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The Nahab of Aukoerebis

by Anthony Hall Martin

NEWS FROM OUR NATIONAL PARKS

On 16 July 1985, six black rhinoceros arrived in Augrabies Falls National Park — the first of their kind to be seen there for 150 years. In this article Anthony Hall-Martin explains why the National Parks Board chose Etosha stock — Editor.

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READERS unfamiliar with the Nama Hottentot language might have some difficulty understanding the title of this article, but it is merely a more romantic way of saying "The black rhino of Augrabies". The soldier/explorer, Robert Jacob Gordon, who lived at the Cape from 1777 to 1795, was apparently the first to record the Nama name of the black rhinoceros. He is quoted (Cave & Hookmaaker, 1977) as saying of this species, "It is called *nabab* in the Hottentot language — the *na* being pronounced with a loud blow...". Gordon, incidentally, is also credited with the first reference to the Augrabies Falls, as "de Groote Waterval Aukorebis" which he visited in 1773. The name is said to mean "the place of great noise".

It is the policy of the National Parks Board of Trustees of South Africa to re-establish where possible the full complement of game animals which once occurred in areas which are now national parks. In the past, however, there was no great concern for adherence to genetic conservation principles. Animals from inappropriate gene pools or even subspecies were sometimes introduced to national parks. In some cases species were introduced to areas where they had never occurred within historical times or where the habitat was totally unsuitable. Grey rhebok, for example, were introduced to the Addo Elephant National Park which has none of the open country preferred by this species.

Times have changed, however, and the abundant arguments in favour of genetic conservation principles espoused by the editor of this magazine (Greig, 1979) have not fallen on deaf ears. Before any animals are moved to national parks now, the entire issue is first carefully investigated, so are the sources of animals available for translocation. This was the case with the recent translocation of Lichtenstein's reedbuck to the Kruger National Park and of black rhino from Etosha to the Augrabies Falls National Park.

Black rhinoceros is a highly endangered animal which is declining rapidly in its African range — except in Zimbabwe and South West Africa/Namibia. In order to be sure that by establishing a population in Augrabies we would be making a worthwhile contribution to the conservation of the species. At the outset, therefore, we had to address the following questions:

Did black rhinoceros occur historically in the area of the park?



A black rhinoceros in close-up. This animal was photographed in Zimbabwe, still a stronghold of the species despite recent serious inroads by poachers. photo: Anthony Hall-Martin

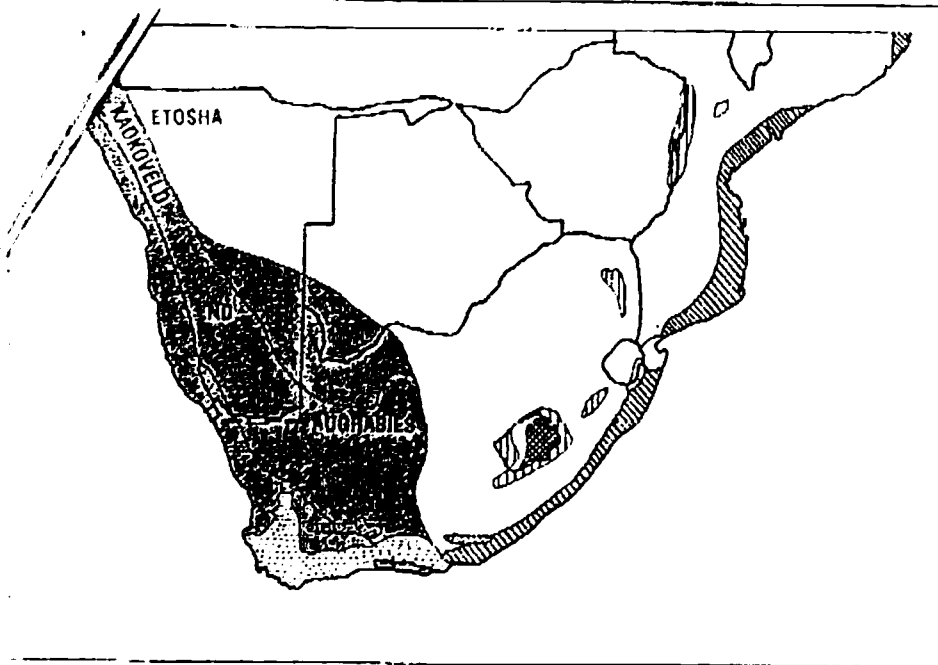
2. If so, to which subspecies or gene pool did the original Augrabies black rhino belong?
3. Are any rhinoceros of this subspecies or gene pool still available for restocking Augrabies? If not, which black rhinoceros population is the nearest to the original geographically, ecologically and genetically?

Only after these questions had been satisfactorily settled could we begin to

look at the logistics of the operation. Only then, and having established that such an operation would be enormously expensive, could we look for sponsors.

