HISTORICAL INCIDENCE OF THE LARGER LAND MAMMALS IN THE BROADER NORTHERN AND WESTERN CAPE

CJ Skead

Second Edition

EDITORS

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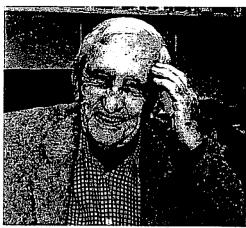


Photo: Andre Bosho

Cuthbert John (Jack) Skead, affectionately known to many as Skeado, was born in Port Elizabeth on 30 April 1912. Originally trained as a sheep and dairy farmer after he matriculated, he went farming, first as an 'apprentice' and, after 1933, on his own farm 'Gameston' in the Highlands area near Grahamstown. He began publishing on the natural history and ecology of birds while still engaged in his first career as a farmer. This career spanned 16 years, interrupted briefly while he served in the artillery during the Second World War and where his health failed.

He was then appointed as Director of the Kaffrarian (now Amathole) Museum in 1950 and for the next 22 years developed a second, successful career as an ornithologist, based firstly at the Amathole Museum, and then at the Percy FitzPatrick Institute for African Ornithology (University of Cape Town) and then back at the Amathole Museum, before retiring to Grahamstown in 1972. During this period he published extensively, producing over 100 articles and books and considerably expanding our understanding of the birds of our region, as well as undertaking studies further afield in Namibia and on the South African offshore islands. His interests were, however, not confined to birds, as he also published on topics as diverse as zebras and eels, and his interest in giant earthworms led to two species being named after him.

Subsequent to his retirement, Jack developed a third career, that lasted 34 years, during which he focused on gathering and synthesizing information from historical records, firstly on the ecology and early distribution of mammals, birds and plants, and secondly on place names and their history, all with an emphasis on the Eastern Cape that he loved so dearly. This produced a suite of 14 books that brings to light invaluable historical information that would otherwise have been lost. A particular strength of these works is that they are founded on Jack's intimate knowledge of the landscapes, places and local languages. The best recognised are his two

volumes on the historical incidence of mammals in the then Cape Province. His studies on place names and early explorers also constitute valuable cultural resources, without which the region would have been the poorer. During the latter part of his third career he was an honorary Research Associate at the Centre for African Conservation Ecology, Nelson Mandela Metropolitan University.

Jack received a number of awards, starting with the Cape Tercentenary Foundation Award in 1954, and including Gold Medals from the Zoological Society of Southern Africa, the Names Society of South Africa and the Wildlife and Environment Society of South Africa, as well as the 2002 Habitat Council Award. He also received academic honours for his ornithological research, including the Gill Memorial Medal, an Honorary Doctorate from Rhodes University in 1982, and he was elected a Member of the American Ornithological Union.

On 23 April 2004, the University of Port Elizabeth (now Nelson Mandela Metropolitan University) awarded him an Honorary Doctorate for his life-long contribution to the study of the natural history, ecology and cultural history of the Eastern Cape, and for enriching the lives of the broader community in which he lived. In recognition of his research into place names in the Eastern Cape, he received the Premier's Arts, Culture & Heritage Award from the Eastern Cape Government on 10 March 2006.

Jack was recognised for his generosity in sharing the wealth of wisdom and knowledge that he accumulated over the years, and students, scientists and historians continued to consult him regularly, appreciating not only the extremely valuable information he provided, but also the modesty and humility with which he shared it. To all of this, add a pervading sense of humour and a dry wit, to make up a truly extraordinary man of the Eastern Cape.

Jack Skead passed away in Port Elizabeth on 28 May 2006, aged 94 years.

PREFACE

During the 1970s, CJ (Jack) Skead wrote two volumes on the historical distribution of mammals; these were published during the 1980s. These are Historical Mammal Incidence in the Cape Province, Vol.1: the Western and Northern Cape (Skead 1980) and Historical Mammal Incidence in the Cape Province, Vol. 2: the eastern half of the Cape Province, including the Ciskei, Transkei and East Grigualand In the decades following their (Skead 1987). publication, these books have become important works of reference for generations of scholars, students, natural and human scientists, conservationists, naturalists and environmental historians. More recently, they have become a valuable source of information for conservation managers and planners in the design and management of national and provincial parks and reserves and protected area networks, for informing provincial conservation policies and legislation, and for owners and managers of wildlife-based ventures. They have also provided a useful source of information for eco-tourism and other heritage-based tourism activities. In addition, these books have provided many natural historians a glimpse into the past glory of the mammals of this region, and stimulated much interest into the almost forgotten legacy that these exciting animals offered.

Owing to the fact that, over the years, there has been, and still is, a steady demand for copies of these books, and also to the fact that both volumes have long been out of print and are therefore unobtainable, the question of revising and republishing the two books was discussed with Dr Skead by the editors. He readily agreed to the suggestion, and granted his permission for the project to go ahead. Consequently, a Second Edition of Volume 2, which deals with the broader Eastern Cape, was published in 2007 (Skead 2007), whereas the current book (Skead 2011) represents the Second Edition of Volume 1, which deals with the broader Western and Northern Cape. Sadly, he passed away before the revised editions were published.

The preparation of the Second Edition of Volume 1 offered a number of important opportunities, some of which are mentioned here. First, it enabled new information to be included in the book, for example distribution records that only came to light after the appearance of the First Edition. Second, it enabled statements to be included that reflect modern thinking on some of the more controversial issues relating to the incidence and taxonomy of certain species. Third, it enabled the compilation and inclusion of maps showing the historical distribution records mentioned in the text. Fourth, it enabled the adoption of the latest taxonomic treatment and

species' names. Fifth, it enabled the employment of modern design and layout techniques to reduce the overall bulk of the original book and also to make it easier to read, and therefore more user-friendly. Sixth, it provided an opportunity to include a number of general maps and illustrations.

Since more comprehensive and up-todate information on the marine mammals exists elsewhere. it was decided to omit the sections in the First Edition that deal with them; readers who may be interested in the expurgated passages can still access them in the First Edition (Skead 1980). The Second Edition, therefore, deals only with the terrestrial (land) mammals. Other major changes include the expansion of Chapter 1 (Introduction) and the inclusion of two completely new chapters (i.e. chapters 5 and 6). New text, compiled by the editors, has been identified as such at the end of each relevant box, section or chapter. However, short passages of new text, dealing with distributional information, that have been added to Chapter 4 by the editors have not been identified as being contributed by them, this owing to the fact that it would have been tedious to do so; these items can easily be identified by their respective reference dates (i.e. post-1974). Some passages of text that were considered to be peripheral to the main theme of the book have been excised; they remain available to readers in the First Edition.

Chapter 1 was expanded in order to provide a biophysical context for the book, particularly with a view to assisting readers who are not familiar with the landscapes in question, and also to concentrate taxonomic issues in one place in the book. Chapter 5 was created with two objectives in mind - first, to provide a general picture of the immense pressures placed on the populations of the indigenous larger mammals in the colonial period and, second, to provide a broad overview of the consequences of these pressures for many of the species. Chapter 6 was created in response to growing concerns about the known and potential biological and ecological impacts of the introduction of non-indigenous (alien) mammal species into the area under consideration.

During the revision process, every attempt was made to retain Jack Skead's unique writing style. Minor grammatical and other editorial changes have been made only where this was considered absolutely necessary. Square brackets have been used to provide, for example, explanations, translations and conversions. As was the case with the First Edition, critical tolerance is required in the matter of citation consistency; more time and effort was expended on those works most regularly and voluminously quoted.

The Second Edition focuses on exactly the same geographical area as that covered by the First Edition. When the latter was written, South Africa had only four provinces and the area covered by the book fell within a single province - the Cape Province. This same area now encompasses parts of four provinces, and hence the term "broader" in the title of the revised edition. Information from the volume that deals with the broader Eastern Cape (Skead 2007), specifically for the Humansdorp and Port Elizabeth districts, and also for the southern parts of the Willowmore, Kirkwood and Uitenhage districts, is repeated in the current volume, this in order to include the entire Cape Floristic Region (Fynbos Biome) in a single book (for bioregional planning purposes).

As far as possible, the text has been edited to reflect the socio-political changes that have taken place in South Africa since the first democratic elections in 1994. Some of the words and phrases used by the early writers, and often included in the original direct quotations used in this book, are considered inappropriate today. In such cases these words or phrases have been substituted with acceptable ones; these substitutions are indicated by the use of square brackets. However, for practical reasons, no such changes have been made to the names of places and landscape features, especially where they are still so named on modern maps.

In the context of this work, the 'historical period' broadly refers to the period that commenced with the arrival of European visitors and colonists around the mid-1600s and that continued until about 1925, the latter date being about the time when zoogeography in South Africa began to be formally and systematically conducted.

There are many pitfalls associated with the analysis and interpretation of historical mammal distribution records in South Africa, and indeed elsewhere (see Boshoff and Kerley 2010 for a review of this topic). This is, essentially a consequence of the quality of the records, and the following examples indicate why this can be a problem.

Not all travellers wrote down what they saw, and even those who did were selective about what they noted in their diaries and journals. For example, common species seem to have been neglected after an initial period of diligent recording, especially in the immediate hinterland of the Cape Peninsula. Perhaps the more noticeable (= large, familiar) and characteristic or charismatic species were more liable to be noted, or those that had a story attached (e.g. animals that occurred in unusually large numbers, predators that threatened life, limb and livestock, animals hunted for food or perhaps for ivory, and for causing crop damage). Furthermore, it can safely be assumed that the notes and records kept by some early observers were never

published or submitted for safe storage in a public institution.

Not all areas were visited or settled by early observers. For example, some places were avoided by them because they were 'off the beaten track' or perhaps because there was no surface water there to supply their needs and those of their horses and livestock (e.g. parts of the Karoo, Bushmanland and Kalahari Duneveld). Rough and densely vegetated terrain, mountains and isolated valleys were generally avoided, especially by wagon travellers, with most observers tending to keep to flat, open areas and well-used tracks.

There was confusion in identification between similar-sized, similar-looking species (e.g. between the various reedbucks, between some reedbucks and the grey rhebok, between mountain zebras, plains zebras and true quaggas, and between red hartebeests and tsessebes). In addition, the nocturnal species (e.g. aardvark, some carnivores) were largely overlooked.

Another limitation concerns the fact that relatively few published records could be precisely located on the landscape; this mainly because insufficient information was provided by the observer in question and/or in the early days of the colonial period few physical features and places had names, or at least ones that were known to Europeans.

A consequence of the above limitations in the quality of the records is that the absence of records of a species in a particular area on a map may signify either (a) that it never occurred there or (b) that it did occur there but that if it was seen there by early observers they did not record this fact. Of course, the latter aspect is also influenced (complicated) by the fact that many mammal species (especially the larger ungulates) were prone to migratory or nomadic movements in relation to the prevailing seasonal or local environmental conditions. Thus, they may well have occurred in a particular area but only on an ephemeral basis, and so may have missed the opportunity to be recorded at a particular place by early observers.

Notwithstanding the data and information quality limitations mentioned above, the historical records in this book (and in Skead 2007) provide an incredibly useful and valuable record of the distribution of the larger mammals during the historical period. Indeed, a study based on the information in the Eastern Cape volume (Skead 2007) found that the majority (82%) of the written historical records are useful for compiling historical distribution maps, and that the quality of those records is consistent back to 1750 (Boshoff and Kerley 2010).

To assist interpretation of the patterns seen on the historical distribution maps, a text box has been inserted below each species distribution map. This interpretative text (in the form of overviews) is based on a combination of the information in the text, the historical records on the map and the biology and ecological requirements of the species in question. In terms of the first two parameters, the emphasis has been on primary material and, in this regard, the work of L C Rookmaaker has been of inestimable value (Rookmaaker 1989, 2007).

Distributional information obtained from archaeological samples dating from the '500 yrs BP-Recent' period (a large part of which falls within our definition of the 'historical' period) from Plug and Badenhorst (2001) has been included in the text in Chapter 4. However, these authors have emphasised that while these types of data reflect the past distribution of animals with some reliability, caution should be used in their interpretation, this because "the samples and sites represent areas of archaeological activity, but not necessarily past animal and human demography". For example, transhumance may have played a role in determining species composition at some archaeological sites. Consequently, historical distribution records from this source have not been included on the distribution maps. However, paleontological records from the Recent period have been included on the maps.

