

presse.info

## THE WORLD OF TAXIDERMISTRY // BUFFALO BALLAD

### THE WORLD OF TAXIDERMISTRY 15.04. – 04.10.2015

Their work includes everything from cutting, chiseling, skinning and painting to carving artificial skeletons and dissecting organic structures. Their workshops are full of dust and often carry the smell of decay and solvents. Zoological, medical and paleontological taxidermists are masters of their craft and the backbone of any natural history museum. Now, the NHM Vienna has created a special exhibition dedicated to their work: "The World of Taxidermy".

People have always striven to preserve living objects in pristine condition, as shown by the human and animal mummies of Ancient Egypt. From the 19th century onwards the demand for attractive hunting trophies grew, resulting in new conservation and taxidermy techniques. While these early objects are today of great historical value, they no longer meet the demands of modern taxidermy, which has little in common with the "stuffed" animals of the past. Instead, 21st century taxidermists employ state-of-the-art materials and techniques such as polyurethane foam and epoxy resins, cryogenic freezing and vacuum treatment, air brushing and precision instruments in order to achieve the same aim: to preserve as much as possible of the original, or to create a replica as lifelike as possible using modelling.

From 15 April until 4 October 2015, "The World of Taxidermy" special exhibition at the NHM Vienna will give visitors a fascinating insight into the 200-year-old history of taxidermy, revealing how the art of preservation has changed over the centuries and how model makers are today able to bring extinct species back to life.

### "The World of Taxidermy" – exhibition information

The World of Taxidermy tells the history of this unique craft, from the earliest exhibits and the works of past masters through to modern techniques producing highly realistic and lifelike objects. Items on show include everything from fantastical beings and wild animals in aggressive poses to classic hunting trophies and scientific research objects. Different styles of taxidermy over the centuries reflect the rapid development of techniques and technologies in this art-like craft. Visitors are introduced to the materials and methods used and also have the chance to take a rare look behind the scenes at the often unseen work carried out by the NHM's taxidermists. The exhibition also traces the often blurred lines between taxidermy and modelling, which make it possible to bring long-extinct species back to life.

*"The major strength of natural history museums in today's information age is that they are able to present original objects. The huge volume of digital information, pictures and videos available to everyone means that visitors to the museum – rightly – demand exhibits of the highest quality. A century ago visitors would flock to natural history museums to marvel at the exotic animals and plants on show. That is no longer the case. Today's visitors are more critical regarding both factual accuracy and the aesthetic presentation of the exhibits. Modern taxidermists fulfil all these criteria. They form the backbone of our research and education work at the NHM Vienna. With this exhibition we want to highlight the work of the taxidermists in our zoological department. Their job includes preparing exhibits not only for the vertebrate department but also for all other departments at the NHM Vienna,"* comments **Director General Univ.-Prof. Dr. Christian Köberl** on the aim of the exhibition.

## **53rd Annual Conference of the Association of German Taxidermists at the NHM Vienna 21 – 24 April 2015**

Between 21 and 25 April 2015, the NHM Vienna will host the annual conference of the Association of German Taxidermists (Verband Deutscher PräparatorInnen, VDP). This is one of the most important meetings of its kind in Europe and is expected to attract around 200 guests from Germany, Austria, Switzerland, Norway, France and Liechtenstein. These experts specializing in biology, geology and medicine represent large natural history museums as well as universities, hospitals and private companies. The conference agenda includes more than 30 papers as well as poster presentations and excursions to promote an exchange of knowledge and networking among the participants.

Taxidermy has a long tradition in Vienna. Until the collapse of the monarchy, the “Viennese School” was considered at the forefront of taxidermy. Works by the famous Viennese anatomist and taxidermist Josef Hyrtl (1810–1894) can still be found in all major taxidermy collections.

Today, Austria is the only country in the EU where young people can train to become taxidermists as part of a dual system combining school education and on-the-job work experience. The NHM Vienna currently has an apprentice from Berlin. The taxidermy department at the NHM Vienna has experienced many changes in recent years and is up there with the very best worldwide when it comes to technology and expertise.

