

Combating the illegal trade in rhinoceros products

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Unless the trade in rhino horn is stopped, the survival of the world's rhinos is in jeopardy. Thanks to the efforts of conservationists, many countries have now banned exports and imports of rhino products, and most of the trade that occurs is illegal. There is still much to be done, however, as the authors explain.

Sometime in 1987 there will be more white rhinos than black in Africa. No one would have believed this possible in 1970, when there were an estimated 65,000 black rhinos and only 3500 white. However, since then there has been a massive slaughter of black rhinos in practically every country of Africa they inhabit. Despite large sums of money spent by wildlife departments and generous donations by international conservation organizations to protect these animals *in situ*, there has been no abatement in the decline. In fact, the most recent statistics estimate that the black rhino fell from 14,785 in 1980 to just 4500 in 1986 (Western and Vigne, 1985; Cumming, 1986).

While it is common knowledge that the black rhino is being killed illegally in many parts of Africa in order to sell its horn abroad, very little is known about how the horn reaches international markets. This paper examines the information that is available, and also describes recent efforts to close down the trade in eastern Asia.

In Zambia there were at least 4000 and perhaps as many as 12,000 black rhinos in the Luangwa Valley in 1974 (Leader-Williams, 1985), but by 1986 only a few hundred remained (D. Lewis, pers. comm.). Rhino horn from Luangwa is often taken north to the area around Mpulungu, a Zambian port on Lake Tanganyika. There, according to a senior Zambian police officer, traders arrange for horn and ivory to be secretly transferred via small fishing boats to steamers

destined for Bujumbura in Burundi.

The CITES Secretariat knows that considerable quantities of rhino horn have been exported from Burundi to Paris and especially to the United Arab Emirates over the past few years. Burundi also serves as the entrepot for rhino horn from Zimbabwe and Tanzania. We know of one shipment in September 1985, consisting of 40 pieces of Tanzanian horn weighing 66 kg, which was exported from Bujumbura to Dubai. Some Zambian and Zimbabwean horn is also being moved out in diplomatic pouches from the capitals of these countries, and government intelligence sources claim that it is going to a communist country in Asia.

Sometimes, the rhino horn moves in roundabout ways. For instance, in September 1985, four horns from freshly killed rhinos were exported from Tanzania's Kilimanjaro airport to Amsterdam, and were supposed to go from there to Dubai, but were intercepted by the Dutch authorities (CITES Secretariat, pers. comm.). A trader in Bangkok told us that he had bought black rhino horns from a German who had taken them out of Tanzania in 1985. In the Central African Republic, where the black rhino population has fallen from approximately 3000 in 1980 to under 200 today (Martin and Vigne, 1986), traders hide rhino horn under firewood in trucks going from the northern part of the country to Khartoum. In 1983 traders in North Yemen were receiving most of their rhino horn

from Khartoum dealers (Martin, 1984). Moreover, several hundred kilograms of rhino horn went from Lisbon, Portugal, to Macao between 1984 and the end of 1985, some of which was declared as old stocks of rhino horn from Mozambique. A Chinese trader in Macao told us that he had imported 100 kg of such horn in November 1985, paying \$500 a kilogram.

Namibia and South Africa have been exporting rhino horn and hide to eastern Asia, legally and illegally. Namibia was probably the last country in Africa with a rhino population to prohibit the export of rhino products. In 1983 the Government sold 99 kg of horn to a South African company for \$460 a kilogram; that company in turn exported it to a trader in Taipei, Taiwan. Even though exports are now illegal in both Namibia and South Africa, rhino horn and hide have continued to be sent to Hong Kong and Taiwan, according to traders and the Hong Kong Agriculture and Fisheries Department.

Over the past few years, almost all the exports of rhino horn and hide from Africa have been illegal. However, as recently as 1985 there were still four major countries that legally allowed rhino horn trade across their borders: Taiwan, Macao, Hong Kong and Singapore. Because of this, an international project was set up in 1985, funded mostly by the World Wildlife Fund, but also supported by IUCN, the African Wildlife Foundation, the African Fund for Endangered Wildlife and the New York Zoological Society, for the purpose of trying to stop the international trade in rhino products. One of the main objectives was to put pressure on governments that had not prohibited the trade to do so. In liaison with the CITES Secretariat and TRAFFIC, a worldwide media campaign was initiated to inform people of the rhino crisis, and articles were written for periodicals in Asia and Africa, translated into local languages when necessary. News conferences were held, and embassies and high commissions in Asia were contacted. In many instances, they translated fact sheets for distribution to doctors of traditional medicine, importers and wholesalers of rhino products, medical associations and key government ministries.

