

# An inventory of major European bird collections

by C. S. Roselaar

## Introduction

During a Round Table Discussion convened by Dr Walter Bock and Dr Henri Ouellet at the XXI International Ornithological Congress in Vienna, 20–25 August 1994, a number of staff members of European ornithological collections expressed the opinion that more cooperation among them was desirable. Many museums suffer from shrinking budgets, making improvement, maintenance, or even access to the collections difficult. Maintaining the world's biodiversity is of major concern among biologists at the moment, and although this concern is also acknowledged by various governments it has not resulted in any additional support for museum ornithology.

Bird collections form a rich source of biodiversity data. Taxonomic information in regional and global handbooks can only be extracted from museum collections. Morphometric data taken from skins of various populations are of importance for unravelling migration patterns for instance. Population studies profit from collections of specimens of known age and sex. Reference collections for identification and training will always be needed, both for laymen (e.g. rarity committees) and scientists (e.g. as help in enforcement of CITES and other national and international nature conservation legislation, for the statistics of bird/aircraft collisions, archaeology, and in ecological studies). Recently, bird skins or feathers have acquired additional relevance as a source of DNA for phylogenetic and population studies. Biochemical data have become a major source of phylogenetic information, from the level of populations up to the level of phyla, but can only be interpreted with reference to collections of entire organisms.

The main aims of this inventory are to facilitate the exchange of data among bird staff of European museums and to provide information to potential users of bird collections about the material available and their whereabouts. The information on which this inventory is based was obtained by sending questionnaires to those major European ornithological collections of which the addresses could be found. In all, 190 questionnaires were distributed, of which 160 were returned. For *c.* 100 other collections presented here data derive from websites, country lists, various literature (e.g. Stresemann 1951, Gebhardt 1964–1974, Mearns & Mearns 1998), or from colleagues in nearby museums. The data given below are mostly the words of the various respondents, and therefore vary somewhat in thoroughness. Under the title References it is explained that the citations are, with some editing, as supplied by correspondents; however, it should also be noted that short references given in the texts, usually without titles of the papers, are again as given by correspondents.

Minor collections (fewer than *c.* 4,000 study skins or fewer than 5,000 bird items) as well as collections for which only limited data were available (e.g. because the

curators did not respond to the questionnaire) are included in the 'B-list'. This list is likely to contain some more important collections, and a few major collections may have been overlooked entirely. Readers are kindly requested to send the author details of any collection they know of, or other data omitted from the main list (although, for reasons of space, no collections with fewer than c.100 well-labelled bird items will be included). These may then be included in a next version of this inventory (e.g. an updated electronic one). I offer my apologies for any omissions from my side. Note that this inventory was mainly based on the answers of the respondents and did not include literature research; when checking the literature references supplied by the various respondents, further details on the included collections and others are likely to be found.

Appendix 1 lists museums by country. Appendix 2 assigns major collectors to the museum to which their collections (largely) went. Appendix 3 tabulates the top 129 European museums in terms of size of collection, with equivalent non-European museums for comparison.

### **The 'A-list', based largely on the questionnaires received**

The data presented for the 109 bird collections on the A-list follow the structure of the questionnaire. Entries are listed alphabetically by cities, with preferred acronym added (occasionally deviating from that proposed in Leviton *et al.* 1985). The first four paragraphs below the heading of each collection contain present-day addresses and details of the staff involved with birds. The date on which the questionnaire was received or updated is added: the details as shown were valid at least on that date. The next four paragraphs present some details on the history of the collection, including some of the more important contributors; in the list of important collections represented, those of staff members mentioned in the previous paragraph are not repeated. The last five paragraphs give some details on the present-day contents of the collection, including the number of skins represented and specialities.

The A-list includes data from collections which include c.4,000 or more bird skins for scientific study, or, for those which have less, have important numbers of skeletons, anatomical specimens or other bird items. Please note that the size of a collection (expressed in number of bird items available) is not the only value to judge its importance: the presence of type specimens, skins or mounts of rare or extinct birds, or of skins from areas not or poorly covered by other museums, may make small collections particularly noteworthy.

Note that the 'Tring collection' mentioned in much of the older literature refers to the private collection of Lord Rothschild, not to the present-day BMNH (now Natural History Museum) collection in Tring (which was in London up to 1972); Lord Rothschild's collection (the largest private collection ever gathered, with 280,000 skins) was sold to the American Museum of Natural History in New York in 1931.



**Altenburg (MMA)**

Info from: N. Höser, 25 Jul 1996

**address** Naturkundliches Museum Mauritanium, Postfach 1644, D-04590 Altenburg, Germany (visitors address: Parkstraße 1, D-04600 Altenburg)

**telephone and fax** #-49-3447-2589

**staff responsible for bird coll.** Dr Norbert

Höser (head), Mike Jessat (coll. manager)

**total staff of bird dept.** 1 head, 1 coll. manager

**brief history** Founded in 1817 by the

Naturforschende Gesellschaft des Osterlandes zu Altenburg; the coll. came to government of Thüringen in 1945.

**references to history, collections, or types** —

**important past bird staff** C. L. Brehm, Hugo Hildebrandt

**important collections come from** —

**approx. nr. of bird skins** 3,600 (1,300 species)

**other bird items** 100 skeletons, 200 birds in alcohol, 200 egg sets, 10,000 biometrical data of ringed birds

**approx. recent annual increase in skins** 40, from local skins, made by private taxidermist

**bird skin collection specialised in** Germany, East Africa, Australia

**card or computer system present** all skins on card, computer in preparation

**Amsterdam (ZMA)**

Info from: J. Wattel, 19 Sep 1994, updated by T.

Prins, 10 Nov 2001

**address** Zoölogisch Museum, University of Amsterdam, Postbus 94766, NL-1090 GT Amsterdam, The Netherlands (visitors address: Mauritskade 61)

**telephone** #-31-20-525-5423/5422, **fax** #-31-20-525-7238, **e-mail** tprins@science.uva.nl, roselaar@science.uva.nl

**staff responsible for bird coll.** Tineke Prins,

Drs Cees S. Roselaar

**total staff of bird dept.** 1 coll. manager, 1 information officer, 1 taxidermist

**brief history** Founded in 1838 by the Royal Zoological Society 'Natura Artis Magistra'; sold to the University of Amsterdam in the 1930s; the real increase in the coll. did not start until the arrival of the first curator of birds in 1945

**references to history, collections, or types**

Roselaar (1990), Prins (1992), Roselaar & Prins (2000)

**important past bird staff** Max Weber, Max Fürbringer, L. F. de Beaufort, Karel H. Voous, Jan Wattel

**important collections come from** O. Bamberg, W. Barentsz Exped. (W. Bierman, H. van der Lee), L. P. le Cosquino de Bussy, G. B. Dinesen, R. von Dombrowski, A. Eriks (eggs), J. A. van Franeker, G. A. Frank, H. Grün, G. A. L. de Haan, A. F. C. A. van Heyst, D. S. Hoedt, C. G. B. ten Kate, V. A. Khakhlov, J. P.

Kleiweg de Zwaan, J. de Korte, A. Kovacs, J. Laenen, H. Baron Loudon, J. G. van Marle, G. A. Mavromonstakis, S. C. J. W. van Musschenbroek, C. J. Neijssel (eggs), C. Ragioneri, E. Schmitz, J. A. Sillem, W. G. N. van der Sleen, R. C. E. G. J. Baron Snouckaert van Schauburg, R. Tancré, R. von Thanner, C. Waldeck, C. J. M. Wertheim

**approx. nr. of bird skins** 53,000 (c. 4,000 species)

**other bird items** 1,000 skeletons, 500 in alcohol, 5,000 egg sets, 8,000 spread wings, 6,000 microscopic feather preparations, 30,000 system cards with biometrics of birds received dead but not retained in coll.

**approx. recent annual increase in skins** 150, mainly local birds skinned by own taxidermist  
**bird skin collection specialised in** Netherlands, Palearctic, Indonesia, Netherlands' Antilles; petrels, waders, skuas, pigeons, birds-of-prey, owls, passerines; c.150 types, c.20 extinct birds  
**card or computer system present** 80% of skins on card, 50% on computer

**Athens/Athinai (ZMUA)**

Info from: A. Legakis, 07 Feb 1995

**address** Zoological Museum, Dept. of Biology, University of Athens, Panepistimioupolis (Kouponia), GR-15784, Athens-621, Greece  
**telephone** #-30-1-7284609 or 7293993, **fax** #-30-1-7284604, **e-mail**

alegakis@atlas.uoa.ariadne-t.gr

**staff responsible for bird coll.** Prof. Dr A.

Legakis, G. Handrinos (volunteer associate)

**total staff of bird dept.** 0

**brief history** Founded 1835 by the Natural History Society of Athens; became part of the University of Athens in 1858

**references to history, collections, or types** Linder Mayer (1840), Krüper (1862)

**important past bird staff** Th. Krüper, A. Kanellis

**important collections come from** L. & G. Schrader  
**approx. nr. of bird skins** 2,500 (2,000 species)  
**other bird items** a few skeletons, 500 eggs, 100 nests  
**approx. recent annual increase in skins** 5, from donations  
**bird skin collection specialised in** Greece, Balkans  
**card or computer system present** none

### Barcelona (MZBA)

Info from: E. García, 25 Oct 1996  
**address** Museu de Zoologia de Barcelona, Apt. 593, E-08080 Barcelona, Spain (visitors address: Parc de la Ciutadella, Pg. Picasso s/n, E-08003 Barcelona)  
**telephone #** -34-3-319-6912, or -501, **fax #** -34-3-310-4999

**staff responsible for bird coll.** Eulalia García Franquesa, Francesc Uribe  
**total staff of bird dept.** 1 head, 1 coll. manager, 1 taxidermist

**brief history** Founded 1900; owned by the Council of Barcelona

**references to history, collections, or types** —

**important past bird staff** Ignaci de Segarra

**important collections come from** Aguilar-Amat, Domènech, De La Escalera, L. Gómez

**approx. nr. of bird skins** 7,000 incl. 1,000 mounts (400 species)

**other bird items** 1,332 skeletons, 10 in alcohol, 24 egg sets, 1,137 sound recordings

**approx. recent annual increase in skins** 30, from local birds skinned by own taxidermist

**bird skin collection specialised in** Spain (esp. Cataluña), Ecuador, Thailand, Equatorial Guinea

**card or computer system present** all skins on card, part on computer

### Bardejov (SMB)

Info from: M. Hromada, 4 Feb 1999  
**address** Sarisske Museum, Natural History Dept., Radnicé nám. 13, 08501 Bardejov, Slovakia  
**telephone** 00421-935-4722630 **fax** 00421-935-4724966 **e-mail** sarmuz@netlab.sk  
**staff responsible for bird coll.** Tomáš Jászay (chief Nat. Hist. Dept.)  
**total staff of bird dept.** 1 head, 1 coll. manager, 2 others (for entire Nat. Hist. Dept.)

**brief history** Founded in 1956 by Tibor Weisz, government-owned

**references to history, collections, or types** none

**important past bird staff** Tibor Weisz, Martin Hromada

**important collections come from** none

**approx. nr. of bird skins** 6,000 (incl c.900 mounts)

**other bird items** 3,550 sterna, 800 egg sets, many bird parasites and pellets of owls, a few skeletons, birds in alcohol, and nests

**approx. recent annual increase in skins** 30

**bird skin collection specialised in** Carpathians, Baltic Sea, Black Sea, Cuba, Argentina

**card or computer system present** All birds on card (including data on measurements etc.), over 500 skins from former Czechoslovakia on computer

### Basel (NMBA)

Info from: Raffael Winkler, 17 Jan 1995  
**address** Naturhistorisches Museum, Postfach 1048, CH-4001 Basel, Switzerland (visitors address: Augustinergasse 2)  
**telephone #** -41-61-266-5500, **fax #** -41-61-266-5546

**staff responsible for bird coll.** Dr Raffael Winkler (head)

**total staff of bird dept.** 1 head, 1 coll. manager, 0.5 taxidermist

**brief history** Founded 1830, when the even older private coll. of H. Bernoulli came to the government

**references to history, collections, or types** Sarasin (1939)

**important past bird staff** F. Sarasin, Ernst Sutter

**important collections come from** Th. Andersen, W. Markl, M. Markl, G. Orcès, P. Sarasin, G. Schneider

**approx. nr. of bird skins** 25,000 (3,500 species)

**other bird items** 1,800 skeletons, 3,300 skulls, many in alcohol

**approx. recent annual increase in skins** 150, from local birds skinned by own taxidermist

**bird skin collection specialised in** Europe  
**card or computer system present** all skins on card, 10% on computer

**Belgrade/Beograd (NHMBEO)**

Info from: Milica Ivovic, 14 Jan 2000  
**address** Natural History Museum, Njegosjeva  
 51, P.O. Box 401, 11000 Beograd, Yugoslavia  
**telephone** #-381-11-3442 147, **fax** #-381-11-  
 3442 265, **e-mail** animig@net.yu

**staff responsible for bird coll.** Dr Milica  
 Ivovic (curator of birds), Dr Vaslav Vasic  
 (director, bird specialist)

**total staff of bird dept.** 1 head, 1 taxidermist

**brief history** Founded 1895, belongs to the  
 government

**references to history, collections, or types** See  
 J. Rasajski (1982) *Glasnik prir. Muz. Beogr.*  
 (Ser. B) 37, 107-125 (egg catalogue)

**important past bird staff** S. D. Matvejev

**important collections come from** O. Reiser

**approx. nr. of bird skins** 5,000 (350 species)

**other bird items** 90 skeletons, 150 birds in  
 spirits, many egg sets

**approx. recent annual increase in skins** 50,  
 from expeditions, buyings, donations, local  
 birds skinned by own taxidermist

**bird skin collection specialised in** Serbia,  
 former Yugoslavia, Balkan area generally (the  
 coll. formed the base for the monographs on  
 Yugoslavian birds of Matvejev & Vasic)

**card or computer system present** partly on  
 card

**Bergen (ZMBN)**

Info from: I. Byrkjedal, 19 Jan 1995, updated 19  
 Nov 1999

**address** Zoologisk Museum, Vertebrate Section,  
 University of Bergen, Musépllass 3, N-5007  
 Bergen, Norway

**telephone** #-47-55-212902/ 05, **fax** #-47-55-  
 321153, **e-mail** ingvar.byrkjedal@zmb.uib.no,  
**web-site** [http://www.zoo.uib.no/systematikk/  
 samlinger/eng/birds](http://www.zoo.uib.no/systematikk/samlinger/eng/birds)

**staff responsible for bird coll.** Dr Ingvar  
 Byrkjedal, Gunnar Langhelle

**total staff of bird dept.** 1 head, 1 taxidermist

**brief history** Founded 1825 as Bergens  
 Museum (a general museum); the first  
 vertebrate curator, S. Johnsen, was appointed  
 1913. The coll. came to the University of  
 Bergen when the latter was founded in 1948

**references to history, collections, or types** —

**important past bird staff** S. Johnsen, J. F.  
 Willgohs

**important collections come from** —

**approx. nr. of bird skins** 6,194 (688 species)  
**other bird items** 144 in alcohol, 2,554 egg sets,  
 1,254 incomplete skeletons, 8,000 nest cards, 1  
 type specimen; also 3,400 recent complete  
 skeletons, but in separate archaeological  
 section with staff of 5

**approx. recent annual increase in skins** 200,  
 from local birds skinned by own taxidermist  
**bird skin collection specialised in** Western  
 Norway, *Passer domesticus* (c.1,000),  
 Tetraonidae, Falconiformes, etc.

**card or computer system present** all skins on  
 card and on computer

**Berlin (ZMB or ISZ)**

Info from: B. Stephan, 26 Nov 1996; S. Frahnert,  
 13 Nov 1999

**address** Museum für Naturkunde, Zentralinstitut  
 der Humboldt-Universität, Institut für  
 Systematische Zoologie, Invalidenstrasse 43,  
 D-10115 Berlin, Germany

**telephone** #-49-30-2093-8512, **fax** #-49-30-  
 2093-8528, **e-mail**  
 sylke.frahnert@rz.hu.berlin.de

**staff responsible for bird coll.** Dr Sylke  
 Frahnert, Jürgen Fiebig, Frank Steinheimer

**total staff of bird dept.** 1 head, 1 taxidermist

**brief history** Founded 1810 together with the  
 university. Part of the Humboldt-University  
**references to history, collections, or types**  
 Stresemann (1954), Mauersberger (1988),  
 Neumann & Mauersberger (1990)

**important past bird staff** J. C. Graf von  
 Hoffmannsegg, J. C. W. Illiger, H. Lichtenstein,  
 F. Deppe, J. L. Cabanis, A. Reichenow, H.  
 Schalow, P. Matschie, E. Hartert, O. Neumann,  
 H. Grote, G. Krause, R. Böhm, E. Hesse, W. K.  
 H. Peters, E. Stresemann, G. Mauersberger, B.  
 Stephan

**important collections come from** W. Beick, R.  
 A. Berger, R. Böhm, Maison Bouvier, W.  
 Bullock coll./Mus. Leverianum (see Wien/  
 Vienna), J. Bürgers, C. Baron von der Decken,  
 F. Deppe, C. G. Ehrenberg, Emin Pascha, C.  
 Euler, E. F. Eversmann, F. von Faber, O. Finsch,  
 G. A. Fischer, G. W. Freireich, F. Fülleborn, F.  
 Grabowsky, R. Grauer, J. Gundlach, F.  
 Heilfurth, G. Heinrich, O. Heinroth, W.  
 Hemprich & C. G. Ehrenberg, J. M.  
 Hildebrandt, C. Hilgert, Exp. J. Holderer, C.  
 Hüesker, C. Hunstein, H. von Ihering (eggs), A.  
 Kaiser, F. H. von Kittlitz, T. Kleinschmidt, A. C.  
 & L. Koch, L. Krebs, J. S. Kubary, H. Kühn, G.

H. von Langsdorff, R. Mell, J. J. Menden, A. Nehr Korn (20,000 eggs), P. S. Pallas, W. Peters, C. C. Platen, V. von Plessen, F. W. Riegenbach, K. Roehl, E. Rüppell, E. Schäfer, R. Schomburgk, H. Schubotz, A. Schultze, F. Sellow, S. S. Sin, G. Stein, A. von Treskow (eggs), Voy. Gazelle, H. Weigold, E. Weiske, G. Zenker, R. Zimmermann

**approx. nr. of bird skins** 135,000 ('nearly all known species represented')

**other bird items** 7,000 mounts, 4,000 skeletons, 5,000 in alcohol, 55,000 eggs, 1,500 nests; 2,900 type specimens

**approx. recent annual increase in skins** 100–400, from local birds skinned by own taxidermist, birds obtained on expeditions, and donations

**bird skin collection specialised in** worldwide (but especially China, Mongolia, Korea, Burma, New Guinea, Afrotropics, Central & South America, Kerguelen, etc.); virtually all families represented

**card or computer system present** all skeletons and part of egg coll. on card, no skins; alcohol specimens on computer

## Bern (NMBE)

Info from: M. Güntert, 25 Apr 1997, updated 18 Dec 1997

**address** Naturhistorisches Museum Bern, Bernstrasse 15, CH-3005 Bern, Switzerland  
**telephone** #-41-31-350-7222, **fax** #-41-31-350-7499, **e-mail** guentert@nmbe.unibe.ch

**staff responsible for bird coll.** Prof. Dr Marcel Güntert (director, also responsible for bird coll.)

**total staff of bird dept.** 1 head and some technicians and taxidermists (for the entire vertebrate coll.)

**brief history** Founded 1802 when the coll. of the Rev. Daniel Sprüngli was donated to the municipality after his death. Still owned by the municipality of the Burghers of Bern

**references to history, collections, or types** Meisner (1824), Güntert *et al.* (1993)

**important past bird staff** Friedrich Meisner, Theophil Studer, Emil August Goeldi

**important collections come from** E. A. Goeldi, J. Gould, J. & P. Henrici (eggs), T. J. Krüper, Gilbert Pochelon (eggs), W. Volz

**approx. nr. of bird skins** 13,200, incl. mounts

**other bird items** 1,200 skeletons & skulls, 100 in alcohol, 8,550 egg sets, 410 nests

**approx. recent annual increase in skins ?**  
**bird skin collection specialised in** Switzerland, Brazil (Goeldi coll., 3,000 skins)  
**card or computer system present** Skin coll. now being computerised, but not quite ready by late 2002. See <http://www-nmbe.unibe.ch>

## Bologna (INFS)

Info from: N. Baccetti, 5 Apr 2000

**address** Museo dell'Istituto Nazionale per la Fauna Selvatica, Via Ca' Fornacetta 9, I-40064 Ozzano dell'Emilia (Bologna), Italia

**telephone** #-39-051-6512218, **fax** #-39-051-796628, **e-mail** infsmuse@iperbole.bologna.it

**staff responsible for bird coll.** Dr Nicola Baccetti (head), Dr Lorenzo Serra (researcher), Dr Marco Zenatello (coll. manager), Adriano De Faveri (taxidermist)

**total staff of bird dept.** 4 (see above)

**brief history** Founded 1933 as a branch of the Zoological Museum of the University of Bologna; separated from the latter 1970. Older colls. were recently obtained

**references to history, collections, or types**

Toschi (1969), Spagnesi (1993)

**important past bird staff** A. Ghigi, A. Toschi  
**important collections come from** T. Pierotti, G. Altobello, E. Garavini

**approx. nr. of bird skins** 8,700 (c.500 species), excluding c.1,000 mounts

**other bird items** 150 skulls, 150 egg sets, a large number of traditional traps and bird-catching devices

**approx. recent annual increase in skins** 300, from local birds skinned by own taxidermist and private professionals, buying of colls., and donations

**bird skin collection specialised in** Italy (7,000), Libya, Ethiopia, Somalia, East Africa, Guatemala; Falconiformes, Charadriiformes, Strigiformes, Ciconiiformes. Coll. includes skins of several rarities (e.g. 31 *Falco biarmicus feldeggii*, 6 *Numenius tenuirostris*)

**card or computer system present** W Palearctic species on card and computer, others largely unregistered

**note** The Museo di Zoologia of the Università di Bologna (MZUB) has a small bird coll. which includes the Zaffagnini coll. of Italian birds (dating around 1910) and a minor part of the Altobello coll.; for a partial catalogue, see Marini (1985). The Museo di Anatomia Comparata of the same university has 376

anatomical specimens and (partial) skeletons of 161 bird species (Minelli & Taranto 2001)

### Bolton (BOLMG)

Info from: Kathryn Berry, 23 Nov 2001

**address** Bolton Museums, Art Gallery, and Aquarium, Le Mans Crescent, Bolton (Manchester) BL1 1SE, U.K.

**telephone** #-44-1204-332197,

**fax** #-44-1204-332241, **e-mail**

natural.history@bolton.gov.uk

**staff responsible for bird coll.** Ms Kathryn Berry (Keeper of Zoology)

**total staff of bird dept.** 1 (see above, for all zoology)

**brief history** Founded 1883, owned by local government

**references to history, collections, or types -**

**important past bird staff** E. Gorton, A.

Hazelwood

**important collections come from** B. King, F. G.

Lupton, A. L. W. Mayo, F. Nisbet, F. W.

Peaples, J. Pennington Thomasson, L. A.

Pownall, L. Price, J. Wallrow

**approx. nr. of bird skins** 5,000

**other bird items** 500 (partial) skeletons, 5,500 egg sets, 180 nests

**approx. recent annual increase in skins** below 100

**bird skin collection specialised in** British Isles; some India, Australia, etc.

**card or computer system present** all on card, in process of being computerised

### Bonn (ZFMK)

Info from: R. Van den Elzen, 29 Dec 1994,

updated G. Rheinwald, 21 Jan 2000

**address** Zoologisches Forschungsinstitut und Museum Alexander Koenig, Adenauerallee 160, D-53113 Bonn, Germany

**telephone** #-49-228-9122-230, **fax** #-49-228-

216979, **e-mail** r.elzen.zfmk@uni-bonn.de,

**website** <http://www.uni-bonn.de/>

museumkoenig

**staff responsible for bird coll.** Dr Renate Van den Elzen, Dr Karl-L. Schuchmann

**total staff of bird sect.** 2 scientists, 1 coll.

manager, 0.25 secretary, 0.25 librarian, up to 6 others (biol. candidates etc)

**brief history** Founded in 1875 as private coll. of Alexander Koenig (who had c.21,600 skins at

his death); the coll. came to the German government in 1940

**references to history, collections, or types**

Rheinwald & Van den Elzen (1984), Van den Elzen (1986), Schifter & Van den Elzen (1986)

**important past bird staff** A. Koenig, O. le Roi,

A. von Jordans, Fr. Neubaur, J. Steinbacher, G.

Niethammer, H. E. Wolters, G. Rheinwald

**important collections come from** Th. Andersen

(see Britton 1978, 1981), O. Bamberg, M. O.

E. Baddeley, H. Bregulla, C. L. & A. E. Brehm

(3,000 skins, stored separately; remainder of

Brehm coll. in New York), P. A. Clancey, K.

Dermedde, M. Eisentraut, Ms M. E. Ferreira, A.

Fischer, C. Floericke, E. Flükiger, C. Fritsche,

H. Geyr von Schweppenburg, H. Grün, J.

Haffer, M. Härms, W. Hartwig, F.

Haverschmidt, G. Heinrich, C. Hilgert, W.

Hoesch, D. von Holst, G. Hoy, L. von Huyn, A.

Kaiser, H. Kelm, O. Kleinschmidt coll. (over

10,000 skins, stored separately), Th.

Kleinschmidt, Maria Koepcke, J. Klapperich,

H. Kumerloeve, P. Kunkel, Künzel, J. Laenen,

R. Lossin, W. Makatsch, J. Martens, J. von

Müller, A. von Nagy, O. Natorp, R. de Naurois,

G. Nikolaus, V. von Plessen, W. F. H.

Rosenberg, E. Schäfer, G. Schiebel, W.

Schlüter, G. Schrader, H. Sick, P. Spatz, R.

Tancré, R. von Thannner, J. Unger, R.

Vierthaler

**approx. nr. of bird skins** 76,000 incl. 3,500 mounts (5,000 species)

**other bird items** 2,000 skeletons (800 species), 500 in alcohol, 54-60,000 sets of eggs

**approx. recent annual increase in skins** 100 skins and 100 skeletons and birds in alcohol;

obtained by own taxidermy and by buying of colls.

**bird skin collection specialised in** Afrotropics,

North Africa, Germany, South America, Spain,

Spitsbergen, Bulgaria, Turkey, Iran,

Afghanistan; Trochilidae, Estrildidae,

Fringillidae, passerines

**card or computer system present** eggs,

skeletons, and spirit specimens all on

computer, 30% of skins on card, another 30% on computer

### Braunschweig (SNMBG)

Info from: G. Boenigk, 21 Oct 1996

**address** Staatliches Naturhistorisches Museum, Pöckelstraße 10, D-38106 Braunschweig, Germany



**telephone** #-49-531-3914351, **fax** #-49-531-3914370, **e-mail** Michaela.Forthuber@snhm.Niedersachsen.de

**staff responsible for bird coll.** Michaela Forthuber (taxidermist)

**total staff of bird dept.** 1 head (vacant), 2 taxidermists

**brief history** Founded in 1754 as private coll. of Herzog Carl I von Braunschweig und Lüneburg; now owned by the government of Niedersachsen

**references to history, collections, or types** Hajmassy (1983), Hinkelmann & Heinze (1990), Frisch *et al.* (1994)

**important past bird staff** J. H. Blasius, W. Blasius, E. F. von Homeyer, Adolf Kleinschmidt, G. Boenigk

**important collections come from** M. Bartels, A. E. Brehm, C. L. Brehm, F. Dörries, O. Finsch, F. Grabowsky, E. Hartert, E. F. von Homeyer (8,000 skins), A. Keyserling, H. Möschler, A. Nehrkorn (5,000 skins), C. C. Platen, H. Raap, J. Riedel, H. von Rosenberg, G. Schneider, R. Tancre

**approx. nr. of bird skins** 27,000 (3,700 species)

**other bird items** 2,800 skeletons, 400 egg sets, 700 nests

**approx. recent annual increase in skins** 30, from local birds skinned by own taxidermist and donations

**bird skin collection specialised in** Palearctic, Borneo, Sulawesi, etc.; 77 types

**card or computer system present** all skins on card, none on computer; eggs catalogued (see Hajmassy 1983)

## Bremen (UMB)

Info from: H. Hohmann, 19 Aug 1997

**address** Überseemuseum, Bahnhofplatz 13, D-28195 Bremen, Germany

**telephone** #-49-421-171347/420438, **e-mail** uem7@uni-bremen.de

**staff responsible for bird coll.** Dr Herbert Hohmann (head of Natural History Dept.), Dr Horst Braun (bird dept.), Klaus Wechsler (taxidermist)

**total staff of bird dept.** 2

**brief history** Founded by the Bremen Natural History Society, but no proper bird coll. before the arrival of G. Hartlaub in 1840s

**references to history, collections, or types** Duncker (1953)

**important past bird staff** Gustav Hartlaub, Otto Finsch, G. A. Weber, Eberhard Focke, P. Becker

**important collections come from** Abel, Anchieta, Andersen, Andersson, T. Ayres, Balfour, A. E. Brehm, Bryant, Capt. Bulger, F. M. Chapman, Du Chaillu, Capt. Conrad, A. Dietrich, H. Dohrn, Emin Pascha (= Emin Bey), E. Schnitzer, A. Schnitzler, Fitzgerald, A. Garrett, Mus. J. C. Godeffroy (duplicates only; see Hamburg), Gräffe, Grayson, J. Gundlach, J. von Haast, Capt. Heinsohn, Heuglin, Hoesch, Kirk, Knipper, A. Krause, J. Kubary, Lahusen, Meller, Monteiro, Joh. Natterer, Newton, H. S. Pel, Capt. Peters, Pollen, E. Riebeck, Rosenberg, O. Salvin, H. Schauinsland, B. Schmacker, G. P. Schmacker, Schultze, Speke, F. Stoliczka, H. T. Ussher, Verreaux, Vierthaler, H. O. Wagner, Wahlberg, K. Weiß, Maximilian Prinz zu Wied-Neuwied, Paul Herzog von Württemberg (c.9,000 skins), J. Xantus, Zimmermann

**approx. nr. of bird skins** over 20,000 of which c.25% mounted

**other bird items ?**

**approx. recent annual increase in skins** very few

**bird skin collection specialised in** Afrotropics (incl. São Tomé, Príncipe, Socotra, Madagascar, Mauritius), Central and South America, and from many Pacific islands (from Hawaii to Pelew and Lord Howe); c.200 type specimens; 3,313 specimens lost during World War II, including some types

**card or computer system present ?**

## Brighton (BMB)

Info from: Jeremy M. Adams, 23 Nov 2001

**address** Booth Museum of Natural History (Brighton and Hove Council Museums), 194 Dyke Road, Brighton BN1 5AA, E Sussex, U.K.

**telephone** #-44-1273-292782, **fax** #-44-1237-292778, **e-mail** boothmus@pavilion.co.uk

**staff responsible for bird coll.** Dr Gerald Legg (curator of zoology), Jeremy M. Adams (ass. curator natural sciences)

**total staff of bird dept.** 1

**brief history** Founded Brighton and Hove Council

**references to history, collections, or types** Griffith (undated), Knox (1998)

**important past bird staff** E. T. Booth, A. F. Griffith, J. G. Dalgliesh, H. Langston  
**important collections come from** Major Bingham Crabbe, L. A. Curtis-Edwards, W. Borrer, P. Godman, G. M. Henry, A. W. Johnson, F. W. Lucas, Lt Col. B. F. Lynn Allen, T. J. Monk, J. B. Nichols, M. J. Nicoll, J. P. Nunn, T. Parkin, Capt. F. H. Scovil, E. C. Stuart Baker, G. Vick  
**approx. nr. of bird skins** 10,000 (incl. 5,000 mounts)  
**other bird items** 3,300 (partial) skeletons, 12 birds in spirits, c.60,000 eggs (33,334 catalogued), 262 nests  
**approx. recent annual increase in skins** 40–120  
**bird skin collection specialised in** worldwide, but mainly British  
**card or computer system present** yes, but for only half of the eggs

### Bristol (BCMAG)

Info from: Tessa Ivison, 6 Dec 2001  
**address** Bristol Museums and Art Gallery Service, Queen's Road, Bristol BS8 1RL, U.K.  
**telephone** #-44-117-9223598, **fax** #-44-117-9222047, **e-mail** tessa-ivison@bristol-city.gov.uk, ray-barnett@bristol-city.gov.uk  
**staff responsible for bird coll.** Tessa Ivison (curator), Ray Barnett (coll. manager)  
**total staff of bird dept.** 2 for all zoology (see above)  
**brief history** Founded in 1820s; owned by Bristol City Council  
**references to history, collections, or types - important past bird staff - important collections come from** Greville Smyth, Stanley Lewis  
**approx. nr. of bird skins** 7,500 (incl. 2,500 mounts)  
**other bird items** 600 (partial) skeletons, 2,400 egg sets (6,500 eggs), 300 nests  
**approx. recent annual increase in skins** a few  
**bird skin collection specialised in** SW England  
**card or computer system present** most skins on card, computerisation in progress

### Brno (LMB)

Info from: Helena Sutorova, 6 Jan 2000  
**address** Moravské Zemské Muzeum, Zoologicesce Oddelení, Zelyň trh. 6, CZ-659 37 Brno, Czech Rep.

**telephone** #-420-(0)5-42321205, **fax** #-420-(0)5-42212792, **e-mail** hsutorova@mzm.cz, **website** <http://www.mzm.cz/>  
**staff responsible for bird coll.** Dr Miroslav Sebela (head), Dr Helena Sutorova, Ing Vaclav Prasek (curators)  
**total staff of bird dept.** 1 head, 2 curators (see above), 2 taxidermists, 1 librarian-secretary (all for entire zool. dept.)  
**brief history** Founded approx. 1816 as Franzens-Museum, but includes some older specimens from earlier colls.; government-owned  
**references to history, collections, or types** Schramm (1886), Varga (1973), Kux (1977)  
**important past bird staff** K. Absolon, E. Hachler, J. Hala, V. Capek, F. Chorinsky, F. Hejl, J. Karasek, Z. Kux, J. Mrazek, K. Plachetka, K. Hudec, F. Balat, J. Talsky, J. Tesar, E.S. Vraz, F. Zdobnitzky  
**important collections come from** A. Schwab, J. Seilern, A. Koch  
**approx. nr. of bird skins** 8,000  
**other bird items** ?  
**approx. recent annual increase in skins** 50–60, from own collecting expeditions, gifts, and buying of colls.  
**bird skin collection specialised in** Moravia, former Czechoslovakia, Venezuela (see *Bull. Brit. Orn. Cl.* 115: 191-192).  
**card or computer system present** ?  
**note** also existing are the Zoologicke Depozitář of Budisov & Trebic (nearby Brno).

### Brussels/Bruxelles (IRSNB/KBIN)

Info from: G. Lenglet, 06 Jan 1997  
**address** Institut Royal des Sciences Naturelles de Belgique/ Koninklijk Belgisch Instituut voor Natuurwetenschappen, 29 Rue Vautier/ Vautierstraat, B-1000 Bruxelles/Brussel, Belgium  
**telephone** #-32-2-6274349, **fax** #-32-2-6464433  
**staff responsible for bird coll.** Dr Georges Lenglet (head of vertebrate dept; there is no separate bird dept), Walter Roggeman  
**total staff of bird dept.** for entire vertebr. dept: 1 head, 1 taxonomist, 4 technicians  
**brief history** Founded 1846; owned by the Belgian government  
**references to history, collections, or types — important past bird staff** B. Du Bus de Gisignies, Baron de Selys-Longchamps, René & Rudolf Verheyen, A. Prigogine, P. Devillers

**important collections come from** C. Dupond, J. Laenen, and many others

**approx. nr. of bird skins** 71,295 (3,000 species)

**other bird items** many skeletons, many egg sets, a few in alcohol, a few nests

**approx. recent annual increase in skins** 100, from local birds skinned by own taxidermist and donations

**bird skin collection specialised in** Belgium, Germany, west Mediterranean countries, North Africa, Iran, Himalaya, Central Africa

**card or computer system present** all skins on card, none yet on computer

### Bucharest/Bucuresti (GAMNH / MGAB)

Info from: A. Petrescu, 24 Apr 1996

**address** Muzeul de Istorie Naturala / Museum of Natural History 'Grigore Antipa', Soseaua Kisseleff 1, 79744 Bucuresti, Romania

**telephone** ?, **e-mail** grantipa@pnet.ro

**staff responsible for bird coll.** Dr Angela Petrescu

**total staff of bird dept.** 1 head

**brief history** Founded 1848 by Carol Wallenstein; now part of the Academy of Sciences of Romania

**references to history, collections, or types** Marinescu *et al.* (1972, 1985), Papadopol & Talpeanu (1986–1987)

**important past bird staff** R. von Dombrowski, A. Papadopol, M. Talpeanu

**important collections come from** E. Holub, P. J. Licherdopol, H. Mitrea

**approx. nr. of bird skins** 6,000 (2,000 species)

**other bird items** 1,000 skeletons, 100 in alcohol, 1,200 egg sets, 250 nests, 11,600 food samples

**approx. recent annual increase in skins** 50, from local birds skinned by own taxidermist, expeditions, and exchanges

**bird skin collection specialised in** 'many bird families'

**card or computer system present** all skins on card, none on computer

### Budapest (HNHM)

Info from: A. Bankovics, 18 Jan 2000

**address** Magyar Nemzeti Múzeum/ Hungarian Natural History Museum, Dept. of Zoology, Baross utca 13, H-1088 Budapest, Hungary

**telephone** #-36-1-2101075/ 2105044 **fax** #-36-1-1171669 **e-mail** bankovic@zoo.nhmus.hu

**staff responsible for bird coll.** Dr Attila Bankovics

**total staff of bird dept.** 1 head, 1 taxidermist (partly retired)

**brief history** Founded in the early 1800s, and the bird coll. was one of the largest in Europe in the early 1950s; however, it was destroyed in 1956, though now gradually rebuilding. A governmental museum

**references to history, collections, or types** A catalogue in preparation

**important past bird staff** J. Frivaldszki, S. J. Petényi, G. Madarász, N. Vasvári, K. Warga, J. Gerschik, L. Horvath

**important collections come from** G. Almásy, A. Baldi, P. Beretzky, G. Csorba, C. Floericke, E. Frivaldszky, A. Keve (= E. Kleiner), L. Kovats, J. Xántus, etc, but colls. of many of these destroyed in 1956

**approx. nr. of bird skins** 70,000 by 1956, when destroyed; now 12,500 (1,200 species)

**other bird items approx.** 1,700 skeletons (200 species), 1,400 egg sets (250 species), 120 nests

**recent annual increase in skin coll.** 50, from own expeditions, donations, local birds skinned by own taxidermist, etc.

**bird skin collection specialised in** now mainly Hungary, Brazil, Tanzania, Argentina, Australia, Vietnam, Korea, Mongolia; before 1956, many from Sudan, C & S America, C Asia, New Guinea, etc.

**card or computer system present** Partly on card; available on computer by 2001

### Cambridge (CUMZ)

Info from: A. E. Friday, July 1996; update 19 Nov 1999 by M. Brooke

**address** University Museum of Zoology, Downing Street, Cambridge CB2 3EJ, U.K.

**telephone** #-44-1223-336659, **fax** #-44-1223-336676, **e-mail** mb10005@cus.cam.ac.uk

**staff responsible for bird coll.** Michael de L. Brooke, Ray Symonds

**total staff of bird dept.** 1 head, 1 coll. manager

**brief history** Founded 1815 as part of Cambridge University

**references to history, collections, or types** Salvin (1882), Gadow (1910), Benson (1970–1971, 1972, 1999)

**important past bird staff** H. E. Strickland, H. Gadow, Alfred Newton, O. Salvin, C. W. Benson, W. H. Thorpe

**important collections come from** Capt. Askew, E. Blyth, T. E. Buckley, Cambridge Philosophical Society, J. S. Constanca, F. Day, W. B. Farr, H. W. Feilden, P. H. Gosse, J. Gould, F. H. H. Guillemard, J. H. Gurney, G. D. Haviland, J. E. Hepburn, B. H. Hodgson, T. Horsfield, C. Hose, A. von Hügel, W. Jardine, T. C. Jerdon, J. J. Lister, Edw. Newton, J. Richardson, P. J. Selby, A. Smith, S. Stevens, H. E., A., & N. C. Strickland coll. (c.6,000 skins), W. Swainson, L. W. Wilesworth, S. B. Wilson, J. Wolley egg coll. (see book *Oothea Wolleyana*)

**approx. nr. of bird skins** 40,000 ('most species represented')

**other bird items** 2,200 skeletons, some in alcohol, c.8,000 egg sets

**approx. recent annual increase in skins** 20, from donations

**bird skin collection specialised in** Western Palearctic, South Africa, Madagascar, Mauritius, Seychelles, India, Borneo, Sulawesi, New Zealand, Fiji, Hawaii, California, eastern North America, Jamaica, Barbados, Central America; includes 104 skins of extinct and endangered birds (31 Hawaii, 19 Malagasy region, 16 New Zealand area, 13 West Indies), c.620 types

**card or computer system present** all skeletons on computer and website (zoo.cam.ac.uk); all skins on card, most on computer (for internal use only)

## Cardiff (NMWC)

Info from: P. Howlett, 1996

**address** National Museum & Galleries of Wales, Dept of BioSyB, Cathays Park, Cardiff CF10 3NP, Wales, U.K.

**telephone** #-44-1222-397951, **fax** #-44-1222-239009

**staff responsible for bird coll.** Peter Howlett (curator of vertebrates)

**total staff of bird dept.** 1 head, 1 coll. manager

**brief history** Founded in the 1880s by the Trustees of the Cardiff Museum; now belongs to the government

**references to history, collections, or types** none

**important past bird staff** P. J. Morgan

**important collections come from** Hewitt, McCouch

**approx. nr. of bird skins** 20,000 (2,000 species)

**other bird items** 500 skeletons, 8,000 egg sets, 200 nest, 40,000 biometrical data of ringed birds

**approx. recent annual increase in skins** 150, from local casualties

**bird skin collection specialised in** Wales, Britain, Asia, Australasia

**card or computer system present** less than 50% of skins on card, none on computer

## Coburg (NMC)

Info from: Dr Werner Korn, 28 Nov 2001

**address** Naturkunde-Museum Coburg, Park 6, D-96450 Coburg, Germany

**tel** #-49-9561-808111, **fax** #-49-9561-808140, **e-mail** info@naturkunde-museum-coburg.de

**staff responsible for bird coll.** Dr Werner Korn (head), Ulrike Neumann (taxidermist) (both for all zoology)

**total staff of bird dept.** 2 (see above)

**brief history** Founded as private coll. in about 1830 by the later Duke Ernst II von Sachsen-Coburg und Gotha and his brother Prince Albert, opened to the public in 1844; now belongs to the Landesstiftung Coburg (Stiftung des Öffentlichen Rechts).

**references to history, collections, or types** Korn *et al.* (1993)

**important past bird staff** H. von Boetticher

**important collections come from** C. L. Brehm, Th. von Heuglin, W. Baldamus, Ferdinand I of Sachsen Coburg-Gotha (King of Bulgaria)

**approx. nr. of bird skins** 14,500 (of which 14,000 mounted)

**other bird items** 15 skeletons, 3,000 egg sets  
**approx. recent annual increase in skins** highly variable

**bird skin collection specialised in** worldwide, but largely historical; many Trochilidae

**card or computer system present** most on card, now revised and completed

## Coimbra (MZCoimbra)

Info from: I. Carreira, 12 May 1997

**address** Museu de História Natural-Museu Zoológico, Faculdade de Ciências e Tecnologia da Universidade de Coimbra, Largo Marquês de Pombal, 3000 Coimbra, Portugal

**telephone #**-351-39-34729, **fax #**-351-39-26798  
**staff responsible for bird coll.** Dra Isabel

Machado Carreira

**total staff of bird dept.** 1 head

**brief history** Founded 1775 by Domingos Vandelli; now part of Coimbra University

**references to history, collections, or types**

Themido (1933), Carreira (1984–1986, 1990)

**important past bird staff** Albino Giriddes, Paulino de Oliveira, A. A. Themido

**important collections come from** Nelo

Beeyner, Luis de Carvalho, Teodoro J. Cruz, King Pedro V, Lopez Vieira

**approx. nr. of bird skins** 3,104 (1,092 species)

**other bird items** 44 skeletons, 1,129 egg sets, 238 nests

**approx. recent annual increase in skins** a few, mainly donations

**bird skin collection specialised in** Portugal, Brazil, Angola, Mozambique, São Tomé, Australia

**card or computer system present** all skins on card, part on computer

## Copenhagen (ZMUC)

Info from: J. Fjeldså, 11 Jul 1996, and J. Fjeldså & C. Rahbek, 14 Nov 2001

**address** Zoologisk Museum, Københavns Universitet, Universitetsparken 15, DK-2100 København-Ø, Denmark

**telephone #**-45-3532-1023/ 1000, **fax #**-45-3532-1010, **e-mail** jfjeldsaa@zmuc.ku.dk

**staff responsible for bird coll.** Prof. Dr Jon Fjeldså (curator-in-charge), Prof. Dr Carsten Rahbek (curator), Jan Bolding Kristensen (coll. manager)

**total staff of bird dept.** 2 scientists, 1 coll. manager/taxidermist, 3 others (at staff of ringing centre)

**brief history** Founded 1805 by J. Reinhardt; now part of Copenhagen University/

**references to history, collections, or types**

Preuss & Aaris-Sørensen (1981)

**important past bird staff** J. Reinhardt, Herluf Winge, P. Hald-Mortensen, F. Salomonsen

**important collections come from** T. Andersen,

W. Beick, J. Fjeldså, Galathea Exp., K. & S.

Harold Olsen, A. M. Hemmingsen, Hans

Johansen, Hermann Johansen, N. Krabbe, P. W.

