

## Recent Developments in the Rhino Horn Trade

by Esmond Martin and Lucy Vigne

No large mammal has been destroyed in recent times at such an appallingly high rate as the rhinoceroses. Over the past seventeen years the world's rhinoceros population has declined by about 85%. In 1970 there were an estimated 65 000 Black Rhinos *Diceros bicornis* in Africa (Martin and Martin, 1985) and today there are less than 4000 (Cumming, 1986). The White Rhino *Ceratotherium simum* population has been gradually increasing since 1975 and now there are about 4000 in Africa (Western and Vigne, 1985).

The numbers of the three rhino species in Asia are much lower. The Indian Rhino *Rhinoceros unicornis* now numbers about 1700 (Martin, *et al.*, in press). The rhinos in the state of Assam, where over 95% of the population of this species lives, have recently become threatened by poaching. There are approximately 660 Sumatran Rhinos *Dicerorhinus sumatrensis* (Martin and Martin, 1985) and recently there has been poaching in Malaysia and Indonesia. The Javan Rhino *Rhinoceros sondaicus* population numbers about 50 (Sajudin, 1986) despite essentially no poaching since 1967 due to an improved guarding system (Amman, 1986). However, one animal was poached at the end of December 1984 (Sajudin, 1986).

The reasons for this slaughter of the world's rhinos lie in the sudden growth in the rhino horn trade in the 1970s. The horn is highly prized in traditional Oriental medicine as a fever-reducing drug and is equally in demand in North Yemen for making dagger handles.

All five species of rhino are listed in CITES Appendix I.

Information below on products, quantities and prices on rhino horn for sale are from the authors' own surveys, except where otherwise specified.

### BRUNEI

The Sultanate of Brunei on the island of Borneo is an oil-rich, newly independent country which, according to traders and shop-owners, has been importing Sumatran Rhino products from Singapore, specifically horn, hide and hooves. The demand comes solely from the Chinese population of 55 000 but very small quantities are bought. Brunei is not a Party to CITES but it is illegal there to export Sumatran Rhino products, under the Wildlife Protection Enactment, 1978 (Notification No. E 10). This act does not refer to products from other rhino species though and it appears that Brunei could therefore become an entrepot for African rhino horn. However, following a letter from Prince Philip, as President of WWF, to the Sultan of Brunei, emphasising the importance of conserving the rhinoceros, on 2 February 1987, the Permanent Secretary in the Prime Minister's office informed WWF that, "the prohibition of importation and exportation of goods (rhino horn), in such interest, whereby Brunei Darussalam had adhered to has been provided for in our Customs Act". Details of this Customs Act have not yet been obtained.

### CHINA

During a survey carried out by Esmond Martin in late 1985, of ten major cities visited in China, only two, Guangzhou and Xian, had rhino horn available in the medicine shops. In Guangzhou two of the 12 shops visited offered it for sale, at an average price of US\$18 722 a kg; in Xian, four of the eight shops visited sold rhino horn at an average price of US\$2413 a kg. The main reason for the cheaper horn in Xian is that, for a variety of reasons,

rhino horn from Hong Kong and the higher world market prices were being paid.

It is not surprising that Guangzhou has been importing stocks of rhino horn over the past few years for sale in its medicine shops. The Cantonese have the greatest fascination for animal products of all the Chinese people. There is a saying in China that the Cantonese will eat anything on four legs except the kitchen table. The traditional medicine shops in Guangzhou sell a wide range of animal products including Water Buffalo *Bubalus bubalis* horn (as a substitute for rhino horn) and rhino hide for US\$146 a kg.

Rhino horn, mostly of African origin, used to be available in most Chinese cities, but today it is mainly used to manufacture patent medicines which are rarely found on the domestic market. Large factories in Beijing, Chengtu, Shanghai, Tientsin and Tsingtao make items such as "Rhinoceros and Antelope Horn Febrifugal Tablets", "Laryngitis Pills", and "Dendrobium Moniliforme Night Sight Pills". Considerable amounts of these are exported all over eastern Asia and earn the factories hard currency.

According to traders abroad, rhino horn which came to China in 1985 was brought from Hong Kong, Macau, Singapore and Thailand. One exporter in Bangkok personally carried 11 kg of African rhino horn by air to Beijing and sold it to one of the main pharmaceutical factories which was government-owned!

