbeville bird the sixth known in France. The specimen was perhaps collected during the visit by L'Astrolabe and La Zélée to the Carolines in December 1838; it was considered a probable syntype of Muscicapa rugensis Hombron & Jacquinot, 1841 (Gouraud & Absalon 2023).

Sturnidae

BLACK-WINGED MYNA *Acridotheres melanopterus*

Gracula melanoptera Daudin, 1800

2021.0.1938—mount, presumably adult. No information.

Remarks.-Endemic to north-west Java; introduced in Singapore. Although treated as a species by del Hoyo & Collar (2016) and Eaton et al. (2021), BirdLife reversed its earlier decision to split this species from Grey-backed Myna Acridotheres tricolor and Greyrumped Myna A. tertius leading to the revised Red List status of Endangered. However, the increase in extinction risk due to splitting is balanced by the decrease in evolutionary distinctiveness, so the EDGE score should change very little (Jetz et al. 2014: 4). Therefore, we have maintained the EDGE score assigned by Jetz et al. (2014), i.e. 3.30. If the number of mature individuals is estimated at 150–190 (including A. tricolor and A. tertius), it is possible that A. melanopterus alone has been extirpated in the wild (Eaton et al. 2021). Irrespective of taxonomy, the population is declining. VertNet and GBIF list two and 192 specimens, respectively.

¹⁵ MNHN database (https://science.mnhn.fr/institution/mnhn/search), accessed 13 January 2024.

EDGE score: 4.10

EDGE score: 3.88*

EDGE score: 3.30

EDGE score: 3.44

EDGE score: 4.01

Mimidae

WHITE-BREASTED THRASHER Ramphocinclus b. brachyurus

Turdus brachyurus Vieillot, 1818

2021.0.1962—mount, presumably adult. No information.

Remarks.—Subspecies endemic to Martinique, where now restricted to the Caravelle Peninsula. Number of mature individuals estimated at 1,300–1,400; population decreasing.

Estrildidae

JAVA SPARROW Lonchura oryzivora

Loxia oryzivora Linnaeus, 1758

2021.0.2130 — mount, presumably adult. No information.

2021.0.2131—mount, presumably adult. No information.

Remarks. - Endemic to Java, Bali, Kangean and possibly Bawean; introduced to many places around the world. Number of mature individuals in native range estimated at 1,000–2,499; population decreasing.

Vulnerable

GALLIFORMES

Phasianidae

WESTERN TRAGOPAN Tragopan melanocephalus

Phasianus melanocephalus J. E. Gray, 1829

2021.0.42 - mount, adult male. No information.

Remarks. - Disjunct distribution in north-west Himalayas from northern Pakistan to north-west India and south-west Tibet. Number of mature individuals estimated at 3,300; population declining.

CAPRIMULGIFORMES

Trochilidae¹⁶

BLACK INCA Coeligena prunellei

Trochilus prunellei Bourcier, 1843

2021.0.380 - mount. Inscription on the pedestal base reads '8. / Prunellii [sic]'. Right wing and leg loosely attached.

Remarks.-Endemic to the departments of Boyacá, Santander and Cundinamarca in Colombia. Number of mature individuals estimated at 7,500; population decreasing.

CUCULIFORMES

Cuculidae

RED-FACED MALKOHA Phaenicophaeus pyrrhocephalus

Cucullus pyrrhocephalus Pennant, 1769

2021.0.412 - mount, presumably adult. Label (initially on the right leg) reads 'Phoenicophaus pyrrhocephalus (Vieill. / le Malcoha Pyrrhocephale / Philippines'. Tail and base of the maxilla damaged; some feathers on the flanks lost.

Remarks.-Endemic to southern Sri Lanka (the locality mentioned on the label is wrong). Number of mature individuals estimated at 2,500-9,999; population decreasing. VertNet and GBIF list 32 and 42 specimens, respectively.

¹⁶ Other world lists place this family either in the Apodiformes (e.g. Gill et al. 2024) or in its own order, Trochiliformes (e.g. Sibley & Monroe 1990).

EDGE score: 3.82

EDGE score: 3.14

EDGE score: 5.19*

EDGE score: 2.67

EDGE score: 2.46*

PROCELLARIIFORMES

Diomedeidae

SHORT-TAILED ALBATROSS *Phoebastria albatrus*

Diomedea albatrus Pallas, 1769

2021.0.529 - mount, immature. No information. Tips of wings and tail damaged; right eye damaged.

Remarks.-Confined to the northern Pacific, breeding only on Torishima and the Senkaku Islands, Japan. Number of mature individuals estimated at 1,734; population increasing.

CHARADRIIFORMES

Laridae

AUSTRALIAN FAIRY TERN Sternula nereis horni

Sterna nereis horni Mathews, 1912

2021.0.879 - mount, adult male. Label (initially on the right leg) reads: 'Male. Jan. 11. 1843 / South Island / Houtman's Abrolhos. /// Sternula nereis Gould / Irides / Brown.' Right leg and tips of tail and wings all damaged.