**Link to conference website:** <http://tagung-vdp53.nhm-wien.ac.at/>

### **Taxidermy technology at the NHM Vienna**

#### **Maceration unit with osmosis function**

Maceration enzymes are used on pre-prepared carcasses of large animals. The osmosis function prevents calcium deposits forming on the bones.

#### **Bone fat removal device**

Designed to reduce the fat content in bones. A pressurized solvent (DCM) is used to extract fat from the bones. This makes the bones easier to preserve and easier to handle for further scientific research work.

#### **Skin beetles**

Skin beetle larvae are used to eat away at the tissue left on small and very small vertebrates. This makes it possible to preserve most ligaments and tendons on the skeleton. The NHM taxidermy department has bred skin beetles (*Dermestes ater*) for this purpose since 1980.

#### **Dry-freezing**

The NHM Vienna taxidermy department has two dry-freeze chambers: a small one measuring around 0.03m<sup>3</sup> and a large one measuring around 1.1m<sup>3</sup>. These make it possible to preserve certain animals – small vertebrates such as fish and amphibians, as well as small mammals – in great detail, which would not be possible with other techniques. A vacuum draws water out of the animal at very low temperatures.

#### **Nitrogen preservation**

Nitrogen is used to preserve items by preventing the development of harmful insects or fighting them if they are already present. Measuring around 12m<sup>3</sup>, the chamber is big enough to accommodate large objects. This technique involves withdrawing oxygen from the chamber, leaving behind a pure nitrogen atmosphere in which the insects cannot survive.

#### **Cool room**

New deliveries to the taxidermy department are stored in the cool room. The temperature can be adjusted from 5°C to a freezing -18°C. This 40m<sup>3</sup> room usually contains around 4000 exhibits.

## History of taxidermy

Around 1900 there was a boom in large hunting trophies. Major workshops led by famous taxidermists created such trophies using different techniques. The most well-known taxidermy experts of the time include Philipp Leopold Martin (1815–1885), the inventor of dermoplasty (Greek: derma = skin, plastein = to shape), as well as famous practitioners of dermoplasty Friedrich Kerz (1842–1915), Hermanus H. ter Meer (1871–1934) and Carl E. Akeley (1864–1926). Animal skins were preserved using tanning or fixing.

No history of taxidermy would be complete without the great Austrian anatomist Josef Hyrtl (1810–1894), whose beautiful works were sold around the world. Hyrtl is credited with inventing the modern corrosion technique. Here, the blood vessels are rinsed and injected with a liquid which dries and hardens. The tissue surrounding the vessels is then removed, leaving detailed depictions of the organs.

Today, quality demands in taxidermy differ greatly from those 200 years ago. The increasingly availability of photos and videos makes it easy for observers to compare exhibits in museums with images of the real animals. This has led to a continuing rise in taxidermy standards. Modern exhibits are highly realistic and, unlike photos and videos, the real thing and not simply copies. The most significant change has been in the materials used. Straw, hay and peat have been replaced by wood wool, PU foam and epoxy resins. New techniques such as dry-freezing have been developed, while poisons commonly used in the past such as arsenic have been removed from taxidermy processes as far as possible. However, the principle remains the same: the long-term preservation of an original object.

## Taxidermy in natural sciences

Different groups of animals pose different challenges to taxidermists. While mussel shells and snail shells require almost no treatment and many insects need only be dried, the preservation of vertebrates often involves highly complex procedures – particularly the case if the exhibits are destined for display.

### Alcohol

The simplest method is to place the entire object in a preservative solution. Normally, alcohol (denatured ethanol, 70%) is used. Objects are often first treated with formol, a fixing solution preventing autolysis and tissue decay, before they are placed into the preservative. Mollusks and sensitive organisms such as jellyfish must be treated with a fixing solution first. However, formol is toxic and should therefore be replaced with ethanol after a few days.

The advantage of using alcohol is that the entire organism can be preserved. This technique is generally used for fish, amphibians and reptiles, though birds and mammals are also sometimes placed in alcohol (young animals in particular). Although alcohol causes colors to fade, the groups of animals mentioned above lose their natural color within the first few hours after death anyway. A further advantage of alcohol is that tissue stored in this way can be used for genetic studies (DNA) for a long time. This is why these days tissue samples are often taken from newly delivered animals and kept separately in alcohol. Exhibits preserved in alcohol are often considered unattractive, but for researchers they are absolutely essential.

