

## **PART II DETAILED COUNTRY REVIEWS**

This part of the report contains the main body of text of all the detailed country reviews, as compiled by the subtask executants, each following the agreed format or terms of reference for the conduct of the reviews (see Summary). There are ten chapters, one for each of the range states. The reviews each contain concept project proposals (in section 6 of each review) that were suggested during the review process either by representatives of the range state rhino management authority, or by SADC consortium members, or by the reviewer concerned. They are arranged in the order in which they were presented in the semester 2 workplan (Section 3.2.2, Tasks 1.2 – 1.4 to 1.2 – 1.13).

### **SOUTH AFRICA (Task 1.2 – 1.4)**

The South African review is divided into two parts: the first part (**A**) is devoted to the areas and rhino populations under the authority of the North West Parks and Tourism Board (NWPTB); the second part (**B**) covers the areas and populations of all the other relevant national and provincial rhino management authorities, including the South African National Parks (SANP), and the KwaZulu-Natal Wildlife (KZNW).

#### **A NORTH WEST PARKS AND TOURISM BOARD**

Review by Keryn Adcock (Area visit: 26 - 29 August, 2000)

##### **1 MECHANISMS FOR PLANNING AND COORDINATING NATIONAL RHINO CONSERVATION EFFORTS**

###### ***1.1 Rhino Management Authority***

North West Parks and Tourism Board (NWPTB, one of the South African provincial conservation agencies)

###### ***1.2 National Rhino Strategy***

The NWPTB follows the Rhino Management Group's Conservation Plan for the Black Rhinoceros in South Africa (Brooks and Adcock 1997)

###### ***1.3 Action Planning***

There is no action plan.

###### ***1.4 Coordination Mechanisms***

Within NWPTB, the coordination of rhino conservation occurs at the management meetings within their individual parks or reserves, and at a higher level at Protected Area Management meetings (PAM). This is attended by the regional Heads, The heads of Park Management, the head of Security, of Human resources and of Ecological Services. The minutes and decisions of this meeting go to the CEO of NWPTB for ratification.

###### ***1.5 Focal Point***

Rusty Husler (Protected Resources Manager) represents NWPTB on the Rhino and Elephant Security Group. He also attends meeting of the KwaZulu-Natal Rhino Security Group. Pieter Nel, (Head Manager: Ecological Services), represent NWPTB on the Rhino Management Group.

## **2 EXISTING MECHANISMS FOR COLLABORATION WITH OTHER RANGE STATES** (Excluding SADC Rhino Programme)

### **2.1 Current Bilateral Arrangements**

NWPTB has ties with Botswana's conservation agency (DWNP). The co-ordination arrangements were originally formalized through high-level bi-lateral agreements at a Ministerial level. The initial dealings involved a donation of 5 white rhino to Khama Rhino Sanctuary (c. 1994). Upon monitoring their progress, a further 3 females were donated to improve the sex ratio and production potential. There are currently 18 white rhino at Khama RS. NWPTB are exporting one black rhino male to Malawi.

### **2.2 Previous Bilateral Arrangements**

The Rhino and Elephant Security Group (RESG) was designed partly to liaise with neighbouring states on common security issues affecting these species. Although the body appears to have currently lost momentum, there are plans to revitalise the RESG, and NWPTB feels this is very important. The funding of SADC representative attendance at RESG meetings is an important need.

## **3 RHINO POPULATION STATUS**

### **3.1 Summary Statistics on rhino numbers, distribution and trends**

NWPTB has rhino in 5 parks.

Madikwe	100 white rhino, +- 23 black rhino
Pilanesberg	280 white rhino, +- 55 black rhino
Borokalalo	33 white rhino
Botsalano	24 white rhino
Mafikeng	25 white rhino

All populations are healthy and productive.

### **3.2 Population monitoring and reporting**

Madikwe rhino are monitored from annual aerial surveys, where all rhino (white and black) encountered are photographed and identified (where possible). Individual rhino histories are updated, and population estimates are made. Black rhino in particular are also monitored during daily field ranger patrols, special rhino patrols and ad-hoc sightings by tour guides from the lodges, and all sightings are added to the history files. Ground monitoring of white rhino is due to start, now that a fair proportion of the population have ID-kits/histories, built up from the aerial work. A special Rhino Monitoring Officer is in charge of coordinating ground rhino patrols.

Pilanesberg: Both white and black rhino are monitored by individual ID methods as for Madikwe. A special Trust fund was set up by Hans Hansen and Hanne Lindemann in Denmark, which provides funds to helicopter/ground survey and ear-notch both white and black rhino as needed. A special Rhino Monitoring Officer is in charge of coordinating ground rhino patrols.