The main source of distributional data and information for this book is the published record. However, where the quality of this information is unreliable it has not been included in the text. For example, during the period 1600 to 1750 a number of people, from various walks of life, visited 'the Cape' or 'Cape of Good Hope', for periods of varying length, and some of them recorded, inter alia, certain of the larger land mammals. Some of the records left by some of these visitors contain information (a reliable identification and a precise locality) that is useful in reconstructing the historical occurrence of these animals in the vicinity of the Fort at present-day Cape Town, on parts of the Cape Peninsula, on the Cape Flats and even in the immediate hinterland. However, many of their other records were based on hearsay or comprised information copied from other observers and, as witnessed by the variety of common names used, there was clearly much confusion about the actual identity of some of the animals being referred to (Rookmaaker 1989; this book). For most of the records the vagueness of the locality descriptions (e.g. "at the Cape") renders them of little value for historical zoogeographical purposes and, consequently, these records have not been included in this book. Interested readers can consult Chapters 2 and 4 in Rookmaaker (1989) for summaries of these records, and further details are also available in the works by Raven-Hart (especially 1971) and Gunn and Codd (1981).

In conclusion, we reproduce a passage that Jack Skead wrote for the First Edition: "May the hope be fulfilled that the contents of this work will prove useful to those whose duty it is to control the destinies of those wild animals and plants whose future is so insecure in a wildly developing world. A knowledge of the historical perspective can be used powerfully to influence public and private opinion and to help direct policy". Now, some 35 years later, these words are as valid as they were when he wrote them.

Although Jack passed away before the second editions of his two volumes were published, the editors were, throughout the revision process, constantly mindful of his enthusiasm, commitment and insights in his compilation of these works.

May this book, like its sister volume (which deals with the Eastern Cape), contribute to the legacy of a remarkable man, and continue to provide a source of information, inspiration and enjoyment for all the people who have an interest in the natural and human history of the area that it covers.

André Boshoff, Graham Kerley and Peter Lloyd

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sive to males but much more irritating, repulsive and detrimental to women, so that when the dogs, that have bitten the animal during the night and are permeated with its odour, enter the house in the morning for their food according to their habit, all the womenfolk immediately hold their noses and order the slaves, children, or whoever is at hand, to drive them out".

For 1907, the prospector Fred Cornell (1920:221) tells of how polecats were caught in Namaqualand in traps along the Orange River between Sendelings Drift and the Lorelei Mountains, places about 20 km apart, the former

being some 65 km directly from the mouth of the Orange River, the latter on the northern bank of the Orange River on the far western edge of the Warmbad district in southern Namibia.

James Alexander (1,1838:179) who was near Warmbad village in December 1836, tells of how his dogs found "two black and grey striped polecats with long bushy tails which were exceedingly difficult to kill, and which emitted a horrid smell".

Striped polecat remains, dating from the '500 yrs BP-Recent' period, have been found in archaeological samples from near Saldanha Bay and from west of Cape Agulhas (Plug and Badenhorst 2001).

Overview: historical distribution of the striped polecat (stinkmuishond)

Based on the information obtained from a recent (1970s) distributional survey (Stuart 1981), it would appear that this animal was widespread in the area covered by this book. The closely related African, or snake, weasel *Poecilogale albinucha* is now regularly recorded in the Western Cape.

[Text by the editors]

4.2.46 WHITE RHINOCEROS (WITRENOSTER)

Despite the occurrence of grassy habitats as far south as the Caledon-Swellendam-Bredasdorp triangle, and probably east towards Mossel Bay, and the overt visibility of this animal, no sight records for these areas by literate man are known,

or have been hinted at. For most, if not all, of the area covered by this book, the presence of the white rhino should demand no consideration were it not for a few references which must be recorded, considered, and, if possible, evaluated.



Aerial view of the two large pans at Heuningvlei (= Chué Springs) near the Makhubung Hills, 135 km north-north-west of Kuruman. It was near this well-known watering hole for game that the first acceptable historical record of a white rhinoceros was made, by the English naturalist, artist and author WJ Burchell, who shot an animal on 16 October 1812. Satellite image: CSIR Satellite Applications Centre and Department of Science and Technology, Pretoria.

Capt. GC Shortridge (1,1934:428) records what he thought to be the first record of the white rhinoceros: "1743, Parsons (Phil. Trans. pl. III, fig. a horn figured) - the first record of the White Rhinoceros" but Bigalke (1963:5) claims this to be wrong, as a result of correspondence he had with Mr RW Hayman, a mammalogist at the British Museum, who studied the Parsons deductions and found them inaccurate. As is generally accepted today, the first acceptable record of a white rhinoceros is that of WJ Burchell (2,1824:75) at the type-locality now given as Heuningvlei (= Chué Springs) near the Makhubung Hills, 135 km north-north-west of Kuruman in the Kalahari Bushveld to the north of the Orange River (cf. Rookmaaker 2007:67-70). This record derives from an animal shot on 16 October 1812. Cave (1947:141-146), writing on Burchell's rhinoceros drawings now in the Gubbins Collection in the library of the University of the Witwatersrand, Johannesburg, found this on a map amongst the drawings.

Namaqualand

The idea of white rhinos in Namaqualand might never have been considered had not one or two items of doubtful provenance opened the issue, without doing anything to clarify it. Shortridge's entry (1,1934:428) "1801, Barrow - supposed occurrence in Namaqualand" contains two errors. Firstly, the year 1801 was the year of publication of Barrow's first volume, whereas the year in which Barrow heard of the 'white rhinoceros' was 1790, when he was in the Hantam region, north of Calvinia, in Bushmanland (or Little Bushmanland as it is sometimes called) about 100 km southeast of the nearest part of Namaqualand district as at present delimited. The actual wording from Barrow (1,1801:395) is: "In our descent of the mountain [i.e. the Kamiesberg in the southern part of Namaqualand] we were driven to seek shelter from the violence of the rain in a mixed horde of Bastaards and Namaquas. The chief was of the former description. In his younger days he had been a lover of the chase...He boasted that in one excursion he had killed seven camelopardales and three white rhinoceroses. The latter is not uncommon on the outskirts of the Colony behind the Hantam Mountain and seems to be a variety only of the African two-horned rhinoceros. It differs from it in colour which is pale carnation, in size which is considerably larger, and in the thinness of its skin; all of which may be the effects of age".

On leaving the Kamiesberg, Barrow travelled to the Hantam country but does not mention seeing white or any other rhinos there. This suggests that he must have obtained his information on their being "not uncommon" from hearsay. To what extent the claim of the Bastaard Chief to have killed seven giraffe and three white rhinos in one day is acceptable, cannot now be known. He could have been correct in the case of the giraffe because they were known in far northern Namaqualand. He might have killed them just south of the Orange River, or even just north of it in southern Namibia. The white rhinoceros, too, might have been taken in northern Namaqualand, if enough grass to sustain the grazing white rhino grew under the arid conditions there. This need not have been impossible.

Bigalke (op. cit.) dismisses Barrow's reference to the difference in skin thickness between the two species but the most puzzling aspect of Barrow's comment is his definite use of the word 'white', which later he refers to as 'carnation', presumably a pale pink. Was the term 'white' really in use by 1790 when he was there in person, or even by 1801 when his book was published? Interestingly, Shortridge (1, 1934:425) comments that "The Black Species [black rhino] has a habit of wallowing in limestone pits and naturally becomes tinged with white, after doing so"; was this perhaps the reason for the "white" rhinos that Barrow referred to?

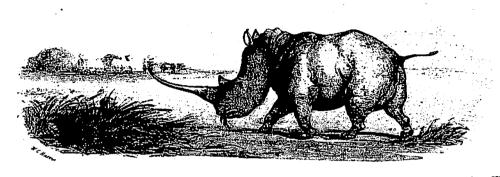
Eight years after publication of his book The Mammals of South West Africa [Namibia] (in 1934), Shortridge (1942:71) wrote that "Although the Black Rhinoceros Diceros bicornis was always presumably more plentiful than Ceratotherium simum south of the Orange River, !Haba, the [Khoikhoi] name still locally surviving, refers correctly to the White species, an indication of its former occurrence in Little Namaqualand". Shortridge's paper covered his expedition through what he called Little Namaqualand in 1936, as it was then still called but which is now known as Namaqualand only, and the tone of his paragraph certainly suggests his own belief in an erstwhile possible occurrence of white rhinos south of the Orange River. However, definite proof is still needed.

HA Bryden (1897:182), who wrote prolifically and with some accuracy and authority on game animals in South Africa, but whose overall knowledge must necessarily have been limited by the weaker communications of that day and age, wrote of the white rhinoceros: "Its modern range has invariably been between the Orange River and the Zambesi, and it has never been found south of the latter river...There can be little doubt, I think, that prior to the beginning of this century [19th] this enormous terrestrial mammal...wandered upon the grassy plains of Bushmanland (a continuation of the Kalahari Desert) just south of the Orange River. Native tradition has it so".

Bryden then cites Barrow's comment on the white rhinos in the Hantam Mountains near Calvinia, and adds: "...But at all events later Europeans have never encountered this rhinoceros south of the Orange" and he then shows the extent

of his reading when mentioning how Dr Andrew Smith, Capt. W Cornwallis Harris and others had found it north of the Orange River. He is no doubt correct in saying that the animal could have

subsisted on the grass in Bushmanland, dry as it was, because the known occurrence of this rhino in the southern part of Namibia shows how it thrived in the dry grassy country there.



A white rhinoceros, as depicted by the early 19th century hunter, author and artist William Cornwallis Harris. In the absence of confirmed records from elsewhere, it is concluded that the historical distribution range of this grazing megaherbivore in the area covered by this book was confined to the savanna of the Kalahari Bushveld, to the north-east of the Orange River, with its relatively high rainfall and reliable grass cover. Illustration from Harris (1852), courtesy of the National Library of South Africa, Cape Town.

Southern Namibia

In archaeological terms, Shortridge (1942:72) states that "In the Port Elizabeth Museum there is a weathered pair of White Rhinoceros horns (oswelli type) discovered at Seeheim (Great Namaqualand) by G Wickham in 1919". Seeheim is on the Great Fish River, 43 km south-west of Keetmanshoop, the Fish River being the boundary between the Keetmanshoop and Bethanie districts, with Seeheim about 160 km from the Fish River's junction with the Orange River. In 1974, Mr J Greig of the former Cape Department of Nature Conservation, then stationed temporarily at the Albany Museum, Grahamstown, approached the Port Elizabeth Museum for a loan of these horns which, however, could not be found. Instead a single weathered, and strongly exfoliated, horn was sent. As it bore neither label nor identifying marks, no connection could be found between this and the Seeheim specimens mentioned by Shortridge, who might have seen the horns and their labels, and satisfied himself that they were the genuine article. His reference to their being of the oswelli race of white rhinoceros suggests that he did, but he left nothing to confirm this.

James Edward Alexander 1836/1837 Ĭn (1,1838:191) travelled from about Goodhouse on the Orange River to Walvis Bay via Bethanie and Bullspoort. He then trekked eastwards from Walvis Bay to the north-eastern corner of Rehoboth district and from there turned southwards to the Orange River, via the Schwarzrand and Hunsberge, to about Sendeling's Drift. Generalising somewhat, he stated that "Two-horned rhinoceroses, both black and white, are found in the upper parts of the Fish River". He shows clearly from his text that he knew both species - he identified them - but curiously he does not mention any actual sighting of a white rhino in the Fish River Valley. His "upper parts of the Fish River" would presumably be the stretch of river running along the Rehoboth/Maltahöhe boundary at about 24° 20'S. Of this record, Shortridge (1942:72) wrote: "In 1895-96, Alexander recorded both species of rhinoceros from the Great Fish River valley in Great Namaqualand", a sentence which carries the implication that he met them generally in the river valley, a fact certainly not borne out in Alexander's own text. The dates "1895-96" given

by Shortridge are also incorrect because Alexander died in 1885 and no other Alexander record appropriate to the dates and places has been found to fit the circumstances. In the item following the above extract, Shortridge mentions "In Alexander's Map (1835-36)". This strongly suggests that Shortridge mistakenly wrote "1895-96" for "1835-36", but this too is at fault because Alexander was there in 1836-1837.

