

CONSIDERATION OF PROPOSALS FOR AMENDMENT OF APPENDICES I AND II

A. Proposal

Amendment of annotation ° 604 regarding the South African population to allow the initial sale of the Kruger National Park stockpile of ivory, 18 months after the adoption of the proposal and a subsequent annual quota of two tonnes.

This proposal is for the exclusive purpose of allowing in the case of the population of South Africa:

- a) trade in hunting trophies for non-commercial purposes;
- b) trade in live animals for re-introduction purposes into protected areas formally proclaimed in terms of the legislation of the importing country;
- c) trade in hides and leather goods;
- d) trade in raw ivory of whole tusks of any size, and cut pieces of ivory that are both 20 cm or more in length and one kilogram or more in weight of Government-owned stocks originating from the Kruger National Park. An initial stockpile of 30,000 kg is proposed and a subsequent annual quota of 2,000 kg accumulated each year through annual mortalities and management practices.

All other specimens shall be deemed to be specimens of species included in Appendix I and the trade in them shall be regulated accordingly.

B. Proponent

Republic of South Africa. This proposal forms the logical follow-up to South Africa's proposal to CITES Conference of Parties 11 (CoP11) in which South Africa proposed and was granted down listing of its elephant population from Appendix I to Appendix II. This down listing was approved with a zero quota for ivory.

C. Supporting statement1. Taxonomy

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|---------------------------------------|---|
| 1.1 Class: | Mammalia |
| 1.2 Order: | Proboscidea |
| 1.3 Family: | Elephantidae |
| 1.4 Genus, species
and subspecies: | <i>Loxodonta africana africana</i> |
| 1.5 Scientific synonyms: | None |
| 1.6 Common names: | English: African elephant
French: éléphant d'Afrique
Spanish: elefante africano |

[Ansell (1974) recognizes four subspecies of African elephant of which *L. a. africana* occurs in the southern African subregion.]

1.7 Code numbers:

2. Biological parameters

2.1 Distribution

In former times elephants ranged through most of South Africa but today they are confined to protected areas (Table 1). An increasing number of privately owned reserves have re-introduced elephant populations.

2.2 Habitat availability

The habitat available to elephants in South Africa has been considerably expanded in recent years, and there are good prospects for yet further expansions. The following initiatives have contributed, or promise to contribute to, the expansion of habitat suitable for elephants:

2.2.1 The agency responsible for the management of national parks (South African National Parks - SANParks) is in the process of acquiring land to expand the Marakele and Addo Elephant national parks. SANParks is also developing the new Vembe/Dongola National Park in the Limpopo Valley, which has good prospects of becoming a transfrontier park spanning three countries (Botswana, South Africa, and Zimbabwe). The land acquisition programme will allow the elephant populations in these parks to increase significantly.

2.2.2 The governments of Mozambique, South Africa and Zimbabwe have declared their commitment to the development of a transfrontier park that will include the Kruger National Park (KNP), the Ghona-re-zhou National Park (GNP) in Zimbabwe and the Limpopo National Park (LNP) in Mozambique. Much remains to be done to realize this objective, but once it has been achieved it will expand the area suitable for elephant conservation by 11 000 km². This area is currently known as the Great Limpopo Transfrontier Park (GLTP). In a pilot project 25 elephants were translocated from KNP to LNP in 2001.

2.2.3 A transfrontier initiative involving the connection of the Maputo Elephant Reserve in Mozambique to the Tembe Elephant Park and Ndumo Game Reserve in Kwazulu/Natal in South Africa is being considered. This has the potential to considerably increase the area available to elephants in this part of southern Africa.

2.2.4 Over the past two decades 1 759 elephants have been translocated from the KNP to other national parks, and to both private and publicly owned protected areas (Table 2).

2.3 Population status

Table 1 shows the status of the most important elephant populations in South Africa.

2.4 Population trends

South Africa's elephant population recovered from a low point of 120 animals in 1920 to more than 13 000 today (Table 1). The translocation of live elephants from the KNP to other protected areas has been promoting an increase in the elephant metapopulation in South Africa in recent years. Trends in the largest population, that of the KNP, is shown in Table 3. The population in the Addo Elephant National Park is increasing at an annual rate of nearly 5% per year.