Lund & J. Reinhardt, H. Möschler, Noona Dan

Exp., A. M. Ollala, K. Paludan, E. L. Schiøler,

J. Waterstradt

**approx. nr. of bird skins** 97,000, incl. 5,000 mounts (5,500 species)

**other bird items** 14,000 skeletons (1,100 species), 10,000 in alcohol (800 species), over 20,000 buffered tissue samples (over 2,000 species), 17,000 egg sets

**approx. recent annual increase in skins** 200–300 (sometimes much more), from local birds skinned by own taxidermist and own expeditions

**bird skin collection specialised in** Denmark, Greenland, Iceland, Fenno-Scandia, Brazil, Ecuador, Beidaihe (China), West Siberia, Iran, Afghanistan, Andes, south-west Pacific, Liberia, Tanzania, and many more

**card or computer system present** 90% of skins on card; tissue coll. on computer; South American and Afrotropical coll. on computer (incl. also many non-skin records)

## Dresden (SMTD)

Info from: S. Eck, 18 Mar 1997

**address** Staatliches Museum für Tierkunde, Königsbrücker Landstrasse 159, D-01109 Dresden, Germany

**telephone #**-49-351-8926-344

**staff responsible for bird coll.** Siegfried Eck

**total staff of bird dept.** 1 head

**brief history** Founded 1728, but the oldest bird is now from 1810; part of the coll. was destroyed in 1940–1945. Owned by the government of Sachsen

**references to history, collections, or types** Meise (1929), Eck (1970, 1982–1985)

**important past bird staff** H. G. L.

Reichenbach, A. B. Meyer, L. Wieglesworth, A. Jacobi, W. Meise, R. Reichert

**important collections come from** U. Bährmann

(7,180 birds and many partial skeletons), F.

Brüggemann, B. Berg, O. Burger, C. W.

Cursham, F. von Faber, A. P. Farafontov, G. A.

Frank, B. Geisler, H. Grün, H. Gude, W.

Gueinzins, J. W. B. Gunning, B. Hantzsch, F. P.

Heilfurth, H. W. Henshaw, M. Hinsche, C.

Hunstein, V. A. Khakhlov, J. Klapperich, O.

Kleinschmidt (coll. # 2; 1st in Bonn), Th.

Krüper, J. Kubary, Kuschel (eggs), L. Laglaize,

W. Makatsch (eggs), McGregor, J. J. Menden,

H. Möschler, S. C. J. W. van Musschenbroek,

H. Palmer, C. & R. Ragioneri, C. Ribbe, J.

Riedel, C. Rolle, H. von Rosenberg, F. & P.

Sarasin, Schierbrandt, R. Schlegel, C.



Schneider, C. Wahnes, H. Weigold (Stötzner Exp.), E. Weiske

**approx. nr. of bird skins** 70,000

**other bird items** many skeletons, a few in alcohol, 60,000 eggs, many nests

**approx. recent annual increase in skins** 150, from local birds skinned by own taxidermist and by buying of colls.

**bird skin collection specialised in** Germany (esp. east), Sweden, Iceland, Spain, Italy; Indonesia (esp. Wallacea & New Guinea), Philippines, China (Sichuan, Manchuria), Hawaii, E & S Africa, West Siberia, etc.

Includes 31 skins and mounts and 19 eggs of extinct birds (24 species)

**card or computer system present** part of skins on card system (including birds destroyed during the war)

## Edinburgh (RSM/ NMSE)

Info from: R. McGowan 06 Feb 1995 & 16 Nov 2001, A. Kitchener 13 Nov 1999

**address** National Museums of Scotland, Royal Museum of Scotland, Dept. Geology & Zoology, Chambers Street, Edinburgh EH1 1JF, Scotland, U.K.

**telephone** (DDI) #-44-131-247-4240, **fax** #-44-131-220-4819, **e-mail** a.kitchener@nms.ac.uk, b.mcgowan@nms.ac.uk, rym@nms.ac.uk

**staff responsible for bird coll.** Dr Andrew C. Kitchener (head of birds and mammal dept, mostly working on mammals), Robert (Bob) McGowan (curator of birds)

**total staff of bird dept.** 0.3 head, 1 curator, 0.3 taxidermist

**brief history** Founded c.1815 by Edinburgh University; both government-owned from c.1854

**references to history, collections, or types** Stenhouse (1924–1930), McGowan (1988), Herman *et al.* (1990)

**important past bird staff** A. S. Clark, W. Eagle Clark, J. H. Stenhouse, I. H. J. Lyster

**important collections come from** L. Adams, E. Baxter, W. Bullock coll./Mus. Leverianum (see Wien/Vienna), P. A. Clancey, L. Dufresne, T. P. Dutton (eggs), Edinburgh Univ. Museum, J. A. Harvie-Brown, Annie C. Jackson, W. Jardine, P. P. King, Parry, J. Richardson, L. Rintoul, J. C. Ross, Scot. natl. Antarctic Exp., H. Seeböhm, W. Serle, A. Smith, R. A. L. & V. G. L. Van Someren, C. Sturt, R. G. Wardlaw-Ramsay, H. Whistler, J. I. S. Whitaker

**approx. nr. of bird skins** 63,000 (6,000 species)

**other bird items** 4,000 skeletons, 33,000 egg sets, a few in alcohol

**approx. recent annual increase in skins** 200, from local birds skinned by own taxidermist and donations

**bird skin collection specialised in** 'worldwide (c.50% Palearctic), all families'. E.g. South Africa, Tristan da Cunha, Australia, Arctic regions

**card or computer system present** Only part of egg coll. on computer

## Exeter (EXEMS or RAMM)

Info from: David Bolton, 4 Dec 2001

**address** Royal Albert Memorial Museum and Art Gallery, Queen Street, Exeter, U.K.

**telephone** #-44-1392-665358, **fax** #-44-1392-665858, **e-mail** david.bolton@exeter.gov.uk.

**staff responsible for bird coll.** Dr David Bolton (Curator of Natural History)

**total staff of bird dept.** 1 (for all natural sciences)

**brief history** Founded 1865 by Sir Stafford Northcote as a memorial to Prince Albert, opened 1868; now owned by local government (Exeter City Council)

**references to history, collections, or types** Lowe (1939), Howes (1969)

**important past bird staff** W. S. M. D'Urban, F. W. L. Ross, R. P. Nicholls, C. Blackie, A. B. Gay, W. P. Lowe

**important collections come from** R. H. Buller, W. T. H. Chambers, Cumming, Major-General Elliot, J. Gilbert, J. Gould, Hollis, Maxwell, Sir Wilfred Peek, Pershouse, Rolle, Mrs H. N. Rowan, General W. N. T. Smee, Sir John Walrond

**approx. nr. of bird skins** 8,500 (mainly mounted)

**other bird items** 200 (partial) skeletons, 50 in liquid, 1,000 egg sets, 100 nests, 100s of wings, heads, etc.

**approx. recent annual increase in skins** below 10

**bird skin collection specialised in** England (esp. Devon) and USA, but in general worldwide; includes various types and an impressive number of extinct species (e.g. 9 each of *Ectopistes migratorius* and *Conuropsis carolinensis*)

**card or computer system present** Part on card, computerised database in progress

### Florence/Firenze (MZUF)

Info from: A. Nistri, 26 Jul 1996

**address** Museo Zoologico de 'La Specola', Sezione del Museo di Storia Naturale, Università degli Studi di Firenze, Via Romana 17, I-50125 Firenze, Italia

**telephone** #-39-055-2288261, **fax** #-39-055-225325, **e-mail** specola@specola.unifi.it

**staff responsible for bird coll.** Dr Marta Poggesi (coordinator of vertebrate section), Dr Annamaria Nistri (coll. manager), Dr Anna Altobelli, Fausto Barbagli, Dr Silke Jantra (volunteer associates)

**total staff of bird dept.** 1 head, 1 coll. manager

**brief history** Founded 1775 as private coll. of Grand Duke Peter Leopold of Lorraine; now belongs to the University of Firenze

**references to history, collections, or types**

Giglioli (1886–1907), De Germiny (1936–1938), Violani *et al.* (1984), Poggesi & Buracchi (1990), Voipio (1990)

**important past bird staff** Carlo Passerini, E. H. Giglioli

**important collections come from** Bessi, Dainelli, Della Gherardesca, Giglioli coll. (c.4300 skins), Griffoli, Ridolfi, T. Salvadori, Tozzi, Voy. Magenta

**approx. nr. of bird skins** 18,000 (3,000 species)

**other bird items** 2,500 skeletons, 300 in alcohol, 350 egg sets, 100 nests

**approx. recent annual increase in skins** 150, from local birds skinned by own taxidermist, buying of colls., and donations

**bird skin collection specialised in** Italy, South America, Ethiopia, Somalia, East Africa. Coll. includes skins of 164 extinct and endangered birds

**card or computer system present** skins partly on card and computer

### Frankfurt am Main (SMF for colls, FIS in general)

Info from: D. S. Peters, 17 Jan 1995; update G. Mayr 14 Nov 1999

**address** Forschungsinstitut und Naturmuseum Senckenberg, Senckenberganlage 25, D-60325 Frankfurt am Main 1, Germany

**telephone** #-49-69-7542348, **fax** #-49-69-746238, **e-mail** gmayr@sug.uni-frankfurt.de  
**staff responsible for bird coll.** Dr Gerald Mayr, Dr D. Stefan Peters (retired, volunteer)

**total staff of bird dept.** 1 head, 1 secretary, 1–2 others

**brief history** Founded 1818–1821 by the Senckenbergische Naturforschende Gesellschaft (SNG), but based on older coll. of B. Meyer; still privately owned by SNG

**references to history, collections, or types** Hartert (1891), Hilgert (1908), Steinbacher (1949, 1954, 1959, 1967), Mertens and Steinbacher (1955), Peters (1992)

**important past bird staff** E. Rüppell, P. J. Cretzschmar, T. Erckel, A. Koch, O. Kleinschmidt, E. Hartert, C. Hellmayr, H. von Boetticher, J. Steinbacher

**important collections come from** O. Baron, F. Behn, H. H. C. L. Graf von Berlepsch (donated private coll. of 55,000 skins), G. Cherrie, Döbel, H. Dohrn, C. F. von Erlanger (donated c.12,600 birds), G. W. Freyreiß, G. & O. Garlepp (4,000 birds), J. von Haast, B. Hagen, W. Hoesch, A. von Homeyer (eggs), G. Hopke, H. von Ihering, J. Kalinowski, F. H. von Kittlitz, A. Koch, K. L. Koch, J. S. Kubary, C. F. H. von Ludwig, B. Meyer, E. Peters, G. Radde, B. Schmacker, H. Schubotz, A. Schultze, J. Unger

**approx. nr. of bird skins** 90,000 (c.6–7,000 species)

**other bird items** 4,000 skeletons, 3,375 in alcohol, 5,050 egg sets, many fossils

**approx. recent annual increase in skin/skeleton coll.** 600, from local birds prepared by own taxidermist and buying of colls.

**bird skin collection specialised in** South America, Germany, northern and eastern Africa, Middle East, Indonesia, New Zealand; Trochilidae

**card or computer system present** most skins on card (except Trochilidae), spirit and skeleton colls. on computer

### Fribourg (MHNF)

Info from: Dr André Fasel, 10 Dec 2001

**address** Museum d'Histoire Naturelle de Fribourg, Chemin du Musée 6, CH-1700 Fribourg, Switzerland

**telephone** #-41-26-3009040, **fax** #-41-26-3009760, **e-mail** museehn@fr.ch

**staff responsible for bird coll.** Dr André Fasel (director) (andre.fasel@unifr.ch), Emanuel Gerber

**total staff of bird dept.** —

**brief history** Founded 1823 with the donation of the coll. of C.-A. Fontaine to the Fribourg Canton; owned by the Fribourg government

**references to history, collections, or types** Fasel (1998) (history)

**important past bird staff** C. de Buman, M. Musy, O. Büchi

**important collections come from** J. de Buman, R. de Bocard, Père A. Buch

**approx. nr. of bird skins** 5,300 skins (of which 4,800 mounted)

**other bird items** 1,200 skeletons and skulls, 515 egg sets, and 130 nests

**approx. recent annual increase in skins** 100–200

**bird skin collection specialised in** Switzerland, SE China, Vietnam, Ethiopia

**card or computer system present** Most bird items on computer

## Geneva/Genève (MHNGn)

Info from F. J. Baud, 06 Dec 1999

**address** Muséum d'Histoire Naturelle de Genève, Dpt. de Mammalogie et Ornithologie, case postale 6434, CH-1211 Genève 6, Suisse/Switzerland (visitors address: 1 Route de Malagnou)

**telephone** #-41-(0)22-4186302, **fax** #-41-(0)22-4186301, **e-mail** francois.baud@mhn.ville-ge.ch

**staff responsible for collection** Dr François J. Baud (curator), Dr M. Ruedi (research officer)

**total staff of bird dept.** 1 head, 2 coll. managers, 2 taxidermist (these for combined bird–mammal dept.; additional staff shared by whole museum)

**brief history** Founded in c.1850 by the Societé de Physique et d'Histoire Naturelle de Genève; now belongs to the municipality (Ville de Genève)

**references to history, collections, or types** Baud (1976, 1977, 1978), Weber (1985)

**important past bird staff** Victor Fatio, T. Horsfield, De Saussure

**important collections come from** T. Horsfield (Java), W. Parsons (Philippines), K. von Sneidern (Colombia), A. Kovaes (Argentina), A. Vaucher (Trochilidae)

**approx. nr. of bird skins** 25,000

**other bird items** c.200 skeletons, 8,500 egg sets, 1,000 bodies in alcohol (of which the skins are in the coll.)

**approx. recent annual increase in skins** 250, from own expeditions and local bird skinned by own taxidermist

**bird skin collection specialised in** Switzerland, Java, Philippines, Colombia, Argentina; Trochilidae

**card or computer system present** Over 60% of skins on computer

## Genoa/Genova(MSNG)

Info from: Giuliano Doria, 16 Dec 1999

**address** Museo Civico di Storia Naturale 'Giacomo Doria', Via Brigata Liguria 9, I-16121 Genova (Genoa), Italy

**telephone** #-39-(0)10-564 567 or 582 171, **fax** #-39-(0)10-566 319

**staff responsible for collection** Dr Giuliano Doria

**total staff of bird dept.** 1 curator (see above, for all animals except insects), 1 taxidermist (for all vertebrates)

**brief history** Founded in 1867 when the private coll. of Marchese Giacomo Doria was given to City of Genoa; still in the possession of the Municipality of Genova

**references to history, collections, or types** Arbocco *et al.* (1979, 1987), Violani *et al.* (1979, 1984), Capocaccia & Poggi (1982)

**important past bird staff** A. T. Salvadori (volunteer from Torino, but described 283 new taxa from the coll.)

**important collections come from** G. Doria, O. Beccari, L.M. D'Albertis, E. Modigliani, L. Loria, O. Antinori, E. Ruspoli, V. Bottego, L. Fea

**approx. nr. of bird skins** 30,000 (incl mounts)

**other bird items** 60 mounted skeletons, 400 sterna, 100 jars with many specimens in spirits, 100 egg sets, 100 nests

**approx. recent annual increase in skins** 30, from donations and local birds skinned by own taxidermist

**bird skin collection specialised in** Italy, North Africa, Ethiopia, Cape Verde Is. (30 *Alauda razae!*), Gulf of Guinea islands (Príncipe, etc.), Burma, Indonesia, New Guinea. Includes 104 skins of extinct and endangered birds and types or type series of 317 (sub)species.

**card or computer system present** All on card, none on computer

### Glasgow (GLAMG)

Info from: Richard Sutcliffe, 28 Nov 2001

**address** Glasgow Art Gallery and Museum,

Kelvin Grove, Glasgow G3 8AG, U.K.

**telephone** #-44-141-2872660, **fax** #-44-141-

2872690, **e-mail** richard.sutcliffe@

cls.glasgow.gov.uk

**staff responsible for bird coll.** Dr Richard

Sutcliffe (Curator of Science)

**total staff of bird dept.** 1 (for all zoology)

**brief history** Founded 1870; owned by Glasgow City Council

**references to history, collections, or types** -

**important past bird staff** C. E. Palmar, J.

MacNaught Campbell, Darryl Mead

**important collections come from** R. Arbutnot

(eggs), M. A. Black, H. Brown, Major Christie,

Capt. H. L. Cochrane, Capt. D. Cross (eggs), P.

Hay (eggs), P. Leys, Sir James Lumsden, Col J.

M. D. Mackenzie (eggs), W. E. Praeger, J.

Ramsay, A. B. Stewart

**approx. nr. of bird skins** 6,400 (incl. 900 mounts)

**other bird items** 250 (partial) skeletons, 10,000 eggs, 100 nests

**approx. recent annual increase in skins** a few only

**bird skin collection specialised in** Scotland,

but also includes quite a number of exotic birds

**card or computer system present** Most on

computer

### Görlitz (SMNG)

Info from: Hermann Ansorge, 30 Nov 2001

**address** Staatliches Museum für Naturkunde

Görlitz, Postfach 300154, D-02806 Görlitz,

Germany (visitors address: Am Museum 1, D-

02826 Görlitz).

**telephone** #-49-3581-47600/ -4760400, **fax** #-

49-3581-4760101, **e-mail** smng.ansorge@t-

outline.de

**staff responsible for bird coll.** Dr Hermann

Ansorge (head of vertebrate dept.), Diana

Jeschke (taxidermist)

**total staff of bird dept.** 2 (for entire vertebrate dept: see above)

**brief history** Founded 1823 as Museum of the Naturforschenden Gesellschaft zu Görlitz, with

important enlargement by the donation of the colls. of J. von Zittwitz and H. Boetsscher in 1860-1861.

**references to history, collections, or types**

Ansorge (1987)

**important past bird staff** J. G. Krezschmar, R.

Tobias, J. W. Stolz

**important collections come from** Niesky

Pädagogium, A. R. von Loebenstein (eggs),

Vogelschutzwarte Neschwitz

**approx. nr. of bird skins** 6,800 (incl. 5,500 mounts)

**other bird items** 1,250 (partial) skeletons, 1,750 egg sets

**approx. recent annual increase in skins** a few

**bird skin collection specialised in** worldwide,

e.g. with *Ara tricolor*, but primarily the Lausitz area of E Germany

**card or computer system present** all on card, part on computer

### Gothenburg/Göteborg (GNM)

Info from: Göran Nilson, 27 Nov 2001

**address** Naturhistoriska Museet, Box 7283, S-

40235 Göteborg, Sweden (visitors address:

Slottsskogen, nr. Linnéplatsen)

**telephone** #-46-31-7752430, **fax** #-46-31-

129807, **e-mail** goran.nilson@gnm.se

**staff responsible for bird coll.** Göran Nilson

**total staff of bird dept.** 1

**brief history** Founded 1833; owned by the local community.

**references to history, collections, or types**

Mathiasson (1985)

**important past bird staff** Sven Mathiasson

**important collections come from** K. Kolthoff

and others

**approx. nr. of bird skins** 25,000, incl. 3,548 mounts

**other bird items** 8,000 skeletons and skulls,

10,000 egg sets, a few birds in alcohol

**approx. recent annual increase in skins** 100

**bird skin collection specialised in** Sweden

(9,211 skins), remainder exotic; many groups

represented, e.g. 250 *Cygnus* spec. All on

computer: see [www.gnm.se](http://www.gnm.se)

### Grenoble (MHNGr)

Info from: A. Fayard, 9 Jul 2000

**address** Muséum d'Histoire Naturelle de

Grenoble, B.P. 3022, 38816 Grenoble Cedex 1,

France (visitors address: 1, rue Dolomieu)

**telephone** #-33- (0)4 76 44 05 35, (portable) #-33-(0)6 82 86 92 31, **fax** #-33-(0)4 76 44 65 99, **e-mail** museum-histoire-naturelle@ville-grenoble.fr, **web-site** http://www.ville-grenoble.fr

**staff responsible for bird coll.** Dr Armand Fayard (head curator), Anne Medard-Blondel (adj. curator)

**total staff of bird dept.** 1 head, 1 adj. curator, 1 taxidermist, 1 other

**brief history** Founded in 1847; now owned by Ville de Grenoble

**references to history, collections, or types** Langrand (1985, 1986a,b)

**important past bird staff -**

**important collections come from** Clot-Bey (1842–1844), Bouteille (1847–1881), Vitalis (1899), Bailly (1902), Blanchet (1921), L. Lavauden (1935), Fleurian (1937), L. Léger.

**approx. nr. of bird skins** 9,000

**other bird items** 830 eggs, 30 nests

**approx. recent annual increase in skins** ?, from local birds skinned by own taxidermist, donations, and buying of colls.

**bird skin collection specialised in** SE France, Tunisia, Egypt (71 mounts of Clot-Bey), Afrotropics (especially Mauritania to Chad), Madagascar (e.g. 269 mounts), etc.

**card or computer system present** part on a card system, nothing on computer

## Halberstadt (MH)

Info from: B. Nicolai, 27 Jun 1996

**address** Museum Heineanum, Domplatz 37, D-38820 Halberstadt, Germany

**telephone** #-49-3941-551460, **fax** #-49-3941-551469

**staff responsible for bird coll.** Dr Bernd Nicolai (head), Rüdiger Holz

**total staff of bird dept.** 1 head, 2 taxidermists, 1 librarian

**brief history** Founded in 1830 as private coll. of F. Heine Sr.; the Heine coll. was presented to Stadt Halberstadt in 1907 when A. Hemprich became director

**references to history, collections, or types** Cabanis, in part with Heine (1850–1863); Busch (1957), Handtke (1974), Kummer (1993), Nicolai (1993), Nicolai *et al.* (1994)

**important past bird staff** F. Heine Sr., F. Heine Jr., J. Cabanis, C. Müller, F. Tiemann, A. Hemprich, R. Busch, H. von Boetticher, K. Handtke, H. König

**important collections come from** J. G. W. Brandt, G. A. Frank, M. Hübner (eggs), J. Kummer (eggs), Mus. Berlin (doublets), W. Schlüter, Maison Verreaux, K. Weiß

**approx. nr. of bird skins** 18,000 (4,500 species)

**other bird items** 2,000 skeletons, 6,000 egg sets  
**approx. recent annual increase in skins** 100, from local birds skinned by own taxidermist and expeditions

**bird skin collection specialised in** Germany (3,000 skins), many from a wide scatter of localities elsewhere; Trochilidae (1,800 skins)

**card or computer system present** all birds received since 1965 on card, none on computer

## Halle (IZH)

Info from: Dietrich Heidecke, 26 Nov 2001

**address** Institut für Zoologie, Zoologische Sammlung, Martin-Luther-Universität, Postfach Universität, D-06099 Halle am Saale, Germany (visitors address: Domplatz 4, D-06108 Halle/S.)

**telephone** #-49-345-5526455, **fax** #-49-345-5527152, **e-mail** heidecke@zoologie.uni-halle.de

**staff responsible for bird coll.** Dr D. Heidecke (Kustos), H.-J. Altner (taxidermist) (both for all vertebrates)

**total staff of bird dept.** See above

**brief history** Founded in 1769 as natural history cabinet by J. F. G. Goldhagen, but the oldest birds in existence now are those of C. L. Nitzsch (from about 1815); the coll. increased strongly after the arrival of Burmeister as director in 1837. Now part of the University of Halle-Wittenberg

**references to history, collections, or types** Taschenberg (1894), Herre (1940), Piechocki (1971) (history); Boetticher (1940) (types); Piechocki (1958, 1968), Piechocki & Bolod (1972), Piechocki *et al.* (1981–1982) (Mongolian and Manchurian colls.)

**important past bird staff** J. R. Forster, C. L. Nitzsch, K. H. C. Burmeister, C. G. A. Giebel, O. Taschenberg, L. Brühl, L. Ludwig, A. Remane, H. von Boetticher, J. O. Hüsing, R. Piechocki

**important collections come from** C. L. & A. E. Brehm, Brandt, Brendel, F. W. Junghuhn, G. A. Frank, G. Hartlaub, A. von Humboldt, A. V. Ladygin, J. F. Naumann, R. A. Philippi, W.



Schlüter, M. Schönwetter (19,300 eggs of 3,839 species), M. Stubbe

**approx. nr. of bird skins** 9,063 (incl. 2,100 mounts of 1,900 species)

**other bird items** 6,300 (partial) skeletons, 20,000 eggs, over 100 nests

**approx. recent annual increase in skins** 20–150

**bird skin collection specialised in** Germany, Mongolia, Kamchatka, NE China, Cuba (over 900 birds), S America (e.g. Chile, Argentina); endangered Palearctic birds of prey, owls, and cranes (esp. skeletons); types of Nitzsch, Burmeister and Giebel

**card or computer system present** all on card; 60% of skins on computer

### Hamburg (ZMH)

Info from: H. Hoerschelmann, Aug. 1996

**address** Zoologisches Institut und Zoologisches Museum, Universität Hamburg, Martin-Luther-King-Platz 3, D-20146 Hamburg, Germany  
**telephone #** -49-40-4123-3860, **fax #** -49-40-4123-3937, **e-mail** fb6a071@zoologie.uni-hamburg.de

**staff responsible for bird coll.** Kordula Bracker, H. Hoerschelmann (retired)

**total staff of bird dept.** 1 coll. manager, 1 taxidermist

**brief history** Founded 1843; large parts of the coll. were destroyed in 1943. Now part of University of Hamburg

**references to history, collections, or types ?**

**important past bird staff** A. Reichenow, G. H. Martens, H. & H. Bolau, F. Stuhlmann, N. Peters, W. Meise, C. Kosswig, E. Focke

**important collections come from** F. Dörries, G. A. Fischer, L. Gomez, Hagenbeck Zoo, G. Hartmann, G. Heidemann, G. Heinrich, Heinze *et al.*, D. von Holst, H. Kelm, G. A. von Maydell, Mus. Godeffroy (J. C. Godeffroy; Amalie Dietrich, A. Garrett, E. Gräffe, Capt. Heinsohn, F. Hübner, Th. Kleinschmidt, J. S. Kubary, A. Tetens; types and 'originals' to Hamburg in 1886, duplicates to Bremen), H. Möschler, D. S. Rabor, Prof. Rockstroh, H. Schubotz, A. Schultze, W. Schulz, G. Siemssen, W. Trense, K. Weiß, P. Wyrwich

**approx. nr. of bird skins** 30,000 (2,500 species)

**other bird items** 4,000 skeletons, 2,000 in alcohol, 2,000 egg sets, feather-sets of 20,000 birds

**approx. recent annual increase in skins** 400, from local birds skinned by own taxidermist, buying of colls., and donations

**bird skin collection specialised in** Germany, São Tomé, Russian Far East, China, Angola, East Africa, India, Pacific, Peru, Guatemala, Philippines, New Guinea, Australia, Bismarck Archipelago; feathers of West Palearctic birds; *Pica pica* (2,000 skins Kelm coll.).

**card or computer system present** all skins on card; computerising of card system in preparation

### Hanover/Hannover (NLMH)

Info from: Chr. Schilling, 21 Feb 2002

**address** Niedersächsisches Landesmuseum, Naturkunde-Abteilung, Willy-Brandt-Allee 5, D-30169 Hannover, Germany.

**telephone #** -49-511-9807-827, **fax #** -49-511-9807-880, **e-mail** naturkunde@compuserve.com

**staff responsible for bird coll.** Frau Dr Christiane Schilling (for entire Bioscience coll.)

**total staff of bird dept.** 1 (see above)

**brief history** Founded c.1850, owned by Niedersachsen government.

**references to history, collections, or types** none (but unpublished catalogues for the Kirchhoff and King George colls. available)

**important past bird staff —**

**important collections come from** King George V, H. Kirchhoff (formerly in the Göttingen Museum), H. Domeier (originally 40,000 eggs, many from the Neotropics)

**approx. nr. of bird skins** 9,000

**other bird items** 75 skeletons, 29,000 eggs, 133 nests

**approx. recent annual increase in skins** minor acquisitions

**bird skin collection specialised in** regional avifauna (Niedersachsen), but also from Africa, Asia, and small numbers from South America

**card or computer system present** all on card, computerisation in preparation

### Helsinki (ZMUH)

Info from: Risto A. Väisänen, 17 Nov 1999

**address** Zoological Museum, Finnish Museum of Natural History, University of Helsinki, P.O. Box 17, FIN-00014 Helsinki, Finland (visitors address: P. Rautatiekatu 13)

**telephone** #358-9-1917440, **fax** #358-9-1917443, **e-mail** risto.vaisanen@helsinki.fi

**staff responsible for bird coll.** Prof Ann Forstén (head of vertebr. dept), Dr Risto A. Väisänen (senior curator vertebr. dept), Dr Torsten Stjernberg (curator, manager of egg coll.), Pertti Saurola M. Sc. (curator, leader of ringing centre), Martti Hilden M. Sc. (assistant)

**total staff of bird dept.** 1 head, 3 coll. managers, 1.5 taxidermist, 0.5 others

**brief history** Originally in University of Turku, where coll. destroyed by fire in 1827; University then moved to Helsinki, where new coll. built up, to which in c.1830–1850 the colls. of the Societas pro Fauna et Flora Fennica and the private coll. of E. J. Bonsdorff were added.

**references to history, collections, or types — important past bird staff** A. von Nordmann, M. von Wright, J. A. Palmén, Pontus Palmgren, O. Kalela, P. Voipio, R. Kreuger, G. Bergman, L. Sammalisto

**important collections come from** Museum Oologicum R. Kreuger (worldwide egg coll.), E. Wassenius (W Palearctic egg coll.)

**approx. nr. of bird skins** 29,000, incl. mounts (c.2,200 species)

**other bird items** 1,200 skeletons & skulls, 900 in alcohol, 31,000 egg sets (3,200 species), 800 nests, 800 frozen tissue samples

**approx. recent annual increase in skins** 600, from local birds skinned by own taxidermist and donation of colls.

**bird skin collection specialised in Finland** (22,000 skins, mostly rather recent); other skins generally rather old, exotic, partly mounted; eggs (worldwide); birds of prey and owls (esp Finnish *Accipiter*, *Strix*, *Bubo*)

**card or computer system present** all on card to 1996, all on computer

## Karlsruhe (SMNK)

Info from: H.-W. Mittmann, 21 Jan 2002

**address** Staatliches Museum für Naturkunde, Erbprinzenstraße 13, D-76133 Karlsruhe, Baden-Württemberg, Germany.

**telephone** #49-721-1752132, **fax** #49-721-175211-010, **e-mail** hwmittmann@aol.com

**staff responsible for bird coll.** Prof. Dr V. Wirth (director), Dr Hans-Walter Mittmann (vertebrate curator)

**total staff of bird dept.** 1 (for all vertebrates)

**brief history** Founded c.1785; owned by the government of Baden-Württemberg  
**references to history, collections, or types — important past bird staff** J. C. Gmelin, H.

Knipper, K. Silber

**important collections come from** Th. Andersen, K. Haberer, B. Hagen, J. Holderer, J. Riedel, J. Unger, Wandres, Zool. Inst. Freiburg

**approx. nr. of bird skins** 5,000 (incl mounts) **other bird items** 300 (partial) skeletons, 600 egg sets, fewer than 50 birds in alcohol  
**approx. recent annual increase in skins** 100–200

**bird skin collection specialised in Germany** (esp. Baden-Württemberg), C & E Asia, Tanzania, Paraguay, Indonesia (New Guinea)

**card or computer system present** all items on computer

## Kaunas

Info from: Saulius Rumbutis, 20 Dec 1999

**address** Kaunas Zoological Museum, Laisves aleja 106, LT-3000 Kaunas, Lithuania

**telephone**#370-7-200305, **fax** #370-7-229675, **e-mail** muzzoo@takas.lt

**staff responsible for bird coll.** Dr Algimantas Macikunas (head), Saulius Rumbutis (ornithologist of bird dept)

**total staff of bird dept.** 1 head, 1 coll. manager, 2 taxidermists

**brief history** Founded in 1919 by Prof. Tadas Ivanauskas; owned by the government  
**references to history, collections, or types** J. Vaskelis (1985) *Soobsh. Pribalt. Kom. Izuch. Migr. Pritis* 18: 112-118; Gaidiene (1999) (history); Andriuskevicius & Macikunas (1988) (catalogue).

**important past bird staff** T. Ivanauskas, K. Bybartas, L. Jezerskas, V. Juska, V. Logmina, V. Mackevicius, M. Navasaitis, B. Talandis, J. Vaskelis

**important collections come from** L. Ivanauskas

**approx. nr. of bird skins** 7,630 (828 species)

**other bird items** 435 skeletons (112 species) and 446 partial skeletons or skulls, 660 birds in spirits (80 species), 872 egg sets, 113 nests.

**approx. recent annual increase in skin coll.** 37, from own expeditions, buyings and donations, local birds skinned by own taxidermist

**bird collection specialised in Lithuania**  
**card or computer system present** all on card

### Kiel (ZMK)

Info from: Wolfgang Dreyer, 7 Dec 1999.  
**address** Zoologisches Museum der Christian-Albrechts-Universität, Hegewischstraße 3, D-24105 Kiel, Germany  
**telephone** #-49-(0)431-597 4180, **fax** #-49-(0)431-597 4177, **e-mail** zool/museum@email.uni-kiel.de

**staff responsible for bird coll.** Dr Wolfgang Dreyer (director of the zoological museum)  
**total staff of bird dept.** 1 head, 1 taxidermist (for entire zoological museum)  
**brief history** Founded 1836; now part of Kiel University. See Hacker (1984)

**references to history, collections, or types**  
 Catalogue on bird bones in *Arbeitsblätter Univ. Kiel*. 8 (1985), on Dodo and Solitaire bones in *Arbeitsblätter Univ. Kiel* 14 (1987)

**important past bird staff** W. Behn, K. Möbius  
**important collections come from** F. Boie, G. von Plessen

**approx. nr. of bird skins** 7,000 (1,950 species)  
**other bird items** 50,000 skeletons; a few egg sets and nests

**approx. recent annual increase in skin coll.** A few, from local birds skinned by own taxidermist

**bird collection specialised in** —  
**card or computer system present** all skins on card

### Kiev (ZIK or ZMAU)

Info from: Alexander Peklo, 07 Jul 1996  
**address** Zoological Museum, Natural History Museum of the Ukrainian Academy of Sciences, Bogdana Khmel'nitskogo Str. 15, 252030 Kiev, Ukraine

**telephone** #-38-44-2247016  
**staff responsible for bird coll.** Dr Alexander Peklo

**total staff of bird dept.** 1 curator  
**brief history** Founded in 1919 by V. A. Karavaev of the Ukrainian Academy of Sciences; still part of the Ukrainian Academy of Sciences

**references to history, collections, or types**  
 Shcherbak (1969), Peklo (1997a,b)

**important past bird staff** N. Sharleman, A. Kistjakovsky, N. N. Shcherbak, M. Voinstvensky, V. Loskot  
**important collections come from** Y. Kostin, V. Ochapovsky, V. Zubarovsky  
**approx. nr. of bird skins** 40,000 (950 species)  
**other bird items** 120 skeletons, 120 in alcohol, 1,200 egg sets, 600 nests  
**approx. recent annual increase in skins** 30–150, from local birds, own expeditions, buying skins, and donations

**bird skin collection specialised in** Ukraine, incl. Carpathians and Crimea (over 3,000 skins from latter), Caucasus, Turkmenistan, Transbaikalia, Russian Far East; most of the material quite recent  
**card or computer system present** Catalogue published (see Peklo 1997a,b)

### København

see Copenhagen

### Krakow (ISEA)

Info from: Z. Bochenski, 25 Sep 1996  
**address** Zakład Zoologii Systematycznej i Doswiadczalnej (Institute of Systematics and Evolution of Animals), PAN (Polish Academy of Sciences), Ul. Slawkowska 17, PL-31-016 Kraków, Poland [skins & mounts partly housed in Muz. Przyrodnicze ISEZ, PAN, Sw. Sebastiana St. 9, 31-049 Krakow; curator Dr Wieslaw Krzeminski]

**telephone** #-48-12-227066, ext. 226 (secr.: 221901), **fax** #-48-12-224294

**staff responsible for bird coll.** Prof. Dr Zygmunt Bochenski, Dr Zbigniew Bochenski (both staff of entire vertebrate division); Dr Teresa Tomek (curator of birds)

**total staff of bird dept.** Vertebr. section (incl. birds): 1 head, 2 others (see above)

**brief history** Founded in 1865 as Muzeum Komisji Fizjograficznej Akademii Umiejstnosci w Krakowie; now belongs to Polish Academy of Sciences

**references to history, collections, or types**  
 Bochenski (1966, 1984, 1990)

**important past bird staff** K. Jelski  
**important collections come from** Z. Glowacinski, Z. Jakubiec, T. Oles, P. Profus, T. Tomek

**approx. nr. of bird skins** 1,400, incl. 200 mounts (200 species)

**other bird items** 3,000 skeletons (1,033 species), 2,900 egg sets, 300 nests  
**approx. recent annual increase in skins** None, but c.150 skeletons annually added, from own taxidermy, exchanges, etc.

**bird skin collection specialised in** Skins & eggs: Poland, North Korea. Skeletons: worldwide (but esp W Palearctic)

**card or computer system present** c.1,000 on card; all skeletons on continually updated computer list

### Lausanne (MZL)

Info from: Dr Olivier Glaizot, 30 Nov 2001  
**address** Musée Zoologie (MZL), Canton de Vaud, Case postale 448, CH-1000 Lausanne 17, Suisse/ Switzerland (visitors address: Palais de Rumine, Place de la Riponne 6, CH-1005 Lausanne).

**telephone** #-#-41-21-316-3460, **fax** #-#-3479, **e-mail** olivier.glaizot@serac.vd.ch

**staff responsible for bird coll.** Dr Olivier Glaizot (curator for all vertebrates)

**total staff of bird dept.** See above

**brief history** Founded late nineteenth century; owned by the Vaud Canton

**references to history, collections, or types - important past bird staff** —

**important collections come from** Capt. Vouga (in 1886), W. Morton, Delessert (eggs)

**approx. nr. of bird skins** 7,000 (incl. mounts)

**other bird items** 1,000 (partial) skeletons, 3,000 eggs, fewer than 100 birds on liquid and a few nests

**approx. recent annual increase in skins** 100, mostly local

**bird skin collection specialised in** Switzerland (esp. west); historical colls. worldwide

**card or computer system present** computerisation in progress

### Leeds (LEEDM)

Info from: Adrian Norris, 23 Nov 2001  
**address** Leeds Museum Resource Centre, 1 Moorfield Road, Yeadon, Leeds LS19 7BN, U.K.

**telephone** #-44-113-2146526, **e-mail** adrian.norris@leeds.gov.uk

**staff responsible for bird coll.** Adrian Norris (Senior Curator of Natural Sciences)

**total staff of bird dept.** 1 (see above)

**brief history** Founded in 1819 as the Leeds Philosophical and Literary Society Collections; went to the Leeds City Council in 1921, and still run by this local authority. Partly bombed in 1940–1945

**references to history, collections, or types** Norris (1998)

**important past bird staff** -

**important collections come from** W. T. Crampton (eggs), Eyres-Monsell coll, J. C. Hirst, Sir William Milner, Roundell coll.; Wakefield, Halifax & Swindon Museums

**approx. nr. of bird skins** 4,500 (incl. 3,500 mounts; an additional 1,000 mounts and many original data of other birds were lost by the damage in 1940–1945)

**other bird items** 50 (partial) skeletons, 3,000 egg sets

**approx. recent annual increase in skins** very few

**bird skin collection specialised in** mounts worldwide, partly historical (mounts in glass cases); includes various rare and extinct species. Eggs from Britain, Europe, Australia and N America

**card or computer system present** Skins and mounts on computer, but only a minor part of the eggs.

### Leiden (RMNH for colls., NNM in general)

Info from: R. Dekker, 19 Mar 1997

**address** Naturalis, Nationaal Natuurhistorisch Museum, Postbus 9517, 2300 RA Leiden, the Netherlands (visitors: Darwinweg 2)

**telephone** #-31-71-5687623, **fax** #-31-71-5687666, **e-mail** dekker@naturalis.nnm.nl

**staff responsible for bird coll.** Dr René W. R. J. Dekker (head), Hein van Grouw (technical support)

**total staff of bird dept.** 1 head, 1 coll. manager/taxidermist

**brief history** Founded 1815 when the older coll. of C. J. Temminck came to government, with Temminck as first director; now a private institution with governmental support

**references to history, collections, or types** Gijzen (1938), Stresemann (1951), Holthuis (1995)

**important past bird staff** C. J. Temminck, C. Reinwardt, H. Boie, H. Schlegel, O. Finsch, J. Büttikofer, E. D. van Oort, G. C. A. Junge, G. F. Mees

**important collections come from** T. Andersen, M. Bartels (15,000 skins from Java), H. A. Bernstein, A. A. Bruyn, W. Bullock coll./Mus Leverianum (see Vienna/Wien), H. Bürger, K. H. Chen, L. Coomans de Ruiter, D. C. van Dam, P. M. Diard, F. von Faber, E. A. Forsten, G. W. Freyreiß, J. Gilbert, J. Gould, B. Hagen, J. C. van Hasselt, F. Haverschmidt, P. A. Hens, Th. von Heuglin, W. C. & F. C. van Heurn, D. S. Hoedt, A. Hoogerwerf, E. R. Jacobsen, C. Klaesi, Th. Krüper, J. S. Kubary, H. Kuhl, T. Kumlien, J. R. Laenen, F. Levaillant, T. G. van Lidth de Jeude, H. A. Lorentz, H. C. Macklot, S. Müller, A. W. Nieuwenhuijs, J. W. Nouhuys, H. S. Pel, V. von Plessen, F. Pollen, G. van Raalten, L. van Renesse van Duivenbode, J. Riedel, H. von Rosenberg, W. F. H. Rosenberg, E. Rüppell, G. Schlegel, L. A. C. M. Schwaner, W. E. D. Scott, P. F. von Siebold, F. K. Stampfli, R. Swinhoe, J. E. Teysman, E. J. Verreaux, A. G. Vorderman, J. P. van Wickevoort Crommelin

**approx. nr. of bird skins** 170,000, incl.

c.53,000 mounts (in total, 7,000 species)

**other bird items** 6,673 skeletons, 1,200 in alcohol, 32,571 eggs, c.3,500 nests

**approx. recent annual increase in skins** 500, from local birds skinned by own taxidermist and buying of colls.

**bird skin collection specialised in** Indonesia, Japan, Netherlands, E China, Taiwan, Madagascar, Liberia, Tanzania, Kenya, Surinam; over 2,400 types, 37,900 mounts and 41,100 skins of non-passerines, remainder passerines (mainly skins)

**card or computer system present** c.50% of skins on card; only types & extincts on computer

## Leipzig (NKML)

Info from: M. Meyer, 30 Nov 2001

**address** Naturkundemuseum Leipzig, Lortzingstraße 3, D-04105 Leipzig, Germany  
**telephone** #-47-341-982210, **fax** #-47-341-982212

**staff responsible for bird coll.** Dr M. Meyer (curator of vertebrates)

**total staff of bird dept.** 1 (for entire vertebrate coll., see above)

**brief history** Founded 1906 by the Naturwissenschaftliche Vereinigung des Leipziger Lehrervereins, opened 1912; from 1930 owned by Stadt Leipzig

**references to history, collections, or types — important past bird staff** E. Hesse, E. Pöppig, H. H. ter Meer, etc

**important collections come from** H. O. Grimm, W. Gueinzius, R. Schlegel (eggs), E. Weiske

**approx. nr. of bird skins** 6,250 (incl. 2,300 mounts)

**other bird items** 310 (partial) skeletons, 10 in liquid, 5,000 eggs sets

**approx. recent annual increase in skins nil**  
**bird skin collection specialised in** Europe; the exotic birds formerly in the coll. were given to the Dresden Museum in the 1970s, but still includes extinct birds like *Pinguinus*, *Nestor productus*, *Heteralochia*, etc.

