

HOW MANY RHINOS ARE LEFT?

AN UPDATE ON THE STATUS AND TRENDS OF WORLD RHINO POPULATIONS

Some of the trends for the beleaguered rhinos around the world are positive, thanks to a combination of private sector involvement and intensive sanctuary maintenance. Richard Emslie, scientific/programme officer, for the IUCN SSC African Rhino Specialist Group and a member of the Asian Rhino Specialist Group, here reviews the current status of the world's remaining two African and three Asian rhino species both in the wild and in captivity, based on the latest statistics compiled by these groups (see box for more details about how these groups work).

White rhino

Numbers of southern white rhino (*Ceratotherium simum simum*) in the wild increased from 4 670 in 1987 to 6 780 in 1993-94 and 7 530 in 1995, with five countries recording increases over the last two years and none noting declines. Provisional results of a 1996 survey indicate that numbers of southern white rhinos on private land in South Africa have continued to increase by almost 7 per cent a year since 1994 (Daan Buijs and Theo Papenfus, see "Survey: Rhinos on Private Land").

South Africa is by far the most important range state, conserving 94 per cent (almost 7 100 in 1995) of all southern white rhinos in the wild.

Zimbabwe, Kenya and Namibia are the other major range states, holding a total of 367, with over 100 rhino each. Swaziland, Botswana, Zambia and the Ivory Coast together conserve another 77 animals.

The only stronghold of the northern white rhino (*C. s. cottoni*) in the wild occurs in Garamba National Park, Zaïre. Recently, poaching has moved further south into the northern part of the rhino's range, greatly increasing the threat to the remaining rhinos. The size of poaching gangs is also increasing and two guards have been killed in the last year during the regular armed contacts with poachers. While the population increased to 31 from a low of 15 in 1984, it now stands at 29 after the poaching of two rhino in the first quarter of 1996. A major effort is required by the international community and the Zaïre government to deal successfully with the new increased poaching threat, and to ensure the survival of this subspecies.

Black Rhino

Since 1992, numbers of black rhino have remained stable at around 2 410 (excluding speculative guesstimates). This is largely due to a combined 23 per cent increase in numbers of South African and Namibian black rhinos, which has cancelled out declines in a number of other range states. Interestingly, the same four countries that hold the most white rhino (South Africa, Namibia, Kenya and Zimbabwe) are also the major black rhino range states. There are four ecotypes of black rhino.

The status of the last remaining *Diceros bicornis longipes* in Cameroon continues to be critical, with only a few individuals at very low densities scattered about northern Cameroon.

