

Keeping Records of Animals

Object transfer and the circulation of lists between zoos and museums

183.30
1448.30
1448

1905
0.30
5
2
3
8
1
10

Vergleichs

von Aquarium vom 1 April 1914 bis zum 31 März 1915
an gelieferten Reptilien u. Amphibien, sowie die bezahlt wurde
die Anzahl der Tiere, nicht durch die Anzahl der Stücke gegeben.

	Invent. №	
14.4: 1 Proteus anguinus (Müller & Schaller)	1,50 1,50	
14.4: 1 Cham. oustaleti (L. & A. L.)	50 50	
14.4: 1 Basiliscus vittatus (Müller)	1 1	
14.4: 1 Otocoryphus cornuta (Müller)	1,50 3,2	
14.4: 1 Lophoceros (Müller)	1,50 1,50	
14.4: 1 Uroplatus fimbriatus (Müller)	2 2	
14.4: 1 Chalchicomula	10 10	
14.4: 2 Homopus areolaris	25 75	
14.4: 1 Lophoceros (Müller)	1 2	
14.4: 1 (Müller)	1 1	
14.4: 1 Crocodil (Müller)	3 3	
14.4: 1 Helmanis (Müller)	2 2	
14.4: 1 Lialis burtoni (Müller)	50 50	
14.4: 1 Heterodon platyrhynchus (Müller)	10 50	
14.4: 1 Basiliscus plumifrons (Müller)	1 33	
14.4: 1 Etenosaurus amandus (Müller)	1 1	
14.4: 1 Testudo ornithi (Müller)	1 1	
14.4: 2 Homopus areolaris (Müller)	25 75	
14.4: 1 Coluber longissimus (Müller)	1 1	
14.4: 1 Physiculus (Müller)	50 50	
14.4: 2 Zinnurus (Müller)	1,50 2	
14.4: 1 Proteus anguinus	25 25	
14.4: 1 Proteus anguinus	25 11,50	
14.4: 1 Helostoma temminckii	2 3	
14.4: 1 Coronella getula	25 75	
14.4: 1 Zinnurus japonicus	50 11,50	
	34,60	

- Article type: story
- Author: Mareike Vennen
- Translated by: Carla Welch
- Text license: CC BY-SA
- DOI: 64y2-m311/30

A list of the reptiles and amphibians delivered by the Zoo Aquarium to the Natural History Museum in Berlin between 1914 and 1915 with price information (MfN, HBSB S III, Zoolog. Garten, Bd. 1. All rights reserved.)

A list containing animal names and dates, beside them various handwritten, not particularly accurate numbers, with crossed out text and post scripts – if we

look at the ‘Register of reptiles and amphibians delivered by the Aquarium from 1 April 1914 to 31 March 1915’, it becomes clear that this piece of paper was in use, that people wrote on it and then changed it again, that it perhaps even passed through many pairs of hands. Why is it worthwhile taking a closer look at lists like this from the early 20th century? Because they teach us something about the [afterlife](#) of zoo animals in natural history collections and about how they were transformed into museum objects. Together with [preparation techniques](#), practices of [record-keeping](#) have always been one important component of natural history [collecting](#), a practice through which animals become – among others – [exhibits](#), [objects of research](#) or [teaching tools](#). It is precisely this transition that we can trace in the ‘Register of delivered animals’, because it was only in the process of creating records of animal bodies at the museum in [accession catalogues](#) and [inventory books](#), by assigning them an inventory number and – in this case – a price, that they became the property of the museum, became part of a collection or exhibition, where they gained new functions. In short: it was in this process that they changed their status, going from zoo attraction to collection item. Lists, inventories, and catalogues were also used to manage the [specimens](#) in the collection. These lists map the order of knowledge in a collection. It is not just that: as tools for organising collections, they also shape and structure this order themselves.