### Pelt

Pelt is the term used for a skin which has been removed from the animal and tanned. This technique is used for mammals and birds. Hairs and feathers on the pelt contain important information.

Such exhibits form an important part of mammal and bird collections. Pelts taken from these groups of animals keep their colors, making this method good for objects destined for display. A further advantage is that they take up less space than “stuffed animals” and are easier to make than dermoplastic exhibits.

### **Skeleton**

For both full and partial skeletons it is first necessary to remove all tissue from the bones. This is generally carried out by the taxidermist, often after the object has been placed in a maceration solution (enzyme solutions). The final step is to let skin beetles feed on the skeleton or bones. These insects, normally feared by museums, clean all tissue residues from the bones within a few weeks.

Skeletons provide important information about the shape and stature of the animal. Bones and skeletons used for research purposes are simply kept in appropriate containers, while those destined for display are mounted back into the original shape of the animal using supporting elements.

### **Dermoplasty**

Dermoplasty enables three-dimensional reconstructions of entire animals. The starting point is always the preserved skin, the pelt, taken from the animal. In some cases other “original parts” of the animal are used (antlers, hooves, teeth, etc.). Until a few decades ago the skin was stuffed with a range of materials including straw, moss, hemp and even peat (hence the term “stuffed animals”), with the resulting exhibits not always particularly lifelike. Today, however, artificial skeletons tailored to the individual species and body size form a frame over which the skin is stretched. Cotton wool and wood wool are used to make fine adjustments to the body shape. In the past, arsenic was employed in order to prevent the skin from being eaten by insects. These days this toxic solution has been replaced by Eulan, a mixture of two compounds used in the textile industry to destroy parasites.

Dermoplasty is without a doubt the most prestigious of modern zoological taxidermy techniques. Producing an object which is as lifelike as possible requires more than dexterity and craftsmanship. Taxidermists must also have detailed knowledge of the animal. This often involves lengthy research and conversations with experts from the respective scientific fields. Photos and videos provide taxidermists with vital information on how the animal moves. These kinds of objects are the most attractive for display purposes but also require a huge amount of work. As such, they are mainly used for exhibitions and presentations.

### **Modelling**

The NHM Vienna, like other natural history museums, also produces detailed scientific models aimed at depicting three-dimensional objects in the most lifelike way possible, though in some cases the models are larger or smaller than in real life. The NHM Vienna’s commitment to using original objects means that modelling is particularly used to create larger-than-life educational tools for items where the original object is simply too small to appreciate the complexity or function of its structures. However, models are also used when the object would, in fact, be large enough but is simply too difficult to preserve in its original form. This is often the case with jellyfish and mollusks such as snails, mussels and squids. As you can see, model-makers face many different challenges in their work.

Before embarking on the actual modelling process, expert model-makers examine photos, microscopic images, taxidermy exhibits and the living object itself. These days, most models are made from artificial materials, including a range of modelling compounds, PU foams, artificial resin laminates, etc. However, creative model-makers could and would use almost any material – glass, wood or metals – in order to achieve a lifelike appearance. Model-makers see everyday things with different eyes from most people and are always on the lookout for new materials with which they can make their creations appear even more realistic.

Like taxidermists, model-makers combine biological expertise with artistic and technical skills. It often takes months to complete a model. Each is unique and therefore highly valuable.

The road to producing a lifelike model ready for display is often a long and winding one characterized by false-starts and technical headaches, so experience is absolutely essential. Molds can be made from plants in order to create the basic structure for a realistic model. However, while this technique can be used for the leaves of the purple dwarf iris, it cannot be used for its petals – these stick to the silicone used for the mold and cannot be separated. Yet, at the same time, “copying” the highly complex leaves of the stinging nettle with their many fine hairs poses no technical problems.

