



BURCHELL, TEETH, RHINOCEROS

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William John Burchell was one of many adventurous young naturalists in the early nineteenth century who left home in search of new worlds and new animals. Arriving from St Helena, he set out from the Cape of Good Hope in 1811 and spent four years exploring the hinterlands of South Africa, largely unknown to Europeans at the time. He was especially interested in the wildlife and shipped substantial quantities of hides and bones back to England, to the admiration of his family and friends. Although in earlier centuries the rhinoceros had been seen in the vicinity of Cape Town, Burchell had to travel deep into the Eastern Cape Province before finally encountering one of these colossal animals. Here he made acquaintance with a two-horned black rhinoceros, which he would have anticipated from the descriptions of earlier travellers.

He audaciously pushed on towards the unexplored lands further to the north. Burchell bivouacked at Chué Springs, now in the Northern Province near Zeerust, in October 1812. He found not only the black rhino with the pointed lip, but also another large type of rhino with a broad upper lip. He made drawings, shot one or two of the animals and preserved some of the remains (fig. 1.). This large type was a hitherto unknown species, now called the Burchell's rhinoceros, square-lipped or white rhinoceros. It took four men to lift the skull from the ground and eight to load the remains onto his wagon. The weight proved more than he could carry, and its body was left in the field. He determined to take only the horns and some teeth back to England. This decision is somewhat surprising. Perhaps he only realised the full impact of his discovery when sorting his notes and specimens upon his return to Fulham in November 1815. Equally puzzling is that he failed to announce the existence of a new species in an English periodical but

instead wrote to scientists at the natural history museum in Paris in 1817, stating that he had named the animal *Rhinoceros simus*.

The white rhinoceros is a docile animal that grazes the fields in groups. They were easy targets for the hunters, traders and explorers who ventured into their preferred habitats, in areas between what is now known as KwaZulu-Natal and Zimbabwe. Historical accounts suggest these rhinos were once plentiful in the areas with the right conditions. In the 1840s, for instance, Cornwallis Harris reported seeing 22 white rhinos within just half a mile's travel. Over a relatively short period, human exploitation appears to have been the primary reason for their demise. Only a fraction of the hunting at this time was thoroughly and honestly documented by travellers.

The popular writings of Frederick Courtney Selous, who began travelling in the African interior in the 1870s, sounded an early warning. At first rhinos were abundant, but their footprints soon became rare, and eventually they disappeared altogether. In 1893 Selous predicted that white rhinos would vanish from the face of the Earth before the end of the nineteenth century. Along with their obliteration in the field, museum directors in Europe and America were appalled to find that their collections lacked even a single complete skin or skeleton of these animals. Consequently, Sir Lionel Rothschild jumped at an opportunity to add one to his new museum in Tring, UK. He had heard that Robert Thorne Coryndon might know of a group in Mashonaland (Zimbabwe), where, despite involvement in the continuing war with the indigenous population, he could shoot two specimens.

Rare in museums, absent in zoos, disappearing in the wild. Reports soon indicated there would be fewer than twenty white rhinos remaining in their potential stronghold



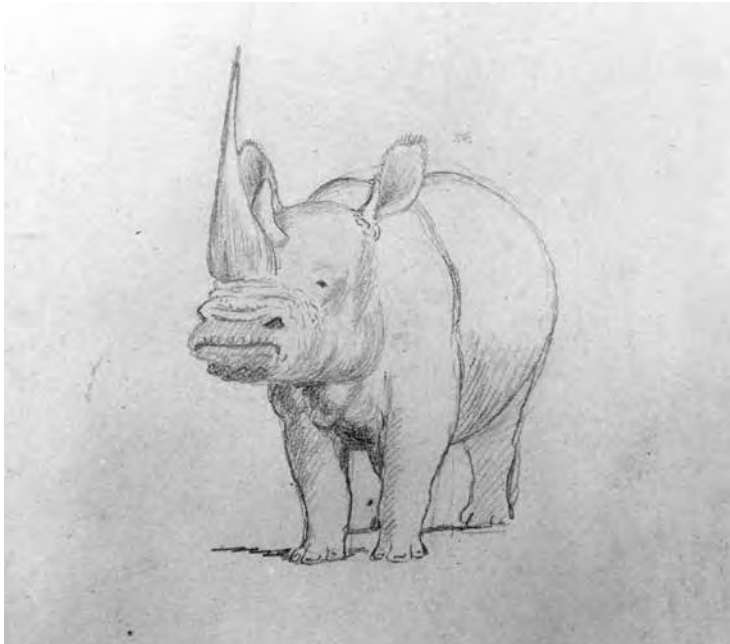


Figure 1. Drawing of the white rhinoceros of Chué Springs by William Burchell, 1812. *Museum Africa*, 68/1844

in the reserves of KwaZulu-Natal. (At that time the Umfolozi Reserve was still a tsetse-infected area and was rarely visited.) The low numbers were likely estimates made by concerned observers who had overlooked isolated pockets of white rhinos elsewhere in southern Africa. The actual number may have been between 100 and 200, though we will never know for sure – regardless, the situation was extremely serious. By contrast, recent estimates from Southeast Asia suggest that in 2024, there are fewer than fifty each of the Sumatran rhinoceros and the Javan rhinoceros. Maybe, like the white rhinos, they can still be salvaged for future generations, but only through major efforts requiring political commitment, dedicated research and monitoring, as well as unprecedented financial resources.


The white rhinoceros of southern Africa was rescued from extinction. Today, with its population having risen significantly, these animals are no longer endangered. This shows that effective conservation practices by dedicated organisations and people can really make a difference and achieve what was once

deemed impossible. Sadly, another subspecies, the northern white rhino of Central Africa, is now deemed functionally extinct, with only two females remaining. Only innovative reproductive research and applications offer a glimmer of hope for their survival.


The white rhinoceros is now a common sight in zoological gardens and safari parks. Initially, however, these animals presented significant challenges in captivity – the first white rhino did not arrive at Pretoria Zoo until 1946. This changed in the early 1970s, when groups of over 20 rhinos were transported to Whipsnade in the UK and San Diego in the USA. These rhinos bred well when kept in large herds, and they were popular with the public due to their large size and gentle nature. The husbandry of white rhinos has been a great success, and the animals can now be seen thriving in facilities across the globe.

Burchell could never have foreseen the struggles required to preserve the white rhinoceros when he first introduced them to science. Taxonomists require a standard for each species – a type specimen. In the case of the white rhino, a right upper second molar brought home by Burchell was chosen as this reference, serving as a small yet significant reminder of an important Rhino Event. This illustrates how even a modest contribution to science or conservation can have far-reaching consequences.





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the Cape, he used ink
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blood to write a detailed
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in his memorandum book.

A photograph of a savanna landscape. The foreground is dominated by dry, yellowish-brown grass growing in patches of reddish-brown soil. In the background, there are several acacia trees with their characteristic flat-topped canopies. The sky is a clear, pale blue.

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