



THE AFTERLIFE: ANECDOTES OF MUSEUM RHINO FROM VICTORIAN TIMES TO PRESENT

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Biological specimens in museum natural history collections have played a fundamental role in studies of species diversity, taxonomy and, by extension, the documentation of the world's fauna and flora. They are an important component of the environmental conservation network, and the comprehensive provenance of a biological specimen adds significantly to its value. In many cases, the gathering of information continues and evolves while the specimen is held in the collection. As a result of modern techniques and advancing research, a specimen's taxonomy may be changed or updated, forming part of an international research database in addition to being used locally for display purposes. However, older specimens may become 'artefacts' attracting a 'social history' component and moving into the realm of 'Africana'. Specimens are continuously relevant and are vulnerable to a variety of threats, including theft, damage by fire and floods, social-political influences and ethical engagements often influenced by emotional opinions.

In the preceding centuries, museums received specimens from explorers and professional hunters and collectors. Many of these were donated by prominent people of the time. While modern social perceptions of these methods are diverse and debatable, the specimens' factual scientific value remains. Natural history museums are primarily charged with the care and preservation of the specimens in their collection, and the Victorian-era rhinoceros displays at the Iziko South African Museum (Cape Town, South Africa) are a case in point. In pride of place at the turn of the twentieth century the collection included mounts of a white rhino (*Ceratotherium simum*) and a black rhino (*Diceros bicornis*). Well preserved and

professionally curated, they have remained on display for 129 and 123 years respectively. The white rhinoceros was collected by Capt. Arthur Henry Eyre Mosse in June 1895 while hunting in the Mazoe District of Mashonaland, Southern Rhodesia (now Zimbabwe). The skin and skeleton were shipped via Beira, Portuguese East Africa (now Mozambique) to the well-known taxidermy company Roland Ward Limited in Piccadilly, London.

The 1896 "Report of the Trustees of the South African Museum" acknowledged with special thanks the Honourable C.J. Rhodes for the mounted skin and skeleton of an extremely valuable modelled in England at his expense. This was included as a donation by Rhodes under the Zoology acquisitions section.

A few years later, the trustee report (April 1901) recorded the receipt of a mounted black rhino collected by Sir H.L. Lawley to be included in the mammal displays. This specimen is not as well documented but is similarly thought to be a Roland Ward mount.

During the night of Saturday 12 April 2008, thieves entered the Iziko South African Museum, broke the glass of the large display case door and hacked both horns off the white rhino mount. The break-in was discovered the following morning and was investigated by the South African Police Service, but the culprits were never found. Based on photographs and the records of the original horn measurements, fibreglass replicas of the missing horns were sculpted so that the specimens could remain on display. The thieves were unable to detach the horns of the black rhino specimen, but they did extensive damage to the stitched seams and skin around the base of the horns. This was repaired by Mr George Esau, the museum taxidermist, who



As the thieves left it, the broken glass of the display case and the damaged white rhino mount showing clearly where the two horns were removed. Iziko South African Museum. 13 April 2008. Photograph: Denise Hamerton

for fear of a repeat attempt, removed the horns and replaced them with fibreglass copies moulded from the originals.

It was suspected that the horns were destined for the Asian market to be used for medicinal purposes. Several other museums in South Africa were targeted around the same time, as were natural history museums in Europe. For a short period, museums appeared an easier source of rhino horn than poaching live animals. It is widely acknowledged that the international trade in illegal rhino horn is highly lucrative. The Wildlife Justice Commission quotes the current average value at \$8 683/kg, prompting museums to install expensive security systems or, at the very least, to remove all genuine rhino horn from displays. An interesting aside is that many taxidermists from the Victorian period used arsenic soap and other potent poisons to protect the mounts from insect infestations. From 1940 until the early 1960s dichlorodiphenyltrichloroethane (DDT) was used and regularly applied to the rhino horns.



Black rhino attempted horn theft, Iziko South African Museum. 13 April 2008. Photograph: Denise Hamerton

Given that DDT is highly toxic, ingesting the powdered horn poses a serious health risk.

While taxidermy mounts attempt to replicate the size and shape of the living animal, both Iziko rhino specimens were 'over-stuffed'. This seems to have been a common error when several other large mammal mounts from this period are viewed. The cause appears to be that the natural creases and folds in the tanned skins were filled with stuffing when the skins were fitted over their armature or mannequin, effectively increasing the animals' size beyond their natural dimensions. It is not possible to determine whether this was a consequence of taxidermists' lack of familiarity with the animal's natural form, the lack of accurate images at the time for reference purposes or a desire to make the 'trophy' appear bigger to gratify clients' wishes.