**card or computer system present** all on card

## Lille

Info from: Roger Marcel, 27 Dec 1999

**address** Musée d'Histoire Naturelle de Ville de Lille, 19 Rue de Bruxelles, 59000 Lille, France.

**telephone** #-33-(0)3-285530380 **fax** #-33-(0)3-20861482

**staff responsible for bird coll.** Dr Roger Marcel (conservateur universitaire), Bertrand Rodigois (coll. manager)

**total staff of bird dept.** See above

**brief history** Founded in the mid-1850s when the coll. of Degland was obtained by the Lille Municipality; still owned by the Ville de Lille

**references to history, collections, or types**  
Only Degland's catalogue available, printed 1857

**important past bird staff** A. Bart

**important collections come from** C. D.

Degland, coll. Vilmarest-de Cossette

**approx. nr. of bird skins** 11,000 (incl. many mounts)

**other bird items** very few, and without scientific interest

**approx. recent annual increase in skins** c.50, from various sources

**bird skin collection specialised in** Europe (especially France) (c.5,000 birds from the colls. Degland and Vilmarest), also, 6,000 birds from elsewhere in the world, but largely without full locality data

**card or computer system** Degland coll. on card & computer, cataloguing of Vilmarest coll. in prep.



**Linz**

Info from: G. Aubrecht, 6 Dec 1999

**address** Biologie Zentrum des  
Oberösterreichisches Landesmuseums, Johann-  
Wilhelm-Klein-Straße 73, A-4040 Linz-  
Dornach, Österreich/ Austria.

**telephone** #(0)723-759733-57,

**fax** #(0)732-759733-99, **e-mail**

g.aubrecht@landesmuseum-linz.ac.at

**staff responsible for bird coll.** Dr Gerhard  
Aubrecht (zoologist), Mag. Stefan Weigl  
(zoologist, head of taxidermist laboratory),  
Jürgen Plass (coll. manager)

**total staff of bird dept.** see above; also, 1  
taxidermist & 1 secretary

**brief history** Founded 1833 as Museum of  
Upper Austria (a private society), now owned  
by Government of Upper Austria

**references to history, collections, or types**

Kerschner & Schadler (1933), Lindorfer  
(1970), Aubrecht & Mayer (1983), Aubrecht  
(1987, 1995)

**important past bird staff** A. Reischek, T.  
Kerschner, G.Th. Mayer

**important collections come from** A. Reischek  
(but most went to Vienna), T. Angele (1,500  
specimens, incl. coll. A. G. H. Rudatis from  
Natal), G. Wieninger (e.g. Paraguay), J.  
Lindorfer (eggs)

**approx. nr. of bird skins** 8,200 (incl 3,600  
mounts), c.1,000 species

**other bird items** a few skeletons, 160 skulls,  
3,400 egg sets (360 species), 450 nests,  
feathers and pluckings of c.220 birds

**approx. recent annual increase in skins** c.100,  
from local birds skinned by own taxidermist  
and buying of colls.

**bird skin collection specialised in** Upper  
Austria, New Zealand, Natal, Paraguay;  
raptors and owls.

**card or computer system** All until 1990s on  
card; all skins, the Angele coll., and birds  
received since 1990 are on computer (in the  
ZOBODAT system), making geographical  
grouping and plotting on maps easier

**Lisbon/Lisboa (MB)**

Info from: C.Almaça, 03 Apr 1997, updated C.  
Hazevoet, 27 Mar 2002

**address** Museu Bocage, Fac. de Ciências, Rua  
da Escola Politécnica 58, P-1200 Lisboa,  
Portugal

**telephone** #-351-1-3965853 or 604485, **fax** #-  
351-1-3969784, **e-mail** calmaca@fc.ul.pt,  
hazevoet@fc.ul.pt

**staff responsible for bird coll.** Dr Maria da  
Graça Ramalhina (head of vertebrate section),  
Dr Carlos Almaça (director of Museum), Dr C.  
J. Hazevoet (bird dept.)

**total staff of bird dept.** 1 head, 1.5 taxidermist,  
0.5 secretary, 1 other (all for entire vertebr.  
section)

**brief history** Founded in 1772 by Domingos  
Vandelli as Real Museu e Jardim Botânico da  
Ajuda; now belongs to the University of  
Lisboa. A fire destroyed the entire coll. in  
March 1978, but it is now gradually being built  
up again

**references to history, collections, or types**

Before the fire of 1978: Soares (1970, 1971,  
1973, 1977); after the fire: Soares (1983),  
Almaça (1987, 1993, 1994, 1996), Almaça &  
Neves (1987)

**important past bird staff** J. V. Barbosa du  
Bocage, G. F. Sacarrão, A. A. Soares

**important collections come from** several old  
ones, but destroyed by fire (see above)

**approx. nr. of bird skins** 2,500 (at present; see  
above), 250 species

**other bird items** a few eggs and nests

**approx. recent annual increase in skins** 100,  
from local birds skinned by own taxidermist

**bird skin collection specialised in** Originally,  
many birds from Angola, Mozambique,  
Portugal, etc. After the fire, a coll. of birds of  
Portugal is being made again, with some  
additional birds present from Madeira and São  
Tomé

**card or computer system present** All on card  
and computer; the card system for the coll.  
destroyed by fire is still in existence

**Lisbon/Lisboa (CZ/IICT)**

Info from: J. Crawford-Cabral, 07 May 1997

**address** Centro de Zoologia, Instituto de  
Investigação Científica Tropical, Rua da  
Junqueira 14, P-1300 Lisboa, Portugal

**telephone** #-351-1-3637055, **e-mail**

czool@www.iict.pt

**staff responsible for bird coll.** Dr Luis Mendes  
(curator), Pedro Santos (head, higher vertebrate  
colls.), Maria José Teixeira (coll. manager)

**total staff of bird dept.** see above (for entire  
vertebrate section)

**brief history** Founded as Junta das Missões Geográficas e de Investigações Coloniais in 1936, which organised expeditions; to keep the colls., the Centro de Zoologia was founded in 1948; a governmental institution

**references to history, collections, or types** Rosa Pinto (1983), de Naurois (1994 a,b) [books based on the colls. of the CZ/IICT]

**important past bird staff** F. Frade, João Crawford-Cabral

**important collections come from** Missão Científica de S. Tomé (1954–1956), Missão de Estudos Zoológicos do Ultramar (1963–1970), Missão Zoológica da Guiné 1944–1946, Missão Zoológica de Moçambique 1948 & 1955, R. de Naurois, A. A. da Rosa Pinto, G. Stein

**approx. nr. of bird skins** 6,340 (1,120 species)

**other bird items** 250 in alcohol, 110 eggs, a few nests

**approx. recent annual increase in skins** 0

**bird skin collection specialised in** Cape Verde Islands (600 skins, 55 spec.), Guinea Bissau, São Tomé and Príncipe, Mozambique, Goa, Macau, Timor

**card or computer system present** all skins on card system; computerisation planned

## Liverpool (LivCM)

Info from: C. T. Fisher, July 1996

**address** Liverpool Museum, National Museums & Galleries on Merseyside, Dept. of Vertebrate Zoology, William Brown Street, Liverpool L3 8EN, U.K.

**telephone** #-44-151-207-0001, **fax** #-44-151-478-4390

**staff responsible for bird coll.** Dr Clemency T. Fisher (curator of birds & mammals), Tony Parker B. Sc. (ass. curator vertebrates), Dr Malcolm J. Lagen (herpetologist, but occasionally also birds)

**total staff of bird dept.** 3 scientists, 2 taxidermists, 2 others (all partly working on other groups)

**brief history** Founded 1851 when the large and much older private coll. of Lord Stanley (the 13th Earl of Derby) was presented to the City of Liverpool; now funded by the government (formerly by the Merseyside County Council)

**references to history, collections, or types** Wagstaffe (1978), Fisher (1981), Cowper (1984), Lagen & Rogers-Price (1985), Lagen (1987, 1988), Woolfall (1990)

**important past bird staff** T. J. Moore, H. O. Forbes, L. Fraser, E. Lear, H. G. Robinson, R. Wagstaffe, P. J. Morgan

**important collections come from** J. Abbot, T. Ayres, Bates, T. Bridges, W. E. Brooks, W. Buller, W. Bullock coll. (see Vienna/Wien), J. Burke, W. D. Cowan, H. Cuming, W. R. Davison, H. O. Forbes, L. Fraser, W. T. & E. Gerrard, J. Gilbert, J. Gould, J. H. Gurney, G. Henderson, India Mus., W. Jardine, T. C. Jerdon, F. H. Kirby, J. Latham, C. L. & E. L. Layard, J. Leadbeater, J. MacGillivray, L. Mandelli, Mus. Godeffroy, Rev. Inglis, Mus. Leverianum (see Vienna/Wien), E. W. Oates, R. C. L. Perkins, H. Pryer, P. Rendell, G. E. Richards, W. Rowan, H. Salt, O. Salvin, St. Helen's Mus., A. Smith, Lord Stanley (Earl of Derby) coll. (over 20,000 skins), W. Swainson, R. Swinhoe, H. B. Tristram coll. (over 17,000 skins; another 7,000 to Philadelphia), Verreaux, Voy. Beagle, A. R. Wallace, Webster-Harris exp., Whitfield, S. Whitmee, A. Whyte, J. G. Williams

**approx. nr. of bird skins** 48,192, excl. 3,367 mounts (5,700 species)

**other bird items** 700 skeletons, 12,000 egg sets, 180 nests

**approx. recent annual increase in skins** 50, from local birds skinned by own taxidermist, buying of colls., and donations

**bird skin collection specialised in** 'strong in all areas and families'; Tristram coll. especially strong in Middle East, North Africa, Canary Is., Bermuda, eastern USA, Pacific, Japan, etc.

**card or computer system present** All items on card and all on computer (except part of eggs), available in various arrangements (Dbase III)

## Lund (ZMUL)

Info from: L. Cederholm, Aug. 1996

**address** Zoologisk Museum, Universitet fran Lund, Helgonavägen 3, S-22362 Lund, Sweden

**telephone** #-46-46-222-9330, **fax** #-46-46-222-4541, **e-mail** zool@zool.lu.se

**staff responsible for bird coll.** Prof Sven-Axel Bengtson (head of entire museum)

**total staff of bird dept.** 0.5 taxidermist

**brief history** Founded 1735; now part of the University of Lund

**references to history, collections, or types** Löwegren (1968)

**important past bird staff** Sven Nilsson, G. Rudebeck, Yngve Löwegren, Lennart Cederholm

**important collections come from —**

**approx. nr. of bird skins** 20,000

**other bird items** 1,000 skeletons, 800 in alcohol, 2,000 tissue samples, 8,393 egg sets, 400 nests

**approx. recent annual increase in skins** 300–2,000, from local birds skinned by own taxidermist

**bird skin collection specialised in Sweden**

**card or computer system present** all skins and mounts on computer

## Lviv (Lvov)

Info from: Ihor Shydlovskyy, 4 Jan 2000

**address** Benedykt Dybowski Zoological Museum of the Ivan Franko Lviv National University, Hrushevsky Str. 4, 79005 Lviv, Ukraine

**telephone** #-380-(0)322-794 548, **fax** #-, **e-mail** zoomus@frank.lviv.ua, **website** <http://www.carpathian.uar.net/museum/> or <http://ecocarpathian.uar.net/museum/>

**staff responsible for bird coll.** Ihor Shydlovskyy

**total staff of bird dept.** See above (head of entire museum as well as taxidermist); also, staff present of the West-Ukrainian Ornithological Station WUOS

**brief history** Founded 1885, but includes material of the Lvov Cabinet of Natural History, dating from 1823; now part of the University

**references to history, collections, or types** Catalogue of rare and endangered animals: Tsaryk (2000); oological catalogue is in preparation

**important past bird staff** B. I. Dybowski, F. I. Strautman, N. A. Srebrodolska, A. Ulianovsky, Z. I. Pavliv, I. I. Hladunko, I. Gorban

**important collections come from —**

**approx. nr. of bird skins** 3,500 (incl. 1,604 mounts)

**other bird items** 476 egg sets, 55 nests, a few skeletons and spirit specimens

**approx. recent annual increase in skins** 20–25, from own expeditions and local specimens

**bird skin collection specialised in Ukraine**, but also quite a number of exotic species (120 families represented)

**card or computer system present in preparation**

## Madrid (MNCN)

Info from: J. Barreiro, 02 Sep 1996 & 11 Nov 2001

**address** Museo Nacional de Ciencias Naturales (Consejo Superior de Investigaciones Científicas CSIC), José Gutiérrez Abascal, 2, E-28006 Madrid, Spain

**telephone** #-34-91-411-1328, **fax** #-34-91-564-5078, **e-mail** jbarreiro@mncn.csic.es

**staff responsible for bird coll.** Ms Josefina Barreiro (curator of birds and mammals), Dr Eulalia Moreno (researcher Ecología Evolutiva dept.), Dr P. Alberch (general director)

**total staff of bird dept.** 1 coll. manager, 1.5 taxidermist, 0.4 other (for birds and mammals)

**brief history** Founded in 1771 when King Carlos III obtained the colls. of Pedro Franco Dávila; now part of the Vicedirección de Colecciones y Documentación de CSIC, a governmental organisation

**references to history, collections, or types** Barreiro (1997), Barreiro & Pérez del Val (1998)

**important past bird staff** A. Gil Lletget, F. Bernis

**important collections come from** A. Boucard, P. Franco Dávila (obt. 1771; no birds left now), Exped. Pacífico 1862–1866

**approx. nr. of bird skins** 19,000 (1,000 species)

**other bird items** 6,000 skeletons, 1,900 in alcohol, 1,500 egg sets, 235 nests

**approx. recent annual increase in skins** 200 (mainly to skeleton or alcohol coll.), from local birds skinned by own taxidermist and donations

**bird skin collection specialised in Spain** (9,300 skins), Morocco (965), C & S America (4,452: esp Chile, Colombia, Mexico, Ecuador, Brazil, Guatemala, Cuba, Panama, Peru), Philippines (524), Eq. Guinea (503), Zaire (462), Japan (281), China (247), Indonesia (151), India (132), Australia (116); Trochilidae (1,749), Accipitridae (1,480), Emberizidae (1,318), etc. 2 types. Most birds from 1880–1930

**card or computer system present** part of skins on card system, all on computer

**Magdeburg (MfNM)**

Info from: H. Pellmann, 28 Nov 2001

**address** Museum für Naturkunde Otto-von-Guerickestraße 68-73, D-39104 Magdeburg, Germany.

**telephone** #-49-391-5403501

**staff responsible for bird coll.** Dr Hans Pellmann (for all vertebrates)

**total staff of bird dept.** 1 (see above)

**brief history** Founded 1874; owned by the city of Magdeburg

**references to history, collections, or types** Krüger (1925) (history, catalogue)

**important past bird staff** —

**important collections come from** —

**approx. nr. of bird skins** 6,200

**other bird items** 1,200 egg sets

**approx. recent annual increase in skins** 10–50

**bird skin collection specialised in** Magdeburg and surrounding state of Sachsen-Anhalt; also from elsewhere in Germany, as well as various Palearctic and exotic birds

**card or computer system present** All on card; catalogue in preparation

**Manchester (MANCH)**

Info from: M. Hounscome, 03 Apr 1997

**address** The Manchester Museum, University of Manchester, Oxford Road, Manchester M13 9PL, U.K.

**telephone** #-44-161-275-2673, **fax** #-44-161-275-2676, **e-mail** m.hounscome@man.ac.uk

**staff responsible for bird coll.** Dr Michael V. Hounscome (Keeper of Zoology)

**total staff of bird dept.** 1 head, 1 part-time technician, 2 volunteers

**brief history** Founded in 1821 by the Manchester Society of Natural History, now owned by the University of Manchester

**references to history, collections, or types** For catalogue, see Internet page

**important past bird staff** R. B. Sharpe, H. E. Dresser, Coward

**important collections come from** H. E. Dresser coll. (15,000 birds, obtained 1896, and many eggs, obtained 1906)

**approx. nr. of bird skins** 16,500, incl. 400 mounts (3,500 species)

**other bird items** 100s of skeletons, 50 in alcohol, 10,000 egg sets ( of 3,000 species), 50 nests

**approx. recent annual increase in skins** 50, from local birds skinned by own taxidermist, own expeditions, buying of colls., and donations

**bird skin collection specialised in** 'worldwide, but especially Palearctic; all families'

**card or computer system present** part of skins on card, all on computer, available at web page: see <http://www.man.ac.uk/museum>

**Milan/Milano (MSNM)**

Info from: G. Chiozzi, 11 May 1995, updated 13 Nov 1999

**address** Museo Civico di Storia Naturale, Corso Venezia, 55, I-20121 Milano, Italy

**telephone** #-39-02-781312, **fax** #-39-02-7602-2287, **e-mail** giorgio\_chiozzi@hotmail.com

**staff responsible for bird coll.** Dr Giorgio Chiozzi (head), Dr Luigi Cagnolaro (head dept. vertebr. zool.)

**total staff of bird dept.** 0.1 head, 1 coll. manager, 1 taxidermist

**brief history** Founded in 1831 by G. De Cristoforis & G. Jan, but only a few birds were included until 1884; part of coll. destroyed in 1943; owned by the Municipality of Milano

**references to history, collections, or types** Violani *et al.* (1984), Violani (1985), Chiozzi (1993)

**important past bird staff** Edgardo Moltoni

**important collections come from** L.

D'Albertis, O. Beccari, A. A. Bruijn, Emin Pasha, J. Hildebrandt, L. Laglaize, Capt. Loche, A. Malherbe, H. Möschler, A. B. Meyer, T. Salvadori, G. Scortecchi, Count E. Turati private coll. (20,661 skins, 700 skeletons, 3,000 eggs), Maison Verreaux

**approx. nr. of bird skins** 34,000

**other bird items** 126 skeletons, 1,000 skulls & keels, 2,500 eggs

**approx. recent annual increase in skins** 100, purchased from private taxidermists

**bird skin collection specialised in** Italy, Palearctic, Algeria, NE Africa, Comoros, Madagascar, S America; Charadriiformes, Picidae, Trochilidae, Paradisaeidae, Passeriformes. Includes 124 skins of extinct and endangered birds

**card or computer system present** small parts of the coll. on card and computer

**Moscow/Moskva (ZMMU)**

Info from: P. Tomkovich, 15 Mar 1995, updated by M. Kalyakin, 26 Jan 2000 & 11 Nov 2001

**address** Zoological Museum, Orn. dept., Moscow Lomonosov State University (Zoologicheskii Muzei MGU), Bolshaya Nikitskaya Str. 6, 103009 Moscow (Moskva), Russia

**telephone** #-7-95-203-4366,

**fax** #-7-95-203-2717, **e-mail**

tomkovic@l.zoomus.bio.msu.ru,  
kalyakin@rambler.ru

**staff responsible for bird coll.** Dr Pavel Tomkovich (head), Dr Eugene A. Koblik (specialised in Emberizidae and fauna of former USSR), Dr Mikhail V. Kalyakin (specialised in Sylviidae, Pycnonotidae, anatomy, and fauna of Vietnam)

**total staff of bird dept.** 1 head, 2 scientific coll. managers, 2 taxidermists

**brief history** Restarted in 1812 by J. G. Fischer von Waldheim after a fire had destroyed the older museum in the Napoleonic War; part of Moscow State University

**references to history, collections, or types** Bogdanov (1892), Turov (1956), Sudilovskaya (1959, 1962, 1972, 1977), Tomkovich & Barisheva (1987), Rossolimo (1991)

**important past bird staff** J. G. Fischer von Waldheim, M. N. Bogdanov, M. A. Menzbier, S. A. Buturlin, S. I. Ognev, G. P. Dementiev, N. A. Gladkov, S. M. Uspenskii, E. P. Spangenberg, A. M. Sudilovskaya, S. S. Turov

**important collections were obtained from or presented by** V. N. Bostanzhogo (Bostanjolo), P. G. Demidov, V. E. Flint, V. E. Fomin, V. A. Khakhlov, A. P. Kuzyakin, G. Baron von Langsdorf, V. V. Morozov, G. I. Polyakov, N. A. Severtzov, S. S. Turov

**approx. nr. of bird skins** 117,000 (1,500 species)

**other bird items** 2,000 skeletons, 3,000 in alcohol (500 species), 8,500 egg sets (often with the nests) (600 species)

**approx. recent annual increase in coll.** 500–600 items (skins, egg sets, etc), from expeditions, donations, and local birds skinned by own taxidermist

**bird skin collection specialised in** Former Soviet Union (especially the NE), Mongolia, N & W China, Vietnam, Brazil, Japan, USA; birds of prey, waders, gulls, owls, passerines (e.g. Paridae); 300 types

**card or computer system present** all skins and most egg sets & nests on card, only types on computer

**Moscow/Moskva (SDM)**

Info from: E. Nesterov, 16 Jul 1996

**address** Darwin Museum, Vavilova Street 57, 117292 Moskva, Russia

**telephone & fax** #-7-95-135-33-76, **e-mail** jennest@darwin.museum.ru

**staff responsible for bird coll.** Dr Eugene V. Nesterov (head), Igor V. Fadeev (curator)

**total staff of bird dept.** 1 head, 1 curator, 1 secretary

**brief history** Founded in 1907 by Prof. A. F. Koths; government-owned

**references to history, collections, or types** Fadeev (1999)

**important past bird staff** —

**important collections come from** G. P.

Dementiev, M. N. Divnogorskii, V. A.

Khakhlov, A. M. Khomyakov, A. P. Kuzyakin,

F. K. Lorentz, M. A. Menzbier, E. P.

Spangenberg, P. P. Sushkin

**approx. nr. of bird skins** 11,000 (1,500 species)

**other bird items** 50 skeletons, 1,000 egg sets, 150 nests

**approx. recent annual increase in skins** 150, from local birds skinned by own taxidermist, expeditions, donations, and from zoos & customs

**bird skin collection specialised in** worldwide; all families, especially Tetraonidae, Anatidae, Trochilidae; incl. *Pinguinus impennis* & *Ectopistes migratorius*

**card or computer system present** all skins on card and computer

**Moscow/Moskva****(PIN RAS)**

Info from: Y. Kurochkin, 10 Feb 2000

**address** Laboratory of Paleoherpetology and Paleo-ornithology, Institute of Paleontology, Russian Academy of Sciences, 123

Profsovnaya Street, 117868 Moscow GSP-7, Russia

**telephone** #-7-95-339-6988, **fax** #-7-95-339-1266, **e-mail** enkur@paleo.ru

**staff responsible for bird coll.** Dr Yevgeny N. Kurochkin (head), Dr Aleksandr Karhu

**total staff of bird dept.** See above.



**brief history** Founded 1962 by the Russian Academy of Sciences

**references to history, collections, or types** none (but see Wood *et al.* 1982)

**important past bird staff** —

**important collections come from** —

**approx. nr. of bird skins** none, but 5,000 bird skeletons (1,500 species)

**other bird items** 70 in alcohol

**approx. recent annual increase in skeleton coll.** 100, from own expeditions and zoo specimens

**bird collection specialised in** skeletons

**card or computer system present** all skeletons on card, part on computer

## Munich/München (ZSM)

Info from: J. H. Reichholf, 07 Apr 1997, some add. F. Steinheimer, Aug 2002

**address** Zoologische Staatssammlung, Münchhausenstrasse 21, D-81247 München, Germany

**telephone & fax** #-49-89-8107-123 (81070: general)

**staff responsible for bird coll.** Prof Dr Josef H. Reichholf (head of bird department), Ms Ruth Diesener (ass.)

**total staff of bird dept.** 1 head, 1 technical assist., 1 taxidermist

**brief history** Founded in 1759 as private coll. of Kurfürst Maximilian III Joseph von Bayern, but real growth only after arrival of von Spix in 1807, and again, after a 60-year gap in bird activity, with C. E. Hellmayr in 1903; now belongs to the Bayern government

**references to history, collections, or types** Hellmayr (1928), Reichholf (1983)

**important past bird staff** J. B. von Spix, J. Wagler, A. Wagner, F. Doflein, K. Parrot, H. Sachtleben, E. Zugmayer, C. Hellmayr, C. Zimmer, A. Laubmann, G. Diesselhorst

**important collections come from** G. von Almásy, T. Andersen, Princes Therese von Bayern, Canesi, Comte R. de Dalmas, K. Deniger, H. Dürck, Exp. Filchner, A. Fischer, J. Gengler, J. von Haast, K. Haberer, J. Haffer, B. Hagen, J. C. van Hasselt, Haverschmidt, Keerl, S. M. Klages, K. L. Koch, H. Krieg, H. Kuhl, Kunkel, priv. coll. A. Laubmann (6,000 skins), M. von Leuchtenberg, F. Leybold, L. Martin, G. Merzbacher, K. Michahellis, L. Müller, J. Natterer, O. Neumann, Neunteufel, M. W.

Palmer, Popp, M. Prager, G. Radde, J. Riedel, A., H. & R. Schlagintweit, R. Schlegel, W. Schlüter, J. von Seilern, Ph. F. von Siebold, Lt. Sommerfeld, E. Stechow, E. Stresemann, J. H. C. F. & J. W. Sturm, O. Tauern, R. von Thanner, V. von Tschusi, H. & C. Watkins, H. Weigold, L. von Wiedenfeld

**approx. nr. of bird skins** 60,000 (6,000 species)

**other bird items** almost nil

**approx. recent annual increase in skins** 50, from local birds skinned by own taxidermist, donations, customs, etc.

**bird skin collection specialised in** Germany (Bavaria, Pfalz), Corsica, Lithuania, Hungary, Macedonia, Asia Minor, Iraq, Caucasus area, C. Asia (W. Tibet, Tien Shan, Baluchistan, Nepal), Sri Lanka, E. China, Japan, Kuril Is, Indonesia (e.g. Sumatra, Bangka, Timor, Buru, Misol), NE New Guinea, Senegambia, Tanzania, Mexico, Galapagos, South America (Colombia, Venezuela, Trinidad, Brazil, Peru), etc.; over 400 types

**card or computer system present** part of skins on card, none on computer

## Münster (WMN)

Info from: H. Terlutter, 30 Nov. 2001

**address** Westfälisches Museum für Naturkunde, Sentruper Straße 285, D-48149 Münster, Germany

**telephone** #-49-251-5916014, **e-mail** h.terlutter@lw1.org

**staff responsible for bird coll.** Dr Heinrich Terlutter

**total staff of bird dept.** 1

**brief history** Founded 1872 by Bernard Altum, F. von Droste-Hülshoff, and H. Landois, opened 1874, considerably enlarged in 1891 and after the arrival of Rensch in 1937; owned by Landschaftsverband Westfalen-Lippe

**references to history, collections, or types** Franzisket (1967)

**important past bird staff** F. von Droste-Hülshoff, H. Landois, R. Koch, H. Reeker, H. Reichling, B. Rensch, L. Franzisket

**important collections come from** L. zu Salm-Salm, A. Tenckhoff (eggs)

**approx. nr. of bird skins** 6,000

**other bird items** 20 (partial) skeletons, 600 egg sets, 100 nests

**approx. recent annual increase in skins** 100

**bird skin collection specialised in NW**

Germany

**card or computer system present** In preparation**Nantes (MHNNT)**

Info from: François Meurgey, 29 Jan 2002

**address** Muséum d'Histoire Naturelle de Nantes, 12 rue Voltaire, F-44000 Nantes, France**telephone** #33-2-40-992620/ 992627, **fax** #33-2-40-51840191, **e-mail**

François.Meurgey@mairie-nantes.fr

**staff responsible for bird coll.** Dr François Meurgey**total staff of bird dept.** —**brief history** Founded nineteenth century; belongs to municipality of Nantes**references to history, collections, or types** Marchand & Kowalski (1903), Durand (1961), Recorbet (1991)**important past bird staff** Louis Bureau, J. Kowalski**important collections come from** Blandin, Bonjour, Vian**approx. nr. of bird skins** 22,100**other bird items** 108 (partial) skeletons, 8,757 egg sets, 365 feather sets, 124 nests**approx. recent annual increase in skins** fewer than 10**bird skin collection specialised in** W France, but also birds from elsewhere in Europe and from Africa and Asia.**card or computer system present** All on computer (Taurus database)**Neuchâtel (MHNNL)**

Info from: B. Mulhauser, 26 Nov 2001

**address** Muséum d'Histoire Naturelle de Neuchâtel, Rue des Terreaux 14, CH-2000 Neuchâtel, Switzerland**tel.** #41-32-7177960, **fax** #41-32-7177969, **e-mail** blaise.mulhauser@mhnn.unine.ch**staff responsible for bird coll.** Dr Blaise Mulhauser (curator of all vertebrates)**total staff of bird dept.** 1 (see above)**brief history** Founded 1835, but based on older coll. of C. D. de Meuron presented to the city in 1795); owned by the city of Neuchâtel**references to history, collections, or types**

Dufour &amp; Haenni (1985) (history), Desfayes (1994) (data on 91 types of Tschudi from Peru)

**important past bird staff** L. Coulon, P. Godet, Louis Agassiz, M. Desfayes**important collections come from** J. J. von Tschudi, A. Mathey-Dupraz, F. Gehringer, S. Robert (eggs),**approx. nr. of bird skins** 10,000 (3,200 species)**other bird items** 200 (partial) skeletons, 6,000 eggs, 200 nests**approx. recent annual increase in skins** 30**bird skin collection specialised in** Switzerland, Europe generally, N USA (Agassiz), C & S America (esp. Peru: Tschudi), Australia; incl. 91 types and 24 paratypes from Tschudi and c.13 types from other authors**card or computer system present** —**Newcastle (NEWHM)**

Info from: L. Jessop, 07 Apr 1997

**address** The Hancock Museum, Barras Bridge, Newcastle upon Tyne, Tyne & Wear NE2 4PT, U.K.**telephone** #44-191-222-7418, **fax** #44-191-222-6753, **e-mail** hancock.museum@ncl.ac.uk**staff responsible for bird coll.** A. Coles (curator of entire biology and geology coll.), L. Jessop (keeper of biology [incl. birds]), E. Morton (ass. keeper biology)**total staff of bird dept.** Fewer than 1; see above (no one specifically dedicated to bird coll. only)**brief history** Founded c.1760–1770 as private coll. of Marmaduke Tunstall; coll. went to Newcastle in 1822, and belongs to the Natural History Society of Northumbria since the latter was founded in 1829**references to history, collections, or types** Howse (1899)**important past bird staff** John Hancock, Thomas Bewick**important collections come from** Herb. Stevens**approx. nr. of bird skins** 12,000, incl. 2,000 mounts**other bird items** 200 skeletons, 10 in alcohol, 10,000 egg sets, 1,000 nests**approx. recent annual increase in skins** 10, from own taxidermy**bird skin collection specialised in** Great Britain; India (Stevens coll., 4,050 skins, received 1965); also, some types and 8 extinct or endangered birds (catalogue of rarer birds in prep.)

**card or computer system present** all skins on computer; mounts not catalogued

### Oslo (ZMUO)

Info from: J. Lifjeld, 12 Nov 1999

**address** Zoologisk Museum, Sars gate 1, N-

0562 Oslo, Norway

**telephone** #-47-22851726, **fax** #-47-22851837,

**e-mail** j.t.lifjeld@toyen.uio.no

**staff responsible for bird coll.** Dr Jan T. Lifjeld

**total staff of bird dept.** 2

**brief history** —

**references to history, collections, or types** Ore & Høeg (1961) (history)

**important past bird staff** R. Collett, Edvard K.

Barth, R. Vik, Gunnar Lid, T. Slagsvold

**important collections come from** A. Bernoft-

Osa, Y. Hagen, C. Lumholtz, Ø. Olsen, H. T. L.

Schaanning, J. Koren, J. Thome

**approx. nr. of bird skins** 25,000, incl. 2,000–4,000 mounts

**other bird items** 1,000 skeletons, 500 in spirit, 6,500 egg sets, 5,000 tissue samples

**approx. recent annual increase in skins** 50–100

**bird skin collection specialised in** Norway,

Australia, Borneo, Antarctica, Siberia,

Svalbard, Tristan da Cunha

**card or computer system present** Skins, eggs, and tissue samples on computer

### Oxford (OUM)

Info from: J. Pickering, 1996

**address** Zoological Collections, Oxford

University Museum, Parks Road, Oxford OX1 3PW, U.K.

**telephone** #-44-1865-272950, **fax** #-44-1865-272970

**staff responsible for bird coll.** Dr Tom Kemp

(curator of the zoological colls.), Jane

Pickering M.Sc. (assistant curator of birds)

**total staff of bird dept.** 0.5 head, 1 ass. curator, 1 technician

**brief history** Founded in 1683 as private coll. of

J. Tradescant when the Ashmole coll. arrived in Oxford; coll. came to Oxford University in

1860

**references to history, collections, or types**

Davies & Hull (1976, 1983)

**important past bird staff** 'many'

**important collections come from** O. V. Aplin,

Sir John Barrow, W. J. Burchell, C. & E. Hose,

F. P. Pascoe, H. S. Rohu, S. W. Silver, R. H.

Thomas, W. H. Treacher, C. M. N. White

**approx. nr. of bird skins** 19,000 ('many species')

**other bird items** 1,500 skeletons, 500 in

alcohol, 2,000 egg sets

**approx. recent annual increase in skins** 20, from donations

**bird skin collection specialised in** Britain,

South Africa, Borneo, Sulawesi, New Guinea,

Ecuador, Brazil, Arctic, New Zealand

**card or computer system present** all skins on card, none on computer

### Paris (MNHN)

Info from: E. Pasquet, 07 May 1997, updated 14 Nov 1999

**address** Muséum National d'Histoire Naturelle,

Laboratoire de Zoologie, dep Mammifères et

Oiseaux, 55 Rue de Buffon, F-75005 Paris, France

**telephone** #-33-1-40793062, **fax** #-33-1-

40973063, **e-mail** pasquet@mnhn.fr,

lefevre@mnhn.fr

**staff responsible for bird coll.** Eric Pasquet

(curator of bird coll.), Christine Lefevre

(curator of skeletons), Géraldine Veron, C.

Voisin, J.-F. Voisin, C. Jouanin (volunteer associate)

**total staff of bird dept.** See above; also 1 technician, 1 taxidermist, 1 secretary (for Dept. of Birds & Mammals), 1 librarian (for entire Zoology Lab.)

**brief history** Founded in 1793, when the older

colls. of Réaumur, Brisson, and the Cabinet du

Roi went to the Muséum d'Histoire Naturelle;

owned by the French government

**references to history, collections, or types**

Berlioz (1929, 1935, 1950), Jouanin (1951,

1962), Voisin (1992, 1993, 1995)

**important past bird staff** G.-L. Buffon, F.

Cuvier, J. Verreaux, R. P. Lesson, E. & I.

Geoffroy de St Hilaire, A. Milne-Edwards, E.

Oustalet, A. Ménégau, J. Berlioz, R. D.

Ethécopar, J. Dorst, F. Roux

**important collections come from** G. Babault,

N. Baudin, J. A. Bernier, G. Bonvalot, A.

Boucard, J. Bourcier, Maison Bouvier, W.

Bullock coll./Mus. Leverianum (see Vienna/

Wien), M. J. Brisson, A. A. Bruijn, Pèrre

Armand David, A. David-Beaulieu, Jean

Delacour, P. A. Delalande, P. M. Diard, L.

Dufresne, J. Dumont d'Urville, L. Duperrey,

Maison Dupont, A. Duvaucel, P. Engelbach, L. Freycinet, J. P. Gaimard, P. Garnot, J. B. Hombron, P. Jabouille, C. & H. Jacquinot, Baron Meiffren Laugier, J. Leschenault de la Tour, F. Levailant, Marche, R. Maugé de Cely, H. Möschler, R. de Naurois, A. Néboux, Prince Henri d'Orléans, Maison Parzudaki, F. Péron, Maison Petit, A. A. du Petit-Thouars, F. Prévost, J. Pucheran, J. R. C. Quoy, R. H. Schomburgk, Maison Verreaux, L. P. Vieillot, Voy. Astrolabe, Voy. Astrolabe & Zélée, Voy. Coquille, Voy. Géographe, Voy. Naturaliste, Voy. Urania, Voy. Vénus, K. Y. Yen

**approx. nr. of bird skins** 161,000, incl. c.30,000 mounts (6,755 species: c.75% of all bird species)

**other bird items** 8,000 skeletons, c.2,000 birds in spirits, 300+ tissue samples, 5,000 egg sets, many nests

**approx. recent annual increase in skins** below 100, from local birds skinned by own taxidermist and own expeditions (few at present)

**bird skin collection specialised in** worldwide, but especially Afrotropics, Madagascar, China, SE Asia, Indonesia, Australia, Pacific islands, (sub)antarctic islands, C & S America; c.2,620 types, many extinct and endangered birds; 8,500 skins from France

**card or computer system present** types, skeletons, and bird skins from France on computer

## Pisa (MSNTP)

Info from: M. Zuffi, 19 Nov 2001

**address** Museo di Storia Naturale e del Territorio, Università di Pisa, Via Roma 79, I-56011 Calci (Pisa), Italy

**telephone** #-39-50-937092, **fax** #-39-50-937778, **e-mail** marcoz@museo.unipi.it

**staff responsible for bird coll.** Marco A. L. Zuffi (Curator of Zoology and Comparative Anatomy of non-mammal vertebrates)

**total staff of bird dept** See above

**brief history** Founded about 1750, now belongs to the University of Pisa

**references to history, collections, or types** Savi (1927–1929) (on Savi coll.), Secone & Zuffi (1996) (catalogue of nests and eggs)

**important past bird staff** Paolo Savi

**important collections come from** An anonymous person from Lucca (donated many local birds in early 1900s)

**approx. nr. of bird skins** 10,000 (incl c.9,000 mounts)

**other bird items** 275 (partial) skeletons, 50 in alcohol, 1,100 eggs, 800 nests, 450 anatomical preparations

**approx. recent annual increase in skins** 15–20  
**bird skin collection specialised in** Italy, esp. Pisa area and Toscana region generally (e.g. the Savi coll., containing the types of several well-known European taxa, but Savi material is partly lost); also the Americas, C & S Africa, Middle East, SE Asia, Australia, with birds of virtually all families, incl. extinct birds like *Fregilupus varius* and *Pinguinus impennis*  
**card or computer system present** 3,500 birds on card and computer

## Prague/Praha (MNHP or NM Praha)

Info from: Pavel Janda, 21 Jan 2000

**address** Národní Muzeum, Zoologické oddelení, Václavské náměstí 68, CZ-11579 Praha 1, Czech Republic

**telephone** #-42-2-2449 7224, **fax** #-42-2-2422 6488, **e-mail** milos.andera@nm.cz (Milos Andera, head of zool dept)

**staff responsible for bird coll.** Pavel Janda (coll. manager), Pavel Kameník (assistant)

**total staff of bird dept** See above

**brief history** Founded 1818, owned by the government

**references to history, collections, or types** Varga (1973), Stepanek (1975) (history)

**important past bird staff** Antonín Fric, Jan Hanzák, Jan Hora, Frantisek Pojer

**important collections come from** C. von Feldegg, J. V. Voboril, E. Holub, Duke L. von Habsburg, K. Knezourek, A. Horice, J. Musilek, J. von Seilern, K. Plachetka, B. K. Kinsky, J. Jirsik, F. Hromadka, F. Mocek, M. Vach, J. Urbanek, R. Prazny

**approx. nr. of bird skins** 22,000 skins

**other bird items** 120 skeletons, 900 sternums, 4,400 egg sets; head and bones of a Dodo *Raphus cucullatus*, adult & juvenile of *Pinguinus impennis*, pair of *Camptorhynchus labradorius*, etc

**approx. recent annual increase in skins** 10, from local birds and zoo specimens skinned by own taxidermist

**bird skin collection specialised in** Bohemia, Balkan, E Siberia, South & North America, South Africa, New Guinea; Trochilidae (10,000 skins)

**card or computer system present** most on card, part of the mounts on computer

### Prerov (MOSPPrerov)

info from: Frantisek Hanak, 8 Dec 1999

**address** Muzeum J. A. Komenského, Moravská ornitologická stanice, Horní náměstí 1, 751 52 Prerov, Czech Republic

**telephone** #-420-641-219910

**staff responsible for bird coll.** Frantisek Hanák (head), Jiljí Sitko (helminthology of birds)

**total staff of bird dept.** 1 head, 2 coll. managers, 1 taxidermist, 1 librarian, 1 other

**brief history** Founded in 1970, owned by the government

**references to history, collections, or types**

Hanak (1991), Sitko (1986, 1991, 1996); also *Zprávy MOS* 37 (1979): 9-35

**important past bird staff** Frantisek Hejl

**important collections come from** F. Hejl, L. Holub, Zdenek Kluz, O. Lipecky, J. Rehurek, V. Sajdl, V. Tichy, Jirí Toufar (eggs), Z. Verbis, E. S. Vráz

**approx. nr. of bird skins** 6,100 (393 species) skins remaining after flooding of coll. in Jul 1997

**other bird items** 1,700 sternums (110 species), 3,060 egg sets (12,665 eggs, of 181 species), 14,000 trematodes of birds

**approx. recent annual increase in skins** 100, from own expeditions, donations, and local birds skinned by own taxidermist

**bird skin collection specialised in** Moravia, Czech Republic generally; also, 463 exotic birds (330 species).

**note** The floods of July 1997 destroyed part of the original skin series and 50% of the books and journals.

**card or computer system present** All on card, part on computer

### Reykjavik (IMNH /NHMR)

Info from: Æ. Petersen, 02 Aug 1996

**address** Icelandic Institute of Natural History (Náttúrufræðistafnun Islands, formerly Icelandic Museum of Natural History), P.O. Box 5320, IS-125 Reykjavik, Iceland (visitors address: Hlemmur 3)

**telephone** #-354-56-29822, **fax** #-354-56-

20815, **e-mail** ni@natffs.is, or: aevar@natffs.is

**staff responsible for bird coll.** Dr Ævar Petersen

**total staff of bird dept.** 1 head, 1 taxidermist, c.1 other (various part-time helpers)

**brief history** Founded in 1889 by the Icelandic Natural History Society; to Iceland government from 1947

**references to history, collections, or types** Petersen (1984)

**important past bird staff** Finnur Gudmundsson

**important collections come from** —

**approx. nr. of bird skins** 14,000 (450 species)

**other bird items** 1,500 skeletons, 100 in alcohol, 2,600 egg sets, 650 nests

**approx. recent annual increase in skins** 200, from local birds skinned by own taxidermist, own expeditions, and donations

**bird skin collection specialised in** Iceland; Greenland, Faeroes

**card or computer system present** 90% of skins on card and computer (these almost all Icelandic birds, but not rechecked yet to coll.)

### Rome/Roma (MZGZ)

(questionnaire not returned; some info from C. Violani, 14 Nov 1999 & N. Baccetti 6 Apr 2000)

**address** Museo Civico di Zoologia di Roma, Via Aldrovandi 18, I-00197 Roma, Italy

**telephone and fax** #-39-6-3216586, **e-mail**

**staff responsible for bird coll.** R. Carlini

(head), B. Cignini

**total staff of bird dept.** 1 head, 2 taxidermists

**brief history** ?

**references to history, collections, or types**

Arrigoni degli Oddi (1929), Foschi *et al.* (1995, 1996)

**important past bird staff** A. Carruccio

**important collections come from** E. Arrigoni degli Oddi (10,373 skins), Antinori, F. Chigi della Rovere, M. Blanc, G. von Burg, Collett, Dal Nero, Lepri, Loria, G. B. Dinesen, Farren, Gallardo, M. Härms, Melloni, A. Owston, D. Rossi, W. Schlüter, R. Baron Snouckaert van Schauburg, R. von Thanner, V. von Tschusi, Mus. Zagreb

**approx. nr. of bird skins** 15,000

**other bird items** ?

**approx. recent annual increase in skins** ?

**bird skin collection specialised in** Italy (esp.

Veneto and Sardinia), Europe, Tunisia, Borneo, New Guinea

**card or computer system present** the Arrigoni coll. is catalogued on computer



**note** A small coll. of 306 mounted birds, largely from Lazio with some from the remainder of Italy and 4 from abroad is owned by Prince Ruspoli, in the Palazzo Ruspoli di Cervetari in Roma (*Avocetta* 25: 153).

## Rotterdam (NMR)

Info from: Kees Moeliker, 16 Oct 1999

**address** Natuurmuseum Rotterdam, Westzeedijk 345 (Museumpark), 3015 AA Rotterdam/POBox 23452, 3001 KL Rotterdam, Nederland.