According to (Rookmaaker 2007), there are no reliable records of the white rhino from southern Namibia. The possibility that it might have once occurred in Namaqualand is hinted at by the fact that the Khoikhoi [Nama] "had distinguishing names for Black and White Rhinoceros" which could have indicated "that both species formerly existed" there (Shortridge 1, 1934: 427).

Area north of the Orange River

Archaeological evidence of the occurrence of the white rhino is given by Bigalke (1963:8) when telling of the unearthing (in 1893) of the imperfect skull about 19 km from the Vaal River in the Kimberley district. This must have been somewhere on the south bank of the Vaal River, according to the boundaries of the Kimberley district in those days.

It was near his camp at Heuningvlei (also called Chué Springs) in the Makhubung Hills, on 16 or 17 October 1812, that WJ Burchell shot the white rhinoceros that was to become the holotype of the species (cf. Rookmaaker 2007:66-70). These hills are in the far western part of the Vryburg district at about 26° 15'S; 23° 5'E and some 185 km west of Vryburg. Burchell's own reference to this event is not recorded. It would appear that a large batch of his notes covering this interesting part of his journey in Bechuanaland is missing. A few weeks later, on 5 November 1812, and in the same region, Burchell killed a white rhino at a place called Hot Station on the Moshowa River (Rookmaaker 2007:67).

In mid-May 1820, John Campbell, a Director of the London Missionary Society, described an incident where a white rhino was shot near the village of Mashow, on the Setlagole River north of Stella (Campbell 1822:294). This animal was first considered by Campbell to be some kind of unicorn and he therefore decided to take its head with him to London; in order for him to be able to do this he removed the lower jaw (Rookmaaker 2007:74).

In 1826, Steedman (1,1835:232) met both black and white rhinos at Setlagole in the Mafikeng district. On 4 August 1826, and just north of

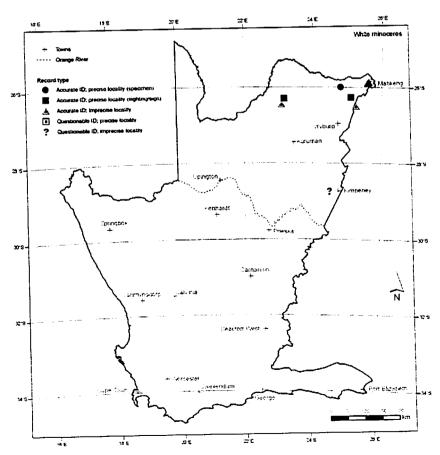


Figure 4.17 Historical distribution records for the white rhinoceros (witrenoster) in the area covered by this book. Refer to 'Overview' (following page) for a general interpretation of the information on this map.

Heuningvlei, Andrew Geddes Bain's companion John Burnet Biddulph 'first shot a male black rhino and later that same day a white one' and Bain made a drawing of the black rhino (Rookmaaker 2007:81). In 1834, on the Setlagole River, Bain (in Lister 1949:39) wrote that "Our second day's sport was varied by a succession of white and black rhinoceroses..." and on the Molopo River white and black rhinos were shot by Bain and his companion, Jan Sauer (Lister 1949:141).

Finally, on the Molopo River after a trip up from Maritzani (Mareetsane) in May 1835 and somewhere west of Mafikeng, Dr Andrew Smith (in Kirby 2,1940:46) shot a white rhino with a young one whose horn was just starting to grow. Two days later, near the source of the Molopo River and nearer Mafikeng (p. 49), he again came across the white rhino.

As with the black rhino, the white rhino was commonly seen by reliable chroniclers and hunters in both Botswana, to the north-west, and in today's North West Province, to the north-east, at about this time. Further details associated with white rhino records in the area covered by this book are to be found in Rookmaaker (2007).

Overview: historical distribution of the white rhinoceros (witrenoster)

No confirmed records from south of 27°S, nor from the Kalahari Duneveld (westwards from roughly 22°E) and southern Namibia, have been found. It is therefore concluded that the historical distribution of this mega-herbivore – a grazer that requires drinking water – in the area covered by this book was confined to the Kalahari Bushveld (a savanna), with its relatively high rainfall and reliable grass cover (Figure 4.17).

The above interpretation is supported by the fact that no white rhino remains have been found in archaeological samples, dating from the '500 years BP-Recent' period, from the area south of 27°S (or from north of this latitude, in the area covered by this book) (Plug and Badenhorst 2001), whereas remains of black rhinos have been discovered to the south of 27°S (see section 4.2.47).

Unfortunately, it will never be known which, if any, of the 'species indeterminate' rhino records (see section 4.2.48) from the region north of the Orange River might have referred to the white rhino.

[Text by the editors]

4.2.47 BLACK RHINOCEROS (SWARTRENOSTER)

Few reliable historical records specifically for the black rhino exist; these comprise archaeological records and a few records from the 19th century. However, as discussed later, many 'rhino' (i.e. sp. indeterminate) records can, with justification, be attributed to this species.

Evidence that the black rhino occurred during the recent period (up to about 500 years BP) along the western section of the Southern Cape coast is provided by the discovery of a skeleton, associated with Khoisan artefacts, from a site near Pearly Beach on the coast south of Caledon, and from fragments of teeth exposed on eroded calcrete near the coast just to the east of Struisbaai, south of Bredasdorp (G Avery, Iziko South African Museum, Cape Town, in litt. 12 February 2010), and also from four discoveries of skeletal material (lower jaw bones, humerus) made in the large

dunefield between De Hoop Vlei and the coast in the De Hoop Provincial Nature Reserve, east of Bredasdorp, between the 1960s and the 2000s (unpub. rec., CapeNature, Stellenbosch). A partial black rhino skeleton (including the skull) found at Witsand near Atlantis on the West Coast, and probably <1000 years old, provides good evidence of the former presence of this animal in this region (G Avery, Iziko South African Museum, Cape Town, in litt. 12 February 2010). Extensive areas of dune thicket vegetation, including those in patches in dunefields or in areas later covered by dunes, along sections of the coast, from Velddrif in the west to Mossel Bay in the east, would have provided excellent foraging habitat for black rhinos.

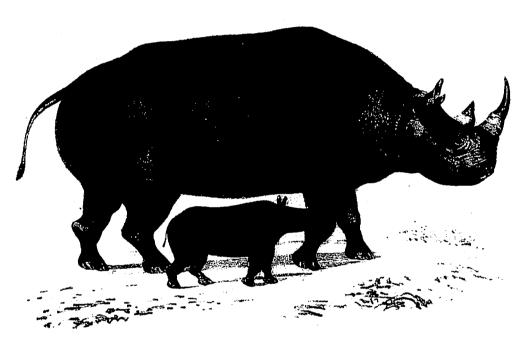
At Van Wyk's Vlei in the Carnarvon district of Bushmanland, Dr M Courtenay-Latimer, then Director of the East London Museum, found in 1954 a calcified rhino skull which was identified as that of a black rhinoceros.

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On 2 November 1778, Robert Jacob Gordon had been far to the south near Beaufort West and a member of his party, J Herm Viljoen, shot a "rhinoster" bull 'at 118 paces distance' (Rookmaaker 1989:115); this incident took place about 10 km north-east of Beaufort West at a place given as being near the source of the Gamka River. This animal is depicted as No. 205 in the Gordon (Atlas) collection of pictures kept in the Rijksmuseum, Holland. A request to the Director of the Rijksmuseum for an appraisal of the rhinoceros species brought the reply (in litt. 1974): "No. 205 was to all appearances a Diceros bicornis and shot at the source of the Gamka, or Leeuwen River. Though drawn in profile the upper lip is clearly pointed. On the other hand, the hump about the shoulders, peculiar to C. simus is lacking, and the head is rather on the small side". On the basis of the dry and bushier Karoo veld-type the rhinos seen there should all have been black rhinos. Interestingly, there is a landscape feature called Renosterkop a further 20 km in the same direction.

During an expedition in 1801, led by Petrus Johannes Truter and William Somerville, black rhinos were shot at 'Kossy' ('Koussie Fountain') (about 55 km south of Kuruman) and at 'Yzerberg Fountain' (north-west of Postmasburg) on 27 and 30 December, respectively (cf. Rookmaaker 2007:59).

WJ Burchell (Burchell 1,1822) was to come to know the black rhino well in March 1812, when he was somewhere west or north-west of De Aar,



Black rhinoceros and calf, as depicted by mid-19th century Scottish surgeon, naturalist and anthropologist Andrew Smith. Although this browsing megaherbivore, which occurred historically to the north and south of the Orange River, was generally widespread, it was absent from some areas, probably owing to a lack of permanent surface water. Illustration from Smith (1839), courtesy of Iziko Museums, Cape Town.

at a place he called Kaabi's Kraal (that has defied locating). Here, he and his companions not only saw, but shot, rhinos and his description leaves no doubt that the animals he shot were black rhinos (pp. 36, 41, 52, 69, 74). Moreover Burchell, like Gordon, was clever with his pen and could draw and sketch accurately. His two illustrations (p. 46 and p. 79) of rhinos taken at Kaabi's Kraal, one a front view and one taken from the side, leave no doubt that the black species was intended; the prehensile lip is definitive. He wrote: "This rhinoceros is of the species already described by Sparrman under the name Rh. bicornis, but the

other species with two horns having since been discovered, the name Rh. africanus has been substituted by Cuvier, and, as I have subsequently discovered another species in Africa, also with two horns, this name would now, according to that principle of nomenclature, require again to be changed". His new species was, of course, the white rhinoceros which he found at Heuningvlei in the Makhubung Hills of the western Vryburg district in the northern part of the country to the north of the Orange River.

On two occasions (19 and 28 October 1812), Burchell (1825) shot black rhinos at a place called



A satellite view of the coastal dunefield between the De Hoop Vlei (top left) and the Indian Ocean (bottom right) in the De Hoop Nature Reserve in the Bredasdorp district of the Western Cape. The discoveries of non-fossilised black rhino bones (such as the lower jawbone shown in the insert) in the dunefield between the 1960s and the 2000s provide good evidence that this animal occurred along this coast in recent times. Satellite image: CSIR Satellite Applications Centre and Department of Science and Technology, Pretoria.

Photo (inset): Keith Brooke-Sumner



Hunting brought about the extermination of the black rhinoceros in the area covered by this book. This scene was painted by the mid-19th century artist Charles Davidson Bell in about 1833. Bell accompanied Scottish surgeon and naturalist Andrew Smith during the latter's travels in the Kuruman area. Illustration courtesy of the John and Charles Bell Heritage Trust Collection (BC25), University of Cape Town.

Hot Station on the Mashowa River (Rookmaaker 2007:65).

On 4 August 1826, and just north of Heuningvlei, a male black rhino was shot by Bain's colleague John Burnet Biddulph, followed later that day by a white rhino (Lister 1949). In 1826, Steedman (1:232) saw both black and white rhinos at Setlagodi, about 60 km south-west of Mafikeng, in the far north-east. In 1834, AG Bain (in Lister 1949:39) wrote of his experiences on the Setlagodi River: "Our record day's sport was varied by the accession of some white and black rhinoceroses".

While in the vicinity of the Molopo River, near Mafikeng, in early June 1835, Andrew Smith heard about a rhino that had been shot in the area. He examined its carcass and, based on various information he received, concluded that it was a new (i.e. a third) rhino species – Rhinoceros Keitloa (Rookmaaker 2007:96). However, many years later it transpired that rhinos considered to be R. Keitloa were in fact black rhinos Diceros bicornis, the latter supposedly being a synonym for the nominal subspecies D. b. bicornis (Groves 1967).

On 14 October 1836, WC Harris (1841) saw black rhino near the Molopo River, north of

Mareetsane (Rookmaaker 2007:96). On 20 May 1846, Cumming (1909:385) took black rhino on the Maretsani (Mareetsane) River, south of Mafikeng.

