

greater, but even if it is 20-30 it is a pitifully small number to give the sub-species a chance to survive. One rhino was poached last year, but increased anti-poaching patrols appear to have been effective in recent months. A handful of northern white rhinos are in zoos, the largest number in Czechoslovakia.

Meanwhile, in southern Africa, the southern sub-species of the white rhino (*Ceratotherium simum*) has been hit by severe drought in some areas, especially southeastern Zimbabwe. Nearly 40 rhinos have been captured and taken into care by local ranchers. Fortunately, the overall situation of the southern white rhino is reasonably good. Thought to be extinct 100 years ago, the few subsequently found in Natal were protected and have bred so well that there are some 3,000 scattered around southern Africa and in world zoos.

The black rhino (*Diceros bicornis*) still numbers between 10,000 and 15,000 and ranges over wide areas of savanna and bush in Africa. But a massive poaching wave, which began in the early 1970s to supply horn for dagger handles in the Yemen Arab Republic, has decimated the species almost everywhere. Game Conservation International (Game Coin) arranged translocation of five black rhino from Natal to Texas ranches in late March, the first of up to 50 specimens which will join another 50 rhinos in zoos in a captive breeding project managed by the American Association of Zoological Parks and Aquariums.

The black rhinos of Namibia, of special interest, along with the region's elephants, because of their adaptation to harsh desert conditions in Damaraland, have been taken under the wing of South Africa's Endangered Wildlife Trust, which is now taking charge of anti-poaching operations and research. At a recent Rhino Trust Workshop the possibility of translocation of some animals was discussed.

### Rhinos in Asia

The Javan rhino (*Rhinoceros sondaicus*) is believed to number only about 50 confined to the Ujung Kulon reserve in western Java (an IUCN representative recently in Vietnam said there were reports of some there, as well as Sumatran rhinos). Discussion continues about the possibility of translocating some animals. The mysterious disease which killed five rhinos in Ujung Kulon two years ago appears to have disappeared.

Good news for the Sumatran rhino (*Dicerorhinus sumatrensis*), the only two-horned Asian species, with a few hundred scattered in small populations in several parts of southeast Asia: Sabah, part of Malaysia at the northeastern tip of Borneo, has established the Tabin Wildlife Reserve, which has rhinos and elephants. This 120,521 hectare reserve was formerly known as Sikabukan.

Despite current efforts to save rhinos they continue to be gravely threatened by the trade in horn. A considerable amount still goes to Chinese communities in Asia, but the market for half the horn continues to be the Yemen Arab Republic. Yemen

banned imports in 1982 and Sudan became a party to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), which bans commerce in rhino horn, but the trade is flourishing. According to IUCN's African

Elephant and Rhino Specialist Group, Khartoum traders are now sending out more rhino horn than the rest of the world and all of it is illegal. Some of the horn is from southern Sudan, but much comes from Zaire, Zambia and Tanzania. □

## New Powers for Conservation in Oman

### Sultan Qaboos acts swiftly on Salalah findings

HIS Majesty Sultan Qaboos bin Said of Oman issued decrees in May to reconstitute his Council of Ministers for the Conservation of Environment and Prevention of Pollution and to set up a new Ministry of Environment to strengthen and expand the Council's scope. The Minister of Environment is His Highness Sayyid Shabib bin Taimur al Busaidi. Another decree set up a Planning Committee for Development and the Environment under the National Development Council.

This new and potent policy structure has arisen from a process of planning and study in which IUCN and WWF International have been very closely involved for ten years. The culmination of this process was the Salalah Workshop, held last September in the capital of Oman's southern region.

