Piotr Daszkiewicz Muséum National d'Histoire Naturelle Paris, France Tomasz Samojlik Mammal Research Institute, Polish Academy of Sciences Białowieża

# NAPOLEON, BIAŁOWIEŻA FOREST AND THE LAST BISON FROM TRANSYLVANIA

**Słowa kluczowe:** wojny napoleońskie, żubr, historia nauki, Transylwania (Siedmiogród), Puszcza Białowieska

**Key words**: Napoleonic wars, European bison, history of science, Transylvania, Białowieża Forest

Although archaeological data evidences that in the early Middle Ages European bison roamed large areas of Central and Eastern Europe, already in the sixteenth century the range of this species has shrunk to the Grand Duchy of Lithuania, Prussia, Moldavia and the Caucasus. In the course of next centuries, consecutive points were erased from the map of the distribution of free-living bison herds. In the end of the 18th century, only one place remained on this map: Białowieża Forest. At that time, even the most prominent naturalists did not believe in the existence of bison populations in Caucasus or in today's Romania<sup>1</sup>. No wonder that in the 19th century, this species enjoyed a great interest of naturalists and was a subject of many publications, sometimes even the main motivation for scientific excursions to Białowieża Forest, since 1795 part of the Russian Empire. Most of the museums and natural collections considered owning a bison exhibit, be it a skeleton, fur or other anatomical part, a point of honour.

<sup>&</sup>lt;sup>1</sup> Daszkiewicz P., Samojlik T. 2004. *The history of rediscovery of the European bison in the Caucasus in the 19th century*. "Przegląd Zoologiczny" 48(1–2): 73–82 (In Polish with English summary).

### "Miska" from Vienna

Conquests of Napoleon's army in Europe were accompanied by confiscation of natural history collections in the occupied countries. A river of specimens from the cabinets of curiosities, church, scientific institutions and museum collections in conquered countries was flowing to France<sup>2</sup>. Among the stolen items, there was also a skeleton (and perhaps other parts) of an European bison from Vienna. The origin of this bison remains a mystery. Jan Sztolcman (1854–1928) addressed it in a 1924 treatise entitled "Materials to the natural history of the European bison (Bison bonasus Linn.)": "Hungary, in the strict sense of the word, was devoid of European bison already in the 16th century. They survived in Transylvania (...) until the end of the 18th century. The last one was killed by a poacher in 1790. In 1809, however, a bison named Miska (Michka) still lived in Vienna. It came from Transylvania, where it was captured as a calf in 1788. It was a favorite of the Viennese public in fights with wolves, dogs, bulls, etc. During the circus fire in 1796, it broke the chains, felled the fence and saved itself, as the only animal that survived this terrible conflagration. After the accident, the bison lived for another 13 years in Schönbrunn. Rumor has it that during the French invasion its skeleton was dug out and transported to the Museum of the Jardin des Plantes [popular name of the National Museum of Natural History in Paris – MNHN]. It is worth to check this information"<sup>3</sup>.

Over a century has passed since the publication of these words but the fate of the last bison from Transylvania still has not been explained. We have therefore decided to follow the suggestion of Jan Sztolcman and check what is known about the bison in the 19th-century French literature and archives and collection of MNHN.

# Marcel de Serres and the French army in Vienna

Marcel de Serres (1783–1862), French zoologist and geologist was appointed by General Pierre Daru (1767–1829) for military service before Napoleon's victorious campaign of 1809. This naturalist from Montpellier was entrusted with a very important and dangerous function of a map courier. Thanks to his courage, lauded by Napoleon himself, a month later de Serres was proclaimed an inspector of science and industry in the newly occupied

<sup>&</sup>lt;sup>2</sup> Daszkiewicz P., Bauer A. M. 2003. The confiscation and replacement of herpetological collections by France under the first republic and empire, with notes on an historically important collection sent to Vienna in 1815. "International Society for the History and Bibliography of Herpetology Newsletter and Bulletin" 4(1): 15–27.

<sup>&</sup>lt;sup>3</sup> Sztolcman J. 1924. *Matériaux pour l'histoire naturelle et pour l'histoire du Bison d'Europe (Bison bonasus Linn.)*. "Prace Zoologiczne Polskiego Państwowego Muzeum Przyrodniczego (Annales Zoologici Musei Polonici Historiae Naturalis)", Tom II, Zeszyt 3–4, 1 IV 1924: 50–137.

Austria. His duties included not only the preparation of reports and scientific descriptions but also the management of seizures. Under his supervision, many boxes of scientific instruments, live plants, zoological and mineralogical specimens, as well as live animals from Vienna were sent to Paris. During this period, de Serres maintained animated contacts with many eminent French naturalists (mainly from the museum in Paris).

Marcel de Serres also went on several scientific journeys and prepared a number of publications, including four volumes of "Voyage en Autriche, ou essai sur statistique et géographique cet empire" [Travel through Austria or statistical and geographical sketch of the empire], and three volumes of "Essai sur les arts at les manufactures de l'Empire d'Autriche" [Description of crafts and manufactures in the Empire of Austria]. He also described the Vienna Zoo and Botanical Garden of Schönbrunn in great detail.

