

The Scientific Bird Collections in Spain: The Museo Nacional de Ciencias Naturales Bird Collection

Josefina BARREIRO

Museo Nacional de Ciencias Naturales, Spain

Abstract. In this paper the Spanish systematic collections are presented and the address of the person in charge is given. The number of specimens, its geographical provenance and the preservation type of the three main systematic collections are also reviewed. Regarding the bird collection from the Spanish Museo Nacional de Ciencias Naturales, a brief summary of the history of the collection, some detailed information on its geographical and taxonomic contents, as well as the literature published on its holdings are also presented.

Key words. Spanish Bird Collections, Museo Nacional de Ciencias Naturales (CSIC), Estación Biológica de Doñana (CSIC), Museo de Zoología, Barcelona

A scientific collection is one which keeps specimens whose main use is research. These collections are composed of well-dated and documented specimens, from the taxonomic and geographical point of view. They are active collections, with curators in charge and with specific policies of enlargement and loans.

In Spain the three main scientific bird collections are held by state-based institutions:

- The Museu de Zoologia, which belongs to the City Council (Adjuntament) of Barcelona, in the autonomous region of Catalunya
- The Museo Nacional de Ciencias Naturales (MN CN) in Madrid
- The Estación Biológica de Doñana in Sevilla.

Both the latter institutes are run by the CSIC (Consejo Superior de Investigaciones Científicas), a public research body affiliated to the Ministry of Science and Technology.

Barcelona Museu de Zoologia

Museu de Zoologia in Barcelona keeps a small collection of about 7,000 specimens, the majority of them collected in Catalunya and preserved mainly as study skins. For more information, contact Ms. Eulalia GARCÍA. Paseo Picasso S/N. Parc de la Ciutadella. 08003. Barcelona. Spain. mzbcol@intercom.es

Estación Biológica de Doñana

The collection in the Estación Biológica de Doñana holds approximately 25,000 specimens: more than 86 % are preserved as study skins; 6 % as egg clutches; 5 % as skeletons, and 3 % in spirit. In this collection species from Spain (mainly Andalucía),

Latin America and Africa are represented (CABOT 1992). For more information about the collection, contact Dr. José CABOT. Av. Maria Luisa S/N, Pabellón del Perú. 41013-Sevilla. Spain. cabot@ebd.csic.es

Museo Nacional de Ciencias Naturales, Madrid

King Charles III founded the Spanish Museo Nacional de Ciencias Naturales in 1771, when he bought the collections of the Ecuadorian Pedro Franco DÁVILA, who was the first director of the museum. It was opened to the public in 1776 (A.J. BARREIRO 1992). From these early collections only a few specimens still survive, as this museum has had quite a hazardous history. It was housed in three different locations and during the moves from one site to the other, which were not performed professionally, quite a lot of specimens were lost.

The oldest specimens in the bird collection are some mounted specimens that were given to the museum in 1836, coming from the Natural History Cabinet of the Infante (Prince) D. Sebastián.

The majority of the specimens that form the collection today were collected in two periods during the 20th century. The first ran from 1920 to 1936, after which the Spanish Civil War (1936-1939) stopped the development of all Museum activities, which did not really pick up again until the 1980s. At that time a remodeling of the Museum took place and, in 1984, an inventory and cataloguing of the collections was started.

The second period of important increase was from 1990 to 1992 when the Autonomous Region of Madrid donated an important collection (both in number and quality) of Iberian specimens to the bird collection.

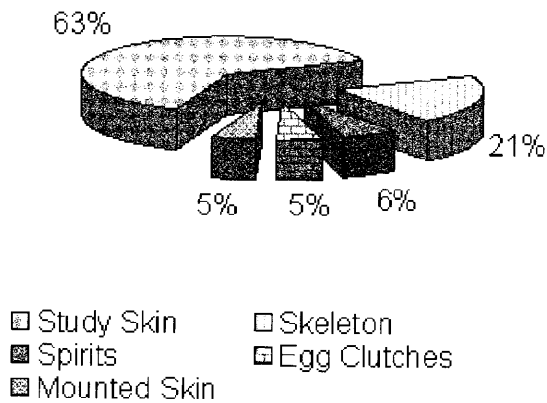


Fig. 1: Composition of the MNCN Bird Collection specimens in percentages.

The inventory of the holdings of the avian collection is now complete and computerized. It holds almost 28,000 specimens preserved, as shown in Fig. 1. The specimens were collected mainly in Spain and in the areas which were once Spanish territories: Latin America, The Philippines, Equatorial Guinea, part of Morocco and the Oriental Sahara, as is shown in Fig. 2.

The systematic composition of the collection can be seen in table 1, where the number of families and specimens in each taxonomic order are shown.

There are 12,603 specimens collected in Spain belonging to 65 families and 339 species. All the Spanish Autonomous Regions are represented (Table 2).

More information about the composition of the MNCN bird collection can be found in J. BARREIRO 1987.

In this collection there are only five type specimens: The holotype of an Icterid *Icterus xantolaemus* GIL, 1918 b, whose validity is questioned by SIBLEY &

Table 1: Number of families and specimens in each taxonomic order in the MNCN bird collection.

