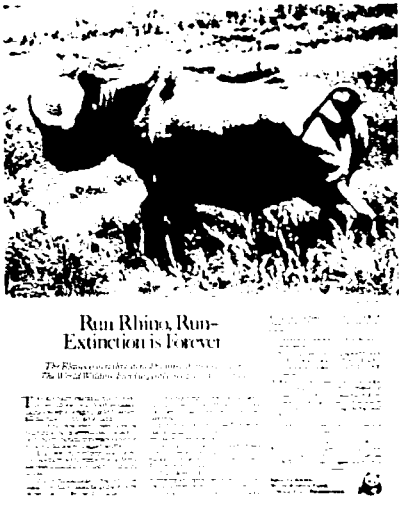
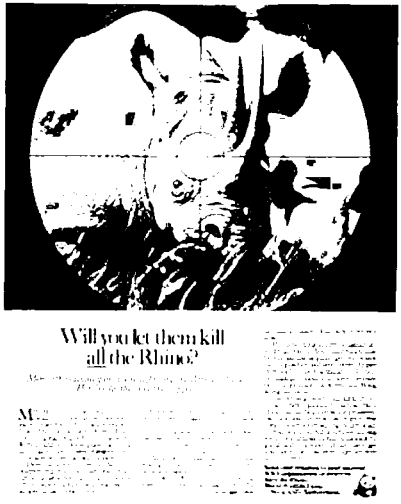
In an intensive campaign which started in 1980, WWF raised about $ 2,500,000 for elephant and rhino conservation which is now financing projects in Africa and Asia





BOTSWANA, Translocation of White Rhino (Project 1966)

The Okavango Wildlife Society (OWS) was intrumental in the translocation of 48 white rhino by road in 1974-76 from Natal, South Africa, to Botswana, a distance of more than 2,000 km. The Natal Game Reserves of Umfolozi and Hluhluwe now have more rhino than the areas can support and an early off-take is essential to avoid having to destroy some of them. The OWS and the Wildlife Department of Botswana have therefore initiated a further series of translocations with support from WWF/IUCN and the Frankfurt Zoological Society.

The aim is to reintroduce 150 white rhino to Chobe National Park and Moremi and Nxai Pan Reserves in Botswana. The rhinos are captured and transported by the Natal Parks Board from Umfolozi Game Reserve. In 1980, 24 rhino were translocated, of which two arrived dead. In 1981, 13 were moved. It is proposed to provide some of the rhinos with radio-collars so that they can be followed up by the Botswana Wildlife Department.

Okavango Wildlife Society

CENTRAL AFRICAN REPUBLIC, Management and Protection of Elephants (Project 3019)

A four-year project began in 1981 to study the ecology of the elephant in the Manovo-Gounda-St Floris National Park in the Central African Republic (CAR), so as to determine its movements, habitat use and status in relation to poaching pressure. The project includes ground surveys of both elephant and rhino. Two vehicles have been supplied to the project.

The Manovo-Gounda-St Floris National Park lies in a wooded savannah area of northeastern CAR, two days by road from the capital, Bangui, and covers 20,000 km^2. It has a population of 2,000-3,000 elephants and about 30 black rhinoceros. During the first half of 1980 about 300 elephants were killed by poachers. Adequate protection cannot be given to the elephants without better knowledge of their movements and behaviour. The black rhinos are also threatened by poaching, and continuous monitoring of their numbers is needed.

In December 1981, an international conference of Ministers of "Eaux et Forêts" was held in Bangui to study ways of controlling illegal grazing and poaching activities in the northern CAR. Of the six neighbouring countries invited only two, Gabon and Congo, sent representatives. The CAR Minister called for a commission to be established of representatives from Chad, Sudan and the CAR, to deal with the grave problem of poaching on the northern and eastern borders of the CAR.
Later in December, the biologists assigned to the project left Bangui for Manovo-Gounda-St Floris National Park to start the survey. The African Wildlife Leadership Foundation is also contributing to this project.

