

Rhino's last stand in africa

BROOKE CHILVERS

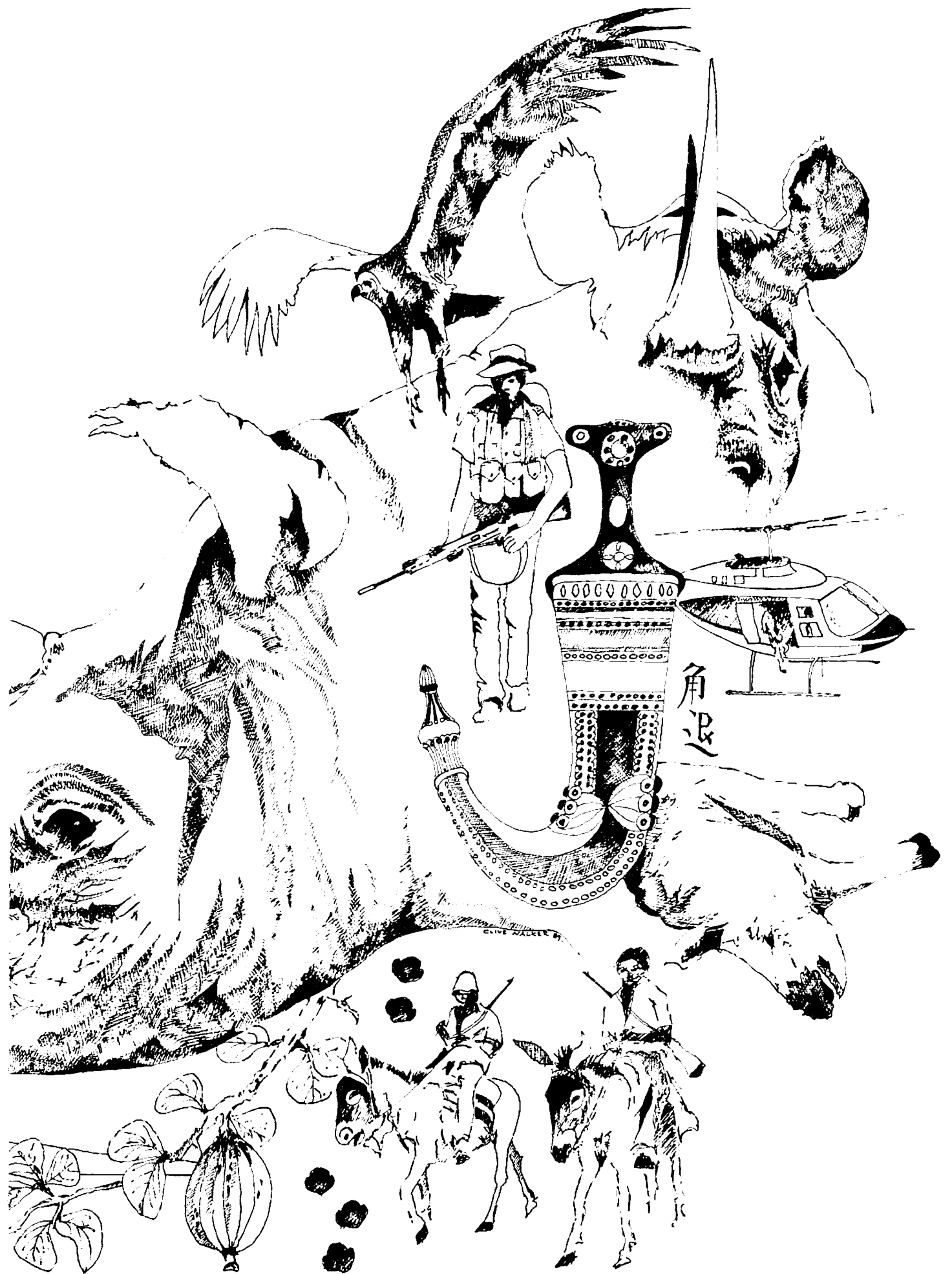
Since the 1970s, black rhino populations in Africa have been crashing towards the point of no return. Numbers are down by 99 per cent in Kenya, 96 per cent in Zambia and 93 per cent in Tanzania. Rhinos have become extinct in Somalia, Ethiopia, Chad and Uganda, and are only moments away from disappearing in the Central African Republic, Sudan, Angola and Mozambique. On a continent where there were some 65 000 black rhino less than 20 years ago, today fewer than 4 000 remain.

