

The Status of Rhinos in Africa

The black rhino (*Diceros bicornis*) is in a far more precarious state than it was four years ago. The northern white rhino (*Ceratotherium simum cottoni*) is on the verge of extinction in the wild. The southern white rhino (*C.s. simum*) continues to increase in number and in many newly-constituted populations. These are the findings of our 1984 surveys.

The surveys took a year to complete and were based on questionnaires sent to wildlife authorities throughout Africa, a method used originally by Kes Hillman in 1979 when she conducted the first pan-African rhino census.

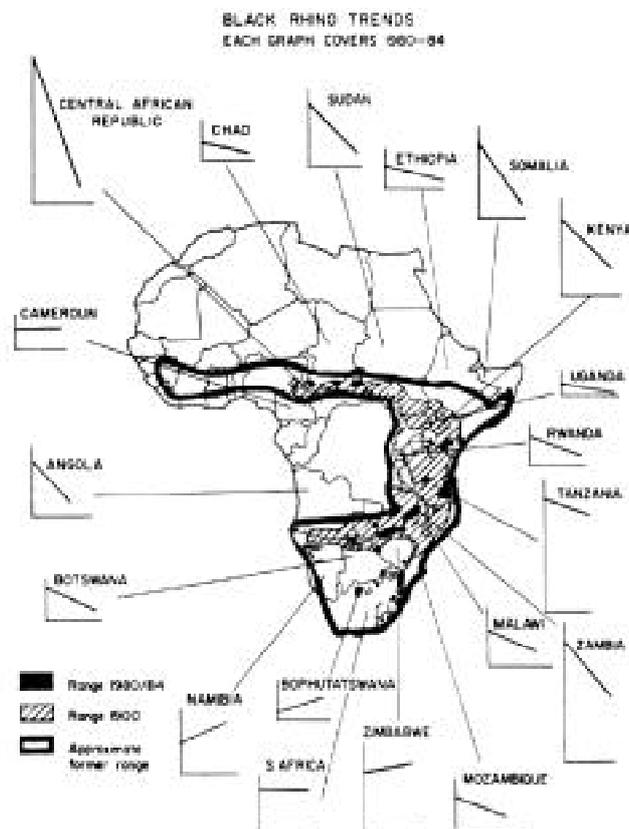
The questionnaires requested information on the size and range of rhino populations, whether accurately censused or estimated, and the name of the authority who provided the figures. Though many populations are too imprecisely known to be sure of exact figures, enough are sufficiently well censused to give us confidence that the overall estimates and trends are reasonably reliable. Full details will be released in a forthcoming publication. The following account summarizes the main findings.

In 1981 Kes Hillman estimated there to be between 10,000 and 15,000 black rhinos, <1,000 northern white rhinos, and 3,000 southern white rhinos. We estimate that in 1984 there are 8-9,000 black rhinos, about 3,920 southern white rhinos and near to 20 northern white rhinos. The 40% decline in estimates of black rhinos results partly from improved estimates of previously little-known populations, but predominantly from poaching losses. So, for example, the large reduction in Kenya's population is due more to improved censusing than real losses, whereas the new figures for Sudan and C.A.R. almost certainly reflect poaching losses.

Table 1. Approximate number of black rhinos in Africa by country

Country	1980	1984
Tanzania	3,795	3,130
Zimbabwe	1,400	1,680
Zambia	2,750	1,650
South Africa	630	640
Kenya	1,500	550
Namibia	300	400
C.A.R.	3,000	170
Mozambique	250	130
Cameroon	110	110
Sudan	300	100
Somalia	300	90
Angola	300	90
Malawi	40	20
Rwanda	30	15
Botswana	30	10
Ethiopia	20	10
Chad	25	5
Uganda	5	0
Total	14-15,000	8-9,000

A national summary (Table 1) shows that nearly all countries have fewer rhinos than four years ago, but that most of the losses occurred in the northern range of black rhinos. The



few countries with stable or increasing populations occur in southern Africa (Fig. 1) and account for only 30% of the continental total.

By using Groves' (1967) classification of black rhino sub-species and their geographic distribution, we can get some idea of how the seven recognized races have fared (Table 2). The three subspecies occupying the northern-most range, *ladoensis*, *brucii* and *longipes*, have virtually been exterminated. The remaining few hundred are widely scattered and heavily hunted and could become extinct in the next few years. *Chobiensis* in the southern continent has also dwindled to a hundred or so animals, and is in danger of extinction. *Bicornis*, though only a few hundred in number, seems well protected in southern Africa. *Michaeli*, which numbers several hundred, is well protected in various Kenya sanctuaries, but is still vulnerable elsewhere. *Minor*, the most widespread and numerous sub-species, numbers several thousand, or more than two third of all black rhinos, and is doing fairly well.

