SADC Regional Programme for Rhino Conservation

Meeting of SADC Rhino Range States and Consortium

Maun, Botswana
12-13 March, 2003

Proceedings

COOPERAZIONE ITALIANA
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CESVI cooperazione e sviluppo

IUCN The World Conservation Union

WWF

SPECIES SURVIVAL COMMISSION
AFRICAN RHINO SPECIALIST GROUP

PROJECT KEY DATA

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A INTRODUCTION

Appointed representatives of the rhino management authorities of each of the SADC Rhino Range Sates convened at Maun Lodge, Maun, Botswana (12-13 March 2003), together with representatives of each of the members of the SADC Rhino Consortium (SADC FANR, DGCS (Italian Ministry for Foreign Affairs), IUCN ROSA, WWF SARPO, CESVI and the IUCN/SSC AfRSG). This was the third full meeting of the SADC Rhino Range States and Consortium since the inception of the SADC Regional Programme for Rhino Conservation in September 1999.

The primary objectives of the meeting of the meeting were:

- To review progress of the SADC RPRC to date;

- To present information to SADC rhino range states on current rhino conservation issues and priorities in the SADC region, and discuss regional implications and needs for rhino conservation;

- To present and consider proposals for regional rhino conservation projects (originating from SADC Range States and Consortium Members) for allocation of funding support by the SADC RPRC, and potential implementation in range states during the subsequent two semesters of the programme (semester 9: April to September 2001, semester 10: October 2001 to March 2002) and beyond.

The Range States Meeting, proceedings of which are presented in Section B, was followed by a meeting of the SADC Rhino Consortium where project proposals presented at the Range States meeting were reviewed and screened, and decisions made on allocation of funding support within the remaining three semesters of the currently funded programme.

The day preceding the full range states and consortium meeting (11th March) was used to convene a second meeting of members of the SADC Rhino Recovery Group (Angola, Botswana, Malawi, Mozambique, Tanzania and Zambia). At the end of the Range States meeting, staff of the Botswana DWNP and its collaborating partners made presentations on their reintroduction projects in the north of Botswana.

Participants at the Range States Meeting are listed in Annex A to these proceedings, and the agenda of the meeting is found in Annex B. Copies of all proposals presented at the Range States Meeting (listed in Annex D) have been circulated separately, for the information of range state focal points.

B PROCEEDINGS

1 INTRODUCTION AND PROGRAMME REVIEW

1.1 Welcome and Opening (Manuel Enock – SADC FANR, Giuseppe Daconto – CESVI)

All participants to the meeting were welcomed by The Chair, Mr Enock, on behalf of the SADC secretariat. He presented the apologies of the FANR supervisor, Margaret Nyirenda who was attending the SADC council of ministries. Mr Enock said that since 1999 the SADC rhino programme has become increasingly recognised as regional in scope and impact. Based on sound technical concepts, the programme was consistent with SADC priorities, and was critical for long-term rhino conservation in the region. The SADC region has diverse ecosystems, from arid deserts to tropical forest with high biological diversity, including many endemic threatened or endangered species. The SADC region suffers from socio economic and environmental problems, and SADC was committed to sustainable conservation in use of NR.

Presently SADC was undergoing process of restructuring. The Sector Technical Coordinating Units (STU) concerned with natural resources management were being fused into the FANR, based in Gaborone. Specified by review committee, the restructuring will enable improved coordination, and also avoid wasteful beaurocratic duplication. Full commitment of member states was required, and collaboration, cooperation and communication were essential within existing framework. Invitation to participants had been extended from SADC secretariat, and he thanked participants present for attending. The Botswana government were thanked for hosting. The Italian government, as donors, were thanked for funding support. Mr Enock wished all participants a pleasant stay and fruitful deliberations.

Mr Daconto, representing CESVI welcomed participants to the third regional meeting of range states under the SADC RPRC. The Italian DGCS were not represented due to other commitments, and he conveyed apologies from Rome, but assured participants that progress is being monitored and that the results of the meeting would be carefully reviewed in Rome. Mr Daconto said that SADC was playing key role in programme, and this was the first opportunity for meeting with SADC secretariat. This meeting came at a key moment for programme, with the three-year original programme planning a 2-year extension up to the end of 2004. The meeting was timely, so as to review progress achieved over last year. The programme was keen to obtain feedback from country representatives on the benefits received and in order to advise on the way ahead. Efforts were needed into planning institutional structures to improve regional coordination on rhino conservation, and this would be important for future planning for the remainder of programme. In addition to the key issue if feedback by range states on implementation, there were fundamental issues of institutional sustainability of programme that needed to be addressed, including the lasting impact at national and regional level. Effort had been into national-level structures, and also in supporting regional structures, e.g. RRG. CESVI were very keen to hear views on functioning of long-term programme, as well as the technical and institutional capacity that needed to be addressed. He wished participants a productive meeting.

1.2 Introduction and Objectives of Range States Meeting (Rob Brett – Programme Coordinator)

Dr Brett summarised the objectives of the meeting and the structure of the agenda (Annex B). The first part of the meeting would review of programme activities and progress achieved against programme objectives in the last year. This would be followed by presentations from SADC rhino range states on the status of rhino conservation activity in the respective countries since the last meeting, including feedback on assistance received from the SADC RPRC during this period. For the six RRG range states, which had met the day before the full range states meeting, key points from the presentations given would be provided.

The third part of the meeting would comprise presentations from members of the SADC rhino consortium on current issues of interest for rhino conservation in the region, and this would be followed by a series of

presentations and discussion by participants on two key issues for regional needs for rhino range states: partnerships in rhino conservation, and sustainability of regional rhino conservation programmes. The final session of the range states meeting would be devoted to presentation and justification by range state focal points of new proposals for funding support by the SADC RPRC, which have been submitted by, or with the endorsement of range state rhino management authorities. Proposals would be presented by their proponents (where present), and discussed by all participants prior to review and screening at the meeting of the SADC rhino consortium.

1.3 Review of Progress by SADC RPRC: Overview of Semester 7 Projects (Rob Brett – Programme Coordinator)

Dr Brett summarised the activities of the programme in the last 12 months (semesters 6 and 7). With restricted flow of funding from the Italian DGCS between March and December 2002, programme activity had been reduced. Highlighted project implemented during this period, under the headings of the programme objectives, were as follows:

Institutional arrangements

- Namibia - New Rhino Conservation Strategy drafted (February 2002)
- SADC Rhino Recovery Group (RRG) – Inaugural meeting convened; Terms of Reference developed (Malawi: May 2002)
- Regional Coordination on provision of rhinos for reintroduction projects (e.g. South Africa, Zambia)

Reporting systems and surveys

- Regional – *WILDb* rhino population and monitoring database developed tested in Zimbabwe and Botswana, and upgrade to incorporate RMG population performance indicators (Site version 1.35, National version 1.01)
- Regional – Improving security and management of rhino horn stocks in SADC rhino range states (TRAFFIC)
- Decision support module (database/GIS) for rhino surveys and monitoring (e.g. IPZ areas)

Technical Capacity and Training

- Zimbabwe – Training course for DNPWLM scouts in rhino monitoring techniques (October 2002)
- Namibia – Capacity Building for Rhino Monitoring: Training Needs Assessment for MET field staff
- Regional – Guidelines for Reintroduction Projects;
- Regional – Guidelines for Survey and Recovery of Dispersed Rhinos
- Regional – Development of course and manual for training in scene-of-crime investigation

Community Participation

- Namibia – Study of Biological and Human factors limiting West Kunene black rhino population Tanzania

Provision of Expertise from SADC Region: Evaluations and Assessments

- Swaziland – Expert assessment of black rhino carrying capacity in two rhino reserves (April 2002)

Tools and Technology for rhino conservation

- SADC RMG – *RHINO* population estimation software development
- Regional – Rhino horn finger-printing: development and validation of techniques
- Regional – New technology for rhino monitoring and patrol reporting: GPS data-logging device

Information on recent activities was also presented in the form of tables outlining progress against tasks planned for semester 7 (Annex C – Table 1), the contribution of these tasks to programme activities (Annex C – Table 2).

In semester 7 Dr Brett had circulated questionnaires for structured feedback from range state focal points on the input received from the SADC RPRC and the follow-up activities in progress or in planning, for which further support from the programme would be required. To date, responses had only been received

from Tanzania and Swaziland. During this meeting Dr Brett circulated a list of all programme documents, task reports and software produced to date, and requested each range state focal point to indicate which outputs they would like copies of, and in which format (hard copy and/or CD-ROM). Annotated lists were received from all range state focal points before the end of the meeting.

1.4 Outcome of SADC RRG meeting (11th March 2003) (Roy Bhima – Malawi, SADC RRG Chair)

The current SADC RRG Chair, Dr Bhima, summarised the outcome of the second meeting of the group, held on the previous day (11th March, 2003). The inaugural meeting of the SADC RRG was held in Malawi in May 2002.

Dr Bhima highlighted communication problems which had hindered progress with activities coordinated under the RRG, in particular email communications between his office and the six RRG country representatives. For each of the six RRG countries, the following highlights with their reintroduction or recovery efforts were noted:

- Botswana had successfully carried out the first phase of its reintroduction project for white rhinos in Moremi GR, for which additional training needs had to be identified alongside evaluation of plans for future reintroduction, and rhino management and monitoring.
- Angola had received unconfirmed reports of rhinos from remote areas of former range; an evaluation and planning mission from the SADC RPRC consortium was the key step in developing its rhino conservation programme.
- Malawi continued to manage a small population of black rhinos at Liwonde NP, for which communications with SANP needed to be restored; a management plan for the park was need, incorporating rhino management guidelines developed during the SADC RPRC ecological and institutional evaluation in 2001
- Mozambique required its feasibility study for the reintroduction of rhinos, and targeted training of staff. Recent reports of rhino presence had been noted in Niassa GR. A joint workshop with Angola on rhino reintroduction and rhino programme development was recommended.
- Tanzania had continued with successful monitoring and protection of rhino subpopulations in the Selous GR, and required further training and development of rhino project staff. No remnant black rhino populations were left outside Selous
- Zambia will commence its initial reintroduction of black rhinos from South Africa later in 2003, based on the SADC RPRC feasibility study and ecological evaluation completed in 2001

Four proposals had so far been received by the RRG Chair from RRG countries for funding support in 2003. Following the preliminary workplan agreed in May 2002 meeting, a workplan for the RRG in 2003 was drafted at yesterday's meeting, which would be finalised with inputs received from RRG range states.

2 PRESENTATIONS FROM SADC RHINO RANGE STATES

2.1 SADC RRG Countries

Presentations were given by each RRG country representative during the SADC RRG meeting held on the day previous to the range states meeting. The presentations were summarised during for participants of th range states meeting, and for completeness, the presentations are provided here (as well as in the proceedings of the SADC RRG meeting

2.1.1 Angola (Nkosi Luta Kingengo)

Planning and Coordination

Rhino Management Authority: Instituto de Desenvolvimento Florestal (IDF)
Rhino Strategy conservation (year): to be outlined
Action planned: Information collection on the historical area of distribution
Co-ordinating Committees: not yet instituted
Focal Point for SADC Programme: Nkosi Luta Kingengo, IDF
Alternate Focal Point: Carlos Henrique Mutula, DNAF (Direcção Nacional da Agricultura e Floresta)

Collaboration with other SADC Range States

Commitments to other SADC Range States: Namibia should be approached
Rhino numbers: no information available
Monitoring and reporting: Information from IDF representative in Kuando Kubango Province indicates the occurrence of Black Rhino.
Requirements for survey and Monitoring: Surveys and monitoring required in all historical areas of distribution.

Manpower and Resources for Rhino Conservation

Scout density (General information):
National Level: total of 570 Scouts
Kissama National Park: 20 Scouts (1 per 500 km^2).1, 260 ex-combatants will be admitted as scouts to reinforce the service
Vehicle density: 1 (Kissama National Park)
Operating budget (US$): No specific budget, the budget approved will cover during the year 2003 all activities relating to wildlife and forestry management and preservation.
Salaries ($ p.a.): IDF:
Scout: 900 $/m./a.
Expertise: Several biologists, vets and some IDF staff trained in wildlife management at Mweka College and Mozambique, but no experience with Rhinos.
Equipment: None

Participation in Rhino Conservation

Community: Should be integrated once confirmed the presence of the Rhino in the historical area or reintroduced in one of the National Parks.
NGOs: Kissama Foundation devoted to Kissama NP plan to reintroduce the White rhino in that NP.
Private Sector: ORCA, Lda is devoted to Iona NP plan to reintroduce the Black rhino once their presence in the Park is not confirmed

Legislation for Rhino Conservation

Protected status of rhinos: Rhinos are listed in Appendix I under the Regulamento de Caça(1957) and Decreto Executivo Conjunto nr 36/99 and 37/99 of 27 January.
Penalties: Poaching of rhinos, and illegal possession of rhino horn: adequate
According the above Decreto the tax of the animal is of 11.600 UCFs (Unidade de Correcção Fiscal. Presently 1 UCF= 20 Kz, 0.30 $). This tax is multiplied by 7. Imprisonment if failure to pay the total of the penalties.

Safari Hunting of rhinos; Hunting of rhinos is prohibited by the Regulamento de Caça and Decreto nr 6/99
Live Sales of rhinos: to be permitted under the Regulamento de Caça
Ownership: State is the ownership of all wild animals existing in their wild habitat according to the Regulamento de Caça. Game can be privately owned if re-introduced to game farm or concession area.

Trade and Import/Export In Rhinos
CITES authority: Instituto de Desenvolvimento Florestal - IDF
Licences required: CITES import/export permits Veterinary certificate from exporting country is required. Licence issued by the National Directorate of Animal Production is also required.
Past translocations: exports: none
Past translocation: imports: White rhino (1968): 10 from Natal Park to Kissama NP.
Stock: The occurrence the animal in the historical area should be confirmed and assessed
Control: Horn and other illegal trophies are stored in the National Department of Administration and Finance of the IDF.
Horn fingerprinting: Project involvement: No involvement in the FP project.

2.1.2 Botswana (Mercy Masedi)

Background information
The rhino population has in the past been affected by hunting and poaching that led to their extinction in Botswana between 1880 and 1890. Reintroduction programme adopted by the country in 1967 coincided with an increase in rhino poaching and this did not spare the lives of those newly relocated. Attempts by both the Department of Wildlife and National Parks and the Botswana Defence Force to bring the situation under control did not bear any fruits, and as a result, the remaining animals were relocated to Khama Rhino Sanctuary between 1992 and 1996 where they are under maximum protection. Since then various relocation or reintroduction has been done in Botswana at various places like Mokolodi Nature Reserve, Tholo Ranch and Mombo.

Botswana's rhino population is doing well. Ten additional rhinos were received from South Africa in November 2002 and to date the number has reached fifty-three. Twenty one more rhinos are expected in April /May this year. All are expected to be relocated to Moremi Game Reserve (Mombo). Preparations are being made to arrange for their arrival. The bomas are being renovated to be ready to accommodate the animals.

Conservation Plan
The Botswana Rhino Management Strategy was adopted by all rhino stakeholders and the Botswana Rhino Management Committee instituted. The document is a vision and meant to be an outlook of the whole rhino industry. The document will be printed and published very soon.

Committees
(a) The Botswana Rhino Management committee is chaired by the private sector as we are partners in conservation and they have played an important role in rhino establishment in Botswana. The secretariat is from the Department of Wildlife and National Parks.

(b) Another committee in Maun has been established; it is composed of Botswana Police Service, Botswana Defence Force, and DWNP. The committee meets regularly after two to three months in Maun. Its focus is mainly on the security of the rhinos at Mombo in Moremi Game Reserve.

Rhino Conservation Activities
The Anti-poaching personnel are doing a good job to monitor the movements of rhinos. We have lost only one rhino due to territorial fights since 1993. We hope the status quo remains. Our law enforcement Agency are always on the look out for any illegal activities. Since our conservation activities are in partnership with the communities, they also play a vital role to protect their resources.

Rhino populations estimate for 2003

Species Sub –species	White rhino			Trend	Black rhino			Trend	
	C.s. *Cottonin* (northern)	C.S *Simum* (Southern)	Total		D.b bicornis (south - Western)	D.b longipes western	D.b michaeli (eastern	D.b minor (southern-Central	Total
Botswana		51	51					1	1

Country	Species	SSP	Park	Type	Num	Size	RCPE	Prob	SG	Total	Trend	Den
Bot	White	Css	Moremi GR	G	1	>4000	14	2		16	U	0.004
Bot	White	Css	Sanctuary	S	1	43	23			23	U	0.535
Bot	White	Css	Mokolodi NR	P	1	30	9			9	U	0.300
Bot	White	Css	Tholo Ranch	P	1	350	4			4	U	0.011

A lonely black rhino was captured from the Chobe National Park and relocated to Khama Rhino Sanctuary.

SADC projects already done

a) Rhino conservation and management strategy. Through the assistance of SADC rhino projects a workshop was held for a discussion paper on the strategy. As a result of that meeting our rhino strategy was born.
b) Funding for the Rhino Conservation Strategy was also from SADC rhino project.
c) Training of trainers on rhino monitoring-two members of staff were trained, and one was in the past engaged in training DWNP staff in Mombo on rhino monitoring.
d) Assessment of Mombo and Khama Rhino Sanctuary on their suitability for both black and white rhinos was done. The two areas were found to be suitable for the two species and a report was done.
e) A rhino database was done and is functional at Mombo and Khama Rhino Sanctuary and it is still to be installed in a computer in Gaborone.

Training

A two-day meeting was held in Maun last December by the SADC Rhino Specialist to introduce about sixteen wildlife officers to the rhino database. The database was installed in Maun Research office and they are to forward the data to the national database on quarterly basis.

SADC Projects waiting for funding

The following projects are still awaiting SADC sponsorship:

- A computer for rhino monitoring, which will have the database and based in head quarters.
- Training of staff. It is important to develop expertise in rhino management. Study tours are important to countries that have been successful in rhino management. An attachment for two to three weeks to successful rhino project will do.
- Training of staff on scene of crime and law enforcement. It was long agreed that this will be done in all range state countries. We hope it will be done this year.
- A project proposal for funding of a project on monitoring, security and biological management has been submitted. With the impending arrival of rhinos from South Africa, the security issue is very important and there is need for a well-defined programme on security, monitoring and biological management.

The following are proposed as future needs from SADC rhino project:

- Microchips and readers to mark some of our rhinos that are not marked and those that are born.
- A radio transmitter that could specifically detect where the animal is within a shorter time is needed because it has been observed that it takes time and costly to locate rhinos that are in the wild.
- Sponsorship for study tours so as to learn from other rhino range states.
- Facilitation on acquiring of black rhino.

Conclusion

There is good coordination between the private sector and the Department of Wildlife and National Parks. This spirit is expected to revive the rhino population.

Recommendations
Study tours to countries with successful rhino conservation need to be done to develop capacity. For any programme to be successful, there should be trained personnel to execute it. Botswana has in the past lost its rhinos due to poaching. We are now trying to prevent history from repeating itself. Therefore the need for capacity building is paramount.

2.1.3 Malawi (Roy Bhima)

Introduction
Malawi has one population of black rhinoceros, *Diceros bicornis minor* that is located in fenced sanctuaries in Liwonde National Park. Three pairs of male and female were introduced from South Africa in 1993, 1998 and 2000. The first pair produced two male calves in 1997 and 1999. The second pair produced a calf in early 2000. Another calf was born in October 2001. Two deaths have since occurred. In 2000 the first male adult died and a pregnant female from the third pair died. The rhino population is currently seven. During a three-day water hole count from 18 to 21 October 2002, observers noted that they saw all seven. There were no indications of newly born calves.

Prior to the introductions in Liwonde National Park, the species had been declared extinct in 1990. In the 1980s the species was confined to Kasungu National Park and Mwabvi Game Reserve only. Kasungu National Park had between10 to 20 individuals in 1984 (Jachmann, 1984) while Mwabvi had 6-7 individuals. In 1990, these animals were not seen anymore.

Strengths
The introduction of the rhino in Liwonde National Park is intended to build a strong population in the country. As a critically endangered species worldwide and in the country, the rhino was declared a protected species soon after it was introduced in the country. This meant that the species would be accorded appropriate management priority. This ensures adequate protection to the species. The population is kept in a fenced sanctuary and protected by a team of six scouts. The park has one Warden, a Research Officer and five scouts' camps. These will ensure that the rhino are given the right attention in all areas of management.

The Department of National Parks and Wildlife has been attempting to construct a boundary fence at Liwonde National since the rhino were introduced, but this has not been possible due to limited funding and vandalism to the small fence that has been constructed. The Malawi Government introduced the Pro-Poor Expenditure (PPE) funds for Government activities intended to minimise poverty amount local people in July 2000. One of the major activities in the Department of National Parks and Wildlife under this programme is to purchase fencing materials for the Liwonde National Park perimeter fence. It is hoped that the entire park (about 250 km perimeter) will be fence by 2005. The will reduce wildlife/human conflicts around the park. A wildlife public awareness campaign around the fence will also be funded under the PPE budget to minimise vandalism of the fence.

There has been the Malawi Frankfurt Zoological Society (FZS) Project in the park that has conducted scouts training programmes. These have assisted with the patrolling of the park to ensure that poaching is controlled. The Department of National Parks and Wildlife has recently signed a new ten-year contract with FZS to assist it with various areas of management, and a new FZS project manager has started work in the park. The project will improve some infrastructure of the park that will be beneficial to the management of the rhino. The project is already working on the upgrading of the management plan of the park through a consultant Dr R Malpas. A participatory approach involving senior members of staff at Headquarters and at the park is being used. The project will improve other resources such as radio equipment and roads. It will also enhance community-based management to improve relationship with neighbouring communities. The presence of the project in the park will definitely be of great importance.

Ecological work in the park has been carried since the park was established. The vegetation was first mapped in the 1970s and has been monitoring the vegetation inside and outside the rhino sanctuary all

along. We intend to improve on the monitoring of the vegetation because there are intentions to release the rhino form the sanctuaries to the greater park and there are fears of are still going on.

Weaknesses

The major weakness affecting development of rhino conservation is funding. Although the DNPW has provided a rhino scouts team to protect the rhino, it has not provided any extra funding to the Liwonde National Park recurrent budget for the Park Warden and the Research Officer to undertake other routine work such as inspections, monitoring movements and controlling fires. The Warden and the Research Officer are located 30 km away from the rhino sanctuary and often, they have not been able to visit the sanctuary because of lack of funding. Because of the same problem, the focal point has not been able to visit the sanctuary as well.

The Department has relied a lot on the support it has received from the "J&B Circle of Friends". This is a group of businessmen who have voluntarily supported the rhino project. Although the J&B Circle of Friends has supported that the project all along, their support is not guaranteed to continue forever. Some times, there has been little collaboration between these people and the Park Warden.

The rhino population is currently very small. Its recovery rate is very low and would be affected by inbreeding. Translocation costs have been paid by others such as the South African Parks Board and the J&B Circle of Friends. The DNPW will not afford to pay any translocations and will continue to rely on others. This is a major weakness. Contact with SANP has not been maintained.

