

# CONSERVATION OF SPECIES AND THE ENDANGERED RHINOCEROS

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## HEARING BEFORE THE SUBCOMMITTEE ON NATURAL RESOURCES, AGRICULTURE RESEARCH AND ENVIRONMENT OF THE COMMITTEE ON SCIENCE AND TECHNOLOGY HOUSE OF REPRESENTATIVES NINETY-NINTH CONGRESS SECOND SESSION

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## STATEMENT OF ESMOND BRADLEY MARTIN, AUTHOR

Mr. MARTIN. Mr. Chairman, first I would like to thank you very much for inviting me to come and talk with you this morning. Daniel Sindiyo and I have come all the way from Kenya, and we'd also like to thank Rhino Rescue for supporting airfares and other expenses here. I'd also like to thank the other wildlife organizations that have funded me since 1978 to carry out an international study of the trade such as World Wildlife Fund, African Wildlife Foundation, and others.

So how long would you like me to talk for?

Mr. SCHEUER. Well, take your 5 or 6 minutes.

Mr. MARTIN. Five or six minutes.

Mr. SCHEUER. Go off the record.

[Off the record.]

Mr. SCHEUER. Of course, your prepared testimony will be printed in full at this point in the record.

Let me say we, too, are very grateful to Rhino USA for having brought you here, for your consistent support of this cause, and we're also grateful to you for having come. It's a long trip. It's tough on the human condition to make that round trip for just a brief period here, and we know it's somewhat of an ordeal. We're very grateful to you and look forward to your testimony.

Mr. MARTIN. Thank you, sir.

I think it's very important to state that the decline of the rhino is really unique. Of all the large mammals in the world over the last 15 years, no other mammal—

Mr. SCHEUER. Excuse me. Could you pull your mike a little bit closer?

Mr. MARTIN. Yes. Yes, sir.

I think it's important to note that the decline of the rhino is unique. Of all the large mammals in the world, since 1970 there's been no equivalent decline of any other. We've had approximately an 80- or 83-percent decline of all species of the rhino. We estimate in 1970—we estimate that there's been a decline of over 80 percent for all the five rhino species since 1970. We estimate that in 1970 there were about 70,000 rhinos in the world, and now we believe there are about 11,000 and they're going down quite quickly.

For instance, the black rhino we estimate about 65,000 in number in 1970 and there are only 4,500 today. So it's extremely dramatic.

Now the main reason for this decline over the last 15 years has been poaching. Over a longer period of time of course it's been habitat destruction as well.

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water buffalo horn from eastern Asia. It's an extremely important point—that they're already using substitutes, and we need to push a little bit more on that.

As I said earlier, rhino horn in eastern Asia is mostly used for lowering fever, but there are other substitutes fully acceptable by the Chinese and Japanese and other Asian peoples. The substitutes are cow horn, water buffalo horn, and certain antelope horns. We need to push on this. Unfortunately, we don't have the money to do this, but some countries have been quite successful. Japan has been extremely successful on that.

And, finally—because I know that time is running short—we need to know more about how the trade actually works. How is the horn leaving Africa? Where is it going? I have been covering this on and off now for the last 8 or 9 years, but, unfortunately, I'm the only one really doing this as a full-time job and I have to cover at least two continents. And the reason for this is the lack of funds. We need to know much more information of how the horn is moving in and out of the various countries and the other rhino products.

Thank you.

[The prepared statement of Mr. Martin follows:]

But what has happened is that in the Asian countries, which are taking 99 percent of all the rhino products, the economies have grown very quickly. There's been a tremendous demand for various rhino products.

Over the last few years perhaps 50 percent of all the rhino horn put on the world market has been going to North Yemen—we discussed that—in making of dagger handles. We have photographs over here on the left of how that rhino horn is used.

The remaining 50 percent has been going mostly to eastern Asia where it is used for medicinal purposes, mostly for lowering fever, not for sexual purposes. The Chinese and Japanese and other eastern Asians have never, never used rhino horn as aphrodisiacs. This is a Western myth that is completely wrong.