**telephone** #-31-10-4364 222, **fax** #31-10-4364 399, **e-mail** moeliker@nmr.nl.

**staff responsible for bird coll.** Drs C. W. ('Kees') Moeliker (curator, also for other animals)

**total staff of bird dept.** C. W. Moeliker, Dr C. J. Heij (honorary curator), Dr E. J. O. Kompanje (honorary curator)

**brief history** Founded 1920; owned by a society, the Vereniging Natuurmuseum Rotterdam

**references to history, collections, or types** none

**important past bird staff** C. Eykman

**important collections come from** Coll. of the Rotterdam Zoological Garden, received in 1939, containing many important historical specimens from the Netherlands

**approx. nr. of bird skins** 2,200 (including 1,200 mounts) (c.350 species)

**other bird items** 5,000 skeletons & skulls (300 species), 300 birds in alcohol, 500 egg sets, 50 buffered tissue samples

**approx. recent annual increase in skin/skeleton coll.** 250, from donations, exchanges, and local birds skinned by own taxidermist

**bird skin collection specialised in Europe** (especially the Netherlands), a few Indonesia; skeletons of Laridae

**card or computer system present** 50% on card, 10% on computer

## Sarajevo

Info from: Svjetoslav Obratil & Denana Buturovic, 30 Dec 1999

**address** Zemaljski Muzej Bosne i Hercegovina Sarajevo (National Museum of Bosnia and Herzegovina), Zmaja od Bosne 3, BiH-71000 Sarajevo, Bosna i Hercegovina

**telephone** #-387-71-668025 **fax** #-387-71-668027

**staff responsible for bird coll.** Dr Svjetoslav Obratil (curator of birds), Dr Drazen Kotrosan (bird scientist), Zuza Borivoje (bird taxidermist), Dr Denana Buturovic (director of entire museum)

**total staff of bird dept.** See above

**brief history** Founded as Landesmuseum für Bosnien-Hercegowina in 1888, with Otmar Reiser as first director (to 1914). Now owned by the Sarajevo Canton of the Federation of Bosnia and Herzegovina

**references to history, collections, or types** Reiser (1891)

**important past bird staff** Otmar Reiser, C. Floericke, L. von Führer, K. Schilling von Canstatt, Dr Sijaric

**important collections come from** Reiser's coll. of c.9,500 Balkan skins

**approx. nr. of bird skins** 10,234 (incl. 1,255 mounts) (over 400 species)

**other bird items** 4,112 eggs (neglected since arrival in 1892), 90 nests

**approx. recent annual increase in skins ?**

**bird skin collection specialised in** Balkan countries and Greece; 696 exotic species

**card or computer system present** none, only inventory books

## Sevenoaks (HZM)

Info from: Paul Bates, 02 Apr 1997

**address** The Harrison Zoological Museum, Bowerwood House, St Botolph's Road, Sevenoaks, Kent TN13 3AQ, England

**telephone & fax** #-44-1732-742446, **e-mail** hzm@btinternet.com

**staff responsible for bird coll.** Dr Paul Bates

**total staff of bird dept.** 1 part-time coll. manager (for entire coll., not for birds only)

**brief history** Founded in 1920 as the private coll. of James M. Harrison; now a private charitable trust

**references to history, collections, or types** none [but, e.g. Harrison (1953) was based on coll.]

**important past bird staff** James M. Harrison, Jeffery Harrison, David Harrison

**important collections come from** large private colls. of W. Payne and C. B. Ticehurst; also, skins of E. Flükiger, K. Kobayashi, P. Patev (Pateff), etc

**approx. nr. of bird skins** 19,500

**other bird items** a few skeletons, nothing else

**approx. recent annual increase in skins** 2,  
local birds

**bird skin collection specialised in** Palearctic;  
emphasis on ducks, waders, and passerines

**card or computer system present** all on card  
system and on computer

## Seville/Sevilla (EBD)

Info from: J. Cabot Nieves, 08 Aug 1996

**address** Estación Biológica de Doñana, Consejo Superior de Investigaciones Científicas (CSIC), Aptdo 1056, E-41080 Sevilla, Spain (visitors address: Avda. Maria Luisa s/n.

Pabellon del Perú, E-41013 Sevilla)

**telephone** #-34-95-4232340 (or -8, -9), **fax** #-34-95-4621125

**staff responsible for bird coll.** Dr José (Pepe) Cabot Nieves

**total staff of bird dept.** 1 head, 3 coll. managers, 2 taxidermists

**brief history** Founded in 1970 by Dr J. A.

Valverde; now managed by the Consejo Superior de Investigaciones Científicas (CSIC)

**references to history, collections, or types** Cabot Nieves (1992)

**important past bird staff** J. A. Valverde

**important collections come from** Dr Castroviejo, Dr M. Delibes

**approx. nr. of bird skins** 22,000 (1,574 species)

**other bird items** 1,000 skeletons, 575 in alcohol, 1,344 egg sets

**approx. recent annual increase in skins** 1,000, from local birds skinned by own taxidermist and expeditions

**bird skin collection specialised in** Spain, Portugal, Morocco, Algeria, Western Sahara, Gabon, Equatorial Guinea, São Tomé, Príncipe, Philippines, Mexico, Nicaragua, Venezuela, Bolivia, Chile, Paraguay, Argentina

**card or computer system present** all skins in catalogue book, c.75% on computer

## Sibiu (MBS)

Info from: Doru Banaduc, 10 Dec 2001

**address** Muzeul Brukenthal – Muzeul de Istorie Naturala, 1 Cetatii Street, RO-2400 Sibiu, Romania

**telephone** #-40-69-436868/ 09-2604338, **e-mail** banaduc@yahoo.com

**staff responsible for bird coll.** Dr Doru Banaduc (curator for all vertebrates)

**total staff of bird dept.** See above

**brief history** The natural history dept. of the museum was founded in 1849 by the Siebenbürgischen Verein für Naturwissenschaften; now belongs to the Ministerul culturii of Romania

**references to history, collections, or types** Popescu (1986)

**important past bird staff** E. A. Bielz, F. W. Stetter, D. Czekelius sr., K. Fuss, C. F. Jickel, W. Knöpfler, W. Hausmann, A. Müller, A. Neugeboren, E. Witting, A. von Spieß, C. Orendi, Alexius Buda, A. Kammer, D. Stanescu, H. Stein, C. Popescu, I. Wördinger

**important collections come from** F. W. Stetter, J. Gromer, P. Theil, Adam Buda, J. F. & F. Binder, C. Melisca, K. Neugeboren, A. Senoner, R. Klement

**approx. nr. of bird skins** 2,526 (of which c.2,000 mounted)

**other bird items** 594 skeletons & skulls, 1,575 eggs, 603 birds in alcohol and nests

**approx. recent annual increase in skins** strongly variable

**bird skin collection specialised in** mainly regional, but also includes birds from elsewhere in Romania and Europe, and 429 exotic birds

**card or computer system present** both partially only

## Siena (MZAFS)

Info from: N. Baccetti, 5 Apr 2000

**address** Museo Zoologico dell'Accademia dei Fisiocritici, Piazza Sant'Agostino 4, I-53100 Siena, Italia

**telephone** #-39-0577-47002, **fax** #-39-0577-47002, **e-mail** cancelli@unisi.it

**staff responsible for bird coll.** Prof. Baccio Baccetti (supervisor of Zoological Museum), Fabrizio Cancelli (coll. manager and taxidermist), Dr Nicola Baccetti, Dr Francesco Pezzo (volunteer associates)

**total staff of bird dept.** 1 coll. manager and taxidermist (for all animals)

**brief history** Founded 1759 by G. Baldassarri; all pre-1798 specimens destroyed by earthquake. Main period of activity 1840–1910. Oldest published catalogue: Baldacconi (1845). The colls. were largely neglected during 1935–1970, but the museum re-opened

in 1972, when also old colls. of the University of Siena (dating from 1900–1930) were added and a modern taxidermy laboratory was founded

**references to history, collections, or types**

Ricci (1972), Baccetti (1885), Baccetti (1996), Cancelli *et al.* (in prep.)

**important past bird staff** Massimiliano Ricca, Apelle Dei, Sigismondo Brogi

**important collections come from** A. Dei,

Baron B. Ricasoli, C. Passerini, with 327, 507, resp. 206 specimens still existing; a few duplicates from Savi (*ante* 1840).

**approx. nr. of bird skins** 2,556 (810 species); mainly mounts

**other bird items** a few skeletons

**approx. recent annual increase in skins** 50, from local birds skinned by own taxidermist and donations

**bird skin collection specialised in** Central Italy

(1,099 birds from Tuscany). Coll. includes skins of several endangered birds (e.g. *Numenius borealis*, *N. tenuirostris*, *Strigops habroptilus* etc.)

**card or computer system present** All on computer; several old partial catalogues

## Sofia (NMNHS/NZMS)

Info from: Z. Boev, 04 Apr 1997, updated 13 Nov 1999 and 10 Nov 2001

**address** National Museum of Natural History, Bulgarian Academy of Sciences, Blv. Tsar Osvoboditel 1, BG-1000 Sofia, Bulgaria

**telephone** #-359-2-9879326, **fax** #-359-2-9882897, **e-mail** nmnhzb@bgciat.acad.bg or boevzaro@yahoo.co.uk

**staff responsible for bird coll.** Prof. Dr Zlatozar Boev (head of fossil and recent bird dept.)

**total staff of bird dept.** 1 head/ coll. manager, 1 secretary; also (for entire museum) 1 taxidermist, 1 librarian

**brief history** Founded in 1889 by King Ferdinand I Sachsen Coburg-Gotha of Bulgaria, grew rapidly but part of coll. lost in fire in March 1944; now belongs to the Bulgarian Academy of Sciences

**references to history, collections, or types**

Anon. (1907), Boev (1990, 1991, 1994, 1997)

**important past bird staff** Ferdinand I of Bulgaria, P. Leverkühn, Boris III of Bulgaria,

K. Andersen, H. Gretzer, P. Patev, N. Boev, S. Donchev

**important collections come from** Amedé

Alleon, Stuart Baker, H. von Boetticher, I. Buresch, E. Holub, Julius, E. Werner (700 birds, from 19 countries)

**approx. nr. of bird skins** 15,500 (incl. 4,155 mounts) (1,200 species)

**other bird items** 13,000 (sub)fossil remains (23% of the fossil bird species known), 2,000 skeletons, 50 in alcohol, 260 egg sets, 12 nests

**approx. recent annual increase in skins** 20, from local birds skinned by own taxidermist; also, many fossils added

**bird skin collection specialised in** Bulgaria, European Turkey (Alleon coll.), N Germany (Werner coll.), India; 11 *Numenius tenuirostris*

**card or computer system present** all skins on card system, none on computer

## Stavanger

Info from: K. Skipnes, 31 Jan 2000

**address** Stavanger Museum, Zoologisk Avdeling, Musé gt. 16, N-4010 Stavanger, Norway

**telephone** #-47-5184 2711, **fax** #-47-5184 2701, **e-mail** kolbjorn.skipnes@stavanger.museum.no **website** www.stavanger.museum.no

**staff responsible for bird coll.** Kolbjørn Skipnes (curator), Olav Runde (head)

**total staff of bird dept.** 1 head, 1 curator, 1 taxidermist, 1 secretary, 1 assistant (all for entire zoology coll.)

**brief history** Founded 1877

**references to history, collections, or types** Skipnes (1989), Runde (1991)

**important past bird staff** H. Tho. L. Schaanning, A. Berhhof-Osa, Holger Holgersen

**important collections come from** J. Koren, Voy. Maud

**approx. nr. of bird skins** 4,200 (944 species) **other bird items** ?

**approx. recent annual increase in skins** ?

**bird skin collection specialised in** Rogaland area (W Norway), Norway generally, Novaya Zemlya, Arctic Siberia

**card or computer system present** all on card, part on computer

**Stockholm (NRM)**

**Info form:** P. Ericson, 31 Oct 1995, updated 13 Nov 1999

**address** Naturhistoriska Riksmuseet, Research dept., Sektionen för Vertebratzoologi, Box 50007, S-10405 Stockholm, Sweden (visitors address: Frescativägen 44)

**telephone** #-46-8-666-4000, **fax** #-46-8-666-4212, **e-mail** p.ericson@nrm.se

**staff responsible for bird coll.** Dr Per Ericson (head), Göran Frisk (coll. manager), Dr Carl Edelstam (retired, voluntary associate)

**total staff of bird dept.** 1 head, 1 coll. manager, 3 taxidermists, 1 other

**brief history** Founded in 1739 as cabinet of the Royal Academy of Sciences (under presidency of C. von Linné), but a real increase in the coll. size occurred only when a new building was erected 1819–1820, when also the private coll. of G. von Paykull arrived. A few hundreds of specimens from the last decades of the eighteenth century are still present. Now belongs to the Swedish government

**references to history, collections, or types** Lönnberg (1926), Gyldenstolpe (1926)

**important past bird staff** Anders Sparrman, Sven Nilsson, Carl J. Sundevall, Fredrik A. Smitt, Friedrich W. Meves, Einar Lönnberg, Nils Gyldenstolpe, Carl Edelstam

**important collections come from** Adelsborg, J. G. Anderson, K. Bäckstrom, O. Bamberg, C. Bangert, S. Bergman, Dr Bovallius, Von Carlsson, Eisenhofer, G. W. Freyreiß, S. H. Granvik, J. W. Grill, J. Hedenborg, S. Hedin, G. von Hofsten, P. A. Holst, G. Kolthoff, K. E. Laman, S. Lovén, E. P. Mjöberg, Nathorst, R. Nicolin, Nordenskiöld, A. M. Ollala, H. Sandeberg, B. Y. Sjöstedt, K. G. Söderbom, L. Söderstrom, P. Spatz, T. F. Tullberg, J. F. Victorin, Voy. Eugenie, Voy. Vega, J. A. Wahlberg, General Westin, G. de Wylder, O. Graf von Zedlitz (private coll. of c.7,500 skins, stored separately)

**approx. nr. of bird skins** 105,000 (c.6–7,000 species)

**other bird items** 13,000 skeletons, 1,100 in alcohol, 27,000 egg sets

**approx. recent annual increase in skins** 100 skins & 900 skeletons/alcohol specimens, from expeditions and local birds skinned by own taxidermist

**bird skin collection specialised in** Sweden, Fenno-Scandia, Arctic (Greenland, Iceland,

Svalbard, North European Russia), Iran, C & E Asia (Kamchatka, Kuril Is., Sakhalin, China, Mongolia, Tien Shan), Thailand, Malaya, N, NE, C & S Africa, New Guinea, Nicaragua, Galapagos Is., South America, Middle East  
**card or computer system present** all skins on card, 95% of skins, skeletons, and eggs on computer

**St Petersburg/Sankt-Peterburg (ZISP)**

**Info from:** V. Loskot, 25 Aug 1995

**address** Zoologicheskii Institut, Rossiiskoi Akademii Nauk (Russian Academy of Sciences), dept of Ornithology, Universitetskaya nab. 1, 199034 Sankt-Peterburg, Russia

**telephone** #-7-812-2180011, **fax** #-7-812-114-04444, **e-mail** SOA@ZISP.SP.BU

**staff responsible for bird coll.** Dr Vladimir M. Loskot (head), Dr L.V. Firsova, A.V. Pantelev, Dr A.M. Sokolov, Dr E.P. Sokolov

**total staff of bird dept.** 1 head, 1 coll. manager, 3+ others

**brief history** Founded in c.1714 as private 'Kunstkamer' of Peter the Great, but intense skin collecting occurred only from c.1820 onwards; from 1832, the coll. became part of the Zoological Museum of the Imperial Academy of Sciences (now Russian Academy of Sciences)

**references to history, collections, or types** Neufeldt (1978), Scarlato (1982), Sokolov & Il'yashenko (1987)

**important past bird staff** J. F. Brandt, T. (= F. D.) Pleske, N. M. Przhivalskii, V. L. Bianchi, P. P. Sushkin, B. K. Stegmann, E. V. Kozlova, A. Ya. Tugarinov, L. A. Portenko, A. I. Ivanov, K. A. Yudin, I. A. Neufeldt

**important collections come from** K. M. Baer, M. M. Berezowskii, T. T. Brandt, Bykov, V. S. Elpatev, E. A. Eversmann, J. P. Falk, L. von Führer, S. G. Gmelin, G. E. & M. E. Grum-Grzhimailo, J. A. Gildenstädt, C. L. Hablitzl, F. H. von Kittlitz (754 specimens), P. K. Kozlov, K. Krebs, G. H. Baron von Langsdorff, I. Lepechin, R. K. Maak, M. A. Menzbier, C. Merck, A. von Middendorff, P. S. Pallas, M. V. Pevtsov, G. N. Potanin, F. L. Potapov, G. Radde, J. Riedel, V. I. Rorobovskii, L. von Schrenck, N. A. Severtzov, L. M. Shulpin, G. W. Steller (1 certain specimen only), P. P.

Sushkin, Voy. Nadezhda, Voy. Senyavin, I. G. Voznesenski, N. A. Zarudny

**approx. nr. of bird skins** 170,000 (4,240 species)

**other bird items** 2,700 skeletons, 7,500 in alcohol, c.20,000 eggs and nests

**approx. recent annual increase in skins** 150, from own expeditions

**bird skin collection specialised in** former Soviet-Union, Mongolia, China, Poland, Brazil, North Pacific

**card or computer system present** all skins on card, alcohol and skeletons on computer.

### St Petersburg/Sankt-Peterburg (ZM SPBU)

Info from: Irina Savinich, 28 Jan 2000

**address** Zoological Museum, Dept of Vertebrate Zoology, Faculty of Biology and Soil Sciences, St Petersburg State University, Universitetskaya nab. 7/9, 199034 Sankt-Peterburg, Russia

**telephone** #-7-812-324 0885, **fax** #-7-812-328 9689, **e-mail** irene@isav.usr.pu.ru

**staff responsible for bird coll.** Dr Irina Savinich (curator, senior lecturer)

**total staff of bird dept.** 1 curator

**brief history** Founded 1819, but real increase not until arrival of S. Kutorga in 1833 and especially K. Kessler in 1862. Now part of the University

**references to history, collections, or types** Shimkevich & Vagner (1899), Raykov (1953), Malchevsky & Polyansky (1969) (all on history)

**important past bird staff** V. Andreevsky, Th. Pleske, W. Shimkevich, M. Bogdanov, A. Nikolsky, E. Buchner, V. Bianki, K. Derjugin, P. Kashkarov, L. Shulpin, A. Malchevsky

**important collections come from** Prince Alexis of Russia, Bilkevich, Meves (eggs)

**approx. nr. of bird skins** 4,500 (1,100 species), incl. mounts

**other bird items** 150 skeletons, 150 spirit specimens, 140 frozen tissue samples, 800 egg sets, 100 nests, and 1,160 recordings of birds sounds

**approx. recent annual increase in skins** 40, from own expeditions, donations, and local birds skinned by own taxidermist

**bird skin collection specialised in** Russia, Central Asia

**card or computer system present** part on card, with another part of the card system burnt in 1995; computerisation just started

### Strasbourg (MZS)

Info from: Élisabeth Lang, 6 Dec 2001

**address** Musée zoologique de l'Université Louis Pasteur et de la Ville de Strasbourg, 29 Boulevard de la Victoire, F-67000 Strasbourg, France

**telephone** #-33-3-90-240489 or -90, **fax** #-33-3-90-240558, **e-mail** elang@cus-strasbourg.net, **website** www.mairie-strasbourg.fr

**staff responsible for bird coll.** Mme Élisabeth Lang (head conservator), Marie-Dominique Wandhammer (birds)

**total staff of bird dept.** 2 (see above)

**brief history** Based on a coll. of c.900 birds of Johann Hermann, started in 1760 (but few of these remain), later bought by the Ville de Strasbourg and serving as a base for a museum; still belongs to the city of Strasbourg but jointly curated by the university and city

**references to history, collections, or types**

Koenig (1993, 1994) (catalogues of Madagascar birds and Anseriformes)

**important past bird staff** P. Koenig, O. Langrand

**important collections come from** Von Berg, Berger, G. A. Frank, Lantz, Mus. Saint-Denis (Réunion), Pougnet, Pouillet, G. Schneider, Sicard, Ursch, Wehrung

**approx. nr. of bird skins** 18,000 (incl. mounts) **other bird items** 50 (partial) skeletons, 17 in liquid, 2,000 eggs sets, 300 nests

**approx. recent annual increase in skins** 20

**bird skin collection specialised in** worldwide (e.g. over 300 from Madagascar), all families (e.g. 720 ducks of 120 species); includes extinct birds like *Camptorhynchus labradorius* and *Rhodonessa caryophyllacea*

**card or computer system present** all on card

### Stuttgart (SMNS)

Info from: M. Grabert, 06 Nov 1996; updated Friederike Woog, 11 Jan 2002

**address** Staatliches Museum für Naturkunde, Rosenstein 1, D-70191 Stuttgart, Germany (visitors address: Museum Schloß Rosenstein)

**telephone** tel. #-49-711-8936-253, **fax** #-49-711-8936-200, **e-mail** woog.smns@naturkundemuseum-bw.de



**staff responsible for collection** Dr Claus König (director), Dr Friederike Woog (curator of birds), Severine Mattes (taxidermist), Holger Haag (scientific assistant)

**total staff of bird dept.** 1 curator, 1 coll. manager, 1 taxidermist, 5 volunteers

**brief history** Founded in 1791 by Herzog C.-E. von Württemberg; now belongs to the government of Baden-Württemberg

**references to history, collections, or types** Van den Elzen & König (1983), König (1991)

**important past bird staff** Ernst Schütz, M. Grabert

**important collections come from** T. Andersen, C. von Barth, A. Boucard, Chevalier, Coll. Duoc, Duve, Elliot, A. Fischer (6,000 skins), G. Frank, K. Fritsche, W. & P. Gatter, H. Grün, H. Gude, Th. von Heuglin, H. von Hochstetter, G. Hoy, A. Kappler, C. F. H. Baron von Ludwig, H. Möschler, F. von Müller, G. Nikolaus, W. Salzmann, F. Sarg, W. Schlüter, F. K. I. Streich, Herzog Paul von Württemberg

**approx. nr. of bird skins** 70,000, incl. 15,000 mounts (5,500 species)

**other bird items** 6,000 (partial) skeletons, 10,000 egg sets, 1,000 nests, 8,000 spread wings

**approx. recent annual increase in skins** 200, from expeditions, local birds skinned by own taxidermist, and buying of colls.

**bird skin collection specialised in** Palearctic, South America (e.g. Surinam), Liberia, Tanzania, and many other parts of the world  
**card or computer system present** most skins on card, c.50% on computer

## Tartu

Info from: Rainer Ilisson, 13 January 2000

**address** Zooloogia muuseum/ Museum of Zoology, Tartu Ülikool/Tartu University, Vanemuise Str. 46, EE-51014 Tartu, Estonia  
**telephone** #-372-7-375833, **e-mail** jux@ut.ee, jluig@ut.ee, webpage <http://www.ut.ee/~BGZM>

**staff responsible for bird coll.** Rainer Ilisson (birds), Jaan Luig (chief curator all animals)

**total staff of bird dept.** 1 (see above)

**brief history** Founded 1802, but the coll. was mainly formed in 1905–1912 (when birds from various parts of Russia arrived) and in 1920s–1930s and 1950s (largely birds from Estonia). Owned by University of Tartu

**references to history, collections, or types**

Ilisson (1992) (skins), Ong (1996) (eggs)

**important past bird staff** V. Russow, M.

Härms, J. Piiper, J. Lepiksaar, E. Kumari

**important collections come from** A. Graf Keyserling, O. von Koch (eggs & nests), both private, and the coll. of the Institute of Zoology and Botany of the Academy of Sciences of Estonia (Dr Vilju Lilleleht)

**approx. nr. of bird skins** 8,500 (over 800 species)

**other bird items** 2,000 skeletons (c.150 species), c.3,000 egg sets (357 species), 100 nests

**approx. recent annual increase in skins** a few  
**bird skin collection specialised in** Estonia; former Soviet Union generally

**card or computer system present** skins and eggs on card, but not skeletal material

## Terrasini

Info from: N. Vitale, 25 Aug 1997

**address** Museo di Storia Naturale di Terrasini, Via Cala Rossa 14, 90049 Terrasini (Palermo), Sicilia, Italy

**telephone** #-39-091-868 2497, **fax** #-39-091-868 2420

**staff responsible for bird coll.** Sig. Nino Vitale (curator), Bruno Massa (pres. Scient. Com.), Vittorio E. Orlando, Marcello Arnone (honorary curators)

**total staff of bird dept.** 1 head, 1 taxidermist, 1 librarian

**brief history** Founded c.1928–1930 by C. Orlando; now, the buildings owned by the Municipality of Terrasini, the colls. by the Sicily Region

**references to history, collections, or types** Arnone & Orlando (1990), Massa (1977), Orlando (1978, 1990a,b, 1991, 1995a,b)

**important past bird staff** C. Orlando

**important collections come from** Sig. Ajola, M. Arnone, M. Jannizzotto, C. & V. E.

Orlando, A. Trischitta, F. Venezia, A. Vitale

**approx. nr. of bird skins** 8,000 (600 species)

**other bird items** 25 skeletons, 15 in alcohol, 150 egg sets, 316 nests, 4,000 various

**approx. recent annual increase in skins** ?, from local birds skinned by own taxidermist  
**bird skin collection specialised in** Sardinia, Sicily, mainland Italy, Europe. Together 5,781 birds from coll. C. Orlando, 1,895 coll. A.

Trischitta, 284 coll. M. Jannizzotto, and 120 coll. A. Vitale; types of 14 taxa  
**card or computer system present** all skins on card and computer

### Tervuren (KMMA / MRAC)

Info from: M. Louette, 25 Jan 1995

**address** Koninklijk Museum voor Midden-Afrika / Musée Royal de l'Afrique Centrale, Steenweg op Leuven 13, B-3080 Tervuren, Belgium

**telephone** #-32-2-7695211, **fax** #-32-2-7670242, **e-mail** louette@africamuseum.be

**staff responsible for bird coll.** Dr Michel Louette (head), M. Herremans, W. Plompen M.Sc., P. Herroelen (volunteer)

**total staff of bird dept.** 1 head, 0.2 coll. manager, 0.25 secretary

**brief history** Founded in 1897 to house colls. made in Central African colonies. Belongs to the Belgian government

**references to history, collections, or types** Louette (1980)

**important past bird staff** H. Schouteden, J. P. Chapin, A. Prigogine, A. de Roo

**important collections come from** Bonnevie, Hutsebaut, F. J. Jackson, C. M. de la Kethulle, Captain Pauwels, A. Pillette, Voy. C. Christy, Voy. Rosenberg (G. L. Bates, W. J. Ansoerge, Usscher), A. F. G. Weyns, G. F. de Witte

**approx. nr. of bird skins** 150,000 (over 8,000 species)

**other bird items** 500 skeletons, 15,000 in alcohol, 1,500 egg sets, 400 nests

**approx. recent annual increase in skins** 400, from expeditions and donations

**bird skin collection specialised in** Central Africa; all Afrotropical families

**card or computer system present** part of skins on card, soon on computer

### Torino see Turin

### Toulouse (MHNT)

Info from: Pierre Dalous, 20 Dec 2001

**address** Museum d'Histoire Naturelle de Toulouse, 35 Allées Jules Guesde, F-31000 Toulouse, France

**telephone** #-33-5-61-479225, **fax** #-33-5-61-554275, **e-mail** pierre.dalous@mairie-toulouse.fr

**staff responsible for bird coll.** Dr Pierre Dalous

**total staff of bird dept.** 1 (for all vertebrates)  
**brief history** Founded in about 1900; owned by city

**references to history, collections, or types - important past bird staff -**

**important collections come from** V. Besaucèle, R. Bourret, G. Cossaune, M. Gourdon, Hammonville, A. Lacroix, Reboussin

**approx. nr. of bird skins** 8,900 (incl. 7,500 mounts)

**other bird items** c.2,000 skeletons & skulls, 5,300 eggs

**approx. recent annual increase in skins** 20  
**bird skin collection specialised in** Europe (especially France), but also a fair number of exotic species

**card or computer system present** All on computer, except skeletons/ skulls

### Tring (BMNH or NHM)

Info from : R. Prýs-Jones, 18 Nov 1994, F. Steinheimer 22 Nov 2001

**address** The Natural History Museum, Bird Group, Akeman Street, Tring (Herts) HP23 6AP, U.K.

**telephone** #-44-207-942-6158, **fax** #-44-207-942-6150, **e-mail** (preferably) bird-enquiries@nhm.ac.uk or (direct) R.Prys-Jones@nhm.ac.uk, m.adams@nhm.ac.uk, f.steinheimer@nhm.ac.uk,

m.walters@nhm.ac.uk, jhc@nhm.ac.uk.,

**staff responsible for bird coll.** Dr Robert Prys-Jones (head), Mark Adams (skins & loans), Michael Walters (eggs & nests), Jo Cooper (alcohol, skeletons), Frank Steinheimer (associate)

**total staff of bird dept.** 1 head, 4 curators

**brief history** Founded in 1753 as private coll. of Hans Sloane; now belongs to the government

**references to history, collections, or types** Sharpe (1874-1898, 1885, 1906), Warren *et al.* (1966-1973), Blandamer & Burton (1979), Stearn (1981), Knox & Walters (1992, 1994), Steinheimer (in press b)

**important past bird staff** G. Shaw, W. E. Leach, J. E. Gray, G. R. Gray, P. L. Sclater, R. Bowdler Sharpe, W. R. Ogilvie-Grant, P. R. Lowe, N. Kinneer, D. Snow, B. P. Hall, D. Goodwin, C. J. O. Harrison, I. C. J. Galbraith, P. R. Colston

**important collections come from** A. L. Adams, J. Aitchison, B. Alexander, J. Anderson, F. B.

Armstrong, D. A. Bannerman, G. L. Bates, R. C. Beavan, J. Biddulph, C. T. Bingham, W. Blanford, W. Blewitt, W. E. Brooks, G. Brown, F. Brüggemann, A. Buchanan, W. Buller, A. L. Butler, E. A. Butler, G. Caley, D. Carruthers, R. E. Cheesman, W. N. Chilly, A. F. Christison, Miss Cockburn, J. Cockerell, Capt. P. Conrad, J. Cook, W. D. Cowan, C. & S. Coxen, J. N. Cripps, P. Crowley, H. Cuming, J. W. N. Cumming, C. R. Darwin, C. Davison, W. R. Davison, J. Delacour, P. M. Diard, F. Dörries, H. Durnford, Emin Pasha, A. H. Everett, T. C. Eyton, H. W. Feilden, H. O. Forbes, A. D. Forbes-Watson, D. Forsyth, L. Fraser, E. Gerrard, J. Gilbert, F. D. Godman, H. H. Godwin-Austen, A. Goldie, W. Goodfellow, P. Gosse, J. Gould, C. H. B. Grant, J. H. Gurney, E. Hargitt, H. H. Harington, E. Hartert, G. Henderson, H. W. Henshaw, B. H. Hodgson, P. A. Holst, T. Horsfield, A. O. Hume, India Mus., C. Ingram, F. J. Jackson, H. B. James, T. C. Jerdon, H. H. Johnston, E. G. Johnstone, F. C. R. Jourdain (eggs), H. J. Kelsall, J. Kirk, C. Boden Kloss, C. L. Landbeck, J. D. D. La Touche, E. & L. Layard, Linnean Society of London, J. J. Lister, C. Livingstone, W. L. Lloyd, G. Loddiges, W. P. Lowe, F. Ludlow, H. Lynes, J. MacGillivray, L. Mandelli, C. H. T. Marshall, J. McClelland, E. McConnell, R. Meinertzhagen, A. B. Meyer, G. Montagu, H. Moseley, J. Murray, E. Newton, E. W. Oates, A. Owston, Capt. Pemberton, H. Philby, S. Pinwill, J. Polatzek, H. Pryer, T. S. Raffles, S. G. Reid, W. B. Richardson, C. B. Rickett, Comte de Riocour, G. Rippon, H. C. Robinson, A. W. Roepstorff, W. F. H. Rosenberg, E. Rüppell, O. B. St John, O. Salvin, H. Saunders, R. H. Schomburgk, W. E. D. Scott, J. Scully, H. Seebohm, W. Serle, R. Shaw, F. Shaw Mayer, G. E. Shelley, G. Sherriff, H. H. Slater, A. Smith, H. Smith, L. Sowerby, W. Stalker, J. K. Stanford, S. Stevens, F. Stoliczka, C. Sturt, F. W. Styan, R. Strachey, C. & R. Swinhoe, W. H. Sykes, Tangier-Smith coll., W. R. Thompson, C. B. Ticehurst, S. Tickell, H. B. Tristram (eggs), Marquis of Tweeddale, J. Vincent, Voy. Alert, Voy. Blossom, Voy. Challenger, Voy. Erebus & Terror, Voy. Herald, Voy. Rattlesnake, Voy. Sulphur, A. R. Wallace, H. Walton, A. E. Ward, R. G. Wardlaw-Ramsay, J. Waterstradt, E. Weiske, H. Whistler, J. I. S. Whitaker, C. H. T. Whitehead, J. Whitehead, A. Whyte, E. Wilson, A. W. S. Wingate, H. F.

Witherby, A. F. R. Wollaston, C. M. Woodford, C. K. Worthen, J. W. Yerbury, Zoological Society of London (L. Fraser, J. Gilbert, J. Gould, T. Horsfield, Raffles, N. Vigors, Voy. Beagle, G. R. Waterhouse), and many others  
**approx. nr. of bird skins** 750,000 (8,492 species), excluding 6,000 mounts  
**other bird items** 15,187 (partial) skeletons (2,600 species), 17,135 in spirit (3,300 species), 4-500,000 egg sets, 2,000 nests  
**approx. recent annual increase in skins** 200, from local birds skinned by staff and donations  
**bird skin collection specialised in** world-wide, all families  
**card or computer system present** most egg sets on card, 33,000 skins and 24,000 egg sets on computer (e.g. skins of all extinct and endangered birds, most types, all Mexican and Spanish birds, and most Australian birds and Nectariniidae); types on museum web page

### Tromsø (TSZV)

Info from: Robert Barrett, 26 Nov 2001  
**address** Universitets Museet i Tromsø, Zoology Dept., Lars Thøringesvei 10, NO-9037 Tromsø, Norway  
**telephone** #-47-77-645013/5010, **fax** #-47-77-645520, **e-mail** zoo@imv.uit.no, robb@imv.uit.no  
**staff responsible for bird coll.** Dr Robert Barrett (for all zoology)  
**total staff of bird dept.** 1 (see above)  
**brief history** Founded 1872; part of Tromsø University  
**references to history, collections, or types - important past bird staff** W. Vader  
**important collections come from** —  
**approx. nr. of bird skins** 4,100  
**other bird items** 512 (partial) skeletons, 890 egg sets  
**approx. recent annual increase in skins** 20-200  
**bird skin collection specialised in** Northern Norway, Spitsbergen, Arctic regions generally  
**card or computer system present** All bird items on card and computer

### Trondheim

Info from: O. Hogstad, 09 Apr 1997  
**address** Museum of Natural History & Archaeology, Institute of Natural History, dept. of Zoology, Norw. Univ. of Science and

Technology NTNU, N-7004 Trondheim, Norway (visitors: Vitenskapsmuseet, Erling Skakesgt. 47)

**telephone** #-47-7-35922207, **fax** #-47-7-3592295, **e-mail** olav.hogstad@vm.ntnu.no

**staff responsible for bird coll.** Dr Olav Hogstad (head zoology dept)

**total staff of bird dept.** 1 head, 1 taxidermist

**brief history** Founded in 1760 by J. E.

Gunnerus and Det Kongelige Norske Videnskabens Selskab; now part of NTN University

**references to history, collections, or types** —

**important past bird staff** Y. Hagen, S. Haftorn

**important collections come from** —

**approx. nr. of bird skins** 3,200 (450 species)

**other bird items** a few skeletons and birds in alcohol, 400 eggs, 50 nests

**approx. recent annual increase in skins** 150, from local birds skinned by own taxidermist

**bird skin collection specialised in** c.3,000 skins from Norway (mainly central), 200 exotic

**card or computer system present** all skins on card and computer

## Turin/Torino (MRSN)

Info from: C. Pulcher, 20 Nov 1996, some add.

Dario Zuccon, 16 Oct 2002

**address** Museo Regionale di Scienze Naturali, Via Giolitti 36, I-10123 Torino, Italy

**telephone** #-39-011-432-3001, **fax** #-39-011-432-3331

**staff responsible for bird coll.** Dr Elena Gavetti (head of entire zoology section), Claudio Pulcher (part-time contractor for birds)

**total staff of bird dept.** 1 head (also for other sections), 1 temporary coll. manager, 1 temporary taxidermist

**brief history** Founded in c.1815, when Bonelli started the bird section of the Museum of Zoology of Torino University; now, the museum building is owned and the coll. managed by the government of the Regione Piemonte, but part of the bird coll. is owned by Torino University.

**references to history, collections, or types**

Salvadori (1914), Tortonese (1957), Passerini d'Entrèves *et al.* (1986), Elter (1986), Violani *et al.* (1997)

**important past bird staff** F. A. Bonelli, G.

Gené, F. De Filippi, A. T. Salvadori

**important collections come from** L. M.

D'Albentis (c.380 birds), O. Antinori (c.1,000

birds), O. Beccari (c.350 birds), A. Borelli (1,000+ birds), A. A. Bruijn, Bullock coll./Mus. Leverianum (see Vienna/Wien), G. Doria, L. Fea, E. Festa (4,100+ birds), E. H. Giglioli, L. Loria, Marquis of La Marmorata, E. Modigliani, V. Ragazzi (c.700 birds), Count Solaroli, Voy. Magenta (F. de Filippi & E. H. Giglioli; c.1,150 birds), duplicates from the colls. of Gould, Rüppell, Savi, Swinhoe, Temminck, and others

**approx. nr. of bird skins** 21,000 (3,000 species)

**other bird items** over 100 skeletons and eggs

**approx. recent annual increase in skins** 0

**bird skin collection specialised in** Italy, Wallacea & West New Guinea (c.1,000 skins), Libya to Ethiopia (over 4,000 skins), South America (c.4,000 skins), Middle East (e.g. Iran), Himalayas, Burma, South Pacific; c.300 type specimens

**card or computer system present** a modernised version of the catalogue of Elter (1986) is on computer

## Uppsala (ZMUU)

Info from: M. Eriksson, Mar 1998

**address** Evolutionsmuseet, Zoologi-sektionen, Uppsala Universitet, Norbyvägen 16, S-75236 Uppsala (visitors: Villavägen 9), Sverige

**telephone** #-46-4712668, **fax** #-46-4712794, **e-mail** mats.eriksson@evolmuseum.uu.se

**staff responsible for bird coll.** Dr Mats Eriksson

**total staff of bird dept.** 5 (for entire zoology dept.)

**brief history** ?

**references to history, collections, or types**

Wallin & Wallin (1994) (history), Wallin (1996, 1997) (types)

**important past bird staff** Sven Hörstadius

**important collections come from** A. W.

Eriksson, L. A. Jägerskiöld, G. Kolthoff, A.

Kovacs, T. Kumlien, M. Lagerström, W.

Lilljeborg, C. von Linné, Melbourne Mus., D.

Melin, B. Mörner, B. Pettersson, C. P.

Thunberg, J. A. Wahlberg, General Westin, A.

E. & J. G. Williams

**approx. nr. of bird skins** 6,900

**other bird items** ?

**approx. recent annual increase in skins** ?

**bird skin collection specialised in** Sweden

(c.3,100, mainly Uppland, Skåne, Öland), Brazil (378), Svalbard (342), Greenland &

Faeroes (c.140 each), South Africa (188), Australia (183), Norway (c.110), Russia (104), USA (95), New Guinea (77)

**card or computer system present** all skins on computer

### Venice/Venezia (MCSNV)

Info from: M. Bon, 17 Jul 1996

**address** Museo Civico di Storia Naturale di Venezia, S. Croce 1730, Fontegna dei Turchi, I-30135 Venezia, Italy

**telephone** #-39-041-524-0885, **fax** #-39-041-524-2592

**staff responsible for bird coll.** Dr Mauro Bon (head), Dr Giuseppe Cherubini, Massimo Semenzato (both volunteer associates)

**total staff of bird dept.** 1 head

**brief history** Founded in 1923 by the Municipality of Venezia (Venice), but includes older colls.; still owned by Municipality of Venezia

**references to history, collections, or types** Rallo (1988), Bon *et al.* (1993)

**important past bird staff** —

**important collections come from** G. Bisacco Palazzi, Conte A. P. Ninni

**approx. nr. of bird skins** 2,500 (400 species)

**other bird items** some skeletons, alcohol specimens, and egg sets

**approx. recent annual increase in skins** a few  
**bird skin collection specialised** in north-east Italy, North Africa

**card or computer system present** part of skin coll. on card

### Verona (MSNVR)

Info from: Roberta Salmaso, 22 Dec 1999

**address** Museo Civico di Storia Naturale, Lungadige Porta Vittoria 9, I-37129 Verona, Italia.

**telephone** #-39-(0)45-8079400, **fax** #-39-(0)45-8035639, **e-mail** leonardo\_latella@comune.verona.it, roberta\_salmaso@comune.verona.it.

**staff responsible for bird coll.** Dr Leonardo Latella (curator), Roberta Salmaso (technician) (both of entire zoology dept)

**total staff of bird dept.** see above

**brief history** Founded c.1906, oldest birds from c.1850 (no birds remaining from earlier Verona museums which latter date back to 1571);

owned by the Commune (Municipality) di Verona

**references to history, collections, or types** Dal Fiume (1907)

**important past bird staff** V. Dal Nero, S. Rufo  
**important collections come from** De Betta, Perini, Carraro, Cipolla, Dal Fiume, Zangheri's Museum

**approx. nr. of bird skins** 5,000 (600 species)

**other bird items** a few eggs and nests, 400 sternums

**approx. recent annual increase in skins** 1–2, local birds

**bird skin collection specialised** in north-east and central Italy, Eritrea (c.500 birds); includes 1 type: *Cryptolopha erythraea*

**card or computer system present** A large part on card and computer, but neither complete

### Vienna see Wien

### Warsaw/Warszawa (MZPW for coll., MIZ PAN for Institute)

Info from: Tomasz Huflejt, 22 Dec 1999

**address** Museum and Institute of Zoology, P. A. N. (Polish Academy of Sciences), Ul. Wilcza 64, PL-00 679 Warszawa, Poland

**telephone** #-48-629-3221, **fax** #-48-629-6302, **e-mail** thuflejt@robal.miiz.waw.pl

**staff responsible for bird collection** Tomasz Huflejt (entomologist, head of collection division)

**total staff of bird dept.** No ornithologists; entire staff of coll. division: 1 head and 3 assistants

**brief history** A combination of the cabinet of F. P. Jarocki (from 1819) and the private coll. of Constantin & Xaver Graf von Branicki (founded 1887), which latter came to government in 1919 (with Domaniewski as first director of the combination); now belongs to the Polish Acad. of Sciences

**references to history, collections, or types** Kazubski (1996) (history), Sztolcman & Domaniewski (1927) (type list)

**important past bird staff** L. Taczanowski, B. Dybowski, J. Sztolcman (Stolzmann), K. Jelski, J. Kalinowski, M. Jankowski, T. Chrostowski, J. Domaniewski, A. Dunajewski, S. Zielinski

**approx. nr. of bird skins** 40,000 (incl. c.5,000 mounts) (3,000 species)



**other bird items** many eggs sets; a few skeletons, birds in alcohol, nests, etc.; 380 types

**approx. recent annual increase in skins** About none in the last 30 year

**bird skin collection specialised in** Poland, Belarus, Ukraine, European Russia (esp. Caucasus area), Turkey, Uzbekistan, East Asia, China, Mongolia, Korea, Vietnam, South America (esp. Peru)

**card or computer system present** All as a list on paper and computer, but nomenclatorially partly outdated and with many misspellings

## Wien (NMW)

Info from: Ernst Bauernfeind, 19 Jan 1995, updated 10 Nov 2001

**address** Naturhistorisches Museum, 1. Zoologische Abteilung – Vogelsammlung, Burgring 7, A-1014 Wien, Austria/ Österreich

**telephone** #43-1-52177-295, 296, or 499, **fax**

#43-1-52177-364, **e-mail** vogelsammlung@nhm-wien.ac.at, anita.gamauf@nhm-wien.ac.at, hans-martin.berg@nhm-wien.ac.at **webpage** www.nhm-wien.ac.at/nhm

**staff responsible for bird coll.** Dr Ernst Bauernfeind (head), Dr Anita Gamauf, Hans-Martin Berg, Dr Herbert Schifter (retired, volunteer)

**total staff of bird dept.** 1 head, 1 ass. curator, 1 secretary, 1 taxidermist

**brief history** Founded in 1793 by Emperor Franz I of Austria, when he acquired the coll. of his retired falconer J. Natterer; now government-owned; oldest specimens from James Cook (2<sup>nd</sup> voyage, c.1773)

**references to history, collections, or types** von Pelzeln (1870, 1873, 1890), von Pelzeln & Lorenz (1886-88), Keve (1948), Keve & Rokitsansky (1966), Schifter & Van den Elzen (1986), Schifter (1990, 1992a,b, 1993, 1994, 1996), Bauernfeind (1995), Schneider & Bauernfeind (1998), Schifter & Violani (1999)

**important past bird staff** Joseph Natterer Sr. & Jr., J. Heckel, A. von Pelzeln, J. Zelebor, C. E. Hellmayr, C. von Schreibers, F. Steindachner, L. Lorenz von Liburnau, M. Sassi, G. Niethammer, G. von Rokitsansky, H. Schifter

**important collections come from** Graf Almásy, F. L. Bauer, W. Bojer, C. L. Brehm, W. Bullock coll. [which included part of the colls. of J. Banks, James Cook, J. R. & G. Forster, J.