Opportunities

The South African National Parks Board and the Malawi Department of National Parks and Wildlife have had a very good relationship that has led to the transfer of some rhino from South Africa to Malawi. The South Africans provided the rhino and did the capturing and transfers. It is hoped that this relationship will continue to exist.

The J & B fraternity which includes the ‘Care for the Rare’ (UK) Programme and the ‘Circle of Friends’ have contributed some funding. The ‘Care for the Rare" Programme funded some of the transportation from South Africa while the "Circle of Friends" have funded transportation from Chileka Airport in Blantyre to Liwonde National Park and have supported the rhino on a daily basis in the park. The role that the FZS Management Project will play has been pointed out under "strengths" above.

The Wildlife and Environmental Society of Malawi WESM has provided some expertise to the management of the rhino in Li r. C.O Dudley who is a member of the Society has done some ecological monitoring in the park and the sanctuary in particular. Prof. Dudley has continued to render his time to undertake some ecological surveys in the park, although travelling from Blantyre to the park has become expensive.

Threats

The heavy reliance of the Liwonde Rhino Project on external funding as has been shown ' above is an issue of concern. This cannot be relied upon completely as the donors may provide their funding on an ad hoc basis and the DNPW may not have a say on how the funding would be used. It is important that the DNPW must have its own rhino funds that it may use as it so wishes. Poaching is a threat. Many wire snares intended to kill animals have been recovered from the park. None have been collected from the rhino sanctuary yet. It is important to maintain strict anti-po9aching activities both in the rhino sanctuaries and in the park at large. Any laxity may lead to the poaching of a number of rhino individuals before the law enforcement team realises. Poachers have also set the park on fire. Fires have gone into the sanctuary causing a threat to the lives of the rhino. These illegal fires can be controlled by firebreaks and early burning programmes.

As the rhino numbers increase, the rhino sanctuary may become too small resulting into stress. There would be need to increase the size of the sanctuary. Dudley (2002) suggests a carrying capacity of 8-10 adults for sanctuaries 1 and 2 and 4-6 adults for sanctuary 3. There is pressure to limit the building of additional sanctuaries as this may hinder east-west movements of elephants in the park. The present rhino number for the whole sanctuary is 7. With new translocations and reproductions, the sanctuary will

soon reach its capacity. It is therefore important to start thinking seriously about how the rhino will be treated as the population grows.

SADC Rhino Programme Activities
The SADC rhino project has supported work on the rhinos in Liwonde. Support has been given to undertake some ecological work. A report titled "Institutional and Ecological evaluation and development of guidelines for future management of black rhino in Liwonde National Park, Malawi (Chafota, Dudley & Labuschagne 2002) was from Chafota, Dudley & Labuschagne (2002) produced with funding from SADC rhino project. It is hoped that another project to establish a Rhino Stakeholders Committee and to monitor the vegetation of the park will be funded.

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2.1.4 Mozambique (Felismina Longamane Langa)

Background
Rhino conservation legislation is currently the Game Law of 1999, under which regulations were approved in 2002. Rhinos in Protected Areas belong to state. Others may own rhinos if they are controlled on their own land.

Rhino status
Reports were received of the presence of rhinos in Niassa GR.

Planned SADC RPRC support for activities in 2003-2004
(a) Feasibility study for the reintroduction of rhinos to Mozambique (draft DNFFB/CESVI proposal)
(b) Rhino Conservation Strategy for Mozambique
(c) Training courses in rhino monitoring, management and security

2.1.5 Tanzania (Mathew Maige)

Introduction
Black Rhino active conservation is not that old in Tanzania. The early attempts of managing rhinos started slightly before rhino poaching outcry during late 1970's and early 1980's. Soon before the countrywide operation against poaching of wildlife, decrease of sensitive species including rhinos made the Government to request for a general survey country-wide. This was the time when it was realised that rhinos were on verge of extinction in the country. Attempts to rehabilitate local populations then started, spearheaded by FZS. Ngorongoro Crater became the centre for the FZS activities. The Selous was far from consideration because the survey revealed that most rhinos in the Selous were poached and what remained could not be substantiated. At later date, around 1989, sporadic sighting of *D.b.minor* in the Selous was heard for the first time.

Status of Rhino Population Recovery
A few years down the line, an enthusiastic rhino admirer who was running a photographic safari camp started the Kidai Rhino Project. Since then, the Selous Rhino Project took shape. Together with that, another follow up was done in the Lukuliro area of the vast Selous Game Reserve.

Today, the two areas have become fairly active towards rhino patrols to protect whatever was in the thick bushes. It started without knowing if there were a few individuals in the areas but recently has confirmed a number (still not known) exists at both Kidai and Lukuliro. Sporadic sightings of rhinos have been recorded totalling 16 individuals. We can conclude with confidence that there are more rhinos in the Selous and the 2 populations known so far are reproducing. Tanzania and well wishers need to put in more efforts to protect and continue to investigate of their numbers and distribution.

Summary on the SADC Rhino Programme Support
Inputs provided:
(i) Advice in the field on rhino survey methodology
(ii) Advice in the field on steps to ensure ongoing, cost-effective monitoring and protection of rhinos within the survey area, based on relevant experience from Zimbabwe.

We have taken actions on some but we still need support to take actions on the remaining items. I am trying to convince Selous Game Reserve authority to understand the reason for identifying a team of rangers to work on rhino protection only, but it is evident that there are too few rangers for assigning a few to rhino project alone. A proposal to be submitted includes:

- Improved rhino monitoring for Selous Game Reserve Sub-population (February, 2003)
- Law enforcement and ranger training in Selous Game. Reserve (Feb. 2003)

The Wildlife Division did request funding from another source with a Project Proposal entitled: Selous black rhino protection project. This was submitted to European Union effective from June 2003-March 2005

2.1.6 Zambia (George Kampamba)

Introduction
Zambia was a strong hold of the biggest population of black rhino (*Diceros bicornis minor*) in the region. The rhino were decimated in the seventies because of its horn. After over two decades down the line, under emotions, sorrow and bad memories of the sad loss of black rhino, the Government of the Republic of Zambia has renewed her interest in re-establishing the population of this depleted species. The black rhino re-introduction has been a matter of concern by Parliament since late 1990. The driving force has been to develop Zambia as a country in which a well-protected and viable black rhinoceros population will contribute to enhanced biodiversity, economic, spiritual and social well being of the public and the country as a whole, and the Zambian wildlife estate for present and posterity. In order to attract further international support for re-introductions the Government of the Republic of Zambia has demonstrated strong commitment through the Zambia Wildlife Authority regarding management strategies for as embedded in the 5-year Strategic Plan. One of the objectives of wildlife conservation in Zambia is species re-introduction to original range under intensive protection.

Partnership for Black Rhino Re-Introduction and Future Management in North Luangwa NP
The key supporter in this project is the Frankfurt Zoological Society. The Frankfurt Zoological Society has a long-standing relationship with the Zambia Wildlife Authority in Zambia and are currently working together under a ten-year agreement with the Zambian Government to manage the wildlife resources in the North Luangwa National Park (see map for the Park). Frankfurt Zoological Society has been in the area for over 15 years under an agreement with the government of Zambia. The current agreement was signed in 1998 focusing on conservation of the wildlife resources in the National Park, development and maintenance of infrastructure. The target area for the project, the North Luangwa National Park, is therefore managed under an intensive resource protection programme.

Activities on Black Rhino Re-Introduction to North Luangwa National Park
In 2001 the IUCN SADC Regional Programme for Rhino Conservation agreed to support a scientific study for putative rhino range suitability within North Luangwa National Park and to coordinate the re-introduction programme with the Zambia Wildlife Authority and the various stakeholders. To determine the basis for re-introducing black rhino to the North Luangwa National Park a technical assessment of

rhino habitat suitability was carried out with support from the IUCN/SADC Regional Programme for Rhino Conservation. Following the study the Zambia Wildlife Authority updated the Government of the Republic of Zambia and Parliament about the project to further secure both political and government support. In April 2002 the Director General of the Zambia Wildlife Authority, Mr. Hapenga M. Kabeta, headed a delegation to South Africa to discuss the programme for rhino reintroduction project for North Luangwa National Park and to confirm the availability of black rhino. In principle it was agreed during that visit that the 5 animals would be made available for the re-introduction project in Zambia. It was also agreed that South African National Parks should satisfy it self on the security of the black rhino in the target area.

On the basis of the above requirement the following were agreed upon as the way forward:

- An expert from South African National Parks to visit North Luangwa National Park to ascertain the strategies for security of black rhino once introduced
- The SADC Rhino Conservation Programme should coordinate the rhino re introduction project,
- The Chief Executive Officer of South African National Parks to inform the Minister of the Ministry of Environmental Affairs and Tourism,
- Zambia Wildlife Authority to prepare a draft agreement for comment by South Africa National Parks on the rhino project,
- Zambia Wildlife Authority and South Africa National Parks to develop a memorandum of understanding for the two governments
- The vision for Zambia Wildlife Authority on the development of a founder rhino population should be broadened to establish contact with the KwaZulu Natal Parks Board and North West Province for more animals.

Proposed Agreement between South African National Parks and Zambia Wildlife Authority

Firstly, South African National Parks and Zambia Wildlife Authority acknowledged the objective of the IUCN SADC Regional Programme for Rhino Conservation to re-establish black rhino population in its former regional range. Following the above Zambia Wildlife Authority developed a draft Agreement for co-operation on the re introduction of the rhino to Zambia and other aspects of national park management and development. The general agreement is to develop Zambia as a country with a well-protected and viable black rhinoceros population. The technical aspects proposed were that there shall be endeavours to build capacity within the Zambia Wildlife Authority through cooperation with South African National Parks on projects to be jointly developed. The draft has gone to both governments and a meeting to consider the out come from the governments has been proposed. Zambia would like the meeting to take place this year 2003.

Black Rhino Re-Introduction is Promising

In December 2002 Zambia received confirmation and support of the project from South African National Parks following the endorsement of the North Luangwa rhino re-introduction by the IUCN/SADC Rhino Conservation Programme as well as the favourable approval by South African National Parks' scientific, veterinary and security staff to further the conservation of black rhino in the sub-region. South African National Parks agreed to make available to Zambia five black rhinos, two males and three females. In order to improve the animals' settling period the introduction exercise is planned to take place between April and May during the cold months. These animals originated from an exchange programme with Frankfurt Zoological Gardens.

White Rhino in Mosi-Oa-Tunya National Park, Livingstone

The population of white rhino (*Ceratotherium simum simum*) was introduced to Zambia in 1994. Since then the population has stagnated at 5 individuals. This status prompted an investigation, which took place 2001 with support from the IUCN/SADC Regional Rhino Conservation Programme. The study recommended an introduction of new individuals to the population to improve the situation. Zambia has so far not secured new individuals because un affordable costs of the animals. Following the above Zambia proposes a swap of two adult animals.

Policy for Rhino Management

As reported on during the RRG inaugural meeting at Club Makokola, Malawi (24-25 May 2002), Zambia has developed a working paper for formulation of a Policy for rhino management. This document requires the participation of various stakeholders to formulate the rhino policy. It was against this background that

Zambia signed an Agreement with US Fish and Wildlife (US$ 16,500) for support in 2002. These funds for consultative meetings and workshops have not been not been made available and consequently the policy has not been formulated. The Zambia Wildlife Authority has sent several reminders to Karl Stromayer but there has been no response.

Conclusion

The rhino conservation project in the North Luangwa National Park in Zambia has attracted the political support and interest in re-establishing the population. To establish a viable rhino population 5 individuals are not ideal. The project is therefore the initial step in the right direction and is based on the principle of phased introduction to ensure animal safety and adaptation. Following the above and the intention to establish a founder population in the next three years Zambia requests this meeting for continued support to the rhino recovery programme to ensure that more animals are solicited for.

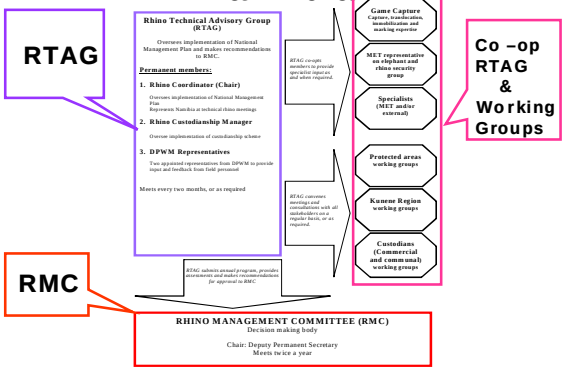
2.2 SADC RMG Countries

2.2.1 Namibia (Pierre du Preez)

THE NAMIBIAN VISION FOR BLACK RHINO

By 2030, the subspecies *D.b.bicornis* is re-established in viable, healthy breeding populations throughout its former range, and is sustainably utilized

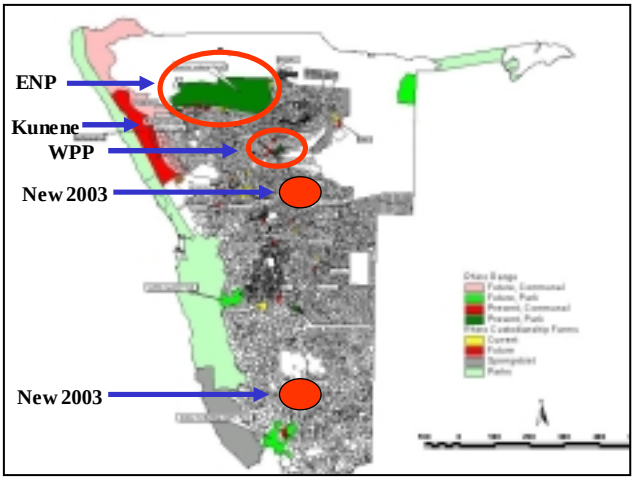
Rhino Committee Structure Namibia



Rhino Population Estimates

• Area	Css	Dbb
• ENP	30 +	700
• WPP	52	36
• Hardap		7
• Naute		2
• Kunene		140
• Custodian Scheme		112
• Total	82	997

- Major donor populations in Namibia (Kunene, ENP and WPP)
- Two new sites for rhino introductions in 2003 (Naute GR and Custodian farm Oorlogsdeel)

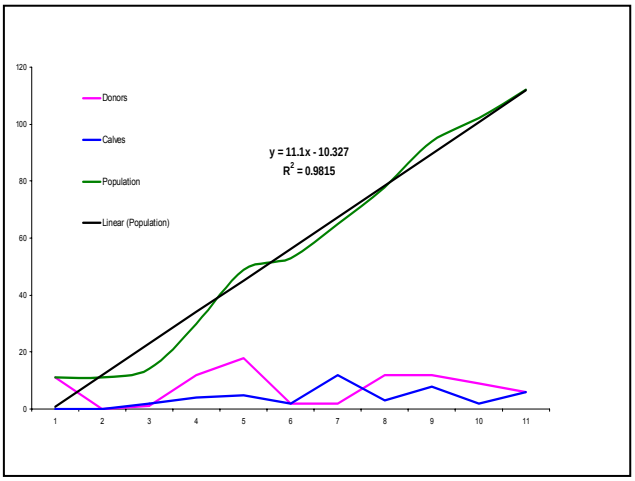


Custodianship Scheme

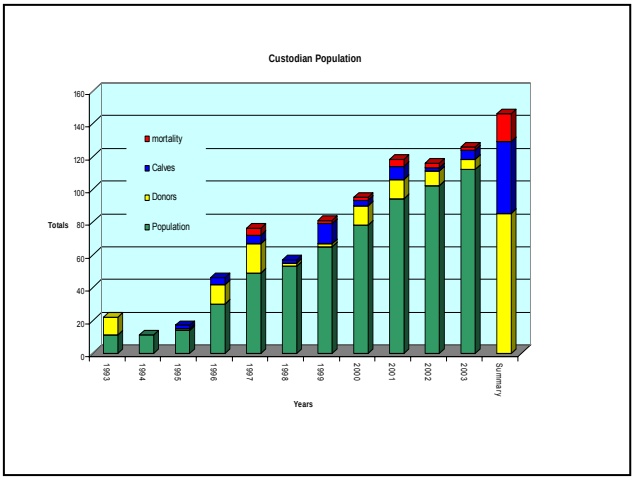
Custodian Scheme

Farm	Size (ha)	*Dbb* Population
Okonjati	14 000	10
Okosongoro	7 000	8
Nomtsas	20 000	10
Omateva	9 000	10
Eden	28 000	15
Kuzikus	11 000	7
Erindi	65 000	15
Schönfeld	11 000	5
Ongava	30 000	13
Okatumba	23 600	6
Onguma	10 000	7
Oorlogsdeel	6 000	6
Total	234 600	112

- Birth spurts – small populations still big effect on overall meta population growth
- Influence of introductions
- 13 Animals ready for translocation in 2004
- Exponential increase in population 26%



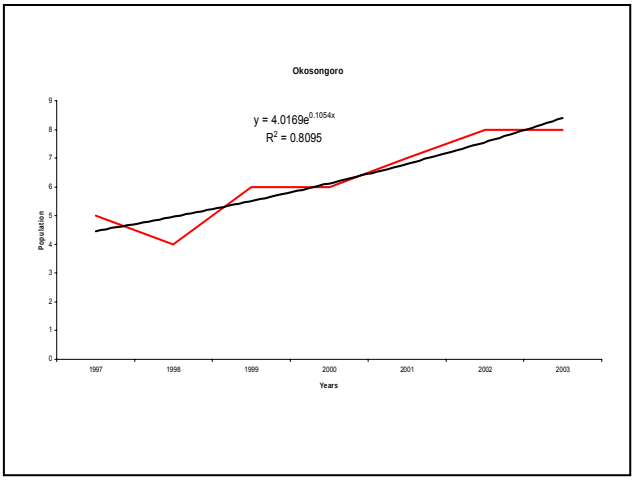
- Indicates Introductions, births and mortalities



Small custodianship populations

Okosongoro
- One of the best performing populations (+11% per annum)
- Step wise growing effect of small populations – birth pulses
- Intensive managing – 7000 ha

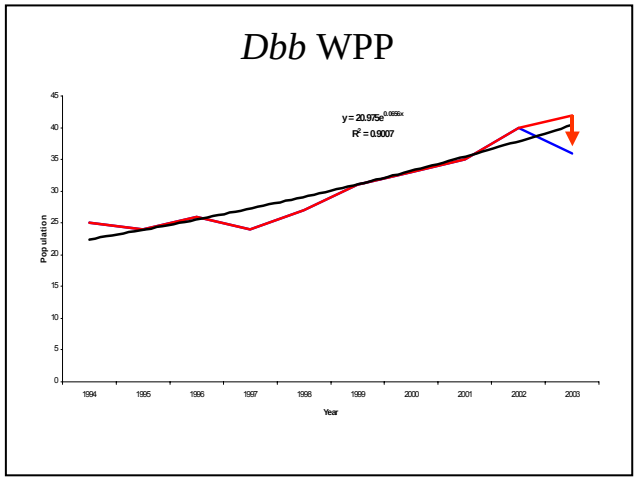
Oorlogsdeel
- Will expand
- Some of the best habitat in Namibia – 6000 ha



Waterberg Plateau Park

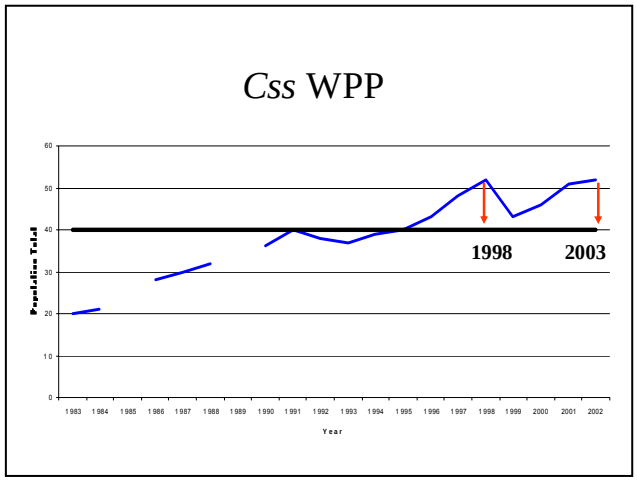
Black rhino

- 2003 capture increase male aggression.
- Poor habitat
- Density dependant
- Intensive management
- Still above 6% per annum



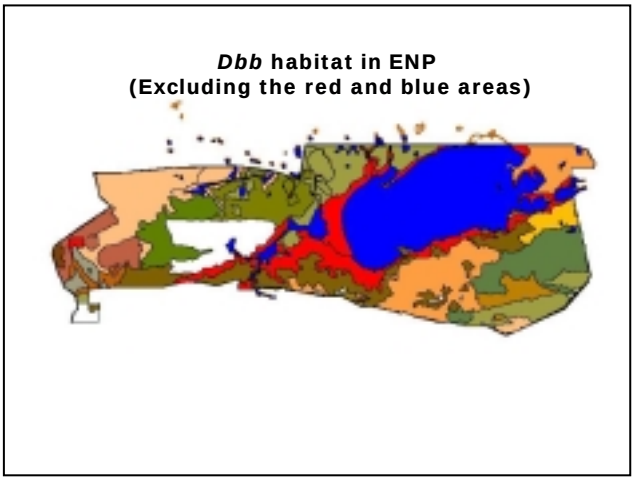
White Rhino

- Grow at +7% if population above minimum of 40.
- Need to capture 12 animals ENP 2003 – due to drought in ENP will not take place.
- Population levels of at 50+

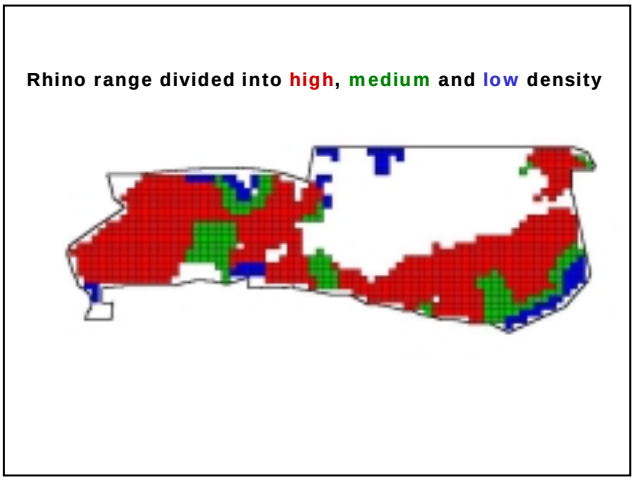


Etosha NP

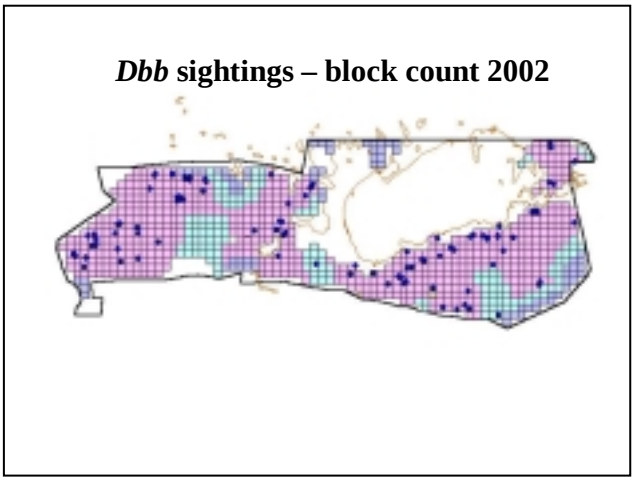
Black rhino habitat, mapped using vegetation and distance from artificial waters



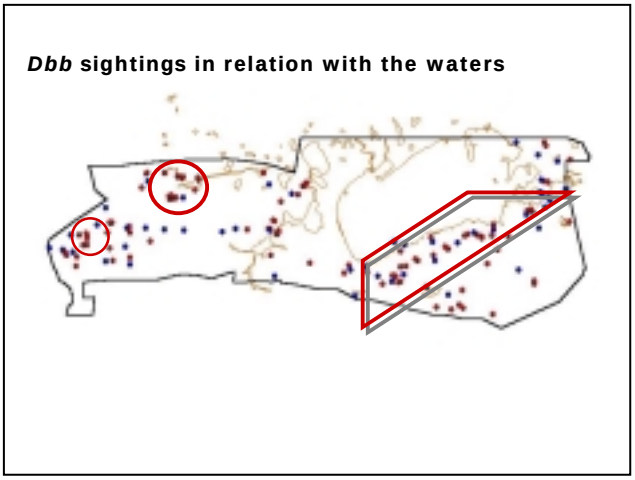
Distribution of all possible blocks in the 2002 block count



All *D.b.bicornis* sightings in blocks counted during the census



Indicating the concentration of rhino relative to the waters in ENP



Some results from the 2002 census

Demography from block count

- **< 1 year = 6.4% (8%+)**
- **< 3.5 years = 26.8% (28%+)**
- **1< 3.5 years = 20.4% (17%+)**

- **73% Adults in population – Stable**
- **18% Adult cows calved in the last year**
- **59% Adult cows with calf (A-E) present**

Aerial Census of ENP Black Rhinos

- Positive indications that the ENP population can reliably be estimated through aerial censuses.
- During 2003 if funding is secured block counts will be repeated and the technique will be tested to determine if differences/variations in the estimate is a result of the technique or indicate variations in the population – Dr. R. Emslie (AfRSG)
- Possible to determine sub populations – determine harvesting to stimulate growth in those sub populations that have reached CC.

