

CONSIDERATION OF PROPOSALS FOR AMENDMENT OF APPENDICES I AND II

A. Proposal

Amendment of Annotation °604 regarding the Zimbabwe population of *Loxodonta africana* to read:

°604 for the exclusive purpose of allowing in the case of the population of Zimbabwe:

- a) trade for commercial purposes in registered stocks of raw ivory (whole tusks and pieces) of Zimbabwe origin owned by the Government of the Republic of Zimbabwe, to trading partners that have been verified by the CITES Secretariat to have sufficient national legislation and domestic trade controls to ensure that ivory imported from Zimbabwe will not be re-exported and will be managed according to all requirements of Resolution Conf.10.10 concerning domestic manufacturing and trade. No international trade in ivory to be permitted until 18 months after the adoption of the proposal (May 2004). There after, an initial one-off quota of not more than 10 000 kg ivory may be traded, and a subsequent annual quota of not more than 5000 kg ivory;
- b) trade in hunting trophies for non-commercial purposes;
- c) trade in live animals for non-commercial purposes to appropriate and acceptable destinations;
- d) trade in hides and leather goods;
- e) trade in ivory carvings for non-commercial purposes.

B. Proponent

Zimbabwe.

Summary

This proposal is designed to enhance sustainable conservation practices for the elephant population in Zimbabwe. The experimental implementation of Decision 10.1 has proved, for Zimbabwe that with adequate controls and strict enforcement measures, ivory can be traded legally, and in such a manner as to prevent any other ivory that is not part of the registered, legal stock from entering such legal trade. The experiment also demonstrated that trade in ivory and other elephant products is not an end in itself, but a mechanism for ensuring that there are revenues and incentives for the conservation of elephant habitats, particularly for impoverished rural communities who will ultimately decide if elephants survive or not.

The biggest threat to the survival of this species in Zimbabwe is not international trade, but loss of habitat and conflict with legitimate human interests. Implementation of Decision 10.1 has proved that the situation can be alleviated by adding value to the animal, not taking it away. The supporting statement will show that it is important to maintain the elephant population of Zimbabwe on Appendix II to allow controlled trade in raw ivory because:

- Revenue from regulated trade is used exclusively to enhance elephant conservation and community conservation and development programmes within the elephant's range.
- It assists impoverished rural communities who co-exists with the elephants.
- Controlled trade will directly benefit the survival of the Zimbabwe elephant population by making elephants valuable to the communities with which they share resources outside protected areas.

- There are strong political and economic imperatives for transfer Zimbabwe's elephant population as it is increasing (over 88,000 animals) and there is continuous accumulation of ivory from natural mortality from both within and outside Zimbabwe's national parks. There are high financial and security implications involved in managing Zimbabwe's growing ivory.

Precautions/conditions for quota

Zimbabwe agrees to abide by all conditions previously set out in Decision 10.1 and to operate in accordance with Resolution Conf. 10.10 (Rev.).

C. Supporting statement¹

1. Taxonomy

- | | |
|--------------------------|---|
| 1.1 Class: | Mammalia |
| 1.2 Order: | Proboscidea |
| 1.3 Family: | Elephantidae |
| 1.4 Species: | <i>Loxodonta africana</i> (Blumenbach, 1797) |
| 1.5 Scientific synonyms: | None |
| 1.6 Common names: | English: African elephant
French: éléphant d'Afrique
Spanish: elefante africano |
| 1.7 Code numbers: | CITES A-115.001. 002. 001 [1984 (1)]
ISIS 5301415001002001001 |

2. Biological parameters

2.1 Distribution

Historical

Historical data on distribution is similar to Zimbabwe's proposals as found in documents Doc.10.21 and Doc 11.23.

It is widely agreed that elephants were distributed throughout Southern Africa prior to the arrival of the first colonial settlers in the 17th century. From the early part of the 18th century, exploitation for ivory, expansion of human settlements and protection of agricultural crops combined to reduce elephant populations throughout the region (1). Consequently, elephants in Southern Africa had largely been eliminated by the beginning of the 20th century except for a few remnant populations, the largest of which was in the (then) North-eastern Transvaal numbering at most a few hundred animals (2). Populations were similarly depleted in Zimbabwe (3,4), Botswana (5,6), Namibia (7), Zambia (8) and Malawi (9), and were extinct through most of their former range.

Current

¹ For more background information please refer also to proposal 10.21 and 11.23 submitted by Zimbabwe to COP10 and COP11 respectively.

The major range of the elephant in Zimbabwe can be considered in four major sub-regions: locally known as north-west Matebeleland, Zambezi Valley, Sebungwe and Gonarezhou. These sub-ranges cover all different land categories in Zimbabwe which include national parks estate, privately-owned large-scale commercial farming areas, communal lands, and the indigenous forest areas managed by the Forestry Commission of Zimbabwe (see figure 1). The approximate extent is 60 000km².

In addition to the main part of its range, within the four sub-regions identified above, the elephant in Zimbabwe is also found on privately-owned game farms and conservancies, isolated protected areas of the national parks estate and in some isolated communal lands. The minor range is increasing as a result of population increases and habitat availability.

For data on the habitat types occupied over the major elephant range please refer also to the proposal Prop. 10.21.

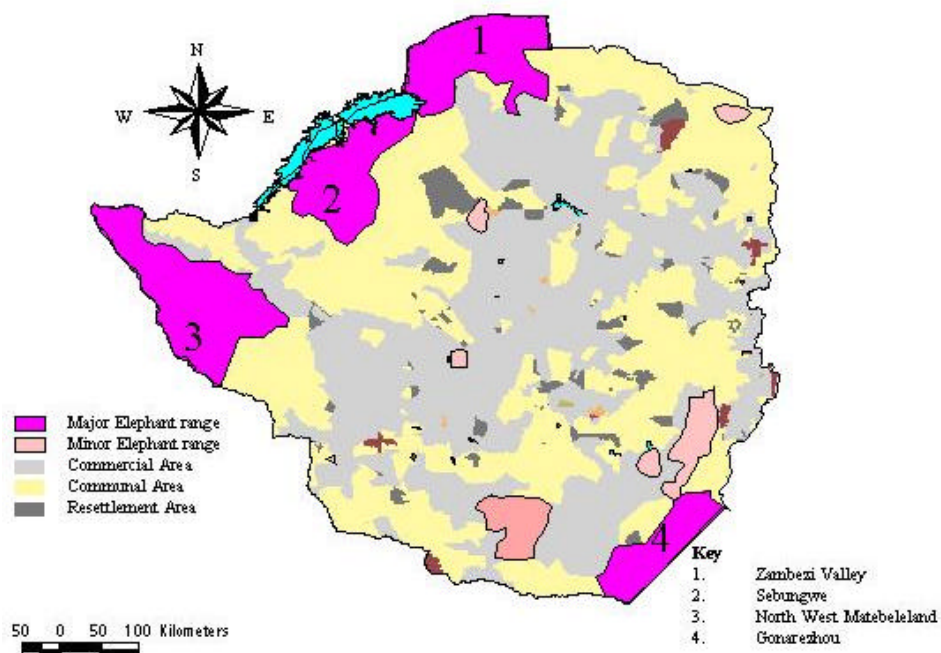


Fig. 1 Distribution of Elephants in Zimbabwe

2.2 Habitat availability

Wildlife habitats in most of Zimbabwe's protected areas are being radically modified by elephants. Elephant population compression has been cited as the principal factor in the modification of habitats of the protected areas of Zimbabwe including: Hwange National Park (10, 11), Chizarira National Park (12), Zambezi escarpment Parks estate (13), and Sengwa Wildlife Research Area (14, 15, 16). Susceptibility to modification is exacerbated by the fact that most protected areas are located in areas characterised by low and erratic rainfall, limited surface water, and inherent low soil fertility.