Latham, G. Montagu, R. Solander, W. Swainson, Voy. Endeavour, Voy. Resolution; these colls. in part from the former Mus. Leverianum. The Bullock coll. was sold in 1819 to the museums of Berlin, Edinburgh, Glasgow, Leiden, Paris and Turin, and to the private colls. of the Earl of Derby (now in Liverpool), Sabine, W. Swainson, N. Vigors, etc.], F. Deppe, R. von Dombrowski, C. W. R. van Duivenbode, Emin Pascha [see Bremen], O. Finsch, A. Fischer, G. W. Freyreiß, L. von Führer, R. Grauer, J. von Haast, J. Hector, T. von Heuglin, F. von Hochstetter, D. S. Hoedt, C. von Hügel, J. Jacquin, P. Knoblechter, T. Kotschy, M. Markl, A. B. Meyer, H. Möschler, Mus. Berlin (Lichtenstein, Hemprich & Ehrenberg), Mus. Leiden (Temminck, Schlegel), Mus. Leverianum [with the colls. of A. Lever, J. Banks, J. Cook, J. R. & G. Forster, R. Solander, Voy. Endeavour, Voy. Resolution. The Lever Museum coll. was sold in 1806 to, among others, the Wien Mus., to the Earl of Derby and from there to Liverpool Mus., and to W. Bullock], Joh. Natterer, E. Parzudaki, Ida Pfeiffer, J. Polatzek, N. M. Przhivalskii (duplicates), A. Reischek, O. Reiser, G. Schiebel, C. J. W. Schiede, F. Schillinger, W. Schimper, J. von Seilern, F. Sellow, F. Stoliczka, R. Swinhoe, J. J. von Tschudi, V. Tschusi zu Schmidhoffen, Underwood, Verreaux, Voy. Novara, E. Weiske, O. von Wettstein, Zimmer, and many others

**approx. nr. of bird skins** 104,300 (incl. c.10,000 mounts); c.7,000 species

**other bird items** 8,000 skeletons, 10,000 egg sets, 1,000 nests, many feather sets, a bone reference coll., bird sound recordings, etc.

**approx. recent annual increase in skins** 500–1,000, from local birds skinned by own taxidermist, donations, and buying of colls.

**bird skin collection specialised in** Austria, Hungary, Balkan countries, Jan Mayen, Egypt, Sudan, Ethiopia, C & E Africa, Madagascar, Himalayas, Tibet, S India, Sri Lanka, Philippines, Sulawesi, Ambon, Australia, Norfolk Isl., New Zealand, C & S America (especially Brazil: over 13,000 skins from Natterer, etc), Haiti; over 1,000 types (list in preparation)

**card or computer system present** skeletons and mounts on card and computer; most eggs on computer, but only 10% of skins

**Wiesbaden (MWHN)**

Info from: Fritz Geller-Grimm, 6 Dec 2001

**address** Landesmuseum Wiesbaden,

Naturwissenschaftlichen Sammlung, Friedrich-Ebert-Allee 2, D-65185 Wiesbaden, Germany.

**telephone** #-49-611-335-2170/ -2178/ -2182,

**fax** #-49-611-3352192, **e-mail** nws@museum-wiesbaden.de, fritz@geller-grimm.de

**staff responsible for bird coll** Dr Volkert Rattemeyer (head), Fritz Geller-Grimm (coll. manager/taxidermist)

**total staff of bird dept.** 2 (for entire vertebrate coll., see above)

**brief history** Founded 1829; owned by the government

**references to history, collections, or types** Römer (1863, 1879, 1892), Lampe (1904–1912)

**important past bird staff** C. Fetzer, E. Lampe, F. Neubaur, A. Römer, E. Zenker

**important collections come from** A. A. Bruijn, C. Feldmann, A. Fischer, E. A. Fritze, B. Lyon, B. De Mons, J. W. von Müller, F. Odenheimer, O. Rau, C. Thomä, J. Weiler

**approx. nr. of bird skins** 6,800 (incl. mounts)

**other bird items** 150 (partial) skeletons, 6,000 egg sets, 100 fossil birds

**approx. recent annual increase in skins** 50

**bird skin collection specialised in** many areas, but mainly C Europe

**card or computer system present** All on card, computer in progress (soon on [www.nws-wiesbaden.de/coll02.html](http://www.nws-wiesbaden.de/coll02.html))

**Wilhelmshaven (IfV)**

Info from: Prof. Dr F. Bairlein, 31 Jan 2000

**address** Institut für Vogelforschung 'Vogelwarte Helgoland', An der Vogelwarte 21, D-26386

Wilhelmshaven-Rüstersiel, Germany

**telephone** #-49-(0)4421-96890, **fax** #-49-

(0)4421-968955, **e-mail** ifv@ifv.terramare.de

**homepage** <http://home.t-online.de/home/O.Hueppop-IFV/ifv-hp.htm>

**staff responsible for bird coll.** Rolf Nagel (coll. manager), Franz Bairlein (director)

**total staff of bird dept.** 1 head, 5 scientists, 1 coll. manager, 1 taxidermist, 19 others (incl. ringing staff and staff for migration studies and ecological research)

**brief history** Founded in 1843 by Heinrich Gätke on Helgoland, moved to Wilhelmshaven in 1947; owned by government of Niedersachsen

**references to history, collections, or types** H.

Bub (1985) *Orn. Mitt.* 37: 38–47.

**important past bird staff** H. Weigold, R. Drost, F. Goethe, H. Bub

**important collections come from**

Nordseemuseum Helgoland, Heinrich Gätke, Hugo Weigold

**approx. nr. of bird skins** 5,500 (550 species), incl. many mounts (on show in Heinrich-Gätke-Halle)

**other bird items** 300 partial skeletons (skulls, sternums, etc), many eggs of c.270 species, 120 nests

**approx. recent annual increase in skins** 75, from local birds skinned by own taxidermist

**bird skin collection specialised in** Germany, China; migratory birds

**card or computer system present** partly on computer (system old)

**Wroclaw (MPUW)**

Info from: T. Stawarczyk, 31 Jan 1995

**address** Muzeum Przyrodnicze (Museum of Nat. Hist.), Uniwersytet Wroclawski (Univ. of Wroclaw), Sienkiewicza 21, 50-335 Wroclaw, Poland

**telephone** #-48-71-3754149, **fax** #-48-71-3225044, **e-mail** [tomilu@biol.uni.wroc.pl](mailto:tomilu@biol.uni.wroc.pl)

**staff responsible for bird coll.** Prof. Ludwik Tomialojc (head), Dr Tadeusz Stawarczyk, Mr Jan Lontkowski (coll. managers)

**total staff of bird dept.** 1 head, 2 coll. managers

**brief history** Founded in 1814 by J. L. C. Gravenhorst; now part of University of Wroclaw

**references to history, collections, or types** Gravenhorst (1832)

**important past bird staff** E. Grube, F. Tiemann, C. Zimmer

**important collections come from** P. Kollibay (2,500 skins), O. Natorp, W. Volz, etc.

**approx. nr. of bird skins** 12,000 (2,000 species)

**other bird items** 136 skeletons, 2,000 egg sets

**approx. recent annual increase in skins** 5–10, from local birds skinned by own staff

**bird skin collection specialised in** Poland, Palearctic, Java, Sumatra, New Guinea, Brazil

**card or computer system present** none

**Zagreb (ZZO)**

Info from: Davor Cikovic, 20 Dec 1999  
**address** Zavod za Ornitologiju /Institute of Ornithology (ZZO), Hrvatske Akademije Znanosti i Umjetnosti, Ilirski trg. 9, 10000 Zagreb, Hrvatska (Croatia)  
**telephone & fax** #-385-1-4851 322, **e-mail** zzo@hazu.hr  
**staff responsible for bird coll.** Davor Cikovic, BSc.  
**total staff of bird dept.** 5 scientists (Dr G. Susic, Dr J. Muzinic, Dr V. Tutis, J. Kralj, D Radovic), 1 curator (D. Cikovic)  
**brief history** Founded 1938, with A. Mastrovic as first director; part of the Croatian Academy of Sciences and Arts  
**references to history, collections, or types** Susic *et al.* (1988), Crnkovic *et al.* (1993)  
**important past bird staff** D. Rucner, R. Kroneisl-Rucner, K. Igalfy, S. Ivkovic, A. Ilic, K. Leskovar, R. Crnkovic  
**important collections come from** A. Mastrovic, A. Ilic (eggs)  
**approx. nr. of bird skins** 6,700 (317 species)  
**other bird items** 557 egg sets (274 species)  
**approx. recent annual increase in skins** 2  
**bird skin collection specialised in** Former Yugoslavia (mainly Croatia)  
**card or computer system present** all on card

**Zürich (ZMUZ)**

Info from: J. Hegelbach, 25 Jun 1996  
**address** Zoologisches Museum der Universität Zürich-Irchel, Winterthurerstraße 190, CH-8057 Zürich, Schweiz / Switzerland  
**telephone** #-41-1-257-4750, **fax** #-41-1-364-0295, **e-mail** hegzm@zoolmus.unizh.ch  
**staff responsible for bird coll.** Dr Johann Hegelbach (head), Prof. Dr V. Ziswiler (retired, volunt. assoc.)  
**total staff of bird dept.** 1 head, 0.5 taxidermist  
**brief history** —  
**references to history, collections, or types** no publications  
**important past bird staff** H. Steiner, K. Immelmann  
**important collections come from** H. Möschler, etc.  
**approx. nr. of bird skins** 4,000 (1,000 species)  
**other bird items** 50 skeletons, 50 in alcohol, 800 egg sets  
**approx. recent annual increase in skins** 50, from local birds skinned by own taxidermist and donations  
**bird skin collection specialised in** —  
**card or computer system present** all skins on card, part on computer

**The 'B-list'**

In this list, some smaller collections are mentioned which have fewer than c.4,000 skins, or fewer than c.5,000 bird items, or of which no exact information could be obtained because the questionnaire was not returned, even after repeated asking. At least addresses are mentioned, as well as some other details as far as known. Some of these collections may belong on the 'A-list'. As indicated there, collections with a smaller number of birds may not necessarily be less important, because they still may include types, rarities or birds from relatively unknown regions not represented in larger museums.

**Açores** Museu Carlos Machado (MCM), Rua de Santo André, Apartado 258, P-9503 Ponta Delgada (São Miguel), Açores, Portugal. Contains a small bird coll.

**Aarhus** Naturhistoriska Museum, Bygning 210, Universitetsparken, DK-8000 Århus-C, Denmark. Curator: Poul Hansen (e-mail: poulh@naturhist.aau.dk). Has a small coll. of bird skins. Former curator: Paul Bondesen.

**Akureyri** Akureyri Museum of Natural History, PO Box 580, IS-602, Akureyri, Iceland. Contains a small bird coll.

**Augsburg** Naturmuseum und Planetarium Augsburg, Im Thäle 3, Augsburg, Germany. Tel. #-49-821-324-6730, fax -6741. Head: Dr Michael Achtelig. Includes a small bird coll.

**Autun** Musée d'Histoire Naturelle de Ville d'Autun, 12-14 rue Saint Antoine, F-71400 Autun, France. Conservator: Gilles Pacaud. Includes a small bird coll.

**Bacau** Muzeul Judetean Bacau, Sectia Stiintele Naturii, Str. Karl Marx 2, Bacau, Romania. The bird coll., founded in 1959 and with entries from 1962 onwards, held c.2300 skins and

skeletal items by the end of 1979, largely obtained by Dr Catalin Rang and largely from the Bacau area, but also from the eastern Carpathians and the Danube delta; also, 104 birds from Kisangani and Kivu in Congo. See Rang (1980).

**Bad Dürkheim** Pflanzmuseum für Naturkunde (PMN), Pollichia-Museum, Hermann-Schäfer-Straße 17, D-67098 Bad Dürkheim, Germany. Tel. #-49-6322-9413-0 or -23, fax -941311. Curator of zoology: Dipl.-Biol. Roland van Gysegghem (R.Gysegghem@pflanzmuseum.bv-pfalz.de), former curator G. Groh. Founded 1840. Contains the coll. of the Pollichia (Verein für Naturforschung und Landespflege), which includes 100 bird skins, 50 skulls, 18 birds in alcohol, 300 egg sets, 50 nests, and a number of mounted birds, mostly from the Rheinland-Pfalz region, not on card or computer.

**Bamberg** Naturkunde-Museum Bamberg (NKMB), Fleischstraße 2, D-96047 Bamberg, Germany. Tel.: #-49-951-86312-48. Head of coll.: Dr Matthias Mäuser (matthias.maeuser@en.uni-bamberg.de). Founded in 1792 by the archbishop Franz Ludwig von Erthal, now owned by the Lyzeum's foundation Bamberg, supervised by the Bavarian States Collections of Natural Science. Has 1,550 mounted birds (800 species), 31 (partial) skeletons, 552 eggs, and 112 nests, with data and photographs of all mounts on computer. Important past staff members D. Linder, A. Haupt, G. Fischer, T. Schneid, A. Kolb; coll. included specimens from Amalie Dietrich, J. C. Godeffroy, J. Natterer, J. L. Schönlein, J. B. von Spix, C. T. E. von Siebold, W. Schlüter, J. H. C. Sturm, and E. Weiske. See Jaeck (1815), Mäuser (1995a,b), and Steinheimer (in press a).

**Bari**, Italy. In the city are 2 small separate bird colls., one of which is the historical De Romita collection, quite famous in the past (N. Baccetti per. comm.) See also *Suppl. Ric. Biol. Selvaggina* 22 (1995).

**Białowieża** This village in the centre of the Białowieża Reserve in NE Poland has a small museum which includes 950 skins and mounts of birds (130 species) and 335 eggs of local origin.

**Bielefeld** Naturkunde-Museum der Stadt Bielefeld, Kreuzstraße 20, D-33602 Bielefeld, Germany. Tel. #-49-521-516734, fax -512481,

e-mail NaturkundeMuseum@bielefeld.de. Head: Dr Peter R. Becker. Includes a small bird coll.

**Birchington** Quex House & Gardens, the Powell-Cotton Museum, Quex Park, Birchington, Kent C17 0BH, U.K. One curator, partly dedicated to natural history. Includes many mammal skeletons, but also bird skins, eggs, and mounts in dioramas, mostly from Africa; many skins of Spheniscidae obtained from E. Shackelton's Antarctic Expeditions. (F. Steinheimer *in litt.*). See also Powell-Cotton (undated).

**Birmingham** Birmingham Museum and Art Gallery (BMAG), Chamberlain Square, Birmingham B3 3DH, U.K. Tel.: #-44-121-3034510, fax -3031315. Head of curatorial services: Dr Jane Arthur (jane\_arthur@birmingham.gov.uk). Natural History part opened 1913 but based on colls. founded in the 1840s, e.g. of Queen's College and C. Beale; owned by Birmingham City Council. Former curators W. Ellis and W. H. Edwards, major colls. received of R. W. Chase, W. R. Lysaght, and J. B. Williams. Includes over 2,000 mounts and over 1,000 egg sets, mostly local but also from abroad (e.g. Toronto) and including extinct birds like *Pinguinus impennis* and *Nestor productus*; partly on card and computer. Access to coll. at moment restricted due to budgetary and staff constraints.

**Bitov** This town in the Czech Republic has a museum which contains 590 birds of 273 species.

**Bordeaux** Muséum d'Histoire Naturelle de Bordeaux, 5 Place Bardinaeau, F-33000 Bordeaux, France. Founded 1811. Includes a small historical coll. of birds.

**Bratislava** Slovenské Národné múzeum (Slovak National Museum) (SNMBS), dept of Zoology, Vajanského nábrežie 2, SL-81436 Bratislava, Slovakia. Tel. #-421-7-366836, fax -366653. Curator: Branislav Matousek. Includes c.6,000 bird skins.

**Brescia** Museo Civico di Scienze Naturali, GRAN, Via Ozanam 4, I-25128, Brescia, Italy. Curator: Pierandrea Brichetti. Director: Dr Marco Tonon. Includes a bird coll.

**Budisov** Moravského Zemského Muzea, Budisov Castle, near Trebic, SW Moravia, Czech Republic. Has over 2,600 mounted birds of many species, provenance worldwide, including many from Seilern (E Asia, S

- America) and the coll. of Adolf Schwab (Mistek). See Sutorova & Hanak (1996) for history, a catalogue, and other details.
- Burgas** Natural History Museum (NHMB), 30 Constantin Fotinov Str., 8000 Burgas, Bulgaria. Tel #-359-56-45855, fax #-359-56-843239. Founded 1962, belongs to the Municipality of Burgas. Curator: Dr Dimitrina Smilova; former head Alexander Prostop. Includes c.300 skins and c.500 mounts of c.200 species, all on a card system, including rarities like *Numenius tenuirostris*; also, a fair coll. of subfossil bird bones. See Prostop & Smilova (1983).
- Bytom** Upper Silesian Museum, Bytom, S-C Poland. Has 1,100 bird skins, 884 mounts, 140 (partial) skeletons, 3,821 eggs, and 234 nests, mostly from Poland but also 130 mounts from Borneo. Includes colls. of M. Bielewicz, E. Drescher, Gedroyc, O. Natorp, and S. Sobania.
- Cagliari** Istituto de Zoologia (IZUCS), Università di Cagliari, Cagliari, Sardinia, Italy. Includes a small historical coll. of Sardinian birds.
- Carlisle** Tullie House Museum and Art Gallery, Castle Street, Carlisle CA3 8TP, Cumbria, U.K. Tel. #-44-1228-534781, fax -810249. Keeper of Natural Sciences: Stephen Hewitt (SteveH@carlisle-city.gov.uk). Founded in 1893, owned by Carlisle City Council. Important past staff members or persons donating colls: Rev. H. A. Macpherson, L. E. Hope, E. Blezard, Marjory Garnett, E. B. Dunlop, D. L. Thorpe, J. W. Harris. Includes 2,500 skins, 1,500 mounts, 100 (partial) skeletons, and c.3,500 egg sets, virtually all from Carlisle and the Cumbria region.
- Casalnuovo Monterotaro** Museo Civico di Storia Naturale, Via Diaz, Casalnuovo Monterotaro, Foggia prov., Italy. Has a bird coll. of 1,350 mounts; see: *Suppl. Ric. Biol. Selvaggina* 22 (1995).
- Catania** Gemmellaro State Institute, Catania, Sicily. For a catalogue of its small bird coll., see : A. Cantarero (1993) *Naturalista Siciliano* 17: 183-185.
- Česka Lípa** Okresní Vlastivedné Muzeum, nam Osvození 297, CZ-470 01, Česka Lípa, Czech Republic. Tel.: 00-420-425-22791, 22854 & 22843. A former monasatery coll. including local and exotic bird mounts.
- Chemnitz** Museum für Naturkunde, Theaterplatz 1, D-09111 Chemnitz, Germany. Tel. #-49-371-4884551, fax -4884597, e-mail naturkundemuseum@stadt-chemnitz.de. Mainly geological/entomological, but includes a small bird coll.
- Chieri** A museum in Piedmont prov., Italy. Contains the Villa Brea coll.; for a catalogue of the small bird coll., see G. Aimassi & L. Levi (1993) *Riv. Piemontese di Storia Naturale* 14: 217-230.
- Cluj-Napoca** Zoological Museum, Dept. of Biology, University of Cluj-Napoca, Ro-3400 Cluj-Napoca, Romania. A coll. founded 1859, which had 1,146 birds in 1964 (of 396 species). Former curator a.o.: L. von Führer. See Gherghel (1988, 1989).
- Coventry** Herbert Art Gallery and Museum (HAGM), Jordan Well, Coventry CV1 5QP, U.K. Tel.: #-44-2476-832374, fax -832410. Keeper of Natural History: Steve Lane (steve.lane@coventry.gov.uk). Founded 1949, part of Coventry City Council. Has 250 skins and mounts and 4,500 eggs with data (and at least 5,000 more without), all on computer. Includes the colls. of, e.g. Nicholls, Betteridge, Beddall-Smith (eggs), Bellgrove (eggs), and Ground (eggs), mostly of local origin (Warwickshire) or from the U.K. generally.
- Cruz Quebrada-Dafundo** Aquário Vasco da Gama, 1495 Cruz Quebrada-Dafundo, Portugal. Head: Dr Aldina Moreira Inácio. The aquarium also has a small bird coll.
- Czestochowa** Muzeum Okregowe, Al. Najswietszej Marii Panny 45a, PL-42-200 Czestochowa, SC Poland. Tel.: #-48-34-3244424, fax #-48-34-3243275. Contains 135 bird skins and mounts (119 species) and 567 eggs.
- Darmstadt** Hessisches Landesmuseum (HLMD), Zoologische Abteilung, Friedensplatz 1, D-64283 Darmstadt, Germany. Tel. #-49-6151-165703, fax -28942. Curator Dr U. Joger. Includes many local birds from Hessen, the large former coll. of J. J. Kaup, and some material of F. Brüggemann, J. Gundlach, C. F. H. von Ludwig, H. von Rosenberg, and many others. For history, see: R. Kuhn (1993) *Collurio* 11: 36-47.
- Dijon** Muséum d'Histoire Naturelle, Pavillion de l'Arquebuse, 1 Avenue Albert 1er, Dijon, France. A large show coll. with dioramas.
- Dobrich (Tolbukhin)** Cultural and Historical Heritage, Direction of Tolbukhin, Bulgaria. Tel #-359-58-24463. Contains a small coll. (228 birds, 178 species) from the Bulgarian part of



the Dobrogea region, all well-registered. See Nonev (1982).

**Dortmund** Museum für Naturkunde, Münsterstraße 271, D-44145 Dortmund, Germany. E-mail: naturkundemuseum@stadtdo.ge. Founded 1912. Includes a small bird coll.

**Dublin** Natural History Museum/Músaem na Staire Nádurtha, National Museum of Ireland (NMI), Merrion Street, Dublin 2, Ireland. Tel: #353-1-6777444, fax -6761348, e-mail nmi@indigo.ie. Curator for all non-entomological zoology Dr Mark Holmes, education officer Dr Damien Walshe (spare-time occupying with bird coll.). Founded 1857. Includes the coll. of O'Mahorey.

**Ekaterinburg** Institute of Zoology, Russian Academy of Sciences. Curator: Vadim K. Ryabitsev (ryabits@etel.ru). An important coll., but not included in the main list because Ekaterinburg is just within Asia, not Europe.

**Elverum** Norsk Skogsbruksmuseum, P.O. Box 117, N-2401 Elverum, Norway. Tel. #47-624-10299, fax -13015. Curator Mr Andersen. Has a small bird coll.

**Erlangen** Institut für Zoologie, Erlangen Universität, Staudstraße 5, D-91058 Erlangen, Germany. Has a small bird coll. which includes, for instance, 2 *Ectopistes migratorius*. Head of Institute: Prof. Dr O. von Helversen.

**Essex** Saffron Walden Museum (SWM), Museum Street, Saffron Walden, Essex CB10 1JL, U.K. Curator of Natural Sciences: Sarah Kenyon, tel/fax #-44-(01)799-510333, e-mail museum@uttlesford.gov.uk. Founded 1832 by the Saffron Walden Natural History Society. Founders and former staff include Lord Braybrook, Clarke, Gibson, and Maynard. Contains 1,500 mounts and skins of birds (mostly British/ European, partly mounted by J. Gould and Leadbeater, but also foreign: Asia, Australia, N & S America, Africa) and 6,540 eggs (e.g. the Tuke and Smith colls., mainly British), largely collected in the nineteenth century.

**Fermo** Museo di Scienze Naturali, Fermo, Italy. Includes 408 mounted Italian birds of the private coll. of T. Salvadori, donated by him to the city of Fermo in 1930. See *Suppl. Ric. Biol. Selvaggina* 22 (1995), and Violani *et al.* (1997); in the latter work, all birds are shown on photographs.

**Ferrara** Istituto di Zoologia e Biologia Generale, Università degli Studi di Ferrara, Via Previatei 24, I-44100 Ferrara, Italy. Contains c.2,000 skins and mounts: see S. Mazzotti & S. Volponi (1993) *Museol. Scientifica* 10: 53-61.

**Forlì** Museo Ornitologico 'F. Foschi', Forlì, Emilia Romagna prov., Italy. Contains the coll. of F. Foschi (assembled 1934-1980) of c.3,500 mounts of Italian birds, and includes also several older colls. See U. F. Foschi ('1993'=1994) *Museol. Scientifica* 10: 335-336. A 112 pp. catalogue was published by U. F. Foschi in 1984.

**Funchal** Museu Municipal do Funchal (Historia Natural) (MMF), Ornithology section, Rua da Mouraria 31, 9000 Funchal, Madeira, Portugal. Tel. #-351-91-792591, fax -225180. Curator (for entire zoology) E. C. Gerrard ('Ted') (egerrard@tethys.uma.pt). Founded by Padre E. Schmitz, now owned by municipality of Funchal. A small but important coll. of birds from Madeira and other Atlantic islands

**Göttingen** Zoologisches Museum (ZIMG), Institut für Zoologie und Anthropologie der Universität Göttingen, Berliner Straße 28, D-37037 Göttingen, Germany. Tel. #: -49-551-395524, fax -395579. Curator: Dr Gert Tröster (gtroest@gwdg.de). Includes colls. of the past staff members J. F. Blumenbach, Ehlers, and H. Kirchoff. The bird coll. has c.350 mounts and 1,350 skins, and includes extinct birds like *Ectopistes migratorius*, *Nestor productus* and *Conuropsis carolinensis*; also, 300 egg sets and a few skeletons

**Graz** Steiermärkisches Landesmuseum Joanneum (LMJ), Raubergasse 10, A-8010 Graz, Austria. Tel #-43-316-8017 9760, fax #-43-316-8017 9800, e-mail post@lmj-zoo.stmk.gv.at, webpage www.museum-joanneum.at. Manager of bird coll.: Peter Sackl; a former curator A. von Mojsisovics. Founded 1811, belongs to the Steiermark government. Includes 1,756 skins (700 species), 150 skeletons (60 species), 350 egg sets, and 100 nests, including parts of the former colls. of von Spix, Tschusi zu Schmidhoffen, Worofka, Johann Natterer, Schiebel and Neunteufel, both from Austria and abroad, of which part is on computer; increase c.20 skins annually, from local birds skinned by own taxidermist. See Marktanner-Turneretscher (1911) and Mecenovic (1969) for history and contents of the coll.

- Greifswald** Zoologisches Institut und Museum, Ernst-Moritz-Arndt-Universität Greifswald, Johann-Sebastian-Bach-Straße 11-12, D-17489 Greifswald, Germany. Tel. #-49-3834-864271, fax - 864252, e-mail zool.museum@uni-greifswald.de. Curator: Dr Dietmar Schittek. Includes an important number of bird skins.
- Härnösand** Länsmuseet Murberget, S-87102 Härnösand, Sweden. Tel. #-46-611-23240. Has a small bird coll.
- Heusden-Zolder** The large coll. of mounted birds of Pater Landewald Jansen is exhibited in Heusden-Zolder, prov. Limburg, Belgium. Info: Stichting Limburgs Landschap, tel. #-32-11-530250.
- Hildesheim** Roemer-Museum, Am Steine 1-2, D-31134 Hildesheim (near Hannover), Germany. The coll. is mostly archaeological, but a small coll. of birds is available. See Schoppe (1987) for history and contents.
- Hradec Králové** Muzeum Východních Czech, Nat. Hist. Dept., Eliscino nábřeží 465, CZ-50001 Hradec Králové, Czech Rep. Tel. #-42-49-5514631, fax #-42-49-5512899. Curator Dr Karel Lohnský, former curator V. Balthasar. Includes 450 skins (300 species, 55 bird families), 450 skeletons (300 species), and 50 egg sets, largely from Czech Rep. and Slovakia
- Innsbruck** Institut für Zoologie und Limnologie (IZUI), Abt. Terrestrische Ökologie und Taxonomie, Universität Innsbruck, Technikerstraße 25, A-6020 Innsbruck, Austria. Head of Institute: Dr Konrad Thaler. The coll. of the institute was founded in about 1860, and now includes c.330 mounts, at least 12 skeletons, and a few birds in alcohol, skulls, egg sets, and nests.
- Istanbul** Robert's College (Istanbul Amerikan Robert Liseri), PK 1 Arnavutkai, TR-80820 Istanbul, Turkey. Contains 266 mounted birds (174 species), presumed to be largely of local origin. Based on the private coll. of T. Robson (an inhabitant of Istanbul 1861-1871), with later additions by Mathey-Dupraz and others. In poor condition, with at least 265 specimens lost between 1924 and 1996. See Mathey-Dupraz (1920-1924) and Kirwan (1997).
- Jelenia Góra** The suburb Cieplice of this town in SW Poland has a small natural history museum which includes 922 skins and mounts of birds (370 species), 541 eggs, and 30 nests.
- Jokkmokk** Äjtte Svens Fjäll- och Samemuseum, S-96040 Jokkmokk, Sweden. Tel. #-46-971-17070. Has a small bird coll.
- Jönköping** Ornithological Museum, Town Park, Jönköping, Sweden. Open May-August; owned by Jönköping Municipality. Contains 1,458 mounts and skins (of 341 species) and 2,580 eggs (of 281 species), largely of birds from Sweden. Based on donations of H. Nyqvist in 1914 (mounts & skins) and E. Wibeck in 1943 (eggs). See Berlin (1988).
- Kassel** Naturkunde Museum im Ottoneum, Steinweg 2, D-34117 Kassel, Germany. Tel. #-49-561-7874014, fax -7874058. Info: Dr Franz Malec or Dr Peter Mansfeld. Founded 1884. Includes a small bird coll., with material of, e.g., J. Gundlach (Cuba) and Matzko, and with extinct birds like *Ectopistes migratorius* and *Conuropsis carolinensis*.
- Kazan** Zoological Museum of the Kazan State University, Tatarstan, Russia. Curator: Tatyana Vodolazskaya (e-mail: Tatjana.Wodolazskaya@soros.ksu.ru). Founded 1804, with K. Fuchs as first head, later succeeded by E. F. Eversmann. Has 500 skins and 1,000 mounts of birds from the colls. of E. A. Eversmann, M. D. Ruzskiy, A. A. Ostroyumov, E. Pelzmann, etc.
- Kendal** Kendal Museum, Station Road, Kendal LA9 6BT, Cumbria, U.K. Tel.: #-44-1539-721374, fax -722494. Ass. Keeper: Morag Clement. Founded 1796, owned by local government. Has large dioramas with mounted birds, both local (Lake District) and exotic; also, a small egg coll.
- Kiev** The coll. of the Zoological Museum of Kiev University (ZMKU) was destroyed in World War II and the museum apparently does not function as such now. The other museum in Kiev, the Zoological Museum of National Academy of Sciences of Ukraine (ZMAU), is in the 'A' list.
- Kosice** Východoslovenské Muzeum Kosice (VSM), Prírodovedné oddelenie, Hviezdoslavova 3, 04136 Kosice, Slovakia. Curator: Dr Miroslav Fulín. Founded 1955; state-owned. Specialised in the Carpathian region of Slovakia. Includes 2,000 bird skins, 1,000 mounts, 3,000 (partial) skeletons, 50 birds in liquid, and 1,200 egg sets, to which c.20 are added annually; includes the coll. of A. Mosansky. For details and catalogues of the coll. see various issues of *Zborník*

*Vychodoslovenského Múzea* (e.g. 1977 and 1978) or Matousek & Mutkovic (1985).

**Köthen** Naumann Museum, Köthener Schloss, Schloßplatz 4 (P.O. Box 181), D-06366 Köthen, Germany. Tel. #-49-3496-212074. A large mounted coll., obtained mainly in the first half of the nineteenth century and still in its original setting. Founded by J. A. & J. F. Naumann, acquired by August Herzog von Anhalt-Köthen in 1821, with J. F. Naumann as first director, later on succeeded by Edmund Naumann. Also, includes the feather coll. of W.-D. Busching, many birds from G. Garlepp (South America), etc. See W. Zimdahl (1980) *Falke* 27: 42-44.

**Kristiansand** Agder Naturmuseum og Botanisk Hage, Gimlegård, Gimleveien 23, N-4687 Kristiansand, Norway. Tel. #-47-380-92388, fax -92378. Head curator Roar Solheim (roar.solheim@agder-natur.museum.no). Has a small bird coll.

**La Rochelle** Museum d'Histoire Naturelle de La Rochelle (MHNL), 28 Rue Albert 1-er, F-17000 La Rochelle, France. Tel. #-33-546-41825, fax -506365. A small historical coll., which includes extinct birds like *Rhodonessa caryophyllacea*, *Ectopistes migratorius*, and a skeleton of *Raphus cucullatus*.

**Leeuwarden** Fries Natuurmuseum (FNM), Schoenmakersperk 2, NL-8911 EM Leeuwarden, Netherlands. Curator: Johannes Fokkema. Tel. #-31-58-2129085, e-mail info@friesnatuurmuseum.nl. Includes 3,500 birds and c.1,000 eggs, virtually all from the province of Friesland.

**Le Havre** Muséum du Havre, Le Havre, France. Includes 744 birds of the coll. Dubois/Hemery, obtained by Maury; Lesueur was curator in the 1840s, but his and other historical colls. were lost after bombing in 1944.

**Leicester** New Walk Museum, Leicestershire Museums, 53 New Walk, Leicester LE1 7EA, U.K. Tel.: #-44-116-2554100, fax -2473057. Curator of biology: Derek Lott. Includes a small bird and egg coll.

**Livorno** Museo di Storia Naturale del Mediterraneo (formerly Museo Provinciale di Storia Naturale di Livorno), Via Roma 234, I-57127 Livorno, Italy. Tel. #-39-586-802294. A small coll., including c.1,000 bird skins, mainly from Tuscany. Catalogue: E. Arcamone & E. Meschini (1981) *Quaderni Mus. Stor. nat. Livorno* 2, 65-94.

**Ljubljana** Prirodosloveni Muzej Slovenije (ML), Prešernova 20, p.p. 290, SI-1001 Ljubljana, Slovenia. Curator for birds: Janez Gregori (jgregori@pms-lj.si; tel. 01-2410947). Founded 1905, government-owned. The bird coll. has 3,500 skins and 125 eggs, to which 100-150 birds are added annually; most birds are from Slovenia, but some recent colls. from Macedonia, Dalmatia, and Nepal. It includes colls. of Lojze Smuc, Janez Dovic, and Dare Sere.

**London** Grant Museum of Zoology and Comparative Anatomy (formerly: Zoology Museum), Biology Dept, Darwin Building, University College London, Gower Street, London WC1E 6BT, U.K. Tel #-44-171-387-7050 or -2647, fax #-44-171-380-7096. Curator Ms Helen Chatterjee (h.chatterjee@ucl.ac.uk), lecturer Dr Adrian Lister; former curator Ms Rozina Down. Founded 1828 when the private coll. of Robert E. Grant was added to that of the Imperial College; now part of University College London. Contains 550 bird skeletons and anatomical specimens.

**London** Museum of the Royal College of Surgeons of England (RCSE), 35-43 Lincoln's Inn Fields, London WC2A 3PN, U.K. Curator of vertebrates: Barry Davis (tel. #-44-171-973-2190, fax #-44-171-405-4438, e-mail museums@rcseng.ac.uk or bdavis@rcseng.ac.uk). Founded in 1799 when the British Government purchased the coll. of John Hunter, becoming the Royal College of Surgeons in 1800; coll. opened to the public in 1813. Heavily damaged in World War II, but some 500 anatomical bird specimens remain, mostly in spirit, many from the eighteenth century. All bird items on computer (F. Steinheimer *in litt.*).

**Lübeck** Naturhistorisches Museum Lübeck, Mühlendamm 1-3, D-23522 Lübeck, Germany. Head: Dr Wolfram Eckloff. Includes a small bird coll. Formerly had material from North America and SE Asia, e.g. the coll. of Hugo Storm, but this was destroyed in 1942.

**Ludlow** Shropshire County Museum Service (SHRCM), Ludlow Museum Office, 47 Old Street, Ludlow SY8 1NW, Shropshire, U.K. Tel: #-44-1584-873857, fax -872019, e-mail ludlow.museum@shropshire-cc.gov.uk. Curator of Natural Sciences: Ms Katherine J. Andrew. Founded 1833; has 550 mounted birds, a further 40 cases of mounted birds, 10

(partial) skeletons, and 3,000 eggs, including material from the Whitchurch Museum, the Ludlow Nat. Hist. Soc., and the John Locke private museum (Clunington), mostly from the Shropshire region (W England) and the British Isles generally.

**Luxembourg** Musée National d'Histoire Naturelle de Luxembourg (MNHNL), 25 Rue Münster, L-2160 Luxembourg. Tel. #-352-462233-200 or -462233-414. Curator of the zoological section: E. Engel (eengel@mnhn.lu), scientific assistant J.-M. Guinet (jmguiet@mnhn.lu; tel -462240-209); former curator V. Ferrant. Has 2,500 mounts (many with full data), 104 skins, 55 skeletons/skulls, c.300 eggs, 240 nests, and 81 feather sets; includes colls. of H. Linden, E. Holub, H. Princess von Schwartzenberg, and J. Saur, both of local origin and from Africa and South America (e.g. from Brazil). See Ferrant (1912) and Guinet (1999) for catalogues.

**Lyon** Musée Guimet d'Histoire Naturelle (MGHNL), Museum de Lyon, 28 Boulevard des Belges, F-69006 Lyon, France; tel. #-33-472-690519. Curator: M. Clary, G. Pacaud. Founded 1772 and containing many mounts of birds. The Centre de Paléontologie stratigraphique et Paléocologie, ERS 2042, Université Claude Bernard-Lyon 1, 27-43 Boulevard du 11 Novembre, F-69622 Villeurbanne Cedex, France, has an enormous coll. of (sub)fossil and recent bird bones (curator: Dr Cécile Mourer-Chauviré).

**Maastricht** Natuurhistorisch Museum Maastricht (NHMM), Postbus 882, NL-6200 AW Maastricht, the Netherlands (visitors address: De Bosquetplein 6-7, NL-6211 KJ Maastricht). Tel. #-31-43-3505477, fax -3505475. Head curator: Ms Drs F. N. Dingemans-Bakels. Founded 1912, owned by local government; includes colls. of A. W. P. Maessen, pater Nillesen, and Mr Knapen (eggs). Has 2,000 skins and mounts, 30 skulls, and 1,370 eggs, largely from the Limburg province, not all yet on card or computer.

**Madrid** The Universidad Autónoma de Madrid has an important avian skeleton coll.

**Mainz** Naturhistorisches Museum Mainz (NHMMZ), Landessammlung für Naturkunde Rheinland-Pfalz, Reichklarastraße 10, D-51116 Mainz, Germany. Tel #-49-6131-122647, e-mail snhmmz@mail.uni-mainz.de. Curator: Dr Ulrich Schmidt. Founded 1834; owned by city

of Mainz. Has 2,875 skins and mounts, 1,025 (partial) skeletons, 1,875 egg sets, and 216 nests, all on card/computer; 10-50 skins are added annually. Regionally specialised (Rheinland-Pfalz), but also birds from elsewhere in C Europe and from Ruanda; includes birds of, e.g., O. Natorp.

**Malmö** Malmö Museer, Natural History Department, Malmöhus Castle, Malmöhusvägen, S-20104 Malmö, Sweden. Tel. #-46-40-344400. Founded 1841. Curator: Sverker Wadén (sverker.waden@malmo.se). Includes an important number of bird skins, mostly Swedish.

**Marseille** Muséum d'Histoire Naturelle de Marseille (MMNH), Palais Longchamp, F-13004 France. Has a small bird coll.

**Melitopol** State Pedological Institute, Melitopol, Crimea, Ukraine. A small bird coll. Curator Aleksander I. Koshelev (station@melitopol.net)

**Monaco** Musée Oceanographique (MOM), Avenue Saint-Martin, MC-98000, Monacoville, Monaco. Has fewer than 200 skins, mostly of sea-birds. Catalogue: C. Carpine (1986) *Bull. Inst. Oceanogr. Monaco* 1436: 1-73.

**Montauban** Muséum d'Histoire Naturelle de Montauban, Palais de la Cour des Aides, Place A. Bourdelle, F-82000 Montauban, France. Founded 1854, containing c.1,500 mounted local and exotic birds.

**Moscow** Biological Faculty of Moscow State University MGU, dept of Vertebrate Zoology. Includes colls. of bird skins and specimens in spirit. Curators: Maksim N. Dementiev (skins; demmaks@apexmail.com), Prof Felix Ya. Dzerzhinski (spirit specimens; dzer@soil.msu.ru)

**Moscow** Dept of Zoology and Ecology, Zoological-Chemistry Faculty, Moscow Pedagogical State University MPSU. Tel #-7-(0)95-283 1634. Curator: Vladimir T. Butiev. Founded 1959. Includes c.3,500 skins (c.600 species) from a wide area of the former USSR, all registered on a card system, with regular additions from own expeditions, local collectors, etc.

**Moscow** Geography Faculty, Dept of Zoogeography, Moscow State University MGU. Includes nearly 1,000 skins and c.400 clutches with nest. Curator: Dr Vladimir N. Kalyakin.

- Moscow** Private coll. of the late Dr L. S. Stepanyan [formerly associated with the Institute of Ecology and Evolution (former A. N. Severtzov Institute) (IOAN), Russian Academy of Sciences, Leninskii Prospekt 33, 117071 Moskva V-71, Russia. Staff: A. V. Filchagov]. This private coll., whose fate is unknown following the death of Stepanyan in 2002, was started in 1953 and includes 2,784 birds (c.600 species) obtained during expeditions to many sites in the former Soviet Union (especially the Caucasus and the Far East), as well as Mongolia, Vietnam, and the SW Pacific; 4 types are included. Catalogue: Stepanyan (2001).
- Nancy:** Muséum-Aquarium de Nancy (MAN), 34 rue Sainte-Catherine, F-54000 Nancy, France. Tel #-33-383-329997. Coll. manager: Dr Alain Philippot (alain.philippot@man.uhp-nancy.fr). Formerly named Musée de zoologie de l'Université et de la ville de Nancy (MZN), now belongs to the Communauté Urbaine du Grand Nancy. Founded in 1854; former staff members Mr Godron and L. Cuénot, includes the coll. of Charon and with large recent acquisitions as a depot of the Paris Museum (MNHN). Includes 3,000 mounts, a few skins and skeletons, and a fairly large number of egg sets. Mounts of worldwide provenance, all on computer.
- Naples/Napoli** Centro 'Musei delle Scienze Naturali' of the Istituto e Museo di Zoologia, Università degli Studi di Napoli Federico II, Via Mezzocannone 8, I-80134 Napoli, Italy. Curator: Nicola Maio. Founded in 1811 by G. Murat, now containing 2,230 skins and mounts, from Italy, Brazil, E Africa, etc.; includes colls. of Luigi Petagna, Achille Costa, Elena d' Aosta, and Mario Schettino. See Maio & Nappi (2001) *Avocetta* 25: 154, and *Avocetta* 23: 193 (1999).
- Nice** Musée d'Histoire Naturelle (Musée Barla), 60 Bd Risso, F-06300 Nice, France. Tel. #-33-4-93551524, fax -93558196. Has a small bird coll.
- Nottingham** Nottingham Natural History Museum, Wollaton Hall, Wollaton Park, Nottingham NG8 2AE, U.K. Tel: #-44-115-9153900, fax -0153932. Has a large egg coll.
- Norwich** Castle Museum, Nat. Hist. Dept., Norwich, Norfolk NR1 3JU, England, tel#-44-1603-493642, fax -765651. Curator of Natural History Dept: Dr A. G. (Tony) Irwin, e-mail tony.irwin.mus@norfolk.gov.uk. Includes large bird dioramas.
- Novi Sad** Institute for Protection of Nature of Serbia, Radnicka 20, 21000 Novi Sad, Yugoslavia. Tel #381-21-421144, e-mail ZZPSNS@eunet.yu. Curator Slobodan Puzovic MSc; 2 taxidermists. Founded 1947, government-owned. Includes 2,500 bird skins (200 species), 45 skeletons, 405 egg sets, 50 nests.
- Novy Jicin** This town in N Moravia (E Czech Republic) has a museum which contains 519 birds of 287 species.
- Odessa** Odessa State University, Odessa, Ukraine. Includes a small bird coll. Curator: Anatoli I. Korzyukov (olegk@te.net.ua)
- Olomouc** Vlastivedne Muzeum v Olomouci (regional Museum of Olomouc), Náměstí Republiky 5, 77173 Olomouc, Czech Rep. Curator Zdeněk Vermouzek (tel. #-420-68-5515116/0605-578746; fax #-420-68-5222743, e-mail verm@vmo.cz). Founded by fusion of some smaller colls. 1873–1908; former curator Zdeněk Rumler. Has 3,000 skins, 1,500 (partial) skeletons, and 273 egg sets, to which up to 20–30 are added annually. Most items are from Moravia or the Czech Republic generally, a few exotic; all are on card, part also on computer. See also Varga (1973).
- Opava** Slezské Zemské Muzeum, Přírodovědní oddelení, Tyrsova 1, 74646 Opava, Czech Republic. Includes 4,000 bird skins (Varga 1973).
- Oporto** see Porto
- Oradea** Muzeul 'Tarii Crisurilor', Str. Stadionului 2, 3700 Oradea, Romania. According to a catalogue (Kovats *et al.* 1970), the coll. contains 1,315 birds of 207 species. Also an egg catalogue is available (Beczy 1971).
- Padua/Padova** Museo di Zoologia, Università degli Studi di Padova, Via Jappelli 1/A, I-35121 Padova, Italy. Tel #-39-49-8275410, fax -8275064. Curator: Paola Nicolosi (paola.nicolosi@unipd.it); scientific staff: Prof. M. Turchetto, Prof. R. Sandra Casellato (for all zoology). Founded 1734 with the donation of the coll. of Antonio Vallisneri to the university; includes colls. of G. Nardo and C. Acerbi from Italy, USA, and Egypt. Has at least 680 mounts (without data on stands, but perhaps to be traced from available ancient catalogues), 21 skeletons & skulls, 340 eggs and 98 nests (425 species), mostly from the



local area (Veneto) but with some from elsewhere; not yet on computer. See also Nicolosi & Turchetto (2001).