### Kassas and Scott in action

IUCN's President, Professor Mohamed Kassas, played an active personal part in the workshop and in presenting its recommendations to Sultan Qaboos, whose enlightened environmental policies have become a byword in the Gulf region and in the world at large. Sir Peter Scott, Chairman of the Council of WWF International, also figured prominently in the workshop, which was convened by Sultan Qaboos to discuss environmental aspects of development in the southern region, with special reference to coastal fishery stock depletion and to overgrazing problems in the rain-fed grasslands of Dhofar. The workshop was chaired by Dr John Sale, ecologist on the

team which surveyed the Dhofar fauna and flora in 1977. Twenty-two other conservation specialists and 24 government officials at the workshop agreed, in their final report, to recommend the production of a comprehensive land-use plan map of southern Dhofar, specifying the most appropriate use options for different areas. The work involved in producing this plan map should, the report suggested, be coordinated on the spot by a secretariat in the office of the Wali (governor) of Dhofar, and a mechanism for linking the different government departments concerned should be created. The new decrees are a decisive response to these recommendations and should set the policy-making course for many years to come. The Salalah Workshop and the events surrounding and arising from it are unique in many senses, but notable above all for the direct interest taken by a head of state prepared not just to listen to conservation recommendations but also to act on them with firm resolution and a profound understanding of the issues.

Outstanding, too, was the personal role played by the IUCN President in bringing the work discussed at Salalah to such satisfactory fruition. Besides taking a leading part in workshop discussions and subsequent meetings with decision makers, Professor Kassas found time to pay a field visit to the southern region, where he discussed local problems directly with people who will be closely affected by future conservation planning, the pastoralists of Dhofar.

A full report on conservation throughout Oman will appear in a future *Bulletin*.



IUCN President Prof. Mohamed Kassas discussing problems with Dhofar pastoralists. Photo: R. Daly

TIMBER — *continued*

blow and other problems known to beset cropping that is lacking in species diversity? Or will they be designed to include a degree of species diversity?

It seems, on balance, that the case may be made for substantial investment in such plantation forestry, provided that adequate research is done into suitable locations for the planting, and into the likely impact of plantation monocultures on soil nutrient status and likely future yields. Also upon capacities of national and regional forestry cadres to evolve multi-species plantation forests and cope with replantation or other necessary measures of soil conservation after cropping.

It seems equally important that, alongside industrial plantation monocultures, major research, training and development efforts should be devoted to other management options such as broadening the range of species suitable for establishment in the forest, and improvement and extension of management systems such as "refining", and "underplanting".

**Encouraging the Development of National Policies Aimed at Sustainable Use and Conservation of Tropical Forests and their Genetic Resources, and Maintaining the Ecological Balance in the Regions Concerned**

The above recommendations are all oriented to ensuring that this final objective of the ITTA is met. One additional specific recommendation, which should be written clearly into the mandate of the Committee on Reforestation and Forest management, in particular, is that the ITTO, working in close cooperation with other international

organisations such as the World Bank, FAO, UNEP and UNDP, should offer help to member countries of the Organisation with the preparation of Sustainable National Forestry Strategies.

Will the establishment of an ITTO really provide the opportunity so long sought by some, to raise tropical forestry from its Cinderella status amidst development priorities, and to integrate it into a sounder pattern of management of marginal agricultural land, as a whole?

The opportunity could be there. But until the ITTA is ratified, the creation of an organisation with the ITTO's potential remains in doubt. Conservationists should offer their conditional support to the present quest for ratification of the ITTA. They should also be considering ways of developing a dialogue with the international tropical timber trade, so that conservation can make a real contribution to the new ITTO's work, if, and when, it is brought into the light of day. □

## RHINOS ON THE MOVE

**Rhinos are on the move. Great one-horned rhinos from Assam are sampling the vegetation of the Dudhwa National Park after an absence of nearly 100 years. Five black rhinos have arrived in Texas from Natal to form part of a large-scale captive breeding project. And white rhinos have been captured and shifted to ranches in Zimbabwe to protect them from the ravages of severe drought.**

by Peter Jackson

**R**HINOS are perhaps the most threatened of all large mammals, although they are probably among the least offensive as far as humans are concerned, mainly wanting to be left alone. They are being wiped out solely because of human beliefs that rhino horn serves as medicine and looks beautiful when carved as a dagger handle. Also, like most wild species, they are losing their habitat to human settlement, but at least they are no longer hunted for sport.