The colonial era saw widespread global exploration, with many European collectors travelling to other continents in search of

resources and curiosities. Many specimens were destined for display in the private ‘cabinets of curiosities’ of royalty and aristocracy. These ‘cabinets’ eventually evolved into public museums, a source of national pride. Today museums play a far more complex and pivotal role in understanding evolutionary history, impacts of climate and habitat modification on species distribution, extinctions and anthropogenic influences on the natural world. They serve as invaluable repositories of genetic material (extractable from preserved skins and skeletal material) that allow advances extending from temporal glimpses of past distributions to an improved understanding of the molecular mechanisms underlying morphological and physiological species adaptation. In short, they have evolved into unique opportunities for interdisciplinary research and educational initiatives, enabling the integration of science and discovery. They are increasingly leveraged and challenged to expand their impact and relevance for present and future societal needs.

In 2025 the Iziko South African Museum will celebrate its 200th anniversary, the oldest public South African museum and one of the oldest museums in the southern hemisphere. It is today an institution that promotes scientific research in several fields of biology and emphasises public education through imaginative displays. Moreover, as part of its role in the international network of museums, its archived specimens (and their associated data) contribute to scientific progress that will inform many answers in the future. In fact, one could argue that “the importance of preserving biological specimens [is] so that they can be reanalysed as [diagnostic] tools improve over time.”¹

¹ Marris 2024



The museum taxidermist, Mr George Esau, sculpting the replacement horns on the white rhino. The horns were then painted to resemble the originals.
Photograph: Denise Hamerton



Exhibition detail. Excrement from five different rhino species, labelled with five significant zoo specimens.





Pretoria Zoo 1946 – *Cerotherium simum*

The first white rhinoceros shown in captivity. "Zulana" from the Umfolozi Game Reserve was born on 23 July 1946.

London Docks 1872 – *Dicerorhinus sumatrensis*

The first Sumatran rhinoceros born in captivity – aboard a vessel in London docks that had arrived from Singapore. Officials from London Zoo examined the baby, but it died 12 days later.

London Zoo 1868 – *Diceros bicornis*

The first black rhinoceros in captivity arrived at the London Zoo in 1868 from Sudan.

Ribeira Palace 1515 – *Rhinoceros unicornis*

The first Indian rhinoceros in captivity since 250 AD arrived at the menagerie of King Manuel I of Portugal.

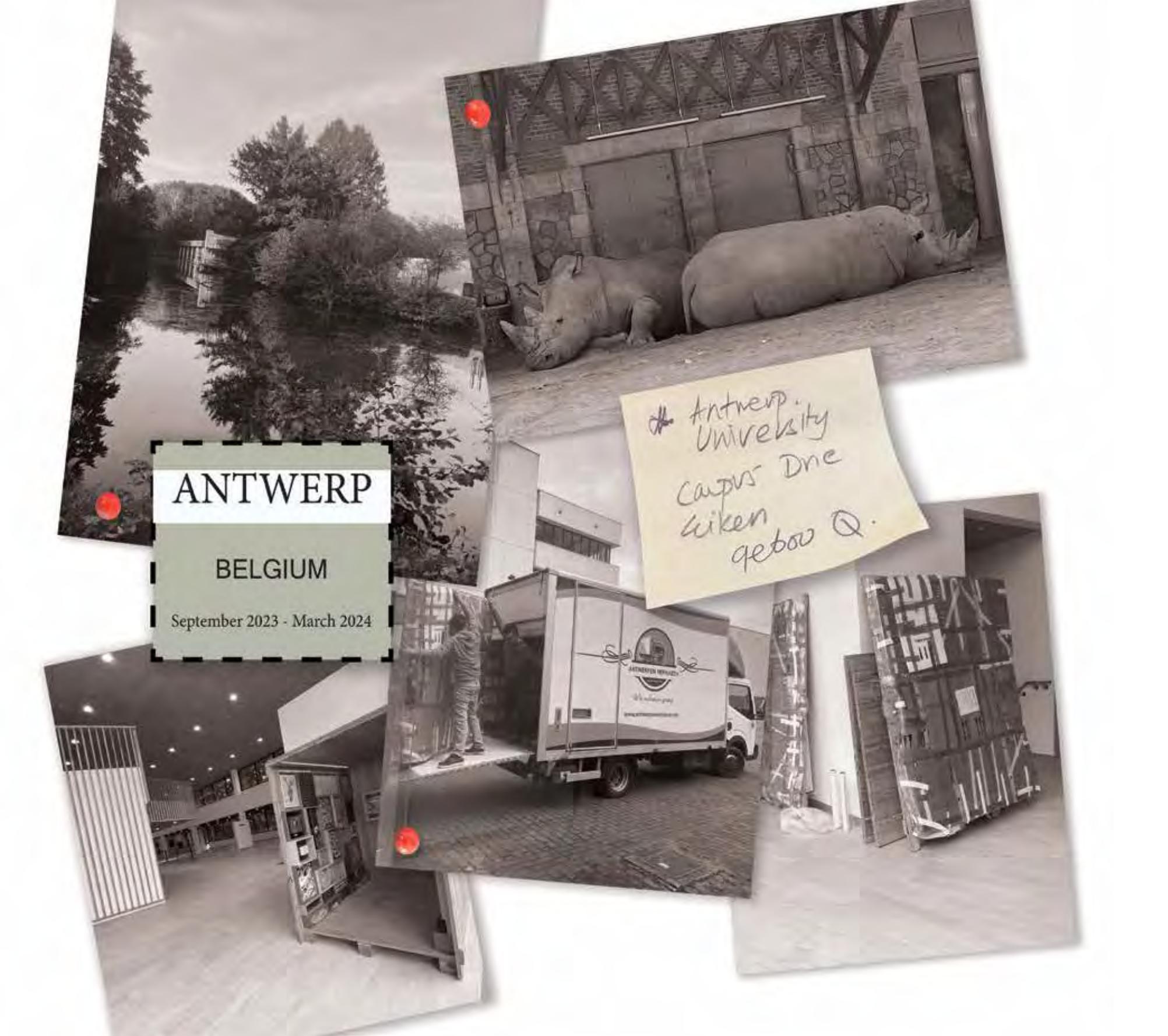
Adelaide Zoo 1907 – *Rhinoceros sondaicus*