For Borakalalo, Mafikeng and Botsalano, their white rhino are monitored by individual identification from sightings from routine ground patrols (usually dealing with rhino weekly) and those of volunteers (Friends of the "park", honorary officers). Numbers are also counted during annual helicopter game counts.

NWPTB has well-established duties to report annually on all game populations, including rhino, to the provincial auditors (annual game audit report). In addition, detailed reports on the Madikwe and Pilanesberg black rhino populations are provided to the RMG, according to their data report format.

There has been no poaching of rhino in any NWPTB park, thus no arrests or convictions.

### **3.3 Requirements for surveys and monitoring**

Only Madikwe Game Reserve has unfulfilled needs regarding surveys and/or demographic monitoring to improve information on the status of their white rhino population, which is an important population in

AfRSG rating terms. This lack is a however not a definite constraint to the development and implementation of a national rhino conservation strategy and action plan.

They need funding to undertake ear-notching of black rhino calves, but especially of white rhino where the proportion of “clean” (unidentifiable) animals is increasing to exceed 50% of the population.

#### 4 MANPOWER AND OTHER RESOURCES FOR RHINO CONSERVATION

##### 4.1 Anti-poaching resources

Protected Area	Area (km <sup>2</sup> )	Field Rangers	km <sup>2</sup> per Field Ranger	Operating Budget (USD)	Operating Budget (USD) per km <sup>2</sup>	4WD Vehicles	LDVs
Pilanesberg	550		20	ca. 80,000	148	2	1
Madikwe	630		40	ca. 80,000	128	3	0
Mafikeng	48		8				1
Botsalano	48		10				1
Borakalalo	110		20				0
Mean			19.6		138		

Figures given for operating budget in the table above are approximate. Pilanesberg and Madikwe spend ca. R450,000 per year on maintaining their perimeter fences, which form a major barrier to poaching. These electrified fences (ca. 2.4 m high, to keep elephant and lion in), are checked in their entirety every day by private fencing contractors. In addition, parks staff undertake daily fence patrols specifically checking for security breaches that could indicate poaching threats. Other annual expenditure that relates to anti-poaching (not other park activities like capture, burning, erosion control, etc) is estimated as half their field expenditure: This is as follows for Pilanesberg, and is fairly similar for Madikwe:

R 132 000 for transport (km)  
R 25 000 for equipment maintenance  
R 5 000 for subsistence (camping out)  
R 21 000 for uniforms.

Salary levels for scouts and junior officers: total package (incl. Pension/medical aid contributions)

Game Scout (field ranger 1): avg. R44 105 per year  
Corporal (field ranger 2): avg. R51 988 per year  
Sergeant (cadet Ranger): avg. R85 129 per year  
Section Ranger (Warden): avg. R124 509 per year

##### 4.2 Expertise available for specialised aspects of rhino management

**Rhino tracking:** Madikwe and Pilanesberg each have one dedicated rhino monitoring officer. Training and motivation of additional rhino monitoring staff are required in these areas. The other normal game scout staff in all parks has been described as lacking in training and motivation as needed for adequate rhino monitoring. The NWPTB's field staff training division is presently non-operational due to staff retrenchments.

**Capture:** Almost all captures are handled by outside, hired contractors. Budgets for this are assigned by the Park in annual budgeting, or are raised from donating agencies when the need arises. Capture firms used are reliable and experienced

**Veterinary work:** The Board has no in-house veterinarian, and all work is handled reliable and experienced by private veterinarians.

**Ecological evaluations and demographic monitoring:** There is a small team of scientific staff within NWPTB who are adequately qualified to undertake the necessary evaluations and monitoring, and who liase with park management on decision-making. Outside rhino experts are also involved in special rhino monitoring operations in each of Pilanesberg and Madikwe, and provide their professional input as required in their contracts with NWPTB. As the need arises, the advise of outside rhino experts is occasionally requested on specific issues by NWPTB.

### **4.3 Specialised equipment available for rhino management**

Equipment for rhino capture and transport, and helicopter work, is contracted in as needed. Both Madikwe and Pilanesberg have good rhino bomas, and their own rhino crate that can be used to handle say isolated rhino in need of medical attention. The smaller parks do not have bomas.

