

Hidden treasures and the reorganization of the Bird Collection in the Hungarian Natural History Museum

Tibor I. FUISZ, Zoltán VAS, Róbert RÁCZ

ABSTRACT

FUISZ, T. I., VAS, Z. & RÁCZ, R. 2010. Hidden treasures and the reorganization of the Bird Collection in the Hungarian Natural History Museum. *J. Afrotrop. Zool. Special Issue*: 37-43.

The history of the Bird Collection of the Hungarian Natural History Museum can be divided into two main epochs: pre- and post-1956. We compare the pre- and post-1956 numbers of inventoried specimens, types and geographical representation and give an account on surviving specimens dating before 1956. The Bird Collection grew to a considerably large, significant Central European ornithological collection till it was completely destroyed in 1956. The whole scientific collection, containing skins and eggs and the exhibition material (in two separate buildings) perished. It had contained 36,000 mounted and skin specimens, and 22,000 eggs. Fortunately, the card indexes of the specimens partly survived; hence the main collecting data of specimens is available. From the foreign material the most significant were the hummingbirds (Trochilidae) with 3000 specimens. The collection contained two then already extinct species: the Passenger Pigeon *Ectopistes migratorius* (Linnaeus, 1766) and Carolina Parakeet *Conuropsis carolinensis* (Linnaeus, 1758). During the approximately one-and-a-half century establishment of the HNHM, between 1802-1956, 133 type specimens were recorded in the inventories, but not all of these taxa were considered valid by 1956. A handful of mounted specimens and few skins from that era survived. Since 1956, foreign donations and intense collection activities have restored to some extent the Hungarian material, but at present no type specimens are held, and the foreign material is poor compared to the state prior 1956. The reorganization of the Bird Collection started in 2007. Dickinson's (2003) nomenclature and taxonomical arrangement is the base for the arrangement of the egg, skin, mounted specimen and bone collections. The present skin collection contains 11,487 specimens; it mainly represents the Carpathian Basin, but significant materials are stored from Brazil, Argentina, the Near East, North Africa and Australia. The mounted specimen collection consists of around 2220 specimens, but only 958 are registered in the inventories. The oological collection consists of approximately 2000 clutches and we store 200 nests. The latter represent foremost the Hungarian avifauna.

FUISZ, T. I., VAS, Z. & RÁCZ, R. Bird Collection, Hungarian Natural History Museum, 1088 Budapest, Ludovika tér 2-6 (fuisz@nhmus.hu)

Keywords: HNHM, Bird Collection, skin collection, mounted material, egg collection, history of collection, type specimens

INTRODUCTION

The Bird Collection of the Hungarian Natural History Museum (HNHM), founded in 1802, was not the biggest but still one of the most significant Central European ornithological collections, till it was completely destroyed in 1956. Both the building of the National Museum, where the bird exhibition was housed, and the Department of Zoology research building in Baross street were hit by artillery shells, hence the Bird Collection was completely annihilated. I. Boros, Director General, gave a vivid account of the losses suffered by the museum (Boros 1957). The Department of Geology and Mineralogy was completely burnt out, and 80 % of the Department of Palaeontology was destroyed. In the Zoology Building the following collections were completely burnt out: the bird collection, ichthyology and herpetology,

lower invertebrates, and malacology. But the mammal, Diptera and Lepidoptera collections also suffered severe losses. Afterwards, decades of diligent collecting activities and exchanges restored to some extent its former magnitude, but neither its geographic representation nor the number of stored specimens or type specimens at present are as significant as the pre-1956 bird material.

In this article we aim to compare the perished and the present material of the Bird Collection according to the following criteria:

- the number of skins and mounted specimens;
- the number of clutches and nests;
- the geographic composition;
- the number of type specimens.

We will also give an account of the reorganization that began in 2007, and will list all the specimens that are housed in the collection today and could be

unambiguously dated back to the pre-1956 period. We also identify the most significant collectors contributing to the increase in quantity of our bird material. We will follow Dickinson's (2003) nomenclature and taxonomical arrangement throughout the article. We also used this checklist to build a comprehensive digital database on the material of the Bird Collection of the HNHM.