The first country to react favourably, following a letter from HRH Prince Philip, President of the World Wildlife Fund, was Taiwan, which had been one of the world's largest importers of rhino horn. On 17 August 1985 it announced that all exports and imports would be prohibited with immediate effect. Official statistics showed that between 1980 and 1984 416 kg of rhino horn were brought into the country. In addition, considerable amounts were being smuggled in from Hong Kong and elsewhere, but steps are now being taken to clamp down on such activities, which occur mainly through the port of Kaohsiung. We carried out a survey of 20 medicine shops there and found that, in December 1985, 90 per cent were offering rhino horn for sale. In Taipei, 76 per cent of the 34 medicine shops we visited were selling rhino horn; one had 35 full horns and another 17. The average retail price for African rhino horn in Taipei was \$1532 a kilogram, and for Asian horn \$23,929 a kilogram (Table 1). Obviously, the demand for rhino horn remains high in Taiwan, and more effort is needed to convince the public of the need to use substitutes.

The Macao Government announced through its Economic Services Department that no more import licences for rhino horn would be issued after 19 December 1985, and on 22 February 1986 it officially announced that this tiny Portuguese-administered enclave attached to South China would conform to all the CITES regulations. Although Macao had been only a small consumer of rhino products, it had by 1984 become an important entrepot for them. Traders we interviewed told us that large quantities were going from there to China and Hong Kong. The ease with which wildlife products could move in and out of Macao also led to its becoming an entrepot for improperly documented ivory from the United Arab Emirates and Singapore.

What happened in Macao, which was partly a result of tightening up restrictions on the wildlife trade through Hong Kong and Japan, well illustrates the ability of traders to develop alternative entrepots. Officials in Macao deserve praise for having taken action quickly, but conservationists must increase their vigilance on the international trade if they are to be able to anticipate the rise of

new entrepôts. As long as African countries supply rhino products, there will be demands for them in Asia.

When the Hong Kong Government agreed to comply with the regulations of CITES in 1979, the Agricultural and Fisheries Department ordered all traders of rhino horn and hide to register their stocks. At that time the traders declared 2167 kg of horn and 2000 kg of hide. They were allowed to continue exporting them, but were told that no permits would be granted for the sale abroad of any additional stocks. Most of the registered stocks have been exported, but in allowing such sales to continue the Government was making it easier for some traders to handle horn illegally obtained after 1979. Furthermore, the legal exports have maintained a demand for rhino products, which encourages middlemen to organize further supplies from poached animals in Asia and Africa. We argued against the legal loophole in Hong Kong's legislation on this trade repeatedly; finally, the Hong Kong Government agreed to stop exports of 'old stocks' at the end of March 1986.

Attempts to close down international trade in rhino products were most seriously impeded by Singapore. Therefore, pressure was mounted against the Singapore Government, especially by CITES. On 25 September 1986, a Congressional Hearing was held in Washington, DC, which criticized Singapore's continued role in the rhino horn trade. On the same day the US Government prohibited all imports of wildlife products from Singapore. These factors, combined with extensive media criticism of Singapore, led to Singapore's ban on all imports and exports of rhino products with immediate effect from 24 October 1986, and the Singapore Government agreed to join CITES on 30 November 1986. The US Government consequently rescinded its prohibition of wildlife products from Singapore.

Singapore had allowed imports and exports of products from all five rhino species. Traders, aware of this and of the fact that the highest profits could be made from Asian horn, urged middlemen to bring horns from Sumatran rhinos to Singapore. Poaching of these highly endangered animals had become particularly alarming

since 1980, and the prevarications of the Singapore Government in stopping rhino horn imports were mainly responsible. Singapore was, in fact, the major legal entrepôt in the world for Sumatran horn. Sabah, Malaysia, has an estimated population of 50 Sumatran rhinos but, according to Patrick Andau, the Assistant Chief Game Warden, at least 12 have been killed for the trade since 1982. The number is probably much higher because the remains of the animals are not always discovered by the limited number of game scouts who patrol the large area of Sabah state where the rhinos live.