It is very, very important to know what the real reasons or the real uses for rhino products are. The only thing that hasn't been discussed this morning is that all parts of the rhino are valuable in Asia—the bones, the horns, the skin, the dung, the toenails. So in Asia the animal is extremely valuable.

Now the real reason the rhino is declining is because they all have economic use. The question is, what can we possibly do about it? Are there any solutions? And there are solutions.

There are certain countries in Asia which protect their rhinos very well. Nepal is one. Nepal is a very poor country, but there's been hardly any poaching.

So there are two general ways of saving the rhinoceros. One is to protect them in situ, where they are, and Mr. Sindiyo has talked about the Kenyan plan for fencing them in. The other one is to reduce the trade, reduce the demand, and that's what I've been working on for the last 8 years.

We talked briefly about the problem with North Yemen and Singapore, but they're not the only places that's trouble. In China, for instance, they are importing rhino and also using up old stocks of rhino to make medicines which are then exported to earn quite a bit of money. This is technically legal because of CITES regulations because you can't identify the rhino horn, but I think some pressure needs to be put on China to stop this.

Brunei, a relatively new, independent country—the sultan of Brunei allows imports of rhino products. A little bit of pressure needs to be put on them.

There are various countries that are acting as entrepôts. The United Arab Emirates, which is a CITES member, has been criticized by the CITES secretariat as handling lots of rhino horn which is going to North Yemen and is going to eastern Asian.

So what we need to do is to encourage those countries which have the laws to enforce the laws concerning rhino horn trade, and those few countries that don't have the laws to bring in the laws. For instance, Burundi is one of those countries, a major exporter from Africa, and it's perfectly legal. Djibouti is another one which hasn't been mentioned. That needs to be done.

Also, much more effort needs to be done for substitutes. This hasn't really been emphasized yet. The important point is that these dagger handles, some of them are made out of rhino horn, but approximately 93 percent are not made out of rhino horn. In other words, they're made out of substitutes, mostly cow horn,

The Decline in Rhino Populations

Of all the large animals in the world, none has declined so dramatically as the rhinoceros during the past sixteen years. Its estimated world population of 70,000 in 1970 has dropped to 11,500 today, an 84% loss.

There are five species of rhinos, two in Africa and three in Asia. Africa's white (or wide-lipped) rhino, the largest, has virtually disappeared from its northern range, except for a guarded population of seventeen in Zaire and a few individuals in Southern Sudan. However, it numbered several thousand in 1970. The southern white rhino, of which there are 4,000, exists mainly in South Africa and, for the time being, is secure there. It is the only rhino species which is not severely threatened. The black rhino, which was once widespread in tropical Africa, has decreased the most startlingly: in 1970 there were 65,000, in 1980 15,000 and now only 4,500 are left. In not one country of tropical Africa is the black rhino safe. Moreover, the majority of those surviving are in small, unstable pockets and if the fragmentation process continues, there is little hope for them to meet and mate.

During the past six years, rhinos have been almost or entirely eliminated from Angola, Chad, Ethiopia, Mozambique, Rwanda, Somalia, Sudan, Uganda and Zaire. Other countries have had their rhinos heavily poached. In the Central African Republic (CAR) less than 200 remain whereas six years ago there

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THE COMMITTEE ON SCIENCE  
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UNITED STATES HOUSE OF REPRESENTATIVES

Hearings on the Plight  
of the Rhinoceros as an  
Example of the  
Rapid Loss of the  
World's Species.

Statement of

Dr. Esmond Bradley Martin

Mr. Chairman, Members of the Subcommittee and Staff:

My name is Esmond Bradley Martin. I am the Vice-Chairman of the African Elephant and Rhino Specialist Group. I have written numerous books and articles on the status of the rhinoceros and the trade in rhino horn. I have also worked for many years to end the trade in rhino horn.

I appreciate the opportunity to appear before this subcommittee on this urgent matter. I would also like to thank Rhino Rescue USA, Inc. for funding my travel from Kenya so that I might testify here today.