## **5 PARTICIPATION OF NON-STATE AGENCIES IN RHINO CONSERVATION**

### **5.1 Community Involvement**

There is no direct involvement of communities surrounding parks in rhino conservation as such. However, all parks including Pilanesberg, but especially Madikwe, have active community liaison initiatives. The "Greater Madikwe Situation Assessment Report (Annex 1.12) by B Marobe, gives an idea of the kinds of initiatives, problems and community needs. The main thrust is to use the conservation areas to promote economic / infrastructure development, employment and entrepreneurial opportunities and skills development in communities, and also to thus benefit conservation by gaining political support and funding for the conservation area, and by gaining increased protection from poaching from the support from local people. The document also lists NGOs involved in these community development programmes.

There are tentative plans to provide white rhino to Lebatlane, a small reserve owned by the Bakgatla tribe. These would allow this reserve to generate income from trophy hunting of the rhino.

### **5.2 Local and International NGO Involvement**

A trust fund was established by two Danish ecologists for black rhino monitoring needs, chiefly in Pilanesberg. Since about 1995 this has provided input worth around R30-40 000 per year mainly for annual aerial surveys and ear-notching programmes. Endangered Wildlife Trust has in the past assisted with funding for such activities, and Mazda Wildlife provides the use of a 4x4 vehicle for the duration of the Pilanesberg programme (1-2 months per year).

The Green Trust provided funds (c. R 70 000) for the translocation of 10 black rhino from Umfolozi to Madikwe in 1996. US Fish and Wildlife's Rhino and Tiger Conservation Fund provided some funding for compilation of the Madikwe white rhino identikit and individual histories (c. R12 000).

### **5.3 Private Sector Involvement**

The private lodges within Pilanesberg and Madikwe provide small amounts of support (financial or accommodation) for specific rhino monitoring equipment / activities from time to time. Volunteers from the public such as Friends of Pilanesberg and various honorary officers provide some support through additional patrols and monitoring within the parks.

## **6 PROPOSED PROJECTS**

### **6.1 Security**

- (i) Funding for the Rhino and Elephant Security Group - specifically funds are needed towards the costs of holding regular meetings (accommodation, food), and for transporting delegates from SADC countries to/from such meetings (air tickets).
- (ii) In North West Parks, funding is required for three high-powered transponder readers: One for Madikwe, one for Pilanesberg and one for the Resource Security Officer (for province-wide use). With rhino translocations and ear-notching programmes, a high proportion of rhino in the province are fitted with transponders, as are all horns in storage. High-powered readers are needed to facilitate the tracing of rhino mortalities and horns recovered within parks and the wider province.
- (iii) NWPTB is currently developing its security information system. This will contain GIS-linked information on park and neighbouring features (resource, infrastructure, personnel distributions etc), along with all security incidents. Equipment items such as upgraded computers, and GPS's for officers, printers/plotters, are needed for the major parks.

- (iv) Radio equipment: Funding is needed to get the intra and inter-park “smart trunking” radio system (Q-trunk) fully operational. Specifically, additional masts are needed to provide the required coverage of NW areas.
- (v) Good quality night-vision scopes for weapons and night-vision binoculars are needed for security monitoring after dark. In Madikwe and Pilanesberg.
- (vi) Funds towards major repairs of the Pilanesberg perimeter fence are needed (estimated to cost R3.3. million). This fence was badly damaged in the record floods of late summer, 2000.
- (vii) Funds are desired to purchase 2 “Quad” motorbikes (4-wheel motorbikes) for fenceline patrols (one for Madikwe and one for Pilanesberg).

## **6.2 Rhino Monitoring**

- (i) Running of courses for basic game scout training and rhino monitoring - this is needed for Pilanesberg and Madikwe game scouts. As NWPTB currently lacks training staff, funding may be needed to bring in someone to run the training courses.
- (ii) the Louis Liebenberg -type “Tracker” palmtop systems are needed for game scout patrols, to capture patrol and sighting information in Pilanesberg and Madikwe.
- (iii) Infrared lighting equipment (“black light”) is needed for night time monitoring of rhino e.g. at waterholes. Internet cameras at waterholes could be explored as a monitoring tool.
- (iv) Basic rhino monitoring equipment items such as binoculars, cameras, water bottles, are needed for all rhino parks, but especially Pilanesberg and Madikwe.
- (v) Funding of the costs of carrying out rhino ear-notching programmes is required for Madikwe Game Reserve. (Helicopter hours and drugs for 10-15 rhino per year), to maintain the continuity of the individual ID-based monitoring.
- (vi) The funding of 12% (c. R15 000) of the Madikwe annual game counts is sought. This is estimated as the amount spent on photographing (from the air) and compiling history updates on the individual white and black rhino of Madikwe.
- (vii) Replacement 4x4 vehicle is needed for rhino monitoring officers to conduct rhino monitoring activities in Madikwe.
- (viii) A “bursary” is needed towards the specialized, high-level training of apprentice Tswana rhino monitoring officers for Pilanesberg and Madikwe. This would involve monitoring training, training in computer/database upkeep for rhino data, provision of their equipment, and their education in further in-depth aspects of rhino conservation, attendance at national and international rhino meeting etc.
- (ix) Gus van Dyk is currently working with overseas experts in advanced “radio tracking” systems - specifically those involving military satellite GPS / GIS tracking, and those involving GSM technology. Additional funding is needed to cover the capture-related costs of fitting such devices to rhino in field tests.