Dbb Population Estimates for ENP

	Estimate	CI 90%
Aerial Census 2002	629	16.9%
Petersen (Mark-Recapture)	986	56%
Blocks (Jolly 3)	596	22%
Blocks (10% undercount)	662	
Blocks (15% undercount)	701	
Zucchini-Channing Bayesian Mark – Recap (15% undercount)	716	14%

Indications

- **The *Dbb* population of ENP is stable and does not grow at a minimum of 5%**
- **Reasons for the above could be:**
  - **Unreliable water provision in the crucial dry period**
  - **Population has reached ecological carrying capacity in the available habitat**

Kunene Black Rhino Population

ASSESSMENT OF BIOLOGICAL AND HUMAN FACTORS
LIMITING THE WEST KUNENE RHINO POPULATION

Michael Hearn

Semester 4-5 Task 5.3-1.1

SADC Regional Programme for Rhino Conservation
January 2003

Equipment supplied by:

SAVE THE RHINO TRUST

Addition support from:
Save the Rhino International and
The Peoples Trust for Endangered Species

RESTRICTED – NOT FOR CIRCULATION

Rhino range and conservancies in Kunene

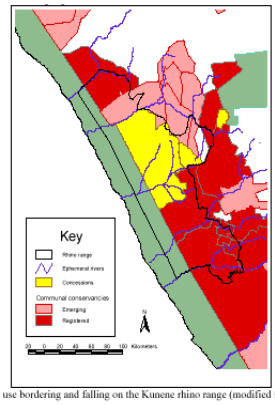


Figure 4. Land use bordering and falling on the Kunene rhino range (modified from MET, 2002)

Demography of Kunene Black Rhino population

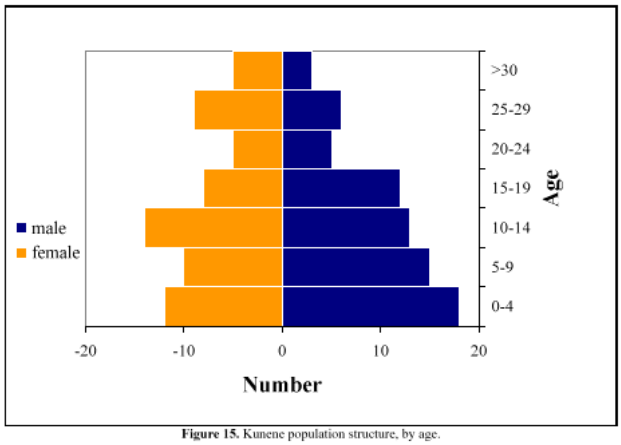


Figure 15. Kunene population structure, by age.

IMPORTANT FINDINGS

- **Highest densities – Mountainous basalt areas**
- **Two populations in optimum habitat significantly different**
- **Off take took place in one – poaching and removals - high growth**
- **Density depended**
- **Female range increase relative to the decrease of resources**
- **Recruitment rates reduced**

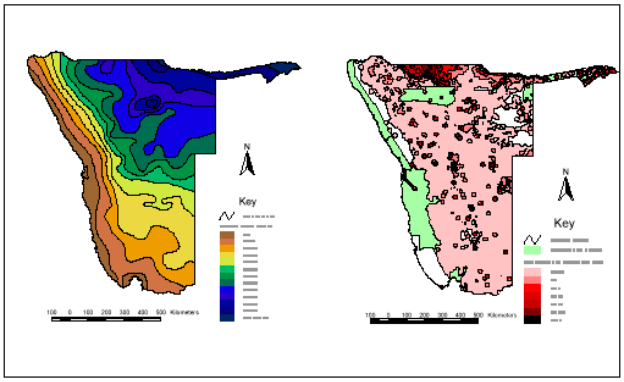


Figure 3. Mean rainfall gradient and population concentrations across Namibia (MET,2002)

Assistance from SADC RPRC

SADC RHINO PROGRAMME ASSISTANCE

CAPACITY BUILDING (MET)

- **Training Needs Assessment - R. Blok**
- **Scene of the Crime Training - R. Potter**

KUNENE POPULATION (SRT)

- **Assessment of the Biological and Human Factors Limiting the West Kunene Rhino Population – M. Hearn**

Rhino Strategy still needs to be approved by the Minister of Environment & Tourism

Need for Mobile Boma

- Translocations in arid areas – boma can be erected in areas with best resources
- Areas not feasible to built bomas.
- Injured or sick animals
- Translocations in future to Iona National Park - Angola

2.2.2 Swaziland (Ted Reilly)

1. Priorities for Rhino Conservation in Swaziland

These have not changed since our previous submission except that the two 4x4 vehicle requirements have been achieved with a gift from the US Fish and Wildlife Service of the USA. This assistance was channelled through their Rhino Elephant and Tiger programme and was in response to an application for help with our Elephant Conservation Programme. As there is, in reality, common purpose in the Rhino and Elephant Conservation Programme, these vehicles automatically serve the conservation of both species.

The Introductory Boma at Hlane to receive translocations from Mkhaya and elsewhere is still a wanted priority whose cost has escalated from E 150,000 to E 200,000.

Ground Support for Rangers – 2 motorcycles are still an important requirement for security purposes as described in the last report. The price has escalated to E 60,000.

Expansion of Range always remains a priority. With it comes the need for fencing and a patrol track network. So unless there are unlimited funds, the financial requirement is not easily quantifiable; it would be easier to determine this requirement if the magnitude of funds which may be available is known. The cost of land in the area is now approximately E 4,000/ha.

2. The Swazi Game Act (**Preventative** rather than **Remedial** legislation)

The Swaziland Game Act is the enabling legislation in use to control poaching and it has helped to turn around the disaster of the late 80's and the early 90's converting it into a resounding success.

The **salient** points of this legislation are: -

Game Rangers have been given the necessary powers under the Act to perform with confidence and without fear, enabling them to deal with highly developed mafia-styled crime. This has boosted morale and has resulted in very effective law enforcement.

A game ranger appointed by the Head of State **or any person acting under the instruction of such game ranger** may:

- bear arms and may, **in life threatening circumstances,** shoot to kill
- search any person or premises without a warrant
- arrest without a warrant
- seize any property or item connected with an offence without a warrant
- stop and search any vehicle, train or aeroplane without a warrant
- and in doing any of these things in the execution of his/her official duty he/she shall **not be liable** to prosecution.

Because the powers of game rangers are so extensive and because of their power to co-opt additional manpower by instruction, the number of substantive rangers has been kept to a minimum. In Swaziland there are only 8 substantively gazetted rangers all of whom are highly disciplined and responsible people who have stood the test of time and who are aware that abuse of power would threaten the survival of the Game Act. Furthermore there is in practice a zero tolerance of abuse of power, so extreme caution and discipline is exercised and enforced in co-opting additional manpower.

In response to Court failure to respond to the need to protect wildlife and to help curb poaching, discretion has been removed from the Courts in substantial measure.

Section 8 of the Game Act, which covers schedules I & II (specially protected and Royal game respectively), is included in the Non-bailable Offences Act along with Murder, Rape, Armed Robbery, hard drugs, weapons of war and money laundering. This indicates how serious Swaziland is in her commitment to conserving her wildlife heritage.

All birds are listed under Schedule II (Royal game) making the killing of any bird without a permit a non-bailable offence.

- Mandatory minimum penalties have been introduced.

- Offenders against species listed in Schedule I face a minimum jail term of 5 years imprisonment without the option of a fine. Second offenders – a mandatory 15 years without the option of a fine.

- Offenders against species listed in Schedule II face a minimum mandatory 2 years imprisonment or E 4,000 – provided the **fine imposed shall not be less** than the value of the animals poached, e.g. the scheduled value of sable is currently E 20,000. (The schedules of valuation need updating because game prices have escalated since 1991 when values were set.)

- Offenders against species listed in Schedule III face a minimum sentence of 6 months in jail or E 600 – provided the **fine shall not be less** than the value of animals poached. E.g. (6 impala snared, currently valued at E 250 each, would equate to E 1,500 so the fine imposed or compensation may **not be less than this**.)

In all cases the concept of replacement of animals poached has been introduced into the Act. Failing replacement or compensation for the animals' value an additional mandatory 2 years is added to the 5 year term for Schedule I game and an additional 1 year is mandatorily added to the 2 year and 6 months minimum jail terms prescribed for Schedules II and III species respectively.

Replacement/compensation for animals taken, in terms of the Act, shall be awarded to the **owner** of such animals or if the owner cannot be identified the replacement/compensation shall be awarded to the **State** by order of the Court. No sentence may be suspended or remitted by the court.

And to ensure compliance with the Act a clause is included which stipulates that any person, including a judicial official who frustrates, obstructs or defeats the ends of justice or who **attempts** to do so, shall go to jail for a period of not less than 1 year without the option of a fine. (Here we see the unique development of the judiciary itself being legislated against. It must be remembered that this legislation came about in response to Court failure to handle cases against wild animals responsibly.)

Any legislation is as good only as its application. And it is easy for prosecution to deliberately spoil a case with pretended incompetence. It is also not difficult for a magistrate to deliberately misinterpret evidence. It therefore can be a thin line that separates a blunder from a deliberate act so we need the police, the prosecution and the judiciary to respect the spirit and the purpose of the Act. Nevertheless the Game Act has worked extremely well for us and has produced the intended results.

3. Births, Deaths and Sales

White Rhino: Since the last meeting of SADC Rhino Range States attended by Swaziland at KwaMaritane Lodge, Pilanesberg National Park there have been 3 White rhino sales to South African buyers. There have been 6 deaths from natural causes including those caused by bull aggression. Births recorded over this period amounted to 14 calves leaving a net gain of 5 animals.

Black Rhino: There have been two losses. One was a new born heifer calf which drowned when her mother led her across the flooding Ngweyane River which is normally a dry sand

drainage. The other loss was an adult cow which was the only cow which had not produced a calf. Cause of death was not determined. There have been 3 births during the period giving a net gain of 1 surviving animal.

4. Law Enforcement

The 1992 Big Bend shoot-out between game rangers and horn traffickers brought rhino poaching in Swaziland to an end. The last rhino poached in the Kingdom was in 1992 – a full 12 years ago. Since the Game Act amendments of approximately the same time, general poaching has declined by about 90%. This Act has proven to be a huge deterrent of wildlife crime. So poaching is currently well contained in Swaziland. However, the threat of a poaching resurgence is ever present and there is no room for complacency! Indeed trafficking and smuggling of contraband which embraces rhino horn and ivory is still a background problem, and a few incidents of this type of crime have been detected in Swaziland in the period under review – the twelve months ending 1st March 2003.

Big Game Parks has been proactive in dealing with the problem of poaching and trafficking and has developed a base of informants as a part of her intelligence in an attempt to distance would be poachers from rhinos on the ground. In April 2001 this intelligence resulted in an early warning that a rhino horn had entered the market, so Big Game Parks infiltrated the Syndicate and set up a sting operation posing as buyers. The deal was arranged to take place at Lavumisa Hotel on Swaziland's Southern border with South Africa. The hotel belonged to a certain Mr. Peter McIntyre who, it transpired, had previously been a Magistrate in South Africa for many years. He also owned property on the South African side of the border known as Golela, giving the man almost unrestricted access to and fro across the border.

Mick Reilly, posing as the buyer, led his group of plain clothed rangers to the venue, strategically placing them at predetermined positions. The horn was produced and the price asked was R 250,000. Mick negotiated the price down to R 80,000 and the deal was concluded. The rangers then identified themselves and arrested McIntyre and three others. Two more people being part of the syndicate – one a Swazi and one a Shangaan from Mozambique – were arrested later bringing the tally to six.

The trial was set in the High Court of Swaziland and 3 days were allocated for it. The trial lasted for 21 days becoming a very high profile case in which 4 attorneys and an advocate defended the accused. The trial judge was Chief Justice Stanley Saphire. Three of the accused were acquitted almost immediately. We have appealed against these acquittals. Two expert witnesses were called by the Crown – the Hon. Richard Emslie whose abundant evidence was interrupted continually by the Defence who wanted him to stop talking, and Mr Mario Scholtz, of the S.A. Police Endangered Species Unit. Scholtz recognized one of the attorneys – a Mr Louis Ben – as a previous offender of rhino horn dealing in the Mpumalanga Province and in which he entered a plea bargain in an out of court settlement with the Attorney General for a fine of R 5,000.

We were tipped off that there might be a hit squad focused on the witnesses so the rangers were escorted each day to court by well armed rangers who mingled strategically with the crowd outside the High Court and who were in radio communication with each other. The general atmosphere was very tense, but fortunately no attempt on the witnesses was made. Being a non-bailable offence the accused remained in custody until the outcome of the trial.

McIntyre was convicted and sentenced to 5 years in jail without the option of a fine as prescribed by the Game Act for possession of the rhino horn, and Jabulane Mhlabane was convicted for trafficking the horn and sentenced to 7 years in jail without the option of a fine as prescribed by the Game Act. There was very useful regional co-operation in that we consulted with, and were well advised by Deputy Director of Public Prosecutions, Mr. Gert Nel of the National Public Prosecution Authority of South Africa. The case was very professionally prosecuted by Public Prosecutor Nkhosinathi Masego. Both convictions were appealed against and both appeals subsequently failed. The convictions were confirmed by the Court of Appeal. The defence was based among other arguments, on the horn belonging to the subspecies the Northern subspecies of the White rhino (*Ceratotherium simum cottoni*), which subspecies was not indigenous to Swaziland. An anomaly of the Act is that 'game' is defined as any wild animal indigenous to Swaziland.

The schedules to the Act had been amended to cover "all species of rhinos" following the Brown rhino debacle of a previous case wherein the Defence argued that while it had no problem conceding that the horn before the Court was indeed the horn of a rhino, the State had failed to prove that the horn did not belong to a Brown rhino. And if it was the horn of a Brown rhino there was no offence because the schedules protected only White rhinos and Black rhinos – not Brown rhinos! The prosecution argued that there was no such thing as a Brown rhino but the Court upheld the argument and the accused was acquitted! Now it was being argued the "ALL species of rhinos" did not cover "subspecies"!!

Fortunately this argument failed in the High Court but it is interesting to note that on appeal the Advocate for the Crown, a very experienced and prominent attorney from Johannesburg called Denis Khune, was uncertain of this line of defence and homed in instead on the "balance of probabilities" argument expounded upon at length by Richard Emslie. Emslie had given evidence to the effect that in terms of his mathematical model the likelihood of the horn belonging to a Northern White rhino was 0.01% against the 99.9% likelihood of its coming from a Southern White rhino! (*Ceratotherium simum simum*).

So the subspecies argument has not been fully tested in Court and this gives cause for concern which should be addressed by all range states when revising their legislation for it could open huge holes in prosecuting future cases. The 3rd accused, the Mozambican, was acquitted on the technicality that his understanding of the proceedings was limited because no interpreter had been provided. Another disturbing aspect of this case was that the Chief Executive of Big Game Parks was approached by a messenger of a very influential Senator and a Prince with a proposal that the case be withdrawn against McIntyre in favour of an out of court settlement. The tentacles of highly priced contraband are unexpectedly long indeed!

It is this aspect of the Swaziland Game Act as **preventative** rather than **remedial** legislation which should be emphasized! We don't want people in jail! We would rather have live rhinos wandering around unmolested, attracting tourists and adding value to the image of the country and to the National economy in a legally sustained manner!

Other than the McIntyre case two other cases involving trafficking of single tusks of ivory were proactively pursued culminating in the arrest of 5 (2 + 3) offenders who are still in jail awaiting trial. A manufactured horn built up around a length of cow horn entered the market and cost the fraudster 6 months in jail on a non bailable offence while the horn went for forensic scrutiny. This horn was easily seen to be false.

During the trial period information was received that another smuggling operation through Swaziland had been diverted because of the high profile publicity this case was receiving on the consequences of rhino poaching in Swaziland.

5. Threats

We perceive as our biggest current threat a conspiratorial attempt to wrest the Game Act out of the King's Office by people of influence who would have it softened. If the Swazi media are followed it is no secret that the Game Act has entered the political arena with the misleading slogan "Wild animals are more important than people". The historical reality is that the Kingdom's wildlife was restored to Swaziland with the support of the Monarchy. Education on this reality, together with the probable consequences of a shift in responsibility for the Game Act, has become urgently necessary to address and Big Game Parks has identified this as one of its priorities. The Rhinos of Swaziland depend on it – as does wildlife as a whole, with its contribution to the sustainability of any economy. Big Game Parks therefore stands resolute in its position to support the Game Act, Cites, etc being retained in the King's Office, where its functionality flourishes, and to resist all moves to transfer it to the Ministry of Tourism. We have therefore found it important and necessary to contradict adverse propaganda at every level by way of paid **advertisement** in the media to ensure that our submissions are not corrupted by editing.

6. Rhino Habitat Assessment Survey

Finally to report is the visit last year to Swaziland by Keryn Adcock, ARSG rhino consultant to survey rhino habitats and produce an assessment only. Keryn's visit was commissioned by SADC's Rhino Range States programme which is very generously funded by the Italian Government. She visited Hlane Royal National Park and Mkhaya Game Reserve. Her findings are going to be very useful in guiding us in our Rhino Conservation Programme and in the expansion of Swaziland's rhino range.

We record our sincerest appreciation to all members of the SADC Rhino Range States' group for their support for this exercise and to the Italian Government for making the survey possible. Big Game Park looks forward to implementing the recommendations which have immerged from Keryn Adcock's report.

2.2.3 South Africa (Mike Knight)

1. Rhino population sizes & trends

Table 1. Rhinoceros populations in South Africa for 1999, 2000 and 2001

Species/ecotype	1999			2000			2001		
	State	Pvt	Tot	State	Pvt	Tot	State	Pvt	Tot
D. b. minor	946	54	1000	NA	NA	NA	1017	77	1094
D. b. bicornis	32	10	42	32	10	42	37	13	50
D. b. michaeli	20	12	32	13	20	33	6	29	35
Total (black rhinos)	*998*	*76*	*1074*	….	….	….	*1060*	*118*	*1179*
C. s. simum	*7743*	*2011*	*9751*	.....	.....	.....	*8432*	*2556*	*10988*

By 2001 the South African black rhino population had increased to 1179 animals, a marginal in increase of 4.7 % since the 1999 estimate of 1074. This increase is marginally up from the 4.0% reported in the previous reporting period. Over the longer period since 1991 the total South African population has increased at about 4.3% per annum, with *D.b.bicornis, D. b. minor* and D*. b. michaeli* performing differently with 12.8, 4.1 and 6.1% increases respectively. Since 1997 *D.b.bicornis, D. b. minor* and D*. b. michaeli* populations have increased by 8.6, 3.5 and 6.5 %, respectively. The positive response in the *D. b. michaeli* population growth rate during this period results from the establishment and settling down of the Thabatholo population. The SA population of this subspecies now stands at 35 (with one still in captivity), equivalent to its 1996 population size. The D*. b. minor* has shown a slight positive increase in its rate from the 2.8% to 3.4% between the last two reporting periods. This may be a positive response to the reductions in Hluhluwe-Umfolozi Park (HUP) and Ithala Game Reserve populations since 1997. The debate on the removal strategy from the important Kwazulu-Natal populations was to be debated in 2002.

Some other populations such as in Pilanesberg NP may have similarly reached or over shot the MPECC. The population of 52 animals has lost 5 subadaults through fighting over the last two years, which has prompted authorities to put six animals up for sale in 2002 as a means of reducing the population size but it still falls short of the recommended MPECC of 36 animals. The Great Fish River Reserve with its introduction of 20 animals in 2000 has increased this population to a 75 animals, the fourth largest population after Umkhuzi GR. None-the-less the population was increasing at a healthy 7%, excluding the introduced animals, as is destined to be an important SA population. Monitoring of the KNP population remains a problem, as no survey was undertaken in the subsample area in 2001 owing to staff problems.

The issue of where to place the extra animals that may emerge from the protected areas (PA's) and private land owners remains a problem given the conflict between financial and conservation needs. The large Kruger NP offers the best prospects for absorbing these excess animals, while other parks (Vembe-Dongola NP) with the potential to carry an important population should come on line soon. If increasing the rate of increase and attaining the goals of the RMG remain a priority, action will need to be undertaken. During the reporting period two more state reserves (Tussen die Riviere & Ophathe) received two males and seven animals, respectively while a single new private population was established. The new private reserve is situated in Subtropical Thicket and offers ideal habitat similar to Addo Elephant NP and the Great Fish Reserve. The number of private properties total 15, an increase on the 11 noted in

1999. However, two of these have single animals and considered captive. The creation of bull reserves for surplus males has had mixed results with the introduction into a Kwazulu-Natal resulting in the death of a number of individuals, while the five bulls introduced in the separate 3600 ha section of Thabatholo and two animals into Tussen die Riviere has proved successful with no deaths, nor aggressive encounters. The later was used as an experiment to test habitat quality.