### Traces leading to Lithuania

The latter publication incorporated the first description of Miska<sup>4</sup>, in the section describing the zoo: "many rare animals lived in the menagerie in Schönbrunn, to quote only the wild buffalo of Transylvania, known to naturalists under the name of bison [in original: aurochs – the wrong name commonly used in French of that era to define European bison] (Bos Urus) (...). European bison is nowadays almost an extinct species. One can find it only in Lithuania. It seems it was once quite common in the woodlands of this part of Europe, as well as in Hungary. Since I had the opportunity to observe there [in Vienna] a living animal, which Aristotle described as bonassos (...) I thought that a similar description might be of interest to naturalists (...). What makes this description even more interesting is the fact that remains of the same individual I have seen alive have been deposited in the museum in Paris". On the following 20 pages author presents a description of bison (including anatomical measurements) and the analysis of historical texts about the bison and aurochs (Bos primigenius).

At the end of the text de Serres shares some information that suggest that it was his text that Sztolcman knew: "Bison, which I observed, lived for thirty years in the menagerie of Schönbrunn near Vienna in Austria. He was brought to Vienna from Transylvania. During a fire which broke out in the place where it was kept, the bison survived thanks to its great strength. He tore open the iron chains, broke down the door of his stall and crashed all the obstacles to escape the flames. The great strength of the bison would make it a very useful domesticated animal. However, all attempts made in Schönbrunn failed to make him more tame or more capable for training.

<sup>&</sup>lt;sup>4</sup> Serres de M. 1815. Notice sur les jardins botaniques de Vienne et sur les serres de Schoenbrunn. "Annales des Arts et Manufactures", Tome 55, No 163: 127–169, 234–269.

When I saw this individual, it was not as wild, weakened by the age. Tree branches that the bison enjoyed and was fed by, wore its teeth to a point where it was unable to chew the food and digested with great problems. In this state, its life could not have been long, and soon afterwards the bison died of exhaustion".

Interestingly, although in the first part of the text de Serres states that Euoprean bison occurs only in Lithuania [i.e. Białowieża Forest], in the final part of the same text he notes: "the European bison is almost completely extinct. Scattered individuals are found in the vast forests of Lithuania and Transylvania. It is argued that they may also persist in certain parts of the Carpathians".

De Serres included a brief mention of the bison from the Vienna zoo in the *Voyage en Autriche*, though without any new information. However, an information he published many years later in 1845 in the work on the causes of migration of animals is puzzling: "The last bison was killed in Prussia in 1755. In the times of Forster the son [George Forster (1754–1794), naturalist from Gdańsk, member of captain Cook's expedition, natural history professor at the Central School in Vilnius in 1784–1787] this animal lived in Poland only in the great Białowieża Forest, which, thanks to the authorities' care, still had some individuals. In Schönbrunn near Vienna in Austria (in 1809), I saw an European bison captured few years earlier in Białowieża Forest" [emphasis by authors]<sup>5</sup>.

The bison from the Vienna zoo owes its fame mainly to the fact that it fell into the hands of Georges Cuvier (1739–1862), creator of the comparative anatomy and one of the greatest zoologists of the 19th century. He posted its anatomical description in the Recherches sur les Ossemens Fossiles [Studies of fossilized bones], one of the most important zoological works of the 19th century. In his description, the French naturalist noted that the bison lived in the menagerie at Schönbrunn, and now his remains are kept in the Natural History Museum in Paris. Thanks to the skeleton from Vienna, Cuvier could compare European bison with the American bison – a specimen of the latter species was sent to Cuvier from the United States by Portuguese diplomat and outstanding naturalist José Correia da Serra (1750–1823)<sup>6</sup>. Cuvier's description was repeatedly quoted by the 19th-century nature dictionaries. Their authors usually added one more interesting information. Without any evidence they supposed that it was the same European bison that was described by a British physician and traveler Robert Townson in his Travels in Hungary with a short account of Vienna in the year 1793, the book translated into French in 1799:

<sup>&</sup>lt;sup>5</sup> Serres de M. 1842. Des causes des migrations des animaux: et particulièrement des oiseaux et des poissons, Paris: 560.

<sup>&</sup>lt;sup>6</sup> Cuvier G. 1823. Recherches sur les ossemens fossiles où l'on retablit les caractères de plusieurs animaux dont les revolutions du globe ont détruit les espèces, Paris: 107–117.

"Another form of entertainment is exercised here [in Vienna], not too civilized custom that we do not know on our island and that no civilized nation should tolerate. Germans call it Hetze and it is an animal fight (...). I went to see the wild bull *Bos Urus* fight. It entered the arena calm and with dignity. Eight or ten dogs were set loose on it, but it did not even move. The bison lowered its chin to the ground and easily forced back the attackers with its short horns, killing the ones charging from behind with one kick of a hind leg. I watched with great regret how dogs tormented the animal. It was majestic, but not terrible. It was caught in Poland at a very young age [emphasis by authors] and today it is completely tame. Also other animals were led into the arena but all seemed more interested in returning to their dens than fighting".