THE PRE-1956 COLLECTION

The Bird Collection of the HNHM grew, till 1956, to become a considerably large collection, which not only held specimens from the Carpathian Basin, but also significant material from Europe and other continents. As only the index cards are available today we cannot separate the skins and mounted specimens; we only know whether an item belonged to the egg collection or the osteological collection, or was a bird specimen prepared either as a skin or a mounted specimen (Table 1). The number of bird specimens amounted to 36,000, and more than half of the material arrived from outside Hungary. Regarding the skins, the main home material came from P. Jányi, S. Petényi, O. Herman, I. Chernel, Gy. Madarász, L. Horváth and N. Hommonay. The most significant foreign material was that of hummingbirds, approximately 3000 specimens. Significant foreign collections were assembled by J. Xántus (California, Indonesia, Great Sunda Islands; 787 specimens), K. Kittenberger (East Africa; 1818 specimens), L. Bíró (Papua New Guinea, north-western Africa; 580 specimens), Á. Vezényi (Brazil; 238 specimens) and by others from India, South Africa, Mexico, Norway, Inner Asia, Venezuela, Sudan, etc. Many foreign materials were purchased from wholesale dealers (such as W. Schlüter, F. Gerrard).

From all the pre-1956 material only eight specimens have been recovered in the course of the reorganization till 2010, although some more skins are expected to show up in the course of the complete revision. Four Kittenberger specimens were identified: two Goliath Herons *Ardea goliath* Cretzschmar, 1827, one Shoebill *Balaeniceps rex* Gould, 1850 (all mounted)



Fig. 1. White-bellied Tit *Parus albiventris* Shelley, 1881; as of 2010, the only surviving skin found from the pre-1956 era. Specimen collected by K. Kittenberger in Ngare-Dowash, Africa in 1909.

and a White-bellied Tit *Parus albiventris* Shelley, 1881 skin (Fig. 1). K. Kittenberger contributed enormously to the enrichment of the Bird Collection. To cover the expenses of his African collecting expeditions Kittenberger offered many specimens to Lord Walter Rothschild; even more were confiscated in 1914 by the Ugandan British Authorities, and finally got into the possession of F. J. Jackson, governor of Uganda (Prys-Jones *et al.* 2008). As a result several Kittenberger specimens that were not sent to the HNHM survived, and also some others, namely those exchanged by the HNHM with other collections. Other survivors include two mounted specimens collected by J. Xántus, a Tufted Puffin *Fratercula cirrhata* Pallas, 1769 and a Jambu Fruit-dove *Ptilinopus jambu* (Gmelin, 1789); a mounted Senegal Coucal *Centropus senegalensis* (Linnaeus, 1766) collected by Franz Joseph, Emperor of Austria and Hungary; and a mounted head of a European Stone-curlew *Burhinus oedicephalus* (Linnaeus, 1758), collected by O. Herman, a legendary figure of Hungarian zoology and particularly ornithology.

The osteological collection contained 22,000 eggs; the Common Cuckoo *Cuculus canorus* (Linnaeus, 1758) material was especially valuable. But the representation outside the Carpathian Basin areas (compared to the bird skins) was considerably lower. Only approximately 10 % of the egg collection originated from abroad (Table 1).

Table 1. The material of the HNHM's Bird Collection perished in 1956.

Pre-1956	Total	Carpathian Basin	Foreign
Skins and mounted specimens	36,000	16,000	20,000
Egg collection	22,000	20,000	2000
Type specimens	133		

The osteological collection contained 2500 bird specimens, and was then considered one of the largest in Europe.

