

**South Africa (Mike Knight)****Rhino population sizes & trends**

Table 1. Rhinoceros populations in South Africa for 1999 and 2000.

Species/ ecotype	1999			2000		
	State	Private	Total	State	Private	Total
<i>D. b. minor</i>	946	54	1000	NA	NA	NA
<i>D. b. bicornis</i>	32	10	42	32	10	42
<i>D. b. michaeli</i>	20	12	32	13	20	33
Total (black rhinos)			<b>1074</b>			
<i>C. s. simum</i>	7743	2011	<b>9751</b>	.....	.....	.....

By 1999 the South African black rhino population had increased to 1074 (1271 if probables from the KNP population are included). With the inclusion of KNP probables, the population would have increased by 7.5% since 1997 (population = 1100). The actual *in situ* populations of *D.b.bicornis*, *D. b. minor* and *D. b. michaeli* populations have increased by 3.0, 5.6 and -1.1 %, respectively since 1995. The radical decline in the *D. b. michaeli* population growth rate during this period results from translocations out of the Addo population to East Africa and zoos. Accounting for the introduced population of 8 *D.b.bicornis* onto private land reduces the actual growth rate of this ecotype to 3.0%. Without the recent 8 deaths of animals due to elephant, new habitat and disease the population would have increased at a healthy 7.0%. The temporary stagnation of the *D. b. bicornis* in the country has resulted from a total of 8 deaths over the last three years (five from introductions and three from *Babesiosis*).

The *D. b. minor* metapopulation is showing particularly varied results with the important populations in Hluhluwe-Umfolozi Park (HUP) and Ithala Game Reserve, as well as smaller populations in Ndumu and Umkhuzi Game Reserves showing relatively poor recruitment (< 5 % since 1997). This may reflect the fact that the populations have either exceeded their ecological carrying capacities or reflect as management maintain a growth rate expected for a free-ranging large population in constant contact with large predators. None-the-less the possible need to reduce these populations to see if growth can be stimulated should be considered has been debated at the 2000 AfRSG and RMG meetings. During 2000 another private property in the Eastern Cape purchased black rhinos, increasing the number of private landowners to 9.

Since 1997 the South African white rhino population has increased by 10.6% to 9754. A minimum of 2011 (22%) was located on private property, an increase of 7.1% from the 1740 in 1997. However, the actual number of private landowners has in fact declined by 1 to 164 (14 new populations established and 14 (6 sold, 2 not traced, 2 incorporated in neighbouring properties, & 4 moved to existing populations) since the 1997 survey. The number of key (>50 individuals) and important (>20 individuals) properties numbered 3 and 13 in 1999, similar to the 2 and 14 noted in 1997. On the whole the sex ratio in favour of females (1:1.5) in the private white rhino population structure is acceptable, as is the 29% subadult component. The number of state reserves with white rhino has increased from 34 to 39 since 1997, seven of which are either Key 1 or 2 populations. The Kruger NP population was estimated to be 5073 animals (the lower 95% confidence estimate) in 1999, making it 52% of the total South African population.

**National rhino initiatives & problems****The Rhino Management Group (RMG)**

Since March 2000, the RMG (which consists of representatives from the nine provincial conservation organisations, South African National Parks (SANP), private land owners (AROA), a number of rhino experts, representation from Namibia and Swaziland) has met once in October 2000. This group continues to prove effective in information sharing and consolidation of population status information. The status reports have become a crucially important management tool in gauging how well our diverse populations in different habitats are fairing. Furthermore, it has been instrumental in creating a unity towards rhino conservation. Important milestones at the October meeting included the

participation of a representative from the Zimbabwe Department of National Parks & Wildlife. This in itself is expected to further enhance regional co-operation in the management of rhinos.

#### Utilisation of surplus black rhino males

A questionnaire survey was distributed amongst the South African conservation fraternity, private landowners and some NGOs in December 1999 to assess their opinions as to the sustainable use options for surplus black rhino males. The notion of trophy hunting of these males was welcomed by most conservation organisations and the private ranchers, but rejected by welfare groups. The RMG recommended that old post-reproductive bulls should be made available for trophy hunting with a number of provisos.