2.3 Population status

The status of the elephant population throughout its major range in Zimbabwe is determined by systematic aerial sample counts (See section 4.2.1 of proposal 10.21 for details). The population estimate from the 2001 national aerial survey over the approximately 67 000 km² of the major elephant range is 88, 123 \pm 8.0 % (Table 1). It is estimated that an additional 1,000 elephants exists in the unsurveyed minor range, giving a total of approximately 89,000 animals.

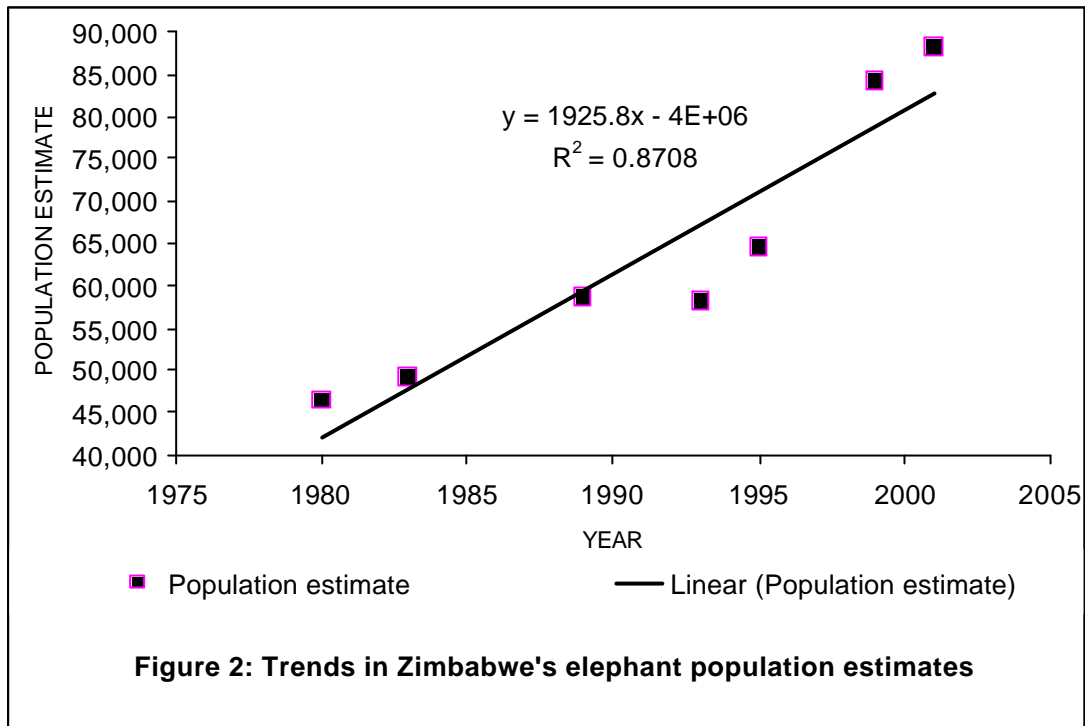
Table 1. Summary of numbers of elephants in Zimbabwe from 2001 aerial surveys

Region	Census zone	Area km ²	Numbers Estimated	% Confidence Limits
n-w Matebeleland	National Parks Estate	19,618	48,693	12.5
	Forests	2,344	553	105..4
	Communal Lands	3,110	64	149.1
	Subtotal	25,072	49,310	12.3
Zambezi Valley	National Parks Estate	13,371	16,110	12.9
	Communal Lands	3,756	3,187	44
	Subtotal	17,127	19,297	13.1
Sebungwe	National Parks Estate	5,842	9,923	18.5
	Forests	270	33	253.4
	Communal Lands	9,500	4,033	27.5
	Subtotal	15,612	13,989	15.2
Gonarezhou	National Parks Estate Park	5,125	4,992	32.8
	Communal Lands	221	0	-
	Subtotal	5,346	4,992	32.8
Save Valley Conservancy		3,484	535	60.2
Total for Major Elephant Range		66,641	88,123	8.0

Source: DNPWLA/WWF-SAPRO (17)

2.4 Population trends

Although elephant numbers have been surveyed over much of their range since 1980 (18) comparisons of national estimates between years are difficult because the precise area surveyed has differed from year to year. However direct comparisons are available for 1980, 1983, 1989, 1993, 1995, 1998 and 2001 (Figure 2, & annex 1). The figure of 88,123 elephants in the air survey regions is the highest ever estimate showing that the population of elephant continues to grow despite large take-offs of elephants in population control exercises between 1980 and 1989. The graph below depicts the increasing trend of the elephant population in the major range areas in Zimbabwe. The estimated annual rate of increase, obtained from the regression, is 1926 animals per year.



2.5 Geographic trends

As reported in the COP10 proposal, the geographic range available to elephants and the number of sub-populations is constant within protected areas and in private-owned large-scale commercial farming areas and conservancies. The current land reform exercise recognises the critical role played by wildlife and seeks to maintain integrity of these production systems by extending benefits to impoverished rural communities. The decline in geographic range in some communal areas has been arrested as a result of land use policies which allow land owners to manage and benefit directly from their elephant populations.

The land reform has resulted in more wildlife areas being ceded to CAMPFIRE. This has helped to stabilise, and in some cases has reversed, the rate of conversion of wild habitat as rural communities in these areas have adopted wildlife production as a land use option and have designated land exclusively for wildlife. This strategy can only be sustainable if the benefits outweigh the costs of living with wildlife.

2.6 Role of the species in its ecosystem

Please refer to the proposal Prop. 10.21.

2.7 Threats

The Panel of Experts who reviewed Zimbabwe's elephant proposals (Pursuant to Resolution Conf. 7.9) in 1992 and 1996 concluded that there were no threats to the survival of Zimbabwe's elephant population in the short or medium terms. Illegal killing incidents have remained low, as reported to the CITES Secretariat through the use of the incident reporting forms on illegal killing of elephants.

The most serious threat to the survival of viable populations of elephants is the expansion of human settlement and agriculture in the semi-arid areas where most elephants survive. Ultimately, it leads

to the eradication of elephants outside protected areas and to their overcrowding inside them. Viable elephant populations inside the government's protected areas are dependent on the survival of suitable habitat in the communal areas.

3. Utilization and trade

3.1 National utilization

Zimbabwe does not exploit elephant directly for their products either for commercial trade or domestic consumption. Indeed, it is recognised that the direct harvest of elephants for their products is often the lowest valued use for the species - recreational hunting and photo-tourism can add a great deal of value to elephant populations. However, large numbers of elephants have been removed during the period 1980 to 1989 to achieve specifically targeted population reductions for conservation purposes.

a) Recreational Hunting

The principle form of utilisation of elephant in Zimbabwe at the moment is recreational, or 'sport hunting'. Zimbabwe has established a national export quota of 400 trophy hunted animals per annum. The current quota is allocated approximately as shown in the table below:

Table 2. Allocation of quota to various land categories

Land category	Quota
State Safari Areas	180
Communal lands (CAMPFIRE Areas)	150
Indigenous Forestry land	20
Private farmland	50
Total quota	400

Source: NPWLMA records

Elephant hunting contributes about 64 % of the total income earned by Rural District Councils involved in CAMPFIRE (19) and about 50 % of the income earned from recreational hunting on state safari areas.

b) Live Sales

The Authority has allowed live sales and export of domesticated elephants to South Africa. No requests have been received from other range states for purposes of conservation programmes such as re-introduction in protected areas or for meta-population management.

c) Sale of elephant products (ivory, hides and meat)

No further commercial exports of raw ivory were undertaken after the one-off sale of 19.9 tonnes to Japan in 1998.