The reintroduction of the great one-horned rhino (*Rhinoceros unicornis*) to Dudhwa is part of an effort to reduce the risk of the species extinction by catastrophe like disease or a wave of poaching in the limited number of areas where it survives.

It also represents the restoration of an important part of the ecology of Dudhwa.

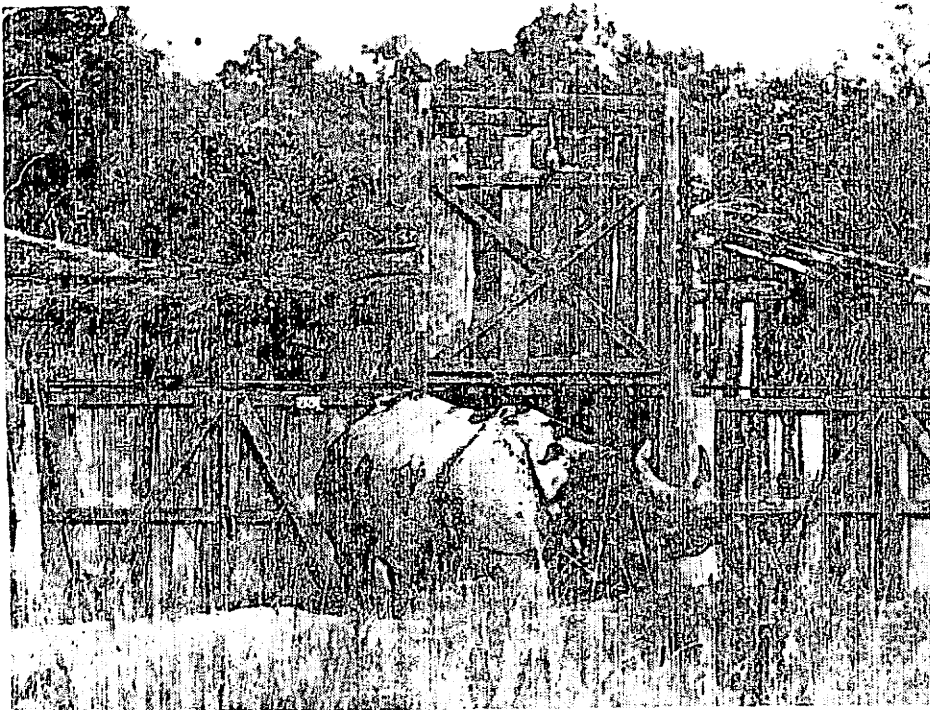
Five rhinos were captured in March in Assam, their main stronghold in India, and transported to Dudhwa, which lies close to Nepal's southwestern border with India. Dudhwa is one of the few surviving natural areas which formed part of the long stretch of marshes and forests along the foot of the Himalayas known as the "terai". It became a national park in 1976, renowned especially for its healthy population of the threatened swamp deer (*Cervus duvauceli*), and its tigers. But it lacked a coarse feeder like the rhino, which helps to improve the habitat for other ungulates.

Two great one-horned rhinos have also been translocated from Nepal's Chitwan National Park to Lal Suhanra in Pakistan. Although this is mainly an arid area they are reported to be doing well in a marshy part of the reserve.

### Poaching

One of the rhinos chosen in Assam for translocation was poached before it could be captured, a telling example of the increasing problem of protecting rhinos when the high price obtainable for their horns is such an incentive to poaching. According to official figures, 91 rhinos were poached in India last year, 36 of them in Kaziranga National Park, which has over 1,000. The poachers trap the rhinos in pits dug along their habitual trails through the tall elephant grass.

Poaching has also brought the northern white rhino (*Ceratotherium simum cottoni*) of Africa to the very brink of extinction. A recent survey by Dr Kes Hillman of the African Elephant and Rhino Specialist Group of IUCN's Species Survival Commission located only 10-11 white rhinos in Garamba National Park in northeast Zaire. Tracks indicate that the total is likely to be



*A great one-horned rhino transported from Assam moves out of a holding pen to freedom in Dudhwa National Park where rhinos have been extinct since early this century.*

Photo: Peter Jackson