RHINOS have one enormous drawback in their fight for survival. Perched above their nostrils is a dense mass of hair compacted into solid keratin - the much prized horn.

Symbol of sexual potency and endowed with sundry magical properties (or so it is believed), the rhino horn commands a fabulous price in the quack medical markets of the Far East.

But rhinos in Asia are now so depleted in numbers that Africa has become the "primary producer" with the result that Africa's two rhino species are now under intolerable pressure. In parts of East Africa the black rhino population is 90% and even 95% down on just a few years ago.

Not all this horn, however, finds its way into the hands of the gullible and exploiters of the gullible in eastern countries. North Yemen has recently been importing (1976 and '77) a tonnage of horn equivalent to nearly 2000 rhinos a year.

This is a relatively new phenomenon arising from the new-found wealth of Middle East oil workers. The dagger or *jambia* is a status symbol in the Yemen. A prestigious dagger handle is one carved from rhino horn - which more and more young men are able to afford, even though it may cost up to \$6000.

The Taiwanese demand for Indian rhino horn is so much greater than for the African species that it has driven up the price to phenomenal heights - averaging \$17,000 per kilo retail - and the shortage in supply exacerbates the situation.

Esmond Bradley Martin

Faced with what is a crisis situation IUCN and WWF have launched a Save the Rhino Campaign in an all-out effort to save this living relic of a distant age. As with the elephant the emphasis is on Africa and on those countries in Africa where the slaughter has been greatest.

An in-depth study International Trade in Rhinoceros Products has been conducted by Esmond Martin - consultant to the SSC African Rhino Group. And elsewhere in this Bulletin (page 5) Kes Hillman, Chairwoman of the Group, reports on the gravity of the situation and the corrective steps that must be taken.

For at least the past 15 years SouthAfrica has been a major supplier of horn to the Far East. In 1978 Japan officially imported 350 kilos at just over \$300 a kilo and Taiwan 166 kilos at \$86 a kilo. Esmond Bradley Martin

Some corrective steps have already been taken. Thanks to highly successful fundraising drives by many different conservation bodies - in particular a number of WWF National Organizations led by the Netherlands - anti-poaching squads in some of the most critical areas are now more realistically equipped to deal with "the enemy".

The enemy? The term is surely warranted. Those in the forefront of the fight to protect the big game of Africa may have to contend with armed gangs who do not scruple to kill

Rhinos are no dodos - yet

any person who comes between them and their lucrative prey. (On page 5 appears an obituary of Tanzanian game warden, Elias Lasheri, killed by poachers. His story shows just what front-line conservationists are up against - and the price they may be called upon to pay.)

For game scouts and wardens the financial reward can never be commensurate with the risk. Nor would they wish it to be. These men are doing what they are doing because of their love of wildlife, not because of their love of money. All the same where wages are totally out of line with the value of the animals they are called upon to risk their lives for, turning a blind eye (for a "consideration") to the deeds of poachers must sometimes be a powerful temptation. The amazing thing is that so few succumb.

Next to the horn the most widely used part of the rhino is its skin. In Singapore, Hong Kong, Macao, Taiwan and Thailand, people believe in its efficacy for curing skin diseases and occasionally for relieving rheumatic pains and blood disorders.

Esmond Bradley Martin

Better equipment, more patrolmen, even higher pay - all will help boost the morale of those in the field. But the biggest and best morale booster of all is the knowledge of full-hearted government support - meaning that at no level is corruption tolerated and that at all levels the law is enforced with the courts imposing penalties intended to deter the poacher rather than (as too often at present) openly to encourage him.

Happily there are clear signs that governments are now genuinely supporting their field workers. Kenya, Tanzania, Uganda, Zambia have all given total protection to the rhinoceros and made their positions very plain in recent ministerial statements. Kenya and Tanzania are now parties to CITES and so should no longer be exporting rhino horn. (Kenya in particular was formerly exporting

enormous quantities.) It is to be hoped that the courts will be similarly stern with offenders.

In determining action priorities on behalf of Africa's rhinos IUCN has adopted four main criteria: a government's willingness to act; the existence and enforcement of strong laws; the presence of a viable rhino population; the urgency of the need for action. Nine countries have accordingly been singled out for assistance: Botswana, Cameroon, Kenya, Mozambique, Sudan, Tanzania, Uganda, Zaire, Zambia.

The family Rhinocerotidae has been around in one form or another for 60,000,000 years. During that time there have been 34 different species. Of these only five have emerged through the evolutionary mill as being "fit for survival". But of course evolutionary fitness is nowadays no guarantee of continued existence.

