# **ZIMBABWE** (Task 1.2 – 1.5)

Review by Raoul du Toit (WWF SARPO) (October-November 2000)

# 1 MECHANISMS FOR PLANNING AND COORDINATING NATIONAL RHINO CONSERVATION EFFORTS

# 1.1 Rhino Management Authority

Regulatory and enforcement authority for wildlife conservation is vested primarily in the Department of National Parks and Wildlife Management (DNPWLM), within the Ministry of Environment and Tourism (MET). A Parks and Wildlife Board is appointed by the Minister, MET, but its functions are purely advisory. Zimbabwe is subdivided into eight provinces with Provincial Governors. Although government agencies such as DNPWLM have provincial offices, they remain entirely under central government administration rather than coming under provincial government administration. Therefore the primary point of contact within the Zimbabwe Government insofar as rhino conservation is concerned is the Director, DNPWLM, P.O. Box CY140, Causeway (Head Office), Botanical Gardens, Sandringham Drive, Harare; telephone 263-4-720626 or707624; telefax 263-4-726089).

#### 1.2 National Rhino Strategy

Zimbabwe's rhino conservation policy is outlined in a concise (8 page) document entitled "Zimbabwe Rhino Policy and Action Plan", which was approved by the Minister, MET, in May 1997 (a copy of the policy is found in Annex 2.1). The elements of this policy statement were developed at an IUCN-facilitated workshop of stakeholders (DNPWLM officials, private rhino custodians, NGO representatives and invited external experts). The full proceedings of this workshop, which was held in December 1996, are published in a DNPWLM document entitled "Zimbabwe Rhino Management Plan Framework" (April 1997). The stated goal and objectives of the national rhino policy/strategy are as follows.

Management goal: to achieve rapid increases in Zimbabwe's black and white rhino populations to levels of at least 2 000 individuals of each species through metapopulation management in suitable habitats throughout the country.

# Objectives:

- establish a mechanism for coordinated and pro-active management and protection of black and white rhinos:
- secure and protect existing and new populations of rhinos throughout the country;
- ensure effective biological management of existing and new populations so as to achieve growth rates of at least 5% per year;
- establish and maintain effective monitoring and evaluation programmes for rhino populations;
- develop economic and social sustainability of Zimbabwe's rhino management programme;
- ensure immediate and effective implementation, management and monitoring of the national rhino management plan.

Although clearly articulated and duly approved by the Minister, MET, the policy statements have not been followed-up by concerted action by DNPWLM. Thus the national rhino policy can be described as lacking implementation rather than being outdated. A national rhino stakeholder's workshop was held on 12-13 October 2000, which re-affirmed the national rhino conservation strategy and identified tasks and deadlines for implementation.

#### 1.3 Action Planning

One of the six objectives of the overall rhino policy is to ensure the immediate and effective implementation, management and monitoring of the national rhino management plan, through the development of a project planning matrix. Systematic planning has not, however, been followed through since 1995. The limited rhino management planning that has taken place has been largely inhouse within DNPWLM, in reaction to immediate pressures. During the current year, administrative changes within DNPWLM have created a more conducive situation for such planning to take place with appropriate stakeholder involvement, as was demonstrated by the stakeholders meeting in October 2000. It was resolved at this meeting to quickly establish the national and provincial rhino conservation committees that are needed for action planning and stakeholder coordination. (Note: the

document entitled "Zimbabwe Rhino Management Plan Framework", referred to in 1.2, has a confusing title and is not in fact an action plan or even the framework for an action plan).

#### 1.4 Coordination Mechanisms

During the height of Zimbabwe's rhino poaching crisis (1992-1995) the rhino conservation response was coordinated by a Rhino Operations Committee (also called the Rhino Project Steering Committee) which involved senior DNPWLM staff members as well as representatives of a couple of NGOs that had major rhino projects underway. The private rhino custodians were involved in rhino conservation plans through their participation in a Rhino Custodians Committee. Regular meetings of these committees ceased during 1996. Replacement committees, as specified in the 1997 Rhino Policy and Management Plan to operate at provincial as well as national levels, are only now being established as an outcome of the stakeholders' meeting in October 2000. The private sector and NGOs are to be represented on a new rhino subcommittee of the Zimbabwe Wildlife and Tourism Advisory Council, and the meetings of this new committee will also be attended by the DNPWLM National Rhino Coordinator. This will serve as a national rhino committee; the composition and functions of the provincial committees are not yet clear.