Reconstructing extinct species is a particular challenge for model-makers. There are no images of these animals, so the only way to observe them is by watching related species still alive today. A good example is the terror bird (*Paraphysornis brasiliensis*), a carnivorous flightless bird species measuring around two meters in height, which died out over 20 million years ago. In close cooperation with paleontologists from the NHM, a mold of a fossilized skull and a more or less complete skeleton found in Brazil in the 1980s were used together with photos to produce a metal skeleton. This was then covered in PU foam, which was shaped into the body form of a terror bird once it had dried. Bird skins from turkeys and ostriches bred in captivity were then stretched over this foam body and individual details such as feathers were attached. The color of the hand-painted glass eyes was based on those of the seriemas, a bird species today found in central and eastern parts of South America and believed to be the closest relative to the terror bird.

Every project – from reconstructing extinct species to creating models for educational purposes and designing dioramas – pose new challenges to model-makers, making it a job full of exciting new experiences.

## A few things you did not know about taxidermy

- The German word for taxidermy, “präparieren”, comes from the Latin verb “preparare” meaning “to prepare”. Taxidermy was originally used in a range of fields – medicine, zoology, and paleontology – to preserve specimens for scientific study. Indeed, the German term “Präparation” is still used today in surgery to describe the dissection of anatomical structures.
- Mummies from Ancient Egypt are among the oldest examples of taxidermy. Over 3000 years ago, both humans and animals such as ibises, crocodiles and gazelles were mummified. In Ancient Egypt mummification was often used for religious reasons. Over the course of the centuries the complex art of embalming was more or less forgotten.
- In Europe, the rise of medicine and modern natural sciences led to a surge in demand for exhibits. From the 19<sup>th</sup> century onwards there was also increasing demand for hunting trophies. New techniques were developed; existing ones such as tanning and fixing were refined.
- Zoological taxidermy has always aimed to preserve organic structures. Initially, this was done for purely scientific purposes. Different animals require very different preservation techniques.
- The simplest form of preservation is placing the whole animal in alcohol. Skinning and tanning the skin is a more complex process. Alcohol makes it possible to preserve important structures intact.
- Skeletons provide even more information. First, tissue is removed from the bones using machines and then chemicals. Finally, skin beetles cleanse the bones of any remaining tissue. These insects, normally feared by museums, remove all tissue residues from the bones within a few weeks. Skeletons and bones destined for research purposes are stored individually; skeletons destined for display are mounted into the shape of the living animal.
- Dermoplasty enables three-dimensional reconstructions of entire animals. The starting point is always the preserved skin, the pelt, taken from the animal. In some cases other “original parts” of the animal are used (antlers, hooves, teeth, etc.). Until a few decades ago the skin was stuffed with a range of materials including straw, moss, hemp and even peat (hence the term “stuffed animals”), with the resulting exhibits not always particularly lifelike. One of the most common reasons for mistakes was the fact that taxidermists did not know what the animal actually looked like. Moreover, certain styles went in and out of fashion. For example, in the earliest 20th century it became fashionable to show animals in aggressive poses bearing their teeth with their mouths open (much too) wide. The trend at the time was to depict “wild creatures” in a “fight for survival”.
- Quality demands in taxidermy have changed a great deal, particularly in recent decades. The huge volume of photos and videos available makes it easy for observers to compare exhibits in museums with images of the real animals. Modern exhibits are highly realistic and, unlike photos and videos, the real thing and not simply copies. The biggest change has been in the materials used. Straw, hay and peat have been replaced by wood wool, PU foam and epoxy resins. New techniques such as dry-freezing have been developed, while poisons commonly used in the past such as arsenic have been removed from taxidermy processes as far as possible.
- Modelling plays an important role when taxidermy reaches its limits. For example, large-than-life models can be made of animals which are too small to be seen with the naked eye. Modelling is also used to depict animals which are more or less impossible to preserve, including jellyfish, mussels and snails. A further key use of modelling is to recreate extinct species.
- The concept of preserving organisms for scientific purposes or display is not unique to zoology. Other natural sciences also use techniques to maintain specimens in their original condition. For example, botanists dry and press plants or sections of plants. In medicine and anthropology both dry and wet preservation techniques are used for bones and soft body parts. Even in earth sciences special techniques have been developed to excavate fossils and preserve sediment samples.



