

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

development, which has enormous tourism values, would happen. Until another solution emerges this is the current policy in place in Swaziland where elephants co-habit with rhinos. We simply cannot afford to risk more rhino losses.

Many questions arise. Are these mortalities not natural happenings? Much has been said of juvenile delinquency of orphaned elephants in the absence of parental guidance. But there are cases of elephant/rhino conflicts and death in the early 1960's in the Kruger National Park, after rhinos were first relocated from Zululand to the Park, where the full social structure of the elephant population was intact. How many more deaths went undiscovered in such a large area at a time when field staff were fewer and resources less? Now that elephant and rhino have been brought together in many smaller places where monitoring is easier – making such conflicts more visible – is this not perhaps the reason why attention is drawn to this “recently discovered new happening”? All animals are individuals and have their own individual temperaments and dispositions. Like people, there are placid ones, aggressive ones, tolerant ones, impatient ones, and so on. Is it not possible that elimination of rhino-aggressive individuals would solve or partly solve the continuation of this problem? Has the reported success of introducing adult animals to suppress young maturing bulls had enough time to have been fully tested as a solution? These are questions the future will in time unfold. To provide tourism with “tuskers” would castration not curtail aggression? As controversial as this might be, it is also a question to be considered along with contraception.

Interestingly Rock hyrax which, we are told, are the closest living relatives of the elephant, show similar behaviour during mating time. The males become extremely aggressive, even to people, though here too there are differences among individuals.

Weaner removal of white rhino

Raw experience has shown that white rhinos are at their most vulnerable between the time when they are expelled and weaned by the dams in favour of new born calves, and the time when they become re-united again some three months later. We have experienced several losses during these periods over the years, and invariably the losses were female. To overcome this we have strategised a policy of weaner removal from the population of white rhino and relocated them to a “mature bull-free” environment, after boma confinement for 24 hours to allow for recovery from the immobilants. This, in line with our stated aim to maximize propagation of rhinos to distributable numbers, has worked well for us.

Surplus white rhino bulls

Specific individual surplus bulls in our small areas remain a problem for us as they continue to be a major cause of injury and death. The option to remove weaners was chosen over the removal of these bulls because Swaziland's rhinos are considered to be Appendix I animals, whose trade value is severely curtailed because they may not be resold and no one will pay reasonable market prices if this investment is not redeemable. However, contrary to the initial belief that Swaziland's adult rhinos are all Appendix I animals, they hold, we are told, pre-convention status which allows for trading without restriction on resale, thus opening them to a wider market. This will temporarily relieve us from some of the tensions we have had to live with. But post-convention born animals will revert to Appendix I, which revives the problem. Swaziland will therefore consider applying for Appendix II classification for her white rhino population.

Productivity of rhino cows

Eight white rhino calves have been born since February 2000, only one of which is female. One black rhino was born last week but its sex has not yet been determined. One black rhino female acquired from Natal in 1995 and who is now 12 years old has never calved, strengthening a growing belief that she is a queen. All other female rhinos that are capable of bearing are productive and have calves at foot. This is true of both species of rhinos in Swaziland. Swaziland's rhino populations therefore continue to be optimally productive.

Manipulated use of habitat

To the extent that it has been possible to assess, in view of the last two seasons being excessively wet, the water reticulation development at Mkhaya is promisingly functional. This development was

sponsored by HRH Prince Bernhard of the Netherlands, who piloted an appeal through WWF Netherlands. It is aimed at servicing the Park with water in the dry season in a way that enables enforced rotation of animals, whose dependence on water dictates their movements. It is a switch on/switch off system, which provides several options to water within cells into which the park is divided. Six cells cover the park and utilization of one or two cells being serviced with water assures utilization by turning off the water to the remaining cells. When the habitat of the cells in use is considered sufficiently utilized by management the water in an adjoining cell is turned on for a week or so before the water in the cell in use is closed off – thus forcing rotation. This of course can only happen in dry times when surface storm water does not cover the veld, causing general dispersal of game over the whole park. With black rhinos, based on the premise that a dominant bull cannot be in two places at once, it gives subordinate or incompatible animals other water and wallowing options, and reduces conflict by providing alternative water points.

One danger we have been faced with was contamination at the source of water, which is pumped from the sand bed of a river. Somehow *Salmonella* entered the system and cost us a rhino, so that aspect must be completely managed. The real value of this development will be evident in the next dry cycle. The water holes are sunken concrete troughs with water delivery controlled by a ball valve. This is adjusted to allow a trickle of water out of the drinking trough and into a natural pan to provide wallowing possibilities. Where possible, all water troughs are positioned alongside natural seasonal pans into which they can be made to overflow.

Expansion of Mkhaya

After a visit by HRH Prince Bernhard of the Netherlands to Swaziland in 1998, His Royal Highness enabled the expansion of Mkhaya by 20%. This very generous contribution of land was from the Prince's personal resources and amounts to the most substantial single contribution by any one person to Swazi Nature conservation. On a subsequent visit to Swaziland in December 1999 HRH Prince Bernhard bestowed upon King Mswati III the honour of his Golden Ark award for our King's contribution to Nature conservation, and for the unprecedented support he gave his Rangers during crisis times. Our Head of State is the youngest ever recipient of this most prestigious award.