But above all, lists like the register are interesting in terms of what they can tell us about the shared history of the zoo and the museum. As they organised the exchange between these two institutions, they are important sources for investigating the history of the relationship between Berlin’s Zoological Garden and Zoological Museum in the early 20th century. How did the transfer of *animals*, the exchange of *information* and the negotiation of *values* take place back then? Which zoo animals made their way into the museum in the first place, how did they become collection items, and how was their value determined? Documents like the ‘Register of delivered animals’ can provide helpful clues in this regard. Sometimes, they are the only [traces](#) that remain.

Object Transfer and the Circulation of Lists

In 1915, the Berlin Zoo and the Natural History Museum were already able to look back on a good 70 years of shared history. Since their beginnings, they had been closely connected both institutionally and in terms of personnel, as can be seen in the example of zoologist Martin Hinrich Lichtenstein, who was the director of collections at the Zoological Museum from 1813 and, from 1844, the head of the recently opened zoo as well. The museum, which aimed to collect and catalogue the world’s fauna as exhaustively as possible, had been receiving numerous [birds and mammals](#) from the zoo since the very start. In 1913, when an aquarium was constructed at the zoo, they were joined by fish, insects, amphibians, and reptiles.

The register provides an insight into the kinds of animals the Zoo Aquarium was keeping shortly after it opened in 1913. But this is just a snippet; more precise information about the aquarium’s animal holdings can be found in the zoo archive, which provides a much more complete picture. However, what the ‘Register of delivered animals’ can give us is an impression of which [aquarium animals](#) made their way into the museum in 1914 after their deaths

(meaning that they had apparently only survived at the aquarium for a brief period after its opening in 1913) – that is, which animals had an afterlife as collection items or exhibits, including olms, iguanas, snakes, and turtles. Indeed, the zoo and the adjoining aquarium were not the only sources of animals for the museum, which is also indicated by the number of animals that were transferred, which was not all that high. Some museum curators even preferred sourcing their material from expeditions, collectors, or from other museums – which we will come back to later. However, the local zoo at this time was, as in many other cities, an important source of animals and, vice versa, the museum was a regular recipient of animal cadavers. How did this kind of transfer take place back then?

Negotiating Prices and Values

We can imagine the exchange between these two institutions roughly as follows: the zoological garden regularly sent the museum lists of animals that had recently died. These offer lists were usually intended for internal use only and for making direct arrangements between the zoo and the museum. Each of the museum's various subcollections selected what they could use from these lists, although certain specimens were more coveted than others, especially if they were members of rare species or species that were difficult to come by.

The register of 1914 also provides an indication of the value of a single animal cadaver back then. It does not just note the species names of the arriving animals or when they went from the zoo to the museum but also points to the various forms of exchange between the two institutions. It shows how economies of gifting, trade, and barter overlapped, for the zoo offered some animals to the museum as gifts and others as objects for barter or purchase. While the zoo gave a majority of animals to the museum for no charge, prices and values had to be determined for the animals that were for sale.¹ The zoo generally left the task of setting the price to the museum, where it was the director's job to appraise the animals, although he usually delegated this task to the respective collection curator.² Some animal bodies were sent to the museum for inspection first, but most of the decisions about them were made on the basis of lists. If the zoo was happy with the price put forward by the museum, a zoo vehicle would normally bring a single or several animal cadavers to the museum, where they were entered into the inventory and appraised.³

Although the zoo generally accepted the suggested price, there was occasional disagreement about the value of a specimen, in which case, as we read in the correspondence between the two institutions, the price had to be renegotiated until a decision was made either in favour of or against the acquisition. We find traces of this process in the register in numbers that have been crossed-out and overwritten, as well as in the comment, "The values on the right that have not been crossed out apply." These lists created both order as well as ownership; they show how things were assigned meaning and value.

Compared with these lists, the information entered in invoices about the animals that had been delivered provide more accurate information. There is already an inventory number beside some animal names and values, which is what irrevocably turns a zoo animal into a collection item.