#### 1.5 Focal Point

The National Rhino Co-ordinator within DNPWLM is Ms Florence Msipa, an Ecologist within Research Branch at DNPWLM Head Office. She is the focal point for the SADC rhino programme as well as for AfRSG interaction. DNPWLM joined the Southern African Rhino Management Group (RMG) in 1996, but only the latest RMG meeting (October 2000) has been attended.

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

#### 2.1 Co-ordination with other range states

There are no existing arrangements other than via the SADC rhino programme. Zimbabwe is not a signatory to the Lusaka Agreement.

## 2.2 Existing commitments with other SADC range states

Transfers of Zimbabwean rhinos within the region are detailed in Section 9.3. No other formal intra-SADC bilateral arrangements were developed over the past decade. Although anti-poaching coordination with Zambia was established to a limited extent during the early 1990s (notably between DNPWLM and the Zambian Anti-Corruption Commission), this tended to follow *ad hoc* arrangements rather than being based upon an established protocol, and Zimbabwe was always wary of leakages of security information. Ongoing contacts between DNPWLM and Zambian counterparts are maintained whenever either side feels that there is need for some cross-border issue to be discussed.

#### 3 RHINO POPULATION STATUS

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

Trend in brackets indicates the inherent trend for that area excluding rhinos that have been translocated in (e.g. Up +) or out (e.g. Up -, Stable -). S = state land; PC = private custodian; P = privately owned. Poss. = additional possible rhinos (not included in total). RP = Recreational Park; IPZ = Intensive Protection Zone; FA = Forest Area; NP = National Park.

## **BLACK RHINOS**

Area	Туре	Size	Definite	Probable	Poss.	Total	Trend
Cinomatalla ID7		1 200 km²	60	4.5	-	75	Lla
Sinamatella IPZ	S	1 300 km <sup>2</sup>	60	15	5	75	Up
Matusadona IPZ	S	500 km <sup>2</sup>	30	10	5	40	(Up +)
Matobo IPZ	S	105 km <sup>2</sup>	13			13	Stable
Chipinge IPZ	S	261 km <sup>2</sup>	14			14	Up
Bubiana Conservancy	PC	1 250 km <sup>2</sup>	75	5	2	80	Up
Save Valley Conservancy	PC	3 400 km <sup>2</sup>	65	2		67	Up
Midlands - Great Dyke	PC	500 km <sup>2</sup>	45	3	1 2	48	Up
Malilangwe	Р	400 km <sup>2</sup>	30			30	(Up +)
Gourlay's Block	PC	240 km <sup>2</sup>	15	7	2	22	Up
Chiredzi River	PC	760 km <sup>2</sup>	17			17	Up
Iwaba	PC	98 km <sup>2</sup>	12			12	Down
Imire Game Park	PC	15 km <sup>2</sup>	9			9	(Up -)
Chipangali Orphanage	PC	Paddocks	7			7	Stable
Total			392	42	17	434	Up
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#### WHITE RHINOS

Area	Туре	Size	Definite	Probable	Poss.	Total	Trend
Matobo IPZ + Hazelside	S	200+km <sup>2</sup>	40	5	5	45	(Stable-)
Lake Chivero RP	S	61 km <sup>2</sup>	20	3	1	20	(Up -)
Lake Mutirikwe RP	S	169 km <sup>2</sup>			'		` ' '
		•	23			23	Up
Nyamaneche	S	9 ?km <sup>2</sup>	8			8	Stable
Matabeleland N. FA	S	500 km <sup>2</sup>		5		5	?
Hwange NP	S	$5000 + km^2$	15	3	2	18	(Stable+)
Malilangwe	Р	400 km <sup>2</sup>	38		1	38	Up
Iwaba	Р	98 km <sup>2</sup>	20		2	20	Stable
Save Valley	Р	3 400 km <sup>2</sup>	7			7	Up
Sipuma	Р	20 km <sup>2</sup>	3			3	Stable
Midlands Conservancy	Р	200 km <sup>2</sup>	2			2	Stable
Cecil Kop	PC	15 km <sup>2</sup>	3			3	(Stable+)
Samanyanga	Р	300 km <sup>2</sup>	14			14	(Stable+)
El Dorado	Р	Small	2			2	Stable
Total			195	13	11	208	Up

# 3.2 Population monitoring and reporting

The main approaches are:

i) Individual recognition. Identity and life history files are maintained for individual black and white rhinos comprising several large populations on private land, notably Malilangwe, Save Valley, Bubiana and Chiredzi River. Monitoring has, however, been disrupted by squatter invasions of ranches during 2000, which have precluded effective operations by ranch scouts in some areas, so that the records are not being updated for all rhinos.