Remarks.—Collected by John Gilbert (1812-45) on the Houtman Abrolhos Islands, Western Australia, on 11 January 1843 (see Gouraud & Absalon 2023). Ranges from Western Australia (subspecies horni), South Australia, Victoria and Tasmania, east to northern North Island, New Zealand, and New Caledonia. Number of mature individuals estimated at 2,500–9,999; population decreasing. VertNet and GBIF list six and 75 specimens, respectively.

CATHARTIFORMES

Cathartidae

ANDEAN CONDOR Vultur gryphus

Vultur gryphus Linnaeus, 1758

2021.0.987—mount, male. No information. Tip of tail damaged.

Remarks.—Mainly confined to the Andes from northern Colombia south to Tierra del Fuego (Chile and Argentina). Number of mature individuals estimated at 6,700; population decreasing.

PSITTACIFORMES

Psittacidae

ST LUCIA PARROT Amazona versicolor

Psittacus versicolor Statius Müller, 1776

2021.0.1343 - mount, presumably adult. No information. Tail and wings missing and were, at some time, replaced by a tail and wings from a male Moluccan Eclectus Eclectus roratus.

Remarks. - Endemic to upland wet forest in central and southern St Lucia. Number of mature individuals estimated at 1,150–1,500; population increasing. VertNet and GBIF list 76 and 74 specimens, respectively.

MAROON-FACED PARAKEET Pyrrhura leucotis

Psittacus leucotis Kuhl, 1820

2021.0.1351 - mount, presumably adult. Label (initially on the right leg) reads 'du Brésil / (Rio Janeiro) / Ménétries / Août 1824' and on the reverse '157 / Brésil / [and in different handwriting] Perruche / à gorge / variée'. The back has lost some feathers and the tail is damaged.

EDGE score: 3.37*

EDGE score: 3.05*

EDGE score: 3.82

EDGE score: 3.01

Remarks. - Endemic to eastern Brazil from southern Bahia to Rio de Janeiro. Number of mature individuals estimated at 2,500-9,999; population decreasing. Edouard Ménétries (1802–61) joined the German explorer and naturalist Baron Georg Heinrich von Langsdorff (1774–1852) in Brazil between 1822 and 1825.

PASSERIFORMES

Pipridae

YELLOW-HEADED MANAKIN Chloropipo flavicapilla

Pipra flavicapilla P. L. Sclater, 1852

2021.0.2396 - mount, presumably adult male. No information. Bill and tail are damaged.

Remarks.-Patchily distributed in the Andes of Colombia. Its presence in Ecuador appears to have been disproved (Palacio 2023). Number of mature individuals estimated at 3,500–4,000; population decreasing. VertNet and GBIF list 34 and 73 specimens, respectively.

Cotingidae

WHITE-WINGED COTINGA Xipholena atropurpurea

Ampelis atro-purpurea Wied-Neuwied¹⁷, 1820

2021.0.1556 - mount, adult male. No information.

2021.0.1557 - mount, adult male. No information. Bill tip broken. The specimen has orangey feathers on its chin and breast. A few specimens of male Pompadour Cotinga X. punicea show similar coloration. It has been suggested that this could be evidence of a type of leucism or, alternatively, that the individuals concerned were placed near a fire shortly after collection (Kirwan & Green 2011: 434, and references therein).

Remarks.-Endemic to the Atlantic Forest of Brazil and now patchily distributed. Number of mature individuals estimated at 2,500–9,999; population decreasing.

Tityridae

ATLANTIC ROYAL FLYCATCHER Onychorhynchus swainsoni

Muscivora swainsoni von Pelzeln, 1858

2021.0.1559—mount, presumably adult. No information. Bill and tail damaged.

Remarks.-Endemic to south-east Brazil. Number of mature individuals estimated at 600-1,700; population decreasing. VertNet and GBIF list 16 and nine specimens in collections worldwide, respectively, but none in France. However, in addition to specimen 2021.0.1559, two specimens of this species are at MNHN¹⁸.

Campephagidae

MAURITIUS CUCKOOSHRIKE Lalage typica

Oxynotus typicus Hartlaub, 1865

2021.0.2423 - mount, presumably adult female. Label (initially on the left leg) reads 'Chusan [= Zhoushan], China'. Tail damaged. Part of one rectrix has become detached and is placed in a plastic bag attached to one leg.

Remarks.-Endemic to Mauritius, where probably widespread prior to human colonisation. Now restricted to the south of the island, where it has a very small range. Number of mature individuals estimated at 600-700; population stable. VertNet and GBIF

¹⁷ Myers (2012) suggested that the name Wied should have preference over Wied-Neuwied.