However, not all animal bodies that were listed were actually used. Some bearing the note ‘unusable’ were not priced. It is no longer possible to reconstruct whether the note ‘unusable’ was made in relation to the animal cadaver’s poor state of preservation or to the fact that the museum did not require the specimen in question.⁴ But what the invoices sent by the zoo to the museum illustrate is that negotiations and item inspections were taking place – and that there were also **excess materials**, like furs, skins, and skulls, that did not stay in the museum.

Whether a zoo animal could be used by the museum and which price was paid depended on various factors. For 1914 at least, we know that a dead zoo animal was appraised at ten per cent of the value of a live animal.⁵ The price that the museum was prepared to pay, however, also depended on the physical state of the animal and on its rarity. Whatever was rare was coveted, because endangerment and extinction produced a **scarcity** that increased the value of an animal or its species.⁶ When the zoo offered the museum the fur and skeleton of its last Père David’s deer in 1914,⁷ for example, the museum valued it at 20 marks. Zoo Director Heck replied that the animal was worth at least 200 marks, because it had been:

“the last Père David’s deer still living in a zoological garden. The fact that it is by all appearances a completely extinct animal in its home country is something of which you are just as aware as we. [...] We would not have been surprised if you had set its value ten times higher, at M 200; for we do not believe that you will receive another Père David’s deer [...].”⁸

However, its value depended not just on the number of animals living in the wild but also on the number of specimens of the same species that a collection already had in its possession. Here, the Zoological Museum of the Friedrich-Wilhelms-Universität zu Berlin was in a good position: at the beginning of the 20th century, the Berlin institution already had an excellent ranking among the German natural history museums as it had the most extensive collections and was located in the capital, and it claimed a prominent role for itself. Curator of mammals Paul Matschie therefore rejected the zoo’s offer of the Père David’s deer.

A Thirst for Knowledge

Information was important currency in the exchange that took place between the zoo and the museum, especially when it came to the various forms of bartering that existed alongside the sale of objects. There were times when the zoo had taxidermies of animals prepared at the museum (these were usually gifts for supervisory board members but could also be intended for sale), for which the museum received other specimens in return.⁹ However, objects were more frequently exchanged for knowledge. The zoo benefited from the specialised **taxonomic knowledge** of the museum’s various collection employees and sent specimens to them to have them identified, in exchange for which the museum collection received the animals it desired.¹⁰ In 1913, for example, curator and later director of the recently opened Zoo Aquarium, **Oskar Heinroth**, wrote to the museum:

“Please find attached insects from New Orleans or northern Central America. Might I ask for the approximate name of the locust? Are these things worth anything?”¹¹

Here we see that the animals were treated as objects and incorporated into scientific and commercial **economies**. Their value – both scientific and commercial – in turn depended considerably on the novelty or rarity of the species. With respect to the supposedly last **Père David's deer** living in a zoo offered to the museum in 1914 for 200 marks by Zoo Director Ludwig Heck, Matschie noted that he doubted that the species was extinct, thereby invalidating the argument that it was the ‘last of its kind’, and only offered 20 marks.¹² The process of acquiring animals was therefore based on specific knowledge that proved to be a currency when it came to determining the value and price of an animal.

For the museum, information about the animals it was offered was also important, although in a different way than it was for the zoo. The collections at the museum required data that was as detailed as possible for every animal. Information about where an animal had been captured was indispensable for ascertaining its scientific value. In the 19th century, many natural history museums were therefore already writing their own manuals for collectors in the field, which contained precise instructions about how to write labels and waybills, for instance, by providing information about the collector, where the animal had been found, and on which date as part of the effort of **keeping records** of the natural world.¹³ Because zoological gardens and animal dealers often neglected to include this information, there was little in the way of standardised guidelines and therefore in the way of consistent or comprehensive information.¹⁴ Items such as **labels**, which were affixed to zoo animals as accompanying notes when they were delivered to the museum, show how scarce the existing information often was.



Label for the transfer of an animal from the zoo to the Zoological Museum with (sparse) information. (MfN, HBSB, S004-02-05, Nr. 96, Bl. 022 verso; MfN, HBSB, S004-02-05, Nr. 96, Bl. 105 recto. All rights reserved.)