Correction of a record

Last year Swaziland was improperly represented at the Stakeholders Planning Workshop held in Johannesburg on 6 – 7 March. As a consequence some of the information given in the paper on Swaziland's rhino position is incorrectly stated.

The reality is that, though Mlawula Nature Reserve was the recipient of a gift of 16 white rhino by Big Game Parks (BGP) before the rhino war of 1988-92, the close of that war left not a single rhino alive on Mlawula. The 16 rhinos, which had been placed on Mlawula Nature Reserve by BGP, had satisfactorily increased to 27 resident animals on Mlawula when the rhino war started. No prosecutions, nor even arrests, resulted from the loss to poaching of the 27 rhinos on this Reserve, which is governed by the Swaziland National Trust Commission (SNTC).

The three white rhino referred to in the paper were in fact captured on Umbuluzi Estates (adjacent to Mlawula) and taken into a high security area at Hlane Royal National Park. They were vagrants that wandered from Hlane to Umbuluzi to Mlawula and back again. No rhinos, other than those given by Big Game Parks, were ever acquired or re-established by the SNTC in Swaziland. This is not to say that SNTC Reserves (or any other suitable habitats in Swaziland for that matter) will not again qualify for rhino translocations, but BGP would have to be satisfied that security, discipline and sustainability was in place before allocating such vulnerable animals to new pastures.

Top Priorities for Rhino Conservation in Swaziland

1. Expansion of existing rhino range

This must be a top priority because Swaziland's protected areas are small. Not only does this expose them to externalisation, but it also is very restrictive on numbers of animals that can be accommodated. The cost of such expansion cannot be accurately quantified because of the general stability of the land market but it is safe to say that good but non-agricultural habitat would

now not be available at less than R3,000 per hectare. A realistic budget on this item would therefore be R20 million.

2. Introductory boma at Hlane National Park

New bomas are an essential priority at Hlane to accommodate and settle new arrivals of rhinos. The original bomas are 35 years old, are now obsolete and have to be replaced. The cost would be approximately R150,000. It is not wise to free release rhinos into new areas. Rhinos have to be settled in confinement and settle before release to optimise on habitat acceptance, and to minimize chances of accidents and onward flight. Mkhaya has been assessed for carrying capacity for black rhino and we are almost at this figure now, so very soon translocations will be necessary. Therefore this construction of a boma is a top priority in terms of facilitating rhino requirements on the ground.

3. Ground Support for Rangers: Two 4 x 4 vehicles and two motor cycles – a security imperative

The Rangers on the ground are the nucleus around which rhino protection is made possible. Remove the custodians in the bush and their commitment, and no amount of political support will save Africa's rhinos. However it is also true to say that political support for the Rangers is pivotal to their success as custodians. In Swaziland we have both the political support and the commitment of the men at the sharp end in place. The former in the shape of the Head of State, who has taken Nature conservation under his own portfolio, so placing it under the highest authority in the land, and the latter in respect of the Rangers, whose effective law enforcement reputation runs rampant ahead of them. The Rangers however have to be adequately enabled – which is most effectively done by efficiently servicing them with their needs on the ground. Such needs cover a whole spectrum from deliveries of such essentials as food, water and other supplies to their remote pickets and patrolling grounds in the bush, as well as to mobilize them with rapid reaction potential.

The first essential in facilitating the above is a 4x4 Pick-up for each park where rhinos are protected – Hlane and Mkhaya. Two such vehicles at approximately R110,000 each requires R220,000. Motorcycles are used on each park for the cost-effective maintenance of low cost high security discipline and control of the Ranger force. They provide quick cheap access to any point on a troublesome fence line or to spot check reports of rhino sightings. This we have found to be an essential tool in security checks. Two of these machines will cost approximately R40,000.

These then are Swaziland's top rated priorities in her rhino protection and conservation programme. If none of these fall into the scope of donor aid then an additional requirement would be the habitat and carrying capacity assessment of Hlane National Park for black and white rhinos, and the revised assessment of Mkhaya Game Reserve, for the same purpose.

Tanzania (Mathew Maige)

Background

Tanzania is the only East African member state to SADC Regional Programme for Rhino Conservation. The presence of more than three discrete *D.b.minor* populations that need to be quantified in the Selous GR, qualified Tanzania to become one of the countries for inclusion in the programme. Tanzania does not have more than 20 year of active rhino conservation requiring development of special mechanisms for managing the national rhino population. It is probably during the last 10 years that concerted efforts to manage this species have been realized by a few wildlife managers in the country. Due to this reason the country requires a lot more of technical support from SADC Regional members with such technology.

Rhino Population Status

Two black rhino subspecies occur in the country, *D.b.michaeli* in the north covering the Ngorongoro highlands through the Serengeti plains. A re-introduced population of *D.b.michaeli* is located about 200 km East of the Kilimanjaro in a sanctuary within the Mkomazi GR. *D.b.minor* is found in small pockets in the Selous GR and few remaining stragglers in most of the southern highlands. However, the *D.b.minor* population in the Selous remain largely unknown and require concerted effort to