U S Peace Corps
Bangui, CAR

KENYA, WWF-Kenya National Project - Laikipia Project

A ranch of 90,000 acres in the Laikipia area of Kenya is the home of between 70 and 80 rhinos; in addition there are between 200 and 300 elephants, and numbers of greater kudu, leopard, cheetah and lion with herds of savannah game. Until recently the owners of the farm have undertaken protection of the wildlife as part of their farm security but two seasons of very low rainfall has caused economic stress and they found that they could not continue to support the added burden of ranger patrols to track and guard against wildlife poachers. The conservation organizations were therefore appealed to for support.

Losses of rhino to poachers had been small but significant and the poacher pressure was increasing. The government's anti-poaching unit was called in to assist but this proved unsuccessful and they were withdrawn. A plan was developed to increase the ranger strength from 8 to 16, to provide firearms, uniforms, tents and a radio system. Authority to arm the rangers was obtained and rifles were provided to replace the bows and arrows previously carried by the ranger force. WWF provided 16 sets of uniforms and donated funds from which radios, tents and salaries were paid.

A report in July from the ranch manager stated that expenses were very high during 1981 due to abnormally high pressure from poachers, but the situation was being contained and it was hoped to get on top of the situation within two months. Six rhinos were born during 1980-81; rhinos poached during the same period numbered five (four in 1980 and only one in 1981).

It is recognised that this is a "survival" measure and gives no long-term security to the wildlife on the ranch, but as the same situation pertains elsewhere throughout the country it must be regarded as acceptable. The security provided within the ranch is greater than that provided within the national parks and considerably greater than in the reserves.

Long-term protection of the rhinos and endangered game can only come from outside Africa by the elimination or strict control of the trade in wildlife products.

E T Monks
WWF-Kenya

KENYA, Rhino Action Group (Project 1724)

Investigations by WWF-Kenya in 1977 revealed that the export of rhino horns in recent years from Kenya must have resulted in a very severe depletion in rhino numbers. As a result of the concern expressed by conservationists, the Kenya Rhino Action Group (KRAG) was formed under the sponsorship of WWF-Kenya. It consisted of biologists, zoologists, government wildlife staff and all persons having an interest in the future of the rhinoceros. IUCN revitalised the SSC Rhino Group and WWF/IUCN established its Rhino Project with Dr Kes Hillman as chairman. KRAG and the WWF Rhino Project co-ordinate their work under the chairmanship of Mr Ian Grimwood.

A series of discussions located the priority areas and, in consultation with the Wildlife Department a Rhino Action Plan was evolved setting out the immediate and long-term priorities. Since it was not possible to give protection with anti-poaching units over the whole of the rhinos' range, it was decided that wherever possible rhinos should be captured and translocated to

safer areas where such protection was more likely. At the same time, the President of Kenya was approached and asked to extend special protection to the rhino over its whole range. This he did in a directive to the Wildlife Department.

To support the department by the provision of additional funds, KRAG undertook fundraising programmes and public awareness endeavours including

For some rhinos, capture and release in the safety of national parks may be the only answer

Darting a white rhino from a helicopter in Kenya *Photo: WWF/Peter Jackson*

film shows, articles in the press and the production of stickers. A special appeal was launched for the rhino and a Rhino Fund established.

The Wildlife Department diverted its Capture Unit to the capturing of rhino and their relocation into national parks. The operation was not without its casualties and of some 40 rhinos captured, eight died. Casualties occurred primarily after release.

The Anti-poaching Unit increased its activities but animals still continued to be lost. Not until the killing of a notorious Somali poacher, nicknamed "Big-Foot" and the break-up of his gang did the situation start to improve.

Towards the end of 1981 the situation began to deteriorate again and KRAG was advised that nine rhinos had been killed within national parks. The capture of rhinos for translocation has virtually ceased and conservation of the rhinos within the national parks has lost its impetus.

Outside the national parks there are small concentrations of rhinos which are

Transporting a white rhino *Photo: WWF/J.H. Blower/J. Allan Cash*

being protected by ranch owners and KRAG is giving support to these ranchers to continue protection.

The Wildlife Department is considering the establishment of two areas specially for rhinos within Meru Reserve and Tsavo West National Park. These areas will be fenced with electric fencing and an effort will be made to concentrate under close guard as many rhinos as the area can stand. To assist in this project KRAG has purchased 12 rhino crates for translocation.