- ii) Semi-intensive monitoring. Less rigorous monitoring, still based to some extent on individual recognition but with less systematic record-keeping, is undertaken in the smaller DNPWLM areas (Chipinge, Matobo, Nyamaneche) and private areas such as Gourlay's Block.
- iii) Radio-collaring. For the two largest populations in National Parks (Sinamatella IPZ and Matusadona IPZ) radio-collaring has been used as an aid to monitoring, particularly of rhinos that move over large ranges or whose home ranges are peripheral to the main population. The issue of ongoing radio-collaring has become contentious following allegations by the Sinamatella-based NGO *Rhinowatch* that the collaring is ineffective and creates veterinary risks. DNPWLM is reviewing the issue. No rhinos on private land are collared at present, although some have been in the past.
- iv) Spoor recording. As an alternative to radio-collaring, *Rhinowatch* have promoted a monitoring system based on photography and computer analysis of rhino spoor. This system has been developed at Sinamatella by *Rhinowatch* but is not readily applicable as a monitoring approach in other areas.

WWF coordinates rhino monitoring for the populations in Bubiana, Chiredzi River and Save Valley Conservancies, and also liases closely with Malilangwe Conservation Trust. For these populations, records for each rhino have been collated every six months (until the current breakdown in the system due to the ranch invasions) and submitted to DNPWLM. For other private land populations, the National Rhino Co-ordinator attempts to obtain similar six-monthly returns of basic information (i.e. confirmation of each rhino being present, any breeding, illness or injuries, and other significant events). However, the quantity and quality of this information has become very variable, partly because the co-ordination mechanisms (see 1.4) were weak until recently. The monitoring in DNPWLM IPZs is also variable, being very opportunistic rather than being directed towards regular "head counts".

## 3.3 Requirements for surveys and monitoring

At present, there is no regular RMG-type population status reporting and comparative review of breeding performance within the various rhino populations. DNPWLM agreed that a Zimbabwean priority for technical assistance from the SADC rhino programme is the development of a computerized database approach for rhino monitoring, which WWF-SARPO has been working on. There is currently no systematic approach to monitoring and reporting on poaching incidents or threats; the recent revival of a national structure for co-ordination of stakeholders will be an impetus to the regular review of such information.

Ear-notching of rhinos is now accepted by DNPWLM as a requirement for the continuance of monitoring systems on private land. However, there is a considerable back-log of such work owing to past inertia in approving the ear-notching operations, compounded by the ranch invasions during 2000 which have stalled the operations that were finally approved for Lowveld conservancies with funding available from WWF and helicopter support from the Malilangwe Trust. The commencement of ear-notching is urgent in order to avoid the identities of "clean" subadults from becoming increasingly confused. For areas where rhinos are not monitored on an individual basis, ear-notching operations (or dehorning or radio-collaring operations) have proven to be the best way of undertaking a periodic "audit" of the animals. The implementation of the "RHINO" mark-recapture technique of population estimation needs consideration in areas where monitoring is faltering but where large proportions of the rhinos are still ear-notched. However, despite the need for these measures, the information on rhino population status in each area remains adequate for most aspects of metapopulation management and it therefore cannot be said that the implementation of the national rhino strategy has to await more demographic information.

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

#### 4.1 Anti-poaching resources

DNPWLM wishes to maintain keep manpower levels for specific IPZs confidential. However, an indicative situation for one large IPZ is as follows:

Area =  $2,000 \text{ km}^2$  (core area is  $1,400 \text{ km}^2$ ). Total effective scouts (excluding those on time-off or sick leave) = 30, of which the number deployed on patrol on most days = 18 to 20 (1 per  $100 \text{ km}^2$ ). Fourwheel drive vehicles = 4 (1 per  $500 \text{ km}^2$ ). Truck = 1. Tractors = 2

Salary levels are:

Scout = Z\$4,500 to Z\$5,000 (US\$88 to US\$98) per month Ranger = Z\$15,000 to Z\$ 17,000 (US\$294 to US\$333) per month Warden (in charge of IPZ) = Z\$23,000 (US\$451) per month.

In additional, patrol allowances are paid at a rate of Z\$58 (US\$1.14) per day, which is proving to be insufficient to maintain scout motivation for patrolling.

The anti-poaching allocations on private land are very variable. Lowveld conservancies have required members to maintain manpower densities of 1 scout per 25 km². It is difficult to separate rhino protection costs from the general costs incurred by landowners in running their ranching enterprises. A WWF review in 1998 indicated these incremental costs of rhino conservation (i.e. over and above general ranch management costs) to range from US\$31 to US\$57 per km².

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

Tracking expertise is adequate for rhino management operations within the scout forces on private land as well as in IPZs, and some trackers have had many years of relevant experience not only in locating rhinos but also in directing aircraft onto rhino positions, loading rhinos into crates, etc.