The National Parks and Wild Life Management Authority (NPWLMA) has sold raw ivory worth ZWD 22.7 million (as of 30/12/2001) to local registered ivory manufacturers since April 1998 (Annex 2). CAMPFIRE communities have been paid ZWD10.931 million for the ivory that was sold on their behalf and the rest was deposited in the National Parks Conservation Fund for exclusive use for conservation expenditure.

In line with implementation of some of the provisions of annotation ^o604, ivory manufacturers can carve items for sale to tourists as personal effects.

NPWLMA also sold 80 tonnes of elephant hide at international auctions in 1998 and 1999 and realised ZWD 17.3 million and ZWD 23.3 million respectively. Direct regular sales of hides to registered trophy dealers realised another ZWD 3.9 million. The major buyers at the international auctions were from Japan, the United States of America, and South Africa. Local registered trophy dealers also participated in the auction but they mainly buy directly from CAMPFIRE communities and private land holders. CAMPFIRE communities and private land holders need a permit from NPWLMA before they dispose of their elephant hide.

Revenue realised from the sale of elephant hide was used to rehabilitate the Hwange National Park game water supplies and to revamp the radio communication system in the major elephant range areas. Authorisation of trade in elephant products has benefited the wildlife authority, land owners, wildlife industry and indeed elephant conservation in Zimbabwe.

Zimbabwe is also seeking authorisation to conduct commercial exports of manufactured elephant leather goods. This would ensure that rural communities and local leather industry fully benefit through value addition rather than exporting semi-processed hide. Necessary control measures for the ivory and hide processing industry are in place.

Meat recovered from elephants destroyed on problem animal control (PAC) and on trophy hunting in CAMPFIRE areas is given to local communities. This provides the much needed protein, especially in areas where livestock raising is difficult because of tsetse fly.

d) Ivory and hide stocks

The current stock of ivory (as of 31st December 2001) held at Central Ivory Store of the NPWLMA is summarised in Table 3 below.

Despite conducting weekly sales to the local ivory manufacturers and the experimental export to Japan, Zimbabwe has accumulated substantial amounts of ivory. As shown in the Table 4 below, most of the accumulation is from natural mortality and PAC with an average contribution of 29%, followed by management and legal hunting contributing an average of 10% for the five- year period 1997-2001. There was no contribution from culling. Seizures contribute very low levels with an average 3%.

Annexes 3 and 4 gives an indication on the accumulation and production of ivory for the period 1998 to 2001. The overall rate of accumulation without conducting major population reduction exercises is generally well above 5 tonnes of ivory per annum. The rate is set to increase as the elephant population continues to expand.

Growing stockpiles present major management, administrative and security problems.

The costs of storing and managing these stocks are at least USD 35 000 per year. This is based on a costs of USD 8 000 for recovery of ivory from field stations, USD 12 000 for a two person/24-hour police presence throughout the year, and USD 500 for staff salaries for stock management. The international conservation community has to take cognisance of this situation and the predicament that conservation agencies find themselves in, especially in countries where elephant populations are expanding, where law enforcement is effective and where there is co-operation from the public.

Table 3. Existing stocks as of 31st December 2001

*Source	PARKS				CAMPFIRE				TOTAL	
	No. of tusks/pieces	Total weight (kg)	Average weight (kg)	Sd	No. of tusks/pieces	Total weight (kg)	Average weight (kg)	Sd	No. of tusks/pieces	Total weight (kg)
NM	526	4906.03	9.33	9.91	56	413.85	7.39	8.71	582	5319.88
NB	764	1242.88	1.63	2.05	97	181.75	1.87	2.15	861	1424.63
LH	5	21.50	4.30	3.65	19	57.25	3.01	1.69	24	78.75
PI	228	1877.65	8.24	7.12	51	285.80	5.06	4.45	279	2163.45
SC	251	1470.50	5.86	5.75	39	250.45	6.42	4.91	290	1720.95
MO	55	791.55	14.39	9.86	5	59.25	11.85	8.88	60	850.80
MC	65	760.30	11.70	6.05	3	19.35	6.45	5.81	68	779.65
MP	56	609.90	10.89	9.63	265	2332.75	8.80	5.95	321	2942.65
PO	499	4939.55	9.90	7.50	88	762.00	8.66	5.87	587	5701.55
UN	0	0	0	0	0	0	0	0	0	0
							TOTAL		3072	20982.31

Source: NPWLMA Ivory Management Database

***KEY** Codes are as per Notification to the Parties No. 984, of 4 July 1997.

NM – Natural Mortality – these are Ivory tusks recovered as a result of Natural death in the field. **NB** – Natural breakage – these are Ivory pieces picked up in the field weighing 0.5kg and above and are registered in the same way as an Ivory tusk. **LH** – Legal Hunting – these are Ivory tusks resulting from off takes of Elephant for the purpose of examining professional hunters and rations. **PI** – Ivory picked in the Parks Estate. **SC** – Confiscated – these are Ivory tusks, which have been handed over to us through customs, Zimbabwe Republic Police and Immigration. **MO** – Management Other – these are Ivory tusks, which are from elephants taken off due to management decisions such as self-defence. **MP** – Management Problem Animal Control – these are Ivory tusks whereby the Elephants have been taken off in communal areas to protect people and their fields. **MC** – Management Culling- these are Ivory tusks, which have originated from Elephant Culls. **PO** – Poached – these are Ivory tusks which have originated from Elephants killed by poachers in the Parks Estate and communal areas. **UN** - Ivory from unknown source.

Table 4. Percentage contribution of different sources to total annual accumulation by weight

Source	% Contribution					
	1997	1998	1999	2000	2001	Average
NM	51.41	21.45	17.79	33.12	24.43	29.64
NB	7.14	7.35	6.91	5.43	3.61	6.09
LH	0.79	2.88	3.49	4.33	1.80	2.66
PI	4.37	18.02	15.19	7.12	9.16	10.77
SC	2.77	1.85	4.10	4.05	4.65	3.48
MO	1.59	16.38	7.15	14.40	11.78	10.26
MC	0	0	0	0	0	0
MP	25.03	22.63	32.29	25.67	39.96	29.12
POA	6.91	9.44	13.08	5.88	4.62	7.98
UN	0	0	0	0	0	0

Source: NPWLMA Ivory Management Database

Zimbabwe maintains a computerised database established with the assistance of TRAFFIC East and Southern Africa, that has all specimens in storage, with source documentation, and all specimens are marked so as make them individually recognisable. Zimbabwe undertakes to provide CITES with a complete inventory of all stocks of ivory, before 31 January of each year as required by Resolution Conf. 10.10 (Rev.).

At present there are about 30 tonnes of elephant hide in the central store. Hide is recovered from animals mainly shot on PAC, legal hunting operations, and from animals killed for other management reasons such as mercy killing or killing in self-defence.

3.2 Legal international trade

There were no further commercial exports of raw ivory conducted by Zimbabwe after the one-off sale to Japan. Tourists can buy manufactured goods from ivory and elephant hide and import them into their countries as personal effects. Despite stricter domestic measures by several developed countries, particularly from Europe, the demand has led to a steady growth of the industry. This trade has contributed significantly to source of revenue for the manufacturers. The industry now has 65 registered carvers an increase from about 40 in 1997 when demand for ivory was low due to the trade embargo. Commercial exports of manufactured leather goods will also contribute significantly to the economic viability of the local wildlife industry.

3.3 Illegal trade

Illegal trade in ivory in the region is relatively low, but probably increasing. Data on ivory seizures in or from Zimbabwe, reported number of elephants poached in Zimbabwe from 1985 until 2001, and the carcass ratios² for the period between 1995 and 2001 are shown in Annexes 5, 6 and 7 respectively. The recovery by Customs and law enforcement officers in the field of ivory from illegal hunting and trade amounts to about one tonne of ivory annually and there is no obvious trend since 1990.