The pre-1956 collection was also very important as it held many type specimens. Although the majority of the species types were later synonymized or are considered now only valid subspecies, compared to the present collection figures, it was very impressive. Deposits of 133 type specimens were recorded during the collection's approximately 150-year operation, till 1956. L. Horváth (1970), then curator of the Bird Collection, listed the 133 type specimens, and he considered 43 taxa still valid. These species were described (with one exception) by Gy. Madarász, and due to his limited access to literature, many of them were later synonymized. Table 2 lists the type specimens of the still valid three species and 42 subspecies according to Dickinson (2003). It is worth noting that a specimen of the African Citril *Serinus citrinelloides hypostictus* (Reichenow, 1904) in the Museum für Naturkunde of the Humboldt University, Berlin (47.46), has an original label indicating that it was collected by K. Kittenberger in Moshi, Tanzania in 1903, and sent to the HNHM. The label attached to the specimen in Berlin states that the bird was purchased from the HNHM, and was part of the series on which the description of *Spinus citrinelloides hypostictus* Reichenow, 1904 (later assigned to the genus *Serinus*) was based.

The collection contained four specimens of two then already extinct species: two Passenger Pigeons *Ectopistes migratorius* (Linnaeus, 1766) and two Carolina Parakeets *Conuropsis carolinensis* (Linnaeus, 1758). The loss of other species such as four kiwis (*Apteryx* sp), two lyrebirds (*Menura* sp) and a condor is particularly regrettable.

THE POST-1956 COLLECTION

After 1956, decades of foreign donations and intense collection activities restored to some extent the HNHM material, but at present no type specimens are held in our collection, and the foreign material is poor compared to the state prior 1956. Figure 2 shows that the growth of the collection was especially intense in the first decade after 1956. This is partly explained by the fact that after the devastating fire many donations arrived to the HNHM from all over the world. The HNHM also organized collecting trips to the 'friendly' socialist regimes outside Europe (Egypt, Iraq, North Korea, Vietnam, Mongolia). Donations also poured into the museum from dissident Hungarians (e.g. from J. Hidasi in Brazil, Gy. Hangay in Australia, and from A. Kovács in Argentina). The total of inventoried items grew to

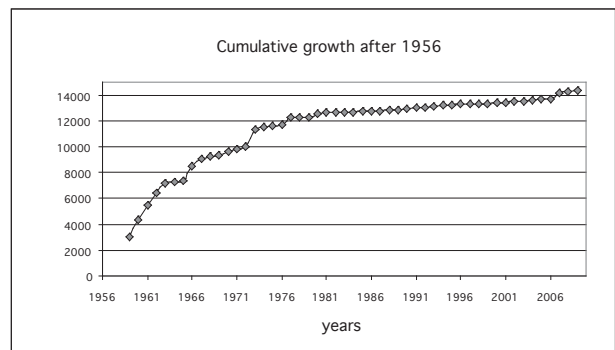


Fig. 2. Cumulative growth in the number of inventoried items in the Bird Collection 1956-2009.

around 14,000 specimens by 2010 (Fig. 2). Nowadays, as a result of strict national and international laws concerning collecting and shipping protected birds, the Bird Collection is enriched mainly through the preparation of specimens donated by national parks, zoos and animal hospitals. The birds that arrive with collecting dates are usually assigned to the skins, and birds without collecting dates or arriving from zoos are mounted. As the largest Hungarian bird collection we frequently loan mounted specimens to other museums and cultural institutions (for example, theatres). A significant number of birds arrive in the collection as confiscated material from illegal bird trafficking by hunters.

According to the inventory, the present skin collection contains 11,487 identified specimens (Table 3), and approximately 620 as yet unidentified specimens, which are thus not included in the inventory. The skin collection represents mainly the Carpathian Basin, but significant materials are available from Brazil, Argentina, the Near East, North Africa and Australia. The approximately 2200 mounted specimens are less well-elaborated, and only 958 are registered in the inventories. The oological collection today consists of approximately 2000 clutches, which represent foremost the Hungarian avifauna. From the 212 breeding bird species of Hungary, the eggs of 192 species are present, thanks mainly

Table 3. The present Bird Collection in numbers.

After 1956	Total
Skins	12,000
Mounted specimens	2200
Egg collection	2000 clutches, approx. 10,000 eggs
Nests	200
Type specimens	0

Table 2. Perished type specimens that are still considered valid species (bold) and subspecies from the HNHM Bird Collection referring to Dickinson (2003).