China is a Party to CITES which bans all commercial international trade in rhino products. But the Convention only applies to 'readily recognizable products' and the small quantities of rhino horn contained in medicines cannot be easily identified amongst the other ingredients. In the past, this has allowed Parties not to control trade in medicinal rhino products. Since 1985, however, CITES has adopted a definition of 'readily recognizable' such that, if rhino horn is mentioned on the label of a product, it is therefore identifiable and is subject to CITES controls. During Martin's 1985 survey, senior staff at a couple of medicine factories stated that, if they were to stop using rhino horn and remove it from the list of ingredients on the labels of their medicines, sales would fall. However, some other people, such as the Deputy Manager of the China National Medicines and Health Products Import and Export Corporation, Mr Yu Yun, understood that selling medicines containing rhino horn abroad encourages further use of rhino products which in turn puts increasing pressure on the remaining live rhinos. He agreed to find suitable substitutes and promised he would soon remove rhino horn from his medicines. The Director of the Shanghai Medicine Company said that they had been using some Water Buffalo horn to replace rhino horn since 1984, when the Chinese Government banned the use of rhino horn in any newly devised medicines. Although rhino horn is permitted to be used in drugs developed prior to 1984, the director of this company, which employs 14 000 people, plans to phase out rhino horn from all medicines.

### HONG KONG

From the end of World War II until 1979, Hong Kong had been the main importer of rhino horn (Parker and Martin, 1979). In 1979, the Government amended its legislation to close a loophole which had allowed importation of rhino horn and, at the request of the ivory traders, all further imports were banned. In addition, Hong Kong law required owners to hold a possession licence, thus, effectively, providing a stock-registering mechanism, and 2167 kg were inventoried (Chan, *in litt.*, 20.11.85). During the following six years, much of this large amount of rhino horn was legally exported. In late 1985, the Department of Agriculture and Fisheries announced that exports would be banned after March 1986. By then, only 75 kg of legal horn remained in Hong Kong (Wong, *in litt.*, 3.9.85). As Hong Kong law allows

TABLE 1  
Average Retail Prices of Rhinoceros Horn in some major cities of Eastern Asia  
from 1979 to 1986

| <u>Year &amp; Place</u>            | <u>Total Number of Clinics/<br/>Pharmacies visited</u> | <u>No. and %<br/>Selling Horn</u> |      | <u>Type of Horn</u>                       | <u>Average price per<br/>kg in US\$</u> |
|------------------------------------|--|-----------------------------------|------|---|---|
|                                    |  |                                   |      |   |   |
| <u>SEOUL</u>                       |  |                                   |      |   |   |
| 1980                               | 30   | 19                                | 63%  | African                                   | 1436                                    |
| 1982                               | 76   | 47                                | 62%  | African                                   | 1797                                    |
| 1986                               | 108  | 55                                | 51%  | African                                   | 1771                                    |
| <u>HONG KONG</u>                   |  |                                   |      |   |   |
| 1979                               | 15   | 11                                | 73%  | mostly African                            | 11103                                   |
| 1982                               | 50   | 23                                | 46%  | mostly African                            | 15700                                   |
| 1985                               | 80   | 33                                | 41%  | mostly African                            | 14282                                   |
| <u>MACAU</u>                       |  |                                   |      |   |   |
| 1979                               | 9  | 7                                 | 78%  | mostly African                            | 4127                                    |
| 1982                               | 14   | 9                                 | 64%  | mostly African                            | 7797                                    |
| 1986                               | 20   | 16                                | 80%  | mostly African                            | 8644                                    |
| <u>TAIPEI</u>                      |  |                                   |      |   |   |
| 1979                               | 9  | 9                                 | 100% | a) African<br>b) Asian                    | 1596<br>17090                           |
| 1985                               | 34   | 26                                | 76%  | a) African<br>b) Asian                    | 1532<br>23929                           |
| <u>KAOHSIUNG, TAIWAN</u>           |  |                                   |      |   |   |
| 1985                               | 20   | 18                                | 90%  | a) African<br>b) Asian                    | 2077<br>21365                           |
| <u>TAINAN, TAIWAN</u>              |  |                                   |      |   |   |
| 1985                               | 4  | 4                                 | 100% | a) African<br>b) Asian                    | 1772<br>29910                           |
| <u>SINGAPORE</u>                   |  |                                   |      |   |   |
| 1979                               | 15   | 8                                 | 53%  | mostly African                            | 11615                                   |
| 1983                               | 46   | 16                                | 35%  | mostly African                            | 11804                                   |
| 1986                               | 33   | 13                                | 39%  | African & Asian                           | 14464                                   |
| <u>BANGKOK</u>                     |  |                                   |      |   |   |
| 1979                               | 23   | 12                                | 52%  | mostly African                            | 3654                                    |
| 1986                               | 44   | 15                                | 34%  | mostly Asian                              | 11629                                   |
| <u>TOKYO</u>                       |  |                                   |      |   |   |
| 1980                               | 18   | 8                                 | 44%  | African                                   | 1620                                    |
| 1986                               | 29   | 5                                 | 17%  | African                                   | 3417                                    |
| <u>OSAKA</u>                       |  |                                   |      |   |   |
| 1980                               | 10   | 9                                 | 90%  | African                                   | 2230                                    |
| 1982                               | 5  | 3                                 | 60%  | African                                   | 2516                                    |
| 1986                               | 41   | 31                                | 76%  | African                                   | 3771                                    |
| <u>BANDAR SERI BEGAWAN, BRUNEI</u> |  |                                   |      |   |   |
| 1982                               | 5  | 2                                 | 40%  | mostly African                            | 6895                                    |
| 1986                               | 7  | 1                                 | 14%  | ?   | 3797                                    |
| <u>DJAKARTA</u>                    |  |                                   |      |   |   |
| 1980                               | 26   | 7                                 | 27%  | mostly Sumatran                           | 12634                                   |
| 1986                               | 34   | 2                                 | 6%   | Sumatran & Javan<br>(latter is old stock) | 9448                                    |
| <u>KOTA KINABALU, SABAH</u>        |  |                                   |      |   |   |
| 1986                               | 18   | 2                                 | 11%  | Sumatran                                  | 14697                                   |
| <u>KUALA LUMPUR</u>                |  |                                   |      |   |   |
| 1981                               | 26   | 15                                | 58%  | mostly African                            | 19801                                   |
| 1983                               | 29   | 6                                 | 21%  | Asian & African                           | 17280                                   |
| 1986                               | 41   | 4                                 | 10%  | Asian & African                           | 11636                                   |