During the national aerial surveys, elephant carcasses are counted and the ratio of dead to live elephant are used as a rough estimate of the mortality over preceding years. A ratio of 2-8 % usually indicates a stable or increasing number, while a ratio greater than 8% is indicative of a declining population (20). The 2001 data on carcass ratios suggest that there has been very low mortality that can be assumed to be from illegal off-take. The high ratio for Zambezi Valley an in Gonarezhou in 1995 could be due to a high levels of illegal activity and 1992/93 drought induced mortalities.

Expenditure on the elephant conservation and protection by NPWLMA has increased significantly from the level reported in 1996 (Table 5). The current overall expenditure stands at USD 99 per km² compared to the 1996 figure of USD 49 per km². The mean area covered per vehicle in 1996 was 702 km² compared to the current figure of 416 km². Additional fleet of 7 patrol vehicles will soon be purchased, using ivory revenue, to boost the fleet in the Zambezi Valley.

Overall anti-poaching manpower densities are comparable to the ideal figure of one scout to 20-30 km². However, in the Zambezi Valley, which is a high-risk area, manpower densities have increased to a level that is much closer to the ideal figure. The 1996 figure for the Zambezi Valley was at one scout per 240 km². The increase in law enforcement effort has led to effective control on elephant poaching against a background of continuous threats from poachers. Six foreign poachers were killed in 2001. The Authority lost one ranger to poachers during the same year.

² Carcass ratios are calculated as the proportion of dead elephants expressed as a percentage of the estimate of the live plus dead elephants.

Zimbabwe has contributed fully to the interim system to monitor the illegal trade in ivory and the illegal killing of elephants as outlined in the notification to the Parties 1998/10. Zimbabwe has also recently implemented the Monitoring Illegal Killing of Elephants system (MIKE) at its allocated sites, with the intention of eventually implementing the system throughout the elephant range in Zimbabwe. Zimbabwe also is contributing data on ivory and elephant product seizures to the Elephant Trade Information System (ETIS), the CITES monitoring system for assessing illegal trade.

Table 5. Resources allocated for law enforcement in protected areas located in major areas of distribution (as of December 2001)

LAW ENFORCEMENT FEATURE	north-west MATEBELELAND	ZAMBEZI VALLEY	SEBUNGWE	G/REZHOU	TOTALS
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Manpower

Officers	13	21	9	9	52
Field Staff	290	386*	220*	120	1 016
Total Manpower	303	407	229	129	1 068

Salaries

Salaries (approx.) (ZWD) & (USD Equiv).	30,188,048 57,965	26,404,479 480,081	8,456,650 15,376	11,098,000 201,279	76,000,000 1,381,818
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Operational budget

Operational Budget (ZWD) & (USD Equiv).	82,080,002 14,923,637	50,828,620.62 924,157	11,627,950 211417	14,558,200 264,695	159,094,773 2,892,632
Total Budget (ZWD) & (USD Equiv).	112,268,050 2,041,237	77,233,100 1,404,328	20,084,600 365,174	25,656,200 466,476	235,211,950 4,276,580

Vehicles, vessels and aircraft

4-wheel drive vehicles	38	24	16	17	99
5-ton trucks	3	3	4	3	13
Total Vehicles	41	27	20	20	112
Aircraft	1	1			2
Boats	1	3	4		8

Protected area (km²)	19 400	12 000	6 200	5 250	42 850
Field staff density (men/km ²)	64	30	27	41	41
Area per vehicle (km ²)	473	444	310	263	373
Total expenditure (USD/km²)	105	117	59	88	99

* Includes Zimbabwe National Army Details

How legal trade will affect illegal trade

The same precautionary measures and conditions that applied for the last experimental trade will apply in order to minimise impacts on other elephant populations. Trade will only take place with

countries having comprehensive trade controls and sophisticated regulating systems for the management of ivory manufacturing industry, and that will not allow re-export for commercial purposes.

Please also refer to the proposal 10.21 for further details on conditions and precautions.

3.4 Actual or potential trade impacts

Trade in elephant products will have a positive effect on the elephant populations concerned (see Rationale, in the introductory statement). The southern African countries see absence of trade as the greatest threat to elephant survival in the region. Many people are concerned that any legal trade will encourage illegal trade. However, facts from the region do not support this assertion. Those concerned about elephant conservation must draw lessons from other species like the white rhino. The issue of ivory stockpiles in Africa is a fundamental problem that needs to be solved; and with the success of the last experimental controlled trade there is evidence that trade can be conducted without producing serious negative consequences elsewhere. One recent survey of ivory markets in South and South East Asia indicates that the sale of ivory from Southern Africa under CITES did not cause ivory trade to increase in this region. (21).

Zimbabwe supports the current systems that have been put in place to monitor illegal trade in ivory and illegal killing of elephants. The systems are an objective means of monitoring the effects of amending the listing of elephant in CITES.

3.4.1 Live Specimens

There is very little trade in live elephant within the region. Since the authorisation of trade in live elephants at the last COP10, very limited trade as reported in section 3.1 (b) has taken place as there were no requests from suitable and acceptable range states. Live exports were conducted in accordance with provisions of proposal Prop. 11.25.

3.4.2 Parts and Derivatives

The proposals for trade in ivory and other elephant products have been dealt fully in section 3.2.

3.5 Captive breeding

There is no significant commercial captive breeding of *Loxodonta africana* anywhere in the world.

4. Conservation and Management

4.1 Legal status

4.1.1 National

The laws which determine the application of CITES in Zimbabwe have been independently reviewed as part of CITES legislation review process and Zimbabwe's legislation has been placed in category 1. Category 1 is the highest ranking and confirms that Zimbabwe's legislation is of the highest standard for implementing CITES. For more details please also refer to proposal Prop. 10.21 and the conclusions of the 1996 Panel of Experts' on the subject.

4.1.2 International

The African elephant is listed in Appendix I of CITES in all countries except in Botswana, Namibia, South Africa and Zimbabwe where the species is listed in Appendix II with trade provisions as outlined in annotation⁰⁶⁰⁴.

4.2 Species management

4.2.1 Population monitoring

NPWLMA has maintained its monitoring programme as reported in the proposal submitted at COP10. Information on the frequencies at which aerial surveys were conducted on the major elephant range since 1995 is detailed in Annex 8.

4.2.2 Habitat conservation

According to the preamble of the Parks and Wild Life Act (1975) the objectives for which National Parks are established are to preserve and protect the natural landscape and scenery, and to preserve and protect wildlife and plants and the natural ecological stability of wildlife and plants. Until 1989, in order to conserve elephant habitat and to maintain biological diversity, the Department of National Parks and Wild Life Management continually tried to reduce elephant densities in protected areas to levels not exceeding 1 elephant per square kilometre. Unfortunately, since the transfer of the populations to Appendix II there are still pressures to reduce numbers. Recent studies have shown that local over-abundance of elephant has led to local extinction of Roan antelope *Hippotragus niger* and a decline in abundance of some large mammal species such as Cape buffalo *Syncerus caffer* and bushbuck in Hwange National Park (22). A reduction in species biodiversity in the Zambezi Valley escarpment has also been observed (23). Ecologists now consider several protected areas to be so overstocked that a major die-off elephant is imminent as happened in Gonarezhou in 1992, and is likely to occur in the event of severe drought. It is, however, likely that with the continued increases in population, there is going to be reduction exercises to protect the habitat.

It costs about USD 100 to cull one elephant if recovery of products is to be done adequately and USD 100-1,000 to translocate one elephant (24). An elephant population reduction exercise in protected areas to safe ecological carrying capacity of approximately 35,000 to 40,000 elephant would therefore require huge financial resources. The exercise can be self-financed if recovered products, such as raw ivory and hide, can be marketed on international markets without unnecessary restrictions.