The greater one-horned (or Indian) rhino lives in two wildlife reserves in Nepal and in India's states of Assam, West Bengal and Uttar Pradesh. However, a breakdown in law and order, both in Assam and West Bengal, brought about an upsurge in poaching between 1981 and 1985. Firearms superior to those used by forest guards have been supplied to poachers by syndicates in Nagaland. In West Bengal the rhinos have been reduced to less than 40, and in Assam, home of over three-quarters of this species' population, 233 rhinos have been killed during the past four years. The Indian rhino now numbers only 1,700.

#### Reasons for Rhino Poaching

Loss of habitat, which used to be an important factor in the decline of rhinos, especially in Asia, has paled into insignificance, compared to the toll taken by poachers since 1970.

In countries where rhino poaching is most rife, you usually find inefficient government bureaucracy, economic instability, strict control of foreign exchange, local currency pegged at artificially high rates and poor game management with few deterrents to prevent people from engaging in the illegal killing of animals.

Some conservationists believe that the illegal killers of rhinos are badly paid and grossly exploited by middlemen. This is often not the case. In Zambia poachers make about a third of the world market price. In Kenya, according to a survey carried

were 3,000. Kenya's rhino population has fallen from 20,000 in 1969 to about 500 today.

It had been thought that the black rhino would remain relatively safe in some of its more remote and secluded habitats, but now even these strongholds are being hard hit. Rhino numbers in the Luangwa Valley, Zambia, have fallen from over a thousand two years ago to probably less than 300. Similarly, in Tanzania's Selous Game Reserve, rhinos are vanishing; reports suggest that they are being obliterated by poachers. Even in Zimbabwe's well protected Zambezi Valley rhino poaching has become a serious threat; Zambians will risk their lives to cross the river border to seek after a rhino.

In Asia, the number of Javan, Sumatran and Indian rhino species are much fewer. There are only 55 Javan (known also as the lesser one-horned) rhino in one small reserve on the western end of Java island. It is actually one of the rarest animals of the world, and 10% of its population was killed by disease four years ago.

The Sumatran (or hairy) rhino, which is the smallest and most primitive, has almost disappeared from Burma, Thailand and Indochina. Of the 700 left in Malaysia and Indonesia, practically all are threatened by logging disturbances, farming, growing human settlements and poaching. Consequently, the hairy rhino has become solitary in its habits, and there is even less hope for the animals to meet and mate than there is for the African black rhino species.

are not believed to be as strong a medicine. Poultices are made of rhino bone and placed on people's broken limbs to ease the pain and promote quicker healing. The dung is taken as a laxative, and the blood is used to treat general lethargy and vitamin deficiencies. In fact, practically every part of the rhino has some medicinal value in Asia, and the animal is a veritable pharmacopeia. Still, it is the horn which is most in demand, and aside from a little hide supplied by South Africa, it is just the horn from African rhinos that is sold in Asia -- all the other remains of a rhino carcass are left to rot in Africa.

During the 1970's, there was tremendous growth in the economies of Hong Kong, Singapore, Malaysia and Japan. Demand for rhino horn soared, and people in eastern Asia were willing to pay the higher prices for it.

There was also the emergence of a new market -- North Yemen. This small Arab country, poor and insignificant, underwent a revolution which opened its doors to the outside world with the result that Yemeni men began going to Saudi Arabia and the Gulf States as migrant workers. They brought back home a billion dollars a year in the 1970s, and with this money they were able to afford the goods they wanted to buy. Chief among these were daggers with handles carved from rhino horn, formerly the prerogative of the Iman and his cronies. Wearing a dagger was part of everyday dress for all men and boys over the age of twelve. Usually, the handles were made from cow horn, but the very few elite of North Yemen traditionally had daggers with rhino horn handles, well carved and adorned with gold coins.

out in and around the Tsavo area in 1983, hunters for rhinos were getting the equivalent of \$370 a kilo for the horn, which was more than half the world market price at that time.

Prices for African rhino horn have risen from \$30 a kilo wholesale in 1970 to about \$700 today, and for Asian rhino horn from \$2,000 to \$9,000 a kilo wholesale. A poacher can make from the sale of one rhino horn as much as three times what he might legitimately earn in a year.