Will the rhino join the ever-lengthening list of animals which, though perfectly adapted to life and entirely secure within their natural domain, are made extinct by the "unnatural" actions of man? It is too soon to know the answer - but the species' survival prospects are certainly a whole lot brighter than they were.

During the first half of the 1970s the wholesale price of African rhino horn averaged \$33 a kilo. In 1976 the price began to rocket. That year it trebled to \$105 a kilo. In 1977 it reached \$190 and in 1978 \$300. By September 1979 the minimum wholesale price was \$675 - a 2000% increase in four years.

For Asian rhino horn the average wholesale price at this time (September 1979) varied between \$2200 a kilo in Thailand - "new stock" is smuggled in from Burma - and \$6500 in Hong Kong, where all rhino imports have been illegal since February 1979. The retail price in Hong Kong was then ranging between \$2000 and \$18,000 a kilo.

Esmond Bradley Martin

Canada's rhinos

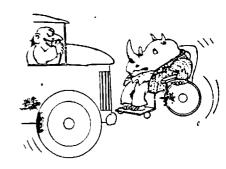
THE rhino is normally a large animal. Not in Canada, though - not yet. There the tiny Rhinoceros Party contested the general election but no rhino candidate was expected to match the performance of the (alleged) spiritual founder of the party, a Brazilian rhinoceros who was elected mayor of Sao Paulo.

Nevertheless the party campaigned on a broad front - 3000 miles broad - and with high hopes of improving on the 62,000 votes it gained in the general election last May.

The party's democratic credentials are impeccable. In the cause of regional equality it proposes that the Great Lakes and the Rocky Mountains be redistributed among all 10 provinces. In the cause of linguistic equality it recommends three official languages, English, French and illiteracy - with retraining (where necessary) for those seeking illiterate fluency. In the cause of happiness equality (or equal unhappiness) it supports capital punishment

all Canadians should spend one winter in Ottawa.

Certain political pundits detect a leftward drift in the party - exemplified by a 5-year plan (as in all good socialist countries) to change driving on Canada's roads from the right side to the left, beginning with heavy trucks and ending with wheel chairs.



Action to save Africa's rhinos

Ever since the middle of the 19th century when big-game hunters first penetrated the hinterland of Africa, rhinos have been in decline. During the 1970s rates of decline accelerated. As many as 90% of the rhinos have been lost from many East African parks and reserves.

Hit by excessive hunting, African rhino populations have also suffered from loss of habitat due to expanding human populations. On top of this there has been a continuous and growing eastern market for rhino products. Apart from the value of the skin for shields, as in Somalia, the use of the horn as a club, and general use of the meat, rhino parts have no special significance in Africa, and the African market makes no great demands.

In the East, however, all parts of a rhino are revered for a variety of purposes. This has long since reduced the three species of Asian rhinos to minute relicts of their former populations. The black (Diceros bicornis) and northern white (Ceratotherium simum cottoni) rhinos of Africa are now facing the same threat. But is it due to genuine demand or to the creation and then exploitation of a market?

Rhino horn's reputation as an aphrodisiac seems not only undeserved but largely nonexistent. From Dr Esmond Martin's recent investigation of the trade in rhino products in Hongkong, Singapore, Thailand, Macao, Taiwan and Sri Lanka, it appears that only in India (where an earlier visit was made) is rhino horn or skin used as an aphrodisiac although occasionally rhino penis is. The

ON 1 June 1979 Elias Lasheri, a Tan-

zanian game warden, was killed by

poachers at Kiripa, Kakesio, in the

western part of the Ngorongoro Con-

servation Area. Armed with subma-

chine guns the poachers were after

sio met 12 men carrying an assort-

ment of heavy weapons, including

submachine guns, who asked him

where they could find leopards and rhi-

nos. The teacher sped to Endulen,

about 40 kilometres away, and repor-

ted the incident to Elias Lasheri who

immediately sent to headquarters for

reinforcements while himself leading a

small advance party to Kakesio, By 31

May two units of six and seven patrol-

men had converged on Kakesio and

On the morning of 1 June, led by

Maasai informers, Elias Lasheri's unit

arrived at the foot of a small hill on

the search for the poachers began.

On 29 May 1979 a teacher at Kake-

leopard and rhino.

Dr Kes Hillman is chairwoman of the SSC African Rhino Group. She has travelled widely in the Arctic, the Middle East and North Africa, and since 1973 has lived in Kenya where she has taken part in various research and conservation projects. In 1977 she became Scientific Deputy to Dr lain Douglas-Hamilton in order to assist on the IUCN Elephant Survey.

horn, however, is prescribed for a variety of ills, such as fevers, headache, toothache and insanity.