demand for rhino horn in the country. A survey in November 1985 of 80 Hong Kong medicine shops showed that 41% offered rhino horn for sale at an average retail price of US\$14 282 a kg (Table 1).

## JAPAN

In 1980, with accession to CITES, the Japanese Government prohibited the international trade in rhino products and strongly encouraged the use of Saiga Antelope *Saiga tartarica* horn as a substitute for rhino horn. At the time of this ban, a survey showed that eight of the larger pharmacies visited in Tokyo were offering rhino horn for sale, but in a 1986 survey only five were found. In Osaka, which is in an area of Japan with stronger traditions, the percentage of pharmacies offering rhino horn fell from 90% to 76% (see Table 1). Importers of animal products and herbs state that people are accepting Saiga Antelope horn in place of rhino horn, and therefore there is little smuggling.

## MACAU

In 1984, this tiny Portuguese enclave of less than seven square miles, and with a population of 365 000 people, became one of the world's largest importers of rhino horn. This was because, by then, most Asian countries had banned the international trade, and there was still a great demand for rhino horn. Sophisticated traders discovered Macau to be a perfect entrepot: rhino horn could be imported and exported legally; it was near Guangzhou in China and only 45 minutes from Hong Kong by jet-foil. Even though Portugal (which administers Macau) and China (which possesses sovereignty over Macau) are CITES Parties, the regulations of CITES were not applicable to Macau. Rhino products had been imported there for many years, to supply the Chinese pharmacies, but Macau's role as an entrepot was a very new development.

In June and July 1984, 160 kg of rhino horn were brought from Portugal to Macau and another shipment of so-called "old stock of Mozambique horn" left Portugal for Macau in November (CITES Secretariat, pers. comm.). In November 1985, a shipment from Lisbon of 100 kg was declared at Macau Customs as "old black rhino horn from Mozambique". A trader in Macau claimed that he paid US\$500 a kg for this latter shipment and had purchased several other consignments of rhino horn in 1984 and 1985. The same trader confirmed what officers in Hong Kong's Department of Agriculture and Fisheries and the CITES Secretariat had suspected; most of the new rhino horn reaching Macau was being re-exported to Hong Kong and mainland China.