A total of 118 black rhinos were located on 15 private properties in 2001, up from 88 on 11 properties in 1999. The 118 animals consists mainly of 81 *D. b. minor*, (13 properties), 23 *D b michaeli* (one property), and 13 *D. b. bicornis* (one property). Only one important population exists. Excluding the 27 animals sold to the private sector from PA agencies (KwaZulu-Natal 17; SANP 10) during the reporting period, the population increased by a low 2.8% to 93 animals in 2001. It none the less indicates a relatively poor return on the 99 black rhino made available to the private sector and indicates a possible lack of comprehension for the complexities associated with black rhino conservation. By 2002 the population increased to 148 animals, with the number of properties totalling 19, with adults still favourably skewed in favour of females. Average property sizes were about 19 000 ha, comparable to the 6300 ha for white rhinos. A total of about 37 horns are held by private land owners, all apparently registered.

The South African white rhino population has increased at about 3.6% to the 2001 estimate of 10988 from the 1999 population estimate. The reduction from the 10% reported in 1999, relates to the variation on the Kruger NP population estimate. None-the-less from the 1997 estimate of 7913 animals, the population has increased almost at its maximum rate of about 8.6%. A minimum of 2566 (23%) animal were located on private properties in 2001 (2779 in 2002 – 9.7% increase with 48 animals sold from the state populations), an increase of 5.2% per annum from the 2073 in 1999. The actual number of private landowners has increased from 180 (inclusive of 19 properties with rhinos but not surveyed in 1999) in 1999 to a total of 242 in 2001, and 270 in 2002, an increase of 108 properties. This equates to an average increase of 35 (or 19%) properties per year, greater than the loss of only 10 properties over the two year period again. Limpopo Province still has the largest proportion of the private population (55%). The number of key and important properties has also increased from 1 Key 1, 2 Key 2 and 14 Important populations in 1999 to a further 2 Key 2 and 8 Important populations in 2001, a striking 58% increase. The sex ratio on private land still remains in favour of females, with the 2001 survey result of 1:1.78 showing a marginal increase from the 1:1.5 in 1999. The 2001 survey appears to indicate a slightly lower adult to subadult ratio from the 1997 survey, indicative a slightly younger population. The number of state reserves with white rhino has increased from 39 to 44 since 1999, 13 of which are either Key 1 or 2 populations. The Kruger NP population was estimated to average 5665 (95% confidence estimate: 3972-6018) animals in 2001, still 52% of the total South African population.

In 2002, although 129 white rhinos were traded on private land, only 25 were shot. Sale prices for white rhinos continue to increase at about 11% per annum, although may have dropped slightly in 2001 to R171 014/head (US $17 101/head). Average black rhinos sale prices increased from R375 000 to R550 000 between 2000 and 2001, a 46% increase, and may be a reflection of the ideal adult sex ratios heavily in favour of females. In 2002 prices per animal increased by an average R55 000/animal to R467 000/animal for the 11 animals traded.

2. National rhino initiatives & problems

- The Rhino Management Group (RMG) which consists of nine provincial conservation organisations, South African National Parks (SANP), private land owners (AROA), a number of rhino experts, representation from Namibia and Swaziland met once in 2000 in the Kruger NP.
- Annual population status reports are still being submitted. The analysis of these is proving invaluable in the management of the different rhino populations. Next report due in 2003.
- To meet the population objectives at current rates of increase, its estimated that *D.b.bicornis (200), D. b. minor (2000)* and D*. b. michaeli (75)* populations will reach their goals in 13 – 20 years.
- A telephonic survey of black and white private rhino owners was undertaken in 2001, with a report submitted. A further survey was undertaken in 2002.
- Further SA representatives have been involved in the regional programme initiatives: AfRSG meeting in Zimbabwe in 2002, a workshop on biological management of black rhinos held in Giants Castle in July 2001, and a strategic management planning rhinos planning workshop for SANP populations in

2002.

- As a result of the biological management meeting, KwaZulu-Natal Wildlife agreed to implement the fixed percentage population removal as a means of sustaining population growth.
- The private rhino land-owners association (AROA) continues to be relatively inactive, as expressed in the private land owners survey. It will need to be revitalised to attend to important issues associated with registering private rhino horn etc if South Africa is to make progress towards developing a proposal around the sustainable use of rhino horn.
- 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.
- The removal of the *D. b. michaeli* from peripheral areas in Addo has continued and is destined for completion in 2003. The park has now been expanded to 1400 km^2. The Karoo NP has been increased to~700 km^2 and now carries surplus D*. b. michaeli* from AENP until 2003 when the last remaining animals will be removed to the same private reserve.
- A private reserve has safely experimented with the introduction of five black rhino bulls on a single 5000 ha property thus exploring options of what to do with respect to surplus bulls.
- The Double Drift - Sam Knott Nature Reserve received a further 20 black rhinos in 2000.
- Marakele NP has been expanded and consolidated to a total of 650 km^2, 190 km^2 of that on a contractual basis. Furthermore, plans are to include the adjacent 300 km^2 Welgewonden NR in 2003 making the total area about 900 km^2
- A further 4 *D. b. michaeli* (2.2) were transferred to Mkomazi GR in 2001, raising that population to eight animals.
- Plans are afoot to transfer 5 *D.b.minor* to North Luangwa NP in 2003.
- Funds generated through the sale of white rhino from KNP were placed into a dedicated Project Development Fund (PDF) and is used almost exclusively for acquisition of other areas of biodiversity importance, not operation expenses.
- White rhino are being transferred from South Africa to Botswana in a swap transaction for roan antelope. Destined for completion in 2003.
- South Africa's very progressive Minister of DEAT is of great help in many conservation arenas, which are indirectly helping rhino conservation.
- Private –State partnerships are proving more fruitful that will also benefit rhino conservation eg. Marakele & Addo Elephant NPs. KwaZulu-Natal are initiating a state-communal-private development in which conservation area for black rhino will be expanded under different model, in which rhino conservation features prominently.

3. Illegal Trade Activities

The number of rhino poached in South Africa since 1999 has remained relatively constant with a minimum of 21 white rhinos and no black rhinos. In comparison, 22 animals were poached in the 1998-9 period. Of the 21, 10 were poached in KwaZulu-Natal reserves, seven from SANP (KNP), and 11 from four private properties (inclusive of 7 animals reportedly lost in 1999). There is also speculation that up to four of the white rhinos on Andover GR have also been poached. One black rhinos has been lost in the last two years up till 2002. However the KNP lost 9 rhinos (1 black and 8 whites) in 2002, with reports of one rhino in KwaZulu Natal reserves, and 8 whites on private land. Elephant poaching in the KNP is down with no losses reported. Intelligence reports from around the KNP indicate a fair degree of interest and illegally related rhino activity outside the park. Around the KwaZulu-Natal reserves 15 rhino related incidents have been recorded, with 19 arrests, 6 convictions and 13 cases pending. No rhino related issues reported from other sectors although poaching for other species continues in the Great Fish River Reserve, and appears financially driven as opposed to subsistence.

Table 1. Total number of rhinos (black (bl) & white (wh)) known to have been poached in South African reserves since 1990.

Year	No. rhino (bl, wh)
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)
2000	12 (12,0)
2001	9 (9,0)
2002	18 (17,1)

Budget cuts to conservation organisations continue to plague the conservation activities of these organisations, notably Eastern Cape, and Limpopo Provinces. The later has seen an almost total collapse in any form of monitoring.

4. Future challenges

- Survival of the conservation organisations in the face of decreasing operational budgets.
- Boost the growth rate of flagging *D. b. minor* populations through removals and meta-population approaches.
- Increase support for other conservation initiatives (nationally & regionally).
- Increase rhino introductions into suitably large areas such as KNP.
- Draft a strategic conservation plan for black & white rhinos in SANP during 2002.
- Review the SA black rhino strategic plan in 2003.

2.2.4 Zimbabwe (Florence Msipa)

CURRENT STATUS OF RHINOCEROS IN ZIMBABWE

1. Black rhino population statistics as at December 31 2002

Area	Recent Census	Probable	Speculative
State Land			
Chipinge	20	1	
Matopo	17	3	
Matusadona	65	2	
Sinamatella	95	6	
Subtotal	200	12	
Private Land			
Bubiana	70	30	
Chipangali	6		
Chiredzi	23		
Gourlays Ranch	30	5	
Imire	5		
Iwaba	14		
Malilangwe	39	1	
Midlands Conservancy + Twin Rivers	54	3	
Save Valley	86	4	
Subtotal	327	43	
TOTAL	**527**	**55**	

2. White Rhino Population as at 31 December 2002

Area	Recent Census	Probable	Speculative
State Land			
Kyle Recreational Park	19		
Lake McIlwaine	19		
Main Camp	12		
Matopo	55	20	
Nyamaneche	7		
Sinamatella	11		
Forestry	7		
Subtotal	130	20	
Private Land			
Cecil Kop	2		
Eldorado	3		
Iwaba	21		
Malilangwe	57		
Samanyanga	16		
Save Valley	8		
Sondelani	3		
Subtotal	110		
TOTAL	**240**	**20**	

3. Observed Births: 2002-2003

Area	**Year**	**Black Rhino**	**White Rhino**
Malilangwe	2002	3	11
Save Valley	2002	1	3
Sinamatella	2002	8	1
Matusadona	2002	2	
Matopo	2002	3	2
Midlands	2003	1	
Lake Chivero	2002	4	
Total		**22**	**17**

4. Rhino Population trends

The estimated population was 464 individuals in 2000. By December 2001 the black rhino population was estimated at a probable 524, but could have been as low as 405. At December 2002 the expected population was 576 individuals. The white rhino population was estimated at 218 individuals by 2001. Now the estimated number is 240 individuals.

5. Rhino Mortality

Year	**Black Rhino**	**White Rhino**
2000	6	
2001	9	3
2002	11	6
2003	7	
Total	**33**	**9**

5.1 Locations of Black Rhino Deaths 2002

Area	**Date**	**Age/Sex**	**Cause of Death**
Matusadona	28 March	Male subadult	Poaching
Matusadona	Est April	Adult	Poaching
Iwaba	15 April	Adult female	Old age abortion
Iwaba	July	Adult male	Old age

Area	Date	Age/Sex	Cause of Death
Malilangwe		Subadult male	Fighting
Malilangwe	June report	Adult male	Fighting
Bubiana		Adult male	Sick/fight
Bubiana	September report Peregwe	Calf	Unknown. Presumed snared bones recovered
Bubiana	September report Sovelele	Calf	Unknown. Presumed snared bones recovered
Imire	25 April	Calf	Disease
Midlands	November report	Subadult male	Injury, horns not recovered

5.2 Locations of White Rhino Deaths 2002

Area	Date	Age/Sex	Cause of Death
Cecil Kop	12 October 2002	Subadult male	Sick
Iwaba		Adult female	Unknown
Matopos	2002	Adult male	Fight
Matopos	2002		Fight
Matopos	2002		Fight
Matopos	2002		Fight

5.3 Locations of Black rhino Deaths 2003

Area	Date	Age/Sex	Cause of Death
Matusadona	11 February	Adult male	Poaching/shot
Sinamatella	January	Adult female	Poaching/shot
Sinamatella	January	Adult female	Poaching/shot
Sinamatella	January	Calf female	Poaching/shot
Sinamatella	February	Adult unknown	Poaching/shot
Sinamatella	February	Adult female	Poaching/shot
Sinamatella	February	Adult unknown	Poaching/shot

6. Rhino Management

Rhino conservation in Zimbabwe continues to be guided by the Zimbabwe Rhino Policy and Management Plan that was last reviewed in 2000. In 2001 provincial committees and a National Rhino Management committee was set: up in order to decentra1ise rhino coordination. This bas proved to be quite fruitful as more information about rhino population status is now more readily available from the different provinces. These committees are required to meet at least three times per annum.

7. SADC Regional Rhino programme Input

The SADC Regional Rhino programme is greatly benefiting Zimbabwean rhino management

a) Already the *Wildb* database is up and running at:
   - Save Valley Conservancy
   - Bubiana Conservancy
   - Midlands Black Rhino Conservancy
   - Matopos IPZ
   - Sinamatella IPZ
   - Matusadona IPZ

It is expected that the database shall be made available for more rhino sub-populations. Lake Chivero, Lake Mcllwaine and Chipinge IPZ are proposed areas. The *Wildb* database will also be expected to start running at a provincial level and then at a National level.

The unavailability of a computer bas somewhat hampered the installation of this programme at Head Office. It is hoped that an additional programme for areas where rhino sightings are not regular or easy will be developed.

b) In conjunction with Marwell Trust Zimbabwe, the SADC Rhino programme has trained two Ecologists and 14 scouts on rhino monitoring. This training bas been most useful as trained personnel feel they are now more competent in the field and readily share their experience with other staff. The continuation of such training is therefore most appreciated by the department

c) It is hoped that the SADC Rhino programme will be able to playa brokering role for beneficial movement of rhinos within the region especially with countries needing to restock their rhino populations.

d) While the Authority has not tendered any project for funding for this period the continued support and consultative role played by the programme is much appreciated.

8. Limitations and Problems faced in Rhino Management Issues.

The greatest challenge currently faced in rhino management is the transition of the department into an Authority. This has proved to be a very slow process with its own repercussions:

- Low scout density in rhino areas as result of no recruitment taking place since 2000
- Lack of and ageing transport fleet affecting scout reaction and deployment
- General low morale, as improved terms of service still awaited.

Also the current shortages being experienced by the country has affected anti-poaching activities in some areas. Plains game snaring continues to pose a threat to rhino populations in affected areas. Removal of snares on rhinos is on going.

9. Expected solutions

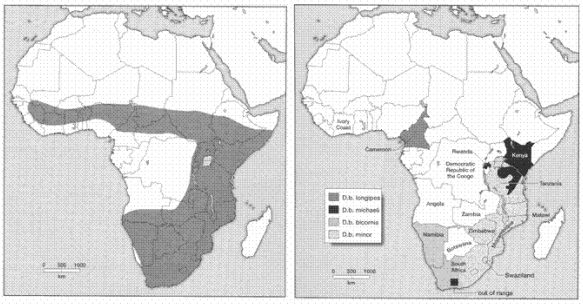
A workshop held at St Lucia's last year in July, came up with recommendations on rhino management actions to be carried out. Among these were the following:

- Translocation of rhinos from high risk areas on private land This was successfully done for Bubiana Conservancy
- Identification of areas for setting up new IPZs. Gonarezhou is one area that is being targeted for a feasibility study.
- Maintenance of current rhino populations. Gourlay's ranch bas four Departmental scouts have been placed to over look the situation. There has been no poaching of rhino.
- Another workshop is ear-marked for the first week of April 2003 and it is expected to be as fruitful as the last one.

3 PRESENTATIONS FROM SADC RHINO CONSORTIUM

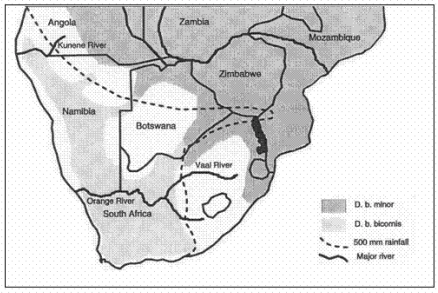
3.1 Presentation: Regional Metapopulation Management (Rob Brett – Programme Coordinator)

Historical Range and Range States of *D.bicornis*



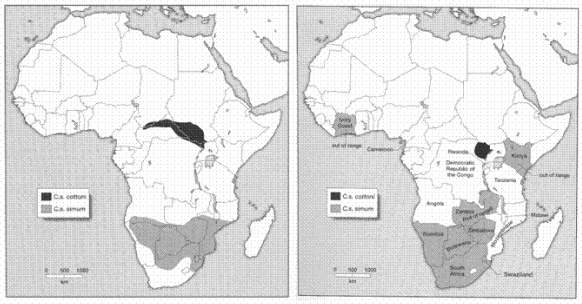
Historical Range ca. 1700 (Cumming *et al* 1990) | Current range (states)

Historical Range boundaries of *D.b.bicornis* & *D.b.minor*



Historical Range of *D.b.bicornis* and *D.b.minor* (after Hall-Martin & Knight, unpubl)

Historical Range and Range States of *C.s.simum*



Historical Range ca. 1800 (Cumming *et al* 1990) | Current range (states)

Subspecies by Range State

- *Diceros bicornis minor (Southern black rhino)*
  - *Angola, Botswana, Malawi, Mozambique, South Africa, Swaziland, Tanzania, Zambia, Zimbabwe*
- *Diceros bicornis bicornis (South Western black rhino)*
  - *Angola, Botswana (?), Namibia, South Africa*
- *Ceratotherium simum simum (Southern white rhino)*
  - *Angola, Botswana, Malawi (?) Mozambique, Namibia, South Africa, Swaziland, Zambia (out of range), Zimbabwe*

Range States by Subspecies

Angola	*D.b.minor, D.b.bicornis, C.s.simum*
Botswana	*D.b.minor, D.b.bicornis (?), C.s.simum*
Malawi	*D.b.minor, C.s.simum (?)*
Mozambique	*D.b.minor, D.b.bicornis, C.s.simum*
Namibia	*D.b.bicornis, C.s.simum*
South Africa	*D.b.minor, D.b.bicornis, C.s.simum*
Swaziland	*D.b.minor, C.s.simum*
Tanzania	*D.b.minor*
Zambia	*D.b.minor, C.s.simum (out of range)*
Zimbabwe	*D.b.minor, C.s.simum*

Subspecies Conservation Goal

- 2,000 animals

A Metapopulation

- Two or more geographically separated populations, with rhinos translocated between them in order to achieve managed gene flow

Genetic Management ideals for new populations

- 20 or more effective (unrelated, breeding) founders
- Establish in an area with CCs of at least 100 rhinos
- Periodic interchange of breeders (1-2 animals per generation)
- Maintain rapid growth rates

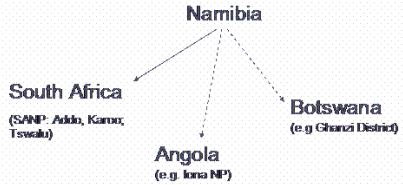
National Metapopulations

- *Zimbabwe (D.b.minor, C.s.simum)*
- *South Africa (D.b.minor, D.b.bicornis, C.s.simum)*
- *Namibia (D.b.bicornis, C.s.simum)*
- *Botswana (C.s.simum)*
- *Swaziland (D.b.minor, C.s.simum)*
- *Tanzania (D.b.minor –Selous GR)*

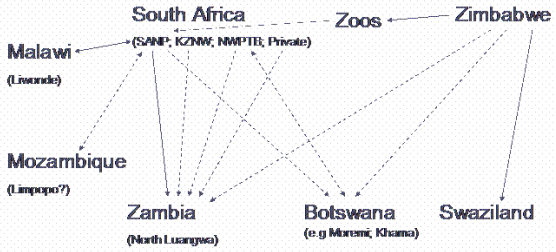
Countries to include in regional metapopulation

- *Malawi (D.b.minor)*
- *Zambia (D.b.minor, C.s.simum (out of range))*
- *Botswana (D.b.minor)*
- *Mozambique (C.s.simum, D.b.minor)*
- *Angola (D.b.bicornis)*

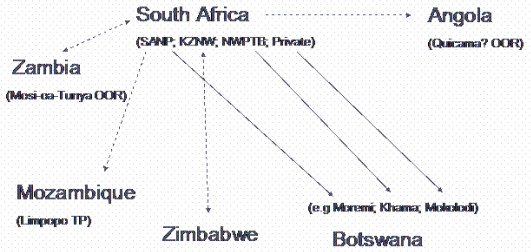
Opportunities for Regional Metapopulation Management
D.b.bicornis



Opportunities for Regional Metapopulation Management
D.b.minor



Opportunities for Regional Metapopulation Management
C.s.simum



Rhino Transactions

- Donation
- Live Sale (e.g. at auction)
- Swap for other species
- Deposit/Loan
- Rhino Rental

3.2 Presentation: Ownership and allocation of rhinos: models and issues (Martin Brooks – AfRSG Chair)

ASSUMPTIONS

- Model selection:
  - Expected performance of rhino population
  - Benefits accruing to Wildlife Authority
  - (Assume all sectors equally effective in all countries)

MODELS

- AUCTION SALE
- TENDER SALE
- FIXED-PRICE SALE
- LEASE "Rent-a-Rhino"
- LEASE "Share progeny"
- CUSTODIANSHIP
- DONATION

AUCTION / TENDER SALE

- Live auction:rhinos captured and viewed
- Catalogue auction: pre-capture (rhino-unknown)
- Tender:pre-capture, advertised, confidential bids
- Price not fixed ➜ Highest bidder wins

AUCTION / TENDER SALE

- Pros:
  - Maximises revenue
- Cons:
  - Best area may not get rhino
  - ECC low to attract bidders
  - Founder populations small (cost, size)
  - Property choice limited to private sector (?)
  - Advertised fixed price ➜best property wins

FIXED PRICE SALE

- Pros:
  - High revenue
  - Best "available" property gets rhino
- Cons:
  - Property choice limited to private sector (?)
  - ECC threshold low to attract buyers (?)
  - Founder populations small (cost, size)

LEASE "Rent a Rhino"

- Annual rental set for certain period
- Compensation paid for rhinos dying
- Founders remain property of State Authority
- Advertised fixed rental ➜ best property wins

LEASE "Rent a Rhino"

- Pros:
  - Moderately high revenue
  - Best "available" property gets rhinos
  - Ownership of founder retained
- Cons:
  - Revenue spread over lease period
  - Property choice limited to private sector (?)
  - ECC threshold low to attract lessees (?)
  - Founder populations small (cost, size)
  - Increased admin and management for State

LEASE "Share progeny"

- No rental - remain State property
- Options
  - State receives 50 % progeny
  - Fixed number of progeny (predicted)
  - Monitoring and mgmt standards set by State
- Progeny as payment ➜ best property wins

LEASE "Share progeny"

- Pros:
  - Suitable model for all sectors (private, communal, State)
  - Very best property gets rhino
  - Optimal rhino population performance
- Cons:
  - No immediate returns (progeny)
  - Option (a) Returns not guaranteed
  - Verification of progeny difficult
  - Good monitoring required
  - Increased admin and mgmt for State

CUSTODIANSHIP

- Founders supplied at no cost
- Founders and progeny remain owned by State
- Monitoring and management standards set by State
- No charge ➜ best property selected

CUSTODIANSHIP

- Pros:
  - Suitable for all sectors
  - Very best property gets rhinos
  - Optimal rhino population performance
  - State's rhino management costs "shared"
- Cons:
  - No immediate returns (progeny)