#### The Markets for Rhino Products

For a long time, Westerners believed that rhinos were being killed for their horns which were used as aphrodisiacs in the Far East. Research in the late 1970s shattered this myth. Only a small group of Gujarati Indians in western India consider rhino horn a love potion. However, since ancient times, the Chinese have believed in the efficacy of rhino horn for curing a multitude of ailments, ranging from high fever and hallucinations to snakebites and nosebleeds; it is indeed one of their most highly prized drugs, and they have spread their beliefs about the important medicinal powers of rhino horn to the Japanese, Koreans and Burmese who likewise use it -- and never as an aphrodisiac. Throughout eastern Asia there are Chinese medicine shops where not only rhino horn is available, but also rhino hide and toe nails. Occasionally, one can also find rhino bone, dried dung and dried blood. The hide is used to treat skin diseases; toe nails are used for the same purposes as horn but are cheaper and

Action Taken to Remedy the Rhino Situation

Conservationists were stunned by the massive slaughter of rhinos in Africa during the 1970s. They had realized that human population growth and economic development would sooner or later exert pressure on the land, but they had pinned their hopes for the future on wildlife in preserves which they set up in the countries with the largest groups of wild animals. The parks and reserves were truly outstanding, had the support of local leaders who often enlarged them and boasted of their success in attracting tourists from all over the world. Indeed, the wildlife seemed to thrive in the protected areas, and there were even cases where excess numbers of elephants and hippos had to be culled. Millions of dollars were poured into the wildlife preserves by conservation organizations, and since the financial support had proved successful in the early days of Independent Africa, more millions were given to wildlife departments to try to halt the rhino poaching.

However, there was lack of political stability in many of the countries which led to the disregard of existing laws to combat poaching, the inability of judiciaries to prosecute offenders, and disillusionment about the benefits of wildlife sanctuaries when tourists stayed away from the countries experiencing strife.

No amount of new vehicles, aircraft for surveillance, radios and other items for anti-poaching could stop the illegal killing

Suddenly, many people had the means to indulge in the purchase of this most prestigious of possessions. Between 1969 and 1977, according to the country's official trade statistics, 22,645 kilos of rhino horn were imported, coming from about 8,000 rhinos. By the late 1970's North Yemen was importing nearly 50% of the rhino horn sold from Africa, and it had become the largest market in the world for rhino horn. A black rhino carries, on average, almost three kilos of horn, and one kilo will make three dagger handles. The dagger-makers' business in the Sanaa souk flourished, and the traders had little difficulty in supplying the demand.

At this time, gangs of Kamba and Somali poachers had invaded Kenya's parks and were hunting both elephant and rhino. In Uganda, under General Idi Amin's rule, chaos reigned. Soldiers used the wildlife for target practice; and when civil war broke out, almost all the rhinos were eliminated. The wave of poaching hit northern Tanzania, also. It was believed that 90% of the rhinos there were killed by late 1979. In many parts of Africa, automatic weapons proliferated, due to the prevalence of local wars. The small-time poacher, with his bow and arrows or clutch of snares, gave way to heavily armed men, unopposed by the authorities, who wiped out rhinos by the score in the CAR, Mozambique, Zaire, Sudan and Chad.

Hong Kong had been the main importer of rhino horn from the end of World War II up until 1979 when it agreed to conform to CITES regulations, even though it could not become a member because of its colonial status. The Department of Agriculture and Fisheries then requested that all traders of rhino horn and hide in Hong Kong to register their stocks; they declared that they had 2,167 kilos of horn and 2,000 kilos of hide. During the next six years most of this stock was legally exported, but in allowing it to be the government was abetting the trade. In late 1985, the Department of Agriculture and Fisheries announced that no more sales abroad of the old stock would be permitted after March, 1986.