2.5 Geographic trends

The translocation of elephants from the well-established population in the Kruger National Park to other protected areas has resulted in an increase in the geographical spread of elephant populations in South Africa (Table 2; Figure 1). The total area of all protected areas where elephants are found

currently exceeds 27 000 km² (Table 1). It is known that there is some elephant movement between Kruger National Park and Mozambique, and also Zimbabwe. Cross-border movements also occur between Botswana and the developing national park in the Limpopo Valley (Vembe-Dongda).

2.6 Role of the species in its ecosystem

Changes caused by elephants to the composition and structure of the vegetation are well documented (Owen-Smith 1988). Within the confines of fenced reserves high elephant densities may result in losses of certain plant species. Tree species with soft trunks, such as the baobab (*Adansonia digitata*) and *Sterculia* species, appear to be particularly vulnerable to elephant damage. There is concern in the Kruger National Park that if the elephant population is allowed to grow without control, the baobab, the common star-chestnut *Sterculia rogersii*, and other sensitive species will disappear. Other biota dependant on these species will then also disappear from the system. In the Addo Elephant National Park a number of endemic succulent plant species are totally absent from the elephant range, but these are present within the so-called botanical reserves from which elephants are permanently excluded (Moolman and Cowling 1994). Elephant can also change the vegetation structure from a tall-tree savanna to a shrub-land savanna. Raptors use tall trees such as the knob-thorn (*Acacia nigrescens*) as preferred nesting sites and they will thus suffer under conditions with very high elephant impact. Whether or not it is necessary to control elephant populations to avoid deleterious impacts on biodiversity has been the subject of controversy. There is, however, broad consensus that population manipulation is needed in situations where elephant movements are inhibited by fences or surrounding human disturbances as is the case in the Kruger National Park.

2.7 Threats

There are no major threats to the elephant populations in South Africa's protected areas. As indicated by trends in the Kruger National Park (Figure 2) poaching is currently well under control. The most serious poaching in the Kruger National Park occurred in 1981 when a total of 102 animals were recorded as having been killed for their ivory. The previous year, 1980, only one elephant was poached. This sudden onslaught took the Kruger National Park management by surprise, and various counter operations were immediately initiated. As a result poaching of elephants declined sharply from 1982 to 1984. Since then the number poached each year has remained below 20, except for 1991 when 28 were poached. In recent years elephant poaching has been very low (Figure 2). Not one elephant has been killed illegally in KNP since 1998. In the South African national parks other than the KNP, only one elephant has been poached since 1980. This occurred in October 1998 in the developing national park in the Limpopo valley (Vembe-Dongola). There is clearly no evidence that the downlisting of the elephant populations of Botswana, Namibia and Zimbabwe from Appendix I to Appendix II in 1995 has brought about an increase in poaching in South Africa.

3. Utilization and trade

3.1 National utilization

Substantial numbers of live elephants from the Kruger National Park have been traded in the past, mainly for the purpose of establishing populations in protected areas (Table 2 and Figure 1). Agreements have now been reached to the effect that over the next four years, up to 1 100 elephants could be moved from Kruger National Park to the LNP area of the GLTP trans-frontier park.

South African National Parks maintains a large stockpile of elephant products in the Kruger National Park (currently over 30 000kg of raw ivory, and over 150 000kg of hides). Most of this has been accumulated during past population control operations, and from elephants that have died of natural causes. A small proportion of the ivory is of uncertain origin, having been seized or confiscated. For each piece of ivory in the stockpile, its individual number, weight, source, date of collection and

other details are recorded in a database. The database complies with CITES specifications in that the source of each piece of ivory has been recorded. The amount of seized or confiscated ivory is therefore known. A smaller stockpile of ivory is maintained by SANParks in the Addo Elephant National Park. The great majority of the pieces in this stockpile have been collected from animals that have died of natural causes and there are none that have been confiscated.

Within South Africa utilization of elephant products is limited. Hides and ivory from the stockpile in the Kruger National Park are occasionally sold to local dealers. Records for ivory sales are kept of the tusk number, its weight, date of sale and the buyer. Over the past four years an average of 70kg of ivory has been sold per year from the KNP stockpile.

3.2 Legal international trade

From 1989 until CoP11, South Africa's elephant population was listed on Appendix I, and therefore no legal commercial international trade in elephants or elephant products (ivory or hides) was allowed. However, this population's status was changed at CoP11 as it was down-listed to Appendix II under the condition that no international sales of ivory would be undertaken before CoP12.