It seems unlikely that this type of demand could grow suddenly and spontaneously. Other traditional medicines are available for the same purposes and modern medicines are effective. Yet import statistics indicate greatly increased quantities of rhino horn traded in the 1970s and prices are now in the region of \$600 - \$700 per kilo wholesale and \$1000 retail.

The other main market is the Middle East, particularly the Yemen, where the traditional use is for dagger handles, or jambias. Imports to Yemen increased more than 4fold in the '60s and another 7-fold or 8-fold in the '70s. In 1976 Yemen was importing more rhino horn from Kenya than were all other countries put together. But this is not too surprising. With expatriate Yemenis working in the oil-rich states a far higher proportion of the 50,000 or so young men coming of age every year can now afford an

been seen by various people and a number of suspects have been rounded up.

Mr Lasheri joined the Ngorongoro Conservation Area Authority in 1965 as a game scout and quickly showed that his interest and talents lay in antipoaching work. Being a Maasai speaker he was able to get information on poaching from the Maasai pastoralists who are the only residents allowed in the Conservation Area.

In 1970, after a one-year course at the College of African Wildlife Management in Mweka, he was made game assistant and joined the headquarters anti-poaching squad. He discovered that poaching was most intense in the south of the Conservation Area and in 1974 he was promoted game warden with responsibility for leading and organizing patrols in that area.

Elias Lasheri's fame as a lawenforcer spread throughout the Conservation Area and its environs, and wherever he was posted the poachers changed their tactics. In 1976 they shifted their main operations to the west and Mr Lasheri was accordingly made second-in-command of the western zone and leader of the western anti-poaching squad.

Elias Lasheri leaves a widow and five children.

expensive dagger, one made of rhino horn rather than cow horn or bone.

The IUCN African Rhino Group is at present assessing the status of rhinos in Africa. and identifying their conservation needs. This is being done by personal visits to if untries and through discussions and correspondence including a detailed questionnaire (following on from the one which Professor Klingel circulated during his period as Chairman of the group).

Rhino distribution

Black rhinos (Diceros bicornis) occur in Cameroon, Central African Republic (CAR), Chad, Sudan, Ethiopia, Somalia, possibly northern Zaire, Uganda, Kenya, Tanzania, Malawi, Zambia, possibly Botswana, Angola, Mozambique, Zimbabwe, South Africa and Namibia. In many of these countries, however, numbers are in the low hundreds or even tens. Substantial populations are only known still to remain in the Luangwa Valley in Zambia, in south-eastern Tanzania, particularly in the Selous Game Reserve, and possibly in northern CAR.

There are probably between 10,000 and 20,000 black rhinos remaining in Africa, but almost everywhere their ranges and densities and overall numbers are declining. In some areas of Kenya remnant individuals are now so scattered that those populations are unviable. The total Kenya black rhino population is estimated to be less than 1500 which is perhaps a tenth of what it was 10 years

The northern race of white rhinos (C.s. cottoni) is reduced to relict populations totalling probably less than 1000 individuals in southern Sudan, Uganda, CAR and northern Zaire. They are badly in need of improved protection. White or squarelipped rhinos (Ceratotherium simum simum) in South Africa were reduced to a single small relict population, but protection since then has led to such healthy increases that nearly 2500 have been successfuly translocated to zoos and reserves and approximately the same number remains elsewhere. It has even been found necessary to reduce the numbers of males (those not in demand for translocation) by controlled shooting.

Country by country, the status, the amount of information and the needs vary considerably. In Angola rhinos probably number in the hundreds and are almost certainly decreasing. The amount of traffic of rhino horn across the border indicates a relatively substantial population but very little is known and a visit by a Portuguese-speaking representative is being negotiated.

In Botswana 50 southern white rhinos, which were introduced into Chobe National Park, are apparently thriving, but less than 20 black rhinos are thought to remain.

In Cameroon there are possibly just over 100 black rhinos, largely in the north. They have been protected from hunting since November 1974, but the Minister for Agriculture is aware that the habitat must be safeguarded as well. Pierre Pfeffer for IUCN is visiting the country in March to discuss the situation.

At least 1000 black rhinos ave believed to live in CAR. Less than 50% of them are in protected areas. Northern white rhinos probably exist in the east of the country, but little is known about them and there are no

which the poachers were said to be encamped, together with their booty. The unit divided up and cautiously approached the hill. But on entering a clearing a volley of machine-gun fire met them. Elias Lasheri was hit twice and died instantly.

Throughout the whole of that week the area was combed for the poachers without success. However they had