4.2.3 Management measures

Management measures reported in proposal Prop. 10.21 are still being applied.

Provision of sustainable artificial water supplies to game is one of the major management activities with huge financial implications. For instance, the provision of sustainable artificial water supplies in Hwange National Park costs about ZWD 12 million per annum. About 90% of water consumption is due to elephants, so the costs will continue to increase as elephant numbers continue to increase.

All the revenues generated from wildlife products derived from natural mortality of elephants and management activities in the Parks Wild Life Estate will be retained by the Authority.

The Government of Zimbabwe in January 1996 approved the establishment of the Parks and Wild Life Conservation Fund under section 30 of the Audit and Exchequer Act (Chapter 168). The Government has further transformed the Department into an Authority through

the enactment of the Parks and Wildlife Amendment Act Number 19 of 2001. The transformation is aimed at changing the Department into an autonomous and commercial entity but ensuring that the goals of conservation are not compromised. All revenues generated by NPWLMA are deposited into this Fund and are for the exclusive use by the Authority. The Authority is no longer receiving allocations from the Central Government.

Revenues from wildlife products derived from natural mortality and management activities in those communal lands with Appropriate Authority under the Campfire programme will be retained by the Rural District Councils in their Campfire fund and used for conservation activities and for providing development benefits to rural people in line with the Campfire guidelines.

4.3 Control measures

4.3.1 International trade

Zimbabwe agrees to abide by any of the conditions previously set out in Decision 10.1 which would currently be relevant and applicable, and to operate in accordance with the Resolution Conf.10.10 (Rev.).

Some changes have been made to the Control of Goods (Import and Export) (Wild Life Regulations 1998(76) {S.I. 76 of 1998} to reflect the new status of elephant and in compliance with Decision 10.1 [paragraph (a)]. Most of the changes were done with the assistance of the CITES Secretariat.

Please refer to the proposal Prop. 10.21 for the mechanism to control international trade.

4.3.2 Domestic measures

Please refer to the proposal Prop. 10.21.

After COP10 decision some changes were made to the legislation in compliance with Decision 10.1 [paragraph (a)]. Monitoring of the activities of the local carving industry has also been stepped up as well.

5. Information on Similar Species

Please refer to the COP10 proposal.

6. Other Comments

7. Additional Remarks

Zimbabwe has contributed immensely to CITES, especially through promoting the philosophy of sustainable use. We believe that conservation in developing countries such as Zimbabwe is only likely to be viable if undertaken as a sustainable use programme. Zimbabwe's participation in the CITES Strategic Planning Working Group is also a testimony of its effective contribution to the evolution of CITES. Authorisation of trade in raw ivory will enhance the efforts of Zimbabwe and indeed CITES to conserve the elephant.

8. References

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ELEPHANT POPULATION ESTIMATES: 1980-2001

Region	Census Zone	1980	1983	1989	1993	1995	1998	2001
Matebeleland N-W	National Parks Estate	20,44	25,888	27,411	26,796	27,191	34,354	48,692
	Forest Areas	N.S	N.S	N.S	815	937	389	533
	Communal Lands	N.S	N.S	N.S	230	2,859	1,250	64
	Total Population estimated 95% C.L	20,444 <u>+ 34%</u>	25,888 <u>+27%</u>	27,411 <u>+33%</u>	27,841 <u>+28%</u>	30,987 <u>+19%</u>	35,992 <u>+15,6%</u>	49,310 <u>+12,3%</u>
	Total Area Surveyed km ²	18,709	19,153	18,933	24,935	25,072	25,072	25,072
Zambezi Valley	National Parks Estate	10,152	9,907	12,744	13,904	14,998	17,040	16,110
	Communal Lands	N.S	N.S	1,334	2,685	2,445	346	3,187
	Population Estimated 95% C.L	10,152 <u>+ 19%</u>	9,907 <u>+17%</u>	13,029 <u>+19%</u>	14,361 <u>+16%</u>	17,443 <u>+14%</u>	17,385 <u>+17,5%</u>	19,297 <u>+13,1%</u>
	Area Surveyed km ²	13,986	10,822	11,304	10,917	15,464	16,137	17,127
Sebungwe	National Parks Estate	8,302	6,088	9,508	7,253	6,367	6,353	9,923
	Forest Areas	89	0	319	70	124	146	33
	Communal Lands	2,735	3,214	3,463	3,419	5,306	3,645	4,033
	Population Estimated 95% C.L	11,126 <u>+20%</u>	9,302 <u>+16%</u>	12,946 <u>+23%</u>	10,742 <u>+21%</u>	11,797 <u>+17%</u>	10,144 <u>+12%</u>	13,989 <u>+15,2%</u>
	Area Surveyed km ²	14,129	13,601	12,568	15,118	15,182	15,577	15,612
Gona-re-Zhou	Population Estimated 95% C.L	4,604 <u>+29%</u>	3,985 <u>+25%</u>	5,286 <u>+27%</u>	5,241 <u>+59%</u>	4,251 <u>+36%</u>	4,232 <u>+28%</u>	4,992 <u>+32,8%</u>
	Area Surveyed km ²	4,855	5,208	4,900	5,171	5,377	5,166	5,346
	Grand Total Population Estimate 95% C.L	46,426 <u>+19%</u>	49,082 <u>+15%</u>	58,672 <u>+17%</u>	58,185 <u>+15%</u>	64,478 <u>+10%</u>	67,652 <u>+10%</u>	87,388 <u>+8%</u>
	Grand Total Surveyed km ²	51,679	48,844	47,705	56,141	61,095	61,952	63,157

N-S-Not Surveyed

Source: Price Waterhouse (10) and NPWLMA records

REVENUE GENERATED FROM THE SALE OF ELEPHANT PRODUCTS 1998-2001

Amount and value of ivory sold to licensed local manufacturers 1998-2001

Year	PARKS		CAMPFIRE		TOTAL	
	Weight (kg)	Value (ZWD)	Weight (kg)	Value (ZWD)	Weight (kg)	Value (ZWD)
1998	2124.25	1108014.53	1813.50	1008366.37	3937.75	2116380.90
1999	5064.90	3481186.82	2975.08	2329812.27	8162.94	580999.09
2000	3980.20	4110853.43	2304.75	2528707.60	6284.95	6639561.03
2001	7161.75	8472359.00	4217.45	4864496.72	11379.20	13336855.72
Totals	18331.10	17172413.78	11310.78	10731382.96	29764.84	22673796.74

Amount and value of hides sold to licensed local manufacturers 1998-2001

Year	Auction		Direct Sales		Total	
	Weight (kg)	Value (ZWD)	Weight (kg)	Value (ZWD)	Weight (kg)	Value (ZWD)
1998	80,000.00	17,300,000.00	0.00	0.00	80000.00	17,300,000.00
1999	28,100.00	23,256,297.50	21.40	3,638.00	28121.40	23,259,935.50
2000			13412.95	2,280,201.50	13412.95	2,280,201.50
2001			9583.00	1,629,610.00	9583.00	1,629,610.00
Total		40,556,297.50	23017.35	3,913,449.50	23017.35	44,469,747.00

Amount and value of raw ivory sold to Japanese in 1998

Authority	Weight (kg)	Amount ZWD
Parks	13608,19kg	ZWD 54 329 023.62
Campfire	6287.16kg	ZWD 21 581 667.18
Total	19895,35kg	ZWD 75 900 690.80

ANNUAL ACCUMULATION OF IVORY 1998-2001

(For annotations of the abbreviated source, please refer to key on page 8.)