In the years before 1880, Mr William Cotton Oswell bagged 89 rhino during an excursion into the interior of South Africa; Captain Cornwallis Harris could shoot two or three a day within view of his hunting camp; C J Andersson took 60 in a single season. In Kenya, Captain Willoughby collected 43 black rhino on safari and Count Teleki, 99.

One hundred years later, in Zimbabwe, a tall, tired, khaki-clad game warden Glenn Tatham of Operation Stronghold was standing over the body of the 41st poacher killed by his game scouts since 1986. "Zimbabwe has the single largest black rhino population left in Africa – a mere 1 775 animals," explains Tatham, "and the majority live in the terribly vulnerable Zambezi Valley and Sebungwe areas." Vulnerable, because since July 1984, 439 Zimbabwe rhino have been poached by Zambian nationals crossing the Zambezi River which forms the international border between the two countries. Both poachers and scouts are playing for keeps now because this is the rhino's last stand in Africa and his time is fast running out.

Some scientists date the emergence of modern black and white rhino species to three or four







million years ago, while others stretch their past to 19 to 23 million – or even 60 million – years ago. Whether Miocene or Pleistocene, *Homo sapiens*' earliest, earliest ancestors confronted the grunt of a shadow half-hidden in the browse: they couldn't have known that they would become the adult rhino's only enemy.

Until the 1920s, despite three hundred years of impressive incursions by sport hunters and the European urge to eliminate potentially dangerous animals from "civilized" areas, some one million black rhino roamed sub-Saharan Africa, yet the renowned big game hunter F C Selous noted that both black and white rhino had disappeared from most of their former range by 1880, "probably through some freak of fashion in knife handles or combs or what not in Europe or Asia." The last black rhino in the Cape was shot in 1853. Some black rhino and a remnant scattering of about 20 white rhino survived in Zululand: a lone female black rhino was seen in the Kruger National Park in 1936. The rhino story was sad testimony to the "civilizing" of Africa.

The awakening in developed nations to conservation in the early 1960s assured the survival of southern white rhino (*Ceratotherium simum simum*). Within ten years, over 3 500 of the animals had been translocated from game reserves in Natal to other South African parks and to zoos, parks and game ranches virtually throughout the world. By 1972, numbers had recovered sufficiently for white rhino to be hunted again in South Africa after an 86-year ban. Some 3 400 rhino live in the country's reserves, while a world population of southern white rhino is estimated at 4 000 to 5 000. Northern white rhino are in dire straits, however: less than 20 remain in Zaire.

The alert for black rhino sounded only in 1980, with the World Wildlife Fund's "Year of the Rhino". But it was already too late for most of the rhino in the greater part of Africa. Starting in the 1970s, first in Kenya, then reaching west to Uganda and the Central African Republic . . . , then creeping south to Tanzania . . . , then to Zambia and now overflowing into Zimbabwe, the bloody path of poachers has littered the bush with tens of thousands of hatcheted rhino corpses. Within

the last seven years, rhino numbers have plummeted in Tanzania from 3 795 to 255, in Zambia from 2 750 to 95, in the Central African Republic from 3 000 to three . . . Why?

The Bad Guys

Money talks. Money corrupts. Money arms poachers with AK-47 assault rifles, Kalashnikovs, or .375's to kill this mythical beast for the supposed magical curing powers or the symbol of wealth of its horn. One hundred rhino per month disappear from the African bush in order to reduce fever in China, to pep up rich men in India, to suck out snake poison or heal skin diseases – and to adorn the waists of the male citizens of the Yemen Arab Republic (North Yemen) in the form of daggers with handles of rhino horn called djambias.

The present \$3 to \$6 million per annum market for rhino horn has its roots in earliest Babylonian, Egyptian and Greek cultures. Rhino horn was worth 63 cents per kilogram in the 1840s, \$11 in 1950 and \$300 in 1978. In 1988, the best horns, weighing between one and a half and three kilograms, are worth \$1 000 per kilo or \$500 per pound for what, in fact, is really just a dense mass of compacted hair – not unlike the keratin of a buffalo hoof – that polishes up nicely. (Interestingly, the age or sex of rhino cannot be estimated by horn size.)