1. DID BLACK RHINOCEROS OCCUR HISTORICALLY AT AUGRABIES?

One seldom finds historical records of animals occurring within the exact confines of a small national park. How-



Southern Africa and its vegetational subdivisions (after Werger, 1978). The white area is the "Sudano-Zambezian Region" and separates the grey area in the west, the "Karoo-Namib Region", from the "Indian Ocean Coastal Belt" (cross-hatching along Natal coast). The Karoo-Namib Region itself has five subdivisions; one of these is the "Namaqualand Domain", marked ND on the map, which includes both the Kaokoveld (including western Etosha) and Augrabies.

ever, it is sufficient to establish that the species occurred in the general area and in the same type of habitat.

There are in fact several reasonably precise records of black rhinoceros for the lower Gariep (the "authentic" name for the Orange River and the name I shall use elsewhere in this article) in general and the Augrabies area in particular. The period 1778-1779 was a busy time for exploring the northern fringes of the Cape, as can be deduced from a study of Skoed (1980). William Paterson recorded black rhino at Ramansdrift in September 1778. This locality is about 195 kilometres south-west of Augrabies. The Swede Hendrik Jacob Wikar who accompanied Van Plattenberg on his journey of discovery in 1779 was an ace black rhino spotter. He records seeing at least 10 rhino during the course of his travels in September and October of that year from Kalagas (97 kilometres south-west of the present park) to the area of the Augrabies Falls and also just to the north of what is now South West Africa/Namibia. He records rounding a rhino and seeing a party of six rhino near Seekoeisteeck which is only 18 kilometres west of the park, downstream of the falls. He also saw a rhino cow and calf between Seekoeisteeck and the falls. Gordon, who had been in the area in August and September also saw rhino and much other game which is memorably recorded on a note on a drawing in the Gordon Collection in the Cape Archives (ref. no. 10.7146.75):

Hier had ik het schoonste en singuliere gesigt in alle mijne Reizen, zende met een opslag van een oog in den hake Cirkel twaalf Cameelpaarden in die vyftig Olifanten; 5 Rhi-

nocerossen; een trop van 20 Struisen, een trop van 13 koedoes, en een grote trop zebraas; siende de Hippopotamussen in de Rivier beneden, swemmen, en samen spelen... (Here I had the most beautiful and singular sight in all my travels, seeing at a glance in a semicircle, 12 giraffes, more than 50 elephant, live rhinoceros, a flock of 20 ostriches, a herd of 13 kudu, and one big herd of zebras; seeing hippopotamus in the river below, swimming and playing together...) — a tribute indeed to the glory of Augrabies in days gone by.

2. TO WHICH SUBSPECIES OR GENE POOL DID THE AUGRABIES BLACK RHINO BELONG?

All the rhino recorded by these and other travellers in the vicinity were part of an original black rhinoceros stock that stretched continuously from the Gariep (or Orange!) to the Kunene as recently as 1850 (Joubert, 1971) and had earlier extended southwards to the Cape Flats before it was hunted to extinction in what is now the Cape Province. Taxonomically the Augrabies rhino would have been classed as the subspecies *Diceros bicornis bicornis*, the Cape rhinoceros.

3. ARE THERE ANY RHINOCEROS OF THIS SUBSPECIES AVAILABLE FOR REINTRODUCING TO AUGRABIES?

In December 1853 a solitary black rhino was shot at Grass Ridge between Uitenhage and Addo. It had been known in the area for between 20 and 30 years and was almost certainly the last specimen of the Cape rhinoceros *D.b.bicornis* in the Cape Province (Hall-Martin, 1977). North of the Gariep River, in South West Africa, the subspecies survived a little longer — the

last record for the Fish River in the southern part of the territory was in 1904 (Joubert, 1971). Some must also have survived in the western Transvaal as Gordon-Cumming shot a black rhino near the headwaters of the Marico in 1855. According to Rookmaaker and Groves (1978) this was within the range of *D.b.bicornis*.

Following the elimination of the black rhinoceros from the Cape, the western Transvaal and the southern half of South West Africa, most authorities have agreed that the Cape subspecies of the black rhinoceros *Diceros bicornis bicornis* is extinct. On the face of it, therefore, we would be unable to restock Augrabies Falls National Park with the same subspecies or same genetic stock of black rhinoceros as existed in the area of the park in Gordon's day. But is this assessment correct? When we looked more carefully at the evidence, we decided that all was not lost and that we could argue a sound case for bringing Etosha rhino to Augrabies.

According to most authorities, the Kaokoveld black rhinoceros population belongs to the subspecies *Diceros bicornis minor*, which is the form found in the Natal game reserves and Kruger National Park northwards through Mozambique and Zimbabwe to Tanzania. In my view, however, the Kaokoveld rhino are uncomfortably placed in this subspecies and they could just as easily be placed in the perhaps-not-so-extinct Cape subspecies *D.b.bicornis*.