Most probably Miska was also seen by Jean-Baptiste Bory de Saint-Vincent (1778–1846), one of the greatest French naturalists of the 19th century, and at the same time a high-ranking officer in Napoleon's army. In a letter to his friend, physician and naturalist Leon Dufour, sent on 15 February 1807 from Warsaw, he wrote: "I have not seen the vegetation of these plains due to the snow cover. Only the pine forests (*Pinus rubra*) are rising in these empty spaces. Huge herds of *Urus* [in Latin in the French original] and elk are present. We have already seen the latter: one of my dragoons even killed one. I have not seen any of the second species. I wish I could compare those free-living with the beautiful one that I saw in Vienna".

#### Third Reich on the trail of the Schönbrunn bison

In 1945, a study on the oldest European bison specimens in MNHN collection was published by Jacques Millot (1897–1980), zoologist and specialist in the field of comparative anatomy<sup>9</sup>. The search for the bison from Vienna led to a very surprising result – although the specimen was described by Cuvier, there was no trace of Miska both in the osteological collection and in laboratory records. Millot wrote that this lack of information was even more perplexing due to the fact that it was a specimen of particular importance for the history of zoology, repeatedly cited in the literature and therefore being the subject of frequent requests from scientists from different countries. And not just scientists – Millot mentioned that during the German occupation in World War II, the museum was several times visited by the Third Reich officials to "demand the return of German property". They also

<sup>&</sup>lt;sup>7</sup> Townson R. 1803. Voyage en Hongrie précédé d'une description de la ville de Vienne et des Jardins Impériaux de Schoenbrun, Paris: 21–24.

<sup>&</sup>lt;sup>8</sup> Lauzun P. 1908–1912. Correspondance de Bory de St Vincent & supplément, Agen: 110.

<sup>&</sup>lt;sup>9</sup> Millot J. 1945. Les Bisons europeens des collections du Museum d'Histoire Naturelle. "Mammalia" 9: 1–1

conducted an official investigation on the fate of the Schönbrunn bison. In occupied France, Germany behaved quite differently than in Poland. Brutal repression against the resistance movement was accompanied by a political game with the collaborationist "French" authorities. Mass looting of works of art and expensive wines was accompanied by proclaimed "respect" for French scientific institutions. Nazis were interested in European bison for several reasons. Firstly - the species was used as a symbol in Nazi propaganda. Secondly – at that time they conducted mendacious experiments on the "aurochs restitution", in which Heck brothers and Goering wanted to reinstate the ancient Germanic species of aurochs, a close relative of bison, by cross breading several breeds of cattle. Thirdly, the pretext for exploration of Miska case was the fact of an Austrian (i.e. Third Reich) origin of the specimen (especially important as a significant part of the Gestapo in France came from Austria). In a similar way, "German specialists" demanded a Franc Joseph Gall's (1757-1828, the creator of phrenology, a theory according to which the morphological features of the skull allowed for the identification of psychological and racial traits) collection of skulls. As a side note, it should be mentioned that the museum was one of the first centers of the French resistance. In 1942, Germans exposed the museum's resistance grid which resulted in execution of several employees of the institution. Each visit of officials "demanding the remains of German bison" most probably caused panic in the museum. Despite the commitment of the whole machinery of Nazi terror, the search for "Germanic bison from Vienna" did not yield any results.

## Transylvania or Białowieża Forest?

Millot recorded yet another puzzling case. Among the assembled specimens of European bison in museum there is one listed in the inventory as "female from Lithuania. Emperor Napoleon". Because the female is in fact a male, Millot asked if that was not the famous Miska transported from Vienna by the order of Napoleon? In order to confirm this, he carefully measured the skeleton and compared the results with the data published by Cuvier concluding eventually that this is not the same specimen. However, the information itself is interesting, because in that case the bison had to be sent to the museum from Białowieża Forest. The occasion for that could be a stay of Napoleon's army near the Forest during the 1812 campaign.

And what about Miska? During our research in the archives of the MNHN and the French National Archives, although numerous documents on the shipment of natural collections from Vienna survived (including a list of 48 live plants shipped from Austria or information on 9 boxes of specimens sent by Marcel de Serres), there was no information about the fate of Vienna bison. There is also no bison on lists of specimens returned by France to

Austria after the Congress of Vienna. The common practice was, however, to negotiate sending other specimens, interesting for the museum in question, instead of stolen specimens. It is therefore probable that Miska remained in Paris, just like the *Mosasaurus* plundered in the Netherlands.

The history of one of the most famous zoological specimens is, therefore, still covered by the shroud of mystery. The location of Miska's remains is still unknown. In the respect of conflicting information provided in the publications of Marcel de Serres and other historical sources, it also seems reasonable to question whether the Vienna bison was indeed the last specimen of a species originating from Transylvania? Many clues direct to a conclusion that Miska came in fact from Białowieża Forest. Search conducted by the authors shows also how important for modern biological sciences, yet often underestimated by the representatives of the natural sciences, is the analysis of historical sources.