¹⁸ MNHN database (https://science.mnhn.fr/institution/mnhn/search), accessed 12 January 2024.

EDGE score: 3.44

EDGE score: 2.43*

EDGE score: 2.75

list only six specimens, all at MNHN. However, another is at AMNH, where two, collected in January 1874, were once held¹⁹.

The information on the original label (i.e. Zhoushan, China) is obviously incorrect as the species is endemic to Mauritius. The origin of this specimen is almost certainly British, firstly due to mention of 'China' (not 'Chine', the French name), and secondly because British forces were present in Zhoushan in the 1840s and 1860s. The ship that brought this specimen from Mauritius was most likely from or heading to Zhoushan, and the specimen was mislabelled as a result.

Acrocephalidae

AQUATIC WARBLER Acrocephalus paludicola

Sylvia paludicola Vieillot, 1817

2021.0.1818 - mount. No information.

2021.0.1819 - mount. No information.

Remarks.—Patchy breeding distribution from north-east Germany to Lithuania, southwest and southern Belarus, and north-west and northern Ukraine. Wintering areas, in West Africa, also patchy. Number of mature individuals estimated at 18,000–29,000; population decreasing.

TAHITI REED WARBLER Acrocephalus caffer

Sitta caffra Sparrman, 1786

2021.0.1822-mount, presumably adult. No information. Tip of tail damaged. Central rectrix broken. Claw on rear toe of right leg missing.

Remarks. - Endemic to Tahiti, Society Islands. Number of mature individuals estimated at 250-999; population stable. VertNet and GBIF list 60 and 98 specimens, respectively.

Icteridae

MARTINIQUE ORIOLE Icterus bonana

Oriolus bonana Linnaeus, 1766

2021.0.2369 — mount, presumably adult. No information.

2021.0.2370 — mount, presumably adult. No information. Right wing loosely attached.

Remarks.-Endemic to Martinique. Number of mature individuals estimated at 6,000–15,000; population decreasing. VertNet and GBIF list 54 and 76 specimens, respectively.

Conclusions

The inventory and study of Abbeville's ornithological collection once again demonstrates that 'small' collections frequently contain rare and valuable specimens. Their historical and scientific importance can be as great as that of collections in major institutions and therefore should not be under-estimated (Steinheimer 2003, 2005, Casas-Marce et al. 2012, Gouraud 2014a,b, 2015, 2021, Gouraud & Absalon 2023). If more than 500 bird taxa have become extinct in the last 700 years (as suggested by Hume 2017), it is probably only a matter of time before other species are added to this list. Some species may be even more at risk than currently thought (Bates et al. 2024) and several recently rediscovered species remain on the brink of extinction (Scheffers et al. 2011). In the context of global biodiversity loss (see, e.g., Szabo et al. 2012), we encourage curators to publish lists of 'E&E' taxa held in their collections or to reassess them in the case of older published inventories.

¹⁹ Data retrieved from Catalogue of birds in the American Museum of Natural History (AMNH), see entries 564459 and 564460, and JJFJ (pers. obs.).

Acknowledgements

The inventory of the Abbeville Museum's ornithological collection was supported by the Direction Régionale des Affaires Culturelles (DRAC Hauts-de-France), the Ministère de l'Enseignement Supérieur et de la Recherche, and the city of Abbeville. We are grateful to the following for their help, listed in alphabetic order: Patrick Absalon, Olivia Beavers, Alex Bond, Patrick Boussès, Dirk Brandis, Kevin Clark, Ombline Cucherousset, Mélanie Daurat, Clemency Fisher, Jérôme Fuchs, Hein van Grouw, Julian Hume, Mathew Lowe, Gerald Mayr, Christian Migeon, Sandra Pinto, Nate Rice, Anna Rodriguez, Brian K. Schmidt, Paul Sweet, Jeremiah Trimble, Carlo Violani, Yves Walter, John James Wilson, Friederike Woog and Linda Wößner. Our sincere thanks also go to Julian Hume, Robert Prŷs-Jones and an anonymous referee for their valuable comments and suggestions.

References:

- Adams, M. P., Cooper, J. H. & Collar, N. J. 2003. Extinct and endangered ('E&E') birds: a proposed list for collection catalogues. Pp. 338–354 in Collar, N., Fisher, C. & Feare, C. (eds.) Why museums matter: avian archives in an age of extinction. Bull. Brit. Orn. Cl. 123A.
- Anon. 1899. Editorial gleanings. The Zoologist 3(695): 234-240.
- Baillon, L. A. F. [1833] 1834. Catalogue des Mammifères, Oiseaux, Reptiles, Poissons et Mollusques testacés marins, observés dans l'arrondissement d'Abbeville. *Mém. Soc. Emul. Abbeville* [1]: 49–80.
- Barnosky, A. D., Matzke, N., Tomiya, S., Wogan, G. O. U., Swartz, B., Quental, T. B., Marshall, C., McGuire, J. L., Lindsey, E. L., Maguire, K. C., Mersey, B. & Ferrer, E. A. 2011. Has the Earth's sixth mass extinction already arrived? *Nature* 471(7336): 51–57.
- Bates, R., Taylor, E., Sun, Y., Gumbs, R., Böhm, M., Gray, C. & Rosindell, J. 2024. Quantifying the IUCN Red List: using historical assessments to calculate future extinction risk. bioRxiv preprint. https://doi. org/10.1101/2024.02.04.578808.
- Benson, C. W. 1972. Skins of extinct or near extinct birds in Cambridge. Bull. Brit. Orn. Cl. 92: 59-68.
- Benson, C. W. & Schüz, E. 1971. A specimen of Coua delalandei (Temminck) (Cuculidae). Bull. Brit. Orn. Cl. 91: 159–160.
- Besson, L. & Fuchs, J. 2019. Les collections ornithologiques conservées en France: Bilan de l'enquête nationale 2017. *Alauda* 87(HS): 3–32.
- Bouteiller, A. 1878. Histoire de la ville de Dieppe depuis son origine jusqu'à nos jours. Emile Delevoye, Dieppe.
- Brown, D. E. & Clark, K. B. 2009. Lost treasure of the Sierra Madre: an obituary for the Imperial Woodpecker. Pp. 67–109 *in* Snyder, N. F. R., Brown, D. E. & Clark, K. B. (eds.) *The travails of two woodpeckers: Ivory-bills and Imperials*. Univ. of New Mexico Press, Albuquerque.
- Buchanan, G. M., Bond, A. L., Crockford, N. J., Kamp, J., Pearce-Higgins, J. W. & Hilton, G. M. 2018. The potential breeding range of Slender-billed Curlew *Numenius tenuirostris* identified from stable-isotope analysis. *Bird Conserv. Intern.* 28: 228–237.
- Buchanan, G. M., Chapple, B., Berryman, A. J., Crockford, N., Jansen, J. J. F. J. & Bond, A. L. submitted. Global extinction of Slender-billed Curlew *Numenius tenuirostris*. *Ibis*.
- Burgio, K. R., Carlson, C. J. & Tingley, M. W. 2017. Lazarus ecology: recovering the distribution and migratory patterns of the extinct Carolina parakeet. *Ecol. Evol.* 7: 5467–5475.
- Burgio, K. R., Carlson, C. J. & Bond, A. L. 2018. Georeferenced sighting and specimen occurrence data of the extinct Carolina Parakeet (*Conuropsis carolinensis*) from 1564 1944. *Biodivers. Data J. 6*: e25280.
- Butchart, S. H. M., Stattersfield, A. J. & Brooks, T. M. 2006. Going or gone: defining 'Possibly Extinct' species to give a truer picture of recent extinctions. *Bull. Brit. Orn. Cl.* 126A: 7–24.
- Butchart, S. H. M., Lowe, S., Martin, R. W., Symes, A., Westrip, J. R. S. & Wheatley, H. 2018. Which bird species have gone extinct? A novel quantitative classification approach. *Biol. Conserv.* 227: 9–18.
- Canivet, E. 1843. Catalogue des oiseaux du Département de la Manche. Emmanuel Canivet, Paris.
- Casas-Marce, M., Revilla, E., Fernandes, M., Rodríguez, A., Delibes, M. & Godoy, J. A. 2012. The value of hidden scientific resources: preserved animal specimens from private collections and small museums. *BioScience* 62: 1077–1082.
- Ceballos, G., Ehrlich, P. R., Barnosky, A. D., García, A., Pringle, R. M. & Palmer, T. M. 2015. Accelerated modern human-induced species losses: entering the sixth mass extinction. *Sci. Advances* 1(5): e1400253.
- Ceballos, G., Ehrlich, P. R. & Dirzo, R. 2017. Biological annihilation via the ongoing sixth mass extinction signaled by vertebrate population losses and declines. *Proc. Natl. Acad. Sci. USA* 114(30): E6089.
- Collar, N. J. & Stuart, S. N. 1985. Threatened birds of Africa and related islands. International Council for Bird Preservation, Cambridge, UK.
- Collar, N. J., Gonzaga, L. P., Krabbe, N., Madroño, A., Naranjo, L. G., Parker, T. A. & Wege, D. C. 1992. Threatened birds of the Americas. International Council for Bird Preservation, Cambridge, UK.
- Collins, M. D. 2011. Putative audio recordings of the Ivory-billed Woodpecker (Campephilus principalis). J. Acoustic Soc. Amer. 129: 1626–1630.
- Cooke, R., Sayol, F., Andermann, T., Blackburn, T. M., Steinbauer, M. J., Antonelli, A. & Faurby, S. 2023. Undiscovered bird extinctions obscure the true magnitude of human-driven extinction waves. *Nature Comm.* 14(1): 8116.



