Another part-answer lies in a continuing scheme to translocate a number of black rhino from tile Zambezi Valley into less vulnerable areas such as the Hwange National Park, where they were shot out by hunters early in the present century and are now slowly rebuilding their former strength.

Whatever the solution may be, local opinion is adamant that concerted action should not be delayed until matters reach crisis proportions. Hopefully, government will be able to provide the necessary manpower and financial muscle. Otherwise, the creation of a nongovernmental agency along the lines of Zambia's Save the Rhino Trust may have to be considered. In either case, there is no time for lengthy debates: a renewed onslaught during the 1985-86 rains seems virtually certain.

Another vital matter concerns international co-operation. Although some Zimbabwean rhino horn was recovered by Zambia's SRT road-blocks on the Chirundu-Lusaka road'—which crosses the heart of the

Zambezi Valley – there has been no concerted effort to help Zimbabwean investigators in tracking down and arresting the Zambian links in the chain, in spite of some very high-level diplomatic and other approaches. Once again, without this co-operation Zimbabwe is forced to rely exclusively on heavy ground patrols and cannot capitalise on the information it gleans from the sacrificial pawns it arrests in the Zambezi Valley.

With prices for rhino horn soaring over the \$10 000 per kilogram mark in its ultimate markets, high risks can bring high rewards, Increasing sophistication and indeed aggression, both by poachers on the ground and by middle-men further up the chain, needs both dedication and resources to fight effectively. In spite of all the thousands of words devoted to rhino poaching —including this current addition — the key lies in money, manpower, and international pressure on end users. Otherwise the Zambezi Valley rhino may follow those of the rest of Africa into oblivion.

Recent Developments in the Japanese Ivory Trade and the Implementation of Cites in Japan

The importation of ivory into Japan has never effectively lent itself to control. Previously, the importing companies were either affiliated with the Tokyo Ivory Association, the Osaka Ivory Association, or were totally independent with no affiliation whatsoever. The two regionally based associations are composed not only of importers, but also carvers, craftsmen, retailers, and other related concerns not directly involved in ivory importation. Occasionally in the past, importing members of a particular association have agreed to act in unison regarding specific trade policy and this has provided a small degree of control in the trade. However, as associations the Tokyo and Osaka groups function independently of each other and consequently do not always agree to pursue uniform policies. At the other extreme, the ivory trade activities of the independent importers have remained totally unaccountable to any outside interests.

Because the trade is characterised by such diverse commercial interests, recent attempts to establish controls have been frustrated. Although Dr. Esmond Martin was successful last August in obtaining promises for specific trade reforms from the importers affiliated with the Tokyo Ivory Association, the agreement was quickly abandoned because the Osaka association would not agree to adhere to the same import guidelines and the independent companies, who are heavily involved in the trade irregularities, were not approached at all.

Likewise, last Fall when Chris Huxley of the CITES Secretariat met with members of the two ivory associations in a meeting arranged by the Ministry of International Trade and Industry (MITI), frank discussions were not forthcoming because the importers present were reluctant to discuss their activities in front of other association members who are not involved in ivory importation. From the Secretariat's view it appeared that the ivory dealers were behaving in an uncooperative manner.

As a result of the kinds of problems these encounters produced and the mounting international criticism of Japanese ivory import practices, it was tacitly recognised by both the industry and the government that the ivory importers needed to be organised into a single cohesive body for control purposes. As a result of an Administrative Guidance request issued by MITI, the Zoogei Bukai (Ivory Importers' Group) was officially established within the Japan General Merchandise Importers' Association in December 1984.

This new group brings together for the first time the 25 ivory importing companies, including independents, plus representation of the two ivory associations into one body. Collectively the Zoogei Bukai members account for 98% of the total Japanese ivory import trade.

MITI quickly availed itself of the Zoogei Bukai and issued Administrative Guidance to the ivory importers to establish an interim import policy before the new trade regulations'—which will prohibit the use of country of origin certificates—take effect in April. Included in the MITI directives were total prohibition on trade from Burundi and Singapore, and a more stringent policy regarding trade from Zaire, Sudan, Uganda and Chad, and all re-export trade.

Although the MITI guidelines are welcomed and hold promise for 1985, they are in fact too late to mitigate the widespread abuse that marked last year's trade. The total for 1984 reached 473 tonnes —second only in Japanese history to the 475 tonne record set in 1983—and included more than 185 tonnes attributed to the Congo, Sudan and Zaire, all countries with export bans, and 33 tonnes from Burundi, a major conduit for poached ivory in Africa. The 1984 Customs statistics reveal the emergence of other serious abuse in the Japanese trade including one possible new route. Large quantities of ivory attributed to Uganda were first imported into Japan in August. This trade was steadily maintained through December making the Uganda total just under 100 tonnes and only two tonnes behind the single largest exporting country, the Central African Republic. In previous years a "Uganda Connection" has not been evident in the Japanese Customs data.

The government's Administrative Guidance did, however, begin to have effect in January of this year. An 18 tonne shipment from Singapore with Burundian documents noting Uganda as the country of origin was confirmed by the Japanese Foreign Ministry not to have been sanctioned by the proper Ugandan authorities. As a result, it was refused entry into Japan, becoming the first case of its kind. Since then other smaller shipments transited through Dubai have been stopped at Customs where they presently remain pending the outcome of government investigations.

It should be pointed out that Administrative Guidance has no real legal authority of its own and depends largely upon the co-operation of the importers themselves for its effective use. If, for example, the government refuses importation solely on the basis of Administrative Guidance and the case goes to court, the importer will win the case hands down. In that respect, it is noteworthy that the ivory importers have fully co-operated with the government in cases to date.