DONATION

- Founders supplied at no cost
- (Game swaps may be negotiated)
- No charge ➜ best property selected

DONATION

- Pros:
  - Suitable for all sectors (mainly communal, State)
  - Very best property gets rhinos
  - Optimal rhino population performance
- Cons:
  - No returns received (unless swaps)

TENTATIVE RATING OF THE VARIOUS OWNERSHIP MODELS

(Based on ecological and economic considerations, and assuming that the private, communal and State sectors are equally effective)

Ownership Model	Pvt	Comm.	State	Benefits Rhino Conserv.	Benefits State Auth.	Outcomes
Auction/Tender Sale	●			★	$$$	Not ideal for rhinos V high revenue
Fixed Price sale	●			★★	$$	Good for rhinos High revenue
Lease - Rent a rhino	●			★★	$$$	Staggard revenue
Lease - Share progeny	●	●	●	★★★	Rhino ✓✓✓	Reasonable returns
Custodianship	●	●	●	★★★	Rhino ✓✓	Best for rhinos
Donation		●	●	★★★	Conserv. Kudos	Altruism

CONCLUSIONS:

- Best options for rhino population growth is Lease "Share progeny",
- Custodianship and Donation ✔ because very best property can be selected
- Best financial returns for Wildlife Authority are Auction/Tender sale and Fixed-price sale

BASIC SELECTION CRITERIA

- Apply to all models:
  - `Founder population viable (varies by model)
  - Property suitable and approved:
  - Within historical range
  - ECC adequate (varies by model)
  - Free ranging (no food supplements)
  - Good security (location, fences, staff)
  - Management capacity

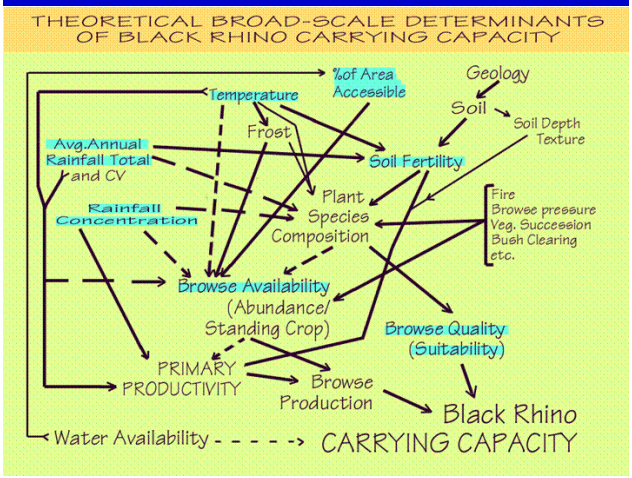
3.3 Presentation: Use of software tools for rhino conservation (Richard Emslie)

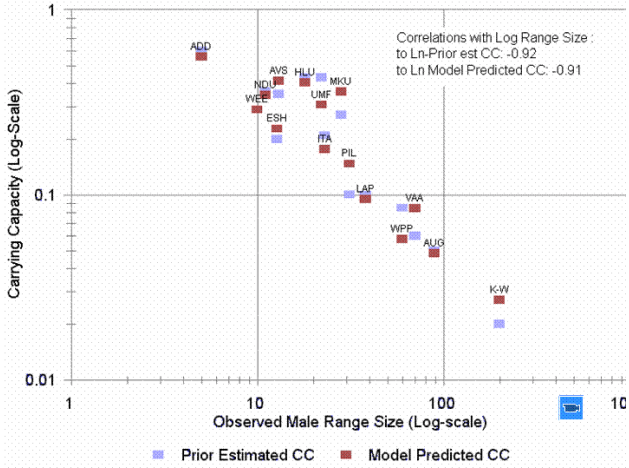
Software tools

- Database systems for capturing, storing, querying and summarising rhino sighting data and producing reports (WILDb, KZN, Kunene,KWS)
- Tools to assist with analysis of population peformance – adds capacity and helps standardise results facilitating comparisons between reserves + saves time (WILDxl)
- Population estimation software to produce population estimates with confidence levels from sighting data (RHINO)

Software tools

- Law Database application to store information on cases and incidents and to query this information and produce reports
- Micro-Track transponder database system to keep track of transponders implanted and to be able to quickly trace where transponder used if recovered.
- Photo ID assessment tool
- RMG Black Rhino Carrying Capacity Estimation Model





Software tools

- Spreadsheet tools
  - E.g block count analyses
- Training
  - AVI Videos with sound - software help and tutorials (eg RHINO 2.0), AfRSG ID course training videos – eg ageing, black rhino condition assessment (ease of use/capacity building)
- Horn Fingerprinting
  - Final aim – be able to import standardised format file with horn chemistry data from labs into software package which then classifies horn sample in terms of both species, and source of origin with probabilities

Software

- Applied research – Statistical software
  - For example, to tease out the influence of physical environmental factors (slope, altitude, geology, aspect etc.) compared to fire data (fire frequencies for different time periods) on black rhino habitat quality (woody species and size class composition).
- GIS/Plotting
  - Patrol effort, Incident mapping, habitat maps, home ranges, post-release movement

Integration of Software

- Rhino database systems (WILDb, KZN,Kenyan) being adapted to produce RHINO 2.0 compatible input files (Saves staff time)
- Rhino, Law and Transponder database systems have a local (reserve, game capture, permits office) version, and consolidated national/agency version. Transfer of data from local databases to national database.

BUT....

- These tools are/will be very useful (save time; provide more standardised and useful information on which to base management decisions; as well as building capacity) BUT...
- They are NOT a substitute for field work (e.g. law enforcement patrolling, browse assessments, rhino monitoring etc.)
- In addition to data quantity, data quality remains critical Garbage IN .. Garbage OUT

4 KEY ISSUES: REGIONAL NEEDS OF RHINO RANGE STATES

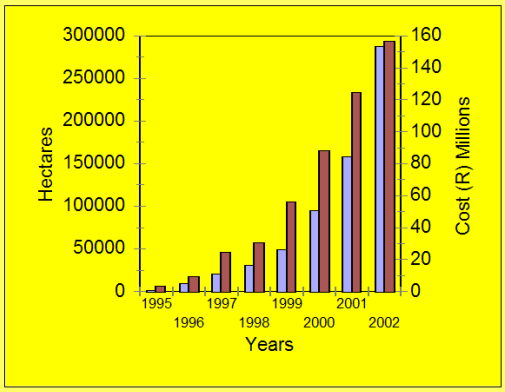
4.1 Presentation: Partnerships I – NGO/Private Sector/Management Authority contractual arrangements for rhino conservation areas (Mike Knight – RSA)

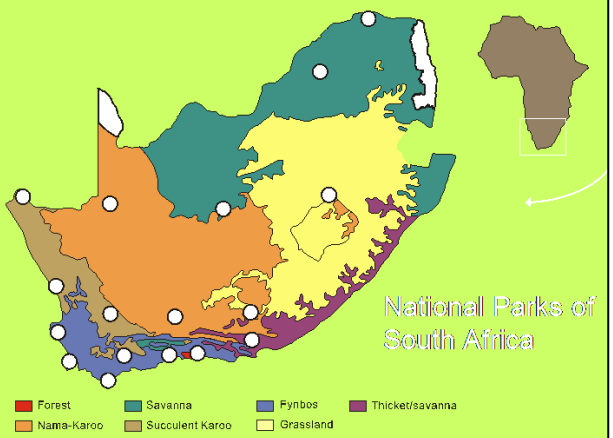
SANParks mission points

For national parks to meet their essential requirement of conserving biodiversity, yet meeting human needs, they must:

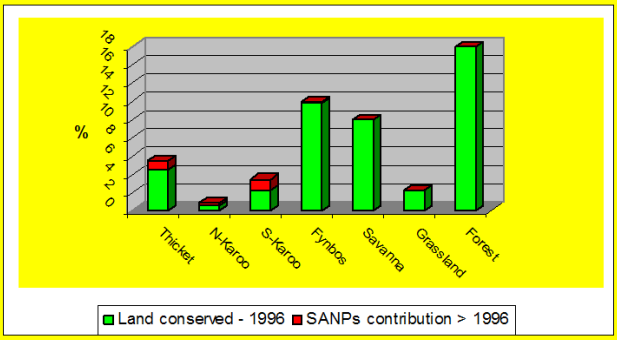
- **Be large enough to support representative examples of one or more natural ecosystems;**
- **Contribute to biodiversity and ecological processes and preserve special cultural features;**
- **Provide spiritual, scientific, educational and recreational opportunities;**
- **Incorporate the needs and aspirations of local, national and international communities;**
- **Reduce occupation and exploitation that are largely in direct threat to its main purpose.**

Accumulative land purchase & costs by SANParks since 1995





SANParks contribution to SA's biome representation in Pas since 1995.



Land incorporation principles: SANParks perspective

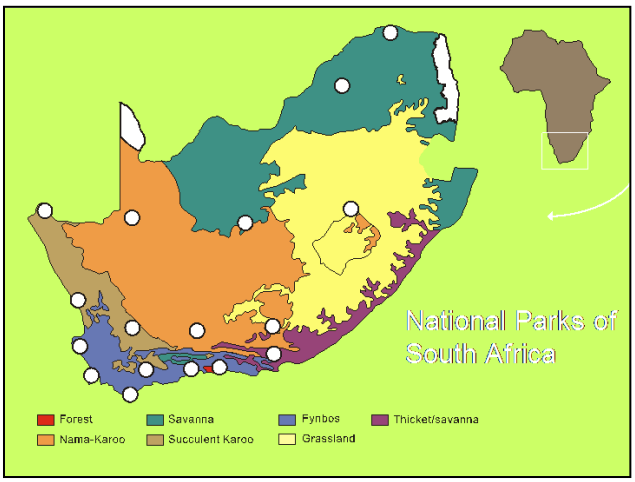
Further expansion of a national park or proclamation of a new one remains justified if one or more of the five following basic principles are met, namely:

- **Maintaining ecological integrity:**
- **Biological respresentativeness:**
- **Enhancing biological diversity:**
- **Enhancing economic viability:**
- **Minimising threats:**

- **Qualified by**
  - *conservation value, location; size; cultural value; economic contribution;financials associated with costs;aesthetic value and social constraints.*

Land incorporation matrix

High conservation value and high threat areas **1. Private land** A. Purchase, very high B. Expropriate, very high C. Contract incentive, moderate D. Management agreement, no	**High conservation value and low threat** **1. Private land** A. Purchase, high B. Contract incentive, high C. Management agreement, low D. Expropriate, low
Low conservation value and high threat **1. Private land** A. Management agreement, high B. Contract incentive, low C. Purchase, low D. Expropriate, no	**Low conservation value and low threat** **1. Private land** A. Management agreement, moderate B. Contract incentives, low C. Purchase, low D. Expropriate, no



Principles of private investment in conservation

Contractual inclusion of private land into SA National Parks

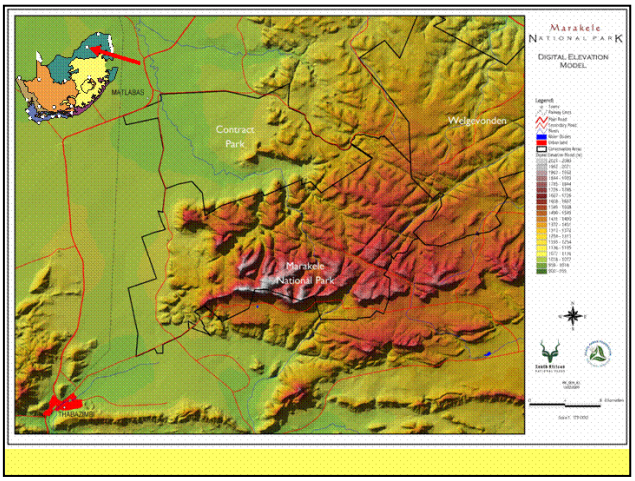
- Enhance conservation as a competitive form of land-use
- Establish & promote sustainable income generating models for conservation
- Increased employment & positive contributions to regional economies.
- Increased local capacity
- Speed-up process of commercialising conservation operations
- Provide necessary bridging finance
- Quality tourism product

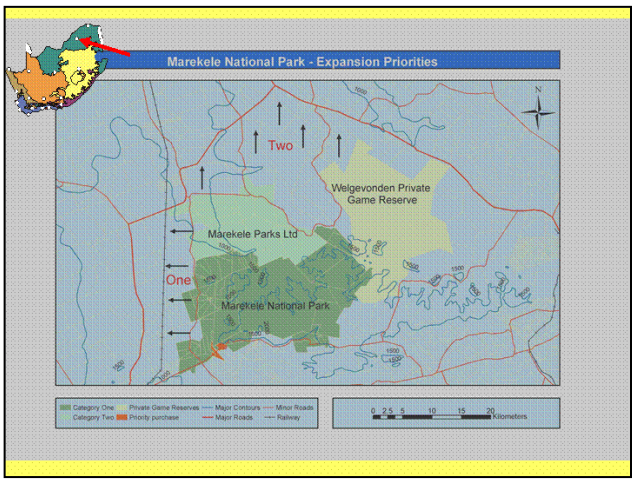
Note

- Not focused on biodiversity conservation
- Largely 'big 5' approach – typical African savanna scenario

Incentives for incorporation of private/communal land on a contractual basis

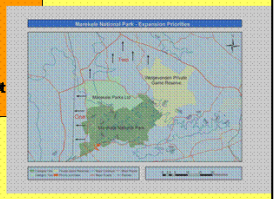
Type of incentive	*Activity*
1. Enabling	• Extension, communication, Contractual National Park
2. Indirect	• Increased land values, Status – National Park, Security • Legal protection
3. Direct	• Fiscal activities (lease, rates, legal costs) – SANParks only • Consumptive use of game (eco-tourism, hunting, sales) • Traversing rights • Infrastructure costs • Alien control • Rehabilitation • Fire management • Management costs • Knowledge transfer • Marketing access • Funding conduit (DTI, IFC)

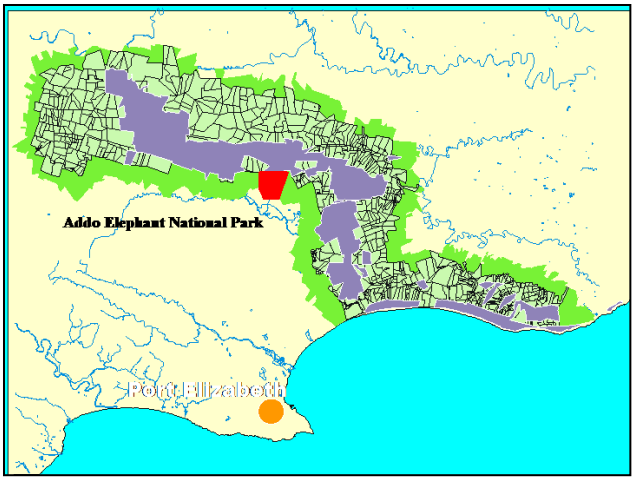




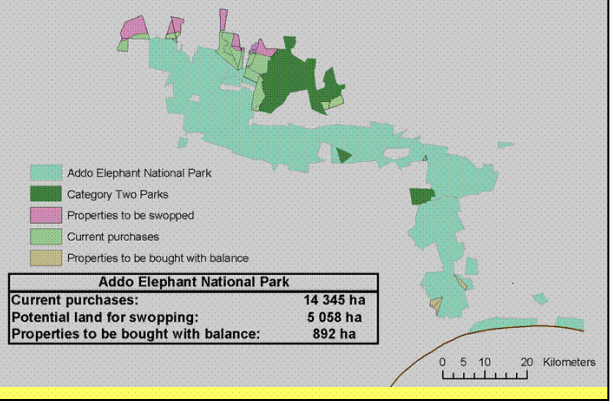
Marakele Parks Ltd in Marakele National Park

- Land purchases (20 000 ha) to SANParks 50 000 ha (ie private: State ownership – 30:70. Focused on productive game areas with SANParks on biodiversity richer areas
- Buy-back option over 30 yrs (min 2000 ha blocks) but one tourism camp/4000 ha block
- Income for SANParks
  - 4% turn-over/camp buy-in fee (increase by 2% points for every 2000 ha land buy back to max of 8% of TO)
  - 50% gate fees
- SANParks game ownership
- Marakele Parks Ltd management of own area
- Traversing rights in remaining park
- SANParks responsible include law enforcement, vet control, translocation, overall management





Addo Elephant National Park: Current Purchases

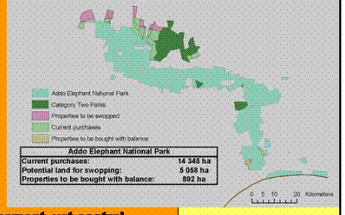


Addo Elephant National Park	
Current purchases:	14 345 ha
Potential land for swopping:	5 058 ha
Properties to be bought with balance:	892 ha

Kuzuko section in Addo Elephant National Park

- Land purchases (16 000 ha) to SANParks 140 000 ha (ie private: State ownership – 13:87 to 30:70 in 6 yrs
- 100 yr contract (1000 yr proposed)
- First right of refusal to SANParks
- Income for SANParks
  - 4% turn-over (buy-in)
  - % of gate fees
  - Management fee (R50/ha/annum)
- SANParks game ownership
- Prorata income from game sales
- Traversing rights on SANParks land
- SANParks responsible include law enforcement, vet control, translocation, overall management

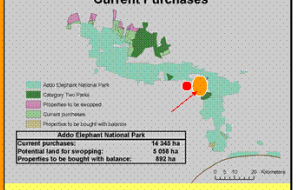
Addo Elephant National Park: Current Purchases

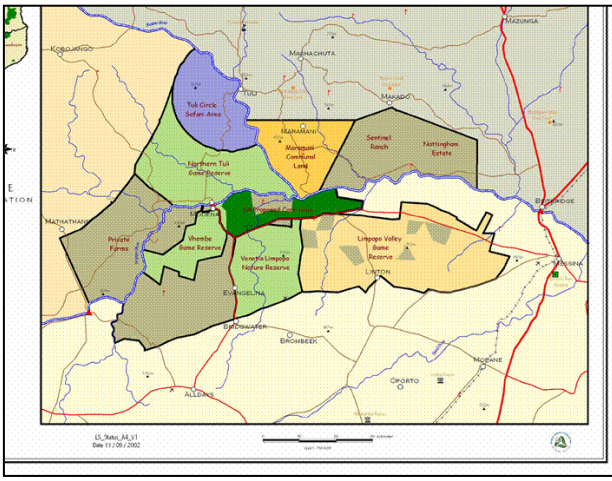


Riverbed Conservancy in Addo Elephant National Park (under negotiation)

- Contract conservancy (20 000 ha) to SANParks 140 000 ha with communal partnership
- 20 yr contract
- Communal land inclusion on a shareholder basis
- First right of refusal to SANParks for pvt land
- Income for SANParks
  - <4 % turn-over (buy-in) on ecotourism
  - % of gate fees on entry to AENP
- SANParks maintain game ownership
- Prorata income from game sales/hunting
- Traversing rights on SANParks land
- SANParks responsible include law enforcement, vet control, translocation.

Addo Elephant National Park: Current Purchases

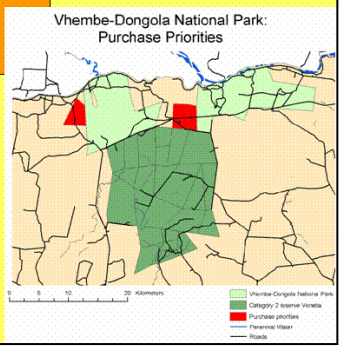




Venetia Game Reserve (Vembe-Dongola NP)

- 40 000 ha contribution by de Beers to VDNP on contactual basis.
- Access to specific section of de Beers property for ecotourism purposes
- SANParks game ownership
- Donation of black rhino in exchange for tourism activities.
- Traversing rights on SANParks land

Vhembe-Dongola National Park: Purchase Priorities



Has the state: private partnership helped in rhino conservation?

Positive

- More land, cash injections, flexible management, enhanced management, greater exposure, redirected conservation budget, greater security (more eyes)

Negative

- Exclusivist, management relationship, conservation vs economics,

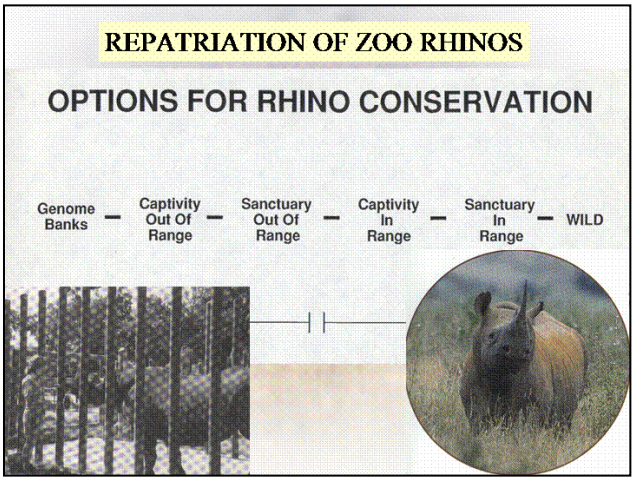
Other state: private partnerships in conservation?