The movement of live elephant from Kruger to GKG will commence in 2001 at no financial cost to the Mozambique Government. Table 2 shows the numbers of elephants that have been sent to southern African and overseas countries from the Kruger National Park between 1980 and 2001.

In accordance with the outcome of CoP11, and by agreement with the Department of Environmental Affairs and Tourism, a total of 50 000kg of elephant hides from the Skukuza stockpile were sold recently by tender. The successful bidder, the Eastern Cape company, Exotan, paid a total of R2.56 million for the seven lots of hides making up the total of 50 000kg. Prices varied between lots from R32.80 per kg to R65.60 per kg. The total quantity of hides sold amounts to roughly one third of the Skukuza stockpile (a limit of 50 000kg was set so as not to over-supply the market). As stipulated in the proposal to CoP11 the income from the hides will be used for projects related to the conservation of elephants and will be paid into a budget vote created for this purpose.

3.3 The status of the Kruger National Park Ivory stockpile

SANParks has accumulated a large stockpile of elephant products in the Kruger National Park since the transfer of the African elephant to Appendix I in 1989 (currently over 30 000kg of raw ivory). Most of this ivory has been acquired during past population control operations and from elephants that have died of natural causes. The record keeping and database comply strictly with CITES specifications.

SOURCE	TOTAL WEIGHT (KG)	WEIGHT FOR TRADE THROUGH CITES (KG)
UN (Unknown)	305.30	0
SC (Seized or confiscated)	285.21	0
NB (Natural breakage)	1803.39	1803.39
NM (Natural mortality)	15492.29	15492.29
MP (Management problem animals)	7399.95	7399.95
MC (Management culling)	6821.80	6821.80
MO (Management other)	5.30	5.30

TOTAL	32113.24	31522.73
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Source codes used above

- NB = Natural breakage. Pieces of ivory found in the field.
- NM = Natural mortality. Ivory from elephants dying of natural causes.
- MC = Management deaths as a result of culling.
- MP = Mortality resulting from problem animal control.
- MO = Other management related causes.
- SC = Seizure and confiscation (in the field or at the point of illegal exportation).
- UN = Unknown origin.

The category 'weight for trade through CITES' indicates the amounts that could potentially be included in a quota for international trade. This category includes only whole tusks of any size, and cut pieces of ivory that are both 20 cm or more in length and one kilogram or more in weight of known source that have not been seized or confiscated. The weights given in the table therefore represent a maximum, and the amount actually available for trade may turn out to be lower than indicated.

A number of pieces of ivory from the Addo Elephant National Park (together weighing 23.95kg) are currently kept with the Skukuza stockpile. These have not been included in the table above. The ivory stockpile kept in the Addo Elephant National Park currently amounts to 188.30kg. All of the Addo ivory comes from natural breakage or natural mortality.

3.4 Illegal trade

The amount of illegal trade in ivory from the Kruger National Park is difficult to assess. As indicated above, the illegal hunting of elephant is currently not a significant problem (Figure 2). It would not be justifiable, however, to draw conclusions on the amount of illegal trade from the statistics on illegal hunting. Many of the poachers are arrested and the ivory recovered. Refugees from Mozambique occasionally pick up ivory in the park (from elephants dying of natural causes) and these may find their way into various illegal markets. However, as a matter of routine in all parks where elephants occur, SANParks staff collect ivory from carcasses as soon as they are found during aerial game counts or patrols. It is unlikely that much remains for illegal collection.

3.5 Actual or potential trade impacts

South Africa proposes that the sale of its ivory be subject to conditions similar to those applied to the governments of Botswana, Namibia and Zimbabwe decided at the Tenth Conference of the Parties (CoP10), namely:

- exports of raw ivory will be restricted to stocks of whole tusks of any size, and pieces of ivory that are both 20cm or more in length and one kilogram or more in weight. Such tusks or pieces must be of certifiable national origin, and which have been marked and registered in accordance with CITES procedures;
- ivory which was confiscated or is of unknown origin will not be eligible for export;
- only countries that meet conditions on national legislation and domestic trade controls as set by the CITES Secretariat will be eligible to buy ivory from South Africa;
- the export of ivory from South Africa will take place through a single government-controlled centre;

- all net revenues from the sale of ivory will be used for projects that promote the conservation of elephants.