So far KRAG has donated over 5 million shillings (US$500,000) to rhino conservation.

E T Monks
WWF-Kenya

MALAWI, Conservation of Elephants (Project 1665)

The project forms part of the general research programme of the Wildlife Research Unit of the Malawi Department of National Parks and Wildlife. Its purpose is to assess the status of the elephant populations in Kasungu National Park and Nkhotakota Game Reserves, both situated in the central region of Malawi. This involves research on numbers, occupance, age structure, calving interval and age at sexual maturity, as well as monitoring mortality due to poaching, crop protection shooting and natural factors.

In addition to standard techniques of photorecognition to determine social organization, photogrammetric methods to analyse age structures and aerial survey to estimate numbers and distributions, methods involving the use of elephant droppings to estimate numbers, distribution and age structure are being tested. These will provide cheap and practicable methods where other techniques such as aerial survey cannot be used, as in forest or mountainous country.

Finally, research on elephant browsing impact on Brachystegia woodland is being carried out in conjunction with the Wildlife Research Unit woodland monitoring program. This is intended to provide information on the dynamics of the elephant-woodland interaction in this extensive though comparatively little-studied biome.

A preliminary estimate of about 3,240 elephants was made for Nkhotakota Game Reserve. A high level of illegal activity was observed in the Reserve, which has probably kept the elephant population at a low level, well below the carrying capacity, for many years. This Game Reserve contains some of the most magnificent scenery in Malawi and has a relatively high carrying capacity for wildlife. It has a good potential for development as a tourist area. Funds are urgently needed to upgrade the law enforcement capability and install basic tourist facilities.

The number of elephant in Kasungu National Park is currently estimated at about 800-1,000. The numbers are probably declining, and the distribution has been considerably compressed over the last three years, most elephant now being found in 20% of the areas of the park in the southeast. These changes are largely due to the sharp increase in poaching over the last three years. Total elephant mortality due to poaching, crop protection shooting and natural factors, is now clearly in excess of the annual increment. In spite of, or because of, this human disturbance, the regulatory mechanisms of the elephant population appears to be responding by gradually increasing the reproductive rate; cow elephant are starting to reproduce younger and having calves more frequently than in former years. Clearly in Kasungu National Park also, the law enforcement capability need to be upgraded by increasing the number of game scouts and establishing radio-linked listening posts in key areas.

Methods for the study of elephant droppings need further improvement, but enough information is now available to make these into practicable and cheap techniques for estimating elephant numbers, occupance and age-structure, particularly in areas where other methods are not feasible.

The browsing impact study is in its early stages, and details cannot yet be reported. It is clear, however, that elephant show selectivity for certain tree species and height classes and it appears that heavy elephant use of Brachystegia woodland is Kasungu Park produces an equilibrium structure of coppiced woodland.

Hugo Jachman
WWF/IUCN Consultant

SENEGAL, Conservation of Elephants (Project 1774)

WWF/IUCN have supplied a Land-Rover and portable telecommunications unit to the National Parks Service of Senegal to combat poaching of the last elephants in West Africa.

The arrival of the radio equipment was timely and within a month had enabled park guards to drive away a gang of six poachers armed with rifles. The walkie-talkie sets are particularly useful for foot patrols in areas which cannot be reached by vehicles. The Land-Rover has been effective in opening up the Mount Hassirik area which forms the core of Niokolo Koba Park and contains the main concentration of elephants.

Warden of Niokolo Koba Park

SUDAN, White Rhino - Proposed Shambe National Park (Project 1949)

The African Rhino Survey, carried out by WWF/IUCN and the New York Zoological Society (NYZS) identified the northern white rhinoceros (Ceratotherium simum cottoni) as being the most endangered sub-species of rhino in Africa. There are considerably less than 1,000 left in the wild and they only occur in southern Sudan and in one park in northern Zaire, apart from possibly a few at the eastern side of the Central African Republic. In February 1980 the Ministry of Wildlife Conservation and Tourism of southern Sudan and Peter McClinton (FZS) with Kes Hillman and Ian Grimwood (WWF and IUCN) identified the Shambe area as the best place to ensure conservation of a viable population of these rhinos in Sudan, as well as conserving a unique habitat and a wide variety of other species, many in very large numbers.