In 1985, all that was required to bring rhino horn into Macau was an import licence which was extremely easy to obtain. However, certain government officials became embarrassed about Macau's international reputation as an entrepot for elephant ivory smuggled mostly out of Africa and were concerned that Macau may be connected to the endangered species trade. To prevent any more criticism, the Government decided to refuse all further requests for rhino horn import licences from 19 December 1985, according to the Director of Economic Services of Macau, Dr Antonio Duarte de Almeida Pinho. Traders did not know this at the end of January 1986 as this new regulation had not been publicized. However, on 22 February 1986 Macau officially published the text of the CITES Convention and a permanent liaison with the CITES Secretariat has been established.

## SINGAPORE

Up until October 1986, Singapore was the greatest remaining problem concerning the trade in rhino products in eastern Asia, since the country still legally allowed

rhino horn. Of the 40 to 70 Sumatran Rhinos in Sabah, Malaysia, at least twelve have been killed since 1982, according to Patrick Andau, Assistant Chief Game Warden in Sabah. Traders in Kota Kinabalu, Sabah, say that the horns, skin and hooves were sent to a syndicate in Tawau, near the Indonesian border of Kalimantan, who smuggled the horns in sea cucumbers for shipment by air to Singapore. From Indonesia, also, sailors were bringing horn to Singapore. Indonesian traders can earn more money and gain hard currency by selling their horns to Singapore merchants; this is evidenced by the fact that the number of medicine shops in Djakarta selling rhino horn has declined (see Table 1).

Singapore was also the largest market for Indian Rhino horn. A breakdown in law and order in Assam brought about an upsurge in poaching between 1982 and 1985, and 233 rhinos were killed (Martin *et al.*, in press). Almost all of the horn taken from them was sent to Calcutta and exported to Singapore for consumption locally or for re-export to other countries (CITES Management Authority, India, pers. comm.). Thus, Singapore's legal market was encouraging serious rhino poaching in India, Sabah and parts of Indonesia.

In a survey of 30 medicine shops by two Singaporean graduate students in mid-1985, only one shop (3%) was found to have rhino horn on sale (Anon., 1985a). However, when Martin surveyed the medical halls in Singapore in 1986, of 33 visited, 39% sold rhino horn (mostly Sumatran), 24% had rhino nails for sale, at US\$554 a kg, and 15% were selling rhino hide, for US\$496 a kg. These medical halls had relatively large quantities of Asian rhino horn and nails. Thus, Singapore appeared to be both an entrepot and one of the largest consumers of Asian rhino products.

Pressure was placed on the Singapore Government, notably by the CITES Secretariat, to prohibit the rhino horn trade. On 25 September 1986, a congressional hearing took place in Washington, DC, USA, at which Singapore's continued role in the rhino horn trade was heavily criticized. Also on this date, the US Government banned all imports of wildlife products from Singapore because it undermined CITES. Furthermore, there was extensive criticism in the international press about Singapore's trade in endangered species.

On 24 October 1986, the Singapore Government prohibited all imports and exports of rhino products with immediate effect. Following this, on 30 November 1986, Singapore acceded to CITES.

## REPUBLIC OF KOREA

South Korea has been a large importer of rhino horn. International pressure from conservation organizations was put on the country in 1982 and 1983 to stop the trade. In November 1983, the Korean Ministry of Health and Social Affairs issued an order demanding the elimination of rhino horn from all medicines. The Ministry of Trade and Industry followed this up with a directive prohibiting all imports and exports of rhino products, which came into effect in 1984. Final legislation on this was passed in 1985 (Martin, 1986). The smuggling of rhino horn into South Korea now appears to be under control and Water Buffalo horn is replacing rhino horn in Oriental medicine clinics.

## TAIWAN

Taiwan, like South Korea, was a major importer of rhino horn. From 1980 to 1984 an annual average of 83 kg was legally imported (Anon., 1980-1984). In addition, much horn was smuggled into the country to avoid import taxes.

In 1985, Taiwan was still one of the main importers of rhino horn and hide and much external pressure was put on the Government to stop the trade. A Minister of



from Prince Philip, to Minister Chang in mid-1985, to encourage the Government to prohibit the rhino horn trade, resulted in the Taiwanese Government closing down legal imports and exports of such products in August (Anon., 1985b).

