gimes. The peaks occur at younger ages, however, suggesting selective hunting of a very young population. No tusks belong to an animal over the age of 35 and a large proportion of animals, particularly males, appear to have died before reaching sexual maturity, it seems highly unlikely that the mortality pattern indicated by these results would be sustainable for very long.

The method used to age this sample of tusks was developed from an examination of ivory collected in East Africa. The extent of variations in the relationship between tusk dimensions and age in different elephant populations have not been quantified. It is conceivable that elephants found in the CAR may be consistently younger or older for given tusk dimensions than their East African relatives, possibly older if they are forest elephants (Africana loxodonta cyclotis). Remarkably different parameters would be required, however, in order to suggest that anything other than very young elephants have been sampled in this case.

The WWF/IUCN aerial survey found a massive decline of elephants in this region and evidence of high recent mortality (Douglas-Hamil-

ton **et al.,** 1985), results which are consistent with the mortality pattern derived from the tusk sample. In the absence of census data, the analysis of tusks in the ivory trade is clearly a powerful tool available to those concerned with elephant conservation.

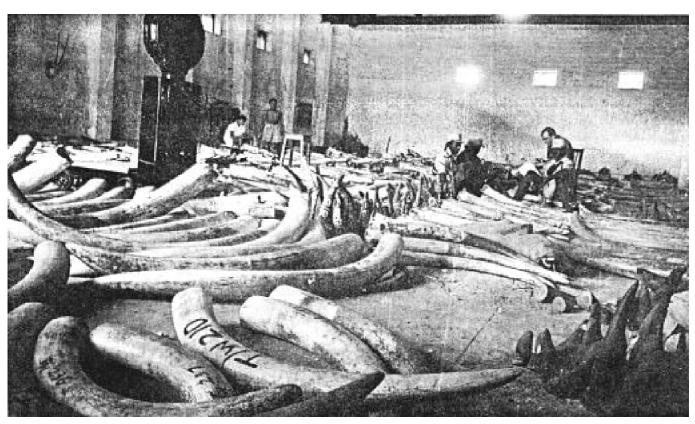
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The Ivory Room, Mombasa, in past days. P.R.O. Bally/WWF.

GARAMBA RHINO

The status of northern white rhino in Garamba National Park, Zaire, appears to have remained stable during 1985. A total of about 13 individuals were seen regularly, of which there were 4 adult males, 4-5 adult females, 3 sub-adults and 2 infants. Despite the two births during the year, the total number remained the same as in 1984, with a couple of adults that were previously thought to be present either disappearing or being confused with the others. There was no evidence of recent rhino poaching within the park.

AERSG ANNUAL MEETING, 1986

Plans for the 1986 annual meeting of the Group are that it will be held from 14-18 July, 1986, probably in the Luangwa Valley, Zambia. Members will be informed of final arrangements as soon as possible.

1986 IVORY EXPORT QUOTAS

According to the CITES procedures that have been agreed upon by Party-states, the CITES Secretariat in Switzerland is to be notified annually by each African country having an elephant population of the number of tusks that are likely to be exported, legally, from that country. This "quota" document is required to be submitted by 1 December of the year prior to that to which the quota applies. Those countries not submitting a quota figure will be presumed to have a zero quota (i.e. no intention of exporting tusks) until the Secretariat is informed otherwise. Party-states with elephant populations but not expecting to export tusks are supposed to submit a zero quota to the Secretariat by the same date in order to clarify their intentions.

These measures have not been designed to give the Secretariat a regulatory function, but rather to provide a means by which the trade in raw ivory can be closely monitored. A referral mechanism is meant to operate whereby an exporting country provides both the importing country and the CITES Secretariat with specific details of a shipment of ivory, and the importing country checks that any documentation is authentic, by consulting either the relevant authority in the exporting country or the Secretariat. Illegal shipments of raw ivory (i.e. shipments made without the authority of a producing or re-exporting country) can thus be detected and brought to the attention of both exporting and importing states.

By the end of January, 1986, the CITES Secretariat had received the following quotas from African countries (CITES, 1986).