For this reason, museum curators frequently had to contact the zoo again in order to ascertain when the animal had arrived at the zoo and, if possible, to obtain information about where it had been caught or at least about the dealer or collector who had supplied it.¹⁵ Lists would once again be sent back and forth, in which the zoo was supposed to enter the information it had about the **place** the animal was found. However, because the latter was frequently unable to answer these questions itself or was unable to answer them precisely enough using its own systems of recording-keeping, such as **journals** and the **Steinmetz-Index**, museum curators often had to carry out even more provenance research, writing to dealers, animal catchers, suppliers, and intermediaries in order to trace back the chain of custody. It is at this point that the local network

once again becomes global, pointing back to worldwide networks of trade and supply chains. For, back then, a considerable proportion of the animals at Berlin Zoo came from established, globally operating (animal traders) like Ruhe, located in the northern German town of Alfeld, J.F.G. Umlauff in Hamburg, and Carl Hagenbeck in Stellingen. Since the late 19th century, these companies had been employing animal catchers in the German colonies, both Europeans and local go-betweens. These traders were constantly receiving enquiries from natural history museums. For example, in 1932, Hermann Pohle, Matschie's successor as the head of the Mammals Collection, wrote to the Hagenbeck company to enquire where in the Sudan an elephant cow named "Mary" had been caught. Berlin Zoo had bought the animal from Hagenbeck in 1888 and had sent it to the museum after its death in 1924.¹⁶ The response from Ludwig Zukowsky, an employee of the firm Hagenbeck, says a lot about the information infrastructures of the time – which data was recorded in the field and passed on and which of it was lost over long distances or with the passing of time. Although Hagenbeck, like many animal trading companies, kept internal inventory books, Zukowsky notes, "You will seldom be able to make much use of the scarce communications about the origins of our animals."¹⁷ In relation to the elephant, Zukowsky therefore answered:

"From the books of my company, all I can determine is that the item made its way to Hamburg on a 'Sudan Transport'. However, because Menges [one of Hagenbeck's animal catchers] usually embarked upon his catching trips from Kassela and had already had good catching results further afield from this location, it is likely that the item comes from that area."¹⁸

The details remained scarce and vague. How else was it possible to obtain information? Zukowsky referred Pohle to articles in specialist journals that one could search for information about specific catching expeditions:

"I would presume that Menges reported on his catching results back then in 'Zoological Garden'. [...] Perhaps you should consider taking a look through a number of back runs."

But information was frequently only passed on orally. What was not written down or relied on an individual's memories was at risk of not being passed on, for example, during the transition to the next generation of employees:

"Moreover, Matschie was already talking about the 'upper Atbaran' in relation to the origins of 'Mary' the elephant cow. He surely must have received a message to that effect – perhaps from Hagenbeck or from Menges."¹⁹

The fragmented (supplychain) of the global animal trade, with its myriad actors, sources, and forms of knowledge but without any standardised form of record-keeping, influenced which kind of information was passed on to whom. In some cases, no data was recorded at all, because, for dealers and zoos alike, it was not crucial to have precise details about the location where the animal was caught – whereas, for collection curators, that was the equivalent of an incomplete data situation. Different kinds of information and inscriptions were of differing significance and value for dealers as commercial enterprises and for museums as scientific institutions. The way that data was recorded, passed on, and stored

depended on disciplinary standards, institutional purposes, and practical reasons, and in turn influenced the scientificity or at least the claim to it. In short: various needs required and shaped various practices of record-keeping.

These differences confronted the Zoological Museum with problems that sometimes only came to light many years later. This was because animal cadavers delivered to the museum by the zoo were frequently only entered into the inventory and scientifically described months or even years later. For this reason, museum curators sometimes requested information from the zoo about animals that had come to the museum long before and had made their way into the zoo even earlier. In some cases, this made it all the more difficult to reconstruct where exactly the animal had been captured.