The last Javanese rhinoceros in captivity died after 20 years at the Adelaide Zoo.



Exhibition details. Reproduction of a section of the *Ceratotherium simum* specimen donated by Cecil John Rhodes to the South African Museum in 1895. The horn was stolen in 2008.

Photographs of the 'Dead zoo gang' or 'Rathkeale rovers' in stool sample vials. This fourteen-member Irish organized crime group was convicted in 2016 for attempting to steal rhino horns and valuable Chinese artifacts worth up to £57 million. These thefts targeted natural history museums, taxidermy shops, and auction houses across Europe.



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Dioramas, invented by Louis Daguerre in 1822 and popularised in the early nineteenth century, were initially theatrical devices that relied on the complex manipulation of light to transform a constructed landscape. The allure of this device lay in its ability to seduce and deceive the viewer into believing the veracity of the observed scene. The parallel development of the diorama and photography is evident in early diorama construction, which adopted various depths of field and singular viewpoints. More recent dioramas employ tilted perspective and an infinity curve with the inclusion of real objects to present the illusion of recessive space. While the diorama's popularity as a purely theatrical device was short-lived, it found new life in natural history museums toward the end of the 19th century. Carl Akeley, best known for his contribution to the American Museum of Natural History, New York, is credited with the first habitat diorama at the Milwaukee Public Museum in 1890. The Akeley Hall of African Mammals opened at the American Museum of Natural History ten years after his death in the Congo, where he is buried.

AVERAGE MEASUREMENTS

Heart: 10kg

Height: 1,3 – 1,9 m

Length: 2,8 – 4 m

Mass: 800 – 2300 kg

Brain size: 400–600 g

Skin thickness: up to 5cm

Crate Sizes:

Black rhino: 271 cm x 191 cm

White rhino: 475 cm x 221 cm

Indian rhino: 335 cm x 201 cm



The white rhinoceros diorama at the American Museum of Natural History, New York.
Photograph: Fritha Langerman, 2017





\$60,000/kg: rhino horn : \$66,000 – 90 000: white rhino hunt : \$350,000: black rhino hunt : \$8,500: 'vita-dart' white rhino hunt



Exhibition details. Theodore Roosevelt and his son Kermit brought three Winchester Model 1895 rifles with them to the Roosevelt-Smithsonian Expedition of 1909. This, together with the .405 Winchester cartridge, became the weapon of choice among American hunters of the time.

White rhinoceros tail, Field Museum, Chicago.
Photograph: Fritha Langerman, 2017



It was about eleven o'clock. As the bull rose Kermit gave him a fatal shot with his beloved Winchester. He galloped full speed toward us, not charging, but in a mad panic of terror and bewilderment; and with a bullet from the Holland I brought him down in his tracks only a few yards away. The cow went off at a gallop. The calf, a big creature, half grown, hung about for some time, and came up quite close, but was finally frightened away by shouting and hand-clapping.

Theodore Roosevelt. African game trails. 1910.

Museum:	USNM
Catalog Number:	USNM 16232
Specimen Count:	1
Common Identification:	Diceros Biocornis
Date Collected:	28 Jun 1908
Country:	Kenya
Precise Locality:	North Equator Mtns, Soddo, Roosevelt, K.
Collector(s):	Type
Other Numbers:	Diceros Field Number
Sex/Stage:	Sex Female Stage
Preparation Details:	Impartation Skin Skull Bones



Exhibition detail. Photograph: Fritha Langerman, 2017



Photograph: Cesar Garcia, 2018