Despite the myriad of problems that have marked the past, the future clearly offers promise. The establishment of the Zoogei Bukai seems to provide a forum for effective control. Both the Zoogei Bukai and the Japanese government have maintained close contact with TRAFFIC (Japan) since the first of the year, particularly regarding

the cases stopped by Customs. As an indication of their future intentions, the Zoogei Bukai meeting on February B, 1985, passed four resolutions as follows:

- 1) "We will try to decrease the amount of imports and refrain from re—exporting ivory, in order to secure the regular import of ivory.
- 2) We will co-operate with the African countries in the export quota system which is now under consideration.
- We will support the establishment of the Ivory Unit at the CITES secretariat.
- 4) We will co-operate with and exchange information with the CITES Secretariat, TRAFFIC (Japan) and World Wildlife Fund Japan."

TRAFFIC is hopeful that the resolutions above will take positive

form and, in doing so, the conservation of African elephants will be greatly advanced.

The address of the Zoogei Bukai is:

Zoogei Bukai Japan General Merchandise Importers' Association 2-4-1 Hamamatsucho Sekai Boeki Center Building Minato-ku Tokyo 105, Japan.

Tom Milliken, Director, TRAFFIC (Japan). February 22, 1985.

Book Review

The Japanese Ivory Industry, by Esmond Bradley Martin (World Wildlife Fund, Japan, 1985)

Most published work on ivory has tended to be either statisticsladen analyses of the effect of the trade on elephants, or adjectiveladen descriptions of the work of the great masters. There is a significant gap in our knowledge of what happens to elephant tusks between the packing crate and the collector's shelf.

Esmond Bradley Martin, who has previously done landmark research into the rhino horn trade, is helping to fill that gap. He has already published several articles on the ivory industries of African nations, in **Pachyderm** and **Traffic Bulletin**. The subject of this review is a beautifully-produced booklet describing the Japanese ivory industry.

The book opens with several pages of photographs and drawings of stages in carving, from stacked tusks to a range of finished products including seals, musical instruments, and figurines. The photographs of the figurines are especially attractive, but unfortunately show up the merely average drawings.

The text begins with a description of the history of the ivory industry in Japan. The industry extends back several centuries, but only began to consume really large quantities of ivory in the 1970's. Since then, Japan has become the world's largest ivory importer, and is unique in that almost all the ivory that is imported is consumed internally.

Most of the ivory is made into personal seals, which are used in lieu of signatures. Dr. Martin describes their place and importance in Japanese society, and their techniques of manufacture. He goes on to describe the other products made from ivory, such as jewellery, musical instruments, and artistic carvings. The carvings, done by master

craftsmen, receive a deservedly long description in the text, having already provided the high points of the photographs.

Dr. Martin goes on to describe the activities of the ivory dealers and the ivory trade associations. It is interesting that as early as 1980 they were expressing concern over the sustainability of the annual ivory offtake. This concern has recently been expressed in the associations' support for genuine enforcement of CITES regulations by the Japanese government.

The booklet ends with a number of tables containing a great deal of interesting and useful information. These may be the most important part of the book for those actually studying the trade.

All in all, the booklet is useful far beyond its small size, because it fills a large gap in our knowledge. It is unfortunate, in this regard, that it was four years in publication, so the latest information is for 1980. This in no way diminishes the import of the facts it does contain, however, and the book makes a key contribution to our understanding of the forces affecting the ivory trade.

Its strength serves to point out a glaring weakness; the limited information available on the Hong Kong carving industry. Ian Parker, who deserves credit as the first, and still most important, filler of the crate-to-shelf information gap, did valuable research into the Hong Kong industry in the mid-1970's. However, his findings, which are now a bit dated, are available only in his mammoth Ivory Report, which is not published. Perhaps he should be supported to carry out and publish an in-depth follow-up study, to describe in more detail the other major ivory consumer.

Tom Pilgram WICI, Nairobi

New Procedures for controlling the Ivory Trade

ROWAN MARTIN

In September 1983, at the meeting of the African Forestry Commission of the FAO, the Working Party on Wildlife Management and National Parks recommended that African ivory producing countries set quotas of ivory for export, and this recommendation was reaffirmed at the Seminar on CITES implementation held in Brussels in June1984. Following the Brussels meeting the CITES Secretariat initiated a consuitancy to pursue the proposals with African states, and this consultancy was carried out by Rowan Martin from the Zimbabwe Department of National Parks and Wildlife Management between November 1984 and March 1985. At the same time, John Caldwell and Jonathan Barzdo of the WTMU in Cambridge prepared a report on the world trade in raw ivory in 1983 and 1984.

Sixteen ivory producing countries were visited and the report was divided into 3 sections dealing with elephant population estimates, a

method for setting quotas, and the administrative procedures which would be required to make the quota system work.

The population of African elephant was estimated at slightly over one million animals, and a simple model of elephant numbers and the volume of ivory entering the trade confirms that the population is unlikely to lie outside limits of 0.8-1.3 million animals. Models of ivory harvesting suggest that an annual ivory harvest of about 700 tonnes is more than populations can sustain and quotas should be set to reduce this substantially. It would be possible to produce over 750 tonnes of ivory from a million elephants with good management, but not with the present strategy of selectively killing older animals.

The method suggested for setting quotas is based on the utilisation policy of the country concerned, and relies on estimates of animals which die naturally, animals killed as a result of management