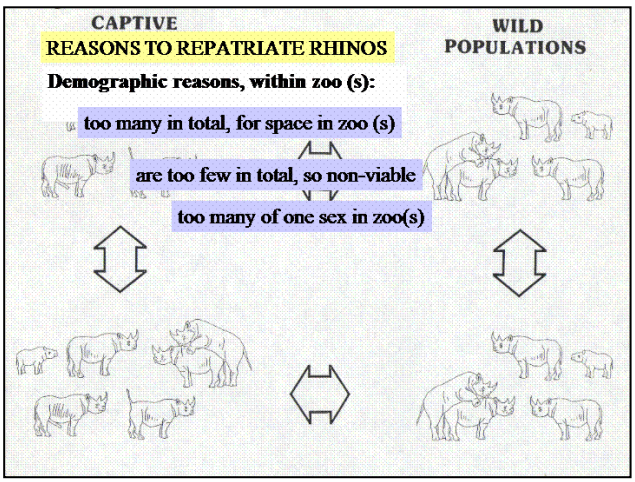
African Parks

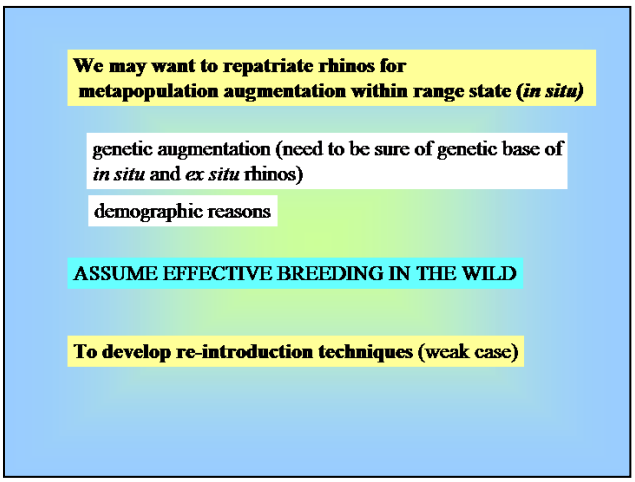
- Management agreement 20 –30 yrs
- Reduced state expenditure
- Entirely externally funded
- State receive % (33%) of profit after 10 yrs
- Shares to be made available to employees
- Greater employment and capacity generation opportunities
- Wildlife re-establishment & protection
- Enhanced expertise & training
- Establish commercial ventures in park

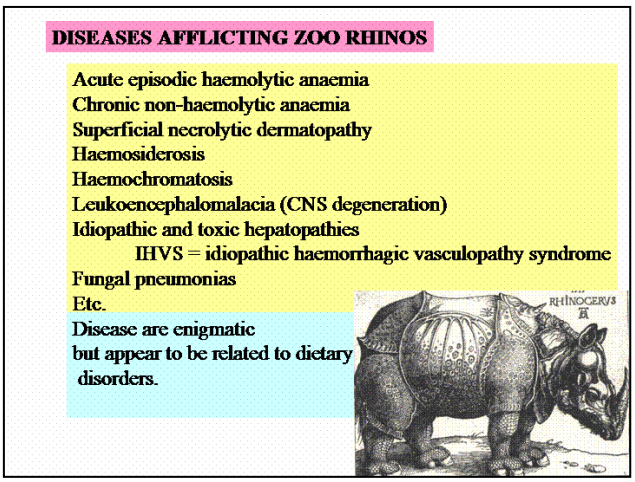
- Potential sites: *Malawi, Zambia, Mozambique*

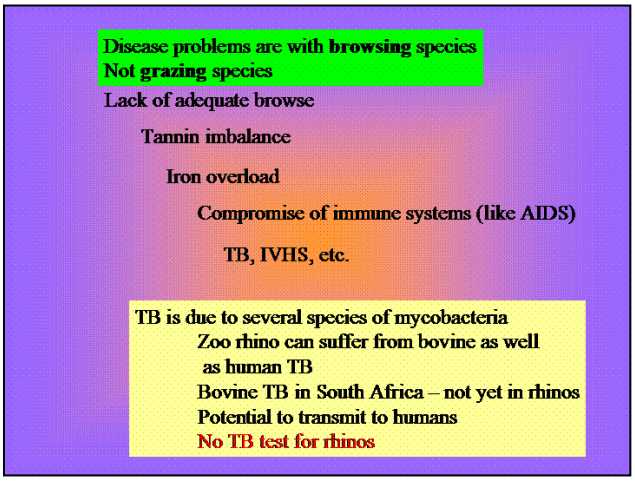
4.2 *Presentation: Partnerships II – Ex-situ rhinos for repatriation to the SADC Region: options, risks and benefits (Raoul du Toit – WWF SARPO)*

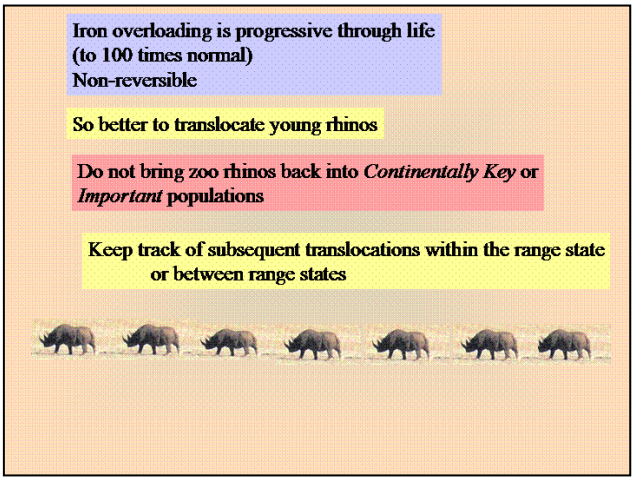


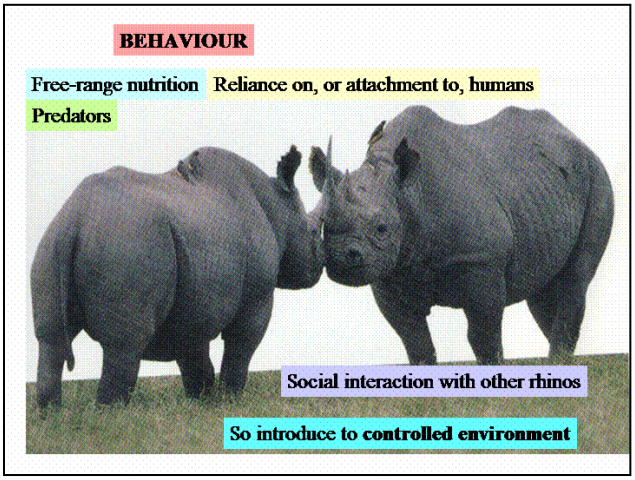


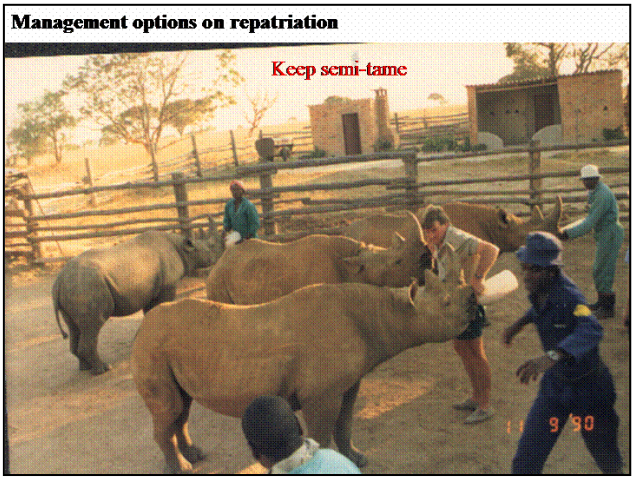




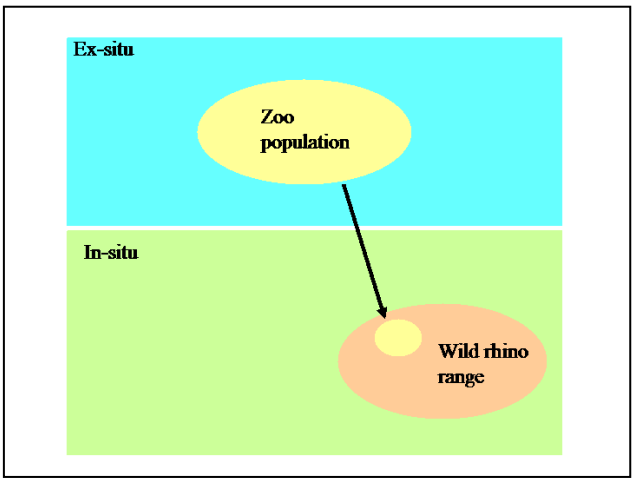


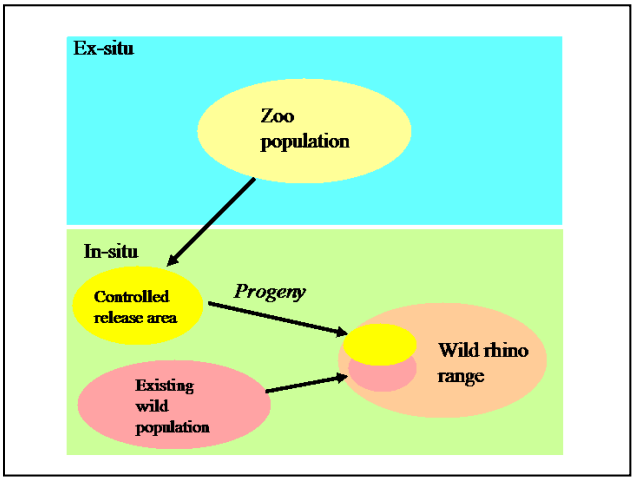



BEHAVIOUR
Free-range nutrition
Reliance on, or attachment to, humans
Predators
Social interaction with other rhinos
So introduce to controlled environment

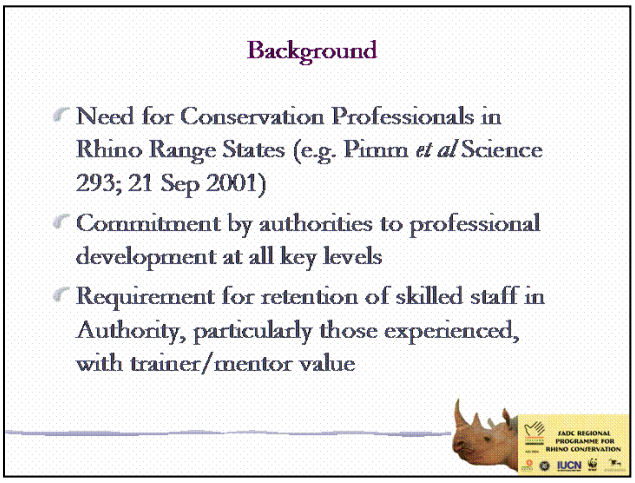

Management options on repatriation
Keep semi-tame

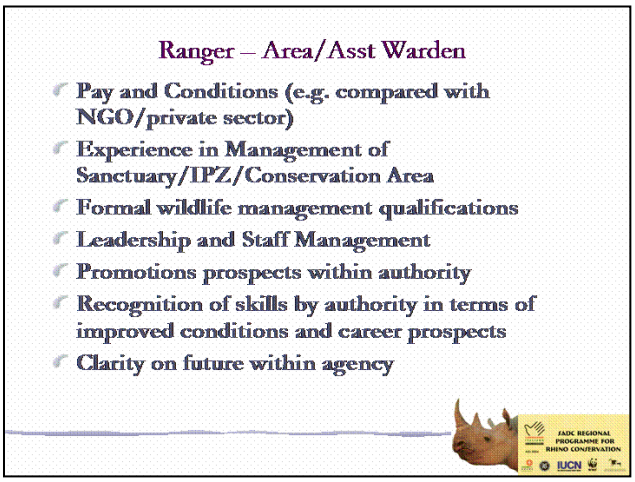

Encourage to "go wild"


Ex-situ
Zoo population
In-situ
Wild rhino range


Ex-situ
Zoo population
In-situ
Controlled release area
Progeny
Wild rhino range
Existing wild population

4.3 Presentation: Sustainability I – Incentives and career development of rhino conservation staff (Rob Brett – Programme Coordinator)





4.4 Presentation: Sustainability II – Institutional options for training activities in the SADC Region & linkages with other regional programmes (Jonas Chafota – WWF SARPO)

1. FORMAL TRAINING OPPORTUNITIES

- **Formal Colleges with a national focus with emphasis on one and a mix of**:
  - Community Based Natural Resource Conservation
  - Wildlife Management
  - Agriculture
  - Forestry
  - Game Scout/Rangers Training
  - Nature Conservation
- **Formal Colleges with a regional/international focus**
- **National Universities**

2. INFORMAL TRAINING OPPORTUNITIES

- **Training opportunities provided by:**
  - Government Departments
  - NGOs
  - Private Sector
  - CBO Associations

3. TRAINING LEVELS

- Certificate level
- Diploma level
- Degree
- Short Courses (Certificate of Attendance)

4. CONSTRAINTS

- Courses offered not strictly relevant to rhino conservation
- Lack of continuity or follow up on rhino courses offered
- Specific rhino courses usually donor driven
- Government departments usually suffer from staff turnover, hence institutional memory is eroded
- Training to viewed as a process and to be internalized in appropriate institutions

5. INSITUTIONAL OPTIONS FOR TRAINING

Consideration in institutional selection

- Government Departments
- NGOs
- Private Sector
- CBO Associations

Natural Resource Management Based Training Providers in the SADC Region

COUNTRY	INSTITUTION	FOCUS	STUDENT BASE	COURSE LEVEL AND LENGTH	NO. OF STUDENTS
Botswana	Botswana Wildlife Training Institute – Maun	CBNRM, Ecotourism and Wildlife Management	Botswana • Long Course targets existing conservation employees	• Basic training (10 weeks) • Short Course (10 days) • Professional Guiding (19 weeks) • Certificate level (2 year) • Two year and three Diplomas in development by end 2002	175 (for 2000 Academic year) 2,200 people since 1967
Botswana	Botswana College of Agriculture	In-service Agriculture and related fields	Botswana	• Certificate • Diploma • Degree (all are between 1-3 years) • Short Courses	N.A
Malawi	College of Forestry and Wildlife	Wildlife and Forestry	Malawi • Long Course targets existing conservation and forestry employees • Short Course has local focus	• Certificate – Wildlife Management (2 year duration) • Diploma in Forestry (2 years) • Short Courses – beekeeping small game animal, wildlife education and interpretation (2 weeks each)	16 people per Long Course 10 people per Short Course
Mozambique	National Game Scout Training Centre –Gorongoza National Park	Specialised Game Scouts and Game Rangers	Mozambique – Ministry of Agriculture and Rural Development • Targets existing employees	• Basic Training • Game Scout training (no duration of courses given)	N.A
Namibia	Desert Research Foundation – Gobabeb Training and Research Centre	Environment and Community	Namibia, SADC and Overseas (focus on Namibia)	• Short Courses (1 to 3 weeks) • Diploma – Post Doctoral	150 – short courses (2000) 60 – long Course (2000)
South Africa	Cape Technikon, Saasveld Faculty of Forestry, Mangosuthu Technikon SA, Technikon Pretoria	Nature Conservation	South Africa • Long course – targets SA matriculants	• Certificate (1 year) • Advanced Diploma – Nature Conservation (3 years)	Various at each institution

COUNTRY	INSTITUTION	FOCUS	STUDENT BASE	COURSE LEVEL AND LENGTH	NO. OF STUDENTS
South Africa	Southern African Wildlife College	National resource management and CBNRM	• SADC region	• Certificate (1 year) • Diploma (1 year) • Short Courses – (1-12 weeks)	40-50 Long Course students/yr (121 since 1998) 1052 short Course participants since 1997
Tanzania	College of African Wildlife management – Mweka	Wildlife Management, Community conservation	East and Southern Africa • Long Course and Short Course – targets SADC conservation employees	• Special course (Secondary level) – 1 year • Certificate (1 year) • Ordinary Diploma (1 year) • Advanced Diploma (1 year) • Postgraduate Diploma (1 year) Short Courses – various lengths	142 (2,5000 since 1963)
Zambia	African College for Community-based Natural Resource Management (formally Nyamaluma)	Community Conservation	Zambia • Short Course targets local community members	• Secondary and Certificate level • Basic upskilling (4-6 months)	26-36 natural resource managers and graduate 700 community members/yr in Short Courses

6. PROPOSED TRAINING APPROACHES

6.1 Informal training (short courses, on or off college)

- Identify national training partners (governmental, NGOs, Private Sector, CBO Associations)
- Develop locally adapted training materials i.e. computers, audio-visual materials, manuals, drama, games etc)
- Develop themes and modules that are demand driven
- Test priority training modules
- Consider sustainability and incentive issues

Advantages

- Suits local needs
- Costly travel and visas for participants minimized
- Client or agencies are prepared to commit resources to such training
- Funding (such as donor monies) is spent directly on training of participants
- Less time away from work place.
- Potential for community participation

6.2 Mainstreaming in formal institutions

- Identify appropriate focal national/regional institution
- Explore funding opportunities
- Examine existing curricula and determine possibility of incorporating rhino conservation modules
- Determine demand for rhino conservation courses
- Develop appropriate modules
- Identify and address capacity needs of focal institutions
- Implement fast track modules
- Assess demand and incorporate into the curricula

Advantages

- Rhino conservation integrated into mainstream curricula
- Funding become core part of national/regional institutions

7. FRAMEWORK FOR REGIONAL DIALOGUE

- Develop mechanisms for sharing information across the regions
- Explore funding opportunities
- Websites
- Publications
- Regular meetings
- Sharing technical expertise
- Feed into the SADC process

8. CONCLUSIONS

- Continue with informal (opportunistic) training if funding permit
- Institutionalize by mainstreaming into formal institutions
- Institutionalize by packaging modules and lodging with focal points/NGOs etc.

4.5 Presentation: Sustainability III – Institutional framework and future coordination by SADC (Manuel Enock – SADC FANR)

Restructuring of SADC institutions was first tabled at the Summit held in Mauritius, in1998. The reason behind was that the then Coordinating Units were inefficient but the issue was not approved. However, the Review Committee on the restructuring programme presented the report again at the March 2001 Summit, which was held in Windhoek, Namibia. This time it was outlined in the report that if the institutions were restructured, there would be a reduction in the costs of running the coordinating units from US$ 16 million (when the coordinating units were being run by Member States) to US$ 12 million if all the coordination was to be done at the secretariat. Summit approved this and it was agreed that four directorates be set up at the Secretariat in Gaborone, Botswana which were to be headed by a chief director. Thus all the sectors were to be clustered into these four directorates below:

(i) Trade, Industry, Finance, Investment and Mining
(ii) Infrastructure and services
(iii) Food Agriculture and Natural Resources (FANR)
(iv) Social and Human Development and Special Programmes

Wildlife sector is now under the FANR (Food Agriculture and Natural Resources) Directorate, which was officially launched on 7th December 2001. The other sectors that have formed this directorate are: Forestry, Fisheries (both marine and inland), livestock and animal disease control, I Agricultural Research and Training, Plant and Genetic Resources, Crops, Regional and Early Warning System, Environment. and Land Management Sector, Food Security and Water. For proper management, the sectors that have formed FANR have been condensed into four units being headed by Deputy Directors. Wildlife falls under the Environment and Natural Resources Management Unit.

PHASING OUT OF THE SECTOR COORDINATING UNITS AND PHASING IN OF THE FANR DIRECTORATE

Upon the establishment of the FANR, SADC Secretariat undertook consultation missions in five Member States, which have been coordinating F ANR Sectors namely; Botswana, Lesotho, Malawi, Namibia and Zimbabwe. The missions reviewed the functions and activities of the Sector Coordinating Units (SCUs) with a view to determining functions that should be relocated to the SADC Secretariat as well as the timeframe for the transfers and implications of such relocations. In undertaking this exercise, two guiding principles were used in line with the Council Decisions. The first was to ensure that there is minimal disruption of on-going projects in the transfer of activities from Sector Coordinating Units to the F ANR Directorate at the SADC Secretariat. The second was that physical implementation of projects and programmes must remain in Member States while the coordination of these activities should be transferred to the SADC Secretariat.

At the time of the consultation missions, the wildlife sector had two projects that were already under implementation. These are: SADC Regional Wetlands Conservation Project Phase II and the SADC Regional Rhino Conservation Project. These two projects will expire in 2004. The management of the projects will remain where they are (IUCN-ROSA offices Zimbabwe) but the project coordinators should be reporting to the SADC Secretariat directly.

THE FUTURE

At the SADC F ANR Sector Coordinators retreat on the restructuring of SADC Institutions meeting held in Zimbabwe, it was noted that there was need to continue having sectoral meetings on mutual basis so as to deliberate issues affecting the sectors. The same applies to F ANR Ministers

STEERING COMMITTEES AND BOARDS OF INSTITUTIONS

At the F ANR Ministers meeting held in Maputo in July 2002, it was approved that all Project Steering Committees/Boards be retained and that the SADC Secretariat be a member. The Steering Committees/ Boards will be responsible for clearing technical issues on projects leaving policy issues to the Secretariat. However this was subject to review by the review committee

Establishment of SADC National Committees (SNC)

As part of the restructuring, SADC National Committees have been established in all the Member States. These Committees constitute an integral part of the SADC structure for the implementation and monitoring of all SADC projects and programmes at national level.

Integrated Committee of Ministers (ICM) Integrated Committee of Ministers (ICM) was to be established by August 2002. The ICM will assume the functions of the abolished Sectoral Committee of Ministers. The ICM may establish "specialised sub-committees" to facilitate its work. The ICM has just been inaugurated in Angola during the Council meeting of Ministers held recently.

5 PRESENTATION OF PROJECT PROPOSALS

5.1 Criteria for funding support by the SADC Rhino Programme (Rob Brett – Programme Coordinator)

The agreed criteria or conditions for funding support by the SADC Rhino Programme were listed:

1. Projects must be of a SADC regional nature or importance. The Programme will concentrate on rhino projects and policies that area of a regional nature (e.g. those which involve sharing of expertise between SADC member states, involve sharing or exchange of their rhinos, are conservation models for potential replication elsewhere in the region, and/or have regional economic or political implications).

2. Projects must limited to 'subspecies' *Ceratotherium simum, Diceros bicornis minor* and *D.b.bicornis.* The Programme will be limited to rhino 'subspecies' whose historical range included more than one SADC state and whose future metapopulation management is also likely in involve more than one SADC state (i.e. southern African subspecies: *Ceratotherium simum, Diceros bicornis minor, D.b.bicornis*).

3. Fundamental rhino management issues as well as land use economics, community involvement, etc. must be taken into account. The Programme will be primarily concerned with fundamental rhino management issues and with clearly relevant aspects of land-use economics, community interaction, applied research, etc. It will endeavour to assist SADC rhino range states, to the extent that they request, with the establishment of proactive measures to protect their rhinos from poaching, but will not become involved in law enforcement or in the investigation of illegal activities. Information on numbers and distribution of rhinos will be kept to the level of confidence that is specified by each range state.

4. Both public and private rhino conservation projects will be considered. The Programme will include public and private sector rhino conservation projects

5. Implementation must make use of existing institutions and linkages. The Programme will be designed and implemented to complement existing institutions and their linkages, particularly the SADC Wildlife Sector Technical Co-ordination Unit, existing national and regional rhino management committees (notably the Southern African Rhino Management Group) and the IUCN African Rhino Specialist Group (AfRSG).

Discussion: Dr Brett said that the project proposal format had been amended to include (a) a section on sustainability of the project to be funded; and (b) a 'model' proposal for guidance of applicants or proponents of proposals. There was discussion of endorsement process within range states. There was agreement that it would be necessary in future for private sector and NGO proponents from individual countries to clear or get endorsement for their proposals by their country rhino management authority.

5.2 Presentation and discussion of project proposals for funding in semesters 8-10 (Martin Brooks – AfRSG Chair)

Each of the project proposals developed by range states and members of the SADC consortium were described in brief by the proponents (if present) or by the range state focal points or consortium representatives involved. Each presentation was followed by queries, comments and discussion from plenary.

Each proposal was given a serial number and all are listed in Annex D, including summary information on each. The project proposals themselves (including subsequent revisions) have been compiled into a separate document for information and circulation to range state focal points.