- Cooper, J. H. & Adams, M. P. 2005. Extinct and endangered bird collections: managing the risk. Zool. Med. Leiden 79: 123-130.
- Dalton, R. 2010. Still looking for that woodpecker. Nature 463(7282): 718–719.
- Degland, C.-D. 1849. Ornithologie européenne, ou Catalogue analytique et raisonné des oiseux observés en Europe, vol. 2. Librairie encyclopédique de Roret, Paris.
- Duchaussoy, H. 1898. Le Grand Pingouin du Muséum d'Histoire naturelle d'Amiens. Mém. Soc. Linn. N. Fr. 9: 88-126.
- Eaton, J. A., van Balen, B., Brickle, N. W. & Rheindt, F. E. 2021. Birds of the Indonesian Archipelago: Greater Sundas and Wallacea. Second edn. Lynx Edicions, Barcelona.
- Feigin, C. Y., Newton, A. H., Doronina, L., Schmitz, J., Hipsley, C. A., Mitchell, K. J., Gower, G., Llamas, B., Soubrier, J., Heider, T. N., Menzies, B. R., Cooper, A., O'Neill, R. J. & Pask, A. J. 2018. Genome of the Tasmanian tiger provides insights into the evolution and demography of an extinct marsupial carnivore. Nat. Ecol. Evol. 2: 182-192.
- Fisher, C. T. 1981. Specimens of extinct, endangered or rare birds in the Merseyside County Museums, Liverpool. Bull. Brit. Orn. Cl. 101: 276-285.
- Fitzpatrick, J. W., Lammertink, M., Luneau, M. D., Gallagher, T. W., Harrison, B. R., Sparling, G. M., Rosenberg, K. V., Rohrbaugh, R. W., Swarthout, E. C. H., Wrege, P. H., Swarthout, S. B., Dantzker, M. S., Charif, R. A., Barksdale, T. R., Remsen, J. V., Simon, S. D. & Zollner, D. 2005. Ivory-billed Woodpecker (Campephilus principalis) persists in continental North America. Science 308: 1460–1462.
- Forbes, H. O. & Robinson, H. C. 1897. Catalogue of the parrots (Psittaci) in the Derby Museum. Bull. Liverpool Mus. 1: 5-22.
- Forbes, H. O. & Robinson, H. C. 1898. Catalogue of the cuckoos and plantain-eaters (Cuculi) in the Derby Museum. Bull. Liverpool Mus. 1: 37-48.
- Fuller, E. 1987. Extinct birds. Viking/Rainbird, London.
- Fuller, E. 1999. The Great Auk. Harry N. Abrams, Southborough.
- Fuller, E. 2000. Extinct birds. Oxford Univ. Press.
- Gadeau de Kerville, H. 1892. Faune de la Normandie. Fascicule III. Oiseaux: (Pigeons, Gallinacés, Echassiers et Palmipèdes). Bull. Soc. amis Sci. Nat. Rouen 27: 201-583.
- Geoffroy Saint-Hilaire, I. 1829. Catalogue des Mammifères et des Oiseaux rapportés par MM. Quoy et Quaimard, médecins et naturalistes de l'expédition de l'Astrolabe. Fait au Muséum le 25 mai 1829. MNHN, Laboratoire Mammifères et Oiseaux, Ms 2223, folios 248-256 [see number 153, M(artin). de Guam, a(lcedo). ruficep].