Shortridge (1,1934:415) makes the unsubstantiated statement: "Black rhino extended, within comparatively recent times, at least as far south as Great Namaqualand, and they are still remembered by [San] and other native tribes". However, there are no confirmed historical records of the black rhino from southern Namibia (Rookmaaker 2007:185).

According to FitzSimons (3,1920:214) "The last Black Rhinoceros shot in the Cape Province, according to Hall, was an old bull, in the year 1853 on the Coega River, not far from Port Elizabeth". Another source gives the date of this incident as 1858 (cf. Skead 2007:27).

Further details associated with the black rhino records in the area covered by this book are to be found in Rookmaaker (2007).

[Text by CJ Skead and the editors]

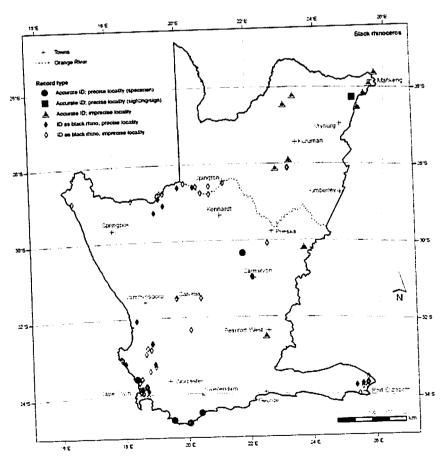


Figure 4.18 Historical distribution records for the black rhinoceros (swartrenoster) in the area covered by this book. All 'species indeterminate' rhino records (= Questionable ID) from south of 28°S are considered to refer to the black rhino (see section 4.2.48). Refer to 'Overview' (following page) for a general interpretation of the information on this map.

Overview: historical distribution of the black rhinoceros (swartrenoster)

As the white rhino was only 'discovered' in 1812, all the written records prior to that date, and which come mainly from the region south of the Orange River, refer simply to 'rhino'. For the sake of consistency, these records have been categorised as 'species indeterminate' and are mapped as such (see section 4.2.48; Figure 4.19). However, since there are no reliable white rhino records from south of the Orange River, all 'species indeterminate' records from south of the Orange River are considered to be of the black rhino (cf. Rookmaaker 2007; section 4.2.48). A strong reason for presuming that all the rhinos encountered from the Cape to the Orange River were black rhinos is provided by the statements by Kolb (1731) and Mandelbrote (1944) that those described had the diagnostic prehensile lips of the black rhino (see section 4.2.48). For the same reasons, all 'rhino' records from the Eastern Cape, i.e. south of the Orange River, were taken as referring to the black rhino (Skead 2007).

Given (a) the information in the text and the records on Figure 4.18, supported by some archaeological information, (b) the stated probability that all the 'species indeterminate' records from south of the Orange River (see section 4.2.48; Figure 4.19) referred to the black rhino (above), and (c) the presence of the black rhino in historical times in the adjacent Eastern Cape (Skead 2007), it appears that, in the area covered by this book, the black rhino - a browsing megaherbivore - was apparently widespread in some areas but absent from others. While the lack of records from the Kalahari Duneveld, north of the Orange River, and central Bushmanland may reflect the lack of early observers in these areas, it is more likely to be a result of a lack of permanent surface water for this highly water-dependent animal. An absence of surface water is also likely to be the reason for the lack of records from the arid west (Namaqualand). 'Species indeterminate' rhino records (taken as referring to the black rhino) from the western and upper Karoo (Fig 4.19) indicate that suitable habitat for this animal did occur in these arid regions. The records from and near the Orange River indicate the year-round availablity of adequate water and browse associated with riparian vegetation zones.

The discovery of skeletal material from the recent period suggests that, as with the African elephant (section 4.2.6; Figure 4.3), black rhinos may have occurred in the dune thicket vegetation in the narrow coastal corridor from about Hermanus in the west to about Mossel Bay in the east (see the vegetation map in Low and Rebelo 1996).

[Text by the editors]

4.2.48 RHINOCEROS: SPECIES INDETERMINATE (RENOSTER)

To supplement the records of reliable black rhino and white rhino records in the country north of the Orange River, where both species seem to have been reasonably common when the literate Europeans arrived, records unrelated to a particular species are worth recording.

Cape Peninsula and Cape Flats

As with the elephant, the rhinoceros does not seem to have been seen on the Cape Peninsula itself. For the Cape Flats and their immediate hinterland, records are firm enough, which suggests that if the rhinoceros did live on the Peninsula its presence there must have been unusual, unless it retreated immediately when a colony of people began to settle there. It could hardly have gone unnoticed and unremarked had it been there when Van Riebeeck's colonists set up their homes in the Table valley. The grassy conditions in the Table valley might not have suited it as well as the scrubby and bushy veld of the flats and the interior, but some parts of the Peninsula could surely have provided the type of food it preferred.

In attempting to identify the species of rhinoceros at the Cape a blank wall is encountered. Nobody thought to describe the animal in any detail. Why should they? There was then no thought that there was another rhinoceros with which it could be mistaken What we now know as the white rhinoceros Ceratotherium simum was an unknown animal of the far interior and still far from the first recorded sighting of it, and when eventually it was found, a great deal of confusion reigned until well into the 19th century as to its relationship with the black rhinoceros. Indeed, for many years even the most capable hunters claimed that several species of rhino occurred in southern Africa and not only the two, the black and the white, which were eventually accepted.

SF du Plessis (1969:8) encountered the problem of rhino identification during his zoogeographical study of the larger mammals of southern Africa and, after giving several references, was forced to depend on two extracts which seem to put the issue beyond doubt and which pointed to the black rhinoceros as the species at the Cape and elsewhere, unless otherwise delineated. Du Plessis wrote: "In none of these references is any distinction between the species given, but in the revised version of Mentzel's description of the Cape of Good Hope in 1787 by Mandelbrote (1944), the rhinoceros found in the Cape is described as follows: 'The upper lip can be stretched half a foot and ends in a pointed fleshy protuberance, which it uses as a kind of hand and imperfect trunk for taking up its food and putting it into its mouth". Du Plessis then refers to Kolb (1731), who wrote of the Cape rhinoceros: "His mouth is like that of a Hog, but somewhat more pointed". "He is not fond of Feeding on Grass, chusing rather Shrubs, Broom and Thistles. But the Delight of his Tooth is a Shrub...the Rhinoceros-Bush". Du Plessis continued: "From the above descriptions, the characteristic prehensile upper lip and the preference for browsing can be deduced. These characteristics, together with the fact that no records of the square-lipped rhinoceros so far to the south could be found, according to Sclater (1900) and others, leads to the assumption that the species recorded at the Cape was D. bicornis".

Perhaps the first record of the rhinoceros at the Cape, whether on the Peninsula or not is unknown, came from Leendert Janssens (in Raven-Hart 1967a:169) who along with a few colleagues, survived the wreck of the Haerlem in Table Bay in 1647. The party had to live ashore as best they could until a ship called and picked them up. His report seems to have stirred the Dutch East India Company into sending a colonising party under Jan van Riebeeck to the Cape. In this report, Janssens wrote that a rhinoceros was shot near their fort and that "the flesh was firm and

tacty", his "near the fort" surely being on or very near the Peninsula proper.

Jan van Riebeeck's journal says very little about rhinos at the Cape, a fact which heightens the doubt that they occurred on the Peninsula to any extent, if at all. Surely so large, conspicuous and dangerous a beast could not have gone unreported in the journal had it been anywhere within easy range of the settlers?

Van Riebeeck arrived at the Cape on 6 April 1652 and his first rhinoceros record is for the Cape Flats in September of that year, at a place somewhere between Cape Town and the Hottentots Holland Mountains at Somerset West. Three deserters from the settlement had been followed and tracked down to a spot near the Strand, on what was the first real journey by Europeans away from the encampment at Table Bay. A report (in Thom 1,1952:68) handed in by one of the men sent to apprehend the deserters ran: "In the evening marched 7 miles [11.2 km]. Saw two rhinoceroses which charged us and threatened to destroy us, but God protected us. Jan Verdonck had to abandon his hat and sword...Took our rest for the night alongside a brook, in God's name. Also saw two ostriches. Had to leave this place when two rhinoceroses advanced upon us". That report seems definite enough; the men are not likely to have mistaken the animal's identity but they do not seem to have been on the Peninsula proper when they met the rhinoceroses.

The next extract does not appear for two years, and then from a passing caller at the Cape, in March 1654, one Johan Nieuhof (in Raven-Hart 1,1971:11): "We heard that a rhinoceros, or nosehorner, was fallen in a marsh and, because of its weight could not get out. Commander Rietbeek sent some soldiers with muskets, but the bullets rebounded from its hard wrinkled skin. They cut an opening in its withers and fired into this until at last they killed it. The horns are still preserved in the Fort at the Cape and from them at times healths are drunk". Here, again, there is no certainty that the animal was on the Peninsula proper but it may well have been very close, in one of the marshes at Rietvlei or Salt River. "Nose-horner" is doubtless a translation from the German 'Nashorn' for the rhino. In early South African Dutch, the term 'neushoring' sometimes appeared.

Dapper (in Schapera and Farrington 1933:19), who was at the Cape in 1658, tells of a party that had gone about 18 km from the fort to the Cape Flats and although no humans were seen, not even Khoikhoi, they did see "rhinoceroses, elephants and other wild beasts" fairly often.

Jan van Herwaerden (Hawarden), who led the second expedition from the Cape in February 1658 (Thom 2, 1954:246) and who went as far as Riebeek Kasteel in the Malmesbury district, saw

a 'renoster" near the "Lupaertsbergh" [Tierberg/ Tygerberg]: "A rhinoceros with two horns on its nose, carrying them just as goats do, appeared among the cattle, but did not molest or harm them, and fled when fired on". The thought of a rhinoceros with horns on its head in the manner of a goat does not ring true but the original Dutch text carries the same imputation as is explained in a footnote by Van Riebeeck's editor, Dr HB Thom. It seems improbable that Van Herwaerden had mistaken his animal: the error may have crept in later during transcription into the journal at the Castle.

When, in November 1660, Van Riebeeck (Thom 3,1958:300) sent a party under Jan Dankaert to explore the interior, the group reported on their return, in January 1661, that they had "seen only one elephant, but a large number of rhinoceroses". The exact localities are not known but they cannot have been far from the fort.

The Tigerberg [Tygerberg], only 9 km northeast of Cape Town, seems to have been good rhinoceros country because on 31 January 1661 (Thom 3,1958:344) a party led by Pieter Cruythoff "saw seven rhinoceroses" near there, while on 28 January 1665, four years later, a report (Leibbrandt 1901:138) states that a rhino was shot at Tigerberg and while it was being loaded for transporting to the Cape the men were surrounded by five lions.

A year earlier, on 6 November 1664, according to Leibbrandt (1901:127), a young rhino was caught near the Cape: "At noon, Willem Willemsz brought us a live rhinoceros whose mother, as well as a young one, he had shot behind the 'Rondeberg' (? Blueberg) about four miles [6.4 km] from here and opposite Robben Island. He and his comrades were accordingly presented with two sheep, six rix-dollars, and 6 lbs [2.7 kg] of tobacco. We hope to rear this rare animal and send it home with the return fleet expected", but it died on 30 November before this could be done".

It may be that the offers of rewards involving livestock, cash, and tobacco were worthwhile enough to induce the men at the Cape to shoot out the rhinoceroses. Undoubtedly, many more encounters than have been found must have taken place between man and rhino, but the dangerous nature of the animal, especially if it was the black rhinoceros, seems to have induced the authorities to destroy them as soon as possible. Thus, in about 1684 (in Theal 1882:229) the Free Burghers, i.e. the better-class farmers who had been released from the company's service on the strength of their good farming capabilities, were allowed to shoot only one rhinoceros, one hippo, eland and hartebeest per year, and then only for use as meat by each Free Burgher's family. No rhinoceroses could have lasted long under such circumstances, especially a species already scarce

by comparison with eland and hartebeest in their fairly strong herds. They too, disappeared in time under pressure from huntsmen and from huntsmen shooting for food, not just for the sake of hunting, in the way the herds in the interior were later to be eliminated in the mid-19th century.