Original name	Sex	Inv. No.	Present name (Dickinson 2003)	Locality	Present country	Collector	Date
<i>Apus singalensis</i> Madarász, 1911	1	1972/67	<i>A. affinis singalensis</i> Madarász, 1901	Kala Weva	Sri Lanka	Gy. Madarász	1896.02.08
<i>Apus singalensis</i> Madarász, 1911	2	1972/67	<i>A. affinis singalensis</i> Madarász, 1901	Kala Weva	Sri Lanka	Gy. Madarász	1896.02.08
<i>Asio canariensis</i> Madarász, 1901	1	2696/17	<i>A. otus canariensis</i> Madarász, 1901	Tafira, Gran Canaria, Canary Islands	Spain	C. Floericke	1900.10.17
<i>Asio canariensis</i> Madarász, 1901	2	2696/17	<i>A. otus canariensis</i> Madarász, 1901	Tafira, Gran Canaria, Canary Islands	Spain	C. Floericke	1900.10.17
<i>Bradypterus elgonensis</i> Madarász, 1912		3285/9	<i>B. baboecala elongensis</i> Madarász, 1905	Buhugu, Mt. Elgon	Uganda	R. Kmunke	1911.12.10
<i>Bradypterus mariae</i> Madarász, 1905	1	2948/13	<i>B. lopesi mariae</i> Madarász, 1905	Kibosho, Mt. Kilimanjaro	Tanzania	K. Kittenberger	1904.10.07
<i>Calandrella brachydactyla hungarica</i> Horváth, 1956	1	55.1.1.	<i>C. brachydactyla hungarica</i> Horváth, 1956	Nagyiván, Hortobágy	Hungary	L. Horváth	1955.05.05
<i>Chrysoptilus ujhelyii</i> Madarász, 1912	1	3270/18	<i>Colaptes punctigula ujhelyii</i> (Madarász, 1912)	Aracataca	Colombia	J. Újhelyi	1912.01.13
<i>Chrysoptilus ujhelyii</i> Madarász, 1912	2	3270/18	<i>Colaptes punctigula ujhelyii</i> (Madarász, 1912)	Aracataca	Colombia	J. Újhelyi	1912.01.13
<i>Cinclodes heterurus</i> Madarász, 1903	1	2866/12	<i>C. fuscus heterurus</i> Madarász, 1913	Culata, Cordillera de Mérida, 3000 m	Venezuela	B. Gabaldon	1902.05.28
<i>Cinclus caucasicus</i> Madarász, 1903	1	2706/21	<i>C. cinclus caucasicus</i> Madarász, 1903	Vladikavkaz, Caucasus	Russia	W. Schlüter	1900.02.14
<i>Cinclus olympicus</i> Madarász, 1903	1	2867/1	<i>C. cinclus olympicus</i> Madarász, 1903	Troodos Mts.	Cyprus	K. Glaszner	1902.10.03
<i>Cisticola humilis</i> Madarász, 1904	2	2926/36	<i>C. chimitana humilis</i> Madarász, 1904	Tanganyika Territory	Tanzania	K. Kittenberger	1904.03.28
<i>Cisticola katonae</i> Madarász, 1904	1	2896/152a	<i>C. brachypterus katonae</i> Madarász, 1904	Boma Gombe, near Moshi, Mt. Kilimanjaro	Tanzania	K. Kittenberger	1903.03.14
<i>Cisticola nilotica</i> Madarász, 1914	2	3219/109	<i>C. erythroptus niloticus</i> Madarász, 1914	Shallal, Blue Nile River	Sudan	Gy. Madarász	1911.03.04
<i>Cisticola pictipennis</i> Madarász, 1905	1	2896/159a	<i>C. cantans pictipennis</i> Madarász, 1905	Moshi, Mt. Kilimanjaro	Tanzania	K. Kittenberger	1903.05.30
<i>Corvus pallescens</i> Madarász, 1904	1	2811/2	<i>C. corone pallescens</i> (Madarász, 1904)	Larnaca	Cyprus	K. Glaszner	1902.01.06
<i>Corvus protegatus</i> Madarász, 1904	1	1972/13	<i>C. splendens protegatus</i> Madarász, 1904	Mt. Lavinia	Sri Lanka	Gy. Madarász	1896.03.19