- Gill, F., Donkser, D. & Rasmussen, P. (eds.) 2024. IOC world bird list (v14.1). doi: 10.14344/IOC.ML.14.1.
- Gouraud, C. 2014a. Extinct and endangered species and subspecies of birds in the Baillon Collection, La Châtre, France. Pp. 29-38 in Mlíkovský, J. (ed.) Proc. 8th Meet. European Bird Curators. J. Natl. Mus. (Prague), Nat. Hist. Ser. 183.
- Gouraud, C. 2014b. Eighteenth century bird specimens in the Baillon Collection, La Châtre, France. Pp. 19–28 in Mlíkovský, J. (ed.) Proc. 8th Meet. European Bird Curators. J. Natl. Mus. (Prague), Nat. Hist. Ser. 183.
- Gouraud, C. 2015. List of type specimens of birds in the Baillon Collection (La Châtre, France). Part 1. Non-Passerines. Bull. Brit. Orn. Cl. 135: 131-153.
- Gouraud, C. 2021. Extinct and endangered ('E&E') birds in the ornithological collections of the Musée de la Vallée, Barcelonnette, France, with comments on a Siberian Crane Leucogeranus leucogeranus egg. Bull. Brit. Orn. Cl. 141: 314-326.
- Gouraud, C. 2023. Rapport de mission. Inventaire de la collection ornithologique 'Duchesne de Lamotte.' Le Beffroi Musée Boucher de Perthes - Manessier, Abbeville, France. [Unpublished, copy available at the Abbeville Museum and from CG, on request.]
- Gouraud, C. & Absalon, P. 2023. List of type specimens of birds in the ornithological collection of Le Beffroi Musée Boucher de Perthes - Manessier (Abbeville, France). Avian Syst. 2: 9-43.
- Greenway, J. C. 1958. Extinct and vanishing birds of the world. American Committee for International Wild Life Protection, New York.
- Greenway, J. C. 1967. Extinct and vanishing birds of the world. Second revised edn. Dover Publications, New York.
- Gurney, J. H. 1854. Note on Nestor productus, the extinct parrot of Philip Island. The Zoologist 12: 4298.
- Hahn, P. 1963. Where is that vanished bird: an index to the known specimens of extinct and near extinct North American species. Royal Ontario Museum & Univ. of Toronto Press, Toronto.
- Heine, F. & Reichenow, A. 1890. Nomenclator Musei Heineani Ornithologici. Verzeichniss der Vogel Sammlung des Königlichen Oberamtmanns Ferdinand Heine. R. Friedländer & Sohn, Berlin.
- Hill, G. E., Mennill, D. J., Rolek, B. W., Hicks, T. L. & Swiston, K. A. 2006. Evidence suggesting that Ivorybilled Woodpeckers (Campephilus principalis) exist in Florida. Avian Conserv. & Ecol. 1(3): 2.
- Holmes, M. W., Hammond, T. T., Wogan, G. O. U., Walsh, R. E., La Barbera, K., Wommack, E. A., Martins, F. M., Crawford, J. C., Mack, K. L., Bloch, L. M. & Nachman, M. W. 2016. Natural history collections as windows on evolutionary processes. Mol. Ecol. 25: 864-881.