Cape Flats to the Great Berg River

In 1652, four deserters, led by Jan Blank, left the settlement at the Cape and journeyed northwards along the coast (from 25 September until 3 October); soon after they left, and when still near Table Bay, they encountered two "renosters" (Molsbergen 1916,1:11).

In October 1653, a small expedition that had left the Peninsula for a short inland trip towards Saldanha Bay returned with the news (Thom 1,1952:186) that they had met many elephants, rhinoceroses, elands and harts, etc.. Twice they had seen elephants, a herd of seven and one of eight. The men were afraid of the elephants because "like the rhinoceroses they remained standing firm so that our men had to get out of their way". Also a little way inland, but five years later, in September 1658 (Thom 2,1954:341), another party returned from a trip on which "everywhere they had seen rhinoceroses and elephants by the hundred", possibly a numerical exaggeration of a kind not unusual today when tallies of birds and other animals are grossly overstated.

Stellenbosch was not without its rhinos. Tachard (in Raven-Hart 2,1971:282) wrote of them at the Bottelaryberg, only 8 km north-west of Stellenbosch and not far from the eastern edge of the Cape Flats. He wrote of the Bottelaryberg being "full of lions, elephants and rhinoceroses of prodigious size". Of these he can only have heard and not seen, judging by what he wrote: "Trustworthy persons who have travelled have assured me...that they saw various rhinoceroses of the size and height of an average elephant. All I can say regarding this is that I saw two horns which this animal carries on its nose, fixed together as they naturally are, of a size and weight (= mass) which inclined me to believe what I was told. The Lieutenant of the Fort, Ensign Isaac Schryver, who was with this journey, told me that the rhinoceros when enraged thrusts its larger horn into the earth, making a sort of furrow until it comes near to whoever hit it. The skin of this animal is so tough as to be musketproof, unless one waits to shoot it until it exposes its flank, the only part of its body which can be wounded by firearms or by the halberds with which the travellers are armed", a halberd being a combined spear and battle-axe, the wielding of which against a rhinoceros, if indeed ever used as suggested by Tachard, must have taken a man of great courage for him to have approached a rhino at such short range. Even the primitive matchlock or

flintlock muskets of the time could not no able to penetrate the skin of a rhino.

In early 1661, an expedition led by Pieter "renoster/reynoster/rynoster" saw Cruvthoff near the Mosselbank River, between Paarl and the Atlantic coast, and near Riebeek Kasteel (Rookmaaker 1989:14). Van Riebeeck's journal (Thom 3,1958:344,345) states that on this mountain, i.e. the [Riebeeck] Kasteel, "there live all sorts of animals, viz. lions, rhinoceroses..." and the following day five rhinos were seen there. A second expedition, also led by Pieter Cruythoff, saw "reynoster/rynoster" at two places in the vicinity of the Mosselbank River, on October 1662 and January 1663, respectively (Rookmaaker 1989:14). In the Tulbagh district, the same party saw "reynosters" at the 'Kleine Bergh River' on 29 October 1662, a "reynoster" near Saron on 30 October 1662, and three "reynosters" at the 'Kleine Bergh River' on 23 January 1663 (Rookmaaker 1989:14).

This area of the Malmesbury district must have been fairly good rhinoceros country because Van Riebeeck's journal (Thom 2,1954:315) says of the country towards the Berg River that "One might suppose that this region was the kingdom of the moles for it is so undermined that one is forced to follow the rhinoceros trails, otherwise one sinks knee deep into the sand...", an expression anyone who has visited the region will have come to know only too well.

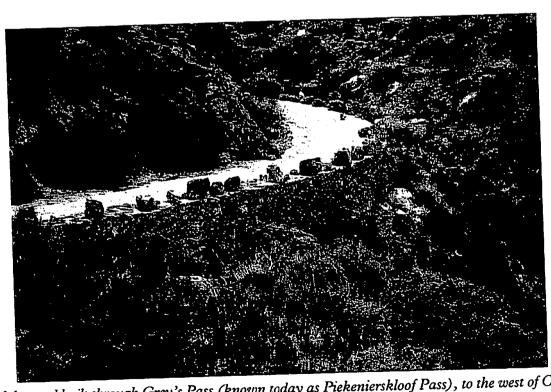
Of the country towards and around Saldanha French little has been told of the rhinos there, lions and rhinos haven-Hart 1966b), during a be presumed that the springs of water. It must the visitors could the visitors could not have re those of rhinos; personal experience.

Graham Avery, archaeologist at the African Museum, Cape Town, saw a partial black rhino skeleton, including the skull, at Witsand near Atlantis (in litt. 12 February 2010). The presence of dune thicket vegetation along the coast, from just north of Cape Town to the mouth of the Great Berg River, would have provided excellent foraging habitat for black rhinos.

Although we know so little of rhino incidence, it is obvious from items in the literature that rhinos were more numerous on the Cape Flats, and inland from there, than on the Peninsula itself, whence no firm records have emerged.

Great Berg River to the Orange River

North of the Great Berg River and into the Piketberg district the incidence of rhinos does not seem to have weakened. One of the earliest expeditions from the Cape (Thom 3,1958:347), namely that led by Pieter Cruythoff in early 1661, had an experience with a rhino on the Grey's Pass Heights (then called Meerhoff's Kasteel), just west of Citrusdal



Part of the road built through Grey's Pass (known today as Piekenierskloof Pass), to the west of Citrusdal, by Thomas Bain in 1856/57. Nearly two hundred years earlier, in the early 1660s, expeditions led by Pieter Cruythoff had encounters with rhinos - considered today to have been black rhinos - in the vicinity Photo: André Boshoff of this pass.

in the Cedarberg. The entry for 10 February 1661 reads: "After we had rested we packed up again and continued north following the rhinoceros paths which led along the lower slopes of the mountain. If we had not found these paths we would have experienced great difficulty for this part of the world had nothing but thorntree and underwood. On the way we saw a rhinoceros with a young one beside her".

Six weeks later (p. 377) and in much the same area, the party were awakened during the night of 29 March when "At 2 o'clock in the night a rhinoceros passed us and our oxen began to jump about wildly. We all took our arms thinking it was a lion. I commanded the sentinel to fire a shot which he did but his powder-horn caught fire so that his arm and hand were severely burnt", an incident showing the continuous state of watchfulness a trekking party had to maintain against dangerous wild animals.

A second expedition, also led by Pieter Cruythoff, encountered three "reynosters" near Grey's Pass (known today as Piekenierskloof Pass) on 21 January 1663, and on 25 January, 'renosters' were observed to the east of Piketberg (Rookmaaker 1989:14).

In Piketberg itself and near the bulk of the mountain of the same name occurred the event which nearly ended the rule of Governor Simon van der Stel in September 1685. Francois Valentyn (1726) (1,1971:243) gives a eye-witness account of the drama that overtook the party as it trekked along in file: "...an unbelievably large rhinoceros appeared, coming with great fury and viciousness straight for the centre of our column and from there running along to the rear where His Excellency was in his coach. It made directly for this, His Excellency having barely time enough to get out from the coach, leaping out with a blunderbuss in his hand and aiming this at the beast which was not six paces distant from him; and, he intended to fire but the blunderbuss misfired, the rear catch striking the forward one. We expected nothing else but that the furious beast would devour His Excellency before our eyes but it ran past him, brushing against his body. We believe that this was due to the shot that one of His Excellency's hunters fired at it, whereat it ran from us at great speed. Several others who were on horseback were unable to avoid it, falling from their mounts in great fright, whereby they wounded themselves in many places". The rhinoceros, by its sudden ill-tempered attack and its apparent short-sightedness, must have been a black rhinoceros. It ran away at speed, followed by a hail of musket balls which it survived. This event took place near a camp named "Kraal Agter de Rhinocersberg [Renosterkraal]" (Rookmaaker 1989:14).

Twenty years later, in November 1705, Johannes Starrenburg (in Valentyn 2,1973:47) had a brief experience with an inquisitive rhinoceros on the

eastern flank of the Piketberg, about 15 km north of the present town: "During the night a rhinoceros came close to the tent, snuffling around the waggons, but on our making up the fire to a blaze, it went away". He was lucky because six weeks before (p. 31), when at Roodeklipheuvel near Wolweberg in the north-western corner of the Piketberg district towards Elands Bay, on 30 October 1705: "...a rhinoceros stood in our path only about 100 paces from the track, which we feared would throw us into disorder, but it went off up hill at the shouts of the [Khoikhoi]".

North of Piketberg extracts on rhinoceros incidence become fewer, presumably because it was less common; it was not the sort of animal to go unnoticed or unrecorded. The increasing aridity of the country in this far north might have been a cause; rhinos need water of some kind reasonably near at hand in which to wallow, and for drinking.

Namaqualand

Along the south bank of the Orange River, in September 1778, William Paterson (1790:64) saw elephants, rhinoceroses, giraffes and zebras when he was east of Raman's Drift in northern Namaqualand, and a year later in September 1779, Wikar (in Mossop, 1935:43) saw fresh giraffe and rhino spoor at Kalagas, not far to the north-east of Pella, but outside the Namaqualand border in the Kenhardt district. He did not see the animals "for at this time water was still everywhere in the veld so that they were seldom to be seen along the river". Robert Jacob Gordon saw "rhinoster" spoor at the Holgat River, some 40-45 km south of the Orange River in western Namaqualand, in mid-August 1779 (Rookmaaker 1989:116).

That black rhinos trek from one place to another even under extremely dry conditions is shown conclusively by Tinley (1971:11), an ecologist who has worked in the Kaokoveld of north-western Namibia, where extremely dry conditions also exist. He wrote: "The Kaokoveld and adjoining Namib Desert are also of extreme importance... as this is probably the last place in Africa where big game (e.g. elephant, black rhino, giraffe, lion) occur on a desert coast by following the seasonal river courses which traverse the desert. Elephant and rhino also walk across the bare desert between river courses, a distance of 30 miles [48 km] or more".

Southern Namibia

Experiences with rhinoceroses in the dry southern regions of Namibia immediately north of the Orange River bear out the incidence of the animal in arid country.

In 1760, Jacobus Coetsé saw 'renosters' in the country of the Great Amacquas, being the region near the Leeuwin River (= Ham River) (Rookmaaker 1989:32). Hendrik Hop (in Mentzel 2,1787:142) saw rhinos among the many other species of animals he found at the Löwen River (Leeu River) not far south of Keetmanshoop, in December 1762. In October 1779, Lt William Paterson (1790:126) saw 'rhinoceros', and wounded two animals, in the region between Goodhouse on the Orange River and Warmbad to the north (cf. Rookmaaker 1989:175). Wikar (p. 51) found them just across the Orange River at Beenbreek, which he called Kaykoop, a little north-east of Pelladrift and in the Warmbad district, of which he wrote: "Now that we are away from the river we have to dig for water for ourselves and for our draught oxen. Here, elephants and rhinos dig for water for themselves", but he was not far from the Orange River at the time, certainly not too far for a rhino.

Meester (1973:7), in discussing Francois le Vaillant's travels north of the Orange River into what is now the Warmbad district, gives an insight into the rhinoceros status there in the 1780s: "All his encounters with rhino took place north of the Orange River where both black and white rhinoceroses are believed to have occurred, but he nowhere mentions the white rhino nor indicates in any way that he is aware of the distinction between the two species. The animal he illustrates is quite clearly a black rhino, judging from the shape of the snout. Presumably, therefore, he did not encounter the white rhino on his travels" [Plate 101 in the Library of Parliament volume shows the animal to be a black rhino]. Places or areas where Le Vaillant recorded 'rhinoceros' in this region are near the Gamma River, near the village of Great Namaquois and near the village of Kabobiquois on the Fish River (Rookmaaker 1989:256).

Other references point to rhinos in the southern part of Namibia in what, until recently, was known as Great Namaqualand in contradistinction to what was then Little Namaqualand south of the Orange River. That rhinoceroses were reasonably common there is shown by Willem van Reenen in his journal of 1791 (in Mossop 1835:307-319) where he shot many in the Keetmanshoop and Rehoboth districts and still more on his journey to Windhoek and back. Indeed he says (p. 319) that "On these journeys there and back sixty-five rhinoceroses were killed, and six giraffe" and in so doing he lifts some of the darkness hiding rhino incidence in these dry regions.