Table3 (a). Annual accumulation by source for raw Ivory 1998

Source	PARKS		CAMPFIRE		TOTAL	
	No. of Tusks/Pieces	Weight (kg)	No. of Tusks/Pieces	Weight (kg)	No. of Tusks/Pieces	Weight (kg)
NM	249	1945.93	25	269.25	274	2215.18
NB	428	738.41	12	20.75	440	759.16
LH	16	93.30	62	203.75	78	297.05
PI	226	1378	72	482.55	298	1860.55
SC	38	191.00	0	0	38	191.00
MO	178	1613.15	10	77.75	188	1690.90
MC	0	0	0	0	0	0
MP	55	590.15	231	1745.95	286	2336.10
POA	103	725.45	34	249.75	137	975.20
UN	0	0.00	0	0	0	0
TOTAL	1293	7275.39	446	3049.75	1739	10325.14

Table 3 (b). Annual accumulation by source for raw Ivory 1999

Source	PARKS		CAMPFIRE		TOTAL	
	No. of Tusks/Pieces	Weight (kg)	No. of Tusks/Pieces	Weight (kg)	No. of Tusks/Pieces	Weight (kg)
NM	228	1401.75	20	116.50	248	1518.25
NB	332	557.40	20	32.00	352	589.40
LH	20	194.50	24	103.50	44	298.00
PI	145	1043.25	38	252.75	183	1296.00
SC	46	334.80	4	14.75	50	349.55
MO	37	429.00	17	181.50	54	610.50
MC	0	0	0	0	0	0
MP	85	959.75	204	1795.50	289	2755.25
POA	135	944.25	24	172.00	159	1116.25
UN	0	0	0	0	0	0
TOTAL	1028	5864.70	351	2668.50	1379	8533.20

Table 3(c). Annual accumulation by source for raw Ivory 2000

Source	PARKS		CAMPFIRE		TOTAL	
	No. of Tusks/Pieces	Weight (kg)	No. of Tusks/Pieces	Weight (kg)	No. of Tusks/Pieces	Weight (kg)
NM	418	2617.25	69	477.25	487	3094.50
NB	254	452.25	54	55.50	308	507.75
LH	29	227.75	48	177.25	77	405.00
PI	111	590.20	17	75.00	128	665.20
SC	66	286.25	14	92.00	80	378.25
MO	94	1160.25	23	185.00	117	1345.25
MC	0	0	0	0	0	0
MP	60	613	217	1785.00	277	2398.00
POA	77	464.25	8	85.00	85	549.25
UN	0	0	0	0	0	0
TOTAL	1109	6411.20	450	2932.00	1559	9343.20

Table 3(d). Annual accumulation by source for raw Ivory 2001

Source	PARKS		CAMPFIRE		TOTAL	
	No. of Tusks/Pieces	Weight (kg)	No. of Tusks/Pieces	Weight (kg)	No. of Tusks/Pieces	Weight (kg)
NM	150	1634.25	30	185.00	180	1819.25
NB	133	235.50	14	33.00	147	268.50
LH	20	96.00	8	38.00	28	134.00
PI	101	556.25	22	125.50	123	681.75
SC	48	339.55	1	6.50	49	346.05
MO	66	823.80	9	53.50	75	877.30
MC	0	0	0	0	0	0
MP	52	498.50	265	2476.50	317	2975.00
POA	26	244	10	100.00	36	344.00
UN	0	0	0	0	0	0
TOTAL	596	4427.85	359	3018.00	955	7445.85

IVORY ADDED TO GOVERNMENT STORES SINCE 1997

Table 4a. Ivory added to government stocks in 1997

Source	No. of tusks/pieces	Total weight (kg)	Average weight (kg)	Sd
NM	373	2825.10	7.57	6.79
NB	250	392.20	1.57	1.78
LH	6	43.25	7.21	4.86
PI	43	240.25	5.59	5.45
SC	46	152.00	3.30	1.82
MO	8	87.50	10.94	6.64
MC	0	0	0	0
MP	139	1375.75	9.90	5.66
POA	37	379.50	10.26	7.31
UN	0	0	0	0

Table 4b. Ivory added to government stocks in 1998

Source	No. of tusks/pieces	Total weight (kg)	Average weight (kg)	Sd
NM	274	2215.18	8.08	8.16
NB	440	759.16	1.73	1.86
LH	78	297.05	3.81	2.02
PI	298	1860.55	6.24	6.65
SC	38	191.00	5.03	5.0
MO	188	1690.9	8.99	6.41
MC	0	0	0	0
MP	286	2336.10	8.17	5.33
POA	137	975.20	7.12	6.66
UN	0	0	0	0

Table 4c. Ivory added to government stocks in 1999

Source	No. of tusks/pieces	Total weight (kg)	Average weight (kg)	Sd
NM	248	1518.25	6.12	7.27
NB	352	589.40	1.67	2.05
LH	44	298.00	6.77	6.80
PI	183	1296.00	7.08	7.11
SC	50	349.55	6.99	6.01
MO	54	610.50	11.31	6.80
MC	0	0	0	0
MP	289	2755.25	9.53	5.93
POA	159	1116.25	7.02	5.80
UN	0	0	0	0

Table 4d. Ivory added to government stocks in 2000

Source	No. of tusks/pieces	Total weight (kg)	Average weight (kg)	Sd
NM	487	3094.50	6.35	7.05
NB	308	507.75	1.65	2.13
LH	77	405.00	5.26	3.80
PI	128	665.20	5.20	7.53
SC	80	378.25	4.73	4.28
MO	117	1345.25	11.50	8.04
MC	0	0	0	0
MP	277	2398.00	8.66	5.65
POA	85	549.25	6.46	5.81
UN	0	0	0	0

Table 4e. Ivory added to government stocks in 2001

Source	No. of tusks/pieces	Total weight (kg)	Average weight (kg)	Sd
NM	180	1819.25	10.11	8.11
NB	147	268.50	1.83	1.68
LH	28	134.00	4.79	2.56
PI	123	681.75	5.54	5.11
SC	49	346.05	7.06	8.25
MO	75	877.30	11.70	7.92
MC	0	0	0	0
MP	317	2975.00	9.38	5.60
POA	36	344.00	9.56	7.18
UN	0	0	0	0