The Shambe area, with its huge expanses of seasonally flooded grasslands, wooded savanna and the swamps that border the ancient Nile, has long been regarded as the best and most accessible for white rhinos in Sudan. Flights over that area in 1979 and 1980 indicated substantial numbers of them as well as elephants, Nubian giraffe, lechwe and roan. It has an old port on the River Nile and is therefore accessible at all seasons for development and later tourism. Dinka people and their cattle use part of the seasonally flooded grasslands there and the project proposal, drawn up to give the existing game reserve and surrounding area national park status and increased protection, was to some extent a compromise with their needs. It was therefore considered necessary to develop it only in conjunction with an investigation of the use of the proposed park and surrounding areas by the wildlife and people, to ensure that conservation had a future by being compatible with and advantageous to the human development and that the whole ecosystem was part of the conservation/management complex.

Kes Hillman and the then prospective warden for the area, P. Snyder, surveyed it on the ground in November 1980 and held discussions with the local game officers and village headmen. A detailed report was made to IUCN including recommendations for a modified approach to the conservation of the area and for conservation needs in southern Sudan. Poaching was found to be heavy, even by government officials, and the Wildlife Department was at an even greater disadvantage than many of the other officials there through lack of fuel, spare parts, equipment, training and hence motivation.

An aerial survey of 15,000 km^2 of the Shambe and surrounding area was carried out in April 1981 by Hillman, Snyder, Somerlatte (a lecturer at the University of Juba) and Tear, using a Cessna 185 belonging to African Wildlife Leadership Foundation, funded by WWF. The results reported indicated the severity and urgency of the poaching problem which had accelerated for rhinos over that dry season. Only dead rhinos were seen throughout. Live rhinos, however, are notoriously difficult to see from the air and there were reports of 25 seen in one day from the ground. There were also more than 800 elephants (Loxodonta africana), 21,000 tiang (Damaliscus corrigum tiang), 20,000 kob (Kobus kob leucotis), 3,600 buffalo (Synceros caffer), 7,000 reedbuck

(Redunca redunca cottoni), 1,700 hartebeeste (Alcelophus buselephus lelwel), 1,500 of the rare roan antelope (Hippotragus equinus) and 1,370 of the endangered Nile lechwe (Kobus megaceros) as well as many others and 130,000 domestic stock. More than 50 rhinos, 250 elephants and 700 unidentified carcasses were estimated to have died; although some of those were of cattle, others were the result of legal hunting and possibly drought. It indicated not only the richness of the area, but the severity and urgency of the poaching problem.

As a result it was recommended that the primary objective of the main project should be the practical conservation of northern white rhinos in Sudan and that this might involve areas other than just Shambe, possibly the nearby proposed Mashra Reserve or Southern National Park. It was also noted that the project officer would need to be involved in and contribute to the overall conservation development of the country, since nothing would work in isolation. Some initial aid in the form of fuel for the vehicles, a motor bike and bicycles and establishment of a radio link, were agreed in return for which the Ministry agreed to increase patrols, carry out negotiations with the local people, clear airstrips and mark and control the boundaries.

Dr Kes Hillman
Chairman
IUCN/SSC Africa Rhinoceros Group

TANZANIA, Rhino and Elephant Survey in Selous Game Reserve (Project 1928)

Ground and aerial censuses are being conducted of all major animal species in Selous Game Reserve, with special emphasis on elephants and rhinos.

Censuses were carried out in March/April 1981 (wet season) and in September/October 1981 (dry season).

The aerial census employed two light aircraft (Cessna 182) and both the systematic reconnaissance flight and total counting methods were adopted. The ground method was carried out by foot transects, with the assistance of game rangers. Since this method has its limitations on the size of the area covered, only selected accessible areas were surveyed where there was no ambiguity over boundaries.

The general observation is that there is an increase in the numbers of some species, including elephants in some areas. It has also been established that there is still a good number of rhinos in Selous. However, more light will be thrown on the subject when the reports of the censuses are completed.