This is revealed once again by the elephant cow “Mary”, who came to the Zoological Museum from Berlin Zoo after her death in 1924. When museum curator Hermann Pohle wrote to animal trading company Hagenbeck to request information about the animal, it had been 44 years since she had been imported to Germany in 1888. The difficulty now was not just finding people or records that could provide information about the past import; the problem was also of a scientific nature. Over the course of those 44 years, it had become increasingly important from a zoological standpoint to make sure that records, in particular of where an animal had been found or captured, were as precise as possible. However, Zukowsky wrote the following about “Mary”:

“It is highly unlikely that it will ever be possible to find the kind of precise information about the origins of this type of *L.a.oxyotis* [he means the Sudanese steppe elephant *Loxodonta africana oxyotis*] required by contemporary systematics for your examinations.”²⁰.

In the late 19th century, scientists still predominantly adhered to a systematics according to which *all* of Africa’s steppe elephants (with two exceptions) were considered *oxyotis*. It was therefore almost impossible to clearly identify an animal or trace its precise location of capture. Here we see the historical changes that were taking place in taxonomic practice, mirroring the dynamics of research cultures and, not least, changing information infrastructures and methods of record-keeping. What was a scientific obstacle for a museum became a primarily bureaucratic challenge for the zoo, as searching for and compiling information about animals from earlier decades was extremely time-consuming research for zoo employees. To one of the numerous letters in which curator of mammals Hermann Pohle once again enquired into the origins of various animals, zoo employee Georg Steinbacher responded as follows:

“I have received your animal list and am quite horrified about how long it has become. It will take many days of strenuous work to compile the more precise information about the 180 animals it contains.”²¹

The repercussions can still be felt today, not least in attempts to trace the origins and history of the zoo animals that wound up in the museum in the early 20th century. This applies to both collection curators and historians – either they cannot find sufficient information, or the specimens are still waiting to be inventoried and described. Collection curators in 2021 might sometimes know

how Steinbacher felt in 1935 when they receive enquiries about the items in their collections. Analysing existing inventories and entering new arrivals into the inventory are two of the essential and tedious, though rarely acknowledged, tasks performed in collections – even if the transfers that take place between zoos and museums are now primarily recorded in databases and the associated exchange of information between institutions now predominantly takes place online. Whether analogue or digital, no zoo and no natural history museum can get by without lists, without records of their animals; and no history that aims to research the relationships between these institutions can avoid delving into the archived paperwork of yesterday.

Footnotes

1.

In the Zoological Museum, gifts vastly outweighed purchases: in 1902, the museum recorded 932 gifts and 547 purchases; in 1908 there were 2,413 gifts versus 1,145 purchases; and in 1913, 3,127 gifts compared with 870 purchases; cf. Renate Angermann. “Die Säugetierkollektion des Museums für Naturkunde der Humboldt-Universität zu Berlin”. *Säugetierkundliche Informationen* 3, no. 13 (1989): 47-68.↵

2.

K.A. Möbius to the Ministerium für geistliche Angelegenheiten (“the Prussian Ministry of Education”), 27.02.1889, MfN, HBSB, Zool. Mus. S III, Zoolog. Garten I, Bl. 25; L. Heck to the Zoological Museum 01.01.1890, MfN, HBSB, Zool. Mus. S III, Zoolog. Garten, I, Bl. 32.↵

3.

Back then, the aquarium usually delivered the animals to the museum free of charge. They were generally transported in collective consignments by one of the zoo’s vehicles; in urgent cases, the museum sent its own messenger; cf. O. Heinroth to A. Brauer, 15.04.1915, in MfN, HBSB, Zool. Mus. S III, Zoolog. Garten I; Zoo to MfN, 06.08.1925, MfN, HBSB, S004-02-05 no. 97.↵

4.

There might have been a number of reasons for this, for example, if the collection in question already had enough specimens of that species, or if the animal was no (longer) suitable for taxidermy or exhibition purposes due to its physical condition.↵

5.

See for example L. Heck to A. Brauer, 10.06.1914, MfN, HBSB, Zool. Mus. S III, Zoolog. Garten I.↵

6.