Original name	Sex	Inv. No.	Present name (Dickinson 2003)	Locality	Present country	Collector	Date
<i>Donacicola sharpii</i> Madarász, 1894	1	1828/43a	<i>Loncura castaneothorax sharpii</i> (Madarász, 1894)	Bongu, Finisterre Mts., Astrolabe Bay	Papua New Guinea	S. Fenichel	1892.08.11
<i>Donacicola sharpii</i> Madarász, 1894	2	1828/43b	<i>Loncura castaneothorax sharpii</i> (Madarász, 1894)	Bongu, Finisterre Mts., Astrolabe Bay	Papua New Guinea	S. Fenichel	1892.08.11
<i>Donacobius brachypterus</i> Madarász, 1913	2	3270/128	<i>D. atricapilla brachypterus</i> Madarász, 1913	Aracataca, Santa Marta	Colombia	J. Újhelyi	1912.02.07
<i>Eupsychortyx horváthi</i> Madarász, 1904	1	2866/163	<i>Colinus cristatus horváthi</i> (Madarász, 1904)	Pedregosa, near Mérida	Venezuela	B. Gabaldon	1902.04.10
<i>Francolinus königseggii</i> Madarász, 1914	2	3246/21	<i>F. clappertoni königseggii</i> Madarász, 1914	Eastern Sudan	Sudan	F. Königsegg	1911.01.20
<i>Garrulus glaszneri</i> Madarász, 1902	1	2867/2a	<i>G. glandarius glaszneri</i> Madarász, 1902	Troodos Mts.	Cyprus	K. Glaszner	1902.05.27
<i>Garrulus glaszneri</i> Madarász, 1902	2	2867/2b	<i>G. glandarius glaszneri</i> Madarász, 1902	Troodos Mts.	Cyprus	K. Glaszner	1902.05.27
<i>Grallaria rara</i> Hellmayr & Madarász, 1941		3281/142	<i>G. ferrugineiceps rara</i> Hellmayr & Madarász, 1941	Medina, Cundinamarca	Colombia	C. Bardy	1912.12
<i>Laniarius ambiguus</i> Madarász, 1904	1	2896/204	<i>L. aethiopicus ambiguus</i> Madarász, 1904	Kibosho, Mt. Kilimanjaro	Tanzania	K. Kittenberger	1903.04.06
<i>Loxia guillemardi</i> Madarász, 1903	1	2867/43	<i>L. curvirostra guillemardi</i> Madarász, 1903	Troodos Mts.	Cyprus	K. Glaszner	1902.11.13
<i>Luscinola mimica</i> Madarász, 1903	1	2850/85a	<i>Acrocephalus melanopogon mimicus</i> (Madarász, 1903)	Tedshen River, Transcaspia	Turkmenistan	M. Harms	1900.03.07
<i>Merula algira</i> Madarász, 1903	1	2868/1	<i>Turdus merula algeris</i> (Madarász, 1903)	Bone	Algeria	W. Schlüter	1902.11.06
<i>Merula aterrima</i> Madarász, 1903	1	2861/1	<i>Turdus merula aterrimus</i> (Madarász, 1903)	Vladikavkaz, Caucasus	Russia	W. Schlüter	1902.10.25
Mimeta szalayi Madarász, 1900	1	2628/6	<i>Oriolus szalayi</i> (Madarász, 1900)	Huon Peninsula	Papua New Guinea	L. Bíró	1899.08.26
<i>Montifringilla cognata</i> Madarász, 1909	1	3142/17a	<i>Leucosticte arctoa cognata</i> (Madarász, 1909)	Tunkinsk Mts.	Russia	P. Weiske & F. Teichmann	1908.04.23
<i>Montifringilla cognata</i> Madarász, 1909	2	3142/17b	<i>Leucosticte arctoa cognata</i> (Madarász, 1909)	Tunkinsk Mts.	Russia	P. Weiske & F. Teichmann	1908.04.23
<i>Montifringilla margaritacea</i> Madarász, 1904	1	1731/45	<i>Leucosticte brandti margaritacea</i> (Madarász, 1904)	Katon Karagai	Kazakhstan	R. Tancré	1881.12
<i>Parus aphrodite</i> Madarász, 1901	1	2715/5a	<i>P. major aphrodite</i> Madarász, 1901	Larnaca	Cyprus	K. Glaszner	1901.03.02
<i>Parus aphrodite</i> Madarász, 1901	2	2715/5b	<i>P. major aphrodite</i> Madarász, 1901	Larnaca	Cyprus	K. Glaszner	1901.03.02

