

Kruger's diversity enriched

At the time of its proclamation in 1926, the Kruger National Park, as well as its predecessors, the old Sabie and Shingwedzi nature reserves, covered a large area with relatively pristine ecosystems. A variety of disturbances before and after its proclamation, however, resulted in a number of animal species dying out. These local extinctions were largely due to excessive hunting at the end of the previous century, certain epizootic diseases such as rinderpest, negative climatic factors such as extended droughts and the effect of the fact that the Kruger Park's boundaries differed from the ecological barriers. In some cases the park only includes small portions of the habitats which in the past formed part of the entire Lowveld ecosystem.

The master plan for the management of the Kruger National Park contains the following policy and prescriptions for relocating game:

- Maintaining and conserving all functional aspects of ecosystems. It is accepted that natural ecosystems are dependent on the dynamic interaction between all the different com-

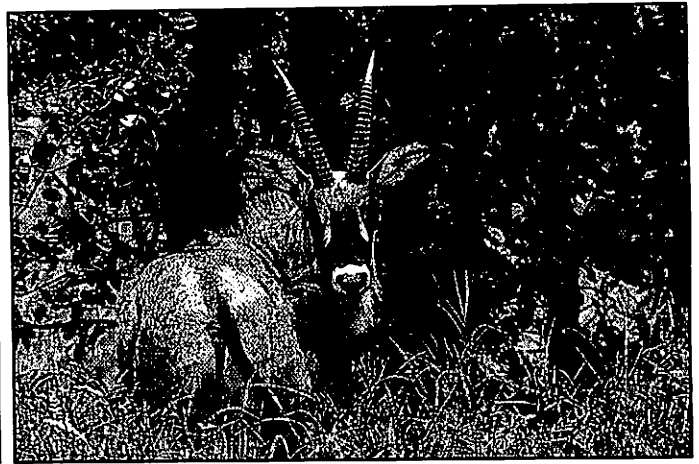
D J PIENAAR

ponents.

- Maintaining and conserving species and structural diversity. This means that the full spectrum of species must be conserved as integral parts of the ecosystem in which they occur.
- Only species which are indigenous to the area and species whose historical occurrence can be substantiated by reliable sources, will be considered for relocation.

According to Col J Stevenson-Hamilton, the first park warden of the Kruger Park, the herbivore populations had been severely decimated shortly after the proclamation of the Sabie and Shingwedzi nature reserves. As early as 1903 he writes that he would very much like to see Lichtenstein's hartebeest and eland relocated in the Kruger Park, animals that had at that stage already been gone from the Lowveld for quite a while. The first attempt to relocate game was also launched by Stevenson-Hamilton shortly after the proclamation of the Sabie Game Reserve. A few young eland were obtained from Mozambique. Some were

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Far left: White rhino cow and her day old calf.

Top left: Lichtenstein's hartebeest in a boma after their arrival in the Kruger National Park.

Above: Roan.

Left: The first black rhino to be released in the Kruger National Park in April 1971.

tamed and the others released.

The Minister of Lands, Mr P Grobler, made a suggestion to the National Parks Board in his inaugural speech in 1926 that the relocation of white rhino in the Kruger National Park should be a chief priority. Financial and logistic problems prevented this being done at that stage, though.

In due course red hartebeest, red lechwe, black wildebeest, giant sable antelope, springbok, blesbok, oribi and red duikers were also offered to the National Parks Board to be established in the Kruger National Park. All these animals were turned down, however, some because the Board did not have the money for their purchase and transportation, and others because it was decided that they would not thrive in the park. In 1930, 20 crested guineafowl were, however, released in the Kruger National Park. It is evident that the Board did not have a definite policy regarding the relocation of game in the Kruger National Park at that stage.

In 1949 a Board member, Dr R Bigalke, suggested a policy for relocating game in national parks. According to this policy, it was decided that national parks would be established to conserve the fauna, flora and all the natural features of the area for all time, and that a wild animal or plant which is not indigenous to that area is a biological deviant.

Dr Bigalke also made other proposals which were accepted by the Board. Reintroducing plants and animals to national parks should always be restricted to

species which occurred there at some or other stage in the history of the area concerned. One should also always guard against introducing exotic plants and animals to a national park. Where exotic species do occur, steps should be taken to rectify the situation.