A survey taken in December 1985 indicated that 76% of Taipei's medicine shops and 90% of those in Kaohsiung, the largest port in Taiwan, were selling rhino horn. Some rhino horn was still being smuggled into the country. According to traders and government officials in Taipei, the main smuggling routes recently were from Hong Kong to Kaohsiung. Also, fishing boat crews would enter the international waters off the coast of China and meet mainland Chinese to exchange electronic gadgets such as watches and radios for fish, alcohol and a variety of raw medicinal products including rhino horn. The Taiwanese Government was aware of these activities in 1986 and has been trying to stop them.

#### THAILAND

In 1986 Thailand was still a major entrepot for Asian rhino products although this trade had been illegal since at least 1972. In Martin's survey of the Chinese pharmacies in Bangkok, in February 1986, 34% of the 44 visited were selling rhino horn (average retail price, US\$11 629 a kg); 18% sold rhino hide (average US\$395 a kg) and 11% sold nails (average US\$1487 a kg). A variety of rhino products not normally seen elsewhere in Asia were available in Bangkok. These products had been obtained from whole Sumatran Rhino carcasses. They included rhino bones which cost US\$115 a kg and which are made into a poultice to treat aching muscles. Rhino meat was on sale for US\$19 a kg, and dried blood, which is consumed as a general tonic, cost US\$230 a kg. Dried, undigested leaves from the small intestine of a Sumatran Rhino, consumed to relieve gastric pains, cost US\$115 a kg. Probably the rarest Sumatran Rhino product for sale in Bangkok was the penis, identifiable by the distinctive 'cross-bar' called the *palang*. They were said mostly to be bought by overseas Chinese for around US\$600. Although they were said to have been very difficult to obtain for many years, one Chinese pharmacy was offering six rhino penes for sale in 1986. The penis is boiled in water with ginseng or other ingredients and the liquid is drunk as an aphrodisiac.

It is surprising that, compared with a 1979 survey of the Chinese pharmacies in Bangkok which showed that most rhino products then available (mostly horn) were from African species, in 1986 the majority of products were from the Sumatran Rhino. At least four traders and pharmacy managers had bought rhino products from rhinos killed within the previous six years in Burma, Laos or Thailand. One businessman had been buying one or two whole Sumatran Rhino carcasses each year for US\$3800 to US\$7600 each. These carcasses would arrive fresh in Bangkok and would then be dried and their products sold. It has been thought by some conservationists that the Sumatran Rhino was extinct in Burma, Laos and Thailand, but the above information contradicts this view.

#### YEMEN ARAB REPUBLIC

From the early 1970s until 1984, North Yemen imported almost half the rhino horn put onto the world market. A ban on rhino horn imports in 1982 had little effect in stopping rhino horn being smuggled into the country up until recently. However, since 1984, there has been an economic slump in North Yemen and, in order to raise revenue, the Government has put considerable efforts into stopping the smuggling of goods into the country, including rhino horn, by tightening Customs control and increasing the number of border officials. Adverse publicity in the world's press has also encouraged the Government to prevent rhino horn being imported.

1700 kg a year from 1980 to 1984, to less than 1000 kg in 1985 and under 500 kg in 1986. The traders say they have been paying about US\$900 a kg for African rhino horn, imported recently via the Sudan.

In December 1986, the authors met the Minister of Foreign Affairs and the Minister of Economy, Supply and Trade, in Sanaa, the capital of North Yemen, to discuss ways of enforcing the ban on rhino horn imports further. A six-point action plan was drawn up:

1. The Prime Minister would talk to the principle trader of rhino horn who has been handling about two-thirds of all imports, to warn him to stop dealing in new supplies.
2. The Foreign Minister would discuss with a senior official of the United Arab Emirates the need to close down the entrepots for rhino horn in this country.
3. The Yemeni Government would ban all re-exports of rhino horn (Chinese, Koreans and Yemenis buy the left-over rhino horn shavings from dagger handles for export to eastern Asia).
4. Owners of dagger-making workshops would be required to sign affidavits when re-applying for their licences, agreeing not to use any more rhino horn. If, later, rhino horn were found on their premises, their shops would be closed.
5. The Customs Department would encourage the use of Water Buffalo horn as a substitute for rhino horn by eliminating all its import duties.
6. The Government would ask the Grand Mufti, the Moslem religious leader, to issue an edict stating that it is against the will of God to cause the extinction of an animal species.