- del Hoyo, J. & Collar, N. J. 2014. HBW and BirdLife International illustrated checklist of the birds of the world, vol. 1. Lynx Edicions, Barcelona.
- del Hoyo, J. & Collar, N. J. 2016. HBW and BirdLife International illustrated checklist of the birds of the world, vol. 2. Lynx Edicions, Barcelona.
- Hume, J. P. & Walters, M. 2012. Extinct birds. T. & A. D. Poyser, London.
- Hume, J. P. 2017. Extinct birds. Second edn. Helm, London.
- Ingersoll, A. W. & Fisher, C. T. 2006. Type specimens of birds in the Academy of Natural Sciences of Philadelphia. https://ansp.org/~/media/Files/ans/research/sys-ornithology/ANSP_typelist_v1.ashx (accessed 18 October 2023).
- Isaac, N. J. B., Turvey, S. T., Collen, B., Waterman, C. & Baillie, J. E. M. 2007. Mammals on the EDGE: conservation priorities based on threat and phylogeny. PLOS One 2(3): e296.
- International Commission for Zoological Nomenclature (ICZN) 1999. International code of zoological nomenclature. Fourth edn. The International Trust for Zoological Nomenclature, London.
- IUCN. 2023. The IUCN Red List of threatened species. Version 2023-1. https://www.iucnredlist.org (accessed 21 December 2023).
- Jetz, W., Thomas, G. H., Joy, J. B., Redding, D. W., Hartmann, K. & Mooers, A. O. 2014. Global distribution and conservation of evolutionary distinctness in birds. Curr. Biol. 24: 919-930.
- Jouanin, C. 1962. Inventaire des oiseaux éteints ou en voie d'extinction conservés au Muséum de Paris. Terre et Vie 3: 257-301.
- Kirkconnell, A., Kirwan, G. M., Garrido, O. H., Mitchell, A. D. & Wiley, J. W. 2020. The birds of Cuba: an annotated checklist. BOC Checklist Series 26. British Ornithologists' Club, Tring.
- Kirwan, G. M. & Green, G. 2011. Cotingas and manakins. Christopher Helm, London.
- Knox, A. G. & Walters, M. P. 1994. Extinct and endangered birds in the collections of the Natural History Museum. Occ. Publ. 1. British Ornithologists' Club, Tring.
- Kolbert, E. 2014. The sixth extinction: an unnatural history. Bloomsbury, London.
- Labitte, P. 1869. Mémoire sur la bibliothèque et les musées d'Abbeville. J. Gamain, Abbeville.
- Latta, S. C., Michaels, M. A., Michot, T. C., Shrum, P. L., Johnson, P., Tischendorf, J., Weeks, M., Trochet, J., Scheifler, D. & Ford, B. 2023. Multiple lines of evidence suggest the persistence of the Ivory-billed Woodpecker (Campephilus principalis) in Louisiana. Ecol. Evol. 13: e10017.
- Leese, B. E., Johannessen, L. E., Schrøder-Nielsen, A., Mlíkovský, J., Gorney, D., Schreffler, L. & Schreffler, J. 2022. Additions and updates to the list of specimens of Imperial Woodpecker Campephilus imperialis (Gould, 1832), including genetic analysis of a putative clutch of eggs. Bull. Brit. Orn. Cl. 142: 491–508.
- Luther, D. 1996. Die ausgestorbenen Vögel der Welt. Spektrum Akademischer Verlag, Heidelberg.
- Lynch, M. 2011. Credibility, evidence, and discovery: the case of the Ivory-billed Woodpecker. Ethnogr. Stud. 12: 78-105.
- Mace, G. M., Collar, N. J., Gaston, K. J., Hilton-Taylor, C., Akçakaya, H. R., Leader-Williams, N., Milner-Gulland, E. J. & Stuart, S. N. 2008. Quantification of extinction risk: IUCN's system for classifying threatened species. Conserv. Biol. 22: 1424-1442.
- Maciet, É. 1846. Catalogue de la magnifique collection d'oiseaux de M. le Prince d'Essling, duc de Rivoli, dont la vente aura lieu aux enchères publiques dans sa galerie, rue de Lille 98, le 8 Juin 1846 jusqu'au 25 du même mois et jours suivants, s'il y a lieu, à midi précis. Imprimerie Schneider et Langrand, Paris.
- Marcotte, F. 1861. Les animaux vertébrés de l'Arrondissement d'Abbeville. Mém. Soc. Imp. Émul. Abb. 9: 217-470.
- Mearns, B. & Mearns, R. 2022. Biographies for birdwatchers. the lives of those commemorated in Western Palearctic bird names, vol. 1. Privately published, Dumfries.
- Meineke, E. K., Davies, T. J., Daru, B. H. & Davis, C. C. 2019. Biological collections for understanding biodiversity in the Anthropocene. Philos. Trans. R. Soc. Lond., B, Biol. Sci. 374(1763): 20170386.
- von Mertens, R. & Steinbacher, J. 1955. Die im Senckenberg-Museum vorhandenen Arten ausgestorbener, aussterbender oder seltener Vögel. Senck. Biol. 36: 241–265.
- Meyer de Schauensee, R. 1941. Rare and extinct birds in the collections of the Academy of Natural Sciences of Philadelphia. Proc. Acad. Nat. Sci. Philadelphia 93: 281-324.
- van der Mije, S. D., Kamminga, P. & Dekker, R. W. R. J. 2023. Type specimens of non-passerines in Naturalis Biodiversity Center (Animalia, Aves). ZooKeys 1155: 1-311.
- Mlíkovský, J. 2012. Extinct and nearly extinct birds in the collections of the National Museum, Prague, Czech Republic. J. Natl. Mus., Nat. Hist. Ser. 181: 95-123.
- Morgan, P. J. 1975. A catalogued specimen of Coua delalandei (Temminck) (Cuculidae) in Merseyside County Museums, Liverpool. Bull. Brit. Orn. Cl. 95: 62–64.
- Myers, C. W. 2012. Prince Maximilian zu Wied: a military man turned naturalist. Pp. 84–87 in Baione, T. (ed.) Natural histories: extraordinary rare book selections from the American Museum of Natural History library. Sterling Publishing, New York.
- Newton, A. 1861. Abstract of Mr. J. Wolley's researches in Iceland respecting the Gare-fowl or Great Auk (Alca impennis, Linn.). Ibis (1)4: 374–399.