## Media photos of exhibition “The World of Taxidermy” (1/6)



“The World of Taxidermy” exhibition

© NHM Wien, Kurt Kracher



“The World of Taxidermy” exhibition

© NHM Wien, Kurt Kracher



“The World of Taxidermy” exhibition

© NHM Wien, Kurt Kracher



“The World of Taxidermy” exhibition

© NHM Wien, Kurt Kracher



“The World of Taxidermy” exhibition

© NHM Wien, Kurt Kracher

## Media photos of exhibition “The World of Taxidermy” (2/6)



Collection of glass eyes for vertebrates

© NHM Wien, Kurt Kracher



Early examples of taxidermy: mummified ibis and basilisk  
Mummified animals from Ancient Egypt dating back more than 3000 years are the oldest examples of taxidermy. During the Renaissance period, ruling princes across Europe added fantastical creations such as basilisks to their “Chambers of Wonder”. This ray has been transformed into such a mythical creature.

© NHM Wien, Kurt Kracher



Early taxidermy techniques  
Modelling tables were used in early taxidermy. From 1850 onwards demand for such specimens grew, either as hunting trophies or for early museums of natural science. Taxidermists’ workshops resembled witches’ kitchens – as well as clay, plaster and straw, poisons such as arsenic were used in large quantities.

© NHM Wien, Kurt Kracher



Glass models of jellyfish  
Leopold Blaschka (1822 – 1895) and his son Rudolph (1857 – 1939) are considered pioneers in the field of modelling. They made hundreds of glass models depicting marine animals and plants. The “glass spinning” technique they developed made it possible to produce models with breathtaking details.

© NHM Wien, Kurt Kracher



## Media photos of exhibition “The World of Taxidermy” (3/6)



Spare parts for taxidermists  
As well as whole animals, these days individual body parts such as tongues, ears, and teeth of common animals are also produced in large quantities. Exhibits of less common animals, including most of those found in museums of natural science, are still custom-made today.

© NHM Wien, Kurt Kracher



Turkey heads treated using different taxidermy methods.

© NHM Wien, Kurt Kracher



Vertebrate skeletons  
Bones only destined for research purposes can be kept individually. Skins are absolutely essential to scientific collections of birds and mammals. They are also the key basic material for dermoplastic exhibits.

© NHM Wien, Kurt Kracher



Fox heads with different sets of glass eyes



A comparison of different foxes shows how important the eyes are to give the exhibit a realistic appearance. Size, color and pupil shape dictate whether or not an exhibit is lifelike.

© NHM Wien, Kurt Kracher

## Media photos of exhibition “The World of Taxidermy” (4/6)



Skin beetles remove remaining tissue from a buzzard skeleton  
(before and after)

Skin beetles are a taxidermist's best friend. Once most of the tissue has been removed from the skeleton, smaller bones are placed in a terrarium where skin beetle larvae consume any remaining material. The population currently in use at the NHM has been bred for the past 35 years.

© NHM Wien, Kurt Kracher



Steps in preparing a crow  
The different steps in preparing a crow: from removing the skin to supporting the body with wire, applying muscle-like wrapping and sewing the finished object, which is protected by bandages and needles during the drying process.

© NHM Wien, Kurt Kracher



Alcohol preparations  
Exhibits for research purposes showing the anatomy of individual animals or a series of animals through the course of evolution are mainly used for teaching and have lost some of their appeal in the modern age of digital film. However, alcohol preservation is still the method of choice for scientists.

© NHM Wien, Kurt Kracher



Terror bird model  
Reconstructing extinct species poses a particular challenge to model-makers. This terror bird was "built" in close cooperation with paleontologists from the NHM – using, among other things, the skin from 23 turkeys, the leg feathers from a cassowary and the legs of an ostrich.

© NHM Wien, Kurt Kracher

## Media photos of exhibition “The World of Taxidermy” (5/6)



### Magnified models

Large-scale models such as these of a greenfly and a brine shrimp reveal details about single-cell organisms, tiny insects and other invertebrates which would otherwise only be visible under a microscope.

© NHM Wien, Kurt Kracher



### Mollusk models

Mollusks such as snails and mussels as well as certain amphibians are considered almost impossible to preserve using taxidermy. Instead, they must be placed into alcohol solutions in order to prevent decay.