Johan Schmelen, a missionary with the London Missionary Society, reported a rhino killed and measured at the Koon River (Schmelen 1818:322); this was probably a black rhino (Rookmaaker 2007:65). Two weeks later, on 26 June 1814, another rhino was killed at the Harragaap River (Schmelen 1818:325).

According to Shortridge (1942:72): "In 1895-96 (sic) Alexander recorded both species of rhinoceros from the Fish River valley in Great Namaqualand".

It is obvious that the dates "1895-96" are wrong because Alexander was there in 1836 and 1837. He died in 1885 and no other comparable Alexander record appropriate to the dates "1895-96" has been found, and rhino had been exterminated there by then. When Alexander's own work (1 & 2,1838) is studied carefully and his route plotted on modern maps (as far as this is possible) it becomes obvious that he saw no rhinos south of the southern entrance to Bullspoort on the Chountop River in the south-western corner of the Rehoboth district, some 450 km north of the Orange River. That he knew the difference between a black and a white rhinoceros is shown by his descriptions of them (2:1,150). Certainly, if they were not seen by Alexander south of Bullspoort (they might of course have been commoner in country through which he had not travelled) he met both species fairly often thereafter in that part of Namibia beyond the geographical limits of this work. When he wrote: "Two-horned rhinoceroses, both black and white, are found in the upper parts of the Fish River" (1,1838) he must have meant that part of the Fish River's course north of the Mariental-Rehoboth border and nowhere near the Orange River. Certainly he saw both species together when he was north-east of Rehoboth, for when his party chased a white rhino "They rapidly pursued it and it fled before them when, in passing a clump of bushes, a black rhinoceros rushed out on the hunters". It can be accepted that Alexander knew the difference between the rhino species. According to the information in Rookmaaker (2007:106), which was extracted from Alexander's texts, rhino tracks were seen at Usis Mountain on 22 March 1837, and, based on hearsay, rhinos were present at Kei'us (Grootfontein) on the same date; Rookmaaker lists these records as referring to the

Of prehistoric relics, Joubert (1971) records that the remains of "rhino skulls and/or parts of skeletons were also found in the Fish River", among other places (Mr B de la Bat, pers. comm.): "A little way southeast of Lüderitz in the Namib a set of rhino footprints is encased in a limestone layer. At Grullental a rhino skeleton, completely fossilised, was found. Carbon-14 dating method showed this to be about 10 000 years old".

Bushmanland and the Karoo regions

Rhinoceroses certainly occurred eastwards along the Orange River to the Augrabies Falls, in the Gordonia district, and beyond.

'Renoster' spoor was noted at Kalagas on the Orange River by Wikar on 21 September 1778 (Rookmaaker 1989:37) and he (Mossop 1935: 97) tells of coming upon a party of six rhinos near Kougaas, when he was following one he had wounded at Seekoeisteek in the Kenhardt district

just south of the river; this was on 1 October 1778 (Rookmaaker 1989:37). Later, on 7 October, when just west of the Augrabies Falls (p. 103) near Namies, he came on a rhino and calf; one rhino was shot (Rookmaaker 1989:37). Of rhinos he said: "I have noticed a remarkable thing among the rhinos. They keep to a fixed sleeping place or lair, to a fixed place where they rub themselves, and a fixed place for excreting, where they go for the set purpose of doing so".

During October and early November 1779, when he was at or near the Orange River in northern Bushmanland, Gordon saw rhinos, or signs of them, at several localities (Rookmaaker 1989:116,117): he noted "rhinoster" spoor near Kabas, 10 km north-east of Pofadder and about 25 km south-east of the river; two "rhinosters" were shot, examined and measured at Nanseep (Noriseep), a few km east of Onseepkans on the river; "rhinoster" spoor was seen to the east of Nanseep; five "rhinosters" were seen and one shot at Bo Narries, 15 km south of the river and just to the west of today's Augrabies Falls National Park; at the Augrabies Falls "rhinoster" spoor was seen and one animal was wounded; "rhinoster/rinoster" was sighted near the Augrabies Falls; "rhinoster" spoor was seen on the north bank of the river and across from Upington, and also to the east of Kakamas and also near Upington; "rhinosters" were said to occur in the region of the Kraal of Geisiquas to the south-west of Upington. Gordon does not give a hint of which species the rhinos might have been but a small figure of a rhino on his map has the appearance of a black rhino, although this may be coincidence.

On 3 August 1778, the same year as Gordon, William Paterson (1790:49) arrived at "Rhinoceros Bosch", a place which could have been about 30 km south of Calvinia and on the edge of the Roggeveld. This locality was 'a noted place formerly for shooting these animals, but it is now seldom that any are seen in this part of the country' (Rookmaaker 1989:174). In October 1803, when Lichtenstein (1,1812:122) was in much the same area he wrote that there were "rhino just over the Colony boundary", i.e. beyond the colony as then known.

Writing of that part of Bushmanland behind the Hantamberge in Calvinia at the end of the 18th century, John Barrow (1,1801:395) penned the account that has had all modern authorities on animal distribution groping for the meaning behind his words. Telling of a Bastaard Chieftain of the Khamiesberg he met in 1798, when taking shelter from a severe thunderstorm, Barrow wrote: "In his younger days he had been a lover of the chase...He boasted that in one excursion he had killed seven camelopardales [i.e. giraffes],

and three white rhinoceroses. The latter is not uncommon on the outskirts of the colony behind the Hantam Mountain and seems to be a variety only of the African two-horned rhinoceros. It differs from it in colour which is pale carnation, in size which is considerably larger, and in thinness of its skin; all of which may be the effects of age".

In describing its size, Barrow could have been correct insofar as the white rhinoceros is concerned, but not in the thinness of skin of which there is no significant difference between the two species. Of its colour, much controversy still rages, but were these true white rhinos Ceratotherium simum? HA Bryden (1897:182), author of many well-considered books on early animal life cites Barrow in support of his contention that it was: "There can be little doubt, I think, that, prior to the beginning of this century [the 19th] this enormous terrestrial mammal...wandered upon the great grassy plains of Bushmanland (a continuation of the Kalahari desert) just south of the Orange River. Native tradition has it so", Bryden's native tradition being the incident mentioned by Barrow, but Bryden adds that "... at all events later Europeans have never encountered this rhinoceros south of the Orange" and he mentions how famous travellers and authors such as Andrew Smith, WC Harris, WJ Burchell and others found it only north of the Orange River in the first half of the 19th century.

In his more detailed discussion on the reliability of Barrow's record, Rookmaaker (2007:58) treats it with circumspection, noting that it is not known how far from the Khamiesberg (Kamiesberg) the Chieftain had travelled in order to obtain his information. Shortridge (1, 1934:425) comments that "The Black Species [black rhino] has a habit of wallowing in limestone pits and naturally becomes tinged with white, after doing so"; was this perhaps the reason for the "white" rhinos that Barrow referred to?

Henry Hall wrote that, according to hearsay, the rhino used to occur at Rhenosterkop, some 30 km north-east of Beaufort West, in 1842 (Rookmaaker 2007:116). Lichtenstein reported that, according to hearsay, the rhino was present in October 1803 at Hartebeesfontein, between Brandvlei and Loeriesfontein in the northern part of the Calvinia district (cf. Rookmaaker 2007:65).

Running northwards some 40 km east of Calvinia is a main river, known as the Renoster River, which comes out of the Sutherland district to the south, passes through Calvinia and becomes the Fish River in the north-eastern part of the Calvinia district and remains such until it joins the Sak River a little south of Brandvlei. When WJ Burchell (1,1822:258) was at the Renoster River, just north of the Sutherland boundary, in August 1811, he learned that rhinos were already becoming

scarce there, and were rarely seen. He remarked that the rhino inhabits dry country abundant in low bushes.

That rhinos might have been commoner in the Central Karoo than has been thought is possible from the number of placenames containing the word 'renoster' in one or other of its spellings. Apart from the Renoster River, mentioned above, there is a Renosterfontein in the south-western corner of the Carnarvon district, and, strangely, two Renosterkops stand only 9 km apart on the south bank of the Orange River a short way below the Augrabies Falls. There is also a Renosterkop some 30 km north-east of Beaufort West.



William John Burchell's sketch of his party gathered around a rhinoceros that had been shot by Speelman, his Khoikhoi companion, in early March 1812, in the De Aar district in the Upper Karoo. Illustration courtesy of the Library of Parliament, Cape Town.

Area north of the Orange River

Rhinos of both kinds must have been reasonably common in this area; they certainly were in Botswana to the north-west and in the North West Province to the north-east, but there are no historical records of either species from the (Orange) Free State, just to the east across the Vaal River (cf. Rookmaaker 2007:185,186).

During an expedition in 1801, led by Petrus Johannes Truter and William Somerville, rhino spoor was seen at Jonkers Fountain (about 50 km south of Prieska) on 31 October, at Eende Fountain (north-east of Postmasburg) on 17 November, and in the Maganga Mountains (north-north-east of Postmasburg) and at Yzerberg Fountain (northwest of Postmasburg) on 18 and 19 November, respectively (cf. Rookmaaker 2007:59). Mention is also made of a rhino (species indeterminate) shot at Skeetfontein [Skietfontein] (just west of Carnarvon) on 4 April 1802 (Bradlow and Bradlow 1979; Rookmaaker 2007:59). Carl Lichtenstein observed rhinos at "Schietfontein", just west of Carnarvon, in June 1804 and also in July 1804 in the nearby Karre [Karee] Mountains (Lichtenstein 1812; Rookmaaker 2007:65).

During 1820, John Campbell, a Director of the London Missionary Society, made the following records of rhinos (species indeterminate) in the region: one that was wounded near Mashow village (near Mafikeng) on 25 April; one sighted and one killed at the Musaree River on 30 April; sightings of animals at the Molopo River on 2 and 14 May; one killed at the Musaree River on 16 May; one killed at Meribohwhey on 23 May (Campbell 1, 1822: Rookmaaker 2007:74).

On 18 June 1823, George Thompson mentioned that rhinos had been seen in the vicinity of the Maquareen [Matlhwaring] River (Thompson 1827:117; Rookmaaker 2007:77). The missionary Robert Moffat recorded several incidents involving the shooting of rhinos (species indeterminate) in this region, namely at Mosita on 26 May 1823, at Heuningvlei on 8 July 1824, at Makalongkuan on 2 April 1827, at Marokweng on 11 April 1827, and at Chuin (Tswaing) on 22 April 1827 and 8 May 1827 (Moffat 1951; Rookmaaker 2007:78).

In 1826, Andrew Geddes Bain (see Lister 1949) saw rhino tracks on the Mashow River on 31 July 1826, and had sightings of rhino at Honing Vlei [Heuningvlei] on 2 August and also at Konkay (= Kunkwe) on 7 August. Stephen Kay (1833:22) described how a Khoisan in his party shot a rhinoceros at Mashow (near Mafikeng) in about 1830.

In 1835, when Dr Andrew Smith (in Kirby 1,1939:286) was at Griquatown (then called Klaarwater) in the Hay district, he could only say that rhino, elephant and buffalo used to be there (in the 1830s?), and, when he reached Heuningvlei at the Makhubung hills in the far western part of the Vryburg district, the place which was later to be designated the type locality of the white rhinoceros, he found that rhinos had left that part (p. 311). At "Great Chooi" (Stella), on the road between Kuruman and Vryburg, but in the eastern sector of the Vryburg district, he found rhino and giraffe spoor abundant on 21 May 1835 (2:35) and when Gordon Cumming (1909:184) was at the same place nine years later, in May 1844, he found the skull and bones of a rhino and saw fresh spoor.

North of Vryburg, on the way to Mafikeng, Dr Andrew Smith (in Kirby 2:42) found rhino spoor at Maritsani (Mareetsane) on 26 May 1835. Nine years before, in 1826, Steedman (1,1835:235) had shot many rhinos between Maritzani and the Molopo River in the western part of the Mafikeng district. This must have been in the vicinity of where W Cornwallis Harris (1838:84,85) later saw three rhinos on the Molopo in October 1836.