#### Private rhino land-owners (AROA)

The South African private rhino land-owners association (AROA) is apparently going through a rather inactive phase. It will need to be revitalised to attend to important issues associated with registering white rhino hunting records, population numbers, and private rhino horn stocks if South Africa is to make progress towards developing a proposal around the sustainable use of rhino horn. The once active Rhino & Elephant Foundation (REF) is in a similar situation having lost its credibility with the Tuli elephant debacle.

#### Elephant induced white rhino mortalities

Pilanesberg NP and the Hluhluwe-Umfolozi Park (HUP) introduced adult elephant bulls to reduce the losses of white rhinos to delinquent elephant bulls. It appears to have so far worked in Pilanesberg NP.

#### Concern as to the recommended 5% growth rate for black rhino population

Concern has been expressed with the 5% growth rate as recommended by the RMG. A number of important *D. b. minor* populations in KwaZulu-Natal have been performing less than this. Management argue that this does not reflect a population at carrying capacity but one impacted by large carnivores or some other factor. Records from KNP and other parks with lions do not substantiate this argument. Plans to hold a workshop to clarify the matter are planned.

#### Gaza/Kruger/Gonarezhou Trans Frontier Conservation Area

Progress towards creating this 98 000 km<sup>2</sup> conservation giant was taken further in the interim period with the signing of the international agreement. If this can come to reality, it could potentially be the most important rhino conservation area in Africa. Concerns as to the safety of the large rhino populations in the KNP are of concern as the park expands.

#### *D. b. michaeli* population

A further seven *D. b. michaeli* were removed from Addo to the private reserve on which the population is being housed. A further four animals are to be translocated from Addo to Mkomazi Game Reserve in 2001 leaving only five *D. b. michaeli* in separated sections of the park. This last group will be removed in later 2001 making Addo an entirely *D. b. bicornis* park. The whole process to replace the *D. b. michaeli* with *D. b. bicornis* has taken about three years to implement. The introduction of the *D. b. michaeli* zoo-born adult male to the Addo Elephant NP has been a success with him having now fathered two calves thus increasing the genetic diversity of this population.

#### The Great Fish River Reserve

This reserve received a further 20 black rhino this year bringing their total to 67, making them the fourth largest population of black rhino in the country.

#### Two *D. b. minor* to Liwonde NP

A further two (1.1) animals were successfully introduced to the 44 km<sup>2</sup> large sanctuary in the Malawi park. The total number of animals is now 7.

#### Loss of animals to *Babesia*

A total of three *D. b. bicornis* in the main elephant section of Addo Elephant National Park were lost to *Babesia* infection in late 2000. The animals appear to have succumbed to this parasite as a result of a

combination of dry conditions and stress induced by high elephant densities on top of their possible lack of immunity to this disease not recorded in this arid adapted ecotype.

#### Land expansions

The Marakele, Karoo and Addo Elephant National Parks continue to be expanded. Marakele National Park has had another 20 000 ha of important lowland habitat added to the park increasing this parks potential to carry more black rhino.

#### Training and ID manuals

The training manuals for rhino identification for field staff have been updated and distributed to local conservation organisations.

#### Budget cuts

Budget cuts to conservation organisations continue to plague the conservation activities of these organisations. This is having substantial negative affects on rhino monitoring and general park management. Some of the hardest hit provinces include the Northern, and Eastern Cape Provinces.

Damages as a result of the 2000 floods in the Kruger NP are estimated at R70m alone to bulk infrastructure. The park and organisation experienced a loss in revenue from its three main camps for three months during this period, which in turn has seriously affected cash flow within SANP.

#### White rhino to Botswana

Plans are in progress to provide 20 white rhino (10 from North West Parks and 10 from SANP) to Botswana in exchange for roan antelope.

#### White rhino conservation strategy

The white rhino conservation strategy for South Africa, drafted by the RMG, was adopted nationally.

#### **Illegal trade activities**

Table 2. Total number of rhinos (black (bl) & white (wh)) known to have been poached in South African reserves since 1990.