© NHM Wien, Kurt Kracher



### Dodo reconstruction

Native to Mauritius and La Réunion, the dodo died out at the end of the 17th century. This reconstruction was made from the few existing drawings as well as molds of its head and feet. Parts of ostriches, swans, eared pheasants, and geese were also used.

© NHM Wien, Kurt Kracher



### Botanic preservation: special techniques

Dried fruits are kept in boxes or glass tubes; fleshy and juicy sections of plants are kept in preservative solution (mostly alcohol) to maintain their shape; mushrooms and fruits are freeze-dried.

© NHM Wien, Kurt Kracher

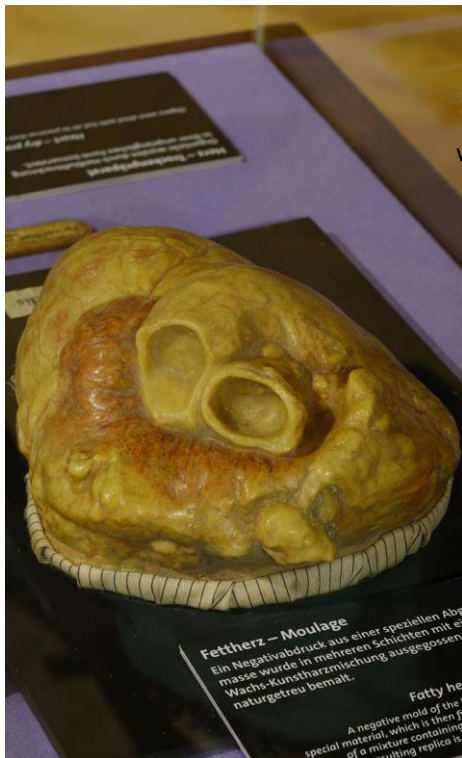


## Media photos of exhibition “The World of Taxidermy” (6/6)



**Botanic preservation:** collection of preserved mushrooms from Gustav Jacob Herpell (1828-1912)  
 As well as side-views and longitudinal profiles of original mushrooms, Herpell's collection also contained preserved spores. Interestingly, this collection was sold in bookshops.

© NHM Wien, Kurt Kracher



**Medical-pathological preservation:** fatty heart – moulage  
 A negative mold of the heart is made using a special material, which is then filled with several layers of a mixture containing wax and artificial resin. The resulting replica is painted to appear lifelike.

© NHM Wien, Kurt Kracher



**Paleontological preservation:** fossilized crab  
 (Italy, 4m years old)

Crabs decompose very quickly after death, so finds of well-preserved fossilized crabs are extremely rare. The fossilized remains are softer than the stone itself, making the process of exposing them with picks and needles very difficult.

© NHM Wien, Kurt Kracher



**Paleontological preservation:** sediment block with ammonites  
 (Madagascar, 110m years old)

After exposing the ammonites from the hard sandstone using fine picks and chisels, the surface was polished using fine-grain sandpaper. In some cases the top layer was removed in order to reveal the internal chambers. All work was carried out by hand.

© NHM Wien, Kurt Kracher

As well as the exhibition “The World of Taxidermy”, the NHM Vienna will also present a new exhibition of photos.

## **BUFFALO BALLAD. Photographs by Heidi & Hans-Jürgen Koch** **15.04 – 04.10.2015**

*“We traveled through the heart of bison country: North and South Dakota, Wyoming, Colorado and Montana. Our view of the bison is neither romantic nor nostalgic – it shows in equal measures the past, the present and the future of the American prairie.” Heidi & Hans-Jürgen Koch*

Buffalo Ballad is a quest for the spirit of this iconic American animal. Captured on their travels through the heart of bison country, Heidi & Hans-Jürgen Koch’s black-and-white photographs turn the mythical bison into a tangible vision. “There must be places out there where archaic creatures can roam free. Only a world where that is possible is a world worth living in,” explain the artists.

It is estimated that in the 16th century more than 30 million American bison made the journey across the grassy plains between Canada and Mexico and from the Rocky Mountains to the Mississippi. As they moved, their thick coats formed a pulsating dark ocean permanently in motion. The arrival of settlers in the Midwest marked the start of their demise. Never before in the history of humankind had man killed so many animals in such a short period of time. Within just two decades the bison population was decimated, with just a few animals surviving. The history of the bison tells the story of globalization and how technical progress, capitalism, ignorance of environmental interdependence, ideologies and politics interweave. The bison symbolizes the American soul. By sending cavalry soldiers to protect the last remaining bison, Theodor Roosevelt became the forefather of animal conservation in the US.