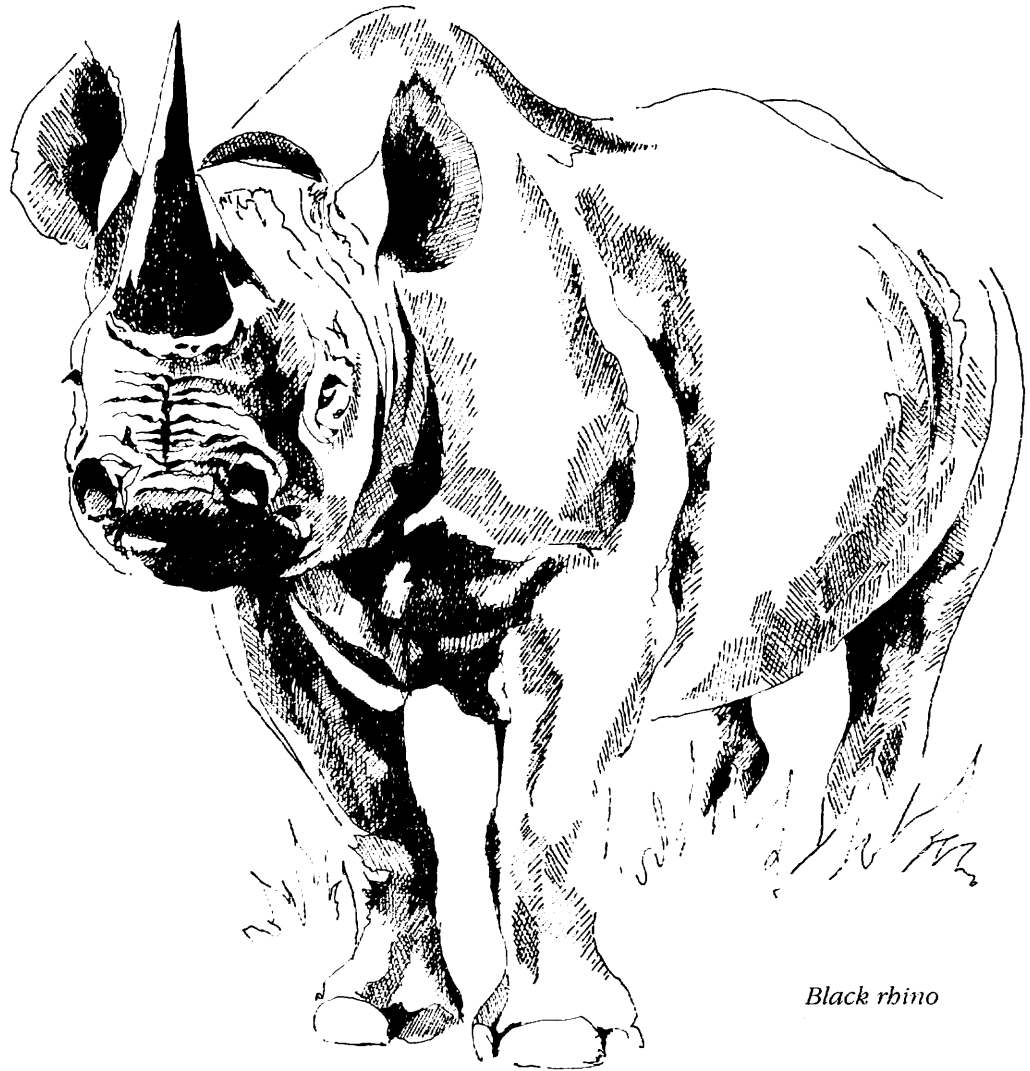
RICHARD H. EMSLIE

This ecotype may become extinct in the very near future and may number as low as seven.

By way of contrast, numbers of the arid-adapted south-western *D. b. bicornis* continue to increase under protection. There are currently about 625. Namibia is the major range state, conserving just over 95 per cent of the animals, with a small number occurring in South Africa.

policy, and in 1989 only 9 per cent of Zimbabwe's black rhino were found on private land. However, by 1995 60 per cent of Zimbabwe's black rhino population was in private custodianship. Over the last year numbers have been stable in Zimbabwe, and have continued to increase in South Africa.

Kenya conserves 88 per cent of the 475



Black rhino

The most numerous ecotype is the southern central *D. b. minor* (1 300). South Africa (960) and Zimbabwe (315) are the major range states, conserving 98 per cent of the remaining known rhino. It is, however, hoped that more *D. b. minor* remain in Tanzania's massive Selous Game Reserve, but no reliable current population estimates are available. Initially, private custodianship of black rhino in Zimbabwe was seen purely as an insurance

remaining east African *D. b. michaeli*, and numbers continue to increase from a 1986 low of 380. As in Zimbabwe, private custodians have greatly assisted the country's rhino conservation efforts. The second largest number of this ecotype (330) occur out of range in South Africa's Addo Elephant National Park, with a further 22 animals in northern Tanzania. Sadly, poaching in Ngorongoro continues to be a problem.

The Tree



Let us pause for the taking of inventory,
To measure the debt we owe the tree.
For the searching root that knits the soul,
The cooling shade for those who toil,
The air we breathe, nature's greatest gift,
And the leaf that heralds each season's shift.

Forget not the fruit that feeds man and beast,
The branch that burns to prepare the feast.
That sturdy frame that builds the home,
And the paper on which you read this poem.
The tree gives all and asks no prize,
Even making the axe that ends its life.

Anon

First National Bank



Indian rhino

African Rhino – State vs. Private Sector

In 1995, 79,1 per cent of Africa's rhinos were under the protection of state conservation departments. Private owners conserve close to a fifth of the remaining white rhino. Private landowners also conserve almost 16 per cent of remaining black rhinos. The pattern with black rhinos differs from that for white rhinos as almost 87 per cent of black rhinos remain the property of the state but are managed by the private sector on a custodianship basis. A further 7,4 per cent of black rhinos occur in communal land or in municipal/county council-run parks. In South Africa and to a lesser extent Namibia, live sales of white and black rhinos to the private sector have generated much-needed revenue for conservation departments.

Indian Rhino

The conservation of Indian rhino in India and Nepal is the success story of Asian rhino conservation. The Indian rhino is almost as big as the white rhino and has an armour-plated appearance. Since 1993 numbers have increased from 1 880 to 2 135, according to the Asian Rhino Specialist Group (AsRSG). About three-quarters

of Indian rhinos are conserved in India, with all but two of the remainder (which wandered into Pakistan) being in Nepal. India's Kaziranga and Nepal's Royal Chitwan national parks have the largest populations. Both India and Nepal protect their rhinos well, and in some cases manpower densities are as high as one man per square kilometre. Just as in some of the well-protected African reserves, expenditure can be as high as U.S. \$1 000 per square kilometre per year.