Since this policy has been accepted, a variety of extinct or rare animal species have already been relocated in the Kruger Park, such as black and white rhino and Lichtenstein's hartebeest.

Historical documentation indicates that white rhino died out in the Transvaal in approximately 1896. The last animals, a cow and a calf, were seen in the south of the current park in 1895 by the hunter F Vaughan Kirby in the dense Nwamihiri thorn thickets. A few white rhino survived between the White and the Black Umfolozi rivers in Natal. These animals have been protected in the Umfolozi Reserve since 1897. In 1929 the American naturalist Herbert Lang counted 120 white rhino in the Umfolozi Game Reserve and an additional 30 animals just outside the reserve. In 1952 the Natal Parks Board took over official control of the Umfolozi Reserve and during an aerial survey in 1953, 437 white rhino were counted. At that stage there were no suitable methods to capture and transport rhinos. It was only with the advent of modern anaesthetics and immobilisation techniques, and especially as a result of the attempts of Dr A M Harthoorn in this regard, that white rhino could be captured and translocated.

On 14 October 1961 the first four white rhino

arrived in the Kruger National Park from the Umfolozi Reserve. These animals were released in a special rhino camp which was constructed at Fayi, near Pretoriuskop. After an absence of 65 years, the white rhino once again left their characteristic clover-shaped tracks in the Eastern Transvaal Lowveld. In 1962 another two white rhino cows were released in the Fayi rhino camp. From May 1963 the translocation of white rhino from Natal to the Kruger National Park took place on a much more organised basis. Every second week a few animals were brought into the park with National Parks Board lorries. With the arrival of a powerful synthetic morphine derivant, Etorphine hydrochloride (M99), capturing rhino became a safe and routine procedure.

During the 12 years from 1961 to 1973, a total of 345 white rhino were transported to the Kruger Park from Natal. One white rhino cow was also transferred to the Kruger Park from the Mlilwane Game Reserve in Swaziland. Only nine animals died during the capture and transportation process – 337 white rhino were thus successfully relocated in the Kruger Park.

Most of these animals have been released south of the Sabie River. Fifteen of them, 12 bulls and three cows, were released at Shipandane, beside the Tsende River in the north of the park. The animals did not adapt very well to the mopani veld, however, and wandered around a lot before finding an acceptable habitat. Because the Kruger Park's eastern and western boundaries were not fenced at that stage, a few of the white rhinos strayed off over the border to Mozambique and Zimbabwe.

A number of the released white rhino also died in accidents. One bull got caught in a snare beside the Sabie River, and his leg became septic. Another one fell into a deep donga and could not get out. A cow drowned when she tried to cross the Sabie River and a large bull was injured so badly by lions that he had to be put out of his misery. In another case a white rhino bull in the north of the park came to blows with an elephant bull at a waterhole and was killed after a vicious fight.

As early as 1964 white rhino were observed crossing the Sabie River and colonising the central district. They were particularly fond of the area beside the Nwaswitsontso Spruit.

The biggest concentration of white rhino occur in the south of the Kruger Park beside the Byamiti, Nwaswitshaka, Bumi and Mlambane spruits. They are regularly seen in the vicinity of Pretoriuskop, and also between Lower Sabie and Crocodile Bridge.

The white rhino population of the Kruger Park has gone from strength to strength. A total of 1 876 were counted during the ecological aerial surveys of 1993. Of this number, 1 415 occurred south of the Sabie River, 397 between the Sabie and Olifants rivers and 74 north of the Olifants River. Since 1980 the white rhino population has shown an average annual growth of 8.4 per cent. Even the serious droughts of the eighties did not affect this growth.

The relocation of the white rhino in the Kruger National Park can rightly be regarded as one of the great success stories in the South African conservation history.

Even during Stevenson-Hamilton's term of service, attempts were made to obtain black rhino from East Africa for the Kruger Park to supplement the meagre numbers which still survived here. The

Tanzanian Department of Nature Conservation had two rhino available in the early fifties, but logistic and financial problems made it impossible to get the animals to South Africa. On 22 July 1936 ex-ranger Harry Kirkman saw the last black rhino in the park, an old cow, in the Nwatimhiri bush east of Skukuza.