	NO. OF TUSKS
Botswana	520
Cameroon	300
Central African Republic	0
Congo	1 200
Ghana	0
Mauritania	0
South Africa	12 100
Sudan	12 971
United Republic of Tanzania	16 400
Zambia	5 800
Zimbabwe	14 000
Total	63 291

In the case of several countries (e.g. Cameroon and South Africa), the figures include substantial quantities of tusks that are already held in government or commercial stores.

In 1984 the mean weight per tusk imported into Japan and Hong Kong was 6.7 kg (Caldwell and Barzdo, 1985); assuming the same mean weight would apply to the tusks that are to be exported during 1986, the total maximum quantity of ivory that will be entering the international trade legally from the countries that have thus far submitted quotas is 424 tonnes. Estimates for ivory exports from Africa in previous years were up to 644 tonnes in 1983 and 410-450 tonnes in 1984 (Caldwell and Barzdo, 1985).

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STOP PRESS

Since the above was written, the CITES Secretariat has received a further four ivory export quotas: Mocambique (120 tusks), Niger (nil), Zaire (10 000 tusks), and Somalia (17 002 tusks — total current stock, to be sold and exported by the end of April, 1986).

RHINO POACHING IN ZIMBABWE

Since the last report in Pachyderm (No.5) on rhino poaching in the Zambezi Valley, there have been continued incursions of Zambian poachers into the Zimbabwean side of the valley, and some successes in the struggle to contain their activities. During 1985, a total of 71 rhino, and 23 elephant, were known to have been killed by well-armed gangs crossing the Zambezi.

Two poachers were shot by Zimbabwean patrols during the year, and eight captured; three of the major poachers in one gang were convicted of killing six rhino and were each sentenced to 11 years in jail, plus being collectively required to pay Z\$ 30 000 in compensation for the rhino that they had killed.

During 1985, the Zimbabwean Ministry of Natural Resources and Tourism announced its intention of recruiting an additional 500 game scouts, of which the first 100 (who are ex-combatants) have now been trained and deployed. Conservation bodies within Zimbabwe launched a fund-raising campaign, and in December equipment worth Z\$2 7 000 was handed to the Department of National Parks and Wild Life Management to assist in the anti-poaching campaign. SAVE, of the United States, have arranged recent donations of radio equipment worth over US\$22 000; an aircraft previously presented to the Zimbabwean wildlife authorities by this organisation is also playing a vital role in the campaign.

Once the rainy season commenced in the Zambezi Valley, the poachers took advantage of the lack of safari hunters and tourists, and the denser vegetation cover, to cross into Zimbabwe frequently along a 450 km front extending from the Luangwa/Zambezi confluence in the east to wildlife areas bordering Lake Kariba in the west. In the first two months of 1986, they are known to have killed at least six rhino and an elephant. However, they have suffered heavy losses, with nine poachers being killed and four being arrested in a series of engagements during this period. The gangs are operating in numbers of 2-4, equipped with both .375 hunting rifles (of recent manufacture) and AK47 automatic assault rifles, the latter being carried for use against the Zimbabwean patrols. Since early 1985,12 hunting rifles have been captured from the poachers.

Since these poachers were all Zambian citizens, there have been diplomatic repercussions, with strong condemnation in the Zambian Parliament for what is regarded as excessive reaction by the Zimbabwean anti-poaching forces. However, President Kaunda of Zambia has stated that he cannot criticize the Zimbabwean Government, "since poaching. whether committed in Zambia or elsewhere, is wrong". The Zimbabwean media have given maximum publicity to the events, with a firm anti-poaching stance.

The Zimbabwean Minister of Natural Resources and Tourism, Mrs. Victoria Chitepo, has stated that the rhino poaching will be resisted to the fullest extent. In November, 1985, she introduced a new clause in the Parks and Wild Life Amendment Bill, specifying mandatory sentences of five years in jail or a fine of Z\$1 5 000 for first offenders convicted of killing rhino and other protected animals, and seven years or Z\$35 000 for second offenders.

The aim of **Pachyderm**, the AERSG Newsletter, is to offer members of the group, and those who share its concerns, brief research papers, news items and opinions on issues directly related to the conservation and management of elephant and rhino in Africa. All readers are invited to submit articles (up to 3 000 words), black and white photographs and graphics for publication; articles may be edited. Material published in **Pachyderm** does not necessarily reflect the views of AERSG, SSC, IUCN or any organisation supporting AERSG.

Editors: Raoul du Toit and David Cumming.