Funding for conservation projects is always difficult to come by and managing parks with elephants or developing new parks where elephant could be accommodated is very expensive. The gradual reduction in South African government funding of SANParks has left the organization suffering from budgetary deficiencies which could be considerably redressed should the current legal stockpile of ivory be sold. Revenues from the sale would be used in projects in the interest of elephant conservation namely:

- Monitoring and research necessary to implement the new elephant management program in the Kruger National Park (summarized in section 4.2.3 below and available in full on the website www.parks-sa.co.za). This program will help to determine best practice in the management of elephant populations in protected areas, and will have wide applications.
- Increased monitoring and control of illegal hunting of elephants, particularly through intelligence networks and acquisition of equipment.
- The acquisition of land to promote the conservation of elephants in other national parks in South Africa, including trans-frontier national parks. As indicated above, this program is vitally important to create protected areas that are sufficiently large for elephants to be re-established in parts of their former range.
- Implementation of the Monitoring of the Illegal Killing of Elephants (MIKE) program in the Kruger Park.

Addressing boundary fence problems where elephants break out regularly and cause crop damage and kill people. Other animals such as lion and buffalo also go out through these elephant breaks and kill livestock and spread diseases such as Foot & Mouth Disease.

3.6 Captive breeding or artificial propagation for commercial purposes

Captive breeding plays no role in the conservation of the African elephant.

4. Conservation and Management

4.1 Legal status

4.1.1 National

In South Africa's national parks the African elephant is protected in terms of the National Parks Act, which prohibits any kind of utilization of large mammals apart from game viewing. Elsewhere the elephant is afforded the highest degree of protection by provincial nature conservation authorities.

4.1.2 International

As a signatory to CITES, South Africa abides by the conditions applicable to a CITES Appendix I & II species, as is currently the case with the African elephant.

4.2 Species management

4.2.1 Population monitoring

In most of the publicly owned conservation areas, aerial censuses are conducted at least once a year. The larger elephant populations in South Africa are closely monitored by this means, and long-term trends have been reliably established. Results from the Kruger National Park are shown in Table 3.

4.2.2 Habitat conservation

In South Africa it is feasible to maintain elephants only within the confines of fenced protected areas. Within these areas the maintenance of the natural habitat is a priority. Various management measures, for example fire management, control of water provisioning and control of large herbivore populations, are routinely undertaken to prevent habitat degradation.

4.2.3 Management measures

Management of elephant populations previously has focused on population reduction to avoid habitat degradation and loss of biodiversity. The rationale behind this has been the subject of debate, and there was a perceived need to place elephant culling on a firmer scientific basis.

In the Kruger National Park elephant damage to the vegetation became noticeable during the 1960s and an annual culling program commenced in 1967. The policy was to maintain about 7 000 elephants in the park, but fluctuations between 6 000 and 8 000 were deemed to be acceptable. In 1995, debates with various animal rights groups led to an undertaking by South African National Parks to revise the culling programme. In 1995 SANParks placed a moratorium on culling while the new elephant management policy was drafted and the population has since increased as a result (Figure 3; Table 3).

The revised elephant management plan (Whyte *et al.* 1999) has been approved by SANParks but awaits implementation. The new plan moves away from the idea of a static elephant population and encourages fluctuations in time and space. The overall aim is to maintain the biodiversity characteristic of the park, in all its facets and fluxes. Elephant numbers will be managed in accordance with measured impacts on biodiversity rather than absolute numbers of elephants. The park has been divided into a number of elephant management zones and different management options will be compared between zones. In high density zones elephant numbers will be allowed to increase unchecked, whereas in low-density zones the population will be progressively decreased. Comparisons between zones will allow managers to assess the impact of elephants on the biodiversity of the ecosystem.

It is anticipated that it will be necessary to remove 1022 elephants during the first year of the new management program. Thereafter numbers that need to be removed each year will gradually diminish. The preferred means of population control will be by non-lethal means, by translocating family groups to other protected areas. Since the development of methods to capture and transport adult elephants in 1994 it has become possible to translocate entire family groups. The previous practice of translocating juvenile elephants has ceased and, as a matter of policy, only intact family groups will be established in new areas. Different methods of contraception are being tested but none are currently practical as a means of elephant population control in large conservation areas. Although non-lethal means of elephant management are preferred, culling of elephants cannot be eliminated as a management option.

The detailed elephant management plan for the Kruger National Park is available on the SANParks web site www.parks-sa.co.za.