SEIZURES OF ELEPHANT PRODUCTS

DATE OF ARREST / SEIZURE	ARRESTING AUTHORITY	PLACE OF SEIZURE	COUNTRY OF ORIGIN	NO OF PIECES	WEIGHT (Kg)	METHOD OF CONCEALMENT	IVORY SERIAL No
28/11/95	EX CID	TSHOLOTSHO		1	9	Ivory placed in car boot	ZW9500051
28/11/95	EX ZRP	TSHOLOTSHO		1	7	"	ZW9500050
22/05/95	EX CID	BINDURA		1	7	Ivory found in a bag	ZW9500593
22/05/95	EX CID	MAHUSEKWA	ZW	1	7	"	ZW9500591
22/05/95	EX CID	MAHUSEKWA	ZW	1	7	"	ZW9500592
07/07/95	PARKS	GURUVE RDC	ZW	1	10	Presented tusks for registration	ZW9500637
07/07/95	"	"	ZW	1	10	"	ZW9500638
07/07/95	"	"	ZW	1	14	"	ZW9500639
07/05/95	PARKS	GURUVE RDC	ZW	1	13		ZW9500640
04/05/95	Guruve Coucil	"		1	4	"	ZW9601615
09/08/95	EX CID	KWEKWE		1	4	Found abandoned in car	ZW9600454
29/08/95	PARKS	GURUVE RDC	ZW	1	3		ZW9602099
28/10/96	PARKS	GURUVE RDC	ZW	1	7		ZW9600165
28/10/96	PARKS	GURUVE RDC	ZW	1	3		ZW9602033
28/10/96	PARKS	GURUVE RDC	ZW	1	4		ZW9602101
28/10/96	PARKS	GURUVE RDC	ZW	1	4		ZW9602100
28/10/96	PARKS	GURUVE RDC	ZW	1	4		ZW9602038
28/10/96	PARKS	GURUVE RDC	ZW	1	5		ZW9602037
28/10/96	PARKS	GURUVE RDC	ZW	1	3		ZW9602036
28/10/96	PARKS	GURUVE RDC	ZW	1	3		ZW9602034
28/10/96	PARKS	GURUVE RDC	ZW	1	4		ZW9602032
28/10/96	PARKS	GURUVE RDC	ZW	1	4		ZW9602031
28/10/96	PARKS	GURUVE RDC	ZW	1	3		ZW9602030
28/10/96	PARKS	GURUVE RDC	ZW	1	3		ZW9602030
28/10/96	PARKS	GURUVE RDC	ZW	1	3		ZW9602029
28/10/96	PARKS	GURUVE RDC	ZW	1	3		ZW9602035
21/01/97	EX CID & Customs	HARARE Airport		1	2	Travelling bag	ZW9700069
12/01/97	EX CID			1	0.75		ZW9700660
13/05/97	EX CID	HARARE		1	0.75	Ivory placed in bag	ZW9701144
13/05/97	EX CID	HARARE		1	5.50	Ivory placed in bag	ZW9701139
13/05/97	NAT PARKS	CHIREDDZI	ZIMBABWE	1	5.00	Ivory presented for registration	ZW9701140
13/05/97	NAT PARKS	CHIREDDZI	ZIMBABWE	1	3.25	"	ZW9701141
13/05/97	NAT PARKS	CHIREDDZI	ZIMBABWE	1	3.50	"	ZW9701142
13/05/97	EX CID	HARARE	ZIMBABWE	1	0.50	Ivory placed in bag	ZW9701143
30/12/97	EX CID	HARARE		1	4.75	"	ZW9800003

DATE OF ARREST / SEIZURE	ARRESTING AUTHORITY	PLACE OF SEIZURE	COUNTRY OF ORIGIN	NO OF PIECES	WEIGHT (Kg)	METHOD OF CONCEALMENT	IVORY SERIAL No
02/04/97				1	10.00		ZW9200680
02/04/97				1	10.25		ZW9200681
02/02/97				1	1.75		ZW9200682
02/04/97				1	1.75		ZW9200683
10/12/97	EX ZRP			1	1.25		ZW9801484
27/02/97		NYAMINYAMI RDC	ZIMBABWE	1	3.50		ZW9900293
27/02/97		NYAMINYAMI RDC	ZIMBABWE	1	3.75		ZW9900292
10/08/97	EX CID	NYAMINYAMI RDC	ZIMBABWE	1	10.25		ZW9900289
15/10/97				1	4.75		ZW9900334
14/11/97	EX CID			1	1.00		ZW9900342
10/08/97	EX CID			1	10.00		ZW9900332
14/11/97	EX CID			1	1.00		ZW9900351
21/12/97				1	10.75		ZW9900804
21/12/97				1	2.50		ZW9900805
21/12/97				1	2.50		ZW9900806
21/12/97				1	2.00		ZW9900807
21/12/97				1	2.00		ZW9900808
17/11/97	PARKS	HARARE	ZIMBABWE	1	5.50	Presented for registration	ZW20000773
26/09/97	PARKS	HARARE	ZIMBABWE	1	3.00	PRESENTED	ZW20000774
17/11/97	PARKS	HARARE	ZIMBABWE	1	5.50	"	ZW20000772
17/11/97	PARKS	HARARE	ZIMBABWE	1	6.00	"	ZW20000771
17/11/97	PARKS	HARARE	ZIMBABWE	1	6.00	"	ZW20000770
26/09/97	PARKS	HARARE	ZIMBABWE	1	2.00	"	ZW20000757
28/02/97				1	7.75		ZW9700330
28/02/97				1	6.25		ZW9700329
03/06/98				1	8.50		ZW9800458
10/07/98				1	22.75		ZW9800703
10/07/98				1	17.50		ZW9800702
09/07/98				1	8.25		ZW9800697
01/09/98				1	5.00		ZW9800978
01/09/98				1	5.00		ZW9800979
12/05/98				1	15.00		ZW9800996
22/05/98				1	17.00		ZW9800988
13/08/98				1	4.50		ZW9800994
13/08/98				1	4.25		ZW9800995
16/05/98				1	1.00		ZW9801017
07/10/98				1	3.00		ZW9801111
07/10/98				1	3.00		ZW9801112
10/12/98	EX ZRP			1	2.25		ZW9801411
30/09/98				1	3.50		ZW9900851
30/09/98				1	6.00		ZW9900852
16/08/98				1	1.75		ZW9900020
16/08/98				1	1.75		ZW9900028
10/11/98	EX ZRP			1	9.25		ZW9900182
10/11/98	EX ZRP			1	9.00		ZW9900183
10/11/98	NAT PARKS			1	3.50		ZW9900184

DATE OF ARREST / SEIZURE	ARRESTING AUTHORITY	PLACE OF SEIZURE	COUNTRY OF ORIGIN	NO OF PIECES	WEIGHT (Kg)	METHOD OF CONCEALMENT	IVORY SERIAL No
10/11/98	NAT PARKS			1	4.00		ZW9900185
10/11/98	NAT PARKS			1	0.50		ZW9900192
10/11/98	NAT PARKS			1	0.50		ZW9900193
10/11/98	NAT PARKS			1	0.25		ZW9900194
22/09/98	EX CID			1	9.00		ZW9900282
27/07/98				1	6.80		ZW9901020
22/09/98	EX ZRP			1	8.00		ZW9900303
25/10/98	EX CID			1	3.25		ZW9900323
27/07/98				1	6.50		ZW9901021
13/10/98	EX CID			1	2.50		ZW9900330
25/10/98	EX CID			1	3.75		ZW9900333
17/06/98	CUSTOMS			1	7.25		ZW9900890
30/11/98	EX ZRP			1	16.75		ZW9900884
30/11/98	EX ZRP			1	15.50		ZW9900885
20/08/98	PARKS	HARARE	ZIMBABWE	1	11.75	Presented for registration	ZW2000795
20/08/98	PARKS	HARARE	ZIMBABWE	1	10.25	"	ZW2000794
20/08/98	PARKS	HARARE	ZIMBABWE	1	10.00	"	ZW2000793
20/08/98	PARKS	HARARE	ZIMBABWE	1	8.25	"	ZW2000792
20/08/98	PARKS	HARARE	ZIMBABWE	1	9.75	"	ZW2000791
20/08/98	PARKS	HARARE	ZIMBABWE	1	12.25	"	ZW2000796
20/08/98	PARKS	HARARE	ZIMBABWE	1	14.50	"	ZW2000798
20/08/98	PARKS	HARARE	ZIMBABWE	1	15.50	"	ZW2000797
09/04/99				1	6.25		ZW9900241
31/03/99				1	6.00		ZW9900242
07/05/99				1	5.50		ZW9900251
09/04/99				1	19.75		ZW9900240
07/05/99				1	5.50		ZW9900246
09/04/99				1	6.50		ZW9900247
13/05/99				1	3.75		ZW9900248
17/05/99				1	5.75		ZW9900249
03/05/99				1	3.50		ZW9900250
31/03/99				1	6.00		ZW9900243
18/03/99				1	14.50		ZW9900300
07/07/99				1	11.25		ZW9900790
07/07/99				1	10.75		ZW9900791
27/07/99				1	2.00		ZW9901385
27/07/99				1	2.25		ZW9901395
26/08/99	PARKS	HARARE	ZIMBABWE	1	3.00	Presented for registration	ZW20000008
26/08/99	PARKS	HARARE	ZIMBABWE	1	3.00	"	ZW20000007
18/08/99		GOKWE	ZIMBABWE	1	4.00		ZW20000604
01/03/99	EX ZRP	CHINHOYI		1	5.00		ZW20000683
01/03/99	EX ZRP	CHINHOYI		1	5.00		ZW20000684

