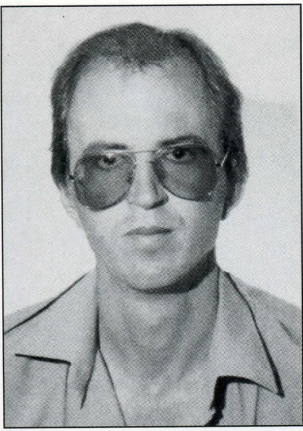


RHINOCEROS CONSERVATION *in Namibia*

BY K. PETER ERB

OF the four recognised extant black rhino subspecies *Diceros bicornis bicornis* occurs in Namibia, representing 97 percent of the world population and the only viable population of this subspecies. This subspecies is endemic to the southwest dry biome and the southern edge of the southern savanna biome.



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MOST of Namibia's black rhino population is found in the Etosha National Park. About 26 percent occur on communal state land and small populations occur in Waterberg Plateau Park, Hardap Game Reserve and the Mangetti Game Camp. Two small populations of black rhino were recently established on private land.

Namibia also has a small population of white rhino (*Ceratotherium simum*). White rhino occur in Waterberg Plateau Park, Etosha National Park and on private ranches.

PAST STATUS OF RHINOCEROS IN NAMIBIA

Historically black rhino in Namibia only occurred in the area west of the 100 mm isohyet and areas with surface water in the east. There is no way of determining past population density. Recent tendencies indicate that a chronic population decrease, which started in the 18th century, has probably only been halted since the mid-1980s.

In the past white rhino were sometimes confused with black rhino. Enough evidence exists, however, to prove that white rhino had occurred over large parts of the country but became extinct in Namibia before 1900. According to early distribution figures in Namibia and north Africa, white rhino were not limited to the higher rainfall areas. The species could have occurred wherever it had access to water, short grasslands and thickets for shade and cover. The highest densities probably occurred in the northeast of the country, especially in the Grootfontein district and the Caprivi Region.

The gregarious white rhino were exterminated rapidly as they are less aggressive and occur in more accessible habitat than black

rhino. The last white rhino was shot either in the northern Kunene Region or in Caprivi.

PRESENT STATUS

Besides in the four game reserves, black rhino are found in the districts of Brandberg, Khorixas, Sesfontein and Opuwo in the Kunene Region. Two small groups have recently been introduced onto private land under the custodianship scheme. Under this project suitable landowners are identified by the Ministry of Environment and Tourism and a breeding group of rhino is translocated onto their land. The farmers are responsible for protecting the rhino. They have the benefit of having the animals on their property for non-consumptive use, e.g. tourism. The rhino, their offspring and all products remain State property.

Although not endangered internationally, the white rhino population in Namibia is very small, numbering less than 100 animals. The species was re-introduced into the Waterberg Plateau Park and on private farms with animals from Natal and, in 1990 and 1995, from the Kruger National Park in South Africa.

Two small founder populations of white rhino were reintroduced into the Etosha National Park. There are more than 1 000 square kilometres of suitable white rhino habitat in the area surrounding Dungaries and in the sandveld north of Namutoni.

The drastic decline of rhino populations in Africa is well known and without doubt the result of poaching for the horn. The southern African region will experience increasing poaching pressure as populations elsewhere are exterminated. Established conservation measures, such as the erection of fences and surveillance by anti-poaching units, have been ineffective in preventing the



A black rhino and calf near Wereldsend in the Kunene Region. Namibia's rhino success story has resulted from dedicated team work involving Ministry officials, NGOs and community game guards.

Jen and Des Bartlett

decline of the African rhino elsewhere. Even the exceptional measures applied in Kenya and Zimbabwe have shown limited success. That both species enjoy the highest conservation status in Namibia is no safeguard. A new and innovative approach to active management is urgently required.

Both black and white rhino were designated specially protected game in 1975. The Nature Conservation Ordinance (Ordinance 4 of 1975) controls all aspects of possession, transport, sale, capture, hunting and disturbance in game reserves of rhino. Other aspects are also covered by veterinary legislation. A fine of N\$200 000 or 20 years imprisonment can be imposed for the possession of and dealing in rhino products. No minimum fines are provided for as yet.

On communal state land in the Kunene Region, the uncontrolled movement of people and stock into areas previously utilised by game only, has compounded problems such as over-utilisation of extremely arid areas. This has forced the free roaming rhino to move from their home ranges. Two rhino died in the 1992 drought due to competition with domestic stock which was moved into western areas in search of grazing.

Several attempts to create a conservation area in Kunene that would at least include the main rhino concentrations have failed, mainly due to political reasons and the lack of a formal land use policy.

MANAGEMENT

The African Rhino Specialist Group (ARSG) of the IUCN advocates that an active and intensive management policy regarding rhino should supplement the existing conservation measures and in some cases replace them, in order to conserve a long-term viable population in natural habitats.

The conservation goals of the Ministry of Environment and Tourism with regard to black and white rhino are aimed at:

- establishing a long-term viable population of at least 2 000 black and 500 white rhino in suitable habitat;
- allowing sustainable utilisation of black and white rhino within the CITES regulations;
- developing a national rhino conservation plan, including an annual action plan and research projects to cover actions such as dehorning, vaccination, translocation and sale of live animals. This should as far as possible be in cooperation with regional and international organisations.