**Panagyurishte** Town Historical Museum (NHMP), Panagyurishte, Bulgaria. Curator: Yasen Hristov. Founded 1970. Includes c.200 bird skins, mainly from nearby localities in C Bulgaria; all on card. See Hristov (1982).

**Pavia** Dip. Biologia Animale, Università di Pavia, Piazza Botta 9-10, I-27100 Pavia, Italy. Curator: Dr Carlo Violani. The coll. includes c.4,000 birds skins and mounts.

**Pécs** Janus Pannonius Museum, University of Pécs, Pécs, Hungary. Includes a small bird coll. For history, see: B. Solti ('1991'=1992) *J. P. Mus. Evkonyve* 36: 59-66.

**Perpignan** Muséum d'Histoire Naturelle, 12 Rue Fontaine Neuve, F-66000 Perpignan, France. Has a small bird coll.

**Pleven** Natural History Museum, 3 Stoyan Zaimov Str., 5800 Pleven, Bulgaria. Tel. #-359-64-23569. Curator: Ivan Raychev, former staff I. Iliev, G. Slavchev, V. Dimitrov. Founded 1958, belongs to Municipality of Pleven. Includes c.1,000 bird skins and 576 mounts, including rarities from the nearby region of NC Bulgaria; all in a card system. See Dimitrov (1981).

**Plovdiv** Natural Science Museum (NSMP), 34 Hristo G. Danov Str, 4000 Plovdiv, Bulgaria. Tel. #-359-32-264474. Curator: Prof. Tseno Petrov; former head Boris Kaltchev. Founded 1918, belongs to the Municipality of Plovdiv. Includes the former coll. of the College St. Augustin (Philipopol), obtained 1955. Includes 662 skins (250 species), largely from S Bulgaria. Card system available. See Petrov (1983).

**Plzen** Zápodocekske Muzeum, Knochova vyme, Kopeckého Sady 15, CZ-30000 Plzen, Czech Rep. Includes 500 skins. For the zoological coll., see: L. Hurka (1982) *Sbornik Zápodocekske Mus. Plzni* 41: 1-63.

**Porto** Museu de História Natural - Zoologia (MZP), Faculdade de Ciências do Porto, Praça Gomes Teixeira, P-4050 Porto, Portugal. Tel. #-351-2-310290, fax #-351-2-2004777. Coll. manager Luzia Sousa, other staff Maria José Cunha. Founded in 1900 by Prof. Augusto Nobre; former staff Reis Júnior, J. R. dos Santos Júnior. Includes 200 bird skins and 4,000 other items.

**Pristina** Muzej Kosova i Metohije (500 PRI), Prirodnjacko Od., Trg. Kralja Milutina 13, 38000 Pristina, Kosovo, Yugoslavia. Tel. #-381-38-20611. Curator: Ms Basanovic. Founded 1951, government-owned. Includes 1,000 skins (157 species) from the Kosovo & Metohija region. The present status and future of the coll. is unknown; in late 1999, it was apparently unattended, as the curator was as a refugee in Beograd.

**Randazzo** A museum in Catania province, Italy. Includes the coll. of A. Priolo, with 2,250 mounted birds (389 species), mainly from E Sicily; see: *Suppl. Ric. Biol. Selvaggina* 22, 1995. Catalogue: Priolo & Di Palma (1995).

**Ravenna** Museo Ornitologico di Scienze Naturali del Comune di Ravenna (MOESN), Via Rivaletto 25, I-48020 Sant'Alberto (Ravenna), Italia (office address: Loggeta Lombardesca, Via di Roma 13, I-48100 Ravenna). Tel. #-39-544-482054, fax -212092, e-mail museo.ornitologico@comune.ravenna.it). Curator Dr Linda Kniffitz (tel. -482761), former curator Dr Azelio Ortali. Founded in 1906 by Alfredo Brandolini; donated to the Comune di Ravenna in 1967, together with the large ornithological library. Includes 2,000 birds of 69 families, 330 eggs, and 91 nests, mainly of regional origin (Emilio Romagna), but also a wide scatter of exotic of birds; several *Numenius tenuirostris*. See Brandolini (1961) and Ortali (1974) for a catalogue.

**Regensburg** Naturkunde Museum Regensburg, Am Prebrunnort 4, D-93047 Regensburg, Germany. Tel.: 00-49-941-5073446. Director and curator: Dr Hansjörg Wunderer. A small coll. of (mainly) local birds.

**Reghin** Lyzeum Nr 2, RO-4225 Reghin (Mures Co.), Romania. Former curator István Kohl. The coll. includes 3,516 birds of 386 species, of which 149 exotic, the remainder largely local, often in fairly large series; also includes many (partial) skeletons present. See Kohl (1990-1991). Also in Reghin is the private coll. of László V. Kalabér (26 Eminescu Str., RO-4225 Reghin; tel/fax #-40-65-520590), which includes 27 skins, 40 birds in alcohol, 2,217 eggs, and 471 nests of 125 European bird species.

**Rennes** Muséum National d'Histoire Naturelle, Université de Rennes, Campus Beaulieu, F-

35042 Rennes, France. Curator: Dr L. Marion. Includes a small bird coll.

**Rimini** Riserva Naturale Orientata e Museo Naturalistico di Onferno, Comune di Gemmano, Piazza Roma 1, I-48855 Gemmano, Rimini, Italia. Curator: Dino Scaravelli. Includes 660 mounted birds, mainly from the region but with some from elsewhere in Italy or Europe. See Scaravelli (2001)

**Rostock** Zoologischen Sammlung der Universität Rostock (ZSRO), Institut für Allgemeine und Spezielle Zoologie, Rostock, Germany. Head of institute: Prof. Dr R. K. Kinzelbach. Founded 1775 by O. G. Tytsen, includes colls. of A. Ch. Siemssen, G. Lembcke, H. Wachs, R. Kuhk, F. Hamann (eggs), and F. J. H. von Müller; contains c.800 bird objects, mainly mounts and eggs (catalogue: [www.biologie.uni-rostock.de/zoologie/sammlung/voegel](http://www.biologie.uni-rostock.de/zoologie/sammlung/voegel)). See: Kinzelbach *et al.* (1997).

**Rouen** Museum d'Histoire Naturelle de Rouen, 198 rue Beauvoisine, F-76000 Rouen, France. Founded 1828 by F.-A. Pouchet; fairly large (1 million zoological items), but closed for security reasons by 2001.

**Rudolstadt** Thüringer Landesmuseum Heidecksburg zu Rudolstadt, beim Landkreis Saalfeld-Rudolstadt, Schloßbezirk 1, D-07407 Rudolstadt, Germany. Formerly Rudolstädter Naturhistorischen Museum. Curator: Dr Eberhard Mey. Founded 1757 by Prince Friedrich Carl von Schwarzburg-Rudolstadt; former curators Julius Speerschneider, Otto Schmiedeknecht, Gustav Kalbe, Gerhardt Jahn, Siegfried Kuss, Wilhelm Ennenbach (Möller 2000). Includes local colls. (Thüringen), but also from Palestine, E Asia, and (on loan) those of Emil Weiske from (e.g.) Hawaii, Australia, etc.

**Ruse** Natural History Museum (NHMRB), 8 Nish Str., Ruse, Bulgaria. Tel #359-82-444754, fax #359-82-272397. Includes c.400 skins (150 species) from the Ruse region in NE Bulgaria, all on system cards.

**Salzburg** Haus der Natur, Museumplatz 5, A-5020 Salzburg, Österreich/Austria. Tel. #43-662-842653, fax -847905, e-mail [office@hausdernatur.at](mailto:office@hausdernatur.at). Head Prof Dr Eberhard Stüber, curator of vertebrate coll. Dr Robert Lindner ([robert.lindner@hausdernatur.at](mailto:robert.lindner@hausdernatur.at)). Founded in the 1930s; owned by private charity (Verein für

darstellende und angewandte Naturkunde Haus der Natur). Former curator E. P. Tratz. Includes c.2,000 birds skins (e.g. from the coll. of V. Tschusi zu Schmidhoffen), hundreds of mounts (largely without proper labels), and a small but unknown number of skeletons, skulls, egg sets, nests, and feathers. The skins are mostly from Austria (esp. the Salzburg region), but the coll. includes birds also from S Germany, the Afrotropics, and C & S America

**San Gimignano** Museo Ornitologico di S. Gimignano, Siena prov., Italy. The former coll. of the Marchioness M. Paulucci, who had 1,260 mounted birds at her death in 1911, of which 696 (253 species) remain. See Massi (1990 & undated).

**Sankt Gallen** Naturmuseum Sankt Gallen, Museumstraße 32, CH-9000 Sankt Gallen, Switzerland. Tel. #-41-71-2420670, fax -2420672. Head: Dr Toni Bürgin ([tbuergin@naturmuseumsg.ch](mailto:tbuergin@naturmuseumsg.ch)). A small coll. of local and exotic birds, e.g. from Ussuriland (Russian Far East)

**Saratov** Zoological Museum of Saratov State University (ZMSSU), Astrakhanskaya, 83, Saratov 410026, Russia. Tel #-7-8452-519228, e-mail [anikinvv@info.sgu.ru](mailto:anikinvv@info.sgu.ru), [yakushevnn@info.sgu.ru](mailto:yakushevnn@info.sgu.ru). Head of bird dept Gennady V. Shlyakhtin, coll. managers Vasili V. Anikin, Mikhail V. Ermokhin, Evgeny V. Zavyalov, also 4 other staff members; past staff members I. B. Volchanecky and L. A. Lebedeva. Specialised in the Volga-Ural region, but a large coll. was lost in fire; the present coll. of 1,900 bird skins was formed after 1991 and is registered on card and computer; c.200 species are represented. The average increase at present is 1,000 skins annually, from own expeditions.

**Schlagl** Schlagl Institut, Österreich. A small bird coll. See Petz (1984).

**Sheffield** Sheffield City Museum, Weston Park, S10 2TP Sheffield, U.K. Tel #-44-114-2782600. Keeper of Natural History: Derek Whiteley. Includes a small bird coll.: see D. Whiteley (1984) *Magpie* 3: 47-53.

**Siracusa** Liceo Classico 'T. Gargallo'. Hosts the Riza coll., originally of 2,700 mounts (of which only 330 survive). Former curator: Prof. G. Sturniolo. See *Naturalista Siciliano* 18: 297-299.

**Southend-on-Sea** Southend Central Museum (SOUMS), Victoria Avenue, Southend-on-Sea

SS2 6EW, Essex, U.K. Tel.: #-44-1702-215640, fax -215631. Senior Keeper of Natural History: John Skinner (john.skinner@bigfoot.com). Includes 30 skins, c.500 mounts (mainly from the colls. of C. Parsons and J. D. Hoy), and 300 egg sets, mostly of local origin (Essex); see Pollitt (c.1925).

**Split** Prirodoslovnog Muzeja, 58000 Split, Croatia. Curator Dr G. Piasevoli; contains 1,161 birds of 230 species: see *Larus* 43: 89-119.

**Stettin** see Szczecin

**Stia** Collezione ornitologica 'Carlo Beni', Stia, Arezzo prov., Italy. Includes c.500 mounts collected around 1900 in Tuscany. Is moving to the visitor centre of the Parco Nazionale Foreste Casentinesi. See G. Tellini Florenzano (1997).

**Suceava** Museum Departamental, Suceava, Romania. For the small bird coll., see M. Vasiliu, A. Ulsamer, D. Zaharia, & D. R. Maxim (1983) *Anuarul Muz. jud. Fasc. Stiint. Nat.* 7: 75-95

**Swansea** Swansea Museum, Victoria Road, Maritime Quarter, Swansea SA2 0JE, U.K. Tel.: #-44-1792-653763, fax -652585. Curator: Bernice Cardy. Founded 1834, owned by Swansea City Council. Includes c.200 mounts, a few skeletons, and 200 eggs sets, mostly British, e.g. of the colls. of John Naylor (1860) and W. G. Percy Player.

**Sykkylven** Sykkylven Naturhistorisk Museum, Kulturkontoret, N-6230 Sykkylven, Norway. Tel. #-47-7025-1500, fax -1501. Has a small bird coll.

**Szczecin (Stettin)** This Polish city once housed a museum which, among others, contained the coll. of its former founder and curator H. Dohrn, with birds of, e.g., the Cape Verde Is. After 1945 this coll. was transferred to Warszawa, but many of the Dohrn specimens seem to have been lost. See Hazevoet (1995).

**Tallinn** Eesti Loodusmuuseum/ Estonian Museum of Natural History, Lai tn. 29A, Tallinn 10133, Estonia (work address of zoology dept.: Kopli tn. 76, 10416 Tallinn). Tel. #-372-6-411738, e-mail museum@online.ee. The bird coll. includes material of V. Russow, A. Rauch, and P. Wasmuth.

**Tbilisi** Zoological Institute (ZIT), Georgian Academy of Sciences, 31 Chavchavadze pr.,

380030 Tbilisi, Georgia. Founded by G. Radde, now part of the Georgian Academy of Sciences. Includes the large coll. of G. Radde and others, mainly from the Caucasus area, Crimea, NE Turkey, Soviet Far East, etc. The Tbilisi coll. was in poor condition in c.1985, when it was stored underground.

**Tessengerlo** Bosmuseum Gerhagen, Zavelberg 10, B-3980 Tessenderlo, Belgium. Tel & fax #-32-13-3673844/ -3663448, e-mail bosmuseum@village.uunet.be. Contact: Jos Thijs. Founded 1968 as part of the Werkgroep Ecologie Tessenderlo (WET), a volunteer association (secretary: Herman Vermeulen, hvermeulen@skynet.be). Includes a coll. of c.330 mounted birds, mostly local and recently acquired.

**Thessaloniki** Zoological Museum (LZUT), University of Thessaloniki, Thessaloniki, Greece. Director: Dr Elena Voultsidou-Koukoura. Includes a small bird coll.

**Timisoara** A museum in this W Romanian city has a small bird coll. Curator: D. Lintia

**Torino** see Turin

**Tournai** Musée d'Histoire Naturelle et Vivarium, Cour d'Honneur de l'Hôtel de Ville, B-7500 Tournai (Doornik), Belgium. Tel. #-32-69-322345, fax -233939, e-mail mushn@swing.be. Conservateur Dr Philippe Brunin, conservateur-adjoint Christophe Remy; former curator Paul Simon. Founded 1828, with most acquisitions before 1860. Of the 4,700 bird skins and mounts only 1,000-2,000 have proper labels; the other original labels were inadvertently thrown away in the 1960s. The coll. includes a small number of skeletons (c.20) and eggs (c.30).

**Trieste** Museo Civico do Storia Naturale (MSNT), Piazza Hortis 2, I-34123 Trieste, Italy. A small bird coll., which includes some exotic ones. A catalogue of all birds is available.

**Tübingen** Zoologische Sammlung der Universität Tübingen (ZST), Tübingen, Germany. Curator: Dr Erich Weber (Erich.Weber@uni-tuebingen.de; tel. #-49-7071-29-4634). A coll. founded c.1841 and now part of the Zoologisches Institut der Eberhard-Karls-Universität Tübingen. Includes about 2,000 bird skins and mounts, 1,300 (partial) skeletons, 500 egg sets, and a small feather coll., to which 20-50 items are added annually (mainly feather sets and skeletons);

includes part of the coll. of Herzog Paul von Württemberg. All items on card, newer ones on computer.

**Turin/Torino** The Collegio San Giuseppe in Turin (CSGT) includes a large coll. of c.1000 mounted hummingbirds, totalling 226 species, brought together by Pietro Franchetti (1878–1964). See Aimassi & Levi (1999) for a catalogue.

**Turku** Zoological Museum (MZT), Centre for Biodiversity, University of Turku, FIN-20014 Turku, Finland. Contact person: Ari Karhilahti (taxidermist) (arikar@utu.fi). Past curator P. Voipio; incl. a skin coll. from K. S. Ehnberg. The MZT has 1,726 skins, 700 mounts, 1,000–1,500 egg sets, 160 spread wings, and fewer than 100 skeletons and birds in alcohol, all largely from Finland, to which 50–150 birds are added annually. All are on computer. For a catalogue, see [www.utu.fi/ML/biologia/elainmuseo](http://www.utu.fi/ML/biologia/elainmuseo).

**Turnhout** Natuurhistorisch Museum van Natuurvereniging De Wielewaal, Graatmaker 11, B-2300 Turnhout, Belgium. Includes a small coll. of mounted birds

**Udine** Museo Friuliano di Storia Naturale, Via Grazzano 1, I-33100 Udine, Italy. Has a small bird coll., curated by a taxidermist. Skin catalogue available. For the egg catalogue, see: R. Parodi *et al.* (1988) *Mus. Friulano Stor. Nat. Pubbl.* 34: 1–30.

**Varna** Museum of Natural History (MNHV), P.O. Box 173, 9000 Varna, Bulgaria. Tel #-359-52-601891, fax #-359-52-681025. Curator: Georgi Raychev, former curator Ivan Peshev. Founded 1960, owned by Municipality of Varna. Contains 350 bird skins of c.140 species, all on card; c.20 added annually, mainly birds from the Varna area (NE Bulgaria).

**Vercelli** (Italy) Includes a small coll. of 580 mounted birds, made by Mr. Ferrero (see *Suppl. Ric. Biol. Selvaggina* 22, 1995).

**Vienna/Wien** The Vienna University has a small bird coll., which for instance includes 2

*Heteralocha acutirostris*.

**Winterthur** Naturwissenschaftliche Sammlungen Stadt Winterthur, Museumstraße 52, CH-8400 Winterthur, Switzerland. Tel. #-41-52-2675166, fax -2675319. Includes a small coll. of local birds.

**Witney** Oxfordshire County Council Museums, Oxfordshire Museums Store, Cotswold Dene,

Standlake, Witney, Oxon OX29 7QG, U.K. Tel.: #-44-1865-300639, fax -300519. Curator of Biological Records Centre: John Campbell (john.campbell@oxfordshire.gov.uk). From Aug 2000, includes the egg coll. of the Jourdain Society, which started from 1964 with the donations of older colls. of deceased members. The most important contributors were K. J. Pickford, C. J. Pring, J. W. Mullholland, and S. A. R. Smith (but not F. C. R. Jourdain himself: his egg coll. is in Tring). Has 12,000 egg sets, mostly on card, 5,000 on computer, from the entire W Palearctic. The museum store also includes a coll. of over 300 eggs of Theed Pearce, donated by Bruce Campbell.

**Yerevan** Zoological Institute (ZIA), Armenian Academy of Sciences, Yerevan, Armenia. Has a bird coll. of unknown size.

**York** Yorkshire Museum, Museum Gardens, York, North Yorkshire YO1 7ER, U.K. Tel.: #-44-1904-629745, fax -651221. Asst. Curator of Natural Science: Stuart Ogilvy. Contains 3,073 bird skins and c.2,000 eggs (Denton 1995).

Please note the addresses of 2 other institutions interested in zoological/ornithological collections:

- (1) the ornithological collections survey of the International Ornithological Committee, c/o Walter J. Bock, Dept. of Biological Sciences, Box 37, Schermerhorn Hall, Columbia University, New York NY 10027, USA;
- (2) the ESF Network of Systematic Biology, secretary Ms Nicola Donlon, The Natural History Museum, Cromwell Road, London SW7 5DB, U.K.

Not listed above but not unimportant are the collections specialising in vocalisations of birds:

- (1) National Sound Archive of the British Library (Curator of Wildlife Sounds: Richard Ranft), 96 Euston Road, London NW1 2DB, U.K. (tel #-44-171-4127402, e-mail richard.ranft@bl.uk);
- (2) The Boris N. Veprintsev Phonotheca of Animal Voices (Olga D. Veprintseva, V. V. Leonovich, S. A. Boukreev), Inst. of Theoretical and Experimental Biophysics of Russia, Academy of Sciences, 142292 Pushchino, Russia. See Veprintseva (1999).

Many other museum collections also contain bird sound libraries.

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### References:

These are mainly on the history, catalogues, or type lists of European bird collections, as supplied by respondents to the questionnaires. The data were in part supplied incompletely, but no attempt has been made to improve them, nor were the texts of the referred articles checked to see whether the questionnaires were filled in correctly. This is not a complete list of all existing literature on type catalogues; for a more full list of these, see Wiktor & Ryzdewski (1991) below. Literature cited in the introduction and elsewhere is given here also.

- Aimassi, G., & Levi, L. 1999. The Hummingbird Collection in Collegio San Guiseppe (Turin, Italy). *Cataloghi Museo Regionale di Scienze Naturali Torino* 11.
- Almaça, C. 1987. A zoologia e a antropologia na Escola Politécnica e na Faculdade de Ciências da Universidade de Lisboa (até 1983). In: Bragança Gil, F. & da Graça Salvado Canelhas, M. (eds.) *Exposição comemorativa do 150.º aniversário da Escola Politécnica e do 75.º aniversário da Faculdade de Ciências da Universidade de Lisboa*. Ramos Afonso & Moita, Lisboa. [Also, a 120 pp catalogue to the exposition was published.]
- Almaça, C. 1993. *Bosquejo histórico da zoologia em Portugal*. Museu Nacional de História Natural, Museu e Laboratório Zoológico e Antropológico (Museu Bocage), Lisboa.
- Almaça, C. 1996. *A natural history of the 18th century: the Royal Museum and Botanical Garden of Ajuda*. Museu Nacional de História Natural, Museu e Laboratório Zoológico e Antropológico (Museu Bocage), Lisboa.
- Almaça, C. (ed.) 1994. *Professor Germano da Fonseca Sacarrão (1914–1992)*. Museu Nacional de História Natural, Museu e Laboratório Zoológico e Antropológico (Museu Bocage), Lisboa. [Memorial volume to Prof. Sacarrão, former director of the Mus. Bocage]
- Almaça, C. & Neves, A. M. 1987. The Museu Bocage and the new series of its Arquivos. *Arq. Mus. Bocage* NS1: 1-8.
- Andriuskevicius, A. & Macikunas, A. 1988. *The catalogue of vertebrate specimens of the Kaunas Zoological Museum named after T. Ivanauskas*. Vilnius.
- Anonymous [= H. Gretzer] 1907. *Collections du Musée d'Histoire naturelle de Son Altesse Royale Ferdinand I, Prince de Bulgarie*. Impr. de l'État, Sofia.
- Ansorge, H. 1987. Die Vogelsammlung des Staatlichen Museums für Naturkunde Görlitz—Belege zur Ornithologie Oberlausitz. *Abh. Ber. Naturkundemus. Görlitz* 60(5): 1-12.
- Arbocco, G., Capocaccia, L. & Violani, C. 1979. Catalogo dei tipi di uccelli del Museo Civico di Storia Naturale di Genova. *Ann. Mus. civico Stor. Nat. Genova* 82: 184-265.
- Arbocco, G., Capocaccia, L. & Violani, C. 1987. Catalogue of bird types in the collections of the Natural History Museum of Genoa: some addenda. *Ann. Mus. civico Stor. Nat. 'Giacomo Doria'* 86: 13-28.
- Arnone, M. & Orlando, V. E. 1990. I tipi delle raccolte del Museo Civico di Terrasini, primo contributo: *Aves. Naturalista Siciliano* 14: 25-32.
- Aubrecht, G. 1987. Die Sammlung Zoologie/Wirbeltiere im OÖ. Landesmuseum. *Oberösterreich* 37(3): 3-7.
- Aubrecht, G. 1995. Andreas Reischek (15.9.1845–3.4.1902)—ein österreichischer Ornithologe in Neuseeland. Illustrierte biographische Notizen. *Stapfia* 41: 9-50.
- Aubrecht, G. & Bauernfeind, E., et al. 1995. Kiwis und Vulkane—Zum 150. Geburtstag des Neuseelandforschers Andreas Reischek. *Stapfia* 41: 1-129.
- Aubrecht, G. & Mayer, G. Th. 1983. Zoologische Sammlungen, 1932–1982. Wirbeltierkundige Sammlungen. *Jahrb. Oberösterreich. Mus. Ver.* 128(2): 125-136.



- Banks, R. C., Clench, M. H. & Barlow, J. C. 1973. Bird collections in the United States and Canada. *Auk* 90: 136-170.
- Barreiro, J. 1997. Las colecciones de aves y mamíferos del Museo Nacional de Ciencias Naturales (CSIC). *Graellsia* 53: 101-106.
- Barreiro, J. & Pérez del Val, J. 1998. Catálogo de las colecciones de aves del Museo Nacional de Ciencias Naturales. Aves no paseriformes: pieles de estudio. *Manuales Técnicos de Museología* (MNCN-CSIC, Madrid) 7: 1-289.
- Baud, F. J. 1976. Oiseaux des Philippines de la collection W. Parsons. I. Cebu, Samar, Romblon, Tablas et Sibuyan. *Revue suisse Zool.* 83: 497-513.
- Baud, F. J. 1977. Catalogue des types de mammifères et d'oiseaux du Muséum d'Histoire naturelle de Genève. *Revue suisse Zool.* 84: 201-220.
- Baud, F. J. 1978. Oiseaux des Philippines de la collection W. Parsons. II. Luzon, Mindoro et Palawan. *Revue suisse Zool.* 85: 55-97.
- Beczy, T. L. 1971. *Catalogue of the oological collection of the Museum in Oradea*. Muzeul Tarii Crisurilor, Oradea.
- Benson, C. W. 1970-1971. The Cambridge collection from the Malagasy Region. *Bull. Brit. Orn. Cl.* 90: 168-172; 91: 1-7.
- Benson, C. W. 1972. Skins of extinct or near extinct birds in Cambridge. *Bull. Brit. Orn. Cl.* 92: 59-68.
- Benson, C. W. 1999. *Type specimens of bird skins in the University Museum of Zoology, Cambridge, United Kingdom*. *Brit. Orn. Cl. Occ. Publ.* 4, Tring, U.K.
- Berlin, A. 1988. Fågelmuseet i Jönköpings stadspark. *Bubo* 17: 130-135.
- Berlioz, J. 1929. Catalogue systématique des types de la collection d'oiseaux du Muséum, ratites-palmipèdes. *Bull. Mus. Nat. Hist. Nat., Sér.* 2(1): 58-69.
- Berlioz, J. 1935. Notice sur les specimens naturalisés d'oiseaux éteints existant dans les collections du Museum. *Arch. Mus. Nat. Hist. Nat.* 6: 485-495.
- Berlioz, J. 1950. L'histoire des collections des mammifères et d'oiseaux du muséum. *Bull. Mus. Nat. Hist. Nat.* 22: 166-180.
- Blandamer, J. S. & Burton, P. J. K. 1979. Anatomical specimens of birds in the collections of the British Museum (Natural History). *Bull. Brit. Mus. (Nat. Hist.), Zool. Ser.* 34(4): 125-180.
- Bochenski, Z. 1966. Uwagi o zbiorze jaj ptasich Kazimierza Wodzickiego (sen.). *Acta Zool. Cracoviensia* 11(1): 1-40.
- Bochenski, Z. 1984. Zbiór szkieletów ptaków w Zakładzie Zoologii Systematycznej i Doswiadczałnej PAN. [The collection of bird skeletons at the Institute of Systematic and Experimental Zoology of the Polish Academy of Sciences] *Przegląd Zool.* 28(1): 81-86.
- Bochenski, Z. 1990. Ptaki w zbiorach Zakładu Zoologii Systematycznej i Doswiadczałnej PAN w Krakowie. *Wszechswiat* 91(1-3): 4-7.
- von Boetticher, H. 1940. Verzeichnis der Typen in der Vogelsammlung der Museum der Zoologisches Institut der Universität Halle an der Saale. *Zeitschr. Naturwiss.* 94: 205-214.
- Boev, Z. 1990. Parrots (order Psittaciformes) in the collection of the National Natural History Museum, Sofia. *Historia Naturalis Bulgarica* 2: 3-6.
- Boev, Z. 1991. Ornithological collections of the National Museum of Natural History at the Bulgarian Academy of Sciences. *Historia Naturalis Bulgarica* 3: 37-48.
- Boev, Z. 1994. The National Museum of Natural History through the years. *Priroda Bulg. Akad. Nauk* 3: 88-94.
- Boev, Z. 1997. Stuart Baker's collection of birds in the National Museum of Natural History (Sofia). *Historia Naturalis Bulgarica* 7: 5-12.
- Bogdanov, A. 1892. *La Musée Zoologique de l'Université de Moscou*. Moscow.
- Bokotei, A. A. 1994. [About the ornithological collection of the State Natural History Museum of the Academy of Sciences of Ukraine]. Pp.159-160 in Grishchenko, V. N. & Vergeles, Yu. I. (eds.) *Materialy I-V konferentsii molodikh ornitologiv Ukraïni (Luts'k, 4-6 bereziya 1994 g.)*. Ukraïns'ke ornitologichne tovaristvo Akad. Nauk Ukraïni, Chernovtsy.
- Bon, M., Richard, J. & Semenzato, M. 1993. La collezione di vertebrati di Giacomo Bisacco Palazzi come testimonianza storica delle trasformazioni dell' ambiente planiziale e costiero Veneto [in Museum Venezia]. *Lavori -Soc. Veneziana Sc. Naturali* 18: 133-171.

- Brandolini, A. 1961. *Catalogo della mia collezione di uccelli del ravennate*. Fratelli Lega, Faenza.
- Britton, P. L. 1978. The Andersen collection from Tanzania. *Scopus* 2: 77-85.
- Britton, P. L. 1981. Notes on the Andersen collection and other specimens from Tanzania housed in some West German museums. *Scopus* 5: 14-21.
- Busch, R. 1957. Zur Chronik des Museum Heineanum. *Falke* 4: 45-52.
- Cabanis, J. [from vol 2 together with F. Heine] 1850-1863. *Museum Heineanum: Verzeichnis der ornithologischen Sammlung des Oberamtmann Ferdinand Heine, auf Gut St. Burchard vor Halberstadt*. Halberstadt.
- Cabot Nieves, J. 1992. Inventario de la Colección Ornitológica. Pp.19-39 in Cabot, J. (ed.) *Inventario de las colecciones herpetológica y ornitológica de la Estación Biológica de Doñana*. Consejo Superior de Investigaciones Científicas, Sevilla.
- Capocaccia, L. & Poggi, R. 1982. Short history of the Museo Civico di Storia Naturale 'Giacomo Doria' in Genoa, Italy. *Arch. Hat. Hist.* 11: 107-122.
- Carreira, I. M. G. 1984-1986. Catálogo das aves de região neotropical existentes no Museu Zoológico da Universidade de Coimbra 1 & 2. *Cienc. Biol. Ecol. Syst.* 5: 195-249; 6: 35-122.
- Carreira, I. M. G. 1990. Catálogo das aves da região afrotrropical existentes no Museu Zoológico da Universidade de Coimbra. *Cienc. Biol. Ecol. Syst.* 10: 51-108.
- Chiozzi, G. 1993. The contribution of the Milan Natural History Museum to knowledge of the African bird fauna. *Proc. VIII Pan-Afr. Orn. Congr.* 77-79.
- Cowper, S. G. 1984. Birds from the Mascarene Islands in the collections of the Merseyside County Museums. *Bull. Mauritius Inst.* 10: 7-14.
- Crnkovic, R., Radovic, D. & Susic, G. 1993. The oological collection of the Institute of Ornithology in Zagreb. *Larus* 44/45: 65-74.
- Dal Fiume, C. 1907. Catalogo di una collezione di uccelli della Colonia Eritrea [in Verona]. Milan: *Atti della Società Italiana di Scienze Naturali* 56.
- Davies, K. C. & Hull, J. 1976. *The zoological collections of the Oxford University Museum*. Oxford.
- Davies, K. C. & Hull, J. 1983. The Burchell collections from 1810-1815 in the Oxford University Museum. *Arch. Nat. Hist.* 11: 317-342.
- Davis, W. E. & Jackson, J. A. (eds.) 1995. *Contributions to the history of North American ornithology*. *Mem. Nuttall Orn. Club* 12, Cambridge (Mass.).
- Denton, M. L. 1995. Birds in the Yorkshire Museum. *Yorkshire Museum Publ.* 1-216.
- Desfayes, M. 1994. [Catalogue of type specimens in the Neuchâtel Museum of Natural History (Switzerland)], IV, Birds. *Bull. Soc. Neuchâteloise Sci. Nat.* 117: 79-95.
- Desfayes, M. 1994. Catalogue des types du Musée d'Histoire Naturelle de Neuchâtel, IV, Oiseaux. *Bull. Soc. Neuch. Sci. Naturelles* 117: 79-95.
- Di Palma, M.G., Catalisano, A. lo Valvo, F. & lo Verde, G. (eds.) 1989. [Specimen Catalogue of the Collezione Ornitologia 'Antonio Trischitta'.] *Accad. Naz. Sci. Lettere e Arti Palermo* 1989: 1-111.
- Dimitrov, V. 1981. [The ornithological collection of the Natural History Museum of Plevan]. *Ornit. Inform. Bull.* 9: 12-24.
- Dufour, C. & Haenni, J. P. 1985. *Musée d'histoire naturelle de Neuchâtel*. Éd. Attinger, Hauterive (Neuchâtel).
- Duncker, H. 1953. Mitteilungen aus der Bremer Vogelsammlung. *Abh. Naturwiss. Vereins Bremen* 33: 211-246.
- Durand, G. 1961. Notes complémentaires à l'inventaire de la collection ornithologique régionale (Bretagne et Vendée) du Muséum d'Histoire Naturelle de Nantes établi par E. Marchand et J. Kowalski. *Bull. Soc. Sci. Natlles. Ouest France (SSNOF)*, 5ème Sér., LVII.
- Eck, S. 1970. Die ausgestorbenen Vögel (Bälge, Skelette, Eier) in den Sammlungen des Staatlichen Museum für Naturkunde in Dresden. *Zool. Abh. Staatl. Mus. Naturkde. Dresden* 30: 131-134.
- Eck, S. 1982-1985. Katalog der ornithologischen Sammlung Dr Udo Bährmanns. *Zool. Abh. Staatl. Mus. Tierkde. Dresden* 38(5): 95-132; 38(9): 155-182; 39(1): 1-38; 39(6): 71-98; 40(1): 1-32; 40(8): 79-108; 41(1): 1-32.
- Elter, O. 1986. *La collezione ornitologica del Museo di Zoologia dell'Università di Torino*. Museo regionale di Scienza Naturali, Cataloghi 8, Turin.

- Fadcev '1998'=1999. Bird collection of the State Darwin Museum, Moscow. *Biol. Con. Fauna* 102: 286.
- Fasel, A. 1998. *Vieux Musée*. Plaqueette éditée à l'occasion du centenaire de l'implantation du Musée d'histoire naturelle au Plateau de Pérolles et du 175e anniversaire de sa fondation. Museum Fribourg.
- Ferrant, V. 1912. *Catalogue des oiseaux du Musée National d'Histoire Naturelle de Luxembourg (collection systématique)*. Musée National d'Histoire Naturelle de Luxembourg.
- Fisher, C. T. 1981. Specimens of extinct, endangered or rare birds in the Merseyside County Museums, Liverpool. *Bull. Brit. Orn. Cl.* 101: 276-285.
- Foschi, U., Cignini, B., Bulgarini, F., Lipperi, M., Melletti, M., Pizzari, T. & Visentin, M. 1995. Catalogazione della collezione ornitologica 'Arrigoni degli Oddi': passeriformi in pelle. *Suppl. Ric. Biol. Selvaggina* 22: 7-14.
- Foschi, U., Bulgarini, F., Cignini, B., Lipperi, M., Melletti, M., Pizzari, T. & Visentin, M. 1996. Cataloga della collezione ornitologica 'Arrigoni degli Oddi' del Museo Civico di Zoologia di Roma. *Ric. Biol. Selvaggina* 97: 1-311.
- Franzisket, L. 1967. Die Geschichte des Westfälischen Landesmuseum für Naturkunde. *Abh. Landesmus. für Naturkunde zu Münster in Westfalen* 29(1): 3-26.
- von Frisch, O., Hevers, J. & Pohl, G. 1994. *Das Staatliches Naturhistorisches Museum Braunschweig*. Braunschweig: Staatliches Naturhistorisches Museum Braunschweig.
- Gaidienne, E. 1999. *The Tadas Ivanauskas Zoological Museum in Kaunas 1919-1999*. Vilnius.
- Gebhardt, L. 1964. *Die Ornithologen Mitteleuropas*, 1. Giessen: Brühlscher Verlag.
- Gebhardt, L. 1970. *Die Ornithologen Mitteleuropas*, 2. *J. Orn.* 111, Sonderheft: 1-235.
- Gebhardt, L. 1974. *Die Ornithologen Mitteleuropas*, 3. *J. Orn.* 115, Sonderheft: 1-127.
- de Gemigny 1936-1938. *Catalogo della Collezione Ornitologica Generale del R. Museo di Firenze*. Roma.
- Gherghel, P. (1988) [Catalogue of birds of the Museum of Zoology in Cluj-Napoca.] *Studia Univ. Babeş-Bolyai, Biol.* 33(2): 87-95.
- Gherghel, P. (1989) 130 years from the foundation of the Museum of Zoology in Cluj-Napoca. *Studia Univ. Babeş-Bolyai, Biol.* 34: 101-104.
- Giglioli, E. H. 1886-1907. *Avifauna Italica*. Florence: Le Monnier.
- Gijzen, A. 1938. *Het Rijksmuseum van Natuurlijke Historie 1820-1915*. Leiden.
- Gill, B. J. 2001. Size and scope of the bird collections of New Zealand Museums. *Notornis* 48: 108-110.
- Gravenhorst, J. L. C. 1832. *Das zoologische Museum der Universität Breslau*. Breslau [Wrocław].
- Griffith, A. F. (ed.) Undated. *Catalogue of cases of birds in the Dyke Road Museum, Brighton, founded by E. T. Booth*. Brighton.
- Guinet, J.-M. 1999. *Catalogue of the Psittacidae of the Natural History Museum of Luxembourg*. Internal report MNHN Luxembourg.
- Güntert, M., et al. 1993. [On the history of the Goeldi collection in Bern.] *Jahrb. Naturhist. Mus. Bern* 11: 147-161.
- Gyldenstolpe, N. 1926. Types of birds in the Royal Natural History Museum in Stockholm. *Arkiv för Zoologi* 19A(1): 1-116.
- Hacker, J. 1984. [History of Kiel University collection.] *Mitt. Zool. Mus. Univ. Kiel, Suppl.* 1: 1-43.
- Hajmassy, P. 1983. Katalog der oologischen Sammlung des Staatlichen Naturhistorischen Museums in Braunschweig. *Braunschweiger Naturk. Schr.* 1: 685-728.
- Hanak, F. 1991. [Exoten im Sammlungen der Mährischen Ornithologischen Station.] *Zpravy MOS* 49: 69-90.
- Handtke, K. 1974. *Zur Geschichte und Bedeutung des Museum Heineanum*. Halberstadt.
- Harrison, J. M. 1953. *The birds of Kent*. H. F. & G. Witherby, London.
- Hartert, E. 1891. *Katalog der Vogelsammlung im Museum der Senckenbergische Naturforschende Gesellschaft in Frankfurt am Main*. Gebr. Knauer, Frankfurt am Main.
- Hazevoet, C. J. 1995. *The birds of the Cape Verde Islands*. British Ornithologists' Union (Check-list 13), Tring.
- Hellmayr, C. 1928. The ornithological collection of the Zoological Museum in Munich. *Auk* 45: 293-301.

- Herman, J. S., McGowan, R.Y. & Swinney, G. N. 1990. Catalogue of the type specimens of recent vertebrates in the National Museums of Scotland. *Natn. Mus. Scotl. Inform. Series* No. 4.
- Hilgert, C. 1908. *Katalog der Collection von Erlanger*. Friedländer & Sohn, Berlin.
- Hinkelmann, C. & Heinze, G.-M. 1990. Die Typusexemplare der von Wilhelm Blasius beschriebenen Vögel. *Braunschw. naturkundl. Schrifte* 3: 609-628.
- Holthuis, L. B. 1995. *1820–1958 Rijksmuseum van Natuurlijke Historie*. Nationaal Natuurhistorisch Museum, Leiden.
- Howes, C. A. 1969. A survey of extinct and nearly extinct birds in the Royal Albert Memorial Museum, Exeter. *Bull. Brit. Orn. Cl.* 89: 89-92.
- Howse, R. 1899. Index catalogue of birds in the Hancock Collection. *Transact. Nat. Hist. Soc. Northumberland* 8: 273-410.
- Hristov, Y. 1982. [The ornithological collection of the Nature Department of the Town Historical Museum of Panagyurishte.] *Orn. Inform. Bull.* 9: 112-120.
- Ilisson, R. 1992. Collection of bird skins in the Zoological Museum of Tartu University. *Acta Musei Zoologici Universitatis Tartuensis*.
- Jaeck, J. H. 1815. *Taschenbuch auf 1815, enthaltend Beschreibungen von Naturalien- und Kunst-Sammlungen [...]*. Johann Jakob Palm, Erlangen.
- Jouanin, C. 1951. Catalogue systématique des types des Trochilidés. *Publ. Un. Int. Sci. Biol. Ser. C* 3: 1-27.
- Jouanin, C. 1962. Inventaire des oiseaux éteints ou en voie d'extinction conservés au Muséum de Paris. *Terre et Vie* 109: 275-301.
- Kazubski, S. L. 1996. The history of the Museum and Institute of Zoology, P. A. S. *Bull. Mus. Inst. Zool. P. A. S., Annales Zoologici suppl.* 1: 7-19.
- Kerschner, T. & Schadler, J. 1933. Geschichte der naturwissenschaftlichen Sammlungen des oberösterreichischen Landesmuseums. *Jahrb. Oberösterreich. Mus. Ver.* 85: 345-479.
- Keve, A. 1948. Über die ornithologische Sammeltätigkeit Franz Schillinger's im russischen Reich. *Ann. naturhist. Mus. Wien* 56: 77-129.
- Keve, A. & Rokitsansky, G. 1966. Die Vögel der Almásy Ausbeute, 1901 und 1906. *Ann. Naturhist. Mus. Wien* 69: 225-283.
- Kinzelbach, R., Schmitz, N. & Bick, A. 1997. *Geschichte und Bestand der Vogelsammlung der Universität Rostock*. Schwerin: Stock und Stein Verlags-GmbH.
- Kirwan, G. M. 1997. A list of bird specimens held in the Robert's College, Bebek (Istanbul, Turkey), with some comments on Mathey-Dupraz (1920–24). *Sandgrouse* 19: 30-38.
- Knox, A. G. 1998. Book review of: B. Mearns & R. Mearns, 1998 [1997] *The bird collectors*. San Diego and London: Academic Press. *Ibis* 140: 547-548.
- Knox, A. G. & Walters, M. P. 1992. Under the skin: the bird collections of the Natural History Museum. *Bull. Brit. Orn. Cl., Centenary suppl.* 112A: 169-190.
- Knox, A. G. & Walters, M. P. 1994. *Extinct and endangered birds in the collections of The Natural History Museum*. *Brit. Orn. Cl. Occ. Publ.* 1, Tring.
- Koenig, P. 1993. *Catalogue: collection des oiseaux de Madagascar*. Musée Zoologique de l'Université Louis Pasteur et de la Ville de Strasbourg, Strasbourg.
- Koenig, P. 1994. *Catalogue de la collection des oiseaux du Musée Zoologique de Strasbourg, vol. 2, Anseriformes (cygnes, oies et canards)*. Musée Zoologique de l'Université Louis Pasteur et de la Ville de Strasbourg, Strasbourg.
- Kohl, S. 1990–1991. Systematischer Katalog der ornithologischen Sammlung des Lyzeums nr. 2 aus Reghin. *Studia Universitatis Babeş-Bolyai Biologica* 35(1): 45-81; 36(1): 53-93; 36(2): 69-98.
- König, C. 1991. Forschungsreisende und ihre Verdienste um den Aufbau der zoologischen Sammlung, in: Aus der Geschichte des Stuttgarter Naturkundemuseums. *Stuttgarter Beitr. Naturkde, Ser. C* 30: 21-37.
- Korn, W., et al. 1993. Pp. 453-468 in *Herzog Ernst II von Sachsen-Coburg und Gotha und seine Zeit*. Maro Verlag, Augsburg.
- Kovats, L., Polis, R. & Beczy, T. L. 1970. *Catalogul sistematic al colectiei de pasari a muzeului din Oradea (1951–1969)*. Muzeul Tarii Crisurilor, Oradea.