Year	No. rhino (wh, bl)
1990	8
1991	5
1992	15
1993	13
1994	26
1995	10
1996	6
1997	5 (5,0)
1998	11 (11,0)
1999	11 (11,1)

The number of rhino poached in South Africa has marginally increased from 5 in 1997 to 11 in 1999 on state properties. This included a single black rhino shot in KwaZulu-Natal reserves, the first in many years. Poaching of white rhino on private land has increased from two to 12 in the same period. In the last three years there have been 30 incidents of illegal trade in rhino parts. There appears to be an indication of an increase in rhino poaching but a decrease in elephant poaching. The unstable Zimbabwe situation is of concern.

The restructuring of the Endangered Species Protection Unit (ESPU) is also of concern with a lot of their functions being taken up by Provincial structures. The poor state of affairs regarding a number of the latter is of concern. In the light of the above, there is a need to resurrect the Rhino and Elephant Specialist Group (RESG) to enhance security and information transfer at the provincial and national levels.

### **Future challenges**

- Survival of the conservation organisations in the face of decreasing operational budgets.
- Enhance the population growth rate of flagging *D. b. minor* populations and boost those able to support larger numbers, such as the KNP.
- Increase support for other conservation initiatives in South Africa and the subregion.
- Increase community involvement in rhino conservation.

### **Discussion**

Dr Cumming recommended that the risks of establishing new populations be assessed relative to the risks of leaving rhinos where they are. When asked by Mr Daconto about community-rhino issues in RSA, Dr Knight said that RSA needed to look at introducing rhinos into communal areas. There were some initiatives. Communities have not owned rhinos in RSA to date. Kenyans have some interesting examples. Mr du Toit recommended improved veterinary coordination and situation reporting within SADC programme, highlighting alarming disease problems from Ngorongoro and Addo NP, including *D.b.bicornis*.

### **Swaziland (Ted Reilly)**

#### **Introduction**

Swaziland's rhino populations continue to flourish. Breeding levels of both black and white rhinos remain satisfactory to excellent, and poaching of rhinos remains nil since December 1992 when Swaziland's last rhino poaching incident occurred. There have been alarm calls from time to time when informer reports of horn contracts being made have necessitated counter measures being taken. Reports of horn trading have also come to hand, but in each case a rhino count on the ground dispelled the possibility of the horns being from Swazi rhinos. To pre-empt the possible loss of rhinos, we offered a horn on the black market when informers revealed a killing contract, and though this exercise excited some response from the Swazi underworld, the final result was that the purchase of this horn was considered too risky to be concluded in Swaziland, and so, after several months of cat and mouse encounters with potential buyers, the deal fell through. It is rewarding that in discussion much reference was made to the Game Act and the Rangers who apply it so thoroughly, leaving no doubt that the severity of the penalties of the Act and its application presents a very daunting risk to would be poachers and traffickers.

#### **Rhino Numbers**

Because there is still interest in illegal horn, the numbers of rhinos in Swaziland remain classified information.

#### **Rhino killings by elephants**

We thought we had escaped the traumas of rhino losses by elephants experienced by other Parks. But sadly this was not to be. A bull elephant of about 20 years of age – a well grown bull with very promising “tusker” values was seen by tourists attacking and killing a white rhino cow with calf at foot. Ground evidence showed it as having been a vicious attack. Shortly after this a lone rhino calf was seen and this prompted a thorough search, which resulted in another cow being found dead and gored all over. The calf too had been injured. Then the following morning in the early hours rhino screams (there is no other word to describe the sound) attracted rangers to a spot where another cow was found dead. All of these rhinos were highly productive cows – in calf with calves at foot. The three calves all succumbed to their injuries, denoting a final tally of nine rhino losses in 24 hours! The decision to destroy the elephant was not an easy one to take for he was a placid beast with a very good nature, and totally tolerant of people. A few days later another bull elephant of approximately the same age was seen chasing a black rhino and so he too was shot. A third slightly younger bull elephant was also shot after he had shown signs of rhino aggression.

We have, for the time being anyway, determined to eliminate elephant bulls at the age of 18 years. In reaching this decision consideration was given to the fact that the elephants would still breed on. Several calves have been born of elephants mating at 14 years, so elimination of these bulls would not mean a non-viable population as regards breeding. What it will mean is that no tusker