Project Proposals

Proposal 104 – Evaluation of monitoring, security and management of the Mombo IPZ rhino population (M Tjibae/M Masedi)

Proposal 107b – Creating awareness of rhino conservation in rural schools II (R du Toit)

Proposal 108 – Towards a long-term plan for a viable rhino population in Liwonde NP, Malawi: Establishment of a rhino stakeholders committee and an ecological monitoring plan (R Bhima)

Proposal 109 - RESG Administrator (S Pillinger/R Emslie)

Discussion: There was support expressed for RESG's activities by country members present. Dr Brett confirmed the funding request and endorsement from the RESG Chair (L Mungwashu) for the proposal from private consultants, highlighting the importance of covering costs of organising meetings and administration, and funding participation at meetings. RESG meetings were scheduled and to piggyback on INTERPOL meetings where possible. Mr Enock asked for more information about the RESG, and requested a copy of the agreed Terms of Reference for the group so that these can be endorsed by member states formally at the SADC technical committee.

Mr du Toit queried the sustainability of RESG funding, including the possibility of ploughing back ivory funds into conservation. There was need to institutionalise the group so that it did not become dependent the private sector. Some indication of sustainability was needed. Dr Brooks proposed that the RESG Chair attend the next range states meeting, and make a presentation. He also requested that the Terms of Reference of the RESG be attached to the proceedings of the meeting (**Annex E**). Dr Kampamba expressed scepticism about use of consultants and access to information. Dr Brooks suggested the need for RESG members to address confidentiality at the next RESG meeting.

It was agreed that the RESG should be asked to formally report back to range states at future SADC range states meetings. An RESG presentation would also be given at the next AfRSG meeting, including comprehensive report. The RESG would also be asked to submit regular reports to SADC range states meetings.

Proposal 112 – Improved training for rangers and rhino monitoring in the Selous GR, Tanzania (M Maige)

Proposal 113 – Purchase of a computer and training of Khama RS staff on rhino database management (M Tjibae)

Proposal 114 - National Rhino Database for Namibia (P du Preez).

Discussion: Mr du Preez said that the project would address one of the strategic objectives of Namibia national rhino plan, and focus on the rhino populations of Etosha, Waterberg and Kunene. Additional data would be incorporated into a national database structure similar throughout Namibia. The database format would be developed from a workshop with consultant input, including external expertise from region. Namibia had unique requirements for its database, since much of the rhino monitoring was based on waterholes (e.g. Etosha NP). Thus is was first necessary to decide on a database for use (e.g. the regional SADC database WILDb), and then customise it for use in Namibia. A workshop would provide additional regionality in terms of possible subsequent use of the database developed elsewhere in the SADC region with similar requirements.

Proposal 115 – Mobile rhino boma for the translocation of rhino in communal areas in north west Namibia (P du Preez)
Discussion: Mr du Preez said that the Kunene region had the largest rhino population on communal land in the world, and there was commitment to biological management of the Kunene population. Most critically there was need for range expansion, and a need to take animals and boma-train them in order to relocate them to different areas within the Kunene range. Dr Knight suggested that the mobile boma system used by SANP may be of interest or application. Mr du Preez added that the proposal had regionality in terms of potential future use of the mobile boma in reintroducing rhinos to the Iona NP/transfrontier park with Angola. Mr du Toit said that is was important to address the whole question of establishment of rhinos in arid areas, and that development and use of a boma should be part of a process of reintroduction of rhinos to desert areas, including design and management of controlled release procedures, and establishment of 'best practice, including boma design and management.

Proposal 116 – Law database programme: completion of development of database for the storage and retrieval of incident information, report writing and training (R Hamilton/R Emslie)
Proposal 117 – Law database programme: adding configuration routine for easy adaptation for use in other range states (R Hamilton/R Emslie)
Proposal 118 – Law enforcement/intelligence database: training (S Pillinger/R Emslie)
Discussion: Dr Brett queried the potential regional extension of law enforcement data, and range states input (reserve level and national level) and also the possibility of bilateral information access between countries. Mr du Toit said that the database should be available for large private operators. Dr Knight asked for any examples of successful prosecution of prosecution from data exchange between countries. Mr Reilly said that there was a valid fear of leakage of information; Swaziland worked with the Endangered Species Protection Unit (ESPU) of the South African Police. Dr Knight suggested that RESG provide an outline plan for regional law enforcement at next meeting. Dr Emslie added that the ESPU had now been disbanded and dispersed.

Proposal 118 – MircroTrack programme: microchip database development, implementation and training (R Emslie)
Discussion: There were questions about the implementation and use of a regional transponder database, and how to institutionalise arrangements, possibly using TRAFFIC as central repository. Individual versions could be housed with central control agency in each SADC country. Dr Brett suggested that the only shared information needed was (a) country and (b) serial number of transponder. Retrieved transponders could be then referred to country databases. Updates would be needed on any regional movements of rhinos. With regional buy-in from all range states, TRAFFIC could be approached to be the clearing house for transponder numbers. It was agreed that the Programme Coordinator would approach TRAFFIC about their potential hosting of a regional transponder database.

Proposal 119 – Funding of SADC delegate attendance at 2004 AfRSG meeting (M Brooks/R Emslie)
Discussion: Dr Emslie said that the AfRSG was the continental coordinating body for rhino conservation, which held 6-day meetings every two years. It was an important forum for networking, and a learning experience for range state delegates. The 2004 meeting envisaged a focus on the SADC RRG, with the inclusion of Mozambique and Angola as well as other RRG countries. Funds were needed for attendance costs of representatives of the SADC range states and the SADC rhino consortium. Mr du Toit said capacity building and networking at was needed at a regional level, and the meeting would need to debate on key themes from SADC region (e.g. arid areas, schools awareness, database integration, staff development). Maybe this could be used as leverage towards motivating for a similar regional approach for East African rhino, which would promote collaborative regional efforts for the conservation of *D.b.michaeli* and *C.s.cottoni*.

Proposal 120 – Black rhino exchange between Namibia, South Africa and Botswana (M Knight)
Discussion: Dr Knight said that the proposed translocation would have strong regionality, and be the first phase in developing a viable population from founder populations. The project would be composed of two phases, the movement of 4 D.b.bicornis from Namibia to South Africa and the movement of 4-6 D.b.minor from South Africa to Botswana. There were queries about the possible use of Khama RS for receiving black rhinos due to its maximum carrying capacity of only 4 rhinos.

Mr du Toit said that the regional translocations were a very positive development. Mr du Preez said that MET would need to be informed that if SANP would not move the rhinos from South Africa to Botswana in 2003, since this was a prerequisites for approval from Namibia. Mr du Toit said that there were issues of phasing the reintroduction of black rhinos in Botswana. A small number could be held for small period at Khama RS. There would be reduced risk if small groups were released from different boma sites at Moremi, and there were concerns about drib-and-drab introductions. Mr Tjibae said that Botswana did not want to make any mistake. He recommend that the rhinos go to sanctuary first, where capacity and security was demonstrated. There were plans to increase Khama RS to 78 sq km. Dr Brett added that the SADC evaluation had confirmed that Khama RS was not large enough to hold a viable population of black rhinos even with the extension proposed. A more appropriate relocation site (e.g. Mombo) was required Mr du Toit suggested that the reintroduction could be broadened to include Zimbabwe, and give consideration to providing rhinos to Botswana. Dr Brooks said that there could be link in terms of approval by donor country (e.g. Zimbabwe) of the release area. Mr Tjibae said that Mombo would be good destination if Zimbabwe are going to contribute additional animals to make up a viable founder population

Proposal 121 – Translocation of the initial black rhino population from South Africa to North Luangwa NP, Zambia (M Knight)

Discussion: Dr Knight said that this project had origins in 1999 origins, when SANP were approached by the Frankfurt Zoological Society NLCP, looking at possibility of establishing a rhino sanctuary in North Luangwa. Apart from being the first phase in the reintroduction project for black rhinos in North Luangwa, the project would further the regional metapopulation of black rhinos managed by SANP, Zambia, Liwonde, Zimbabwe and Botswana.

6 OTHER BUSINESS

6.1 Any Other Business (Humphrey Nzima – Malawi)

Sustainability
Dr Knight raised the question of sustainability of SADC rhino programme, and the need for a request for SADC programme to be continued. A funding mechanism required, not necessarily including the current donor. Mr Chafota added that SADC would not be able to carry on the programme without funding, and sustainability rested ultimately with member states.

Dr Brooks said that a review of programme to date was needed to justify or seek umbrella support from SADC upon which to launch extended programme. Dr Brett added that he had contacted range states with specific requests in writing for feedback on benefits received, stressing regional aspects. As part of a programme review, further formal feedback should be drafted by country representatives with high level transmission to SADC (Executive Secretary, FANR directorate) requesting continuation of the SADC rhino programme.

Mr Chafota said that the SADC consortium must identify potential sources of funds. Mr Daconto said that one potential source of future funding is the Italian government. A evaluation of the programme by the donor is expected at some stage. In the mean time a critical internal review was required. This was already happening in the form of an examination of training and sustainability. The internal review would also be an opportunity for the SADC secretariat to learn more about results of programme. Feedback form SADC itself would also be needed, specifically in identifying what activities could and could not be brought under SADC, and how to shift emphasis. The internal review document would go to DGCS and SADC FANR. Mr Enock confirmed that this would be normal procedure for processing motivations up to request for further funding of the programme.

It was agreed that the next step was for the Programme Coordinator and SADC Consortium to develop Terms of Reference for the internal review, including listing of conservation implications, and approach used to assess what various projects have actually achieved. The target for completion of the internal review process should be the end of July 2003.

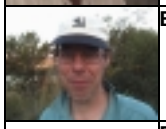
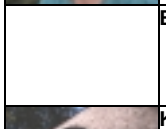
Other items
Dr Brett asked for country representatives to submitted completed lists of task reports and software developed under the programme Mr du Toit reminded all participants to correctly refer to the programme as the SADC Regional Programme for Rhino Conservation (not IUCN). Dr Emslie requested all participants to submit contributions on rhino conservation in SADC range states for inclusion in *Pachyderm.*

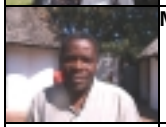
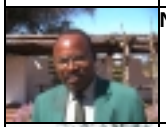
Date for next meeting
March 2004 was suggested as the date for the next SADC range states. Mr Daconto said that this should depend on the objective of the final meeting of the range states, and an alternative time would be the final quarter of 2004, including a final review of the programme. It was agreed that the decision on the timing of the next meeting would be deferred to the meeting of the SADC rhino consortium.

6.2 Concluding Remarks and Closure of Range States Meeting (Manuel Enock – SADC FANR)

SADC secretariat – Manuel Enock summarised his impressions of the SADC rhino range states meeting, the first that he had attended. He said that the meeting had proved very fruitful, and the participation had been very active. The meeting had come up with a good conclusion for range state representatives, and it was clear that the programme was good for rhino conservation at regional level. He indicated that he would advise management on the recommendation for the programme to continue. He thanked the Programme Coordinator for including SADC secretariat in the meeting, and the Programme Coordinator in turn thanked Priscilla Mutikani for her hard work in organising the meeting. With that Mr Enock declared the meeting formally closed.

ANNEX A: LIST OF PARTICIPANTS

	NAME	FIRST NAME	Country	POSITION	AUTHORITY	ADDRESS	TEL	FAX	E -MAIL
	**Bhima**	Roy	Malawi	Deputy director (research)	DNPW	P O BOX 30131, LILONGWE 3	265-1-757584 265-9-921474	265-1-774059	sadc.wstcu@malawi.net
	**Brett**	Rob	Zimbabwe	Programme coordinator	IUCN-ROSA	P. O. BOX 745, HARARE	263-4-728266/7	263-4-720738	robb@iucnrosa.org.zw
	**Brooks**	Martin	South Africa	Chairman	IUCN/SSC AFRICAN RHINO SPECIALIST GROUP (AFRSG)	BOX 13053, CASCADES, PIETERMARITZBURG 3202	27-33-8451471	27-33-8451498	mbrooks@kznwildlife.com
	**Chafota**	Jonas	Zimbabwe	Programme officer	WWF-SARPO	10 LANARK RD, BELGRAVIA BOX CY 1409, CAUSEWAY, HARARE	263-4-252533/4 263-4-703902 263-11-213921	263-4-252533/4	jchafota@wwf.org.zw
	**Daconto**	Giuseppe	Zimbabwe	Advisor	CESVI	29 NORTHWOOD RISE, MT. PLEASANT, HARARE	263-4-882243 263-91-249386	263-4-882243	daconto.cesvi@zol.co.zw
	du Preez	Pierre	Namibia	Rhino coordinator	MINISTRY OF ENVIRONMENT AND TOURISM	LTIA BUILDING RUHR STR, NORTHERN INDUSTRIAL AREA)PRIVATE BAG 13306, WINDHOEK	264- 61-263131	264- 61-259101	dupreez@mweb.com.na
	**du Toit**	Raoul	Zimbabwe	Project executant	WWF-SARPO	BOX CY 1409, CAUSEWAY, HARARE	263-4-252533/4	263-4-252533/4	rdutoit@wwf.org.zw
	**Emslie**	Richard	South Africa	Afrsg scientific officer	IUCN/SSC AFRICAN RHINO SPECIALIST GROUP (AFRSG)	BOX 13053, CASCADES, PIETERMARITZBURG 3203	27-33-8451472/3434065	27-33-8451498	kerynric@absamail.co.za remslie@kznwildlife.com
	Enock	Manuel	Botswana	Forestry and wildlife expert	SADC SECRETARIAT FANR DIRECTORATE	P. BAG 0095, GABORONE	267-3951863 267-71461213	267-3972848	manuele@sadc.int
	**Kampamba**	George	Zambia	Director: research, planning & information	ZAMBIA WILDLIFE AUTHORITY	KAFUE RD, PRIVATE BAG 1, CHILANGA	260-1-278335 260-97-889159	260-1-278244/439	zawaorg@zamnet.zm gskampamba@yahoo.com

	**Kingengo**	Nkosi Luta	Angola	Chief of wildlife department	INSTITUTE OF FORESTRY DEVELOPMENT - IDF MINADER	CP 527, RUA COMMANDATE, GIKA NO 62, LUANDA	244-2-323934/322729 244-91-221626	244-2-323934/322729	florestal@netangola.com
	**Knight**	Mike	South africa	Head: park development	SOUTH AFRICAN NATIONAL PARKS	P. O. BOX 20419 HUMEWOOD 6013, PORT ELIZABETH	27-41-5085412	27-41-5085415	mknight@upe.ac.za
	**Langa**	Felismina Longamane	Mozambique	Officer	DNAC - MINISTRY OF TOURISM	AV. 25 DE SETEMBRO NO 1018, C.P. 4101, MAPUTO	258-1-303633 258-82-315968	258-1-303633	flanga@turismo.imoz.com
	**Maige**	Mathew	Tanzania	Principle wildlife officer & nat. Rhino coordinator	TANZANIA WILDLIFE DIVISION	IVORY ROOM - NYERERE RD, P. O. BOX 1994, DAR-ES-SALAAM	255-22-2866408 255-744-299814	255-22-2123158	wildlife-division@twiga.com
	Masedi	Mercy	Botswana	Assistant wildlife officer "rhino coordinator"	DEPT. OF WILDLIFE AND NATIONAL PARKS	P. O. BOX 131, GABORONE	267-3906396	267-3912354	mercy_masedi@yahoo.com
	**Mutikani**	Priscilla	Zimbabwe	Personal Assistant	IUCN Regional Office for Southern Africa (ROSA)	6 LANARK ROAD, BELGRAVIA, HARARE. P O BOX 745, HARARE, ZIMBABWE	+263 4 728 266	+263 4 720 738	priscillam@iucnrosa.org.zw
	**Msipa**	Florence	Zimbabwe	Rhino coordinator	DNPWM	BOTANICAL GARDENS, CNR SANDRINGHAM/BORROWDALE RD, BOX CY 140, CAUSEWAY, HARARE	263-4-707624/9, 792786 263-91-325621	263-4-724914	mfcmasiyazi@yahoo.com
	**Nzima**	Humphrey	Malawi	Deputy director	DEPARTMENT OF NATIONAL PARKS AND WILDLIFE	P. O. BOX 30131, LILONGWE 3	265-1-775499 265-852648	265-1-774059	dnpw@malawi.net
	**Reilly**	Ted	Swaziland	Chief executive	KINGDOM OF SWAZILAND'S BIG GAME PARKS - KING'S OFFICE	P. O. BOX 311, MALKERNS	268-5282013	268-5283924	reillys@biggame.co.sz
	**Theophilus**	Isaac k.	Botswana	Deputy director	DEPT. OF WILDLIFE AND NATIONAL PARKS	BOX 131, GABORONE	267-3971405 267-71850674	267-3912354	itheophilus@gov.bw
	**Tjibae**	Moremi	Botswana	Chief warden	KHAMA RHINO SANCTUARY	BOX 10, SEROWE	267-4630713 267-71621447/71539929	267-4635808	krst@botsnet.bw

ANNEX B: AGENDA

Day 1 Wednesday March 12th, 2003

Session I Chair: Manuel Enock

08:30	Welcome and Opening	(Chair/SADC FANR Secretariat, DGCS/CESVI)
08:50	Self-introduction by participants	(Chair)
09:00	Introduction and Objectives of Range States Meeting	(Chair, Rob Brett)
09:10	Review of Progress by SADC RPRC to date: Overview of Semester 7-8 Projects	(Rob Brett)
09:40	Outcome of RRG meeting	(RRG Chair)
10:00	***Coffee/Tea Break***	

Session II Chair: Humprey Nzima

Presentations from SADC Rhino Range States

SADC RRG countries

10:20	Key points from RRG country presentations Angola, Botswana, Malawi, Mozambique, Tanzania, Zambia	(Range State Focal Points, Rob Brett)

SADC RMG countries

10:50	Namibia	(Pierre du Preez)
11:10	Swaziland	(Ted Reilly)
11:30	South Africa	(Mike Knight)
11:50	Zimbabwe	(Florence Msipa)

Presentations from SADC Rhino Consortium

12:10	Regional metapopulation management of rhinos	(Rob Brett)
12:20	Ownership and allocation of rhinos: models and issues	(Martin Brooks)
12:40	Use of software tools for rhino conservation	(Richard Emslie)
13:00	***Lunch***	

Session III Chair: Rob Brett

Regional Needs of RRG and RMG countries: Key issues for Discussion

Partnerships in rhino conservation

14:00	NGO/Private Sector/Rhino Management Authority partnerships: contractual arrangements for rhino conservation areas	(Mike Knight)
14:20	Discussion	
14:40	*Ex-situ* rhinos for 'repatriation' to the SADC region: options, risks & benefits	(Raoul du Toit)
15:00	Discussion	
15:20	***Coffee/Tea Break***	

Sustainability of regional rhino conservation programmes

15:40	Incentives & career development of rhino conservation staff	(Rob Brett)
16:00	Institutional options for training activities in SADC region & linkages with other regional programmes	(Jonas Chafota)
16:20	Institutional framework and future coordination by SADC	(Manuel Enock/Humphrey Nzima)
16:40	Discussion	
17:00	***Close***	

Day 2 Thursday March 13th, 2003

Session IV Chair: Martin Brooks

08:00	Criteria for Funding Support by the SADC Rhino Programme	(Rob Brett)
08:15	Presentation and Discussion of Project Proposals for funding in Semesters 8-10 • Projects already approved at October 2002 consortium meeting • New proposals submitted from range states and consortium	(Chair)
10:00	***Coffee/Tea Break***	

Session V Chair: Humphrey Nzima

10:30	Presentation and Discussion of Project Proposals for funding in Semesters 8-10 (continued)	(Plenary)
12:30	Any Other Business: Outstanding Agenda Items, Dates for next meeting	(Humphrey Nzima)
12:50	Concluding Remarks	(Humphrey Nzima/SADC Secretariat)
13:00	***Close of Range States Meeting and Lunch***	

ANNEX C: PROGRESS REPORTS

Table 1: Progress against Semester 7 tasks (September 23rd, 2002 - March 10th, 2003)

Task	Task	Task Leader	Indicators of progress	Progress to date
Name	*No.*		*semester 7*	*semester 7*
Revision of management plan for Liwonde NP, upgraded to include rhino management	1.2-4.2	Jonas Chafota	(a) Consultative meetings/workshop in Malawi held; (b) Revised management plan drafted by end of semester	Task deferred to semester 8, awaiting revised proposal from Malawi DNPW, and improved coordination of task with revision of Liwonde NP Management Plan supported by FZS.
Development of new National Rhino Strategy for Zambia	1.2-6.1	Rob Brett	Stakeholders meeting held and rhino strategy drafted by end of semester	Delay in primary funding by US Fish & Wildlife RTCF has delayed this project until semester 8.
Coordination with National and Continental Rhino Conservation	1.3-1.4	Rob Brett	Missions to at least one SADC range states by programme coordinator or consortium member	Coordination with Botswana rhino programme during visits by programme coordinator in November and December 2003, including database-training course. Technical assistance missions to Namibia in semester 7b. Coordination assistance provided to Zimbabwe on (a) potential repatriation of black rhinos from US Zoos (b) motivation for support provided to PWMA from local donors to address recent rhino poaching in Zimbabwe IPZs
SADC Rhino Range States Meeting (includes preparation)	1.3-2.3	Jonas Chafota	Meeting held and attended by representatives from at least 5 SADC rhino range states	Meeting scheduled for 11-13 March at Maun Lodge, Maun, Botswana, including meetings of the SADC RRG and SADC rhino consortium.
WILDb development: performance indicators and RHINO software interface	2.2-2.3	Rob Brett	(a) Version 1.1 of the national version of the *WILDb* developed; (b) Version 2.0 of the *WILDb* site database developed and distributed to sites where *RHINO* software (version 2.0) has also been distributed and installed	(a) Version 1.1 of National Database developed; (b) Version 1.35 of site database developed and circulated to users in Botswana and Zimbabwe (c) Version 0.5 of *WILDxl* (analysis of population performance) developed and circulated for review. Training course in use of *WILDb* provided for users in Botswana (Maun, December 2002)

Task	**Task**	**Task Leader**	**Indicators of progress**	**Progress to date**
Name	*No.*		*semester 7*	*semester 7*
Decision support module (database/GIS) for rhino monitoring and surveys II	2.2-3.2	Rob Brett	Version 1.0 of database/GIS developed by end of semester, including grid-based analysis of rhino abundance indices by 5x5 grid, and distribution of rhino sightings by category	Version 1.0 of database/GIS module under development by consultant (D Purchase), with Matusadona NP IPZ and Sinamatella IPZ in Zimbabwe as pilot areas for testing, and potential for customising GIS grid for use in several IPZ or conservancy areas in the region.
Compilation of SADC RMG black rhino status report 1999-2001	2.4-1.1	Martin Brooks	SADC RMG status report for 1999-2001 complete and circulated to RMG management authorities and agencies by end of semester	RMG Status report currently under production by consultant (K Adcock) with funding from USFW RTCF.
Improving security and management of rhino horn stocks in SADC rhino range states II	3.1-3.3	Rob Brett	(a) Revised guidelines for Rhino Horn and Product Database (RHPD) completed; (b) Reviews of horn tracking and registration systems completed for Namibia, Zimbabwe, Tanzania, South Africa and Botswana completed;(d) Rhino Horn Stockpile Documentation Database (RHSDD, for individual horns) developed, and guidelines completed; (e) Rhino Horn Seizures Database (RHSD) developed for SANP, and database manual completed.	(a) RHP Database with GIS extension complete, in use and populated with 2,000+ rhino horn stocks and seizures from the SADC region. (b) Results from rhino survey on private land in South Africa added to national reconciliation report. (c) First version RHSMD developed. (d) Revised guidelines for RHPD complete. Poor reporting and expenditure of task budget.
Training in scene of rhino crime investigation II: training course in Namibia	4.1-2.1	Richard Emslie	Scene of rhino crime training course held in one SADC rhino range state before end of semester	Scene of Crime Training course scheduled for 12-16 May 2003 in Windhoek, Namibia for law enforcement staff of MET and Namibia Police PRU.
Capacity building in rhino monitoring in NW Namibia I	4.1-3.1	Rob Brett	Training needs assessment mission by SADC consultant and MET team completed, and draft assessment report completed and in circulation before end of semester	Training Needs Assessment mission completed by consultant (R Blok) and MET staff (27 Jan – 18 Feb 2003). Draft TNA report submitted.
Improving and standardising models for black rhino carrying capacity assessment II: review of RMG model v 1.1	4.2-2.2	Martin Brooks	Review of RMG Black rhino carrying capacity model by at least 2 consortium members drafted by middle of semester	Review of carrying capacity model by consortium specialist and consultant (K Dunham) in progress.