Veterinary expertise for rhino immobilizations and animal health requirements is provided by two government veterinary officers within the Wildlife Unit of the Department of Veterinary Services (WUDVS). These inputs are dependent upon cost recovery since the WU-DVS is not funded from central government other than for salaries and basic office running costs and therefore functions through a revolving fund, with clients (including DNPWLM) paying for drugs, other consumables, mileage, etc. DNPWLM previously had its own veterinary unit (funded by the European Community) but this was dissolved in 1996. In addition to qualified veterinarians, a small number of non-veterinarians are licensed to use narcotic and other dangerous drugs for wildlife capture, and of these people who hold Dangerous Drugs Licenses about seven have experience in rhino capture and are able to play a role (e.g. in emergency situations) when the WU-DVS veterinarians are not available. Overall, Zimbabwe has adequate expertise for rhino captures, translocations, etc.

A couple of ecologists within DNPWLM are accumulating experience relevant to rhino demography, habitat assessments, etc. External expertise exists within the Harare-based SADC Rhino Conservation Programme, and there are also three or four ecologists at the University of Zimbabwe and in private consultancy practices who could provide relevant expertise.

#### 4.3 Specialised equipment available for rhino management

During the rhino poaching crisis of 1997-1993, DNPWLM was donated several vehicles that were specially equipped for rhino capture/translocation. However, over the years these vehicles have not been used exclusively for rhino operations and have suffered considerable wear and tear. DNPWLM's ability to provide a vehicle for loading and moving rhinos in the field is therefore very limited, being primarily dependent upon one unreliable Mercedes Unimog that is based in Hwange National Park. WWF maintains a four-wheel drive Mercedes, equipped for loading rhinos, but this was donated (by the Beit Trust) specifically for WWF's activities in the Lowveld conservancies and is therefore not available for more general usage. A variety of rhino translocation crates could be put into service by DNPWLM and the Lowveld conservancies. A private game capture company has a loose agreement with the WU-DVS and the Zambezi Society to make a four-wheel drive truck with crane and crates available for rhino operations on a cost-recovery basis, together with a Hughes 300 helicopter at US\$400/hour.

WWF maintains a Husky A-1 spotter aircraft that is used for rhino operations in the Lowveld but, being subject to the donation conditions of the Beit Trust, this is not generally available for operations elsewhere. DNPWLM's fleet of aircraft has become virtually unserviceable due to disputes with donors and maintenance problems, to the extent that the department cannot provide the support of a spotter aeroplane in IPZs. The Zambezi Society can sometimes meet this need in Matusadona IPZ by making its Piper Supercub available, but operations in other IPZs fall outside the Zambezi Society's geographical scope. DNPWLM does have a Bell Jetranger 206 helicopter (donated in exchange for rhinos exported to zoos), but this is proving to be too expensive to operate and may have to be substituted for with a smaller model (e.g. Hughes 300). DNPWLM did have a Robinson R22 helicopter

(paid for by USAID) but this was destroyed in a crash earlier this year, which also resulted in the death of the DNPWLM officer who had most experience in rhino operations.

The Malilangwe Trust has a Bell Jetranger 206 helicopter which is normally based in South Africa but which is available, through formal agreement with WWF, for use in Lowveld conservancies for up to 50 hours per year, without charge.

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

#### 5.1 Community Involvement

There are no rhino populations in Communal Lands. Although significant populations did exist in the Sebungwe region and in Dande CL in the late 1980s, these were wiped out through poaching. A project to develop a community stakeholding in white rhinos in Save Valley Conservancy has received funding from WWF (sufficient for the purchase of a couple of rhinos) but has been put on hold because of the serious poaching that has been associated with recent ranch invasions by squatters. The concept is that these rhinos will be regarded as the assets of a community trust, and the conservancy (or other buyers) will purchase all progeny at the prevailing market price, generating income for the trust to fund community development projects and thereby providing an incentive for these communities to defuse any rhino poaching threats. This project would be one facet of a larger "community wildlife endowment" which would include other commercially valuable species.

#### 5.2 Local and International NGO Involvement

**WWF-SARPO** supports rhino conservation in the Lowveld (Save Valley, Chiredzi River, Bubiana and Malilangwe) through the Rhino Conservancy Project. This was initiated with Beit Trust funding, which was applied catalytically to induce the formation of conservancies that met criteria for this support (notably, the acceptance by landowners of a conservancy constitution that precludes internal game fencing and establishes a set of mutual obligations for sustainable, scientifically-based wildlife management, in extensive areas of suitable habitat). Apart from the salary and overhead costs of the Project Executant (R. du Toit), WWF's annual funding on this project amounts to some US\$25,000. This includes community outreach activities, which are presently focussed on Save Valley. WWF-US is in the process of allocating a similar amount to the rhino-related activities of the Wildlife Unit of the Department of Veterinary Services (WU-DVS), to support ear-notching and other veterinary interventions for black rhinos throughout Zimbabwe, during 2000-2001.