Today, bison are being reintroduced as part of the long-term project “Buffalo Commons”. One of the aims is to counteract the increasing desertification of the Great Plains, where the Dust Bowl years of the 1930s saw tens of thousands of settlers forced to leave the arid land that had become worthless. According to the project organizers, a return to hundreds of thousands of bison roaming the plains would help the region to recover – ecologically, economically and socially.

Heidi and Hans-Jürgen Koch studied social work and behavioral science before becoming professional photographers over 25 years ago. The many images they have had published in some of the world’s most renowned magazines reflect their passion and skill.

## **The Last Giants – A Photographic Homage to the Bison** **By Frank Zachos, Head of the Mammal Department at the NHM Vienna**

Bison are icons of the prairie and, thanks to the Buffalo Bill legends, also part of the common romantic image of the Wild West familiar to adults from cigarette advertisements and to children from games of Cowboys and Indians. At the same time, many people know that the reality was much less romantic, in particular for Native Americans. Less well-known, however, is the fate of the bison during this period. Just like its European brother, the wisent, the bison was almost hunted to extinction. They were killed for many reasons – from the rising demand for bison leather thanks to new tanning methods to a need for meat and even the desire to “cleanse” the landscape of potential hindrances to the expanding railroad network. Wars waged against Native Americans often led to the destruction of the bison’s natural habitat. Of the over 30 million animals spread across the landscape from northern Mexico to Alaska and Canada, only a few hundred remained in 1890. The most famous of these lived in the Yellowstone National Park. Today around 30,000 bison roam the plains; 19,000 of these are prairie bison, while the remaining 11,000 are the larger forest bison now extinct in Alaska and only found in Canada. It is estimated that there are 500,000 further prairie bison living in commercial cattle herds. These are of little or no use for protecting the species as a whole. Free-roaming bison have disappeared from 99% of their original area and are still threatened today by hybridization with domestic cattle, genetic weakening as well as the destruction of



their natural habitat. Cattle lobbyists, who fear that bison may transfer diseases to domestic cattle, exert pressure in certain areas in order to keep bison populations as small as possible.

The exhibition and the book (GOLD at the 2015 German Photobook Prize) *Buffalo Ballad – On the Trail of an American Icon* by Heidi und Hans-Jürgen Koch is an homage to these magnificent beasts. The texts (in German and English) are very short and provide no more than basic information and a chronological list of events relevant to the relationship between humans and bison. Instead, the book focuses on large photographs almost entirely in black and white depicting the bison and its world. The images are a feast for the eyes and, at the same time, a celebration and homage to nature. Although, as the title implies, there is a mythical atmosphere, many of the photos show the species *Bison bison* in a sober, de-romanticized way. These beautiful photographs are also portraits of survival, generating a sense of relief and happiness that these fascinating creatures survived and did not join the long list of species made extinct by humankind.

*Buffalo Ballad – On the Trail of an American Icon*

Photographs by Heidi & Hans-Jürgen Koch, 224 pages, 110 photos, large format

ISBN 978-3-901753-73-2

Available in the NHM Shop for €99.

## Media photos of exhibition „Buffalo Ballad“ (1/3)



Presbyterian Church in the vastness of the prairie. The church belongs to a settlement from the 19th Century, 1880 Town, near the town of Murdo, South Dakota, USA

© Heidi & Hans-Jürgen Koch/Edition Lammerhuber



Bison herd in the wide prairie, Bad River Ranch (farm of Ted Turner), Fort Pierre, South Dakota, USA

© Heidi & Hans-Jürgen Koch/Edition Lammerhuber



Adult bull shows his broadside, located in the moult and lose the thick winter coat, Bad River Ranch (ranch of Ted Turner), Fort Pierre, South Dakota, USA

© Heidi & Hans-Jürgen Koch/Edition Lammerhuber



Bison calf follows its mother, pup 2-4 weeks old, Bad River Ranch (farm of Ted Turner), Fort Pierre, South Dakota, USA