## **6.3 Community**

Madikwe Game Reserve has an active, successful community development programme. This could be used as a test case or role model of community conservation links. Funding could be provided to bring community and park representatives from other SADC countries to learn about the Madikwe situation. (This idea could be expanded to actually create a forum or group comprising community representatives around rhino conservation areas, and facilitate their meetings and liaison to exchange ideas and develop new community conservation initiatives involving rhinos).

- (i) Funding is needed for representatives from the Madikwe local communities to visit community conservation initiatives in other SADC countries (e.g. CAMPFIRE, Damaraland).

- (ii) Currently all community conservation in NW is generic, and rhino specifically (on their own) are not used for community development or education, or as an issue requiring community cooperation and support. Some ideas were put forward which could bring rhino more strongly into the picture: Funding could be obtained to develop programmes for bringing community leaders into the parks, (providing food and transport), showing them rhino and rhino monitoring programmes in operation, and educating them on the issues around these animals' threatened status and approaches to their conservation. Funding would also be used to develop audio-visual educational material for such programmes.
- (iii) NW has long had conservation clubs run at the schools, where education and activities around conservation took place, aided by the Board community liaison staff. With staff cutbacks, these have fallen into inactivity. Rhino could act as the focus to revive these in schools in the province. Specifically, funding could go towards educational material on rhino biology, rhino status and the role of conservation areas and communities in their conservation, and towards running inter-school competitions for the clubs (covering art, information posters, essays), providing prizes, and bringing children to parks to learn about rhino and other wildlife in their habitat. This idea could be expanded to other SADC countries with inter-school competitions and liaison developed at this level.

## **7 NATIONAL LEGISLATION AND POLICIES**

### **7.1 Penalties**

For North West province, legislation protecting rhino falls under the NW Parks Board Act of North West Province legislation (Annex 1.13). This reportedly depends on the old acts of the old Bophuthatswana homeland and Transvaal Provincial Administration territories, parts of which now make up North West Province. NWPTB staff have submitted proposals to the North West Province legislature to adopt the national Endangered Species Act (currently under review at a national level), which would then supersede the sections relevant to white and black rhino (among others).

Poaching convictions under this act would comprise the following:

For white rhino:

A fine of up to R 50 000 or imprisonment up to 5 years in the case of a first conviction; or in the case of a second or subsequent conviction, to such imprisonment without the option of a fine.

For black rhino:

In the case of a first conviction, a fine of up to R 100 000 or imprisonment up to 10 years in the case of a first conviction; or in the case of a second or subsequent conviction, to such imprisonment without the option of a fine, not exceeding 15 years.

### **7.2 Ownership of Rhinos**

Ownership of black and white rhinos is permitted in the province (see Part B of South Africa Review).

### **7.3 Hunting and live sales of rhinos**

Hunting of white rhino, and live sales of white and black rhino are permitted in the province. These operate as in the rest of South Africa under Cites restrictions.

## **8 DATA SOURCES**

### **8.1 Names, addresses and contact details of all informants/interviewees**

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## **9 TRADE AND IMPORT/EXPORT OF LIVE RHINOS**

### **9.1 CITES Management Authority**

The National CITES authority in Gauteng is used to handle permits for trophy horn exports / imports, and export of live rhino.

### **9.2 Veterinary Controls**

No information available.

### **9.3 Past Imports and Exports**

To date, NWPTB has exported 8 white rhino to Botswana, and is in the process of exporting 1 black rhino male to Malawi (together with some rhino from South African National Parks).

## **10 HORN STOCKS**

### **10.1 Control, Storage and Identification**

Horn stocks are controlled as required by CITES regulations, as well as the more stringent requirement of the NW auditor general. All NWPTB's horn is sent for storage in a (secret) vault, each horn is implanted with a microchip transponder and has an external numbered tag. All stock is accounted for to date. There is a need to notch both white and black rhino to keep a high proportion of identifiable individuals in the population for adequate monitoring.

### **10.2 Involvement in AfRSG rhino horn fingerprinting project**

NWPTB have provided extensive horn samples for the horn fingerprinting project.