- Nicolai, B. 1993. Dünnschnabelnestor, Nestor productus (Gould 1836), in der Sammlung des Heineanums. Orn. Jber. Mus. Heineanum 11: 113-116.
- Norris, K., Bond, A. L., Cooper, J. H., Adams, M. P., van Grouw, H., White, J., Stervander, M., Russell, D. G. D. & Loader, S. P. 2024. Unlocking avian museum collections to enable and advance environmental change research. Ibis 166: 315-322.
- Oswald, J. A., Smith, B. T., Allen, J. M., Guralnick, R. P., Steadman, D. W. & LeFebvre, M. J. 2023. Changes in parrot diversity after human arrival to the Caribbean. Proc. Natl. Acad. Sci. USA 120: e2301128120.
- Palacio, R. D. 2023. A reappraisal of the distribution of the Yellow-headed Manakin (Chloropipo flavicapilla) in Colombia and Ecuador. Orn. Colombiana 23: 31-37.
- Pons, J.-M. & La CAF. 2020. Le Grand Pingouin Pinguinus impennis en France au XIXe siècle. Ornithos 27: 289-292.
- Prŷs-Jones, R. P. 2011. Type specimens of the Imperial Woodpecker Campephilus imperialis (Gould, 1832). Bull. Brit. Orn. Cl. 131: 256-260.
- Quaisser, C. & Nicolai, B. 2006. Typusexemplare der Vogelsammlung im Museum Heineanum Halberstadt. Abh. Ber. Mus. Heineanum Halberstadt 7(Sonderheft 2): 1–105.
- Roncaglia, F. 2015. Que reste-t-il du grand pingouin? Les spécimens naturalisés de l'espace francophone. Espèces 16: 20-27.
- Roselaar, C. S. 2003. An inventory of major European bird collections. Pp. 253–337 in Collar, N., Fisher, C. & Feare, C. (eds.) Why museums matter: avian archives in an age of extinction. Bull. Brit. Orn. Cl. 123A.
- Rothschild, W. 1907. Extinct birds. Hutchinson, London.
- Scheffers, B. R., Yong, D. L., Harris, J. B. C., Giam, X. & Sodhi, N. S. 2011. The world's rediscovered species: back from the brink? PLoS One 6(7): e22531.
- Schifter, H. 1973. A specimen of Coua delalandei (Temminck) (Cuculidae) in the Naturhistorisches Museum, Vienna (Austria). Bull. Brit. Orn. Cl. 93: 2-3.
- Schifter, H., Bauernfeind, E. & Schifter, T. 2007. Die Typen der Vogelsammlung des Naturhistorischen Museums Wien. Teil I. Nonpasseres. Naturhistorisches Museum, Wien.
- Sibley, C. G. & Monroe, B. L. 1990. Distribution and taxonomy of birds of the world. Yale Univ. Press, New Haven, CT.
- Snyder, N. F. 2004. The Carolina Parakeet: glimpses of a vanished bird. Princeton Univ. Press.
- Snyder, N. F. & Russell, K. 2020. Carolina Parakeet (Conuropsis carolinensis), version 1.0. In Poole, A. F. & Gill, F. B. (eds.) Birds of the world. Cornell Lab of Ornithology, Ithaca, NY. https://doi.org/10.2173/bow. carpar.01 (accessed 21 December 2023).
- Steinheimer, F. D. 2003. Bamberg's Natural History Museum the scientific significance of small collections. Bonn. Zool. Beitr. 51: 141-146.
- Steinheimer, F. D. 2005. The whereabouts of pre-nineteenth century bird specimens. Zool. Med. Leiden 79: 45-67.
- Stone, W. 1899. A study of the type specimens of birds in the collection of the Academy of Natural Sciences of Philadelphia, with a brief history of the collection. Proc. Acad. Nat. Sci. Philadelphia 51: 5-62.
- Szabo, J. K., Khwaja, N., Garnett, S. T. & Butchart, S. H. M. 2012. Global patterns and drivers of avian extinctions at the species and subspecies level. PLoS One 7(10): e47080.
- Vimpère, J. 2019. Charles Payraudeau (1798-1865). Vie et œuvre scientifique. Vendée Impress'Yon, La Roche-sur-Yon.
- Vincent, T. 1999. Josse Hardy (1798–1863), ornithologue dieppois: parcours d'un amateur et devenir des collections. Pp. 239-253 in Mécènes et collectionneurs (eds.) Les variantes d'une passion, vol. 1. 121ème congrès national des Sociétés historiques et scientifiques, Nice, 26-31 octobre 1996, Section d'histoire moderne et contemporaine et d'archéologie et d'histoire de l'art.
- Violani, C., Daturi, A. & Cagnolaro, L. 1984. Üccelli estinti e rari nei musei naturalistici di Milano, Genova e Firenze. Riv. Ital. Orn. 54: 105-178.
- Voisin, C. & Voisin, J.-F. 1991. Sur quelques spécimens remarquables de la collection d'oiseaux du Musée Boucher de Perthes d'Abbeville. Bull. Soc. Emul. Hist. Litt. Abbeville 27: 105–114.
- Voisin, C. & Voisin, J.-F. 1999. Liste des types d'oiseaux des collections du Muséum national d'Histoire naturelle de Paris. 6. Coucous (Cuculidés). Zoosystema 21: 379-402.
- Warren, R. L. M. 1966. Type-specimens of birds in the British Museum (Natural History), vol. 1. Trustees of the British Museum, London.
- Watson, P. 2011. Birmingham ornithology collections. Part 5 The collection of foreign birds (Version1.0). https://web.archive.org/web/20130805021455/http://www.bmag.org.uk/uploads/fck/file/Foreign%20 Birds.pdf_(accessed 19 October 2023)
- Woog, F. 2005. Staatliches Museum für Naturkunde Stuttgart: Entdeckungsreise in eine Vogelsammlung. Der Falke 52: 288–292.
- Addresses: Christophe Gouraud, c/o Le Beffroi Musée Boucher de Perthes-Manessier, 24 rue Gontier-Patin, 80100 Abbeville, France, e-mail: ornithocoll@gmail.com. Justin J. F. J. Jansen, Naturalis Biodiversity Center, Postbus 9517, 2300 RA Leiden, the Netherlands, e-mail: justin.jansen@naturalis.nl