Plainly speaking, the real bad guys on the buying end are the Yemen Arab Republic, United Arab Emirates, Singapore, Taiwan, China and South Korea. In theory, Hong Kong stopped imports in February 1979, Japan in November 1980 and Singapore in October 1986, which might explain why the North Yemen market for rhino horn dropped from a peak of 4 tons (or 1500 dead rhinos) in 1980 to about 400 kg per annum since 1986. (In 1982, Yemen prohibited the import, but not the export of rhino horn.)

On the supply side, the killing of rhino and trade in horn are illegal practices in all African countries except Burundi, a trading hot spot for rhino and elephant products. All signatories of the first Convention on International Trade in Endangered Species (CITES) in 1976 banned trade in rhino horn. But of the 20 African countries that had rhino, five have not signed CITES. (Namibia, which is not a signatory to



CITES, was the last country to allow trade in rhino horn, but since 1984 has voluntarily complied with CITES, as do the National Republics within South Africa.) In the meantime, only 11 of the original 20 still have their rhino to brag about – and out of the remaining 60 or so rhino populations, almost half consist of ten animals or less, which means they would probably be doomed even without further poaching.

In 1988, a workshop convened by the Rhino and Elephant Foundation brought together 150 desperate and angry game rangers, park wardens, veterinarians, research scientists, game capture specialists and enforcement officers from Kenya, Zimbabwe, Zambia, Botswana, Namibia, Swaziland, South Africa and its black independent republics to develop a continental strategy for rhino conservation.

When the discussion turned to the record of shocking indifference or sickening corruption of most African governments concerning wildlife, the speakers preferred not to be named: "Trade

bans and treaties are meaningless to corrupt government officials who are above the laws of their own lands and exploit their diplomatic pouches to transport illegal, banned rhino horn from Africa to the East," says one. "It is time to name names in spite of the over-sensitivity of black African governments... to create public embarrassment and apply both diplomatic and economic pressure to stop poaching" says another.

The local parks and conservation departments themselves are often a danger to the animals they proclaim to protect: an estimated one-third of the rhinos poached in Kenya over the last ten years were killed by employees of the Wildlife Department. In 1988, several game scouts with over 20 years of service in the Umfolozi or Hluhluwe Game Reserves in South Africa are serving time in prison – for poaching within those reserves.

Unfortunately, even money can't solve all of the rhino's problems. A 1988 World Wildlife Fund discussion paper reports that WWF has spent

"When these highly specialised and most interesting creatures have completely disappeared from the face of the African veld, there will be no living species of animal left alive which resembles them in the remotest degree."

Selous, 1908





more than four million Swiss francs – which tops two and a half million dollars since 1962, on 42 rhino projects, including 32 for black rhino. During that same period, the number of black rhino declined from about 100 000 to less than 4 000. WWF spent well over half a million dollars in Garamba National Park in Zaire to save the desperately threatened northern white rhino, *Ceratotherium simum cottoni*. Yet only 19 of these rhino remain in all Africa. Within ten years they disappeared from the Sudan, Uganda, Chad and the Central African Republic.

But money helps, and speakers at the rhino workshop explained their strategies to save Africa's last black rhino.

Kenya: The Rhino Action Plan

Ten years ago, a proposal by Dr Anthony Hall-Martin of the South African National Parks Board to dot the African map with small populations of well-protected rhino was shot down by his colleagues for "being artificial, unnecessary, too expensive . . . causing infighting and inbreeding between rhino . . . and facilitating poaching."

But today Kenya has relocated 100 of its 150 remaining rhino to protect and study them in fenced, patrolled sanctuaries on both park and private lands. "The situation has stabilised since mid-1986 and there are now more known births than deaths," said veterinarian Dr Dieter Rottcher.

There are fenced sanctuaries in Nakuru, Aberdares, Tsavo and Meru National Parks and on private ranches like Solio, Lewa Downs, Ol Joli and Laikipia.

Zimbabwe: Operation Stronghold

White rhino were extinct by the turn of the century in Zimbabwe, but black rhino remained locally abundant until the 1940s, despite the massive game culls in the tsetse fly control era. In the 1960s rhino were even reintroduced into hunted-out areas like Hwange National Park. And so, while the rest of Africa was losing its black

rhino at an overall rate of 12 per cent per year, the trend in Zimbabwe, especially the Zambezi Valley and Sebungwe areas, was actually positive, and the future looked secure.