Tanzania Wildlife Division

TANZANIA, Anti-poaching Equipment for Reserves (Project 1930)

WWF/IUCN are providing equipment to consolidate anti-poaching work in Selous and Rungwa Game Reserves before intensity of poaching there reaches the same level as in northern Tanzania. Work includes rehabilitation of roads to areas difficult of access, establishment of anti-poaching posts and the carrying out of reconnaissance flights to identify areas of active poaching. Equipment being donated by WWF/IUCN includes six Landrovers, one Cessna aircraft, spares for graders and one generator.

Tanzania Wildlife Division

TANZANIA, Rhino, Anti-poaching, Northeastern Selous Game Reserve (Project 3018)

WWF/IUCN have donated a Toyota vehicle to patrol the northeastern Selous Game Reserve and to transport game rangers into the field.

Through the use of the vehicle it has been possible to ferry game rangers to points in the field from where they can begin their foot control surveillance. Owing to the types of vegetation and terrain in the Selous and the infrastructure of the reserve, only some areas can be served by the Toyota. Through its use, however, it has been possible to identify parts which have rhino concentration and which therefore need special attention. Use of the vehicle has enabled a number of poachers to be caught.

Tanzania Wildlife Division

ZAMBIA, Save the Rhino Trust, Anti-poaching Operations (Project 1757)

The Save the Rhino Trust of Zambia was formed in December 1979 in an attempt to combat the excessive commercial poaching and trading in ivory and rhino horn which was taking a heavy toll of elephants and rhinos.

Lack of resources including vehicles, fuel, radios and other patrol equipment had severely handicapped the Department of Wildlife and National Parks, and the Honorary Wildlife Rangers, in the execution of their duties. The Trust was therefore established to mobilise resources both nationally and internationally in key priority areas for three years. The Trust has the involvement and

support of the Republic of Zambia, the Honorary Wildlife Rangers of Zambia, the Wildlife Conservation Society of Zambia, and of WWF and IUCN. An important objective was the establishment of effective anti-poaching units capable of carrying on after the expiration of the project, including the training of Zambian Wildlife Guards.

Two anti-poaching units were set up to cover the Luangwa Valley and the Lower Zambezi, where most of the elephant and rhino occur and where poaching was heaviest. The two field units have achieved considerable success against organised poaching groups, many of whom are armed with automatic firearms. The units have arrested a total of 807 poachers, confiscated 328 illegal firearms and recovered 649 elephant tusks and 40 rhino horns.

The largest anti-poaching operation ever undertaken in the history of Zambia was carried out successfully in November 1981. It was launched because the effectiveness of the anti-poaching campaign was being jeopardised by loopholes through which some of the ring-leaders were escaping capture and prosecution. In view of the security aspects involved (use of automatic firearms by the poachers) and the evasion of exchange control (smuggling of ivory and rhino horn), it was felt that the problem should be treated under the country's emergency regulations. A full-scale military operation was therefore mounted to pull in the poachers and break up the poaching rings. It involved 126 personnel, 10 motor vehicles, one helicopter and one aircraft. The personnel included a platoon of the Police Mobile Unit, C.I.D. officers, Wildlife Scouts and members of the Save the Rhino Trust anti-poaching units.

The target area for this operation was Luangwa (North) National Park, Luangwa (South) National Park, Lukusuzi National Park, Luambe National Park, Lumimba Game Management Area, Lupande Game Management Area, Sandwe Game Management Area, Munyamadzi Game Management Area, Lower Zambezi International Game Park and the Mpika villages in Chief Mpumba's area.

The overall result of the operation was 187 arrests, the confiscation of 132 firearms of which nine were automatic, and recovery of 147 tusks and two rhino horns. A total of 14 top hunters leading organised poaching gangs were among those arrested, as well as three organisers and principal buyers.

The operation brought organised paoching temporarily under control in the National Parks and Game Management Areas. But we must not be complacent or relax the anti-poaching patrols. The government has proved its willingness to support our anti-poaching efforts and there is no doubt they will be responsible to a similar appeal in the future if poaching activities get out of hand again.

M J Faddy
Chairman, Operations Committee
Save the Rhino Trust