Sumatran Rhino

The recent history of the smallest rhino species, the "woolly" two-horned Sumatran rhino, is bleak. Neither of the major rhino range states, Malaysia and Indonesia, has yet set up a single well-protected fenced sanctuary or an "intensive protection zone" (IPZ) on the Indian/Nepalese/African model. Although population estimation is difficult (Sumatran rhino live in dense tropical forest and are very secretive), it appears that numbers have declined between 25 per cent and 50 per cent over the last five years. The latest figures compiled by the AsRSG estimate there to be only about 120 of these rhino left in Malaysia and about 150 in Indonesia. There is a desperate need to set up one or two well-protected sanctuaries or IPZs the size of a Hluhluwe-Umfolozi park or a Pilanesberg national park in each country if this species is to be saved from extinction in the wild. Sumatran rhino conservation efforts in Indonesia and Malaysia are currently being assisted by a U.S. \$2 million grant, spread over three years, from the Global Environment Facility of the United Nations Development Programme. Some of this money has, however, been used to support captive breeding attempts.

Javan Rhino

The majority of remaining one-horned Javan rhino (60) occur in the Ujung Kulon park in Indonesia, with a further 15 remaining in Vietnam, according to the AsRSG. In Ujung Kulon, efforts are ongoing to limit illegal access to the park from both land and sea. While the population in the park is stable, the age structure

(based on spoor) indicates a healthy, growing population. Carrying capacity limitations are therefore unlikely to be the cause of the stable population. It is more likely that actual poaching levels may be higher than recorded levels, cancelling out the annual natural increase. Despite much success in Ujung Kulon, there is, therefore, no room for complacency, as any increase in poaching will cause this key population to decline.

Rhinos in Captivity

Performance of African rhinos in captivity remains poor, and well below the growth rates obtained in protected wild populations. In recent years, performance has improved in some cases as rhino husbandry and diets improve. By 1995, there were 664 white, 223 black, 134 Indian, 21 Sumatran and no Javan rhinos in captivity worldwide (data supplied to AfRSG by Tom Foose).

Captive breeding attempts for Sumatran rhinos have so far been disastrous, with 19 of the 40 animals captured dying, and no calves having yet been bred in captivity. However, on a

positive note, the increasing trend towards giving captive Sumatran rhinos access to paddocks of natural habitat has resulted in observed matings in the Sepilok Managed Breeding Centre in Sabah, Malaysia (Edwin Bosi, personal communication). All concerned hope calves will result.

Sadly, recent attempts to engage the two zoos currently in possession of the world's nine remaining captive northern white rhino in a joint conservation initiative to establish a second free-ranging population failed.

In recent years captive breeding institutions worldwide have increasingly donated funds to assist rhino conservation efforts in the wild.

Indeed, it appears that the concepts of fenced sanctuaries and intensive protection zones are where the best hopes lie for several species in several countries. To sum up, only the southern white rhino, black rhino, and Indian rhino total more than 2 000 individuals. White rhino are in the best position at a total of more than 7 500, while for black rhino the most numerous ecotype numbers some 1 300 animals.

What is the African Rhino Specialist Group?

The African Rhino Specialist Group (AfRSG) is one of a number of groups that make up the Species Survival Commission (SSC) of the IUCN (World Conservation Union). The mission of the AfRSG is to promote the long-term conservation of Africa's rhinos and, where necessary, the recovery of their populations to viable levels. The AfRSG is charged with providing and improving technical information and advice to both government and non-government conservation agencies, and with promoting and catalysing conservation activities to be carried out by these agencies.

In particular, the AfRSG plays a key role in the promotion and coordination of rhino conservation strategies. AfRSG members come from 15 different countries and all but four members are based in Africa. The group comprises official representatives of the major African rhino range states and rhino specialists in the scientific, veterinary, field conservation management and trade study fields. Three members of the AfRSG are also members of the Asian Rhino Specialist Group (AsRSG) and there is increasing dialogue between the two groups.

One of the tasks of the AfRSG is to compile and keep a database on the numbers of African rhino. These are updated at AfRSG meetings, which are held at about 18-month intervals – the most recent being the one held at Itala Game Reserve in February 1996. Although the meeting was held early in 1996, the official continental totals that were compiled were for 1995, as the most recent population estimates then available were all made during 1995. The most recent Asian rhino figures were compiled at the 1995 Asian Rhino Specialist Group meeting held in Sabah, Malaysia in December 1995.