- Krüger, A. 1925. Verzeichnis der Vogelsammlung des Museum für Natur- und Heimatkunde [Magdeburg]. *Abh. Ber. Mus. Nat. Heim. Natur. Verein* 4(2): 127-153.
- Krüper, Th. 1862. Das Naturhistorische Museum der Otto's Universität zu Athen. *J. Orn.* 10: 311-320.
- Kummer, J. 1993. Geschichte der oologischen Sammlung Kummer. *Orn. Jahresber. Mus. Heineanum* 11: 47-52.
- Kux, Z. 1977. [The zoological department of the Moravian Museum in Brno and its activities.] *Acta Mus. Moraviae, Sci. Nat.* 62: 173-174.
- Lampe, E. 1904-1912. Katalog der Vogel-Sammlung des Naturhistorischen Museums zu Wiesbaden. *Jahrb. Nassauischen Ver. Naturkde* 57: 193-275; 58: 195-217; 59: 213-248; 62: 68-102; 65: 125-148.
- Langrand, O. 1985. *Les oiseaux de Madagascar. Série inventaire des collections.* Muséum d'Histoire Naturelle de Grenoble.
- Langrand, O. 1986a. *Les oiseaux d'Afrique tropicale et australe. Série inventaire des collections.* Muséum d'Histoire Naturelle de Grenoble.
- Langrand, O. 1986b. *Les oiseaux du Nord de l'Afrique. Série inventaire des collections.* Muséum d'Histoire Naturelle de Grenoble.
- Largen, M. J. 1987. Bird specimens purchased by Lord Stanley at the sale of the Leverian Museum in 1806, including those still extant in the collections of the Liverpool Museum. *Arch. Nat. Hist.* 14: 265-281.
- Largen, M. J. 1988. [The collection Salt from Ethiopia in the Liverpool Museum]. *Arch. Nat. Hist.* 15: 331-355.
- Largen, M. J. & Rogers-Price, V. 1985. John Abbot, an early naturalist-artist in North America—his contributions to ornithology, with particular reference to a collection of bird skins in the Merseyside County Museums, Liverpool. *Arch. Nat. Hist.* 12: 231-252.
- Leviton, A.E., Gibbs, R. H., Heal, E. & Dawson, C. E. 1985. Standards in herpetology and ichthyology: part 1. Standard symbolic codes for institutional resource collections in herpetology and ichthyology. *Copeia* 1985 (3): 802-832.
- Lindermaier, E. 1840. [General catalogue of the various natural products in the Museum of the Natural History Society of Athens.] Athens. (In Greek).
- Lindorfer, J. 1970. Nester und Gelege der Brutvögel Oberösterreichs. *Schriftenreihe Oberösterreich. Mus. Ver.* 2: 1-171.
- Lönnberg, E. 1926. The ornithological collection of the Natural History Museum in Stockholm. *Auk* 43: 434-446.
- Louette, M. 1980. The ornithological collections at Tervuren and their zoogeographical importance. *Africa-Tervuren* 26: 89-92.
- Lowe, W. P. 1939. The bird collection in the Royal Albert Memorial Museum, Exeter. *Ibis* (14)3: 65-75.
- Löwegren, Y. 1968. Zoologiska Museet och Institutionen vid Lunds Universitet. *Lunds Universitets Historia* 6: 1-142.
- Maio, N. & Nappi, A. 2001. Le collezioni ornitologiche del Museo Zoologico dell'Università di Napoli Federico II: interesse storico e faunistico. *Avocetta* 25: 154.
- Malchevskiy, A. & Polyanskiy, Yu. 1969. [Development of the Zoological departments.] *Vestnik Leningradsk. Gosud. Univ.* 1969 (3): 37-59.
- Marchand, E. & Kowalski, J. 1903. Inventaire détaillé et annoté de la collection ornithologique régionale (Bretagne et Vendée) du Muséum d'Histoire Naturelle de Nantes. *Bull. Soc. Sci. Natlles. Ouest France (SSNOF)*, 5ème Sér., III.
- Marinescu, A. & Ionescu, A. 1985. Le Muséum d'Histoire Naturelle de Bucarest (1834-1984)—aperçu chronologique. *Trav. Mus. Hist. nat. 'Grigore Antipa'* 27: 374-417.
- Marinescu, A. & Rojancovski, E. 1972. La collection zoologique 'Dr Ilarie Mitrea' du Musée d'Histoire Naturelle 'Grigore Antipa'. *Trav. Mus. Hist. nat. 'Grigore Antipa'* 12: 439-446.
- Marini, M. 1985. [Catalogue of Trochilidae of the Museo di Zoologia, Università di Bologna.] *Natura Montagna* 32: 11-18.
- Marktanner-Turneretscher, G. 1911. Die zoologische, botanische und phytopaläontologische Abteilung. Pp.239-265 in *Das Steiermärkischen Landesmuseum und seine Sammlungen.* Graz.



- Massa, B. 1977. Carlo Orlando (1898–1976). *Riv. ital. Orn.* 47: 86-92.
- Massi, A. Undated, c.1996. *Museo ornitologico di S. Gimignano*. Nencini [a catalogue], Poggibonsi.
- Mathey-Dupraz, A. 1920–1924. Notes ornithologiques de la région du Bosphore. *Orn. Beob.* 17-22 [a series of 27 articles published over five years].
- Mathiasson, S. 1985. [New acquisitions to the Göteborg Natural History Museum.] *Arstryck Göteborgs naturhist. Mus.* 1985: 10-13.
- Matousek, B. & Mutkovic, A. 1985. [The list of vertebrate collections in museums in Slovakia.] Ústredna správa múzeí a galérií, Bratislava.
- Mauersberger, G. 1988. Über Lichtensteinsche Vogelnamen und ihre Typen. *Mitt. Zool. Mus. Berlin* 64, suppl. Ann. Orn. 12: 129-148.
- Mäuser, M. 1995a. Das neue Naturkunde-Museum Bamberg. *Ber. Naturforsch. Ges. Bamberg* 69: 121-132.
- Mäuser, M. 1995b. Zur Gründung des Bamberger Naturalienkabinetts durch Fürstbischof Franz Ludwig von Erthal. Pp.235-243 in Baumgärtel-Fleischmann, R. (ed.) *Franz Ludwig von Erthal—Fürstbischof von Bamberg und Würzburg 1779–1795*. Diözesanmuseum Bamberg, Bamberg.
- McGowan, R. Y. 1988. Birds' eggs in the National Museums of Scotland. *Nat. Mus. Scotl. Inform. Series* No. 1.
- Mearns, B. & Mearns, R. 1998. *The bird collectors*. Academic Press, San Diego.
- Mecenovic, K. 1969. Die Zoologisch-Botanische Abteilung in den Jahren 1911 bis 1961. In B. Sutter, ed. *Festschrift 150 Jahre Joanneum 1811–1969. Joannea (Publ. Steiermärk. Landesmus. & Steiermärk. Landesbibl.)* 1969: 75-94.
- Meise, W. 1929. Verzeichnis der Typen des staatlichen Museums für Tierkunde in Dresden, Vögel, 1. *Abh. Ber. Staatl. Mus. Tierkde. Dresden* 17(4): 1-22.
- Meissner, F. 1824. *Systematisches Verzeichnis der Schweizerischen Vögel, welche im Museum der Stadt Bern aufgestellt sind*. Jenni, Bern.
- Mertens, R. & Steinbacher, J. 1955. Die im Senckenberg-Museum vorhandene Arten ausgestorbener, aussterbender oder seltener Vögel. *Senckenbergiana biologica* 36: 241-265.
- Minelli, D. & Taranto, P. 2001. I preparati anatomici degli Uccelli del Museo di Anatomia Comparata dell'Università di Bologna. *Avocetta* 25: 155.
- Möller, R. 2000. Beiträge zur Geschichte des Rudolstädter Naturhistorischen Museums—1903 bis 1960. *Rudolstädter naturhistorische Schriften* 10: 3-32.
- de Naurois, R. 1994a. *As aves do Arquipélago de Cabo Verde*. IICT, Lisboa.
- de Naurois, R. 1994b. *As aves das Ilhas do Golfo da Guiné*. IICT, Lisboa.
- Neufeldt, I. A. 1978. [Extinct birds in the collection of the Zoological Institute of the Academy of Sciences of the USSR.] *Trudy Zool. Inst. Akad. Nauk SSSR* 76: 101-110.
- Neumann, J. & Mauersberger, G. 1990. Albert und Louis Koch und ihre nordamerikanischen Sammlungen. *Mitt. Zool. Mus. Berlin* 66, suppl. Ann. Orn. 14: 95-111.
- Nicolai, B. 1993. Anmerkungen zur Sammlung Kummer [in coll. Halberstadt]. *Orn. Jahresber. Mus. Heineanum* 11: 53-54.
- Nicolai, B., Neuhaus, R. & Holz, R. 1994. *Museum Heineanum: Geschichte und Bedeutung*. Förderkreis Museum Heineanum, Halberstadt.
- Nicolosi, P. & Turchetto, M. 2001. Prima indagine sulla storia delle collezioni ornitologiche del Museo di Zoologia dell'Università di Padova. *Avocetta* 25: 156.
- Nonev, S. 1982. [The ornithological collection of the Cultural and Historical Heritage, Direction of Tolbukhin.] *Orn. Inform. Bull.* 11: 97-106.
- Norris, A. 1998. The Roundell collection: a historic country house collection of mounted birds. *Leeds Mus. Galleries Review* 1: 14-16.
- Ong, A. 1996. Katalog der Eiersammlung von Oskar Koch im Zoologischen Museum der Universität Tartu. *Acta Musei Zoologici Universitas Tartuensis*.
- Ore, A. & Høeg, O. A. 1961. Det matematisk-naturvitenskapelige fakultet—Zoologisk Museum. Pp.610-627 in Oslo Universitetet (ed.) *Universitetet i Oslo 1911–1961*. Universitetsforlaget, Oslo.
- Orlando, V. E. 1978. La raccolta Jannizzotto a Chiaramonte Gulfi (Ragusa). *Riv. ital. Orn.* 48: 337-339.

- Orlando, V. E. 1990a. Designazione di lectotipi della raccolta Carlo Orlando. *Naturalista Siciliano* 14: 21-23.
- Orlando, V. E. 1990b. La raccolta ornitologica Trischitta di Messina al Museo di Terrasini. *Museol. Sci.* 7: 169-171.
- Orlando, V. E. 1991. Francesco Venezia (1874–1935). *Naturalista Siciliano* 15: 223-226.
- Orlando, V. E. 1993. [Catalogue collezioni ornitologiche del Museo Regionale di Storia Naturale di Terrasini, Palermo.] *Naturalista Siciliano* 17: 181-183.
- Orlando, V. E. 1995a. Un museo di storia naturale per la Sicilia. *Atti Conv. 'Un Museo di Storia Naturale per la Sicilia', Terrasini (Palermo), 27 febbraio 1993*: 9-18.
- Orlando, V. E. 1995b. Le collezioni ornitologiche del Museo Regionale di Storia Naturale di Terrasini, Palermo. *Suppl. Ric. Biol. Selvaggina* 22: 37-42.
- Ortali, A. 1974. *Gli uccelli del Museo Brandoloni*. Galeati, Imola.
- Papadopol, A. & Talpeanu, M. 1986–1987. Catalogue des collections ornithologiques provenant de Roumanie conservées au Muséum d'Histoire Naturelle 'Grigore Antipa' de Bucarest. *Trav. Mus. Hist. nat. 'Grigore Antipa'* 28: 199-246; 29: 213-316.
- Passerin d'Entrèves, P., Rolando, A. & Violani, C. 1986. Tommaso Salvadori nel centocinquantesimo della nascita (1835–1923). *Riv. ital. Orn.* 56: 133-171.
- Peklo, A. M. 1997a. *Katalog koleksii Zoologicheskogo Muzeya NNPM NAN Ukrainy, Ptitsy, Vyp. 1—Nevorob'inye Non-Passeriformes (Pingvinoobraznye Sphenisciformes – Zhuravleobraznye Gruiformes)*. Kiev.
- Peklo, A. M. 1997b. *Katalog koleksii Zoologicheskogo Muzeya NNPM NAN Ukrainy, Ptitsy, Vyp. 2—Nevorob'inye Non-Passeriformes (Rzhankoobraznye Charadriiformes - Dyatloobraznye Piciformes)*. Kiev.
- von Pelzeln, A. 1871. *Zur Ornithologie Brasiliens*. Wien.
- von Pelzeln, A. 1873. Birds in the Imperial Museum, Vienna, obtained from the Leverian Museum. *Ibis* 3(3): 105-124.
- von Pelzeln, A. 1890. Geschichte der Säugetier- und Vogel-Sammlung des k.-k. naturhistorischen Hofmuseums [Wien]. *Ann. k.-k. naturhist. Hofmus.* 5: 503-539.
- von Pelzeln, A. & von Lorenz, L. 1886–1888. Typen der ornithologischen Sammlung des k.-k. naturhistorischen Hofmuseums. [Wien]. *Ann. k.-k. naturhist. Hofmus.* 1: 249-270; 2: 191-216, 339-352; 3: 37-62.
- Peters, D. S. 1992. Sektion Ornithologie. In M. Türkay & W. Ziegler, eds. *175 Jahre Senckenbergische Naturforschende Gesellschaft*, 2: 32-38.
- Petersen, Æ. (1984) Rare and vagrant birds in Iceland. *Naturrufrædingurinn* 53: 73-82.
- Petrov, T. 1983. [Ornithological collection (Falconiformes, Strigiformes, and Pelecaniformes) of the Natural Science Museum in Plovdiv.] *Bull. Museums South Bulgaria* 9: 55-58.
- Petz, E. 1984. Die Vogelsammlung des Stiftes Schlagl. *Jahrb. Oberöst. Mus. Verein* 129: 333-342.
- Piechocki, R. 1958. Beiträge zur Avifauna Nord- und Nordost-Chinas (Mandschurei). *Abh. Ber. Mus. Tierke Völkerke Dresden* 24: 105-203.
- Piechocki, R. 1968. Beiträge zur Avifauna der Mongolei. Teil 1, Non-Passeriformes. *Mitt. Zool. Mus. Berlin* 44: 149-292.
- Piechocki, R. & Bolod, A. 1972. Beiträge zur Avifauna der Mongolei, Teil 2, Passeriformes. *Mitt. Zool. Mus. Berlin* 48: 41-175.
- Piechocki, R., Stubbe, M., Uhlenhaut K. & Sumjaa, D. 1981–1982. Beiträge zur Avifauna der Mongolei, Teile III & IV. *Mitt. Zool. Mus. Berlin* 57-58, suppl. *Ann. Orn.* 5: 71-128; 6: 3-53.
- Poggesi, M. & Buracchi, G. 1990. Cataloghi del Museo Zoologico 'La Specola' dell' Università di Firenze. VII. Aves, Trogoniformes. *Atti Soc. tosc. Sc. nat. Mem.* 97 (B): 239-249.
- Pollitt, W. c. 1925. *Essex birds in the Southend-on-Sea Museum*. County Borough, Southend-on-Sea.
- Popescu, C. 1986. Constituirea evoluția si importanta patrimoniului ornitologic al Muzeului de Istorie Naturala din Sibiu. *Studii si Comunicari Stiinte Naturale Muzeul National Brukenthal* 27: 225-239.
- Powell-Cotton, C. Undated. *Quex Museum House and Gardens*. Quex Museum House and Gardens, Birchington.

- Preuss, N. O. & Aaris-Sørensen, K. 1981. Nyt fra Zoologisk Museum. Tilvaekst i museets recente og kvartaerzoologiske fuglesamlinger. *Dansk Orn. Foren. Tidsskr.* 75: 131-138.
- Prins, T. G. 1992. The specimens of Parulidae from the Neotropics in the collection of the Zoological Museum Amsterdam. *Versl. Techn. Gegevens Inst. Taxon. Zoöl. Univ. Amsterdam* 61: 1-26.
- Prostov, A. & Smilova, D. 1983. [The ornithological collection of the Nature Department of the Burgas District, Direction of Cultural and Historical Heritage.] *Orn. Inform. Bull.* 13-14: 14-31.
- Rallo, G. 1988. La collezione naturalistica di Giacomo Bisacco Palazzi acquisita dal Museo Civico di Storia Naturale de Venezia. *Boll. Mus. Civico Storia Naturale Venezia* 38: 257-69.
- Rang, V. 1980. *Catalogul sistematic al colectiei ornitologice a Muzeului Judetean de Stiintele Naturii Bacau*. Bacau: Intreprinderea poligrafica Bacau.
- Raykov, B. 1953. [History of zoology in Leningrad State University.] *Vestnik Leningradsk. Gosud. Univ.* 1953(4): 73-87.
- Recorbet, B. 1991. *Les oiseaux de Loire-Atlantique du 19e à nos jours*. Groupe Ornithologique de Loire-Atlantique, Nantes.
- Reichholf, J. H. 1983. Der Bestand an Typenmaterial der ornithologischen Aufsammlungen von J. B. von Spix in der Zoologische Staatssammlung in München. *Spixiana*, suppl. 9: 417-423.
- Reiser, O. 1891. *Die Vogelsammlung des bosnisch-hercegovinischen Landesmuseums in Sarajevo, enthaltend die während der Jahre 1887-1891 gesammelte Avifauna des Occupations-Gebiet*. II. Internationaler Ornithologen-Congress, Budapest.
- Rheinwald, G. & Van den Elzen, R. 1984. Die Wirbeltiersammlungen des Museums Alexander Koenig und ihre Typusexemplare. II. Vögel. *Bonner zoologische Monographien* 19: 49-151.
- Römer, A. 1863. Verzeichnis der in Herzogthum Nassau, insbesondere in der Umgegend von Wiesbaden vorkommenden Säugethiere und Vögel. *Jahrb. Nassauischen Ver. Naturkde* 17: 1-76.
- Römer, A. 1879. Nachträge zum Verzeichnis der Säugethiere und Vögel des vorm. Herzogthums Nassau, insbesondere der Umgegend von Wiesbaden. *Jahrb. Nassauischen Ver. Naturkde* 31: 245-250.
- Römer, A. 1892. Nachträge zu dem Verzeichnisse der Säugethiere und Vögel des vorm. Herzogthums Nassau, insbesondere der Umgegend von Wiesbaden. *Jahrb. Nassauischen Ver. Naturkde* 45: 147-152.
- da Rosa Pinto, A. A. 1983. *Ornitologia de Angola*. IICT, Lisboa.
- Roselaar, C. S. 1990. Karel H. Voous en het Zoölogisch Museum in Amsterdam. *Vogeljaar* 38: 103-111.
- Roselaar, C. S. & Prins, T. G. 2000. List of type specimens of birds in the Zoological Museum of the University of Amsterdam (ZMA), including taxa described by ZMA staff but without types in the ZMA. *Beaufortia* 50(5): 95-126.
- Rossilimo, O. L. (ed.) 1991. [Two centuries in collections of the Zoological Museum of Moscow University.] Moscow Univ. Publ., Moscow (in Russian).
- Runde, O. J. 1991. Naturhistorien [History of the Stavanger Museum.] *Stavanger Museum Årbok* 100: 27-46.
- Salvadori, T. 1914. Notizie storiche intorno alla collezione ornitologica del Museo di Torino. *Mem. Acc. Sc. Torino* (2)65(5).
- Salvin, O. 1882. *A catalogue of the collection of birds formed by the late Hugh Edwin Strickland*. Cambridge Univ. Press.
- Sarasin, F. 1939. Geschichte der Vogelsammlung des Basler Naturhistorischen Museums. *Verh. Naturforschenden Gesellschaft Basel* 50: 13-24.
- Savi, P. 1927. *Ornitologia toscana*. Tipografia Nistri, Pisa.
- Scaravelli, D. 2001. Le collezioni ornitologiche del Museo della RNO di Onferno (Rimini). *Avocetta* 25: 157.
- Scarlato, O. A. (ed.) 1982. [Zoological Institute of the Academy of Sciences of the USSR: 150 years.] Leningrad.
- Schifter, H. 1990. Dr Adolf Bernhard Meyer und die Vogelsammlung des Naturhistorischen Museums Wien. *Zool. Abh. Staatl. Mus. Tierkde. Dresden* 46: 63-73.
- Schifter, H. 1992a. Die Vögel aus dem Nachlaß Ferdinand Lucas Bauer im Naturhistorischen Museum Wien und die darunter befindlichen typen. *Ann. Naturhist. Mus. Wien* 93 B: 41-57.

- Schifter, H. 1992b. [Type specimens of Apodidae from Natterer.] *Mitt. Zool. Mus. Berlin* 68, Suppl. *Ann. Orn.* 16: 157-165.
- Schifter, H. 1993. [The history of the Wien collection.] *Neues Museum* 3/4: 36-39.
- Schifter, H. 1994. The 200-year-old bird collection at the Natural History Museum in Vienna. *J. Orn.* 135: 269.
- Schifter, H. 1996. Von Ferdinand Deppe und Christoph Julius Wilhelm Schiede in Mexico gesammelte Vögel im Naturhistorisch Museum Wien. *Mitt. Zool. Mus. Berlin* 72, suppl. *Ann. Orn.* 20: 3-5.
- Schifter, H. & Van den Elzen, R. 1986. Die Typen der von Guido Schiebel beschriebenen und der nach ihm benannten Vögel. *Ann. naturhist. Mus. Wien (Bot. Zool.)* 88-89: 25-35.
- Schifter, H. & Violani, C. 1999. Bird specimens in the Natural History Museum, Vienna, received from Franco Andrea Bonelli and Paulo Savi including some (possible) type specimens. *Riv. ital. Orn.* 69: 195-202.
- Schneider, B. & Bauernfeind, E. 1999. Dis Sammlung Kronprinz Rudolf am Naturhistorischen Museum Wien. *Veröff. Nat. Hist. Mus. Wien*, N.F. 25: 1-162.
- Schoppe, R. 1987. Die ornithologische Sammlung. Geschichte und aktueller Bestand der Vogelsammlung des Roemer-Museum. *Mitteil. Roemer-Museum Hildesheim, N.F. (Bestandskatalog)* H1: 1-156.
- Schramm, W. C. 1886. Die naturhistorischen Sammlungen des Adolf Schwab im Franzens-Museum [in coll. Brünn= Brno]. *Notizen-Blatt* 1886 (10): 76-77.
- Secone, X & Zuffi, M.A.L. 1996. La collezione storica ornitologica (nidi e uova) del Museo di Storia Naturale e del Territorio dell'Università di Pisa: morfometria dei nidi e significato biologico di forme e colori delle uova. *Museologia Scientifica* 13 (suppl.): 183-192.
- Sharpe, R. B. 1885. The Hume collection of Indian Birds. *Ibis* (5)3: 456-462.
- Sharpe, R. B. 1906. Birds. Pp.79-515 in: *The history of the collections contained in the Natural History departments of the British Museum*, 2. London.
- Sharpe, R. B. (ed.) 1874-1898. *Catalogue of birds in the collection of the British Museum*, 1-24. British Museum (Natural History), London.
- Shcherbak, N. N. 1969. 50 rokov Zoologichnomu Muzeyu [50th anniversary of the Zoological Museum of the Ukrainian Academy of Sciences in Kiev]. *Zbirnik drats' Zool. Mus.* 33. Kiev.
- Shimkevich, V. & Vagner, Yu. 1899. [History of Zoological and Zootomical Departments of St. Petersburg University.] *Transactions St. Petersburg Naturalists Soc.* 28(4): 31-54.
- Sitko, J. 1986. Für die Fauna bedeutungsvolle Zugänge in den Sammlungen der Mährischen Ornithologischen Station in den Jahren 1979-1984. *Zprávy MOS* 44: 65-73.
- Sitko, J. 1991. [Eier Sammlungen der Mährischen Ornithologischen Station.] *Zprávy MOS* 49: 91-162.
- Sitko, J. 1996. List of dermoplastic preparations, skins and breastbones from the collections of Moravian Ornithological Station of Komenský's Museum at Prerov, as acquired in 1985 to 1996. *Zprávy MOS* 54: 31-61.
- Skipnes, K. 1989. [Summary of the Norwegian bird collection in Stavanger Museum.] *Stavanger Museum Årbok* 98: 27-36.
- Soares, A. A. 1970. Rapinaceos de Portugal: I-Falconiformes. *Arq. Mus. Bocage* (2)2: 203-318. [Survey of the collections of Mus. Bocage (Lisboa), Porto, and Coimbra; those of the Mus. Bocage before the fire]
- Soares, A. A. 1971. Rapinaceos de Portugal: II-Strigiformes. *Arq. Mus. Bocage* (2)3: 91-131. [Survey of the collections of Mus. Bocage (Lisboa), Porto, and Coimbra; those of the Mus. Bocage before the fire]
- Soares, A. A. 1973. Sobre *Caprimulgus europaeus* L. e *C. ruficollis* Temm. em Portugal (Aves, Caprimulgiformes). *Arq. Mus. Bocage* (2)4: 213-232. [Survey of the collections of Mus. Bocage (Lisboa), Porto, and Coimbra; those of Mus. Bocage before the fire]
- Soares, A. A. 1977. Coraciiformes de Portugal. *Arq. Mus. Bocage* (2)6: 61-94. [Survey of *Coracias garrulus* and *Upupa epops* in the collections of Mus. Bocage (Lisboa) before the fire, with field data]
- Soares, A. A. 1983. Aves de Portugal: Catálogo 1 e notas ornitológicas (ilhas). *Arq. Mus. Bocage Ser. B, Notas* 2: 81-94. [Survey of the collection of the Museum Bocage: birds from islands received after the fire]

- Sokolov, E. P. & Il'yashenko, V.Yu. 1987. [Birds of the Red Data Book of Russian SFSR in the collection of the Zoological Institute of the Academy of Sciences of USSR.] Pp.106-112 in [*Problems of conservation of rare animals—Materials towards the Red Data Book*]. Moscow.
- Stearn, W. T. 1981. The Natural History Museum at South Kensington—a history of the British Museum (Natural History) 1753–1980. Heinemann, London.
- Steinbacher, J. 1949. Kritische Verzeichnis von Eduard Rüppells und Ph. J. Cretzschmars Vogel-Typen. *Senckenbergiana* 30: 99-124.
- Steinbacher, J. 1954. Die Typen der Vogelsammlung von F. H. von Kittlitz. *Senckenbergiana* 34: 301-305.
- Steinbacher, J. 1959. Weitere Angaben über ausgestorbene, aussterbende und seltene Vögel im Senckenberg-Museum. *Senckenbergiana biologica* 40: 1-14.
- Steinbacher, J. 1967. Geschichte der ornithologischen Sektion. *Senckenbergiana biologica* 48, Sonderheft B: 19-40.
- Steinheimer, F.D. In press a. Bamberg's Natural History Museum – scientific significance of small collections. *Bonner Zoologische Monographien – Conference Proceedings, Second European Symposium of European Avian Curators*.
- Steinheimer, F.D. In press b. Darwin, Rüppell, Landbeck & Co. - Important historical collections at The Natural History Museum, Tring. *Bonner Zoologische Monographien – Conference Proceedings, Second European Symposium of European Avian Curators*.
- Stenhouse, J. H. 1929–1930. Some birds of historical interest in the Royal Scottish Museum. *Scottish Naturalist* 1929: 181-187; 1930: 9-14, 75-84, 101-104, 147-153.
- Stenhouse, J. H. 1930. Bird-types in the Royal Scottish Museum. *Novit. Zool.* 35: 270-276.
- Stepanek, O. 1975. [150 years of zoology in the National Museum, Prague (1818–1968).] *Cas. Narodni Muz. v Praze, r. prir* 138-139 (1969-1970): 1-159.
- Stepanyan, L. S. 2001. Sistematischeskii katalog privatnoi ornitologicheskoi kolleksi avtora. Izd. Buryatskii Gosuniversitet, Moskva/Ulan-Ude. [Systematical catalogue of the private ornithological collection of the author]
- Stresemann, E. 1951. *Die Entwicklung der Ornithologie von Aristoteles bis zur Gegenwart*. F. W. Peters, Berlin.
- Stresemann, E. 1954. Ausgestorbene und aussterbende Vogelarten, vertreten in Zoologischen Museum Berlin. *Mitt. zool. Mus. Berlin* 30: 38-53.
- Sudilovskaya, A. M. 1959. [Type specimens of the ornithological collection in the Zoological Museum of Moscow University.] *Ornitologiya* 2: 81-88 (in Russian).
- Sudilovskaya, A. M. 1962. [Type specimens of the ornithological collection in the Zoological Museum of Moscow University.] *Ornitologiya* 5: 431-437 (in Russian).
- Sudilovskaya, A. M. 1972. [Additions to the list of type specimens of the ornithological collection in the Zoological Museum of Moscow University.] *Ornitologiya* 10: 320-323 (in Russian).
- Sudilovskaya, A. M. 1977. [The second addition to the list of type specimens of the ornithological collection in the Zoological Museum of Moscow University.] *Ornitologiya* 13: 157-159 (in Russian).
- Susic, G., Radovic, D. & Bartovsky, B. 1988. Scientific collection of bird skins of the Institute of Ornithology of the Yugoslavian Academy of Sciences and Arts. Pp.37-89 in M. Mestrov & G. Susic, eds. *Ornithology in Croatia*. Jazu, Zagreb.
- Sutorova, H. & Hanak, F. 1997. The dermoplastic specimens in the zoological store-room of the Moravian Museum in Budisov, district of Trebic. I. Birds (Aves). *Acta Mus. Moraviae, Sci. Nat.* 81, suppl.: 3-62.
- Sztolcman, J. & Domaniewski, J. 1927. Les types d'oiseaux au Musée Polonais d'Histoire Naturelle. *Annales Zoologici* 6(2): 95-194.
- Themido, A. A. 1933. Aves de Portugal (Catálogo da coleção do museu zoológico de Coimbra). *Mems. Estud. Mus. Zool. Univ. Coimbra, Ser 1, No.* 65.
- Tomkovich, P. S. & Barisheva, I. K. 1987. [Birds of the Red Data Book of Russian SFSR in the collection of the Zoological Museum of the Moscow State University.] Pp.98-105 in [*Problems of conservation of the rare animals—Materials towards the Red Data Book*]. Moscow.



- Tortonese 1957. Venticinque anni di vita del Museo Zoologico di Torino (1930–1955). *Natura* 48: 1-27.
- Tsaryk, Y. V. (ed.) 2000. *Catalogue of rare and red data book species of animals in the Zoological Museum collections—Insecta, Pisces, Amphibia, Reptilia, Aves, Theria*. Zoological Museum of the Ivan Franko University, Lviv, Ukraine.
- Turov, S. S. 1956. [*The Zoological Museum of Moscow University*.] Moscow (in Russian).
- Van den Elzen, R. 1986. Nachträge und Berichtigungen zum Typenkatalog der ornithologischen Sammlung in Museum Alexander Koenig. *Bonner zool. Beitr.* 37: 209-210.
- Van den Elzen, R. & König, C. 1983. Vögel des (Sud-)Sudan: taxonomische und tiergeographische Bemerkungen. *Bonner zool. Beitr.* 34: 1-3. [On types of Heuglin]
- Varga, J. 1973. [*List of vertebrate collections in museums of the Czechoslovak Socialist Republic*.] Muzeolog. Kabinet SNM, Bratislava.
- Veprintseva, O. D., Leonovich, V. V. Boukreev, S. A. Veprintsev, B. N. Veprintsev, D. B., Budney G. F. & Blomgarden, C. A. '1998'=1999. The Boris N. Veprintsev Phonoteca of Animal Voices: holdings of the wildlife sounds collection. *Biol. Cons. Fauna* 102: 295.
- Violani, C. 1985. Cenni storici su alcuni tipi di uccelli della collezione Ercole Turati di Milano. *Atti Conv. Ital. Orn.* 1985: 309-311.
- Violani, C., Cappocaccia, L. & Arbocco, G. 1979. The bird collection of Genoa Museum of Natural History 'Giacomo Doria': an historical outline. *Atti Soc. ital. Sci. nat. e Mus. civ. tor. nat. Milano* 120: 27-30.
- Violani, C., Daturi, A. & Cagnolaro, L. 1984. Uccelli estinte e rari nei musei naturalistici di Milano, Genova e Firenze. *Riv. ital. Orn.* 54: 105-178.
- Violani, C., Zanozzo, G. & Pandolfi, M. 1997. *La collezione ornitologica di Tommaso Salvadori, Catalogo*. Comune di Fermo, Servizio Beni e Attività Culturali.
- Voipio, P. 1990. [Report on a visit to the Firenze collection.] *Lintumies* 25: 206-209 (in Finnish).
- Voisin, C. 1993. Liste des spécimens types d'ibis (*Threskiornithinés*) de la collection du Muséum National d'Histoire Naturelle de Paris. *Oiseau et R. F.O.* 63: 45-53.
- Voisin, J.-F. 1992. Liste provisoire des types d'oiseaux des collections du Muséum national d'Histoire naturelle de Paris, I, Pélécianiformes. *Oiseau et R. F.O.* 62: 162-172.
- Wagstaffe, R. 1978. *Type specimens of birds in the Merseyside County Museums*. Merseyside County Council, Liverpool.
- Wallin, L. 1996. *Catalogue of type specimens, 2. General Zoology*. Uppsala University Zoological Museum, Uppsala.
- Wallin, L. 1997. *Catalogue of type specimens, 4. Linnaean specimens*. Uppsala University Zoological Museum, Uppsala.
- Wallin, L. & Wallin, H. 1994. *Catalogue of type specimens, 1. C. P. Thunberg (1743–1828), Insecta*. Uppsala: Uppsala University Zoological Museum.
- Warren, R. L. M. [in part with C. J. O. Harrison] 1966–1973. *Type-specimens of birds in the British Museum (Natural History)*. London: British Museum (Natural History).
- Weber, C. 1985. Oiseaux et mammifères de la collection Horsfield au Muséum de Genève. *Musées Genève* 258: 2-6.
- Wiktor, J. & Rydzewski, W. 1991. Bibliography of catalogues of type specimens in world's zoological and palaeozoological collections. *Acta Univ. Wratislaw Pr. Zool.* 22: 1-308.
- Wood, D. S., Zusi, R. L. & Jenkinson, M. A. 1982. *World inventory of avian skeletal specimens*. American Ornithologists' Union, and Oklahoma Biological Survey, Norman, Oklahoma.
- Woolfall, S. J. 1990. History of the 13th Earl of Derby's menagerie and aviary at Knowsley Hall, Liverpool (1806–1851). *Arch. Nat. Hist.* 17: 1-47.

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## Appendix 1

**European museums by country.** Countries are listed alphabetically, but museums within countries are listed in order of the number of specimens they possess. The third column indicates which list the museum is treated under.

Country	City	List	Denmark	Copenhagen/København	A
				Århus	B
<b>Armenia</b>	Yerevan	B			
			<b>Estonia</b>	Tartu	A
<b>Austria</b>	Vienna/Wien (NMW)	A		Tallinn	B
	Linz	A			
	Salzburg	B	<b>Finland</b>	Helsinki	A
	Graz	B		Turku	B
	Innsbruck	B			
	Schlagl	B	<b>France</b>	Paris	A
	Vienna/Wien (Univ)	B		Nantes	A
				Strasbourg	A
<b>Belgium</b>	Tervuren	A		Toulouse	A
	Brussels/Bruxelles	A		Lille	A
	Tournai	B		Grenoble	A
	Heusden-Zolder	B		Nancy	B
	Turnhout	B		Montauban	B
	Tessenderlo	B		Le Havre	B
				Monaco	B
<b>Bosnia</b>	Sarajevo	A		Dijon	B
				Lyon	B
<b>Bulgaria</b>	Sofia	A		Rouen	B
	Pleven	B		La Rochelle	B
	Plovdiv	B		Autun	B
	Burgas	B		Bordeaux	B
	Ruse	B		Marseille	B
	Varna	B		Nice	B
	Dobrich	B		Perpignan	B
	Panagyurishte	B		Rennes	B
			<b>Georgia</b>	Tiflis/Tbilisi	B
<b>Croatia</b>	Zagreb	A			
	Split	B	<b>Germany</b>	Berlin	A
				Bonn	A
<b>Czech Rep.</b>	Prague/Praha	A		Frankfurt a/M	A
	Prerov	A		Stuttgart	A
	Brno	A		Dresden	A
	Olomouc	B		Munich/München	A
	Opava	B		Hamburg	A
	Budisov	B		Kiel	A
	Plzen	B		Braunschweig	A
	Hradec Kralove	B		Bremen	A
	Bitov	B		Halberstadt	A
	Novy Jicin	B		Halle	A
	Česka Lipa	B		Coburg	A

	Hanover/Hannover	A		Venice/Venezia	A
	Wiesbaden	A		Siena	A
	Leipzig	A		Randazzo	B
	Görlitz	A		Naples/Napoli	B
	Wilhelmshaven	A		Ravenna	B
	Magdeburg	A		Ferrara	B
	Münster	A		Livorno	B
	Karlsruhe	A		Casalnuovo Monterotaro	B
	Mainz	B		Bologna (MZUB)	B
	Altenburg	A		Turin/Torino (CSGT)	B
	Tübingen	B		Padua/Padova	B
	Göttingen	B		San Gimignano	B
	Bamberg	B		Rimini	B
	Bad Durkheim	B		Vercelli	B
	Rostock	B		Stia (Arezzo)	B
	Greifswald	B		Fermo	B
	Darmstadt	B		Siracusa	B
	Köthen	B		Bari	B
	Rudolstadt	B		Brescia	B
	Augsburg	B		Cagliari (Sardinia)	B
	Bielefeld	B		Catania	B
	Chemnitz	B		Chieri	B
	Dortmund	B		Trieste	B
	Erlangen	B		Udine	B
	Hildesheim	B			
	Kassel	B	<b>Lithuania</b>	Kaunas	A
	Lübeck	B			
	Regensburg	B	<b>Luxemburg</b>	Luxembourg	B
			<b>Netherlands</b>	Leiden	A
<b>Greece</b>	Athens/Athinai	A		Amsterdam	A
	Thessaloniki	B		Rotterdam	A
				Leeuwarden	B
<b>Hungary</b>	Budapest	A		Maastricht	B
	Pécs	B			
			<b>Norway</b>	Oslo	A
<b>Iceland</b>	Reykjavik	A		Bergen	A
	Akureyri	B		Tromsø	A
				Stavanger	A
<b>Ireland</b>	Dublin	B		Trondheim	A
				Elverum	B
<b>Italy</b>	Milan/Milano	A		Kristiansand	B
	Genoa/Genova	A		Sykkylven	B
	Turin/Torino (MRSN)	A			
	Florence/Firenze	A	<b>Poland</b>	Warsaw/Warszawa	A
	Rome/Roma	A		Wroclaw	A
	Pisa	A		Krakow	A
	Bologna (INFS)	A		Jelenia Góra	B
	Terrasini	A		Bialywieza	B
	Verona	A		Bytom	B
	Pavia	B		Czestochowa	B
	Forli	B			

	Szczecin/Stettin	B	Neuchatel	A
<b>Portugal</b>	Lisbon/Lisboa (CZ/IICT)	A	Lausanne	A
	Coimbra	A	Fribourg	A
	Lisbon/Lisboa (MB)	A	Zürich	A
	Porto	B	Winterthur	B
	Funchal (Madeira)	B	Sankt Gallen	B
	Cruz Quebrada	B	<b>Tatarstan</b> Kazan	B
	Ponta Delgada (Azores)	B	<b>U.K.</b> Tring	A
<b>Romania</b>	Bucharest	A	Edinburgh	A
	Sibiu	A	Liverpool	A
	Reghin	B	Cambridge	A
	Bacau	B	Cardiff	A
	Oradea	B	Brighton	A
	Cluj-Napoca	B	Manchester	A
	Suceava	B	Newcastle	A
Timisoara	B	Oxford	A	
<b>Russia</b>	St Petersburg (ZISP)	A	Sevenoaks	A
	Moscow (ZMMU)	A	Witney	B
	Moscow (SDM)	A	Bolton	A
	St Petersburg (ZM/SPBU)	A	Bristol	A
	Moscow (PIN/RAS)	A	Exeter	A
	Moscow (MPSU)	B	Glasgow	A
	Moscow (Stepanyan)	B	Leeds	A
	Saratov	B	Carlisle	B
	Moscow (Fac Geogr MGU)	B	Birmingham	B
	Moscow (Fac Biol MGU)	B	York	B
<b>Slovakia</b>	Bardejov	A	Saffron Walden	B
	Kosice	B	Coventry	B
	Bratislava	B	Ludlow	B
			Birchington	B
<b>Slovenia</b>	Ljubljana	B	Southend-on-Sea	B
			London (Grant Mus.)	B
<b>Spain</b>	Madrid	A	London (Surgeons Coll.)	B
	Seville/Sevilla	A	Swansea	B
	Barcelona	A	Kendal	B
<b>Sweden</b>	Stockholm	A	Norwich	B
	Gothenburg/Göteborg	A	Nottingham	B
	Lund	A	Leicester	B
	Uppsala	A	Sheffield	B
	Jönköping	B	<b>Ukraine</b> Kiev	A
	Malmö	B	Lviv	A
	Härnösand	B	Melitopol	B
	Jokkmokk	B	Odessa	B
<b>Switzerland</b>	Genève	A	<b>Yugoslavia</b> Belgrade/Beograd	A
	Basel	A	Novi Sad	B
	Bern	A	Pristina	B

## Appendix 2

**Index of persons named in the lists above, with museums where collections of these persons are housed (if they had any). (\*) denotes persons at present active in the museum mentioned**

Abbot, J. (Liverpool); Abel (Bremen); Absolon, Karel (Brno); Acerbi, C. (Padova); Achtelig, Michael (Augsburg)\*; Adams, Jeremy M. (Brighton)\*; Adams, Leith (Edinburgh, Tring); Adams, Mark (Tring)\*; Adelborg (Stockholm); Agassiz, Louis (Neuchâtel); Aguilar-Amat (Barcelona); Aimassi, G. (Chieri); Aitchison, James (Tring); Ajola (Terrasini); Alexander, Boyd (Tring); Aleon, Amedé (Sofia); Almaça, Carlos (Lisboa-MB)\*; Almásy von Zsadány und Törökszent, George Graf (Budapest, München, Wien); Altner, H.-J. (Halle)\*; Altobelli, Anna (Firenze)\*; Altobello, G. (Bologna INFS, Bologna MZUB); Altum, Bernhard (Münster); Anchieta (Bremen); Andersen (Elverum)\*; Andersen, Knut (Sofia); Andersen, Th. (Basel, Bonn, Bremen, Karlsruhe, København, Leiden, München, Stuttgart); Anderson, J. G. (Bremen, Stockholm); Anderson, John (Tring); Andersson, Carl J. (Stockholm); Andreevsky, V. (St Petersburg ZM SPBU); Andrew, Katherine (Ludlow)\*; Angele, Theodor (Linz); Anhalt-Köthen, August Herzog von (Köthen); Anik, Vasilii V. (Saratov)\*; Ansoerge, Hermann (Görlitz)\*; Ansoerge, W. J. (Tervuren); Antinori, Orazio Marquis (Genova, Roma, Torino); Aosta, Elena Duchess of (Napoli); Aplin, Oliver V. (Oxford); Arbuthnot, Robert (Glasgow); Arcamone, E. (Livorno); Armstrong, F. B. (Tring); Arnone, Marcello (Terrasini); Arrigoni degli Oddi, Count Ettore (Roma); Arthur, Ms Jane (Birmingham)\*; Ashmole, Elias (Oxford); Askew, Capt. (Cambridge); Askeyev, Oleg V. (Kazan)\*; Aubrecht, Gerhard (Linz)\*; Austria, Franz II, Emperor of (Wien); Ayres, Thomas (Bremen, Liverpool);