The Malilangwe Trust runs its own rhino conservation programme on its property near Chiredzi and, in addition, has formed a strategic alliance with WWF-SARPO to assist rhino management operations on a broader scale in the Lowveld through the provision of helicopter support. Since such operations have not been initiated this year due to security problems associated with the land invasions, the helicopter has not been used except on Malilangwe itself and it is therefore not yet possible to assign a monetary value to this support.

**Save the Rhino International** has recently allocated US\$7,000 to the WU-DVS to support veterinary interventions for ear-notching, radio-collaring, translocations, etc. (including helicopter hire) in IPZs.

**The International Rhino Foundation** has pledged US\$25,000 to the WU-DVS for the same purposes. Thus the WU-DVS is adequately funded for its rhino work over the next year at least.

**The Marwell Zimbabwe Trust** (MZT) has been supporting the captive rhino breeding programme at Chipangali and is in the process of establishing its own Dambari Field Station for intensive management of rhinos, adjacent to Chipangali. MZT are also supporting nutritional research relevant to the release into the wild, in Matusadona NP, of hand-reared black rhinos.

**The Zambezi Society** has been the most active of the local Zimbabwean NGOs, as far as rhino conservation is concerned. Since 1993 the society's main emphasis has been on the provision of support for Matusadona IPZ, being the only remaining rhino population in the Zambezi Valley. This support has been directed towards the establishment and maintenance of a centre for the release of hand-reared rhino calves, in collaboration with the Matusadona Tour Operators Association; boma construction and maintenance, the provision of fuel and other essential needs for the IPZ; funding of veterinary work (by DVS-WU); and the provision of a spotter aircraft for ear-notching operations. Over the past year, this support has amounted to about US\$8,000.

**Other NGOs** funding rhino conservation in Zimbabwe include the Sebakwe Black Rhino Trust (involved in private land projects in the Midlands), *Rhinowatch* (funding their own research activities in Sinamatella IPZ), and Save Foundation of Australia.

#### 5.3 Private Sector Involvement

Some 300 black rhinos (70% of the national total) are now managed on private land in Zimbabwe. Apart from 28 that were imported from South Africa by the Malilangwe Conservation Trust in 1998, these rhinos are the outcome of the translocation of about 150 rhinos that were threatened by poaching in state areas. A decade ago the private sector held only 10% of the national population while about 1,000 black rhinos were on state land, but the latter population has now fallen, due to poaching, to about 140. Thus the private sector has played an extremely positive role in protecting rhinos on behalf of the nation, under a custodianship arrangement, so that DNPWLM could concentrate its own manpower and other anti-poaching resources in a few IPZs where the poaching attrition could finally be stemmed. The motivation for private custodians has been a combination of interest in contributing to the conservation of the species and interest in enhancing ecotourism opportunities on their properties.

The rhino custodianship programme was a catalyst to the formation of large conservancies. WWF and the Beit Trust made funding for private sector rhino projects conditional upon the amalgamation of ranches into areas large enough to receive at least 25 founders into each area with room for expansion to a population size of over 100. The establishment of joint wildlife management and anti-poaching operations and the removal of internal game fencing have created conditions that have been conducive not only to the rapid breeding of rhinos but also to the general restoration of biodiversity on ranches that had been degraded through cattle ranching.

Initially the Midlands area was seen as the most suitable for moving rhinos to under the custodianship scheme, because it is distant from the cross-border poaching risk. However, as rhino management experience was gained it became clear that the dystrophic miombo habitats of the Midlands have a low carrying capacity for black rhinos. This gave rise to a high mortality rate amongst translocated rhinos. A controversial destocking exercise was undertaken by DNPWLM in 1993 to alleviate this problem.

The most difficult aspect of the custodianship scheme has been the political tension associated with the racial imbalance in land ownership in Zimbabwe. The scheme has been jeopardized by the recent politically-incited invasions of white-owned farms. Where rhinos have not bred well on private land because of inferior habitats, poaching or other problems, landowners have sometimes been resistant to DNPWLM's operations to move these animals to more suitable areas. DNPWLM has the legal power to override landowners' objections and to implement decisive action in the interests of the rhinos. Nonetheless, the friction that has arisen (particularly in the Midlands) has sometimes become so serious as to create a political logiam for rhino metapopulation management.