Small amounts of rhino products had been coming into Macao for many years to supply the Chinese medicine shops, but in 1984 this became one of the world's largest rhino horn importers. A Portuguese-administered territory under China's sovereignty, with only 360,000 people, it was obviously acting as an entrepot, and despite the fact that both China and Portugal are CITES members, Macao's imports and re-exports of rhino horn were legal. All that was needed in 1985 to bring in rhino products was an import license, which was easy to obtain from the authorities. However, towards the end of that year, some members of the government became embarrassed by international criticism of the wildlife trade, and the government decided, through the Economic Services Department, to refuse to issue any more import licenses for rhino horn after December, 1985. Furthermore, Macao agreed to conform to all the CITES regulations in February, 1986.

of rhinos in places where there was no infrastructure left to protect people, let alone wildlife. Only in the countries where security was maintained was there any hope at all for the rhinos, and even in these the animals must now be kept behind well patrolled fences.

Granting protection to rhinos in situ is one of two general approaches to the rhino problem. The second, combatting the root cause of poaching -- the rhino horn trade -- did not begin until after 75% of the rhinos had been killed in the 1970s, and it has been limited to some extent by scarcity of funds. Only about \$100,000 has gone into this strategy but since 1979 the trade has been continually monitored; and, moreover, we have recently made some strides towards promoting the use of substitutes for rhino horn.

The main means to stopping the international trade in rhino products has been the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) which was formulated in 1973 to curb the trade in all endangered species, including rhinos. Now, most of the countries which have rhino populations and those which are main consumers of rhino products have ratified this Convention. Its influence has also led to the banning of rhino horn imports in a few countries which are not signatories to CITES. Support for CITES has come strongly from the World Wildlife Fund, the African Wildlife Foundation and the New York Zoological Society which have coherently put pressure on governments to uphold its tenets.



Statistics showed that Taiwan imported 416 kilos of rhino horn legally between 1980 and 1984. In addition, considerable amounts were being smuggled in to avoid paying import duties. On account of the fact that in 1985 Taiwan was one of the largest importers of rhino horn and hide, considerable pressure was put on to the government to stop the trade, especially by Tom Milliken, Director of TRAFFIC, Japan. Fortunately, one of the Ministers of State, Mr. Chang Feng-Shu, also the head of Taiwan's Society for Wildlife and Nature, was extremely concerned and lobbied with other ministers and heads of government departments about the rhino horn and hide imports. In mid-1985, when he received a letter from Prince Philip, President of the World Wildlife Fund, encouraging the government to close down this commerce, he was able to persuade it to do so with immediate effect.

International pressure was also applied to South Korea to stop its imports of rhino horn, most of which is used in making Chung Sim Hwan medicinal balls to treat high blood pressure, nose bleeds, paralysis and aches and pains. Bowing to the criticism from abroad, the Korean Ministry of Health and Social Affairs issued an order in November, 1983, demanding the elimination of rhino horn from Chung Sim Hwan and all other medicines. Further legislation was passed in 1985 by the Ministry of Trade and Industry, banning imports and exports of rhino products. In the meantime, scientists in the field of Oriental Medicine at the Kyung Hee University began carrying out experiments with water buffalo horn which they have now accepted as an effective

substitute for rhino horn, and they are encouraging its use in Chung Sim Hwan balls.

Traditional medicine is an important part of Japanese culture, despite the fact that Japan is a modern, industrial world power. Millions of people there purchase herbs, minerals and animal products to cure anemia, high blood pressure and other such ailments, even though they generally rely on western drugs for most diseases. Rhino horn is considered by some Japanese as one of the "best" medicines for colds and fever, but other animal products are acceptable to them as substitutes. Since these are not derived from endangered species, their use should be encouraged. The most common substitute for rhino horn as a traditional fever-reducing drug in Japan is a dried worm, imported from China. In 1980 when the government banned rhino horn imports, it actively promoted the use of saiga antelope horn instead. The results have been satisfactory, and little rhino horn has been smuggled into the country since it was outlawed.