Original name	Sex	Inv. No.	Present name (Dickinson 2003)	Locality	Present country	Collector	Date
<i>Pinarolestes megarhyncha</i> madarászi Rothschild & Hartert, 1903	1	2554/1	<i>Colluricincla megarhyncha</i> madarászi (Rothschild & Hartert, 1903)	Sattelberg, Huon Peninsula	Papua New Guinea	L. Biró	1897.04.17
<i>Pitta reichenowi</i> Madarász, 1901		2736/5	<i>P. reichenowi</i> Madarász, 1901	Congo	Democratic Republic of Congo	E. Torday	1900
<i>Poecilodryas hermani</i> Madarász, 1894	1	1828/30	<i>P. hypoleuca hermani</i> Madarász, 1894	Bongu, Finisterre Mts., Astrolabe Bay	Papua New Guinea	S. Femichel	1983.01
<i>Ptilopus decorus</i> Madarász, 1910	1	2062/78	<i>Ptilinopus pulchellus decorus</i> (Madarász, 1910)	New Guinea	Papua New Guinea	L. Biró	1897.03.10
<i>Ptilotis proxima</i> Madarász, 1900	1	2062/93a	<i>Pycnopygius ixoides proximus</i> (Madarász, 1900)	Erima, Astrolabe Bay	Papua New Guinea	L. Biró	1897.02.20
<i>Ptilotis proxima</i> Madarász, 1900	2	2062/93b	<i>Pycnopygius ixoides proximus</i> (Madarász, 1900)	Erima, Astrolabe Bay	Papua New Guinea	L. Biró	1897.02.20
<i>Pucrasia meyeri</i> Madarász, 1886	1	1984/4	<i>P. macrolopha meyeri</i> Madarász, 1886	South-eastern Tibet	China	B. Széchenyi	unknown
<i>Pucrasia meyeri</i> Madarász, 1886	2	1984/5	<i>P. macrolopha meyeri</i> Madarász, 1886	South-eastern Tibet	China	B. Széchenyi	unknown
<i>Sarothrura antonii</i> Madarász & Neumann, 1911		3240/22	<i>S. affinis antonii</i> Madarász & Neumann, 1911	Ndassekera, Tanganyika Territory	Tanzania	K. Kittenberger	1910.01.17
<i>Scops cypria</i> Madarász, 1901	1	2715/1	<i>Otus scops cyprius</i> (Madarász, 1901)	Livadia	Cyprus	K. Glaszner	1901.02.08
<i>Siptornis certhia</i> Madarász, 1903	1	2866/6	<i>Leptasthenura andicola certhia</i> (Madarász, 1903)	San Antonio, Cordilleras de Mérida, 3000 m	Venezuela	B. Gabaldon	1902.03.08
<i>Synallaxis fuscifrons</i> Madarász, 1913	2	3270/41	<i>Certhiaxis cinnamomeus fuscifrons</i> (Madarász, 1913)	Aracataca, Santa Marta	Colombia	J. Újhelyi	1912.02.07
<i>Tetraophasis széchenyii</i> Madarász, 1885	1	1984/6	<i>T. széchenyii</i> Madarász, 1885	Sichuan	China	B. Széchenyi	unknown
<i>Tetraophasis széchenyii</i> Madarász, 1885	2	1984/7	<i>T. széchenyii</i> Madarász, 1886	Sichuan	China	B. Széchenyi	unknown
<i>Thryothorus consobrinus</i> Madarász, 1904	1	2866/39	<i>T. genibarbis consobrinus</i> Madarász, 1904	Hechisera, Cordilleras de Mérida, 2000 m	Venezuela	B. Gabaldon	1902.05.14
<i>Vinago gibberifrons</i> Madarász, 1915	1	3294/106	<i>Treron calvus gibberifrons</i> (Madarász, 1915)	Mujenje	Uganda	K. Kittenberger	1913.07.29
<i>Virco forreri</i> Madarász, 1885	1	1466/22	<i>V. flavoviridis forreri</i> Madarász, 1885	Tres Marias Island	Mexico	A. Forrer	1881.04.05
<i>Zosterops egregia</i> Madarász, 1911	1	1972/50	<i>Z. palpebrosus egregius</i> Madarász, 1911	Kandy	Sri Lanka	Gy. Madarász	1896.03.03