#### 6 PROPOSED PROJECTS

**Database project.** In Semester 2 of the SADC Rhino Conservation Programme, WWF developed an Access-based database system that facilitates detailed record-keeping for rhinos at an individual, population (area) and national level. During Semester 3 it would be desirable to implement this system within DNPWLM and within the major conservancies, while concurrently refining it in accordance with the snags that will inevitably arise during the implementation phase.

**Radio-collaring project.** Since concerns have arisen over the cost-effectiveness and veterinary risks of radio-collaring, it would be desirable to develop new designs for "rhino friendly" but durable collars and to test these in situations where the rhinos can be closely monitored (notably at Imire or in the Tashinga project at Matusadona IPZ, where the rhinos are held under semi-captive conditions).

**Transponder project.** Transponder technology may well offer a cost-effective solution to rhino monitoring as new miniaturised implantable devices, with electromechanical power sources, are developed. There has been recent progress in this technology ("Digital Angel" system) in the USA. Ongoing effort should be made within the SADC Rhino Conservation Programme to keep current with these developments and to test their applicability for our rhino needs as soon as possible.

Rhino census project. Since some populations are no longer monitored through regular recognition of every individual, DNPWLM seeks technical support in estimating population sizes, for which the RHINO mark-recapture technique is likely to be highly appropriate. DNPWLM staff members therefore require training in this statistical technique and some training in rhino identification would also be desirable for the scouts who are to collect the relevant sighting information.

#### 7 NATIONAL LEGISLATION AND POLICIES

The pertinent legislation is embodied in the Parks and Wildlife Act (Chapter 20:14). Both species of rhinos are classified as "specially protected species" (Annex 2.2)

#### 7.1 Penalties

The Act specifies mandatory penalties for a) the unlawful killing or hunting of a rhino (hunting being defined as injuring, shooting at, wilfully molesting, capturing, etc., or even the intent to take any such actions); b) unlawful possession of or trading in rhino horn. These mandatory sentences are: for a first conviction, imprisonment for not less than 5 years and not more than 15 years; for a second conviction, imprisonment for not less than 7 years and not more than 15 years. Fines are applicable instead of imprisonment or in addition to imprisonment if special circumstances pertain, these fines to not exceed Z\$15,000. This figure has not been adjusted to follow the ongoing devaluation of the Zimbabwean currency (it would be equivalent to US\$283 in November 2000 whereas it was equivalent to US\$5,700 when revised in 1990).

#### 7.2 Ownership of Rhinos

In terms of section 45 of the Act no person may hunt, keep, have in his possession, sell or otherwise dispose of any live specially protected animal, save with a permit issued in terms of section 46. While the allocation of a permit is necessary in order to keep a specially protected species, this does not in itself confer ownership. But rhinos and other specially protected species can be owned by private individuals who are appropriately licensed, just as a firearm can be owned by someone provided that person has a firearms licence. Apart from the necessary permit, a landowner who wants to claim ownership of a rhino (for instance, one that has been imported privately from South Africa) has to show that he has the animal under some degree of control; if it strays off his land, he cannot claim that he still owns it. However, his neighbour would not have a permit to keep the rhino so they should be no legal problem in returning the rhino. Thus the Zimbabwean legislation should, if interpreted correctly, be conducive to private investment in rhinos and to the commercial sale of these wildlife assets. However, black rhinos on private land (apart from those on Malilangwe, which were imported privately) were allocated under Zimbabwe's rhino custodianship scheme according to which there is no expectation that the landowner would claim ownership of the rhinos or their progeny. Some landowners who manage rhinos have been issued with permits that outline the custodianship conditions while other landowners have not. Thus there is an urgent need to tidy up the permit arrangements. At the national rhino stakeholders meeting in October 2000, it was agreed that the private sector should voice proposals on the conditions that should be stated on permits, with the landowners' privileges being varied according to whether the rhinos were privately imported and/or purchased, or allocated on a custodianship arrangement.

#### 7.3 Hunting and live sales of rhinos

In the past, permits have been issued for safari hunting of white rhinos (on Iwaba) and white rhinos have also been traded within the private sector. As explained above, the basic Zimbabwean legislation allows for a permitting system with conditions and privileges being varied to suit circumstances including those pertaining to live sales and safari hunting. However, DNPWLM policy since 1995 has been to restrict the privileges of private landowners with regard to their commercial gain from specially protected species. This attitude may well change in response to the stakeholders' insistence that the permitting system is reviewed to give greater incentives for private sector investment in rhino conservation.

