



In Kenya, alone, the Black Rhino, which numbered perhaps 18,000 in 1970 is down to some 500 today. Why has the rhino in Africa and Asia been threatened with extinction and what if anything is being done to rectify this?

In eastern Asia, rhino horn has been consumed for centuries, primarily for lowering fevers. Other parts of the rhino too: the skin, bones, blood and even the penis have long been considered excellent remedies for a variety of illnesses. In the Middle East, Yememi daggers or jambias have been worn by the elitist rich with handles carved from African rhino horn.

In the 1970s, however, these markets grew out of all proportion, particularly in North Yemen, due to the sudden rise in oil prices. The jambia could be afforded by many. Rapidly expanding economies in Asian countries similarly enabled previously poor



The only place in India where rhino horn is sold is in the west of the country, where African horn is available, not Indian. Lucy Vigne is in a medicine shop in 1986 holding two black rhino horns.

people to buy rhino horn for medicinal purposes. Prices for African horn shot up from US\$30 a kilo wholesale to US\$600, while Asian horn increased from US\$2,000 a kilo to US\$9,000. From 1972 to 1979 eight tonnes of rhino horn left Africa each year, the equivalent of 22,000 rhinos in total slaughtered to meet this sudden soaring demand.

Simultaneously in Africa a new type of poacher had replaced the man with the bow and arrow. Automatic weapons became available and spread across Africa in the hands of well organized poaching gangs, destroying rhinos in Ethiopia, Sudan, Uganda and Zaire. A catastrophe had occurred before the problem had been properly comprehended.

Campaigns to save the rhino were initiated and millions of dollars spent on anti-poaching units.

Despite these efforts rhinos are worse off than ever. Nowhere in Africa and Asia do they seem safe. Even Zimbabwe which has the most efficient wildlife department in tropical Africa, lost over 100 rhinos in 1985 to poachers in the Zambezi Valley. More rhinos have been poached in Zambia's Luangwa Valley and Tanzania's Selous Game Reserve, the last stronghold for Black Rhino. The figures for Black Rhino are depressing: 65,000 in 1970 fell to 15,000 in 1979, with a further drop to 8,800 in 1984 and 4,500 in 1986. The Northern White Rhino has been poached virtually to extinction with only 17 known individuals left in Zaire and perhaps a handful in southern Sudan. The Southern White Rhino has, however, due to devoted conservation methods, increased from fewer than 100 at the beginning of this century to over 4,000 today. In Asia the Javan and Sumatran Rhinos number a pitiful 60

at last will prove the solution to protecting rhinos *in situ* where former attempts to patrol larger unfenced areas have failed.

Over the next four years such rhino sanctuaries are to be built in four national parks: Nakuru, Nairobi, Aberdares and Tsavo West. At the moment, Tsavo has a sanctuary of 3 km² with three rhinos. It will be expanded later as other sanctuaries reach saturation point and need to be relieved of their surplus rhinos. And eventually it may be possible to let them out into the parks again. Over a million pounds must be raised for this ambitious plan, and, as Peter Jenkins, an Kenyan wildlife adviser, states, "it is expensive but there is no short cut for an endangered animal". Already there are enough funds to put up the 74 km electric fence to surround 140 km² of land beside Lake Naivuru, and preparations for this first government rhino sanctuary are in motion.

KENYA TRIES TO SAVE ITS RHINOS

LUCY VIGNE & ESMOND BRADLEY MARTIN

and 750 respectively, while the Indian Rhino reaches a total of about 1,700. With increasing poaching in the 1980s in India, it is a depressing prospect that the numbers of the Indian Rhinos could also plummet.

Many ingenious ideas for combating the disaster of rhino poaching have been put forward, such as cutting off the rhino's horns or swamping the market with fake rhino horns. Such ideas are not feasible. In 1985, however, two new approaches were initiated in Kenya and are now under way.

The new schemes attack the problem at both the supplying and consuming ends. In Kenya, the last surviving scattered rhinos, and some rhinos from private land, are to be translocated to secure, electrically-fenced areas which will keep poachers out and rhinos in. It is hoped this

The fence itself will be seven feet high, comprising several wires carrying electric currents of a high voltage. If the fence is tampered with, a monitoring system will immediately set off alarms and a flashing red light.