Efforts to reduce the trade in rhino products and to promote the use of substitutes are proving effective. In the late 1970s, eight tonnes of rhino horn reached the world market annually. By the mid-1980s, due to the scarcity of rhinos, it had dropped to approximately three tonnes. With this 62% decrease in supply, one would expect a correlated rise in price. However, the prices for both Asian and African horn have not increased since 1979. The horn is coming from a variety of places, so there is no monopoly position which might affect the price; it is also readily available in many countries of eastern Asia, and internal

producer of patent medicines which contain rhino horn, and these are marketed throughout eastern Asia. Advantage is taken of the fact that CITES allows endangered species to be traded when they are not viable components in a product. Although some medicine factories in China are beginning to use water buffalo and saiga antelope horns in place of rhino, China must be persuaded to stop manufacturing and exporting any drugs with rhino horn as an ingredient. The factories have been illegally bringing in the horn from Macao and Thailand.

The Thai authorities have done very little to enforce their ban on imports and exports of rhino products. The country has become a major entrepot for Asian rhino horn, hide and toe nails, even though the trade has been illegal for several years. In 1985, a survey indicated that 34% of the Chinese medicine shops in Bangkok sold rhino horn. The government needs to be encouraged to enforce its law against the rhino trade.

Similarly, the United Arab Emirates have a ban on imports and exports of rhino products but do not pay much attention to it.

In Africa, Burundi, which has no rhinos of its own, exports large quantities of rhino horn. Its central location on the continent enables the horn to be moved in and out with relative ease. So far, this trade has not been outlawed by the government, and in order to stop it pressure will have to be put on Burundi.

In August, 1982, following an impressive campaign initiated by the African Wildlife Foundation, imports of rhino horn to

trade in it is often still legal. Unquestionably, the demand for rhino horn has gone down considerably.

Immediate Requirements for Curtailing the Rhino Trade

The single greatest problem concerning the trade in eastern Asia is Singapore which still legally allows imports and exports from all rhino species. This open market is primarily responsible for the rhino poaching in India, Indonesia and Malaysia. The government has prevaricated about joining CITES since 1984, and not only has Singapore now become the most important entrepot for rhino horn, it is also one of the large consumers of Asian rhino products today. Diplomatic and media pressure need to be strongly exerted on Singapore to bring in a law specifically prohibiting imports and exports of rhino products as it has already done for urinating, birds of paradise and arowana fish.

Brunei, an oil-rich Sultanate on the island of Borneo, also allows imports of all rhino species products for its population of 55,000 Chinese residents. Approaches have been made to the government to stop the trade; Prince Philip wrote to the Sultan in March, 1986, but there must be continued lobbying. If imports and exports are not prohibited, this country could become an important entrepot for illegal trade from source countries, since most of its neighbours have banned rhino horn imports.

China is a member of CITES, and very little horn is found for sale in its medicine shops. However, China is a major

also to find out where rhinos are most threatened in situ and to learn ways of granting them better protection.

The rhino catastrophe calls for close international co-operation in stopping the trade. So sharp and dramatic a decline of the second largest land animal is hard to accept in this age of conservation and wildlife awareness.

North Yemen became illegal. However, poachers and middlemen are willing to take risks in continuing to supply the horn to the country because the demand is so great and the financial return so profitable. Perhaps as much as one and a half tonnes per year are still bought by known importers. The horn is often smuggled through customs at Sanaa airport in personal luggage. Stricter controls need to be initiated, and the export of shavings from the carving of rhino horns must be stopped.

It is equally necessary to reduce the demand for rhino horn. In North Yemen, all duties should be eliminated on cow and water buffalo horns. Handles carved from these should be made more attractive by adding elaborate and expensive decoration and fitting them with higher quality blades. It should also be explained to the craftsmen why they should not use rhino horn; few of them know anything at all about rhinos.

In eastern Asia, methods which have been used to decrease the demand for rhino horn in medicines must be continued. Water buffalo and saiga antelope horns are plentiful and cheaper than rhino. Traditional doctors' associations and pharmacists have been asked to accept and prescribe these instead of rhino horn, but efforts to encourage this must not wane.

Intelligence gathering on the patterns of international trade in rhino products need to be improved in order to prevent the development of new entrepots and to learn ways to combat more efficiently illegal movements of rhino horn. Continual monitoring of the trade is imperative, not only for the purpose of collecting data on illicit trade routes in Africa and Asia but

So the Government could put pressure on those countries which don't have a law. Second, the U.S. Government could help in encouraging countries to implement their legislation better. We talked about North Yemen before; I don't need to talk about it any more. But the United Arab Emirates is a problem. The CITES secretariat is very concerned about that.