In terms of section 47, the trophy (i.e. rhino horns) of any specially protected animal killed or found dead is deemed to be a State trophy. Individuals have, in the past, been issued with permits to keep horns from rhinos that they have owned which have died or which are family heirlooms. The current policy regarding the issuing of permits to keep horns has not been tested over recent years.

#### 8 DATA SOURCES

Most information has been derived from the personal knowledge and records of R. du Toit: Project Executant, WWF Rhino Conservancy Project, 10 Lanark Ave, Harare.

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

Lovemore Mungwashu, Chief Warden, DNPWLM Headquarters, Harare.

Florence Msipa, National Rhino Co-ordinator, DNPWLM Headquarters, Harare.

Tom Milliken, TRAFFIC East and Southern Africa, 10 Lanark Ave, Harare.

Participants at national rhino stakeholders' workshop, Ambassador Hotel, Harare (12-13 October 2000).

#### 8.2 Documentation

Zimbabwe Rhino Policy and Management Plan. Ministry of Environment and Tourism, Harare. Approved 20 May 1997 (Annex 2.1)

Zimbabwe Rhino Management Plan Framework. Recommendations from the Department of National Parks and Wildlife Management seminar held at the Boulton-Atlantica Centre, 12 December 1996. Draft minutes of the National Rhino Stakeholders Meeting, held at the Ambassador Hotel, Harare, 12-13 October 2000.

#### 8.3 Sources of Digital Information

Databases: Raoul du Toit, WWF SARPO, Box CY 1409, Causeway, Harare

Sarah Clegg, GIS Manager, Malilangwe Conservancy

GIS: WWF SARPO, Box CY 1409, Causeway, Harare

## 9 TRADE AND IMPORT/EXPORT OF LIVE RHINOS

## 9.1 CITES Management Authority

This is the Department of National Parks and Wildlife Management.

## 9.2 Veterinary Controls

An animal health protocol is drawn up by the Wildlife Unit, Department of Veterinary Services, to specify veterinary measures according to the country of export. Treatment for internal parasites and removal of external parasites are mandatory. For imports from South Africa, the major concern is tuberculosis. There is no reliable test for carriers of this disease but DVS regards rhinos as dead-end hosts and has not so far precluded imports from South Africa. Within Zimbabwe, movements of rhinos do in principle require a veterinary movement permit but this is merely a formality.

#### 9.3 Past Imports and Exports

# **Imports**

Species	Year	From	То	Number
White	1962	Kwazulu-Natal	Muturikwe RP	4?
White	1962	Kwazulu-Natal	Matobo NP	4?
White	1965	Kwazulu-Natal	Muturikwe RP	6
White	1966	Kwazulu-Natal	Matobo NP	8
White	1966	Kwazulu-Natal	Muturikwe RP	23
White	1966-67	Kwazulu-Natal	Hwange NP	35+
White	1967	Kwazulu-Natal	Matobo NP	1
White	1967	Kwazulu-Natal	L. Chivero RP	3
White	1967	Kwazulu-Natal	Zambezi NP	4
White	1972	Kwazulu-Natal	Ranch, Dete	4?