© Heidi & Hans-Jürgen Koch/Edition Lammerhuber



Bison cows in the eroded landscape of Theodore Roosevelt National Park, North Dakota, USA

© Heidi & Hans-Jürgen Koch/Edition Lammerhuber

## Media photos of exhibition „Buffalo Ballad“ (2/3)



Bull resting in the grass, close-up, Theodore Roosevelt National Park, North Dakota, USA

© Heidi & Hans-Jürgen Koch/Edition Lammerhuber



Windmill and some old buildings in Old Town, remains of the settlement from the 19th Century, now its a museum (Historic Site), South Dakota, USA

© Heidi & Hans-Jürgen Koch/Edition Lammerhuber



Two bulls fighting to clarify for who is the stronger, typical behavior at the beginning of the rutting season, Custer State Park, South Dakota, USA

© Heidi & Hans-Jürgen Koch/Edition Lammerhuber



Cragged and eroded rocky aerea, Badlands National Park, South Dakota, USA

© Heidi & Hans-Jürgen Koch/Edition Lammerhuber



Back view, rests in the Bison Prairie, Custer State Park, South Dakota, USA

© Heidi & Hans-Jürgen Koch/Edition Lammerhuber

### Media photos of exhibition „Buffalo Ballad“ (3/3)



„Buffalo Ballad“ exhibition

© NHM Wien, Kurt Kracher



„Buffalo Ballad exhibition“

© NHM Wien, Kurt Kracher



„Buffalo Ballad“ exhibition

© NHM Wien, Kurt Kracher



Photographers-couple Heidi & Hans-Jürgen Koch while working on the project Buffalo Ballad

© Heidi & Hans-Jürgen Koch/Edition Lammerhuber

## Information

### Opening hours

Thu–Mon, 9.00–18.30 | Wed 9.00–21.00 | Tue closed

### How to find us

Underground lines U2, U3 | Bus routes 2A, 48A  
Tram routes 1, 2, D, 46, 49, 71

### Admission

Adults	€10.00	
up to 19 years & Friends of the NHM	free admission	
Concessions	€8.00	
Groups (min. 15 persons) per person	€8.00	
Students, apprentices, soldiers & individuals performing civil service		€5.00
Year pass	€27.00	

Planetarium	€5.00
Concessions	€3.00

### **About the Natural History Museum Vienna**

*Opened in 1889, exactly 125 years ago, the Natural History Museum Vienna is one of the most important natural sciences museums in the world. It is home to around 30 million exhibits and in 2013 welcomed more than 750,000 visitors. The museum's earliest collections date back over 250 years and feature famous and unique objects such as the 25,000-year-old Venus of Willendorf, the Steller's sea cow that became extinct over 200 years ago, and enormous dinosaur skeletons. Further highlights in the 39 rooms include the world's largest and oldest collection of meteorites, among them the spectacular new Tissint meteorite from Mars, and the new anthropological exhibition "Becoming (hu)man". A Digital Planetarium has also been installed to mark the NHM Vienna's 125th anniversary.*

*The museum's departments are home to around 60 scientists carrying out fundamental research in a wide range of fields related to earth sciences, life sciences and human sciences. This makes the museum an important public institution and one of the largest non-university research centers in Austria.*

Press texts and photo material are available for download at: [www.nhm-wien.ac.at/presse](http://www.nhm-wien.ac.at/presse)

Like us on Facebook: [www.facebook.com/NaturhistorischesMuseumWien](https://www.facebook.com/NaturhistorischesMuseumWien)

Follow us on Twitter: [https://twitter.com/NHM\\_Wien](https://twitter.com/NHM_Wien)

### **For questions please contact**

Mag. Irina Kubadinow  
Head of communication & media  
Press officer  
Tel.: ++ 43 (1) 521 77 DW 410  
[irina.kubadinow@nhm-wien.ac.at](mailto:irina.kubadinow@nhm-wien.ac.at)

Mag. Miriam Reichel, MA  
Communication & media  
Assistant press officer  
Tel.: ++ 43 (1) 521 77 DW 411  
[miriam.reichel@nhm-wien.ac.at](mailto:miriam.reichel@nhm-wien.ac.at)