But we've had successes on this. Eighteen or nineteen months ago there were five Asian countries that legally allowed rhino horn imports. We're down really to, say, one and a half because Brunei has legislation prohibiting exports.

But if one goes around and encourages countries to close down the trade, they will do that. South Korea has recently done it. Macau has recently done it. Taiwan has done it, and Hong Kong has just stopped all exports of old stock in April of this year. So it can be done, and it doesn't cost much money. It's just pressure.

Ms. SCHNEIDER. Understood.

Well, let me say that oftentimes, as you are out tracking the rhino and tracking the poachers, you probably wonder to yourself, Does anybody really care that you're out here doing this or does anybody really know? Let me say that I certainly do, and I assure you that the other Members of Congress and people throughout this country and throughout the world are always thrilled when we find someone that is as dedicated as you are to this effort.

So let me just give you a big appreciation for these efforts because there are too few people who are willing to dedicate their lives to such a thing. We thank you.

Mr. MARTIN. Thank you.

Mr. SCHEUER. Just following up on Congresswoman Schneider's question, Is Singapore, then, the last remaining villain in this, the last remaining significant villain, other than Brunei being half a minor villain?

Mr. MARTIN. I'd rather not use the word "villain." It's the single most important problem in eastern Asian. Singapore must be encouraged to bring in a law.

One thing that we haven't mentioned is that when Singapore brings in the law, they'll enforce it. There are various countries in Asia who have brought in the law and have not enforced it, but Singapore will, which makes it especially important for them to bring in the law. So that's the last country of significance that doesn't have legislation.

Then the other one was we need more pressure on North Yemen to implement the law. Again, what hasn't been brought up about North Yemen is that they prohibit the importation of horn; they do not prohibit the export of horn. So what we need to do is encourage the North Yemenese to bring in a law prohibiting the exports. This is important because when you make these dagger handles, there are chips and powders that are left and then they reexport it and make money out of it and it has to go somewhere, and it's been going places.

Mr. SCHEUER. Yes.

You mentioned to me before, Dr. Martin, that Prince Philip—is it Prince Philip?

Mr. MARTIN. Yes, sir.

Mr. SCHEUER. Well, thank you very much, Dr. Martin.

What is responsible for the relative success that—well, the two countries that you mentioned—Japan and Nepal have had in suppressing this trade in rhino horns? Let's take Nepal first because that would be a habitat country.

Mr. MARTIN. Yes. Nepal is one of the poorest countries in the world. It has about 350 rhinos, and those numbers have been down in the sixties to 100. The answer to your question is that the King of Nepal, who is the head of state, has a personal interest in those rhinos, and that is one of the most important things. If a head of state is interested in conserving the species, it can be done.

How the King of Nepal has done it is that he's got 500 people in the Royal Nepali Army in the main reserve, Royal Chitawain National Park, and there are 200 forest guards outside of it.

But the answer to it is very simple: The head of state is interested in conserving the animal.

Now as far as Japan is concerned, Japan was a major importer of rhino horn and has been for over a century. What happened was when Japan joined CITES in 1980, the Government immediately contacted the local medicine shops that were selling rhino horn and encouraged them to use substitutes. So every single medicine shop in the country that had been selling rhino products received a letter saying that they should use substitutes, and that was Saiga antelope horn. It has been very successful. There's hardly any rhino horn being smuggled into Japan today.

Mr. SCHEUER. Well, that's encouraging on both counts.

Congresswoman Claudine Schneider.

Ms. SCHNEIDER. The only question that I have—I will say that the testimony of you was very succinct and detailed, so I think you've answered most of the questions I was anticipating of asking.

But I wonder, Dr. Martin, if you have some specific proposals that the U.S. Government could follow insofar as eliminating the trade in rhino products.

Mr. MARTIN. I think the most important thing that the U.S. Government could do is to put pressure on those countries which do not have laws prohibiting the trade, and they would be Burundi, Djibouti, and especially Singapore.