Babault, Guy (Paris); Baccetti, Baccio (Siena)\*; Baccetti, Nicola (Bologna INFS, Siena)\*; Bäckstrom, K. (Stockholm); Baddeley, M. O. E. (Bonn); Bährmann, Udo (Dresden); Bailly (Grenoble); Bairlein, Franz (Wilhelmshaven)\*; Balat, Frantisek (Brno); Baldamus, W. (Coburg); Baldassari, G. (Siena); Baldi, A. (Budapest); Balfour (Bremen); Balthasar, Vladimír (Hradec Králové); Bamberg, Otto (Amsterdam, Bonn, Stockholm); Banaduc, Doru (Sibiu)\*; Bangert, C. (Stockholm); Bankovics, Attila (Budapest)\*; Banks, Joseph (see Mus. Leverianum); Bannerman, David A. (Tring); Barbagli, Fausto (Firenze)\*; Barboza du Bocage, José V. (Lisboa-MB); Barej, Thomas (Warszawa); Barentsz Exped. (W. Bierman, H. van der Lee) (Amsterdam); Barnett, Ray (Bristol)\*; Baron, Oskar T. (Frankfurt); Barreiro, Josefina (Madrid)\*; Barrett, Robert (Tromsø)\*; Barrow, Sir John (Oxford); Bart, André (Lille); Bartels Sr., Max E. G. (Braunschweig, Leiden); Barth, C. von (Stuttgart); Barth, Edvard K. (Oslo); Basanovic, Ms (Pristina); Bates, George L. (Liverpool, Tervuren, Tring); Bates, Paul (Sevenoaks)\*; Baud, François J. (Genève)\*; Baudin, Nicolas (Paris); Bauer, Ferdinand L. (Wien); Bauer, Kurt M. (Wien); Bauernfeind, Ernst (Wien)\*; Baxter, Evelyn V. (Edinburgh); Bayern, Maximilian III König von (München); Bayern, Prinzessin Therese von (München); Beale, Charles (Birmingham); Beaufort, Lieven F. de (Amsterdam); Beavan, Robert C. (Tring); Beccari, Odoardo (Genova, Milano, Torino); Bechet, George (Luxembourg)\*; Becker, Peter R. (Bielefeld\*, Bremen); Beczy, Toma L. (Oradea); Beddall-Smith (Coventry); Beeyner, Nelo (Coimbra); Behn, Friedrich (Frankfurt); Behn, Wilhelm F.G. (Kiel); Beick, Walter (Berlin, København); Bellgrove (Coventry); Bengtson, Sven-Axel (Lund)\*; Benson, Constantine W. (Cambridge); Bentz, Per-Göran (Malmö)\*; Beretz, Peter (Budapest); Berezowskii, M. M. (St Petersburg ZISP); Berg, Bengt (Dresden); Berg, Günther H. D. Freiherr von (Strasbourg); Berg, Hans-Martin (Wien)\*; Berger (Strasbourg); Berger, Arthur (Berlin); Bergman, Göran (Helsinki); Bergman, Sten (Stockholm); Berlepsch, Hans H. C. L. Graf von (Frankfurt); Berlin, A. (Jönköping); Berlioz, Jacques (Paris); Bernier, Chevalier J.A. (Paris); Bernis, Francisco (Madrid); Bernoft-Osa, Anders (Oslo, Stavanger); Bernoulli, Hieronymus (Basel); Bernstein, Heinrich A. (Leiden); Berry, Kathryn (Bolton)\*; Besaucèle, V. (Toulouse); Bessi (Firenze); Betteridge (Coventry); Bewick, Thomas (Newcastle); Bianki (Bianchi), Valentin L'ovich (St Petersburg ZISP, St Petersburg ZM SPBU); Biddulph, John (Tring); Bielewicz, M. (Bytom); Bielz, Eduard A. (Sibiu); Bierman, Willem H. (Amsterdam); Bilkevich, S. I. (St Petersburg ZM/SPBU); Binder, Jon. Fr. & Franz (Sibiu); Bingham, C. T. (Tring); Bisacco Palazzi, Giacomo (Venezia); Black, M. A. (Glasgow); Blackie, Churchill (Exeter); Blanc, M. (Amsterdam, Roma); Blanchet, A. (Grenoble); Blandin (Nantes); Blanford, William (Tring); Blasius, Johann H. (Braunschweig); Blasius, Wilhelm (Braunschweig); Blewitt, W. T. (Tring); Blezard, E. (Carlisle); Blumenbach, Johann F. (Göttingen); Blyth, Edward (Cambridge); Bochenki, Zbigniew



(Krakow)\*; Bochenski, Zygmunt (Krakow)\*; Bock, Carl (Tring); Boenigk, Gerhard (Braunschweig)\*; Boetsscher, Hermann (Görlitz); Boetticher, Hans von (Coburg, Frankfurt, Halberstadt, Halle, Sofia); Boev, Nikolay (Sofia NMNHS); Boev, Zlatozar (Sofia NMNHS)\*; Bogdanov, Modest Nikolaevich (Moscow ZMMU, St Petersburg ZM SPBU); Böhm, Richard (Berlin); Boie, F. (Kiel); Boie, Heinrich (Leiden); Bojer, Wenzel (Wien); Bokotei, A. A. (L'vov); Bolau, Heinrich & Hermann (Hamburg); Bolton, David (Exeter)\*; Bon, Mauro (Venezia)\*; Bondesen, Paul (Århus); Bonelli, Franco A. (Torino); Bonjour (Nantes); Bonnevie (Tervuren); Bonsdorff, E. J. (Helsinki); Bonvalot, G. (Paris); Booth, Edward Thomas (Brighton); Borelli, A. (Torino); Borivoje, Zuza (Sarajevo)\*; Borrer, William (Brighton); Bostanzhoglo, V. N. (Moscow ZMMU); Bottego, V. (Genova); Boucard, Adolphe (Madrid, Paris, Stuttgart); Bourcier, Jules (Paris); Bourret, R. (Toulouse); Bouteille (Grenoble); Bouvier, Maison (Berlin, Milano, Paris); Bovallius, Dr (Stockholm); Bracker-Braun, Cordula (Hamburg)\*; Brandolini, Alfredo (Ravenna); Brandt, Johann F. von (St Petersburg ZISP); Brandt, Johann G. W. (Halberstadt, Halle); Brandt, T. T. (St Petersburg ZISP); Branicki, Alexander, Konstantin, & Xaver Graf von (Warszawa); Braun, Horst (Bremen)\*; Braunschweig und Lüneburg, Herzog Carl I von (Braunschweig); Braybrook, Lord Richard G. (Saffron Walden, Essex); Bregulla, Heinrich (Bonn); Brehm, Alfred E. (Bonn, Braunschweig, Bremen, Halle); Brehm, Christian L. (Altenburg, Bonn, Braunschweig, Coburg, Wien); Brendel (Halle); Bricchetti, Pierandrea (Brescia)\*; Bridges, T. (Liverpool); Brisson, Mathruin-Jacques (Paris); Brogi, Sigismondo (Siena); Brooke, Michael de L. (Cambridge)\*; Brooks, W. E. (Liverpool, Tring); Brown, Henry (Glasgow); Brüggemann, Friedrich G.F. (Darmstadt, Dresden, Tring); Brühl, L. (Halle); Bruijn, A. A. (Leiden, Milano, Paris, Torino, Wiesbaden); Brunin, Philippe (Tournai); Bryant, Henry (Bremen); Bub, Hans (Wilhelmshaven); Buch, Père A. (Fribourg); Buchanan, Angus (Tring); Büchi, Othmar (Fribourg); Buchner, E. (St Petersburg ZM SPBU); Buckley, T. E. (Cambridge); Buda, Adam & Alexius (Sibiu); Buffon, George-Louis Leclerc, Comte de (Paris); Bulgaria, Boris III of (Sofia); Bulger, Capt. (Bremen); Buller, R. Hughes (Exeter); Buller, Walter (Liverpool, Tring); Bullock, William/Mus Leverianum (Berlin, Edinburgh, Leiden, Liverpool, Paris, Torino, Wien); Burchell, William J. (Oxford); Bureau, Louis (Nantes); Buresch, Ivan (Sofia); Burg, Gustav von (Roma); Bürger, Hermann (Leiden); Burger, O. (Dresden); Bürgers, Joseph (Berlin); Bürgin, Toni (Sankt Gallen)\*; Burke, J. (Liverpool); Burmeister, Karl Hermann C. (Halle); Busch, Rudolf (Halberstadt); Büsching, W.-D. (Köthen); Butiev, Vladimir T. (Moscow MPSU)\*; Butler, Arthur L. (Tring); Butler, Edward A. (Tring); Büttikofer, Johann (Leiden); Buturlin, Sergei Aleksandrovich (Moscow ZMMU); Buturovic, Denana (Sarajevo)\*; Bybartas, K. (Kaunas); Bykov (St Petersburg ZISP); Byrkjedal, Ingvar (Bergen)\*; Cabanis, Jean L. (Berlin, Halberstadt); Cabot Nieves, José (Sevilla)\*; Cagnolaro, Luigi (Milano)\*; Caley, G. (Tring); Campbell, Bruce (Witney); Campbell, J. M. (Glasgow); Campbell, John (Witney)\*; Cancelli, Fabrizio (Siena)\*; Canesi (München); Capek, Vaclav (Brno); Cardy, Bernice (Swansea)\*; Carlini, R. (Roma)\*; Carlos III, King of Spain (Madrid); Carlsson, Von (Stockholm); Carrine, C. (Monaco); Carraro (Verona); Carreira, Isabel M.G. (Coimbra)\*; Carruccio, A. (Roma); Carruthers, Alexander Douglas M. (Tring); Carvalho, Luis de (Coimbra); Casellato, Sandra (Padova)\*; Castroviejo, J. (Sevilla); Cederholm, Lennart (Lund); Chambers, W. T. H. (Exeter); Chapin, James P. (Tervuren); Chapman, Frank M. (Bremen); Charon (Nancy); Chase, Robert W. (Birmingham); Chatterjee, Helen (London Univ. Coll.)\*; Cheesman, Robert E. (Tring); Chen, K. H. (Leiden); Cherrie, George (Frankfurt); Cherubini, Giuseppe (Venezia)\*; Chevalier (Stuttgart); Chigi della Rovere, F. (Roma); Chill, W. N. (Tring); Chiozzi, Giorgio (Milano)\*; Chorinsky, Friedrich (Brno); Christie, Major (Glasgow); Christison, A. F. Philip (Tring); Christy, C. (Tervuren); Chrostowski, T. (Warszawa); Cignini, B. (Roma); Cikovic, Davor (Zagreb)\*; Cipolla (Verona); Clancey, Philip A. (Amsterdam, Bonn, Edinburgh); Clark, A. S. (Edinburgh); Clark, William Eagle (Edinburgh); Clarke, Joseph & Joshua (Saffron Walden, Essex); Clary, M. (Lyon)\*; Clement, Morag (Kendal)\*; Clot-Bey, Antoine B. (Grenoble); Cochrane, Capt. H. L. (Glasgow); Cockburn, Miss (Tring); Cockerell, James (Tring); Coles, A. (Newcastle)\*; Collett, Robert (Oslo, Roma); Colston, Peter (Tring); Condé, Bruno (Nancy)\*; Conrad, Capt. Paul (Bremen, Tring); Constanca, J. S. (Cambridge); Cook, James (see Mus. Leverianum); Coomans de Ruiter, Louis (Leiden); Cooper, Jo (Tring)\*; Cossaune, G. (Toulouse); Costa, Achille (Napoli); Coulon, Louis (Neuchâtel); Cowan, W. D. (Liverpool, Tring); Coward (Manchester); Coxen, Charles & S. (Tring); Crabbe, Major Bingham (Brighton); Crampton, W. T. (Leeds); Crawford-Cabral, João (Lisboa-CZ/IICT); Cretzschmar, Philipp J. (Frankfurt); Cripps, J. N. (Tring); Crnkovic, R. (Zagreb); Cross, Capt. Donald (Glasgow); Crowley, Philip (Tring); Cruz, Teodoro J. (Coimbra); Csorba, G. (Budapest);

Csőrgy, Titus (Budapest); Csörgő, Tibor (Budapest)\*; Cuénot, L. (Nancy); Cuming, Hugh (Liverpool, Tring); Cumming, Walter (Exeter, Tring); Cunha, Maria José (Porto)\*; Cursham, C. W. (Dresden); Curtis-Edwards, L. A. (Brighton); Cuvier, Frédéric (Paris); Czekelius sen., D. (Sibiu);

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Raalten, Gerrit van (Leiden); Raap, Hugo (Braunschweig); Rabor, Dioscoro S. (Hamburg); Radde, Gustav (Frankfurt, München, St Petersburg ZISP, Tbilisi); Radovic, Dragan (Zagreb)\*; Raffles, Thomas Stamford (Tring); Ragazzi, V. (Torino); Ragioneri, Cesare & Renzo (Amsterdam, Dresden); Rallo (Venezia); Ramsay, J. (Glasgow); Rang, Catalin & Violeta (Bacau); Rasajski, J. (Beograd); Rattemeyer, Volkert (Wiesbaden)\*; Rau, Otto (Wiesbaden); Rauch, A. (Tallinn); Raychev, Georgi (Varna)\*; Raychev, Ivan (Pleven)\*; Réaumur (Paris); Reboussin (Toulouse); Reeker, Hermann (Münster); Rehurek, J. (Prerov); Reichenbach, Heinrich G. Ludwig (Dresden); Reichenow, Anton (Berlin, Hamburg); Reichert, Robert (Dresden); Reichhoff, Josef H. (München)\*; Reichling, Hermann (Münster); Reid, Savile G. (Tring); Reinhardt, Johannes T. (København); Reinwardt, Caspar G. C. (Leiden); Reis Júnior (Porto); Reischek, Andreas (Linz, Wien); Reiser, Othmar (Beograd, Sarajevo, Wien); Remane, Adolf (Halle); Rendell, P. (Liverpool); Renesse van Duivenbode, L. D. W. A. van (Leiden); Rensch, Bernhard (Münster); Rheinwald, Goetz (Bonn); Ribbe, C. (Dresden); Ricasoli, Baron B. (Siena); Ricca, Massimiliano (Siena); Richards, G. E. (Liverpool); Richardson, John (Cambridge, Edinburgh); Richardson, W. B. (Tring); Rickett, Charles B. (Tring); Ridolfi (Firenze); Riebeck, E. (Bremen); Riedel, Johan G. F. (Braunschweig, Dresden, Karlsruhe, Leiden, München, St Petersburg ZISP); Riggerbach, Fritz W. (Berlin); Rintoul, Leonora J. (Edinburgh); Riocour, Comte de (Tring); Rippon, George (Tring); Robert, S. (Neuchâtel); Robinson, H. C. (Liverpool, Tring); Roborovskii, Vladimir I. (St Petersburg ZISP); Robson, T. (Istanbul); Rocke, John (Ludlow); Rockstroh, Prof. (Hamburg); Rodigois, Bertrand (Lille)\*; Roehl, Karl (Berlin); Roepstorff, A. W. (Tring); Roggeman, Walter (Brussels)\*; Rohu, H. S. (Oxford); Roi, Otto le (Bonn); Rokitansky, G. Freiherr von (Wien); Rolle, C. (Dresden, Exeter); Römer, August (Wiesbaden); Rosa Pinto, A. A. da (Lisboa-CZ/IICT); Roselaar, Kees (C. S.) (Amsterdam)\*; Rosenberg, Karl B. Hermann Baron von (Braunschweig, Bremen, Leiden); Rosenberg, W. F. H. (Bonn, Leiden, Tring); Ross, Francis W. L. (Exeter); Ross, James C. (Edinburgh); Rossi, Domenico (Roma); Roundell (Leeds); Roux, François (Paris); Rowan, Mrs H. N. (Exeter); Rowan, W. (Liverpool); Rucner, Dragotin (Zagreb); Rudatis, A. G. H. (Linz); Rudebeck, G. (Lund); Ruedi, M. (Genève)\*; Rufo, S. (Verona); Rumbutis, Saulius (Kaunas)\*; Rumler, Zdeněk (Olomouc); Runde, Olav J. (Stavanger)\*; Ruppell,

Eduard (Berlin, Frankfurt, Leiden, Torino, Tring); Ruspoli, E. (Genova); Ruspoli, Prince (Roma)\*; Russia, Alexis Prince of (St Petersburg ZM/SPBU); Russow, Valeri (Tallinn, Tartu); Ruzskiy, M. D. (Kazan); Ryabitshev, Vadim K. (Ekaterinburg)\*;

Sacarrao, Germano da Fonseca (Lisboa-MB); Sachsen Coburg-Gotha, Albert Prince of & Ernst II Duke of (Coburg); Sachsen Coburg-Gotha, Ferdinand I of -, King of Bulgaria (Coburg, Sofia); Sachtleben, Hans (München); Sackl, Peter (Graz)\*; Sajdl, V. (Prerov); Salmaso, Roberta (Verona)\*; Salm-Salm zu Anholt, Leopold Fürst zu (Münster); Salomonsen, Finn (København); Salt, H. (Liverpool); Salvadori, A. Tommaso (Firenze, Genova, Milano, Torino); Salvin, Osbert (Bremen, Cambridge, Liverpool, Tring); Salzmann, W. (Stuttgart); Sammalisto, Lasse (Helsinki); Sandeberg, H. (Stockholm); Santos Júnior J. R. dos (Porto); Santos, Pedro (Lisboa-CZ/IICT)\*; Sarasin, Fritz & Paul (Basel, Dresden); Sarg, F. (Stuttgart); Sassi, Moriz (Wien); Saunders, Howard (Tring); Saur, Jules (Luxembourg); Sauro, Pertti (Helsinki)\*; Saussure, de (Genève); Savi, Paolo (Pisa, Siena, Torino); Savinich, Irene B. (St Petersburg ZM SPBU)\*; Scaravelli, Dino (Rimini)\*; Schaanning, Hans Tho. L. (Stavanger); Schaanning, Theo (Oslo); Schäfer, Ernst (Berlin, Bonn); Schaller, F. (Strasbourg)\*; Schalow, Herman (Berlin); Schainsland, H. (Bremen); Schettino, Mario (Napoli); Schiebel, Guido (Bonn, Graz, Wien); Schiede, C. J. W. (Wien); Schierbrandt (Dresden); Schifter, Herbert (Wien)\*; Schilling von Canstatt, Karl Freiherr (Sarajevo); Schilling, Christiane (Hannover)\*; Schillinger, F. (Wien); Schimper, W. (Wien); Schjølter, E. Lehn (København); Schittek, Dietmar (Greifswald)\*; Schlagintweit, A., H. & R. (München); Schlatter, Rudolf (Leipzig)\*; Schlegel, Gustav (Leiden); Schlegel, Hermann (Leiden, Wien); Schlegel, Martin (Leipzig)\*; Schlegel, Richard (Dresden, Leipzig, München); Schlüter, Wilhelm & Willy (Bamberg, Bonn, Halberstadt, Halle, Leiden, München, Roma, Stuttgart); Schmacker, B. (Bremen, Frankfurt); Schmacker, G. P. (Bremen); Schmidt, Ulrich (Mainz)\*; Schmiedeknecht, Otto (Rudolstadt); Schmitz, Ernst (Amsterdam, Funchal); Schneid, Theodor (Bamberg); Schneider, C. (Dresden); Schneider, Gustav (Basel, Braunschweig, Strasbourg); Schnitzer, Eduard; see Emin Pasha; Schnitzler, Arthur; see Emin Pasha; Schomburgk, Robert H. (Berlin, Paris, Tring); Schönlein, Johann Lukas (Bamberg); Schönwetter, Max (Halle); Schoppe, R. (Hildesheim); Schouteden, Henri (Tervuren); Schradr, Leopold & Gustav (Athinai, Bonn, Braunschweig, Wien); Schreibers, Carl Ritter von (Wien); Schrenck, Leopold von (St Petersburg ZISP); Schubotz, Hermann (Berlin, Frankfurt, Hamburg); Schuchmann, Karl-Ludwig (Bonn)\*; Schultze, Arnold (Bremen, Frankfurt, Hamburg); Schulz, W. (Hamburg); Schüz, Ernst (Stuttgart); Schwab, Adolf (Brno, Budisov); Schwaner, L. A. C. M. (Leiden); Schwartzberg, Princess Hilda von (Luxembourg); Schwarzburg-Rudolstadt, Friedrich Carl Prince von (Rudolstadt); Sclater, Philip L. (Tring); Scortecci, Giuseppe (Milano); Scot. natl. Antarctic Exp. (Edinburgh); Scott, W. E. D. (Leiden, Tring); Scovil, Capt. F. H. (Brighton); Scully, J. (Tring); Sebela, Miroslav (Brno)\*; Seebohm, Henry (Edinburgh, Tring); Segarra, Ignaci de (Barcelona); Seilern und Aspang, Josef Graf von (Brno, Budisov, München, Praha, Wien); Selby (Cambridge); Sellow, Friedrich (Berlin, Wien); Semenzato, Massimo (Venezia)\*; Senoner, Adolf (Sibiu); Sere, Dare (Ljubljana); Serle, William (Edinburgh, Tring); Serra, Lorenzo (Bologna INFS)\*; Severtzov, Nikolai Alekseevich (Moscow ZMMU, St Petersburg ZISP); Shackleton, E. (Birchington); Sharleman, Nikolai Vasil'evich (Kiev); Sharpe, Richard Bowdler (Manchester, Tring); Shaw Mayer, Fred W. (Tring); Shaw, George (Tring); Shaw, Robert (Tring); Shcherbak, N. N. (Kiev); Shelley, George E. (Tring); Sherriff, G. (Tring); Shimkevich, W. (St Petersburg ZM SPBU); Shlyakhtin, Gennady V. (Saratov)\*; Shulpin, L. (St Petersburg ZM SPBU); Shulpin, L. M. (St Petersburg ZISP); Shydlovskyy, Ihor (Lviv)\*; Sicard (Strasbourg); Sick, Helmut (Bonn); Siebold, Carl T. E. von (Bamberg); Siebold, Philipp F. von (Leiden, München); Siemssen, Adolf Ch. (Rostock); Siemssen, Gustav Th. (Hamburg); Sijaric, Dr (Sarajevo); Silber, K. (Karlsruhe); Sillem, Jérôme A. (Amsterdam); Silver, S. W. (Oxford); Simon, Paul (Tournai); Sin, S. S. (Berlin); Sitko, Jilji (Prerov)\*; Sjöstedt, Bror Yngve (Stockholm); Skinner, John (Southend-on-Sea)\*; Skipnes, Kolbjorn (Stavanger); Slagsvold, Tore (Oslo); Slater, Henry H. (Tring); Slavchev, Georgi (Pleven); Sleen, Wicher G. N. van der (Amsterdam); Sloane, Hans (Tring); Smee, General Walter N. T. (Exeter); Smilova, Dimitrina (Burgas)\*; Smith, Andrew (Cambridge, Edinburgh, Liverpool, Tring); Smith, H. E. (Saffron Walden, Essex); Smith, Herbert (Tring); Smith, S. A. R. (Witney); Smitt, Fredrik A. (Stockholm); Smuc, Lojze (Ljubljana); Smyth, Greville (Bristol); Sneidern, K. von (Genève); Snouckaert van Schauburg, René C. E. G. J. Baron (Amsterdam, Roma); Snow, David (Tring); Soares, A. A. (Lisboa-MB); Sobania, S. (Bytom); Söderbom, K. G. (Stockholm); Söderstrom, L. (Stockholm); Sokolov, A. M. (St Petersburg ZISP)\*; Sokolov, E. P. (St Petersburg ZISP)\*; Solander, Daniel (see



Mus. Leverianum); Solaroli, Count (Torino); Solheim, Roar (Kristiansand)\*; Solti, B. (Pecs); Sommerfeld, Lt. (München); Sousa, Luzia (Porto)\*; Sowerby, Laurence (Tring); Spangenberg, Evgenii Pavlovich (Moscow SDM, Moscow ZMMU); Sparrman, Anders (Stockholm); Spatz, Paul (Bonn, Stockholm); Speerschneider, Julius (Rudolstadt); Speke, John (Bremen); Spieß, August von (Sibiu); Spix, Johann B. von (Bamberg, Graz, München); Sprüngli, Daniel (Bern); Srebrodolska, Natalia I. (Lviv); St Helen's Mus. (Liverpool); St John, Oliver B. (Tring); Stalker, William (Tring); Stampfli, Franz X. (Leiden); Stanescu, Dan (Sibiu); Stanford, John K. (Tring); Stanley, Lord (= Earl of Derby) (Liverpool); Stawarczyk, Tadeusz (Wroclaw)\*; Stechow, Eberhard (München); Stegman, Boris (St Petersburg ZISP); Stein, G. H. W. (Berlin, Lisboa-CZ/IICT); Stein, H. (Sibiu); Steinbacher, Joachim (Frankfurt); Steindachner, Franz (Wien); Steiner, Hans (Zürich); Steinheimer, Frank (Tring, Berlin)\*; Steller, George W. (St Petersburg ZISP); Stenhouse, John H. (Edinburgh); Stepanyan, Leo S. (Moscow Stepanyan coll.); Stephan, Burkhard (Berlin); Stetter, Friedrich W. (Sibiu); Stevens, Herbert (Newcastle); Stevens, Samuel (Cambridge, Tring); Stewart, Alexander Bannatyne (Glasgow); Stjernberg, Torsten (Helsinki)\*; Stoliczka, Ferdinand (Bremen, Tring, Wien); Stolz, Johannes W. (Görlitz); Storm, Hugo (Lübeck); Strachey, R. (Tring); Strautman, Fedir I. (Lviv); Streich, F. K. Ivo (Stuttgart); Stresemann, Erwin F. T. (Berlin, München); Strickland, A. (Cambridge); Strickland, Hugh E. (Cambridge); Strickland, N. C. (Cambridge); Stuart Baker, Edward C. (Brighton, Sofia, Tring); Stubbe, Michael (Halle); Stüber, Eberhard (Salzburg)\*; Studer, Theophil (Bern); Stuhlmann, Franz (Hamburg); Sturm, J. Wilhelm (München); Sturm, Johann H. C. Friedrich (Bamberg, München); Sturniolo, G. (Siracusa); Sturt, Charles (Edinburgh, Tring); Styau, Frederick W. (Tring); Sudilovskaya, Angelina Mikhailovna (Moscow ZMMU); Sundevall, Carl J. (Stockholm); Sushkin, Petr Petrovich (Moscow SDM, St Petersburg ZISP); Susic, Goran (Zagreb)\*; Sutcliffe, Richard (Glasgow)\*; Sutorova, Helena (Brno)\*; Sutter, Ernst (Basel); Swainson, William (Cambridge, Liverpool, Wien); Swindon Mus. (Leeds); Swinhoe, Charles (Tring); Swinhoe, Robert (Leiden, Liverpool, Torino, Tring, Wien); Sykes, William H. (Tring); Symonds, Ray (Cambridge)\*; Sztolcman/Stolzmann, Jan (Warszawa);

Taczanowski, Ladislaus (Warszawa); Talandis, B. (Kaunas); Talpeanu, Matei (Bucharest); Talsky, Josef (Brno); Tancré, A. (Braunschweig); Tancré, Rudolf (Amsterdam, Bonn, Braunschweig); Tangier-Smith coll. (Tring); Taschenberg, O. (Halle); Taern, O. (München); Teixeira, Maria José (Lisboa-CZ/IICT)\*; Temminck, Coenraad J. (Leiden, Torino, Wien); Tenckhoff, Adolf (Münster); Ter Meer, Hans H. (Leiden, Leipzig); Terlutter, Heinrich (Münster)\*; Tesar, Josef (Brno); Tetens, A. (see Mus. Godeffroy); Teysman, J. E. (Leiden); Thaler, Konrad (Innsbruck)\*; Thanner, Rudolf von (Amsterdam, Bonn, München, Roma); Theil, Paul (Sibiu); Themido, António A. (Coimbra); Thomä, Carl (Wiesbaden); Thomas, R. H. (Oxford); Thome, Johan (Oslo); Thorpe, D. L. (Carlisle); Thorpe, W. H. (Cambridge); Thunberg, C. P. (Uppsala); Ticehurst, Claude B. (Sevenoaks, Tring); Tichy, V. (Prerov); Tickell, Samuel R. (Tring); Tiemann, F. (Halberstadt, Wroclaw); Tobias, Robert (Görlitz); Tomek, Teresa (Krakow)\*; Tomialojc, Ludwik (Wroclaw)\*; Tomkovich, Pavel S. (Moscow ZMMU)\*; Toschi, Augusto (Bologna INFS); Toufar, Jirí (Prerov); Tozzi (Firenze); Tradescant, John (Oxford); Tratz, Eduard P. (Salzburg); Treacher, W. H. (Oxford); Trense, W. (Hamburg); Treskow, Arthur von (Berlin); Trischitta, Antonino (Terrasini); Tristram, Henry B. (Liverpool, Tring); Trojan, Przemslav (Warszawa)\*; Tröster, Gert (Göttingen)\*; Tschudi, Johann J. von (Neuchâtel, Wien); Tschusi zu Schmidhoffen, Viktor von (Graz, München, Roma, Salzburg, Wien); Tugarinov, A. Ya. (St Petersburg ZISP); Tuke, W. M. (Saffron Walden, Essex); Tullberg, Tycho F. (Stockholm); Tunstall, Marmaduke (Newcastle); Turati, Count Ercole (Milano); Turchetto, M. (Padova)\*; Turov, S. S. (Moscow-ZMMU); Tutis, Vesna (Zagreb)\*; Tweeddale, Marquis of (Tring); Tychsen, Oluf G. (Rostock);

Ulianovsky, A. (Lviv); Underwood (Wien); Unger, Jakob (Bonn, Frankfurt, Karlsruhe); Urbanek, Josef (Praha); Uribe, Francesc (Barcelona)\*; Ursch (Strasbourg); Uspenskii, Savva Mikhailovich (Moscow-ZMMU); Ussher, H. T. (Bremen, Tervuren);

Vach, Miloslav (Praha); Vader, Wim (Tromsø)\*; Väisänen, Risto A. (Helsinki)\*; Vallisneri, Antonio (Padova); Valverde, Jose A. (Sevilla); Van den Elzen, Renate (Bonn)\*; Van Someren, Robert A. L. (Edinburgh); Van Someren, Victor G. L. (Edinburgh); Vandelli, Domingos (Coimbra, Lisboa-MB); Vasic, Vaslav (Beograd)\*; Vasiliu, M. (Suceava); Vaskelis, J. (Kaunas); Vaucher, A. (Genève); Vazvári, Nikolaus (Budapest); Venezia, Francesco (Terrasini); Verbis, Z. (Prerov); Verheyen, René & Rudolf (Brussels); Vermouzek, Zdeněk (Olomouc)\*; Veron, Géraldine (Paris)\*; Verreaux, Édouard & Jules P.



(Bremen, Halberstadt, Leiden, Liverpool, Milano, Paris, Wien); Vian (Nantes); Vick, G. (Brighton); Victorin, J. F. (Stockholm); Vieillot, Louis J. P. (Paris); Viçere, Lopez (Coimbra); Viertthaler, Richard (Bremen, Bonn); Vigors, Nicholas A. (Tring); Vik, Rolf (Oslo); Vilmarest-de Cossette coll. (Lille); Vincent, J. (Tring); Violani, Carlo (Pavia)\*; Vitale, Antonino (Terrasini)\*; Vitalis (Grenoble); Voboril, Jan V. (Praha); Vodolazskaya, Tatyana (Kazan)\*; Vogelschutzwarte Neschwitz (Görlitz); Voinstvensky, M. (Kiev); Voipio, Paaavo (Helsinki, Turku); Voisin, Claire (Paris)\*; Voisin, Jean-François (Paris)\*; Volchanecky, I. B. (Saratov); Volponi, S. (Ferrara); Volz, Walter (Bern, Wroclaw); Voous, Karel H. (Amsterdam); Vorderman, A. G. (Leiden); Vouga, Claude (Lausanne); Voy. Alert (Tring); Voy. Astrolabe & Zélé (Paris); Voy. Astrolabe (Paris); Voy. Beagle (Liverpool, Tring); Voy. Blossom (Tring); Voy. Challenger (Tring); Voy. Coquille (Paris); Voy. Endeavour (see Mus. Leverianum); Voy. Erebus & Terror (Tring); Voy. Eugenie (Stockholm); Voy. Gazelle (Berlin); Voy. Géographe (Paris); Voy. Herald (Tring); Voy. Magenta (Firenze, Torino); Voy. Maud (Stavanger); Voy. Nadezhda (St Petersburg ZISP); Voy. Naturaliste (Paris); Voy. Novara (Wien); Voy. Rattlesnake (Tring); Voy. Resolution (see Mus. Leverianum); Voy. Rosenberg (Tervuren); Voy. Senyavin (St Petersburg ZISP); Voy. Sulphur (Tring); Voy. Urania (Paris); Voy. Vega (Stockholm); Voy. Vénus (Paris); Voznesenski, I. G. (St Petersburg ZISP); Vráz, Enrico Stanko (Brno, Prerov);

Wachs, Horst (Rostock); Wadén, Sverker (Malmö)\*; Wagler, Johann G. (München); Wagner, Andreas (München); Wagner, H. O. (Bremen); Wagstaffe, Reginald (Liverpool); Wahlberg, Johan A. (Bremen, Stockholm, Uppsala); Wahnes, Carl (Dresden); Wakefield Mus. (Leeds); Waldeck Sr., Carel (Amsterdam); Wallace, Alfred R. (Liverpool, Tring); Wallenstein de Vella, T. Carol (Karl Walstein) (Bucharest); Wallrow, J. (Bolton); Walrond, Sir John (Exeter); Walters, Michael (Tring); Wandhammer, Marie-Dominique (Strasbourg)\*; Wandres (Karlsruhe); Ward, A. E. (Tring); Wardlaw-Ramsay, Robert G. (Edinburgh, Tring); Warga, Kálmán (Budapest); Wasmuth, Paul (Tallinn); Wassenius, Ernst (Helsinki); Waterhouse, G. R. (Tring); Waterstradt, Johannes (København, Tring); Watkins, H. & C. (München); Wattel, Jan (Amsterdam); Weber (Genève); Weber, Erich (Tübingen)\*; Weber, G. A. (Bremen); Weber, Max (Amsterdam); Webster, Frank B. (Liverpool); Wechsler, Klaus (Bremen)\*; Wehrung (Strasbourg); Weigl, Stefan (Linz)\*; Weigold, Max Hugo (Berlin, Dresden, München, Wilhelmshaven); Weiler, Justus (Wiesbaden); Weiske, Emil (Bamberg); Weisner, Berlin, Dresden, Leipzig, Rudolstadt, Tring, Wien); Weiß, Karl (Bremen, Halberstadt, Hamburg); Weisz, Tibor (Bardejov); Werner, Emil (Sofia); Wertheim, C. J. M. (Amsterdam); Westin, General (Stockholm, Uppsala); Wettstein, Otto Ritter von (Wien); Weyns, Lt.-Col. A. F. G. (Tervuren); Whistler, Hugh (Edinburgh, Tring); Whitaker, Joseph I. S. (Edinburgh, Tring); Whitechurch Mus. (Ludlow); White, C. M. N. (Oxford); Whitehead, Charles H. T. (Tring); Whitehead, John (Tring); Whiteley, D. (Sheffield); Whitfield (Liverpool); Whitmee, Samuel (Liverpool); Whyte, Alexander (Liverpool, Tring); Wibeck, Edward (Jönköping); Wickevoort Crommelin, Jan P. van (Leiden); Wiedenfeld, Lothar von (München); Wied-Neuwied, Maximilian A. P. Prinz zu (Bremen); Wieninger, George (Linz); Wigglesworth, Lionel W. (Cambridge, Dresden); Willgohs, Johan F. (Bergen); Williams, A. E. (Uppsala); Williams, J. B. (Birmingham); Williams, John G. (Liverpool, Uppsala); Willmann, Rainer (Göttingen)\*; Wills, M. A. (Oxford)\*; Wilson, Edward (Tring); Wilson, S. B. (Cambridge); Wingate, A. W. S. (Tring); Winge, Herluf (København); Winkler, Raffael (Basel)\*; Wirth, V. (Karlsruhe)\*; Witherby, Harry F. (Tring); Witting, E. (Sibiu); Wollaston, A. F. R. Sandy (Tring); Wolters, Hans E. (Bonn); Woodford, Charles M. (Tring); Woog, Friederike (Stuttgart)\*; Worofka (Graz); Worthen, Charles K. (Tring); Wright, Magnus von (Helsinki); Wunderer, Hansjörg (Regensburg)\*; Würdinger, I. (Sibiu); Württemberg, Carl-Eugen Herzog von (Stuttgart); Württemberg, Paul W. Herzog von (Bremen, Stuttgart, Tübingen); Wyrwich, P. (Hamburg);

Xántus, Johann (Bremen, Budapest); Yen, K. Y. (Paris); Yerbury, John W. (Tring); Yudin, K. A. (St Petersburg ZISP); Zaffagnini (Bologna MZUB); Zarudny, Nikolai A. (St Petersburg ZISP); Zavyalov, Evgeny V. (Saratov)\*; Zdobnitsky, Franz (Brno); Zedlitz und Trützschler, Otto Graf von (Stockholm); Zelebor, Johann (Wien); Zenatello, Marco (Bologna INFS)\*; Zenker, E. (Wiesbaden); Zenker, Georg (Berlin); Zielinski, S. (Warszawa); Zimmer, Carl (München, Wien, Wroclaw); Zimmermann (Bremen); Zimmermann, Robert (Berlin); Ziswiler, V. (Zürich)\*; Zittwitz, Julius von (Görlitz); Zoological Society of London (Tring); Zoologisches Institut Freiburg (Karlsruhe); Zubarovsky, V. (Kiev); Zuffi, Marco A. L. (Pisa)\*; Zugmayer, Erich (München).

## Appendix 3

### Numbers of bird skins, mounts and other items in scientific collections

(1) Numbers in collections in **Europe**, according to the data supplied by the curators, in sequence from large to small as far as skins and mounts are concerned, omitting collections with fewer than 2,500 study skins and mounts or fewer than 5,000 bird items. The number of all bird items available is often far from exact and therefore is not used for establishing ranking order.

Rank	Town	Skins & mounts	*All bird items				
				41	Oxford	19,000	23,000
				42	Florence/Firenze	18,000	28,000
				43	Halberstadt	18,000	26,000
1	Tring	756,000	1,291,000	44	Manchester	16,500	28,000
2	Leiden	170,000	214,000	45	Sofia	15,500	31,000
3	St-Petersburg ZISP	170,000	190,000	46	Rome/Roma	15,000	?
4	Paris	161,000	177,000	47	Coburg	14,500	17,500
5	Tervuren	150,000	167,500	48	Reykjavik	14,000	19,000
6	Berlin	142,000	157,000	49	Bern	13,200	23,500
7	Moscow ZMMU	117,000	131,000	50	Budapest	12,500	16,000
8	Stockholm	105,000	146,000	51	Newcastle	12,000	23,200
9	Vienna/Wien	104,300	125,000	52	Wroclaw	12,000	14,000
10	Copenhagen/København	97,000	138,000	53	Moscow SDM	11,000	12,200
11	Frankfurt am Main	90,000	102,500	54	Lille	11,000	11,000
12	Bonn	76,000	136,000	55	Sarajevo	10,234	11,500
13	Brussels	71,300	100,000	56	Brighton	10,000	28,500
14	Stuttgart	70,000	95,000	57	Neuchâtel	10,000	12,000
15	Dresden	70,000	90,000	58	Pisa	10,000	12,000
16	Edinburgh	63,000	100,000	59	Bologna	9,700	10,000
17	Munich/München	60,000	61,000	60	Halle	9,100	21,000
18	Amsterdam	53,000	60,000	61	Hanover/Hannover	9,000	16,500
19	Liverpool	51,500	64,500	62	Grenoble	9,000	9,300
20	Cambridge	40,000	50,500	63	Toulouse	8,900	12,200
21	Warszawa	40,000	50,000	64	Tartu	8,500	13,600
22	Kiev	40,000	42,500	65	Exeter	8,500	10,000
23	Milan/Milano	34,000	36,000	66	Linz	8,200	12,500
24	Hamburg	30,000	58,000	67	Terrasini	8,000	9,000
25	Genoa/Genova	30,000	32,000	68	Brno	8,000	?
26	Helsinki	29,000	63,000	69	Kaunas	7,630	10,200
27	Braunschweig	27,000	31,000	70	Bristol	7,500	11,000
28	Göteborg/Göteborg	25,000	43,000	71	Lausanne	7,000	8,800
29	Genève	25,000	34,000	72	Barcelona	7,000	8,400
30	Oslo	25,000	33,000	73	Kiel	7,000	57,000
31	Basel	25,000	31,000	74	Uppsala	6,900	?
32	Nantes	22,100	31,500	75	Wiesbaden	6,800	13,000
33	Prague/Praha	22,000	27,500	76	Görlitz	6,800	9,800
34	Seville/Sevilla	22,000	25,000	77	Zagreb	6,700	7,300
35	Turin/Torino	21,000	22,000	78	Glasgow	6,400	9,300
36	Lund	20,000	31,000	79	Lisbon CZ/IICT	6,340	6,700
37	Cardiff	20,000	29,000	80	Leipzig	6,250	11,600
38	Bremen	20,000	?	81	Bergen	6,200	10,000
39	Sevenoaks	19,500	19,500	82	Magdeburg	6,200	7,400
40	Madrid	19,000	29,000				

\*skins, mounts, skeletons, in alcohol, egg sets, nests

83	Prerov	6,100	11,000	107	Ljubljana	3,500	3,600
84	Bardejov	6,000	10,500	108	Leeuwarden	3,500	3,800
85	Bucharest	6,000	8,500	109	Lviv	3,500	4,100
86	Münster	6,000	7,000	110	Coimbra	3,200	4,500
87	Bratislava	6,000	?	111	Trondheim	3,200	3,400
88	Wilhelmshaven	5,500	8,000	112	York	3,100	3,600
89	Fribourg	5,300	7,200	113	Kosice	3,000	7,250
90	Bolton	5,000	11,200	114	Olomouc	3,000	4,773
91	Belgrade/Beograd	5,000	6,000	115	Nancy	3,000	?
92	Karlsruhe	5,000	6,000	116	Salzburg	3,000	?
93	Verona	5,000	5,500	117	Mainz	2,875	6,000
94	Tournai	4,700	4,750	118	Moscow Stepanyan	2,800	2,800
95	Leeds	4,500	7,600	119	Luxembourg	2,600	3,000
96	St-Petersburg SPBU	4,500	5,700	120	Siena	2,600	2,650
97	Stavanger	4,200	?	121	Sibiu	2,550	4,000
98	Tromsø	4,100	5,500	123	Turku	2,500	4,000
99	Carlisle	4,000	6,700	124	Novi Sad	2,500	3,000
100	Zürich	4,000	4,900	125	Athens/Athinai	2,500	2,750
101	Pavia	4,000	?	126	Venice/Venezia	2,500	2,600
102	Opava	4,000	?	127	Rotterdam	2,200	8,000
103	Forli	4,000	?	128	Krakow	1,400	7,600
104	Altenburg	3,600	4,100	129	Witney	?	12,000
105	Reghin	3,600	?	130	Moscow (PINRAS)	0	5,500
106	Moscow MPSU	3,500	3,500				

The total number of skins in European collections is at least 4,000,000.

(2) **Outside Europe.** For comparison, some non-European collections have the following number of bird skins and mounts (*vide* Banks *et al.* 1973, Davis and Jackson 1995, Mearns and Mearns 1998, Gill 2001), but note that some figures are rather outdated, especially those of Banks *et al.* (1973).

New York (American Mus. of Nat. Hist.)	900,000	Sydney (Australian Mus.)	48,000
Washington (Nat. Mus. of Nat. Hist.)	600,000	Pretoria (Transvaal Mus.)	40,000
Chicago (Field Museum of Nat. Hist.)	390,000	San Diego (San Diego Nat. Hist. Mus.)	37,000
Harvard (Mus. of Comparative Zool.)	320,000	Los Angeles (Univ. of California)	36,500
Ann Arbor (Univ. of Michigan)	180,000	Melbourne (Museum of Victoria)	36,000
Pittsburgh (Carnegie Mus.)	170,000	Denver (Denver Mus. of Nat. Hist.)	35,000
Philadelphia (Acad. Nat. Sci.)	163,000	Ithaca (Cornell Univ., New York)	34,200
Berkeley (Mus. of Vertebr. Zool.)	160,000	Adelaide (South Australian Mus.)	30,446
Ontario (Royal Ontario Mus.)	134,000	Durban (Durban Nat. Sci. Mus.)	30,140
Baton Rouge (Mus. Nat. Sci. Louisiana)	133,500	Abiko (Yamashina Institute, Japan)	30,000+
Ottawa (Canadian Mus. of Nature)	120,000	Nairobi (National Museums of Kenya)	30,000
Los Angeles (LA County Mus. Nat. Hist.)	95,000	Greenville (Delaware Mus. Nat. Hist.)	25,000
Bulawayo (Nat. Hist. Mus. Zimbabwe)	90,000	Salt Lake City (University of Utah)	25,000
San Francisco (California Acad. Sci.)	83,000	Minneapolis (University of Minnesota)	25,000
New Haven (Peabody Mus., Yale Univ.)	80,000	Cleveland (Cleveland Mus. Nat. Hist.)	24,000
Caracas (Colección Ornitología Phelps)	76,000	Blacksburg (Virginia Polytec. Inst. State Univ.)	20,060
Los Angeles (Moore Lab. of Zool.)	67,000	Livingstone (Livingstone Mus., Zambia)	20,000
Lawrence (Univ. of Kansas)	55,000	Wellington (Mus. of New Zealand)	20,000

The total number of skins of all non-European collections is at least c.5,000,000, of which USA and Canada have at least 4,000,000.