Specimens attributed to the "extinct" Cape subspecies (Rookmaaker and Groves, 1978) came from near Lüderitz and as far north as the Naukluft Mountains. This latter locality, however, is little more than 200 kilometres from the Erongo Mountains where Ian Hofmeyr captured black rhino for translocation to Etosha National Park as recently as 1972 (Hofmeyr et al., 1975). There are no physical or ecological barriers between Naukluft and Erongo which could have prevented rhinoceroses from these areas from mixing and therefore it is highly unlikely that the Naukluft rhinos were a different subspecies from those of the Erongo Mountains. It is also a fact that there are adequate records of rhino in the Kuiseb, inland from Walvis Bay and along the Swakop to show that their distribution was continuous across the Naukluft-Erongo gap.

The rhino that Hofmeyr caught in Erongo, together with 42 others from various localities in Kaokoland, the Ugab Valley, Olifantspoort Reserve, Khorixas and Kammas, were moved to Etosha which at that time held a population estimated at 15 animals (Joubert, 1971). This concentration of the formerly scattered animals into one gene pool made immediate conservation sense. The black rhino of Etosha

therefore, be referred to as a Kaokoveld gene pool.

Evidence for the distinctness of the Cape rhinoceros is based on seven skulls (Rookmaaker & Groves, 1978) which are considerably larger than any other black rhino skulls measured anywhere in Africa. Apart from telling us that the Cape rhinoceros was larger than other subspecies, it seems reasonable to suggest that these data also indicate that the nearest genetically related rhino could also be expected to have large skulls. Eugène Joubert (1970) compared skull measurements of 18 Kaokoveld black rhino with 20 from Zululand. He found the mean size of the South West African skulls to be larger than that of the Zululand skulls and that the mean size was greater than that generally recognised for the subspecies *minor* (Groves, 1967). As the Kaokoveld/Etoshia rhino were historically capable of mingling with the "extinct" *bicornis* to the south, perhaps this finding is not entirely unexpected.

The distance from Augrabies to Etoshia, following the crescent of historical black rhino records which are mostly from the escarpment zone parallel to the coast, and which avoid the sandy Kalahari area north of Augrabies, is about 1 000 kilometres. The distance from Augrabies to Natal measured via rhino habitat is nearly 1 500 kilometres. On simple geographical grounds, therefore, the Etoshia rhino would have been selected as the parent stock for Augrabies, and not Natal.

But for me the most convincing argument is that of environment. It is generally agreed that animals become genetically adapted to the particular conditions of climate and vegetation in which they live. It is also accepted that similar environmental conditions will, by and large, result in broadly similar vegetation types. As can be seen from the map (p 246), the most recent biogeographical classification of southern Africa (Werger, 1978) clearly places both the Kaokoveld and Augrabies within the same biogeographical Region (the "Karoo-Namib") and even further recognises the affinities of the



The Etoshia game capture team manhandles a black rhinoceros bull into position before loading it for translocation to Augrabies.
photo: Anthony Hall-Martin

stretch of country joining and including them in a further subdivision of the Region known as the "Namaqualand Domain". Zululand rhino, however, find themselves in an entirely different region (the "Indian Ocean Coastal Belt") with two major regions separating them from Augrabies.

The above arguments are necessarily simplified for the sake of clarity for our present purpose. In reality, however, the fact that Augrabies and Etoshia end up in the same biogeographical region translates into similarities of climate and vegetation to which the rhino are accustomed, and presumably adapted.

On all counts then, the Kaokoveld black rhino are the closest taxonomically, genetically, geographically and ecologically to the extinct Cape rhinoceros which Gordon and his contemporaries recorded at Augrabies — and, who knows, maybe the Cape rhinoceros isn't yet extinct!

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DURING July this year a group of six black rhinoceros was translocated from the Etoshia National Park in South West Africa/Namibia to the Augrabies Falls National Park in the north-western Cape. In exchange, six buffalo of stock originating from the Addo Elephant National Park were moved from the Willem Pretorius Game Reserve in the Orange Free State to the Waterberg near Otiwarongo in S.W.A./Namibia, and more will follow.

The project was a joint venture of the National Parks Board of Trustees of South Africa and the Directorate of Nature Conservation and Recreation Re-

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sorts of South West Africa/Namibia. The Nature Conservation Branch of the Orange Free State helped by providing some of the buffalo for the exchange and Pilanesberg National Park in Bophuthatswana lent its rhinoceros trailer.

The operation was generously assisted by sponsors from the private sector. Ford provided heavy trucks to transport the animals: a 4x4 for pick-up to be used in Augrabies for monitoring the released rhinoceros and a Ford 5610 four-wheel-drive truck

on loan. Shell fuelled the operation and Avis provided support vehicles. Consolidated Wire Industries, Haggie Rand, J.C.I. and Freyssinet donated fencing materials which Cargo Carriers moved to Augrabies. The Endangered Wildlife Trust, Gypsum Industries and the Everard Read Gallery contributed much-needed funds, as did the Hoteliers Holland Centre and Peninsula Centre of The Wildlife Society Southern Africa.

The Wildlife Society provides to give financial support to the second phase of this project (mid-1980). — Editor]