Then, in a single afternoon in January 1985, six rhino were killed in the Lower Zambezi Valley. The war on rhino had suddenly moved south of the Zambezi.

"Saving rhino is mainly a question of protection. And that costs money – lots of money," explained Rowan Martin of Zimbabwe's Department of National Parks. "The minimum annual expenditure for protected area management – in an easily protectable area, requiring a single game ranger for every fifty square kilometres – is two hundred dollars per square kilometre. Anything less is just throwing away money. We are spending only ten dollars a square kilometre and losing rhino."

The lower Zambezi holds one of only two black rhino populations still numbering over 400 animals. But with an area of 12 000 square kilometres, where Martin says they could use five times the present number of field staff, efficient protection would cost up to seven million US dollars a year for the Lower Zambezi alone, in a country where an incredible 12 per cent of the land is in conservation areas. Obviously, there is no hope of meeting such costs.

Since 1986, Operation Stronghold has been saving rhino by killing Zambian poachers, although its real task is detection and intervention. "Each gang stays in the valley for an average ten days. Our job is to find and arrest, or if necessary, to kill poachers before it's too late for the rhino," says Tatham. Black and white scouts, whose fighting experience in the bush goes back to opposite sides of the Rhodesian war for independence, are combining radio equipment, a helicopter, training and motivation with a clear-cut objective. Patrols can be on the trail of an armed gang within hours instead of days – and the consequences are often fatal.

Nevertheless, 70 poached rhino carcasses were found in 1987. Zimbabwe, too, is pulling back its line of defence: 284 rhino have been translocated to safer parks or behind the fences of private ranches in the Midlands, the deep heart of the country away from the borders of Zambia and Mozambique.

South West Africa/Namibia: Conservation by consensus

At the turn of the century an estimated 600 desert rhino inhabited Kaokoveld in northern Namibia and there were another 600 or so in Damaraland to the south. By 1965, less than 100 black rhino remained in all of South West Africa/Namibia. Local poaching by semi-nomadic Herero tribesmen moving through Kaokoveld began in the 1970s, in what was then a vast, unprotected area, administered from afar by South Africa's Department of Bantu Affairs. The incentive to poach blossomed with the 1980 drought that left people destitute and killed 80 per cent of their cattle.

Since the establishment of a Namibia Wildlife Trust rhino project in 1982, the rhino population in Kaokoveld and Damaraland has grown from 40 to 100. "Now these desert rhino are state-owned, but live on communal/tribal land," said Rudi Loutit, Chief Nature Conservator. "It's a vast area four times the size of Kruger Park with a density of two rhino per hundred square kilometres and it had no manpower or money to control poaching." A cooperative effort between the central government and local tribesmen to save the region's rhino and elephant led to the hiring of Herero "auxiliaries" by their own headmen to patrol their land and report on poaching activities, thus protecting what have become "their" rhinos.

South West Africa/Namibia's rhino population of 400, including 350 in Etosha National Park, is now considered "stable".

South Africa: A National Strategy

In 1987, South Africa put down on paper a national strategy to conserve and increase its black rhino and Namibia's.

By establishing a "founder population" of Kenyan *Diceros bicornis michaeli* rhino in Addo Elephant National Park and reintroducing desert

D. bicornis bicornis to Auwabies and Vaalbos National Parks after 136 years of extinction in the Cape, and redistributing Zululand *D.b. minor* black rhino in reserves throughout South Africa, the strategy is well on its way to having three of the four major subspecies prospering in South Africa.

"Our goal now," says Dr Martin Brooks of the Natal Parks Board, "is to breed up and protect 2 000 *D.b. minor*, 2 000 *bicornis* and 100 *michaeli* in the region as quickly as possible."

Rhino biology isn't always cooperative, however. Unlike the docile, grass-eating white rhino, black rhino require diverse, dense browse and permanent fresh water. In the best of circumstances, rhinos start breeding when about six years old, and average some two and a half years between births. A 16 per cent mortality rate in the first year when predators like lion, leopard and hyena can take youngsters, also takes its toll. The bottom line is that a young, healthy and safe population of 100 rhinos produces only between three and 11 calves per year. Thus, "at a three per cent growth rate, it would take forty years to turn 580 *minor* into 2 000. By pushing that rate up to six per cent, we can do it in 20 years and at eight per cent, in only 14 years which is entirely feasible," says Brooks.