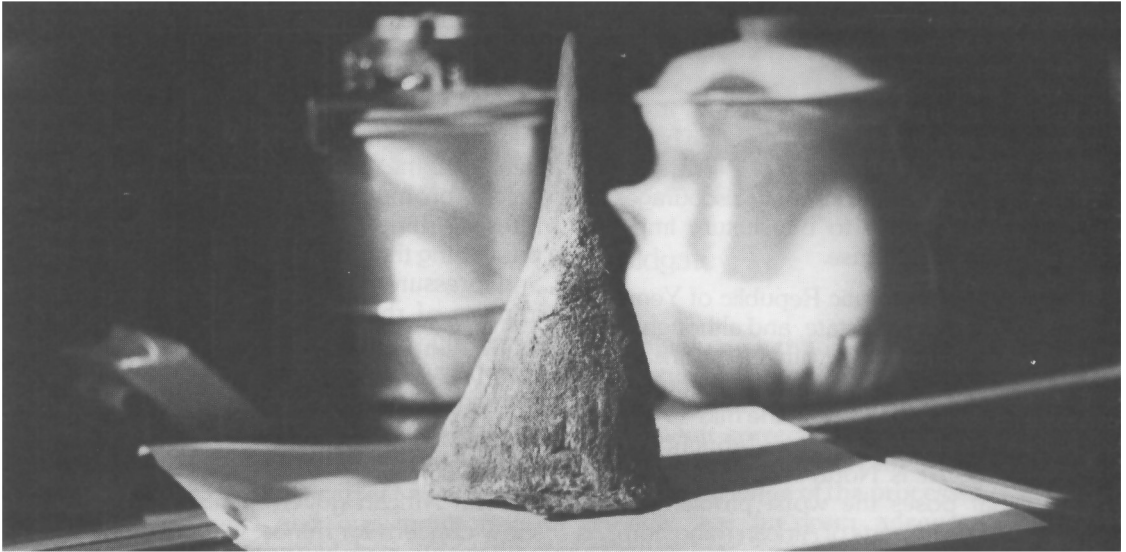
There is no significant market for the horn in Sabah's capital city, Kota Kinabalu; we found rhino horn in only two of 18 traditional pharmacies (Table 1). Businessmen in Sabah sent the rhino products to Singapore, often from Tawau, near the Indonesian border, because they could obtain higher prices for them. According to one trader, the smugglers put rhino horns inside sea cucumbers for shipment to Singapore. Singapore's demand for rhino horn also stimulated trade from Indonesia. In 1980 27 per cent of the Chinese pharmacies in Djakarta had rhino horn for sale, but only 6 per cent did in 1986 because Indonesian suppliers received better prices for rhino products from Singapore and they were paid in Singapore dollars, which are much more valuable than Indonesian rupiahs. Owners of pharmacies in Singapore told us in early 1986 that Indonesians went from one pharmacy to another to bargain for the highest prices they could obtain for horn, skin and nails.

Also contributing to Singapore's open market were dealers in Indian horn, who caused poaching in Assam to increase greatly in the 1980s. From 1966 to 1980 an annual average of five rhinos were illegally killed in Kaziranga National Park, the main home of Indian rhinos; however, the average rose to 31 per annum between 1981 and 1985, according to the Chief Conservator of Forests in Assam. Almost none of the horn is retailed in India; we found none in the main cities on either of our past two visits to India (although there is African horn available in Bombay). The poaching syndicates involved in rhino horn sent it to Calcutta for export to Singapore, earning about \$9000 a kilogram.

Table 1. Average retail prices of rhinoceros horn in some major cities of eastern Asia between 1979 and 1986

Year	Total number of clinics/ pharmacies visited	Percentage selling horn	Type of horn	Average price per kg in US\$
Seoul				
1980	30	63%	African	1436
1982	76	62%	African	1797
1986	108	51%	African	1771
Hong Kong				
1979	15	73%	Mostly African	11,103
1982	50	46%	Mostly African	15,700
1985	80	41%	Mostly African	14,282
Macao				
1979	9	78%	Mostly African	4127
1982	14	64%	Mostly African	7797
1986	20	80%	Mostly African	8644
Taipei				
1979	9	100%	(a) African (b) Asian	1596 17,090
1985	34	76%	(a) African (b) Asian	1532 23,929
Kaohsiung, Taiwan				
1985	20	90%	(a) African (b) Asian	2077 21,365
Tainan, Taiwan				
1985	4	100%	(a) African (b) Asian	1772 29,910
Singapore				
1979	15	53%	Mostly African	11,615
1983	46	35%	Mostly African	11,804
1986	33	39%	African and Asian	14,464
Bangkok				
1979	23	52%	Mostly African	3654
1986	44	34%	Mostly Asian	11,629
Tokyo				
1980	18	44%	African	1620
1986	29	17%	African	3417
Osaka				
1980	10	90%	African	2230
1982	5	60%	African	2516
1986	41	76%	African	3771
Bandar Seri Begawan, Brunei				
1982	5	40%	Mostly African	6895
1986	7	14%	?	3797
Djakarta				
1980	26	27%	Mostly Sumatran	12,634
1986	34	6%	Sumatran and Javan (latter is old stock)	9448
Kota Kinabalu, Sabah, Malaysia				
1986	18	11%	Sumatran	14,697
Kuala Lumpur				
1981	26	58%	Mostly African	19,801
1983	29	21%	Asian and African	17,280
1986	41	10%	Asian and African	11,636

Source: sample surveys taken by the authors in various years between 1979 and 1986.