In the Addo Elephant National Park it has never been necessary to control the elephant population, despite its rapid increase. This has been possible because of the successful land acquisition program, which has been successful in providing the habitat needed by the expanding elephant population. The elephant populations in the Marakele National Park (established 1996) and in the developing national park in the Limpopo valley (occasional entry of elephants from Botswana) have not so far required reduction.

4.3 Control measures

4.3.1 International trade

The Endangered Species Protection Unit of the South African Police Service, the provincial nature conservation agencies and SANParks cooperate closely to control illegal dealing in ivory in South Africa. The National Biodiversity Act, currently in preparation, will enhance the efficiency of law enforcement.

4.3.2 Domestic measures

Control of elephant populations would be undertaken mainly in publicly owned protected areas. In these areas population control is conducted only to maintain habitat quality and biodiversity and not for the sake of generating income. Elephant off-take for management reasons will not reach unsustainable levels.

5. Information on Similar Species

6. Other Comments

7. Additional Remarks

8. References

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Owen-Smith, R.N. 1988. *Megaherbivores: The influence of very large body size on ecology*. Cambridge University Press, Cambridge.

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D. Summary

South African National Parks has accumulated a large stockpile of elephant products in the Kruger National Park since the transfer of the African elephant to Appendix I in 1989 (currently over 30 000kg of raw ivory, and over 150 000kg of hides). Most of this has been acquired during past population

control operations, and from elephants that have died of natural causes. The record keeping and database comply with CITES specifications.

Within South Africa utilization of elephant products is limited. Hides and ivory from the stockpile in the Kruger National Park are occasionally sold to local dealers.

The gradual reduction in South African government funding of SANParks has left the organization suffering from budgetary deficiencies which could be considerably redressed should the current legal stockpile of ivory be sold. Revenues from the sale would all be used in the interests of elephant conservation.

The South African elephant population was downlisted from Appendix I to Appendix II at CoP11, on condition that it would not trade ivory internationally until after CoP12.

Through this proposal, the South African Government and SANParks, having complied with this condition, now seeks CITES approval at CoP12 to proceed with the sale of its legal ivory stocks.

Table 1. Major protected areas in South Africa with populations of African elephants.

SANP = South African National Parks; EMOA = Elephant Managers and Owners Association

PROTECTED AREA	SURVEY YEAR	AREA (KM ²)	NUMBER OF ELEPHANTS	SOURCE
Kruger National Park	2001	18992	9276	SANP Unpublished.
Makuya National Park	2001	165	39	SANP Unpublished.
Letaba Ranch	1997	420	58	Barnes et al. In press.
Marakele National Park	2001	450	91	SANP Unpublished.
Atherstone Nature Reserve	2001	136	32	EMOA Unpublished
Manyeleti Game Reserve	1997	228	28	Barnes et al. In press.
Madikwe Nature Reserve	2001	700	318	EMOA Unpublished
Pilanesberg National Park	2001	553	142	EMOA Unpublished
Tembe Elephant Park	2001	300	140	EMOA Unpublished
Pongolapoort Nature Reserve	2001	119	33	EMOA Unpublished
Itala Nature Reserve	2001	297	61	EMOA Unpublished
Mkuzi Game Reserve	2001	380	28	EMOA Unpublished
Hluhluwe-Umfolozi Park	2001	965	310	EMOA Unpublished
Addo Elephant National Park	2001	513	340	SANP Unpublished.
Phalaborwa Mining Co.	2001	41	73	SANP Unpublished.
Klaserie Private Nature Reserve	2001	628	113	SANP Unpublished.
Umbabat Private Nature Reserve	2001	144	189	SANP Unpublished.
Timbavati Private Nature Reserve	2001	784	522	SANP Unpublished.
Sabie Sand Game Reserve	2001	572	601	SANP Unpublished.
Other Private Reserves	2001	-	604	EMOA Unpublished
Vembe-Dongola (developing national park)	2001	-	53	EMOA Unpublished
TOTAL			13 051	

Table 2. Numbers of live elephants translocated from the Kruger National Park from 1980 to 1999.