In spite of an unpredicted drop in rhino numbers, apparently due to habitat degradation for browsers, Natal's parks are virtually the only source of "surplus" rhino in Africa, supplying about 19 black and 130 white rhino per year to other conservation areas.

Africa's basket cases

Tanzania: until 1981, Africa's largest game reserve, the 55 000 square kilometre Selous, held 85 000 elephant and 3 000 black rhino – the largest populations on the continent. Only 12 000 elephant and 200 rhino remain.

Zambia: here 3 500 rhinos have been reduced to less than 100 in under 15 years. Zambia's national parks are underfinanced, understaffed, and there is little training or motivation for anti-poaching teams. With the explicit consent of corrupt government officials, poachers fearlessly supply the Lusaka-based trade with horn poached in Zimbabwe.

Government indifference to the plight of Africa's most fragile subspecies, *D.b. longipes* or the north-western black rhino, has allowed them to be exterminated within 10 years; populations have dropped from 3 000 to three in the Central African Republic and from 110 to 30 in Cameroon and have probably become extinct in Chad and Sudan.

Wildlife administration has vanished during the civil wars in Angola, Mozambique, Sudan, Chad, Ethiopia and Uganda, taking the rhino with it.

The statistics add up to only one thing: failure. Failure by the frayed patchwork of African nations, of international conservation societies, legislation, treaties, education, research and money to stop the slashing of rhino numbers. The invincible combination of illegal trade, inadequate international treaties that don't result in fines or prison sentences, government indifference or blatant corruption, plus sheer demographics spell bad news for black rhino.

Two steps forward

Assuming it's not too late . . . and it may be . . . the rhino workshop's agenda of action for 1989 is to:

- (1) enlist the assistance of international agencies like Interpol to research and expose the network of illegal trade;
- (2) help create internationally enforceable legislation where violations result in arrests, fines, prison terms and bad publicity;
- (3) promote the use of substitutes for rhino horn, such as water buffalo horn for carving and saiga antelope horn (estimated population: one million) for its supposed medicinal properties;
- (4) educate suppliers and users about the devastating effects of "business" on rhino populations.

But what about Africa's long-term problems, which throw into question the very existence of all large mammals? Africa's human population is expected to double every 18 to 20 years! What about 10-year drought cycles and deforestation? Is there enough land, fuel and water for these rural economies to share with Africa's elephants, rhinos and buffaloes? "Remember, Africa's parks were established in an era of vast, uninhabited areas with no demographic pressure to share the parks' natural resources," explained Salomon

Joubert, chief warden of Kruger Park. And what about civil wars and wars of liberation that drag on for a generation or more . . . ?

If the ideal of maintaining breeding populations of rhino in the full range of their natural habitats becomes outdated as more African nations teeter on the brink of collapse, can the 183 black rhino in 71 zoo populations around the world guarantee that black rhino will not become extinct? Yes . . . and no.

Virtually all zoo black rhino originated in Kenya (*D.b. michaeli*) which does nothing to preserve the other subspecies or ecotypes of African rhino; the International Union of Zoo Directors and the World Wildlife Fund do not recognise such considerations in their programmes for rhino.

In addition, 19 of these zoo populations consist of a single animal; 22 of a single male and female pair, which doesn't turn either of them on enough to get the reproductive juices flowing; 25 consist of one male with two or more females, which sounds like fun but doesn't produce results. Only five consist of a single female with two or more males – and that is what makes rhino babies. A studbook or Who's Who in rhino reproduction, must also be compiled to keep the genetic material circulating and avoid inbreeding.

But not everyone is content to see black rhino exported from Africa to found safe breeding populations abroad. Game Coin's rhino project, which should have paved the way, got off to a disastrous start when three of five animals imported from Natal died soon after arrival in Texas, as did the first born calf. Accusations of incompetence, neglect and politicking shook up Game Coin's administrative guts and soured the goodwill of the conservation community. All further such projects should now be given the seal of approval by the American Association of Zoological Parks and Aquaria (AAZPA).

The ultimate tragedy is that a number of African nations prefer to lose all their rhino rather than to translocate them abroad, or even into safe reserves in South Africa, because they interpret such action as an admission of their inability to conserve rhino at home. Thus, the northern white rhino and northern-western black rhino are next on the Noah's Ark hit list for extinction. [✓]