Cape Peninsula eastwards to Mossel Bay and the Tsitsikamma

Knowing that rhinoceroses were well established on the Cape Flats, and within the sweep of the Great Berg River, it would seem reasonable to suppose that they occurred east of the Hottentots Holland Mountains, if not in the central plains then certainly along the foothills of the Langeberg and towards the coast where more bushiness and forest conditions prevailed, perhaps on a limited scale. If they did occur there, nobody has thought to mention them, an omission so striking that it can only mean that none was seen (figures 4.18 and 4.19). Most other species, large and small (excluding buffalo), were discussed. Moodie (2,1835:249), whose book covered the 10 years from 1819 to 1829, and who came from an old-established family in Swellendam, could say no more than that the place-names of Rhenosterfontein and Buffel Jaagte River (Buffeljagsrivier) "commemorate these animals. Both rhino and buffalo have totally disappeared". Certainly, no early references to the buffalo have been found for the Buffelsjag River region, despite the name, any more than rhino records have been found for Rhenosterfontein.

Further south, in the Bredasdorp district in the vicinity of De Hoop Provincial Nature Reserve and elsewhere along the coast, the shrub dominated vegetation was most suitable for the black rhino. The absence of sight records in the Bredasdorp district is more understandable because this part of the Cape was little travelled. The main road then went under the mountains, and few adventurers bothered to deviate southwards. Paterson (1790) did so in the 1770s but mentions no rhino-

ceros. Had he seen them he, keen observer that he was, would almost certainly have remarked on the fact, in an area otherwise seemingly devoid of rhinos. The possibility of their having been there is strengthened by the place Rhenosterkop, only 7 km south-west of Zoetendalsvlei in south-western Bredasdorp district and no more than 4 km from the coast. If there, or anywhere along the south-western Cape coast, they might have been scarce at all times and therefore shot out before man had had a chance to refer to them in print.

A vague reference to rhinos near the Gourits River is recalled but, unfortunately, the item was not filed when found and has not been re-discovered. Here, the drier country and the sub-tropical thicket of the river's course would have been good rhino veld.

The George and Knysna districts have produced nothing, understandably perhaps because of the better forested conditions, but John Barrow (2,1804:368), wrote: "In the forest of Sitsikamma are elephants, buffaloes and rhinoceroses". This must surely be an error for the forest. His 'Sitsikamma' may have been meant to include the open portion of the Tsitsikamma east of the forest edge at Storms River. Nevertheless he used the word "forest", country disliked by rhinos. Moreover, no author has mentioned the rhinoceros in the Humansdorp district and it must be concluded that, as this extract is from Barrow's second volume, which was not so clearly an account of his travels as was his first volume, this ex cathedra statement should now be ignored. Rhinos along the southern coastal belt only return to the mammal story on the Swartkops River near Uitenhage, 150 km east of the Tsitsikamma River. However, there seems to be no ecological reason why they should not have occurred in much of the Humansdorp district.

Little Karoo

No rhino records for this region have been found but the region should have suited the black rhino. Shortridge (1,1934:416) includes in his historical items for this animal: "Gordon – Gamka River, Oudtshoorn". Presumably he is referring to that part of the river south of the Swartberg in the Calitzdorp district and west of Oudtshoorn, before it becomes the Gourits River. This may well be the case but no firm rhino records are known from there. They lived on the dry interior of the Great Karoo near Beaufort West, immediately north of the Great Swartberg range.

Langkloof

No record, nor hint of a record, has been found for the valleys behind the Tsitsikamma Mountains, although veld conditions would surely have suited the black rhino.

Gamtoos River to Port Elizabeth

The only reference to rhinos west of Port Elizabeth is from Thunberg (2,1795:84), when writing of his visit to Kraggakamma, in December 1773, and the various wild animals still living there in a state relatively undisturbed by the Colonists. Among these he mentions the "two-horned rhinoceroses" (repeated on p. 89). Although he is the only visitor to have mentioned rhinos there, their presence would have been quite possible, especially in the bushveld on the coastal plateau. By ecological probability these must have been black rhinos. They were in the Valley Bushveld (sub-tropical thicket) west of Uitenhage, only 20 km away, until the late 1840s.

Port Elizabeth to the Sundays River, including the Uitenhage district

At the Cape, where it was recorded as early as 1647 (Raven-Hart 1967a:169), five years before Van Riebeeck's arrival, the rhino had been a common animal. However, apart from the black rhino remains discovered near Pearly Beach, near Struisbaai and in the De Hoop Provincial Nature Reserve, all in the Bredasdorp district (Figure 4.18), no adequate records of rhinos east of the Hottentots Holland Mountains have been found until the Port Elizabeth-Uitenhage area is reached.

Moodie (1,1835:249), in passing, mentions that the rhino and the buffalo had totally "disappeared" from the Swellendam district when he was there in 1819/1820. He mentions a place name Rhenosterfontein, which although giving a possible hint of the occurrence of the species in historical times is not supported by any other evidence other than the remains from De Hoop. Bear in mind that Swellendam is a place that has received good coverage in other respects, but delivered no rhino records, although a vague reference to a rhino on the Gourits River, near Mossel Bay comes to mind.

Eastwards of this, along the coastal plateau, the rhino is not mentioned until Thunberg (2,1795:83) refers to it at Kraggakamma, just west of Port Elizabeth, in December 1773. Once the drier Valley Bushveld country around Uitenhage, and along the Swartkops River, was reached the rhino began to come into its own and eastward trekking travellers really began to meet it and to refer to it in their texts. The bushy country, often very dense in the valleys, strongly suggests that only the black rhino would have been here, certainly in historical times.

Thunberg also recorded 'two-horned rhino-ceroses' near the 'Zwartkops' River, on 15 December 1773 (Rookmaaker 1989:159). Rhino tracks were recorded by Robert Jacob Gordon at the Sundays River in January 1778 (Rookmaaker 1989:114). In 1782, Le Vaillant (1,1790:280) found unidentified spoor between the Swartkops

Salt Lake and the Swartkops River in the Port Elizabeth district, in country very suitable for the black rhino. However, his people assured him that they were not from a rhino! William Paterson (1790:83) met rhinos in 1779 at the Coega River, only 10 km east of Swartkops where, he says, the country was very "much frequented by Lions, Rhinoceroses, and Buffaloes". Records of rhinos immediately east of the Sundays River are dealt with in Skead (2007), but it seems obvious that from the time of Paterson's visit rhinos were well on the way to being ousted by the domestic animals, which had come with the settled farmers in the early 1770s, even though frontier farmers had been there much earlier. It is not surprising, therefore, to find Backhouse (1844:172) saying of the year 1838 that the two-horned rhino was still at Grassridge and Addo, a statement implying some sort of surprise that such should still be the case.

If the records can be accepted, Grassridge had one of the last rhinos in the Cape Colony, in 1853 (cf. Skead 2007). Rochlin (1961:259), quoting Henry Hall, a surveyor, wrote: "The last rhinoceros killed in the Cape Colony was an old male which was shot in 1853 on the Coega, or Grassridge, near Port Elizabeth". This rhino survived another 'last' Uitenhage rhino by only about four years, according to EHLS (1926), the initials of Prof. EHL Schwarz, a noted geologist. After mentioning that the last lion in Albany (Grahamstown) had been shot in 1849, Prof. Schwarz added: "...the last rhinoceros [was] shot near Uitenhage on Red Hill about the same time". Red Hill is 6.4 km west of Uitenhage, and has the alternative names of Boshoogte and Mimosadale. Thus the 'last' Grassridge and Red Hill rhinos were only about 25 km apart. The Grassridge incident was reported in the Eastern Province Herald of 8 November 1853; mention is made of the rhino being known in the neighbourhood for the past 20-30 years.

In the privately printed account of the history of his farm Amanzi, 11 km east-north-east of Uitenhage, Sir Percy FitzPatrick (ca 1925:9) wrote: "It is recorded in the old books that the last bull rhinoceros killed in the Cape Colony was shot on the Coega River, on what is now Amanzi. That was in 1858". His date of 1858 conflicts with the date of 1853, given by EHLS. Until the "old books" mentioned by Sir Percy have been found, the true date of this event must be in the balance.

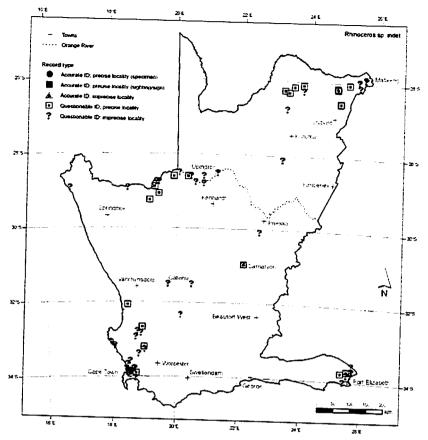


Figure 4.19 Historical distribution records for 'rhinoceros' (species indeterminate) in the area covered by this book. Refer to 'Overview' for a general interpretation of the information on this map.

Overview: historical distribution of the rhinoceros (species indeterminate)

The records north of 28°S are considered to refer to either the white rhino (a grazing megaherbivore) or the black rhino (predominantly a browsing megaherbivore), whereas those to the south of 28°S are considered to refer exclusively to the black rhino (Figure 4.19) (see sections 4.2.46 and 4.2.47).

[Text by the editors]

HUNTING RHINOS, AND USES OF RHINO PRODUCTS

The inevitable pitfall for large animals not easily killed by arrows and spears was literally used against rhinos by the aboriginal peoples at the Cape. Johan Schreyer (in Raven-Hart 1,1971:122) tells of how the Khoikhoi killed rhinos in 1668 when he was there. "To catch these beasts, the [Khoikhoi] dig deep pits in the ground, like our wolf-pits, on the ways where these beasts are wont to pass when in the great heat of summer they wish to drink; and cover the same with branches. Then, when the beast comes and steps thereon, if

only with one foot, he must fall in and let himself be killed". Kolb (1,1731) says much the same in his discussion on elephants, to which he adds: "The rhinoceros and the elk [= eland] the [Khoikhoi] generally take after much the same manner".

Hendrik Jacob Wikar (in Mossop 1935:99) had a narrow escape from six rhinos at Seekoeisteek, just west of the Augrabies Falls, in 1779: "But since then" he wrote "I have learnt to know the rhinoceros better than before, and now I am more daring in dealing with the rhino than with any other animal". He then describes how a rhino behaves before it attacks: "I have learnt from the [Khoikhoi] and my own experience has proved it

to be true, that even when the rhino has you in a tight corner, and is only a yard or three [say 1 to 3 m] behind you, you have only to throw yourself behind a bush and, if there is not one, you swerve to one side and throw yourself in the open plain so that your body is not in the direct line of the charging horn. Every snort means a forward thrust of the horn; even when there is nothing in front of the rhino he turns up the ground till it looks as if it has been ploughed, and even if in this charge he ploughs up the ground at your very feet, that need not worry you; his rage is too great, he slips past and cannot check his pace, or possibly he does not see your honourable self, for in any case his eyes are very small and, as the [Khoikhoi] tell me, his sight is weak; but when he is standing still, his hearing is all the keener by contrast...When the Gyzikoa [a Khoikhoi tribe] men find a rhino which shows fight or begins to attack them, it does not escape. This type of rhino does not look in the least like those I have seen drawings of. Its body closely resembles that of an elephant but its head is almost like a pig's, with two horns, one above the other, loosely fixed in the skin. The horns curve upwards, but I have heard the [Khoikhoi] say that they have seen rhinos with horns curving downwards. I have heard the same from Christians, men whose word you can take, and a certain Jacob Louw himself shot them in the country beyond the Roggevelt". In a footnote to this he says "The rhinoceroses which I have seen resemble fairly well the description and drawing of them by P Kolbe". The Roggeveld is in the western Calvinia district.

From Wikar's descriptions and remarks it seems that the rhinos he knew were black rhinos. This strengthens the surmise expressed elsewhere in this account that the rhinoceros of the western and south-western Cape, and well into the colony, was the black rhinoceros. The Khoikhoi observation that rhino horns sometimes point downwards is borne out by experiences of later hunters, but is unusual.