In 1971 the first black rhino were eventually obtained from the Natal Parks Board and 20 were released beside the Nwaswitshaka Spruit in the Kruger Park. In 1972, 12 black rhino were imported from Zimbabwe. Ten of them were released beside the Nwaswitshaka Spruit west of Skukuza and two young bulls in the Hlangwine camp near Pretoriuskop. These two unfortunately died of botulism ('lamsiekte') after drinking water containing the remains of an old carcass. In 1977 another two black rhino from Natal were released beside the Nwaswitshaka Spruit. In 1979 a young cow which had entered the park in the north, possibly from Zimbabwe, was captured and released west of Skukuza.

From 1980 to 1982 an additional 33 black rhino from Natal and two from the Addo Elephant National Park were relocated in the Kruger Park. They were released beside the Lubyelubye Spruit near Lower Sabie, beside the Sweni Spruit and at Kumana in the central district. A black rhino bull, possibly also originally from Zimbabwe, were captured in the vicinity of Pafuri and released at Kumana.

In 1989 Kwazulu's nature conservation department donated 10 black rhino to the Kruger National Park on a loan basis. The rhino were captured in the Ndumu Game Reserve in an area east of the Pongola River where there was thought to be a problem with poaching. The 10 rhino were released at Leeu Pan near Tshokwane and are being kept in trust for Kwazulu.

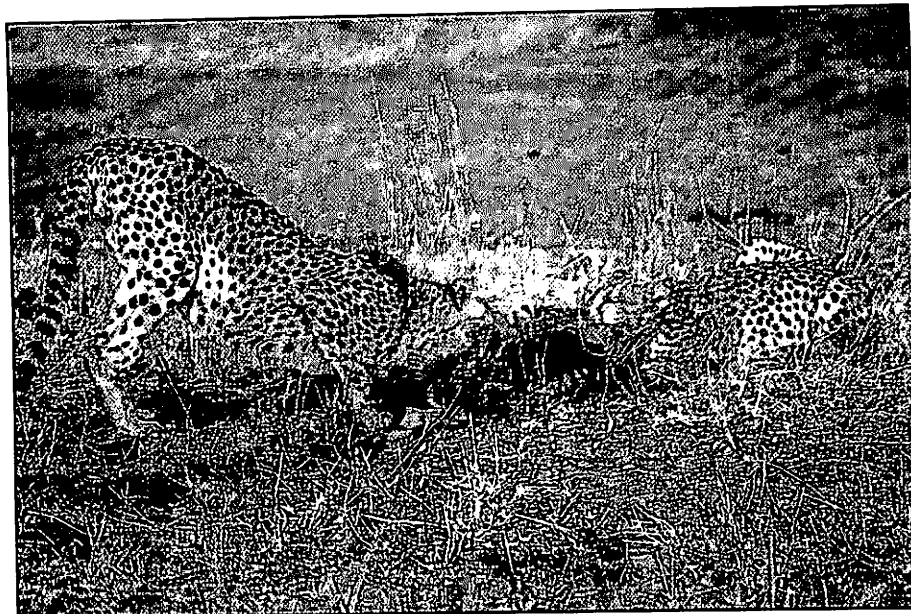
Although it is very difficult to count black rhino from the air, they seem to be doing well. An area west of Skukuza is investigated thoroughly by helicopter every year and a photo library is built up of the big rhinos in the area. The growth of this subpopulation is very healthy. The black rhino population of the Kruger Park is currently estimated at between 220 and 230. If one takes into consideration that the park can accommodate approximately 3 000 black rhino, this population is rather small, and an attempt must be made to further supplement the population.

With the return of the Lichtenstein's hartebeest to the Kruger National Park, the National Parks Board has re-established in the park the last big game species to have died out in the Lowveld.

In 1985, six of these animals were captured in Malawi and relocated in the Nwashitsumbe camp in the north of the Kruger Park. In 1986 an additional 15 Lichtensteins were relocated in the park. Of these, nine were also put in the Nwashitsumbe camp and the other six in the Hlangwine camp at Pretoriuskop.