DATE OF ARREST / SEIZURE	ARRESTING AUTHORITY	PLACE OF SEIZURE	COUNTRY OF ORIGIN	NO OF PIECES	WEIGHT (Kg)	METHOD OF CONCEALMENT	IVORY SERIAL No
20/10/99	PARKS	HARARE	ZIMBABWE	1	3.00	Presented for registration	ZW20000769
20/10/99	PARKS	HARARE	ZIMBABWE	1	3.00	"	ZW20000768
20/10/99	PARKS	HARARE	ZIMBABWE	1	2.00	"	ZW20000767
20/12/99	PARKS	HARARE	ZIMBABWE	1	4.00	"	ZW20000766
30/08/99	PARKS	HARARE	ZIMBABWE	1	3.00	"	ZW20000756
30/08/99	PARKS	HARARE	ZIMBABWE	1	4.50	"	ZW20000763
20/12/99	PARKS	HARARE	ZIMBABWE	1	4.00	"	ZW20000762
20/10/99	PARKS	HARARE	ZIMBABWE	1	3.00	"	ZW20000761
14/09/99	PARKS	HARARE	ZIMBABWE	1	2.00	"	ZW20000760
20/12/99	PARKS	HARARE	ZIMBABWE	1	5.00	"	ZW20000759
30/08/99	PARKS	HARARE	ZIMBABWE	1	4.00	"	ZW20000764
12/06/99				1	3.00		ZW20000862
13/08/99				1	1.00		ZW20000881
12/06/99				1	3.50		ZW20000872
03/01/00				1	2.75		ZW20000021
03/01/00				1	1.00		ZW20000024
03/01/00				1	1.00		ZW20000023
03/01/00				1	2.25		ZW20000022
03/01/00				1	8.25		ZW20000019
03/01/00				1	8.25		ZW20000020
02/05/00	EX ZRP			1	0.50		ZW20000738
02/05/00	EX ZRP			1	0.50		ZW20000741
02/05/00	EX ZRP			1	0.50		ZW20000739
02/05/00	EX ZRP			1	0.50		ZW20000737
02/05/00	EX ZRP			1	2.00		ZW20000736
02/05/00	EX ZRP			1	1.50		ZW20000735
02/05/00	EX ZRP			1	2.50		ZW20000734
02/05/00	EX ZRP			1	2.00		ZW20000740
12/01/00				1	3.00		ZW20000765
12/01/00				1	2.50		ZW20000758
13/04/00				1	8.00		ZW20000777
13/04/00				1	7.00		ZW20000778
27/06/00				1	2.00		ZW20000809
16/08/00				1	0.50		ZW20000880
22/08/00				1	8.50		ZW20001036
22/08/00				1	8.50		ZW20001037
15/09/00				1	0.25		ZW20001315
23/10/00				1	1.00		ZW20001439
23/10/00				1	1.00		ZW20001440
20/12/00				1	5.50		ZW20001449
20/12/00				1	5.50		ZW20001450
06/12/00				1	14.00		ZW20001483
06/12/00				1	16.50		ZW20001484
01/03/00				1	13.00		ZW20010382
01/03/00				1	13.50		ZW20010384
26/04/01	EX ZRP			1	0.50		ZW20010023

DATE OF ARREST / SEIZURE	ARRESTING AUTHORITY	PLACE OF SEIZURE	COUNTRY OF ORIGIN	NO OF PIECES	WEIGHT (Kg)	METHOD OF CONCEALMENT	IVORY SERIAL No
13/06/01				1	17.00		ZW20010145
13/06/01				1	4.50		ZW20010147
13/06/01				1	5.50		ZW20010149
13/06/01				1	22.00		ZW20010144
13/06/01				1	5.00		ZW20010146
13/06/01				1	5.50		ZW20010148
02/02/01				1	4.50		ZW20010365
02/02/01				1	4.50		ZW20010363
01/03/01				1	16.00		ZW20010385
05/09/01				1	15.00		ZW20010665
05/09/01				1	14.00		ZW20010664
03/12/01				1	2.00		ZW20010723

REPORTED NUMBER OF ELEPHANTS POACHED IN ZIMBABWE: 1985 2001

Year	Matebeleland north	Zambezi Valley	Sebungwe	Gonarezhou	Total
1985	–	27	–	5	32
1986	1	17	–	6	24
1987	–	9	–	30	39
1988	8	14	3	823	848
1989	8	9	3	8	28
1990	7	73	9	10	99
1991	6	41	7	12	66
1992	12	38	–	11	61
1993	10	37	11	–	58
1994	6	31	8	1	46
1995	13	12	2	11	38
1996	3	5	–	3	11
1997	3	15	13	12	43
1998	6	24	15	3	42
1999	13	60	9	1	83
2000	10	19	5	1	35
2001	15	21	7	0	43

– = Data not available

CARCASS RATIOS FOR ELEPHANTS: 1995 – 2001

Region	Carcass category	Carcass ratio %					
		1995	1996	1997	1998	1999	2001
Nort West Matebeleland	Fresh	0	0	0	0	0.08	0.09
	Recent	0.13	0.03	0.12	0.06	0.23	0.12
	Old	4.29	5.25	6.14	1.77	2.03	3.02
	Overall	4.4	5.28	6.24	1.83	2.32	3.22
Zambezi Valley	Fresh	0.05	No survey	No survey	0.03	0	0.07
	Recent	0.1			0.2	0.07	0.16
	Old	7.34			3.1	11.2	3.74
	Overall	7.47			3.31	11.25	3.95
Sebungwe	Fresh	0	0	No survey	0.13	0.1	0.09
	Recent	0.19	0.19		0.09	0.17	0.7
	Old	6.07	4.64		1.92	3.67	5.13
	Overall	6.25	4.81		2.13	3.92	5.84
Gonarezhou	Fresh	0	0	No survey	0	No survey	0.26
	Recent	0	0		0.12		0
	Old	20.45	15.73		14.31		3.09
	Overall	20.45	15.73		14.4		3.33

DEFINITIONS USED TO RECORD TIME SINCE DEATH FOR ELEPHANT CARCASSES

Carcass category	Definition
1	Fresh: intact; white droppings of vultures visible; vegetation trampled; fluid stain on ground around carcass visible (animal likely to have died within the last 3 months).
2	Recent: pieces of hide still attached; skeleton still partly articulated; no vulture droppings; no trampled vegetation; no fluid stain evident (less than 1 year old, but generally since the last rainy season, i.e. 3 to 8 months old).
3	Old: bones scattered and bleached (probably died during or before the last rainy season, i.e. more than 8 months old but generally more than 1 year old and up to several years old).

THE FREQUENCY OF SURVEYS IN EACH OF THE FOUR MAJOR REGIONS OF ZIMBABWE: 1995-2001

Years	1995	1996	1997	1998	1999	2000	2001
MATEBELELAND NORTH							
Hwange NP Complex							
Matesti Complex							
Communal Lands							
Forest Areas							
SEBUNGWE							
Matusadona NP							
Chizarira							
Chete S A							
Chirisa S A							
Gokwe District							
Kariba-Omay							
Binga District							
Forest Areas							
ZAMBEZI VALLEY							
Charara SA							
Rifa SA							
Nyakasanga SA							
Mana Escarpment							
Mana South							
Mana/Sapi							
Mana Zambezi							
Sapi Zambezi							
Chewore NW							
Chewore South							
Chewore Escarpment							
Chewore Mountains							
Doma SA							
Dande SA							
Dande CL							
Mukwishe CL							
GONA-RE-ZHOU							
Gona-re-zhou							

Source: NPWLMA records (