Rhino horn in South Korea is one of 30 ingredients in Chung Sim Hwan balls, which are used to treat a variety of ailments (E.B. Martin)

Because the Singapore dollar is a hard currency, they usually did not bring the money back to India. We carried out a survey of traditional medicine shops in Singapore in 1986 and found a 20 per cent increase from 1983 in the number selling rhino horn; much more of the horn was from Asian species than before, and the majority of the rhino hide and nails was from Asian rhinos.

There was considerable media publicity in the late 1970s and early 1980s in Singapore about the rarity of rhinos, and we believe that the traditional demand for rhino horn then began to fall because many customers who previously would have asked for it in their neighbourhood medicine shops were accepting substitutes. However, as Singapore became a growing entrepot for Asian rhino products, we feared that local consumption was increasing again.



Until 1980 Japan was a major importer of African rhino horn, which was taken as a medicine to cure fevers, measles, nose-bleeds and influenza (E.B. Martin).

In conservation circles there has been a lot of worry about the rhino horn trade in the two Koreas. However, the South Korean Government stopped all imports of rhino horn in 1984 (Martin, 1986), and there is no evidence to indicate that large quantities of rhino horn have been smuggled into the country since then. More than 90 per cent of the imported rhino horn is used in making Chung Sim Hwan balls, a Korean speciality for treating a multitude of ailments. During the past year, however, scientists involved in Korean oriental medicine have fortunately accepted water buffalo horn as a substitute for that of rhino, and it is hoped that this will be used by most of the pharmacies when present supplies of rhino horn run out.

As for North Korea, we organized a survey of the oriental medicine clinics in the largest city,

Pyongyang. The investigators did not find any rhino horn available, but heard innumerable customers complaining that they could not purchase Chung Sim Hwan balls. It is not surprising that rhino horn could not be bought in Pyongyang's clinics, since the North Korean communist government strongly discourages the use of hard currency to buy luxury imported products for domestic use.

The People's Democratic Republic of Yemen is also a strict communist state, and although Aden used to have close ties with East Africa, and traders imported rhino horn for making dagger handles until the revolution in the mid-1960s, we do not believe any rhino horn is brought into the country today. It is North Yemen, a capitalist country, that poses the worst problem in the world regarding imports of African rhino horn. As the largest single market, it is importing approximately half of all available rhino horn, and North Yemeni traders have flouted the law against rhino horn imports ever since its introduction in 1982. However, the demand for rhino horn is now beginning to decrease in North Yemen. Most of the people who wanted and could afford precious daggers with rhino horn handles now have them. Moreover, North Yemen is becoming more and more westernized, and carrying a dagger with everyday dress is no longer as important as it was in the late 1970s.

From 1980 to 1985 only about three tonnes of rhino horn came on to the world market annually, in contrast to eight tonnes per year during the 1970s, and yet wholesale prices have remained roughly the same since 1979, which indicates a considerable decrease in demand. Furthermore, in such cities as Seoul, Hong Kong, Bandar Seri Begawan (Brunei), Djakarta and Kuala Lumpur, retail prices have actually fallen from the early 1980s to 1986. Had the demands for rhino horn remained constant, the prices for it in this decade would have soared for the much smaller supply available. In eastern Asia, the demand has gone down due to the acceptance of substitutes (saiga antelope and water buffalo horn) in traditional medicines.

On the other hand, while there has been success in cutting back sales of rhino horn, the few rhinos left are more endangered from poaching than

ever before. Therefore, much greater effort is required to combat the trade. Intelligence gathering and analysis of the trade in Africa and Asia must be improved, and appropriate action taken against it. Methods that have been used to decrease the demand (especially media campaigns promoting the use of acceptable substitutes for rhino horn in traditional medicines and publicizing the plight of the rhino) must continue, and pressure put on the governments to stop imports of rhino products must become more persuasive. Now that we have won Singapore's support against the rhino horn trade, there will be some respite, but at the same time we must work towards closing down the trade routes in Africa and the entrepôts of Burundi and Djibouti.

Several African governments are beginning to show concern for rhinos, very probably because in their reduced numbers rhinos have become prestigious assets. In Zimbabwe poachers are now being shot, and in Kenya rhinos are being put behind fences. It is consequently probably easier now than it would have been two or three years ago to attack the problem of the rhino horn trade at source, and this should be done. As one dealer in Asia said to us, 'It's high time for Africa to put its own house in order'.

Acknowledgments

We would like to thank the following organizations for their support of the project to try to close down the international trade in rhino products: the World Wildlife Fund, IUCN, CITES, the New York Zoological Society, the African Fund for Endangered Wildlife, the African Wildlife Foundation, the Columbus Zoo, and the International Trust for Nature Conservation.

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