Over the past few years 65 Lichtenstein's hartebeest have already been released from the Nwashitsumbe camp. There is still a breeding herd of 24 in the camp at the moment. There are more than 40 animals in the Hlangwine camp at present and the first group will be released later in 1994.

The relocation of an antelope species is a long process, because these animals are released in a strange environment and they are also very susceptible to predation. That is why as large a group of animals as possible is released at a time.



In the late sixties 34 cheetahs were exchanged for elephant calves and Burchell's zebra. Photos: Danie Pienaar.

The Kruger Park's roan antelope population was severely depleted as a result of droughts and an anthrax epidemic in the late sixties and early seventies. That is when it was decided to supplement the small population in the south of the park, because this area is free of anthrax. Twelve animals from Zimbabwe were then released in the Hlangwini camp near Pretoriuskop. The animals did not adapt to their new environment very well, though, as a result of problems with ticks in the long grasslands and the roan antelope population in the south of the park has remained small.

Roan antelope were also relocated in the vicinity of Rietpan in the Central District in 1984. From 1974 to 1976, 370 mountain reedbuck were brought to the Kruger Park from the Mountain Zebra National Park and released at Stolznek in the Malelane area. At present the mountain reedbuck population in this area is healthy and the animals are seen regularly.

In 1978, 20 grey rhebok were brought to the Kruger Park from the Golden Gate Highlands National Park and released on the Khandizwe plateau west of Malelane. Suitable habitats for grey rhebok are very limited and it is doubtful whether these animals would be able to survive anywhere else.

In 1962, 29 oribi were captured on farms in the vicinity of Badplaas and released in the Fayi rhino camp at Pretoriuskop, yet without any success. During the same operation, an aardwolf was also caught, which was released near Pretoriuskop. In 1972 and 1973, 98 oribi were captured in the vicinity of Amsterdam and Badplaas and released near Pretoriuskop and Stolznek. These tiny antelope did not adapt very well, though, due to a shortage of suitable Highveld grass plains and the veld-burning regimes which were applied in the Kruger Park.

In 1979, three sunis were released from Natal in the Punda Maria area, and another four in 1982. In 1989, 20 sunis were brought to the holding camps at Skukuza from Natal and nine from the De Wildt breeding station. The animals did not do very well in captivity, though.

In 1972, 27 red duikers were captured at Mariepskop. Twelve were released at Shabinkop, nine at Newukop and four alongside the Sabie River. In 1981 an additional 21 antelope were released between the Sabie and the Sand rivers east of Skukuza.

In 1980, 21 nyalas were brought to the Kruger

Park from Natal and released alongside the Sabie River, east of Skukuza. These animals are regularly seen from the tar road between Skukuza and Lower Sabie.

In 1971, 27 eland were brought to Kruger from the Addo Elephant National Park, and an additional six came from the Mountain Zebra National Park in 1972. The animals were all released in the Hlangwini camp near Pretoriuskop. The eland were very vulnerable to the high tick counts in the camp, though, and few calves were raised. They were thus all released in the surrounding area. Their numbers were later supplemented by a few adult bulls from the northern plains.

In 1970, 19 sable antelope were brought to the north of the Kruger Park from the Crocodile Valley Estates near Hoedspruit. Eleven of the animals were released in the Nwashitsumbe camp in the north. This herd bred well and 64 animals were released from the camp in 1976.

From 1982 to 1988, 95 samango monkeys were also brought to the park from the Entabeni forestry station near Louis Trichardt. These animals cause problems in the forestry plantations by eating the growth points of the young trees. All the monkeys were released alongside the Luvuvhu River in the north, and are sometimes seen in the Pafuri area.

In 1968 and 1969, 34 cheetah were brought to the Kruger Park from Namibia. These animals were exchanged for elephant calves and zebra and were released in the Tshokwane, Crocodile Bridge and Malelane areas.

It is evident that the relocation of some animal species in the Kruger National Park is conducted with great success, while others struggle to adapt. Suitable habitats play a very important role in a successful relocation programme. Nowadays the Kruger Park's boundaries are fenced and the human population around the Kruger Park has shown a marked increase in numbers – particularly in the west and south. Should an animal species die out in the park now, the chances are very slim that it would ever be able to recolonise the area in a natural manner. This is an important fact to bear in mind in the management especially of the rarer species of game.