The uses to which rhinoceros hide was put were many and varied, its thickness being its great asset. Dapper (in Schapera and Farrington 1933:49), who was at the Cape as a passer-by in 1658, mentioned that the Khoikhoi "shoes consist of quite flat, uniformly level, patches of tough rhinoceros hide which cannot be worn out, fastened to the ridge of the foot by two leather cross-strips, and at the back by a heel-band similar to that worn by the Capuchin Friars". His description rings true and examples of such shoes, of a style still used by the San in the Kalahari Desert, can be seen in the ethnological collections of many South African museums.

For making 'sjamboks' (in Afrikaans, 'sambok'), the thick short whips used for whipping recalcitrant horses, cattle and slaves, the rhinoceros and hippopotamus hides were ideal, the hippo's perhaps being better. Sparrman (2,1786:284) remarked that hippo sjamboks were stronger and more pliable than those of rhinos "though they are not as transparent as these latter are when new". John Barrow (2,1804:125) thought otherwise; he wrote: "The skin of the two-horned rhinoceros...is so thick that the Dutch boors cut out of it their largest sambocs or horse-rods which, if well prepared, are better than those of hippopotamus, and as transparent as amber".

The term 'sjambok' as used in South Africa, according to Partridge (1971:105), comes from the Malay word *samboq*, a whip; the word appeared in English as early as 1645; "A strip of the hide of rhinoceros, hippopotamus or giraffe".

Strange beliefs inevitably surrounded the rhinoceros in early times. De Grevenbroek (in Schapera and Farrington 1933:269), for about 1684, at the Cape, tells that the drinking of half a pint [284 ml] of blood of either the "two-horned rhinoceros, the eland, the bison [in this case the buffalo] immediately it has been killed" has brought recovery to patients suffering long-term illnesses.

Kolb (1731:104) exaggerated on the rhino's magic properties: "His skin, his horn, and his blood are used in medicine. A German gentleman who was employed in the Company's laboratory at the Cape, assured me he had extracted from the skin of a rhinoceros a salt by which he performed great cures. He returned, while I was at the Cape, to his native country, taking with him, as he said, a considerable quantity of this salt, and not doubting it would procure him not a little of the wealth and fame in Germany".

Kolb goes on to say that the horn of a rhinoceros "will not endure the touch of poison. Many people of fashion at the Cape have cups turned out of rhinoceros horn. If wine is poured into one of these cups, it immediately rises and bubbles up as if it were boiling, and if there be poison in it, the cup immediately splits. If poison be put by itself into one of these cups, the cup, in an instant, immediately flies to pieces, yet some writers have affirmed that the rhinoceros horn has no virtue. The chips made in turning one of these cups are ever carefully saved and returned to the owner of the cup, being esteemed of great benefit in convulsions, faintings, and many other illnesses".

Kolb also tells that "The blood of the rhinoceros is not a little valued at the Cape. When the Europeans there get it fresh they put it in some of the guts of the rhinoceros, and hang it in the sun to dry. 'Tis of great virtue for the opening of obstructions and the healing of inward sores, and it is taken in a glass of wine or in a dish of coffee or tea". If such be true, it is perhaps not surprising that what few rhinoceroses there were near the Cape were soon killed off. Kolb's stories, related

as he would have heard them, tend to warn against the placing of too much reliance on what he wrote of other things at the Cape. Nevertheless, as a chronicler he has to be given consideration.

According to Leibbrandt (1896:244), Jan van Riebeeck in 1657 was instructed to see that "All large and half the number of small rhinoceros horns be sent to Holland, as samples, and the rest to India, excepting six tusks, two of the largest, two of medium size, and two of the smallest, which are to be sent to patria via the two ships, that the directors may examine them and send out the orders necessary". Presumably the tusks refer to elephant tusks, but the journal (Thom 2, 1954:100), for 9 March 1657, says that "The orders detailed above were carried out and, in the possession of Harmans Harmanssen, were found ostrich shells and nineteen fine rhinoceros horns which no doubt he embezzled, as up to now he has not disclosed anything about them". The Company in Holland were persistent in their demands because the journal for 27 October 1657, seven months later (p. 166), contains the passage: "Should you find rhinoceros horns and elephants teeth and hippo tusks in the Saldanha Bay, you shall...purchase as many as you are able to obtain...Until now our men have made little effort to obtain these things...".

Mentzel's (1,1785:27) comprehensive survey of conditions at the Cape tells of the turning of rhino horn and the effect of such horn on poison, an idea already mooted by Kolb: "When I was at the Cape there was a certain expert turner in the employ of the Company...This man constructed a big cup or chalice out of a rhinoceros horn which measured seven inches [176 mm] in diameter at the mouth. Between the cup and its pedestal he screwed three balls. In the upper and smallest of these he skilfully placed a set of nine-pins, intertwined with two ivory balls; in the middle and largest one a draughtsboard was inset, made of ivory and ebony, with 24 draughtsmen of the same materials; while below in the smaller ball he was still engaged upon the task of modelling three cannons mounted on their gunwales. The statement that the rhinoceros' horn secures immunity from poison, or that it will cause wine to ferment is quite fabulous. These things have been tested several times and disproved".

4.2.49-4.2.50 QUAGGA AND ZEBRAS

As discussed in section 1.3.1, the true quagga are Land and the Burchell's zebra E. burchellii burchellii is here as two distinct species. Equus sake of continuity"ed the 'plains zebra'. For the 1980), and with the east First Edition (Skead 'Burchell's zebra' has been recurrent, the name Because many of the early recordatext for Equus burchellii.

sufficiently definitive in their separation of the three species dealt with in this work (viz. true quagga Equus quagga, mountain zebra Equus zebra, Burchell's zebra Equus burchellii) it has been decided to give the records here as they occurred. The confusion is confounded further by the inconsistencies of individual authors. Where some talk of 'horses' where they seem to mean 'zebras', others talk of 'asses' in the same connotation. Where 'mules' would seem to suggest 'quaggas' in one work, 'horses' would seem to have the same meaning in another. Some authors credit long ears to the mountain zebra, others to what seems to be the true quagga, and where we today associate long ears with donkeys, they associated them with either 'asses' or 'wild horses'.

Colour has been equally misrepresented. Just when the reader thinks a quagga is intended the author breaks into a colour description of anything covering blue, yellow, green, black-and-white, white, chestnut, red, pure sky blue, brownish red, chestnut brown, pale red, carnation, and so on. Some of these 'colour' characters might have been reasonably accurate, because Harris (1838:48), who knew the true quagga from experience in the veld, said of it: "Of a pale red colour, the quagga is faintly striped only on the head and neck".

The range of stripes was never clearly and definitively stated, nor was the so-called 'gridiron' pattern over the rump of the mountain zebra mentioned in any record seen. This is excusable in that without the contrast of Burchell's zebras' lack of a 'grid-iron' pattern the early observers would not have considered it characteristic when they saw it on a mountain zebra. Where an author stated that the animal he was discussing had stripes over the whole body, the zebra was surely intended, but when he merely mentioned that it was striped, there is no certainty whether he meant that it was wholly striped or only partially striped, a crucial factor when viewed from our distance in time.

While in some cases the identification is correct, in others it remains just a possibility, and in other cases a return of 'species indeterminate' is the only option. These three categories have been used as the basis for compiling the maps that attempt to illustrate the distribution of the equines in the area covered by this book. Equine species mentioned in the text were tentatively allocated to one of these three categories on the basis of one or more of the following clues: (a) the descriptions provided (e.g. nature and extent of striping etc.), (b) the general habitat (e.g. mountains or plains), (c) the indicated ability of the observer to distinguish between some of the equines. As applied here, a 'probable' classication has a higher status than a 'possible' one but, nevertheless, both treatments should be viewed with circumspection. This should be borne in mind when interpreting the maps showing the * storical distribution records for the three species.

4.2.49 TRUE QUAGGA AND MOUNTAIN ZEBRA (KWAGGA EN BERGSEBRA)

It is safe to say that both the true quagga and the mountain zebra occurred just inland of the Cape Flats.

Cape Peninsula

Early records of both the true quagga and the mountain zebra in the vicinity of Cape Town are so vague and muddled that very little of real value can be determined from them. That both occurred not far from Cape Town is certain, but that either occurred on the Cape Peninsula is doubtful. Jan van Riebeeck's journal certainly makes no comment on any form of equine there and it is only when his men started exploring the immediate interior that reports start appearing. Before that, comment concerned 'zebras' or their skins brought from beyond the Peninsula.

Some kind of equid was known as early as 1627, not necessarily on the Peninsula because the report does not say so, but certainly not far from it. The Englishman, Thomas Herbert (in Raven-Hart 1967a:119), who was there in July 1627, twenty-five years before Van Riebeeck, mentions "zebras, or pied horses" as being there, although he does not say he saw them himself. The local Khoikhoi had never seen a horse, in fact had never heard of one, and would have been at a loss to draw comparisons. Several earlier seafarers on their way to the east had called at the Cape and climbed Table Mountain, or walked round Devil's Peak to the forests on the mountains above Rondebosch and Newlands. Possibly they saw 'pied horses' then, and on the Peninsula at that.

An example of early bungling and uncertainty surrounds the specimen sent to Leiden in Holland, and which had always been taken to be that of a true quagga given as from Steenbergen, Cape Colony, and therefore on the Cape Peninsula proper. However, Rau (1974:46), in a full paper on quagga problems, shows that this specimen, through bad labelling, must now be relegated to an indeterminate status, a tragedy in a world of tragedies. Rau wrote: "The locality given for the Leiden quagga - Steenbergen, Cape Colony - is incorrect. The position of the only 'Steenbergen' ever recorded is in the Cape Peninsula, well outside the known distributional range of the quagga". This mistake apparently stems from one of the two labels included with this specimen. The two labels give different data: (a) 'obtained alive in 1826'; (b) '15th June 1827 - Steenbergen'

Rau then shows that neither label is applicable to this specimen. In his view, (a) referred to a female which he discusses later, whereas (b) "probably refers to a male mountain zebra specimen Equus zebra sent to Leiden in conjunction with a quagga.

This mountain zebra could well have been collected at Steenbergen" (cf. Van Bruggen 1959).

Steenberg is the prominent range behind Muizenberg on the False Bay side of the Cape Peninsula. Tempting as it is to accept this as proof of the zebra's existence on the Peninsula, even as late as 1827, the fact that the earliest explorers at the time of Van Riebeeck and soon after made no mention of equines there, must leave this as an indeterminate specimen and an indeterminate record of no real value. Rau's statement that Steenberg is "well outside the known distributional range of the quagga" is not supported by the references which follow.

Cape Flats to the Great Berg River

That 'horses' of some kind occurred in the Southwestern Cape was noticed by Etienne de Flacourt (in Raven-Hart 1967a:173) at Saldanha Bay in October 1648 when his ship called for refreshment: "We walked for pretty near four leagues [19 km] in the vicinity without perceiving anything: we indeed saw some lion tracks and dung of many sorts of animals such as elephants, deer, leopards and other beasts, and even saw the footprints of horses or mules, and of oxen, especially near the spring". The probability of the 'horse or mule' footprints being those of equines is strong because the men should have been able to recognise the shape of hoof-marks; the spoor of the 'oxen' might have come from domesticated animals belonging to the local Khoikhoi, who were not to know the domestic horse until Van Riebeeck imported them from Batavia in 1653 (Theal 1909,1:38).

The first mention of a wild equine in the Van Riebeeck journal did not appear until 1657 (Thom 2,1954:175), no less than five years after his arrival in 1652. This represents a significant gap, which suggests that none could have lived on Table Mountain or in the mountainous country to the south, still on the Peninsula, because the free burgers as well as the Company's servants came to know all that country fairly well, since they ran their cattle there.

This first record in the journal, dated 23 October 1657, came from the report by Abraham Gabbema who led the first expedition away from the Cape settlement into the interior, and when his party was a few kilometres north-east of Paarl, itself 50 km from Cape Town. The men had travelled towards the Great Berg River. "We went on past the Diamond and Pearl Mountain and along the said river...On the march we saw the footprints and dung of horses at several places which was confirmed by our men who have a sound knowledge of animals so that it is quite possible that horses exist in that area".

A year was to pass before 'horses' were mentioned again in the journal (p. 341), when in