Year	South Africa	Botswana	Namibia	Swaziland	Zimbabwe	Over seas	Mozambique	Total
1980	14	0	0	0	0	34	0	48
1981	25	0	0	0	0	28	0	53
1982	0	0	0	0	0	0	0	0
1983	32	0	13	0	0	0	0	45
1984	10	0	72	0	0	0	0	82
1985	67	0	19	0	0	2	0	88
1986	9	0	0	0	0	0	0	9
1987	44	0	33	18	0	0	0	95
1988	44	0	0	0	3	0	0	47
1989	69	0	15	0	0	0	0	84
1990	71	7	7	0	0	0	0	85
1991	103	0	25	0	0	4	0	132
1992	122	3	5	0	0	0	0	130
1993	124	2	0	0	0	10	0	136
1994	204	0	0	19	0	2	0	225
1995	39	1	0	0	0	10	0	50
1996	164	0	0	0	0	0	0	164
1997	70	0	0	0	0	0	0	70
1998	63	0	0	0	0	0	0	63
1999	20	0	0	0	0	0	0	20
2000	39	0	0	0	0	0	0	39
2001	69	0	0	0	0	0	25	94
Total	1402	13	189	37	3	90	25	1784

Table 3. The growth of the elephant population in the Kruger National Park from 1903 to 2001. Note: population estimates made before 1967 are less reliable, and are believed to be underestimates of the actual populations at the time.

Year	Estimate	Type of count
1903	0	Estimate
1905	10	Estimate
1908	25	Estimate
1925	100	Estimate
1931	135	Estimate
1932	170	Estimate
1933	200	Estimate
1936	250	Estimate
1937	400	Estimate
1946	450	Estimate
1947	560	Estimate
1954	740	Estimate
1957	1 000	Estimate
1960	1 186	Aerial survey
1962	1 750	Fixed-wing survey
1964	2 374	Helicopter count
1967	6 586	Helicopter count
1968	7 701	Helicopter count
1969	8 312	Helicopter count
1970	8 821	Helicopter count
1971	7 916	Helicopter count
1972	7 611	Helicopter count
1973	7 965	Helicopter count
1974	7 702	Helicopter count
1975	7408	Helicopter count
1976	7 257	Helicopter count

Year	Estimate	Type of count
1977	7 715	Helicopter count
1978	7 478	Helicopter count
1979	No census	
1980	7 454	Helicopter count
1981	7 343	Helicopter count
1982	8 051	Helicopter count
1983	8 678	Helicopter count
1984	8 273	Helicopter count
1985	6 887	Helicopter count
1986	7 617	Helicopter count
1987	6 898	Helicopter count
1988	7 344	Helicopter count
1989	7 468	Helicopter count
1990	7 278	Helicopter count
1991	7 470	Helicopter count
1992	7 632	Helicopter count
1993	7 834	Helicopter count
1994	7 806	Helicopter count
1995	8 064	Helicopter count
1996	8 320	Helicopter count
1997	8 371	Helicopter count
1998	8 869	Helicopter count
1999	9 152	Helicopter count
2000	8 356	Helicopter count
2001	9 276	Helicopter count

Figure 1. Destinations of elephants translocated from the Kruger National Park.