On the economy of scarcity using the example of the trade in subfossils, see Irina Podgorny. “Recyclen: Vom Schrott der Ausrottung zur Ökonomie der (Sub-)Fossilien”. In *Sammlungsökonomien*. Ina Heumann and Nils Güttler (eds.). Berlin: Kadmos 2016: 23-46.↵

7.

Originally endemic to eastern Asia, the Père David’s deer (*Elapharus davidianus*) has been extinct in the wild since the 19th century and was only able to survive in captivity in the Imperial Garden of Beijing. After French, British, and German diplomats were each gifted live animals from a herd of roughly 120 Père David’s deer, they were taken to European zoos, including Berlin Zoo. However, after they arrived, these animals were crossed with red deer, and the population was soon pure-blooded no more. Today’s populations descend entirely from European zoo deer.↵

8.

L. Heck to A. Brauer, 10.06.1914, MfN, HBSB, Zool. Mus. S III, Zoolog. Garten I. After their extinction in China was announced, all of the zoos gave their Père David’s deer to Woburn Abbey in England, where the Duke of Bedford successfully bred them. By 1914, he had already bred 90 animals, and, by 1946, this number had grown to 300. Small breeding populations were distributed among various zoos and were soon being bred successfully everywhere.↵

9.

Cf. H. Pohle to L. Heck, 28.02.1931, MfN, HBSB, Zool. Mus. S III, Heck, L. (1926-1937).↵

10.

This also applied to animal dealers like the Hamburg-based company Umlauff, which sent furs that they wanted to include in their sales catalogue to Matschie for identification. Animals or payment were usually offered in return. Cf. MfN, HBSB, Zool. Mus. S III Umlauff.↵

11.

O. Heinroth to the Natural History Museum in Berlin, 09.03.1913, MfN, HBSB, Zool. Mus. S III, Heinroth, Oskar, Bl. 8.↵

12.

Matschie wrote: “I do not dare claim that the species is extinct, because vast regions in China have not yet been researched. It will be very difficult to utilise its fur and this skull as an object of exchange. In that case, the garden should mount it itself instead and be reimbursed for the taxidermy costs.” Internal memo by Paul Matschie, 10.06.1914, MfN, HBSB, Zool. Mus. S III, Zoolog. Garten.↵

13.

On the instructions issued by the Natural History Museum, see Martin Hinrich Lichtenstein. “Instructionen für die auswärtigen Reisenden und Sammler.” 1815, MfN, HBSB, Zool. Mus. S I, Instructionen für Sammler; see also Arthur MacGregor. *Naturalists in the Field: Collecting, Recording and Preserving the Natural World from the Fifteenth to the Twenty-First Century*. Leiden/Boston: Brill, 2018.↵

14.

This was one of the reasons why the museum usually preferred animals that came from collecting expeditions or collectors in the field over animals that had been kept in captivity. Cf. Paul Matschie 10.06.1914, MfN, HBSB, Zool. Mus. S III, Zoolog. Garten.↵

15.

Cf. MfN, HBSB, S004-02-05 no. 97.↵

16.

According to the “Elephant Database”, the African steppe elephant was born in Sudan in 1875 and imported to Germany by ship in 1888; cf. Dan Koehl. “Mary, African Savanna Elephant (*Loxodonta africana*) Located at Berlin Zoo in Germany”. *Elephant Encyclopedia*, 2021. https://www.elephant.se/database2.php?elephant_id=3912 (23.08.2021).↵

17.

L. Zukowsky to H. Pohle, 29.11.1932, MfN, HBSB, S004-02-05 no. 97; see also Dr Hauchecorne to P. Matschie, 20.03.1925, MfN, HBSB, S004-02-05 no. 97.↵

18.

L. Zukowsky to H. Pohle 23.02.1932, MfN, HBSB, S004-02-05 no. 97.↵

19.

Ibid.↵

20.

Ibid.↵

21.

G. Steinbacher to H. Pohle, 01.07.1935, MfN, HBSB, S004-02-05 no. 97.↵