The first rhinos are to come from an over-stocked private ranch, Solio, where 20% of Kenya's rhinos live in safety. Within this ranch there is an electrically fenced area of 15,000 acres into which about 20 Black Rhinos were introduced 20 years ago. Under efficient management, the population has grown to about 80 today. None has been poached in Solio. But the ranch cannot support this large group, well above carrying capacity, in the dry season, and about 30 rhino are to be moved to Nakuru when the sanctuary is ready. The success of Solio proves that the system of electric fencing, with proper management, works.



In order to capture and translocate a rhino, it is first necessary to dart the animal, which goes down in a few minutes. Generally it is transported by sledge to a holding pen where an antidote is given and the rhino recovers in less than one minute. In three days, the black rhino is tame enough to feed from the hand, and for several days is fed inside its travelling crate until fully acclimatized. The rhino is then ready for translocation. Holding pens are available at the reception site if necessary, but otherwise the rhinos are released immediately to disperse and define their home ranges.

When the rhinos arrive in Nakuru they will be monitored by radio transmission, probably from battery-powered transmitters attached to the base of their horns. The private ranches have shown that with good management rhino numbers can expand and it is hoped that this will be true also of these government sanctuaries.

The second approach tackles the root cause of poaching — the demand for rhino horn from the consumer in Asia. Largely ignored by conservationists until the late 1970s, the Asian demand had caused the killing of 70% of Africa's rhinos by then. It had been generally believed in the West that rhino horn was used as an aphrodisiac, and the North Yemen connection was virtually unknown. This mixture of error and ignorance is being rectified at last.

Since 1982, the World Wildlife Fund, led by its president HRH Prince Philip, and other conservation bodies have been urging countries which import rhino products to use traditionally acceptable substitutes for rhino horn such as saiga antelope and water buffalo horns. Furthermore, a greater emphasis is being focussed on prohibiting the trade and enforcing the law.

A specific World Wildlife Fund project was started in July 1985 to help achieve these aims. Based in Kenya, it has the backing of the World Wildlife Fund, the African Wildlife Foundation, the African Fund for Endangered Wildlife and the New York Zoological Society. The Director of the project, Esmond Bradley Martin, has recently returned from a five month visit to eastern Asia, the first phase of the project.

He visited thirteen countries which supply or consume rhino products, from Japan in the east to India in the west. He met senior officials to dis-

cuss trade bans and possible means of law enforcement. He spoke to doctors and pharmacists who prescribe rhino products to patients for a variety of ailments, asking them to use substitutes instead. He also investigated smuggling routes and collected data on the demand for rhino horn.

The results of all these efforts to end the trade in rhino products have been impressive.

Four out of five countries in Asia which have been trading in large quantities of rhino horn in the 1980s have decided to ban it, namely, South Korea, Taiwan, Macao and Hong Kong. These countries must be congratulated on their efforts and

rhino products. CITES permits the export of medicines containing unrecognizable, small quantities of rhino horn. However, the ingredients list on the boxes includes rhino horn and thus encourages the market. This must be stopped as soon as possible.

How successful have efforts been so far to reduce the demand for rhino products? In the 1970s, on average, eight tonnes of rhino horn per year were available on the world market. In the early 1980s the figure dropped to three tonnes, but there has been no price increase. This means that the demand for rhino horn has fallen significantly, mostly due to increased use of substitutes.



Black rhino carcass being examined by Kenya's anti-poaching unit. Today, under 500 rhinos remain in Kenya.

encouraged to enforce their new laws. Yet Singapore, which is the major entrepôt for rhino products in eastern Asia, continues to defy all pleas to stop, by continually deferring a final decision. It is imperative that Singapore end its trade in rhino products with immediate effect. Another country which represents a damaging gap in the closure of the trade is China, which deals in large amounts of rhino horn that are manufactured into medicines for export all over Asia. Although China is a member of CITES (the Convention on International Trade in Endangered Species of Wild Fauna and Flora) which bans international trade in

Continued efforts to encourage cheaper substitutes are essential. If rhino horn imports are thus decreased even more, in a few years repercussions of the shrinking market should be felt and the highly sophisticated poaching gangs of the 1970s and 1980s will find the economic incentives less attractive.

Meanwhile, Kenya's rhino sanctuaries will act as a stop gap and will, we hope, save the species during the critical years ahead. Other countries may follow Kenya's example in managing their rhinos in order to protect them from man's hitherto insatiable desire for the horn.