The importance of Singapore is not that they're handling a lot of African horn; they're not, but they're handling almost all the Asian horn that's on the world market.

In India, which had a very small Indian rhino population at the turn of the century, we estimate under 50. They built this number up to over 1,000 in the early eighties. Then, beginning in 1982, there's been severe poaching of the Indian rhino because almost all that horn moves out of Calcutta down to Singapore. If that outlet wasn't there available in Singapore, the poaching would decrease very sharply.

The other Asian horn that's on the world market is from Simatra, which is right next door to Singapore, and also some animals are being killed in Malasia, specifically in Sava, and all of that goes over to Singapore. So Singapore is the single most critical country in the world for the Asian horn. The most critical one for the African horn is North Yemen.



Mr. SCHEUER [continuing]. Is chairman of the World Wildlife Federation?

Mr. MARTIN. He's president of the World Wildlife Fund International.

Mr. SCHEUER. Yes; and he has made personal representations to Prime Minister Lee of Singapore, has written him?

Mr. MARTIN. Yes, sir.

Mr. SCHEUER. Has he met with them?

Mr. MARTIN. He wrote a letter at the end of last year to the Prime Minister of Singapore who answered it almost immediately saying that they would be joining CITES perhaps by the end of this year. He's also written letters—

Mr. SCHEUER. To Prime Minister Lee?

Mr. MARTIN. Prime Minister Lee has written a letter back saying—

Mr. SCHEUER. Yes.

Mr. MARTIN [continuing]. That they hope to join CITES by the end of this year.

I was in Singapore in February of this year trying to push them to bring in a regulation specifically barring rhino horn imports because they've done that with orangutans, birds of paradise, and the rare arawana fish, but for some reason that I'm afraid I cannot state because I don't know, they will not do it.

As you rightly said, tomorrow or within hours the Prime Minister could say no more rhino horn imports, which is a separate issue from CITES, and that's what I would like to see. I have not been pushing them for CITES. It's a complicated issue. But I'm sure if someone can get to the Prime Minister of Singapore, he could turn that thing off tomorrow, which would have a major, major effect on preserving rhinos in the world.

Mr. SCHEUER. Well, going off the record for a moment—

[Off the record.]

Mr. SCHEUER. Going back on the record—my honored and distinguished colleague, Congressman Tim Valentine of North Carolina, one of the most forthcoming and hard-working members of this subcommittee.

Mr. VALENTINE. Thank you, Mr. Chairman.

I was really going to say some good things about you even before you said that. [Laughter.]

I want to associate myself with the remarks made by the lady, the distinguished Congresswoman. There are those of us in the Congress who are concerned about this problem, concerned not only about what happens to this precious animal, but many other species on the face of creation who are in danger of disappearing.

She has asked my question. I wanted to know—and I think you've answered it—what do you expect or what do you want the Congress to do about it, if you would explain that?

I want to say thank you to the chairman for arranging for you to come. I think it's very worthwhile.

I want to say, finally, that I hope that you will do the same thing that you are doing here in Washington before this subcommittee of the Congress—I hope that you will repeat this same thing with the Common Market countries of Europe and elsewhere because I feel—I don't know what you have done. Perhaps I should ask you if

you have made this type of presentation to the British, for example, the West German folk, and Italians, because they should have a great deal of influence in this region and on these governments also.

Mr. MARTIN. May I answer that, sir?

Mr. VALENTINE. Yes.

Mr. MARTIN. Yes. The British high commissions in various parts of Southeast Asia have been extremely helpful to me. When I was in Singapore, the British High Commissioner was Sir Hamilton White. The night before I arrived he had a special meeting with Prime Minister Lee and he talked about this rhino horn situation. So the British are very, very helpful, but, again, they can't quite get it pushed through for reasons that I don't fully understand. But the British foreign office and the various British high commissioners in eastern Asia has set up appointments for me so I can get to the top people, and they've been very, very helpful.

Mr. VALENTINE. Thank you, Mr. Chairman.

Mr. SCHEUER. Thank you, Congressman Valentine.