Table 2. Approximate number of black rhinos for each sub-species

Sub-species	1980	1984	%change
chobiensis	330	100	70% ↓
longipes	3,135	285	91% ↓
minor	6,895	5,840	13% ↓
michaeli	3,480	1,975	70% ↓
brucii	300	90	70% ↓
ladoensis	345	110	68% ↓
bicornis	300	400	33% ↑
Total	14-15,000	8-9,000	40% ↓

The overall status of the white rhino continues to improve steadily (Table 3) but once again geography distinguishes the fate of the northern and southern subspecies, the former falling from an estimated 650 in 1979 to less than 20 today, while the latter has increased to nearly 4,000 animals, up from only a few dozen early in the century. The northern race must be regarded as essentially extinct everywhere except Garamba National Park in northern Zaire, where poaching continues to threaten the last dozen or so animals (Hillman et al, in press).

Table 3. Approximate number of white rhinos in Africa by country

Southern White Rhinos

Country	1980	1984
South Africa	2500	3,330
Zimbabwe	180	200
Botswana	70	200
Namibia	150	70
Swaziland	60	60
Kenya	25	30
Mozambique	30	20
Zambia	5	10
Total	3,020	3,920

Northern White Rhinos

Country	1980	1984
Zaire	400	15
Sudan	400	10
C.A.R.	20	1
Uganda	1	1
Total	<1,000	15—30

Even more critical to their status than total number and loss rate is the rhino's fragmentation into tiny populations, which are becoming rapidly more isolated (Fig. 2). Most rhinos survive in populations of less than 100 animals and only two populations, Luangwa National Park in Zambia and Selous Game Reserve in Tanzania, now number more than 1,000 animals.

Based on Iain Douglas-Hamilton's (pers. comm.) recent re-analysis of Markus Borner's 1983 Selous census (see page 18), there may be reason to suspect that this vast reserve has lost up to three-quarters of its rhinos since Douglas-Hamilton's 1976 survey, which would lower the estimate from the present 3,000 to some 750 and the African total from some 9,000 to 6,750.

The picture for the black rhino looks bleaker than ever, the result of continued poaching, encouraged by trade in horn in both N. Yemen and the Far East (Bradley Martin, 1983). The remoter regions in central and northern sectors of the rhino's range seem to be the most vulnerable —the result of increased military arms and well organized poaching gangs (Douglas-Hamilton, 1983; Western, 1983). Less than 390 black and white rhinos survive in Zaire, Chad, Uganda, Sudan, Ethiopia and Somalia, perhaps even half that number, a tenth of the estimates made only 5 years ago (Hillman, 1980). The losses accord with Bradley Martin's (1983) findings that virtually all the North Yemen imports arrive from Khartoum, the key trade outlet for horn originating in the rhino's entire northern range.

In East and Central Africa, from Kenya to Zambia, a region with about 60% of the continent's rhinos, the picture is more variable, though still grave. According to Borner's recent survey of Ruaha in Tanzania, virtually all of the 500 rhinos reported in the mid-1970s (Norton-Griffiths et al '80) have been killed and fewer than 20 survive. Similar poaching could soon reach Selous, the last stronghold of black rhinos, if it has not already done so. A review of the status of rhinos in Selous is urgently needed. On the other hand there is evidence from Kenya, Tanzania, and Zambia that the stronger muscle put into anti-poaching forces in various parks over the last few years has greatly slowed rhino losses in some important populations, especially the Luangwa Valley in Zambia. Plans for consolidating fragmentary arid vulnerable populations in safe sanctuaries are also underway in Kenya, a move which will increase protection of the remaining few hundred animals.

It is in Zimbabwe, Namibia and South Africa, which have 30% of Africa's black rhinos, that prospects look good and the results of active management programmes are most apparent. The lessons and methods learned here show that rhinos can be salvaged and rehabilitated within their former range. However, based on prevailing trends, unless similar national conservation plans are formulated immediately in the east and central African countries, most of Africa's remaining rhinos could be poached within the next five years.

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Note: the figures are estimates based on the best information available.

REFERENCES

Groves, C P (1967) Geographic Variation in the Black Rhinoceros *Diceros bicornis*, *Sonderdruck aus Z.f. Saugenerkunde* Bd. 32(3): 267-276.
 Bradley Martin, E (1983) Rhino Exploitation WWF Hongkong
 Western, D (1983) Chairman's Report *African Elephant & Rhino Group Newsletter* 2
 Douglas-Hamilton, I (1983) Elephants Hit by Arms Race. *African Elephant & Rhino Group Newsletter* 2
 Hillman, K (1981) IUCN/NYZS/WWF African Rhino Survey. *Report to IUCN*
 Norton-Griffiths, M Ecosystems Ltd (1980) Results of aerial surveys of wildlife within the immediate impact area of the Stiegler's Gorge hydro-electric dam. *Report to Rufiji Basin Development Authority* pp 145