Task	**Task**	**Task Leader**	**Indicators of progress**	**Progress to date**
Name	*No.*		*semester 7*	*semester 7*
Improving and standardising models for black rhino carrying capacity assessment III: browse assessment	4.2-2.3	Martin Brooks	(a) Browse assessment reference data and photographs acquired from 15 black rhino areas in South Africa and Namibia; (b) Procedures document drafted with reference photos by end of semester	6 consultants from representative rhino habitat areas in SADC region identified and contracts prepared for their contribution to browse availability reference data for revision of model. Remainder of this task to be completed in semester 8.
Creating awareness of rhino conservation in rural schools I: proposal development	5.1-2.1	Raoul du Toit	Project proposal drafted by end of February 2003, for review at March 2003 consortium meeting	Project proposal (107b) prepared and circulated for review at March 2003 range states and consortium meeting.
RHINO population estimation software development II	6.1-2.2	Richard Emslie	Produce and distribute the revised and completely rewritten *RHINO* version 2.0 to existing *RHINO* users by the end of semester	With the exception of Multi-area analysis, all analytical procedures have now been completed and tested and debugged against earlier versions of *RHINO*, for completion by end of semester. The simulation procedures, manuals, context sensitive help files and *CamtasiaStudio* .avi help/tutorial videos will be completed in the first half of Semester 8. *RHINO* 2.0 is on schedule for its proposed release by the end of June 2003.
Rhino horn fingerprinting techniques II: validation	6.2-1.2	Richard Emslie	(a) Meeting held between project leader, consultant statistician/programmer and university maths student followed by (b), Further supervised statistical analyses of existing data by student and consultant which advances the development of fingerprinting as a technique, and (c) Further communication between AARL and project leader leading to decisions as to which samples need to be analysed at AARL using new machines; (d) Sample analyses at AARL underway.	Anglo American Research Labs (AARL) have developed, calibrated and tested new MS and OES analysis machines that will analyse future samples. In early November 2002, Dr Emslie visited AARL and it was confirmed that testing of the new multi-element analysis packages was finalised, that good results had been obtained, and that AARL were now in a position to offer the analysis packages to clients. Results showed that the technique can reliably distinguish the species and regional/country origin of horn samples, this work also indicated that the existing sample sizes of 3-6 per park were insufficient to reliably determine source down to the finer park or area-within-park level. To answer these questions a penultimate experimental phase of the project has been developed (Semester 8).

Task *Name*	Task *No.*	Task Leader	Indicators of progress *semester 7*	Progress to date *semester 7*
Technology for rhino monitoring and patrol reporting II	6.2-2.2	Raoul du Toit	Prototype automated scout patrol reporting - GPS data-logging device developed by end of semester	Specifications of prototype GPS scout-tracking device provided to consultant engineer for development of prototype device. Potential GPS modules included in device to be selected from *u-blox* TIM/SAM or *NavSys TrackTag* depending on power requirements and cost.
Project development & prioritisation	8.3-1.3	Rob Brett	(a) Project proposal format revised to include model proposal for range state guidance; (b) project proposals submitted for selection and review at SADC range states meeting (March 2003)	(a) Model proposal included in updated proposal format, in addition to section on addressing project sustainability. (b) 11 project proposals submitted from region for review at SADC consortium meeting (March 2003)

Table 2: Progress of Semester 7 tasks against Programme Activities (at March 2003)

	ACTIVITY ▼	SEMESTER 7 PROGRESS ▼	FUTURE NEEDS AND PLANS ▼
1.1	**Establishment of national rhino committees.**	National Committees established and operating in Botswana and Namibia	National Committees are still priorities for improving coordination and support of present and future rhino conservation efforts in Tanzania and Malawi.
1.2	**National rhino conservation strategies and action plans.**	Final draft of Botswana rhino conservation strategy was approved by DWNP for endorsement by Minister. Process of developing revised and updated management plan for Liwonde NP (Malawi) commenced with first planning workshop in May 2003.	Development of new National Rhino Strategy for Zambia planned for June 2003 (RTCF funding). Tanzania rhino strategy of 1999 has still not received official endorsement from parent ministry. Angola and Mozambique require preliminary assessment of areas and options for rhino conservation on which to base country strategies and plans. South Africa black rhino management plan to be updated in semester 9.
1.3	**SADC rhino programme committee.**	New Botswana rhino focal point (Ms M Masedi) appointed replacing M Tjibae. SADC rhino range states meeting, including second meeting of SADC Rhino Recovery Group (RRG) convened in March 2003 in Maun, Botswana.	SADC RMG meeting planned for June 2003 in Namibia. Internal review of programme, including sustainability, to be undertaken in July 2003.
2.1	**Surveys of remnant populations.**	None.	Monitoring assistance to IPZs in Zimbabwe still needed, in addition to possible further input to Selous GR.

	ACTIVITY ▼	SEMESTER 7 PROGRESS ▼	FUTURE NEEDS AND PLANS ▼
2.2	**SADC regional rhino database.**	WILDb Site database upgraded to version 1.35, and supplied to existing users in Botswana, Zimbabwe and South Africa. WILDxl population performance analysis module developed and tested (version 0.5).	WILDb site database to be upgraded during semester 8 with function to export sightings data to RHINO population estimation software (version 2.0). WILDb may be modified and extended for use as national database for Namibia in semester 9 task.
2.3	**Incorporation of GIS into database.**	GIS Map module (Excel) and MS Access and MS Query used in development of version 1.0 of rhino monitoring and survey database tool, for pilot testing in Matusadona IPZ, Zimbabwe	GIS/database rhino survey and monitoring tool will be further developed for mapping rhino distribution and abundance indices in semester 8.
2.4	**Annual rhino status reports.**	RMG status report (1999-2000) compiled.	To be developed in coordination with AfRSG and SADC RMG/RRG.
3.1	**Specific field projects.**	Reviews of horn tracking and registration systems completed for Namibia, Zimbabwe, Tanzania, South Africa and Botswana completed; Two new databases Rhino Horn Stockpile Documentation Database (RHSDD, for individual horns) and Rhino Horn Seizures Database (RHSD) developed by TRAFFIC, including documentation.	Support for regional translocation of black rhinos (South Africa to Zambia; Namibia to Botswana via South Africa) approved for implementation in semester 8. New projects to be supported for developing rhino conservation in Angola and Mozambique from semester 8 onwards.
4.1	**Specialized training.**	On-site training in use of WILDb database(s) provided in Botswana and Zimbabwe. Training needs assessment for rhino monitoring staff in Namibia (MET, conservancies and private sector) completed.	Instructor course in rhino monitoring (revised version) scheduled for July 2003 in South Africa. Also Training courses in Scene of Crime investigation, and use of law enforcement database (semester 8 onwards)
4.2	**Production of technical manuals.**	Updated user and reference manuals produced for WILDb site database, both for Site database (version 1.35) and National database (version 1.01). Review task of RMG carrying capacity model (1.0) completed.	Updated rhino monitoring training course for instructors (task 4.1-1.2) to be completed in semester 8, for further use in courses from July 2003 onwards. Course handbook for Scene of Crime training course to be used for future training in Namibia (semester 8) and Zimbabwe (semester 9).
5.1	**Materials for community awareness.**	Project proposal for rhino awareness project in rural schools in Zimbabwe completed, for implementation in semester 8.	Follow-on phase of rhino awareness project approved for implementation in Swaziland in semester 9.
5.2	**Incentive schemes for reporting poachers.**	None.	Further elements of projects in semesters 4-7 involving community participation to be reviewed.
5.3	**Benefits to local communities.**	None.	Further elements of projects in semesters 4-7 involving community participation to be reviewed.

	ACTIVITY ▼	SEMESTER 7 PROGRESS ▼	FUTURE NEEDS AND PLANS ▼
6.1	**Provide expertise for research.**	RHINO 2.0 population estimation software completed for pilot testing in KZN Wildlife rhino reserves.	Regional law enforcement database (developed at KZNW) to be completed and distributed from semester 8 onwards, including installation and training missions to range states.
6.2	**Pilot projects to test new technologies and methods.**	Rhino horn finger-printing tool developed to point where analysis machines and software can reliably distinguish species and region/country of origin of horn samples. Specifications for GPS automated scout tracking and data logging device provided to consultant engineer for prototype construction.	Horn fingerprinting technology still needs further development in semesters 8-9, including additional sampling (3-6 per park) to determine source at park or within-park level.
6.3	**Economic analyses.**	None	Sustainability of individual projects and outcomes of SADC RPRC to be addressed in future technical reports.
7.1	**Assist with the drafting and "marketing" of proposals**	Some projects proposals that will not be funded by SADC RPRC in 2003 have been presented to other donors (WWF, RTCF).	Additional projects proposals that do not fit criteria for SADC programme support, but are otherwise highly rated, will be 'marketed' with other potential donors.
8.1	**Executive Board and Programme Coordinator**	Completed in Semester 1. SADC Rhino Consortium meeting was held in October 2002 in Harare, Zimbabwe. Range States and Consortium meeting (including SADC RRG meeting) was held in March 2003.	Regular meetings of SADC RRG and SADC RMG planned during remainder of programme lifetime, as well as annual full meetings of SADC rhino ranges states.
8.2	**Financial and reporting procedures**	Administrative protocol for the programme (version 1.3) in use.	Timely financial reporting to CESVI required for remainder of programme lifetime.
8.3	**General workplan**	11 new project proposals presented from SADC region for approval at SADC Consortium meeting in March 2003.	Financial plan for extension of funding of the programme by DGCS to December 2004 awaiting approval.
8.4	**Semester technical reports**	Technical report for Semester 7 be submitted to CESVI on 6th May 2003.	Technical report for Semester 8 due for submission to CESVI by 7th November 2003.
8.5	**Semester financial reports**	Inputs to technical and financial reports for Semester 7 received. Draft financial reports for Semester 7 submitted in mid-May 2003.	Financial report for Semester 8 due for submission to CESVI on 7th November 2003.
8.6	**Final report**	None.	To be completed during final semester of programme (currently extended to 18th July 2003, but proposed for further extension to 31 December 2004)

ANNEX D: LIST OF PROJECT PROPOSALS SUBMITTED

No	Project Proposal Title	Range State	Originator	Contact	Semester	Period	Funds requested
104	Evaluation of monitoring, security and management of the Mombo IPZ rhino population	Botswana	DWNP	M Tjibae	8	4 mo	$7,500
107b	Creating awareness of rhino conservation in rural schools II	Zimbabwe	SADC RPRC	R du Toit	8	6 mo	$7,080
108	Towards a long-term plan for a viable rhino population in Liwonde National Park, Malawi: Establishment of a Rhino Stakeholders Committee and an ecological monitoring plan.	Malawi	DNPW	R Bhima	8-9	8 mo	
109	RESG Administration	RESG	RESG	L Mungwashu	8-11	6 mo	$5,500
112	Improved training for rangers and rhino monitoring in the Selous GR, Tanzania	Tanzania	Wildlife Division	M Maige	8	1 mo	
113	Purchase of a computer and training of Khama RS staff on rhino database management	Botswana	Khama RS	M Tjibae	8	2 mo	$6,200
114	National rhino database for use in Namibia	Namibia	MET	P du Preez	8	2 mo	$15,145
115	Mobile rhino boma for the translocation of rhino in communal areas in north west Namibia	Namibia	MET	P du Preez	8	3 mo	$35,500
116	Law Database programme: completion of development of database for the storage and retrieval of incident information, report writing and training	SADC Region	KZNW	R Hamilton	8		$1,500
117	Law Database programme: adding configuration routine for easy adaptation for use in other range states	SADC Region	KZNW	R Hamilton	8		$1,250
110	Law Enforcement/Intelligence Database: training	SADC Region	RESG	L Mungwashu	8	6 mo	$6,450
118	*MicroTrack* programme: microchip database development, implementation and Training	SADC Region	KZNW	R Hamilton	8		$2,800
119	Funding of SADC delegate attendance at AfRSG meeting	SADC Region	AfRSG	R Emslie	10		$34,142
120	Black rhino exchange between Namibia, South Africa and Botswana	SADC Region	SANP	M Knight	8	6 mo	$22,500
121	Translocation of the initial black rhino founder population from South Africa to North Luangwa NP, Zambia	SADC Region	SANP	M Knight	8	6 mo	$34,500

ANNEX E: RESG TERMS OF REFERENCE

RHINO AND ELEHANT SECURITY GROUP

OF SOUTHERN AFRICA

TERMS OF REFERENCE

Drafted 14 June 2001
Adopted 10 April 2002

VISION

Our vision is a continent in which there are secure and increasing populations of free-ranging rhino and elephant in their natural habitats. We believe that attaining this vision will contribute to the economic and spiritual well-being of our peoples. This will be achieved through provision and coordination of adequate security and law enforcement, and the realisation of opportunities and benefits derived from the sustainable utilisation of these resources

OVERALL GOAL AND OBJECTIVE

- To develop guidelines, strategies and databases for the effective and efficient protection of African rhino and elephant populations
- To assist the various conservation agencies, communities and private landowners to minimise rhino and elephant poaching and the illegal trade in rhino horn and ivory.
- To provide advice, training and coordination

MODUS OPERANDI

A Brief summary statement on the composition and purpose of the RESG:

"The RESG is an Advisory Group composed of government representatives and invited NGOs, which convene and coordinate to enhance regional efforts to improve the security, viability and promote the increase of rhino and elephant populations in Southern Africa"

KEY COMPONENTS

- LAW ENFORCEMENT
- INTELLIGENCE
- PROCEDURES FOR EFFECTIVE INVESTIGATION AND PROSECUTION, AND MINIMISING INTERNATIONAL TRADE
- SECURING AND MANAGING RHINO HORN/IVORY STOCKS
- COORDINATION, NETWORKING AND INFORMATION EXCHANGE
- TRAINING FOR CAPACITY BUILDING
- POSITIVE PUBLIC INVOLVEMENT, AWARENESS AND EDUCATION
- INTERNATIONAL AND REGIONAL CONVENTIONS
- SUSTAIN ABILITY, FUNCTIONING AND SUPPORT OF RESG

LAW ENFORCEMENT

Objective:

RESG will recommend levels and pro-active deployment of anti-poaching resources to achieve successful protection in the field

Activities:

- Provide range states with recommended standards for desirable staffing levels for areas where rhinos and elephants are protected
- Provide forum to make range states aware of the practical value and cost effectiveness of different law enforcement strategies, and reassess these strategies
- Promote use of law enforcement monitoring and data analysis to guide and improve future deployment
- On request undertake and assist with assessments of threats to the security of rhino and elephant populations, and develop strategies to mitigate these threats

INTELLIGENCE

Objective:

RESG facilitates the establishment
and successful operation of intelligence networks

Activities:

- Promote the development and successful use of intelligence databases
- On request, facilitate the training of intelligence database users
- On request, facilitate training on the handling of informers and the establishment of informer networks
- Provide forum for advice on policies for effective maintenance of informers
- Encourage conservation agencies and organisations to brief staff on procedures to follow up on suspicious approaches to elicit information on reserve security, numbers of rhinos and elephants, disposal of horn/ivory, etc
- Promote the analysis of intelligence on a regular basis
- Provide intelligence reports to RESG member agencies

PROCEDURES FOR EFFECTIVE INVESTIGATION AND PROSECUTION, AND MINIMISING INTERNATIONAL TRADE

Objective:

Identify and provide strategies that maximise the chances of successful detection, investigation, prosecution of offenders in crimes involving rhinos and elephants

Activities:

- Review and advise on legal penalties, and, where insufficient, recommend that they be increased or modified, or that alternative sentencing options be explored (e.g. asset forfeiture), as already agreed by range states through the SADC Wildlife Protocol
- Promote effective methods for scene-of-crime investigations
- Encourage member states to establish and maintain databases of court cases and their results
- Identify and promote techniques and procedures which can result in successful prosecution and sentencing
- Promote the use of forensic techniques such as DNA analyses and horn fingerprinting where appropriate
- Promote the standardised use of passive transponders and readers/scanners
- Establish and coordinate a regional database of passive transponders used on rhinos and elephants
- Through RESG meetings, facilitate cross-border cooperation on investigations and prosecution
- Recommend staffing levels and establishment structures of investigative staff
- Promote awareness of offences relating illegal killing of rhinos and elephants and trade in their products in all range states

SECURING AND MANAGING RHINO HORN/IVORY STOCKS

Objective:

Range states and their management authorities advised on the process of handling, registration, auditing and management of their horn and ivory stockpiles

Activities:

- Advise on techniques and CITES requirements for marking, storage and trade/export of rhino horn and ivory
- Advise on the control and audit of rhino horns and ivory, and the process of transfer and registration of seizures and stockpiles
- Promote the establishment and use in range states of systems for auditing stocks of rhino horns and ivory
- Make rhino and elephant management authorities, private owners, conservancies and custodians aware of any CITES stockpile reporting requirements
- Encourage RESG members to provide assistance to regional studies of rhino horn and ivory stockpiles

COORDINATION, NETWORKING AND INFORMATION EXCHANGE

Objective:

RESG provides a forum whereby range state management agencies, custodians and private owners can be kept informed on security developments and level of threats facing rhino and elephant populations in the region

Activities:

- RESG members submit country/organisational reports at every RESG meeting, containing information on local security threats and levels of crime relating to rhinos and elephants
- Use the RESG to set up a network to facilitate the rapid dissemination of critical information (e.g. intelligence, poaching incidents) between agencies and range states
- Set up an information directory ('Network File') for RESG members
- To liaise with other relevant rhino and elephant conservation bodies (AfRSG, SADC RMG, SADC RRG, AESG, AROA, Interpol ETCG), and provide feedback on strategy developments and security issues/threats. RESG representatives to attend meetings of these groups if possible.

TRAINING FOR CAPACITY BUILDING

Objective:

Security training needs identified and RESG to provide and/or facilitate such training

Activities:

- Identify expertise and facilitate scene-of-crime training courses
- Facilitate development and training for identified staff of range state management authorities, conservancies, custodians and private owners in essential security procedures (e.g. monitoring, anti-poaching)

POSITIVE PUBLIC INVOLVEMENT, AWARENESS & EDUCATION

Objective:

Promotion of enhanced liaison and good relations with communities owning or neighbouring to rhino and elephant populations, as this can contribute to improved security (as agreed in the SADC wildlife protocol)

Activities:

- Encourage conservation agencies and organizations to brief neighbouring communities on procedures to follow up on approaches to elicit information on security status
- At RESG meetings share information on community initiatives that have resulted in improved security for rhino and elephant populations

INTERNATIONAL AND REGIONAL CONVENTIONS

Objective:

Enhanced awareness and implementation of relevant international and regional conventions and agreements (e.g. CITES, SADC Wildlife Protocol, Lusaka Agreement)

Activities:

- Circulate current information to RESG members on the international and regional conventions and agreements relevant to rhino and elephant security
- Promote the adoption and use of approved systems for the law enforcement monitoring and surveillance of elephant and rhino populations (e.g. MIKE, ETIS)

SUSTAIN ABILITY, FUNCTIONING AND SUPPORT OF RESG

Objective:

RESG able to fulfil its mandate

Activities:

- Solicit funds for identified key activities of the RESG (e.g. meetings, training courses, reports)
- Hold biannual meetings (to coincide with meetings of the Interpol ECTG)
- Produce and circulate minutes of meetings
- Membership to provide current status information to the coordinator for regular dissemination to other RESG members by email/fax
- Appoint individuals with responsibility for key RESG activities (e.g. transponder database management)
- Appoint coordinator to assist the RESG Chair, and identify funding to support operating expenses
- Members to report back to, and lobby support from their respective organisations
- Market outputs and achievements in order to enhance the credibility and standing of the RESG
- Ensure that the RESG actively contributes towards the implementation of relevant articles of the SADC Wildlife Protocol by member states

MEMBERSHIP

Level of Membership: Requirements

- Rhino/Elephant security knowledge & current involvement, but also adequate seniority and influence
- Continuity of representation by countries or organisations
- Formal appointment by country or organisation. RESG Chair writes to Directors/CEO'S to obtain nominations for individual representatives to the Group for a specific period (e.g. 3 years). Develop general guidelines for countries on ideal type of RESG representative, to attach to letter inviting nomination.

Technical Membership

- Elect or co-opt specialists in rhino or elephant security, nominated by RESG members as and when their input is required.
- Observers invited at Chairman's prerogative

Legitimacy and Political Endorsement

Potential benefits of SADC Umbrella

- Improved liaison with Government departments (e.g. Police)
- Political Backing for Group (e.g. in order to facilitate sharing of information between Governments)

The RESG will explore other possibly beneficial linkages via SADC WSTCU.

GENERAL

- Species: Maintain current Species: Rhino and Elephant

- Geographical Area: Maintain RESG with Regional membership only, but maintain liaison with non-SADC range states (e.g. Kenya). Keep membership under regular review.

- Office Bearers:
  Chairman
  Vice Chairman
  Coordinator (including duties of treasurer)

DEFINITION OF TERMS

COMMUNITY	A group of people living in a contiguous geographical area with a common boundary living with or along side, and sharing a common interest in, the security of rhinos and elephants
MIKE	Monitoring the Illegal Killing of Elephants
TRAFFIC	Trade Records Analysis in Flora and Fauna in Commerce
IPZ	Intensive Protection Zone (see Definitions in Emslie & Brooks Action Plan 1999)
Sanctuary	Definitions in Emslie & Brooks Action Plan 1999
Rhino Conservation Area	Definitions in Emslie & Brooks Action Plan 1999
SADC RMG	SADC Rhino Management Group
SADC RRG	SADC Rhino Recovery Group
SADC WSTCU	SADC Wildlife Sector Technical Coordination Unit
ETIS	Elephant Trade Information System
AfRSG	IUCN/SSC African Rhino Specialist Group