to the bequests of I. Homonnay, D. Radetzky and M. Janisch. Besides eggs, we store 200 nests. We still possess a rarity though, one specimen of an extinct species: a Passenger Pigeon *Ectopistes migratorius* originating from the Royal Ontario Museum of Zoology.

The reorganization of the Bird Collection started in 2007. Dickinson's (2003) nomenclature and taxonomical arrangement is the basis for creating the egg, skin, mounted specimens and osteological collection. Besides the paper-based inventory, a digital database was created using Microsoft Access. First, the cards that survived the fire in 1956 were digitally recorded. From the cards the species name, sex, collection date and locality of the bird could be retrieved. Some duplicate records are undoubtedly present in the material, possibly due to the fact that the card system was organized according to the collecting year, but in some cases other organizing criteria (taxonomic, geographic composition of the material) were also applied (T. Kecskeméti, retired deputy director general, pers. comm.). All inventory books are fully digitized. In 2009 we began building a photographic record of the eggs within the framework of the STERNA project, and also rearranging and thoroughly revising the mounted specimens. A large proportion of the unlabelled birds in the mounted collection were also identified.

Our main task in the coming years is to reorganize and complete the inventories of the skins and mounted specimens. We would also like to photograph the full

mounted bird material, as the Hungarian Museum Law requires the creation of photographic records of every individually inventoried item.

ACKNOWLEDGEMENTS

We are grateful for the comment of Tibor Kecskeméti regarding the organization of the index cards prior to 1956. The library of the HNHM kindly helped us with finding old Kittenberger specimens in their photographic archives. We are especially indebted to two anonymous referees, who pointed out the weak points of an earlier version of this manuscript.

BIBLIOGRAPHY

- BOROS, I. 1957. The Tragedy of the Hungarian Natural History Museum. *Annales Historico-Naturales Musei Nationalis Hungarici* 8: 491-505.
- DICKINSON, E. (ed.). 2003. *The Howard and Moore Complete Checklist of the Birds of the World*. 3rd edition. London: Christopher Helm.
- HORVÁTH, L. 1970. The Destroyed Bird Types of the Hungarian Natural History Museum. *Annales Historico-Naturales Musei Nationalis Hungarici* 62: 363-372
- PRYS-JONES, R., FUISZ, T. I. & WILLARD, D. 2008. Egy szerencsétlen sorsú és mellőzött afrikai madárgyűjtő ('An unfortunate and neglected collector of African birds'). In: FÁCZANYI, Ö. (ed.), *A népiskolától az Akadémiáig. Kittenberger Kálmán Emlékkülés ('Commemoration for Kálmán Kittenberger. Memorial meeting in the Hungarian Academy of Sciences')*. Budapest: Országos Magyar Vadászkamara, 59-80.