At the time of writing (May 1987) the first three points have been acted upon, the most important one being the banning of all rhino horn re-exports under Ministerial decree No. 29 of the Ministry of Economy, Supply and Trade on 20 January 1987. The Cabinet >



Dagger handle being carved from rhino horn in North Yemen

has agreed to the remaining measures, which the Foreign Minister has promised will be effected in 1987. The affidavit system will probably be the most effective way of stopping the use of rhino horn. Craftsmen are already turning to Water Buffalo horn as a substitute since it is more readily available than rhino horn. Thus, it is an opportune time for the Government to enforce the 1982 ban effectively.

## OVERVIEW

From the few official statistics there are on trade, and from information supplied by traders in eastern Asia and North Yemen, it appears that from 1980 to 1984 an annual average of three-and-a-half tonnes of new African rhino horn entered the world market. The horn originated from Black Rhinos mostly killed in the Central African Republic, Sudan, Tanzania and Zambia (see Martin & Vigne, 1986). On the basis of information received from many sources, it would appear that half of this was exported to North Yemen via Burundi, Djibouti, Sudan and the United Arab Emirates. The other half was exported to eastern Asia, mostly from Burundi, the Central African Republic, Namibia, Portugal, Tanzania, the United Arab Emirates and Zambia.

From 1980 to 1985 an estimated 40 kg of Indian Rhino horn and about 10 kg of Sumatran Rhino horn (representing 5% of the known population of this species) were put onto the international market on average each year. Despite the very small quantities of Asian horn compared to African horn, its total annual wholesale value has been about US\$450 000, while the African Rhino horn has been worth perhaps US\$2 000 000. The main entrepôts and consumers for Asian horn were Singapore and Thailand.

From 1972 to 1979 an annual average of eight tonnes of rhino horn was put onto the world market (Martin, 1980), compared with less than half this amount in the following five years. Yet the wholesale price of rhino horn remained relatively unchanged from 1979 to 1984 at US\$650 a kg for African horn and US\$9000 a kg for Asian horn. There was no monopoly position which could have caused the price to remain stagnant, since supplies of horn come from a variety of places. Rhino horn was still readily available in many eastern Asian countries in the early 1980s, and the trade was still legal in many places. Therefore it seems that there has been a significant decrease in demand for rhino horn or the prices would have risen dramatically in response to the much smaller supply.

To substantiate this, if the supply from Africa had dried up without a parallel contraction in Asian demand, the price would have risen since we know that the quantity demanded there is relatively insensitive to price. Furthermore, if the demand had contracted without a drying up of the supply from Africa, there would have been evidence of accumulations of unsold stocks and/or a decline in price since we know that supplies are sensitive to price movements (as was demonstrated by the upsurge of poaching in the 1970s).

In eastern Asia the demand for rhino horn is for an essential pharmaceutical product by those who culturally believe in it. An important factor is that rhino horn is considered there a medicine and, when it is needed, patients will pay what they must to obtain it. However, in recent years, the progressive westernization of youth, together with aggressive campaigns in favour of the introduction of substitutes, have caused the demand to contract. Pharmacists no longer offer rhino horn so readily; they, as well as importers, wholesalers and doctors, have been strongly urged to deal in Saiga Antelope horn and Water Buffalo horn instead. Both are acceptable substitutes in traditional medicine and are much cheaper. Customers are willing to rely on these

In North Yemen there has been a marked decrease in demand for rhino horn as well. The Yemeni demand for a prestige item like a dagger with a rhino horn handle, and the affluent period of the 1970s which raised average incomes in North Yemen by a factor of six, are the two reasons for the huge price increase of over 1000 per cent in that period and the very great increase in consumption. In the 1980s, however, Yemeni incomes began to decline and by the time of the devaluation of the Yemeni rial, in 1984, two of the traders in rhino horn had already gone out of business, indicating that the demand had declined.

Hence, in Yemen the demand and price appear to be mutually sensitive. Most people who could afford daggers with rhino horn handles now have them and, with increasing westernization, younger people's demand for these daggers has been reduced. In the southern part of the country, very few people regularly wear daggers, because of a recent change in fashion. These factors, combined with the 1982 import ban on rhino horn which has recently started to become effective, have led to the increased use of Water Buffalo horn for the making of dagger handles.

Efforts, therefore, to discourage the demand for rhino horn must continue. Any slacking could well allow a reversal of the situation, as has occurred in Thailand recently with the Sumatran Rhino, and could mean the end for African and Asian rhinos which are not in zoos or in well guarded, fenced enclosures.

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