Species	Year	From	То	Number
	40=0		5	
White	1972	Kwazulu-Natal	Ranch, W. Nicholson	4?
White	1973	Kwazulu-Natal	Hwange Safari Lodge	9+
White	1974	Kwazulu-Natal	Ranch, Dete	8
White	1974	Kwazulu-Natal	lwaba	8
White	1974	Kwazulu-Natal	Ranches, Chiredzi	9
White	1974	Kwazulu-Natal	Ranch, W. Nicholson	10?
White	1996	South Africa	Malilangwe	3
White	1997	Kwazulu-Natal	Malilangwe	12
White	1998	South Africa	Ranch, Bubye	14
Black	1998	Kwazulu-Natal	Malilangwe	28
Exports				
Species	Year	From	То	Number
Black	1964	Sebungwe	Zoo	1
Black Black	1964 1965	Sebungwe Sebungwe	Zoo Zoo	1
Black Black Black	1964 1965 1967	Sebungwe Sebungwe Matobo NP	Zoo Zoo Pretoria Zoo	1 1 1
Black Black Black Black	1964 1965 1967 1972	Sebungwe Sebungwe Matobo NP Kariba	Zoo Zoo Pretoria Zoo Kruger NP	1 1 1 12
Black Black Black Black Black	1964 1965 1967 1972 1982	Sebungwe Sebungwe Matobo NP Kariba Sebungwe	Zoo Zoo Pretoria Zoo Kruger NP Los Angeles Zoo	1 1 1 12 2
Black Black Black Black Black White	1964 1965 1967 1972 1982 1983	Sebungwe Sebungwe Matobo NP Kariba Sebungwe Ranch, W. Nicholso	Zoo Zoo Pretoria Zoo Kruger NP Los Angeles Zoo on Algeria zoo?	1 1 1 12 2 3?
Black Black Black Black Black White Black	1964 1965 1967 1972 1982 1983 1984/5	Sebungwe Sebungwe Matobo NP Kariba Sebungwe Ranch, W. Nicholso Dande CL	Zoo Zoo Pretoria Zoo Kruger NP Los Angeles Zoo on Algeria zoo? N. Korea, Jugoslavia	1 1 1 12 2 3? 6
Black Black Black Black Black White	1964 1965 1967 1972 1982 1983	Sebungwe Sebungwe Matobo NP Kariba Sebungwe Ranch, W. Nicholso Dande CL ?	Zoo Zoo Pretoria Zoo Kruger NP Los Angeles Zoo on Algeria zoo? N. Korea, Jugoslavia N. Korea	1 1 1 12 2 3? 6 2?
Black Black Black Black White Black White Black	1964 1965 1967 1972 1982 1983 1984/5	Sebungwe Sebungwe Matobo NP Kariba Sebungwe Ranch, W. Nicholso Dande CL ? Zambezi Valley	Zoo Zoo Pretoria Zoo Kruger NP Los Angeles Zoo on Algeria zoo? N. Korea, Jugoslavia N. Korea Swaziland	1 1 1 12 2 3? 6 2? 6
Black Black Black Black White Black White Black Black	1964 1965 1967 1972 1982 1983 1984/5	Sebungwe Sebungwe Matobo NP Kariba Sebungwe Ranch, W. Nicholso Dande CL ? Zambezi Valley Zambezi Valley	Zoo Zoo Pretoria Zoo Kruger NP Los Angeles Zoo On Algeria zoo? N. Korea, Jugoslavia N. Korea Swaziland USA zoos	1 1 1 12 2 3? 6 2? 6
Black Black Black Black White Black White Black Black Black	1964 1965 1967 1972 1982 1983 1984/5 1984	Sebungwe Sebungwe Matobo NP Kariba Sebungwe Ranch, W. Nicholso Dande CL ? Zambezi Valley Zambezi Valley Zambezi Valley	Zoo Zoo Pretoria Zoo Kruger NP Los Angeles Zoo On Algeria zoo? N. Korea, Jugoslavia N. Korea Swaziland USA zoos Frankfurt Zoo	1 1 1 12 2 3? 6 2? 6 10 2
Black Black Black Black White Black White Black Black	1964 1965 1967 1972 1982 1983 1984/5 1984 1987	Sebungwe Sebungwe Matobo NP Kariba Sebungwe Ranch, W. Nicholso Dande CL ? Zambezi Valley Zambezi Valley	Zoo Zoo Pretoria Zoo Kruger NP Los Angeles Zoo On Algeria zoo? N. Korea, Jugoslavia N. Korea Swaziland USA zoos	1 1 1 12 2 3? 6 2? 6

The arrangements pertaining to early imports and exports are unclear. Points of relevance to recent rhino management policy are:

- imports by the private sector have all been through private purchase;
- exports of black rhinos to USA and Australia in 1992 were reciprocated through the provision of a Bell JetRanger helicopter and the payment of the aircraft's operating costs for some years, plus all handling and shipping costs, by the International Rhino Foundation;
- DNPWLM is currently reviewing the arrangements that pertained to exports to overseas zoos following concern that progeny of black rhinos exported to Frankfurt Zoo are being returned to South Africa and not to Zimbabwe.

#### 10 HORN STOCKS

## 10.1 Control, Storage and Identification

Control of horn stocks is undertaken effectively in Zimbabwe, in accordance with guidance from TRAFFIC. All horns are marked with indelible felt-tip pens, weighed on a digital scale, recorded in a computerized database, and stored in a strong room at DNPWLM headquarters. The database was adapted from the TRAFFIC ivory database system. Field registers are also maintained in field stations which collect horns, such horns being kept only temporarily in these stations before being forwarded to the headquarter strong room. Shavings of horn that were derived from chainsaw dehorning in the early 1990s are also stored in labelled bags in the strong room.

## 10.2 Involvement in AfRSG rhino horn fingerprinting project

Zimbabwe did not cooperate in the first phase of the AfRSG horn fingerprinting project by providing horn samples from areas that currently contain rhinos. However, at the national rhino stakeholders meeting in October 2000 it was agreed that Zimbabwe should provide samples. The matter can now be pursued between AfRSG and the DNPWLM National Rhino Co-ordinator.