Order	Families	no. of Specimens
Anseriformes	2	968
Apodiformes	3	1960
Apterigiformes	1	1
Caprimulgiformes	2	187
Casuariformes	2	9
Charadriiformes	13	1715
Ciconiiformes	5	626
Coliiformes	1	11
Columbiformes	2	549
Coraciiformes	10	847
Cuculiformes	3	338
Falconiformes	5	2343
Galliformes	5	567
Gaviiformes	1	12
Gruiformes	10	673
Passeriformes	67	12589
Pelecaniformes	6	154
Piciformes	6	1019
Podicipediformes	1	209
Procellariiformes	3	96
Psittaciformes	3	297
Sphenisciformes	1	14
Strigiformes	2	1023
Strutioniformes	1	20
Tinamiformes	1	36
Trogoniformes	1	58

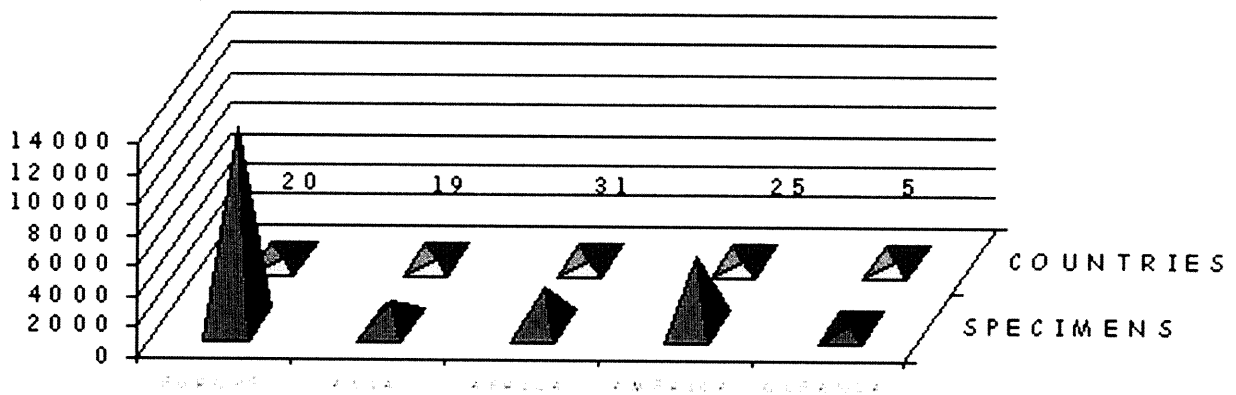


Fig. 2: Number of Countries and Specimens in Each Continent Represented in the MNCN Bird Collection.

Table 2: Number of specimens of each of the Spanish Autonomous Regions present in the MNCN bird collection.

Autonomous region	no. of specimens	Autonomous region	no. of specimens	Autonomous region	no. of specimens
Andalucía	751	Ceuta	5	Melilla	80
Aragón	342	Comunidad Valenciana	409	Navarra	75
Canarias	73	Extremadura	867	País Vasco	102
Cantabria	188	Galicia	459	Principado de Asturias	278
Castilla la Mancha	2891	Islas Baleares	96	Región de Murcia	79
Castilla León	2038	La Rioja	144	unknown	499
Cataluña	206	Madrid	2675		

MONROE (1990) and BARREIRO & PÉREZ DEL VAL (2000). The holotype of a Ralliforme subspecies, *Gallinula chloropus lozanoi* GIL, 1918 a, and also the holotypes of the subspecies *Uria aalge ibericus* BERNIS, 1948, *Galerida theklae berengueri* CABRERA, 1922 and *Galerida theklae aguirrei* CABRERA, 1922 (HERNÁNDEZ CARRASQUILLA 1998).

Until 1998 (BARREIRO & PÉREZ DEL VAL 1998) there was no published catalogue of this collection, only one manuscript dated 1846 and written by the director of the Museum at the time, Dr. M.P. GRAELLS.

Furthermore, only LOZANO (1911) and GIL LLETGET (1935, 1941, 1943) have published papers on a small quantity of specimens of this collection. However, thanks to the Agencia Española de Cooperación Internacional (AECI), which has provided the necessary funds, two new inventories were published in 2001: one on the museum holdings of specimens collected in Equatorial Guinea (PÉREZ DEL VAL 2001) and another on Asian specimens (ALONSO et al. 2002).

Collection facilities

Microsoft Access is the software being used to computerize the data and the management system of the collection. More information about this system can be found in BARREIRO et al. 1994.

The arrangement of the collection in the stores follows a systematic order in the case of orders and families, genus and species being stored in alphabetical order. The HOWARD & MOORE (1991) Checklist of Birds of the World is used for the arrangement and nomenclature of the specimens.

The Spanish MNCN and the Real Jardín Botánico collections has been recognized by the European Commission as a Major Research Infrastructure during the years 2002-2004. This provides a great opportunity for European scientists who would like to visit our collections because the European Commission

can finance their travel, accommodation and subsistence costs as well as laboratory fees. More information is available at www.museociencias.com or e-mail: BIODIBERIA@mncn.csic.es.

University Collections

In general, the Spanish Universities have only small collections, used for teaching, which contain few specimens of each species and are not very useful for systematic research. However, an important collection of bird skeletons is held at the Universidad Autónoma de Madrid (for more information contact Dr. A. MORALES, arturo.morales@uam.es).

There are other smaller collections in a few local museums. Among them is that in the Museo de Ciencias de Vitoria, Alava in the Basque Country which may be of interest (contact D. G. BELAMENDÍA gbela@gm.es for further information).

ACKNOWLEDGEMENTS

I would like to thank M^a Soledad Alonso for helping me in the design of the figures; M. Barreiro for the English revision of the text and Dr. R. van den Elzen and Prof. Schuchmann for the scientific revision of this paper.

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- J. BARREIRO, Museo Nacional de Ciencias Naturales. José Gutierrez Abascal, 2. 28006-Madrid. Spain. jbarreiro@mncn.csic.es