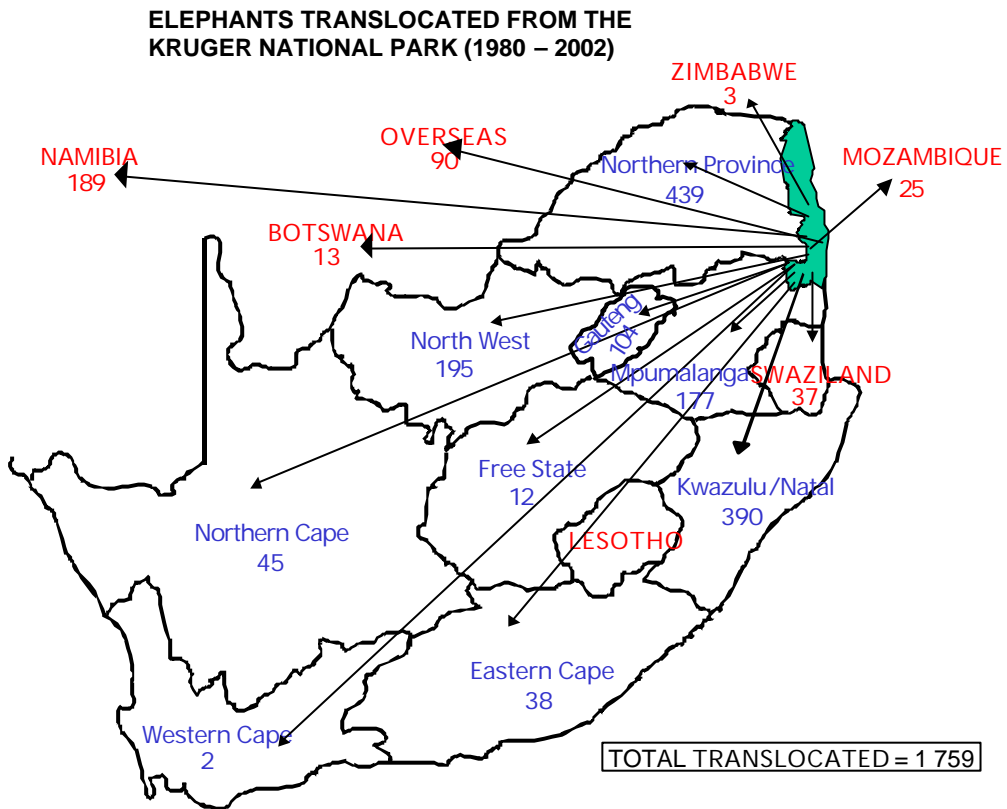


Figure 2: Records of elephant poaching in the Kruger National Park from 1980 to 2002.

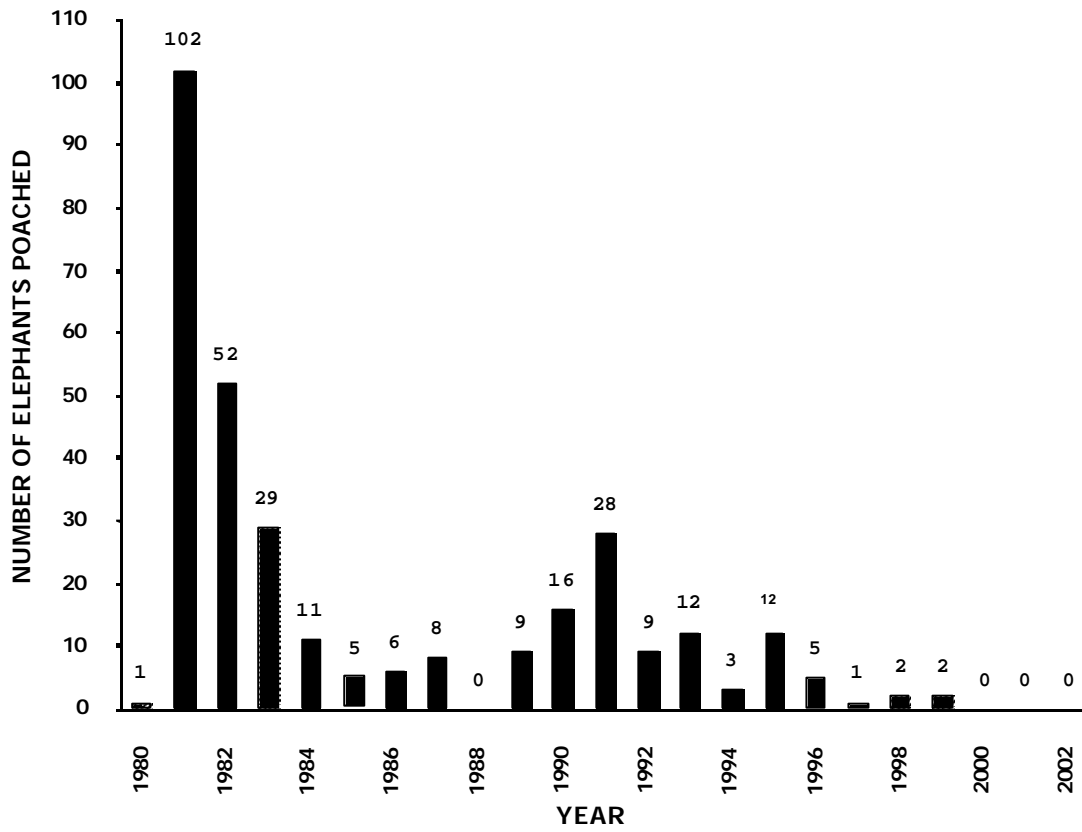


Figure 3. Numbers of elephants culled in the Kruger National Park from 1980 to 2002.