Active rhino conservation started in the mid-1960s in Namibia with the initiation of a project aimed at establishing the status of the black rhino and to translocate splinter groups from farming areas into Etosha National Park. Between 1967 and 1977, 56 rhino were successfully moved to Etosha. Apart from these rhino, 42 were translocated inside Etosha



Ginger Mauney

between 1978 and 1989 to disperse the rhino away from the initial release sites.

An intensive monitoring and counting programme was initiated in the 1980s. Rhinos were photographed and catalogued to allow individual identification, which today has become a common practise. To combat sporadic poaching in Etosha, Waterberg and Kunene, a Wildlife Protection Services Unit (anti-poaching section) was instituted in 1987. This supplemented ongoing monitoring, law enforcement activities and extension work by government conservation staff and NGOs in the field.

Namibia has drawn-up a detailed National Conservation Plan, which is reviewed regularly and updated. This forms the basis of a short-term action plan for rhino management. In 1989 and 1991 certain subgroups in

To deter would-be poachers, Namibia has taken the drastic step of de-horning rhinos which occur in vulnerable areas.



Olivia Forge

Namibia's white rhino were exterminated before 1900, but they have recently been re-introduced into Etosha and Waterberg. This animal is being released by the Ministry's Game Capture team.

the Kunene Region were de-horned. This operation was 100 percent successful.

At national level, the six-person Rhino Advisory Committee advises the management of the Ministry on rhino issues. An experienced game capture unit and wildlife veterinarians have established routine immobilisation procedures with low mortality risks, for translocation, veterinary treatment, and research of rhino.

Consultations with people living near rhino populations are essential to plan and implement management actions aimed at rhino conservation. The rights of the communities in conflict with rhinos have to be recognised, as well as their aspirations to benefit materially or financially from the sustainable use of rhinos and other wildlife.

ACHIEVING CONSERVATION GOALS

At present only the Etosha National Park, Waterberg Plateau Park, Hardap Game Reserve and sections of the Namib-Naukluft Park are suited as long-term rhino sanctuaries. Together these can accommodate only 630 individuals. Through infrastructure improvements this could be increased to 1 050 black rhino. There are currently no rhino in the Namib-Naukluft, where aridity is a problem. The biggest danger in Etosha is poaching. The other parks are too small, less than 420 square kilometres, to accommodate large numbers of rhino.

Although about 15 percent (or 123 000 square kilometre) of the surface area of Namibia enjoys some form of conservation status, only 2,4 percent (or 19 700 square kilometres) is suitable for rhino at this stage. Areas with the highest potential to establish long-term viable white rhino populations are the eastern conservation areas of Khaudum with a surface area of 3 841 square kilometres, Mangetti (480 square km), Mahango (244 square km) and Mudumu (1 009 square km). The Kunene, Hobatere Game Park and the Mangetti Game Camp, all communal state land, include good rhino habitat but have no formal conservation status. Together these three areas could accommodate an additional 300 black rhino.

Several suitable farms, in terms of habitat, security and size, for both white and black rhino exist in Namibia. White rhino bought from South Africa for game farms are privately owned. As the Ministry of Environment and Tourism has no jurisdiction over these white rhino, it is seeking ways to institute joint security and monitoring operations with private landowners.

To achieve the primary goal of the conservation plan, local populations with a slow growth rate must be stimulated to be more productive. Not one of the existing populations has reached a maximum potential size. The distribution of the rhino in Namibia is very uneven. Some groups may well have



*A black rhino and her sub-adult calf in Etosha. Namibia has the only viable population of the rare sub-species *Diceros bicornis bicornis*.*

attained preferred management densities. This could explain why some groups increase at a slower rate than others.

Stratification of the different groups and a flexible management policy are needed to manage each group correctly.

In summary, a national black rhino population of about 2 000 individuals in some 22 populations on about 9 percent of Namibia's surface area is theoretically possible. At the same time 885 white rhino could be accommodated in 17 populations. To achieve this goal, however, major infrastructural and management improvements need to be made in existing conservation areas. All potentially suitable game farms need to be identified, prepared, and stocked with rhino.

USE OF RHINO IN NAMIBIA

Tourism, which as elsewhere in Africa, is directly related to wildlife, is one of the fastest growing foreign exchange earners. Rhino is one of the "Big Five" and as such is

a big tourist attraction. Existing populations in game reserves are used as donor populations to stock other areas. The trade of live rhino should become more important as conserving the species succeeds.

Consumptive use of white rhino on commercial farmland is only desirable if minimum population sizes exceed 10 individuals and in the interest of genetic diversity, only the correct animals are removed.

Namibian conservation authorities do not support the destruction of rhino products as a solution to the problem of illegal trade. Acceptable alternatives have to be sought at international forums such as CITES. The Ministry of Environment and Tourism believes that rhino horn, as a natural resource, has a value which cannot simply be ignored. In view of possible legal and orderly long-term trade in rhino products, horns in the State's possession and those from any future mortalities and dehorning will not be destroyed.