

African Rhinos increase to 11 000 in the wild

by Richard H. Emslie

The continental statistics for black and white rhino in Africa (based on 1997 estimates) were recently revised at the April 1998 meeting of IUCN SSC's African Rhino Specialist Group (AfrSG) held in Namibia, with some totals updated in June '98. Guesstimates (based purely on speculation or very old data) and orphans that are not free ranging are excluded from the totals given in the Table. As in 1995, the same countries (South Africa, Namibia, Kenya, Cameroon and D.R.Congo) remain the strongholds for the different subspecies, with four range States (South Africa, Namibia, Kenya and Zimbabwe) continuing to hold most remaining rhino. This paper also summarises the breakdown of rhino numbers by management/ownership model. Despite the fact that 74.3% of Africa's rhinos are still conserved in State run areas, the number of rhinos under other forms of management and ownership continues to increase.

White rhino population sizes and trends

Southern white rhino *Ceratotherium simum simum* numbers have continued to increase in the wild to an estimated 8 440 in 1997, up from 6 780 in 1993 and 7 530 in 1995 (totals rounded off). All countries with wild populations recorded an increase in numbers. South Africa remains by far the most important range State with 93% of the wild population, (7 913); while Zimbabwe (167), Namibia (141) and Kenya (137) conserve most of the remainder.

Two surveys in April 1998 and June 1998 confirmed that the only known wild northern white rhino (*C.s. cottoni*) population, in what is now the Democratic Republic of Congo had declined slightly to a minimum of 25, down from 31 in 1995, with some births cancelling out some of the animals poached during the unrest coinciding with the liberation war which overthrew the then government of Zaïre of President Mobutu. The presence of SPLA troops in neighbouring Sudan and the current civil war in the DR Congo further threatens the few remaining rhino.

Black rhino population sizes and trends

Past AfrSG data indicated that at a continental level, black rhino numbers in the wild stabilised from 1992-95 (largely due to a combined increase of the South African and Namibian populations which cancelled out declines in other range States). Encouragingly the latest 1997 black rhino estimate of 2,600 (excludes speculative guesstimates) indicates that numbers have started to increase, with numbers rising in the major rhino range state of Zimbabwe for the first time in many years. The major range States remain South Africa (1,043), Namibia (707), Kenya (424) and Zimbabwe (339), while another six countries together conserve the remaining 86 or so black rhino.

The most critically endangered subspecies remains the central western *Diceros bicornis longipes*, which is now restricted to a small and high fragmented population of 10+ rhinos over an area of 3,000 km² in northern Cameroon. These pockets of 1 to 3 rhinos each are probably genetically and demographically doomed unless they can be consolidated into one well protected population. However, apart from the high expense and logistic difficulty in doing this, concentrating the remaining animals is likely to make them increasingly vulnerable to poaching unless adequate security can be implemented.

The eastern black rhino, *D.b. michaeli*, showed a very slight increase from 476 to 485 between 1995 and 1997 and the majority (88%) occur in Kenya. A number of these populations have been performing sub-optimally and may be overstocked.

The south western black rhino, *D.b. bicornis*, continues to perform excellently, with Namibia conserving 95% of the estimated 741 animals (up from 626 in 1995).

The most numerous subspecies, the southern central black rhino, *D.b. minor*, occurs in six range States of which South Africa with 976 (72%) and Zimbabwe with 339 (25%) are by far the most important.

Management authorities, ownership and reserve status

While the majority of African rhino are still conserved in state run protected areas (8,219), over 2,500 rhinos are now either privately owned (2145) or managed by the private sector on a custodianship basis for the state (395). The bulk of privately managed black rhino are managed under a custodianship basis on behalf of the state. This differs from white rhino, where almost a quarter of all white rhino are privately owned. In 1997, of the 248 discrete white rhino populations in Africa, 184 were privately owned, and 51 occurred in state run protected areas. However, many of these privately owned white rhino populations are small with an average size of only 11 rhinos compared to an average of 123 in state run protected areas.

Of the 83 discrete black rhino populations in 1997, 45 occur in state protected areas. Of those that are privately managed, 23 were managed on a custodianship basis, while in one case the rhinos live on a state protected area that is managed under contract by the private sector. In 1997 there were 7 privately owned black rhino populations although all were small.

Indeed, in four of the white rhino range States (Botswana, Kenya, Namibia and Swaziland) more white rhinos occur on privately managed/owned or communal land than on land managed by the formal State conservation bodies. In Zimbabwe in 1997 more black rhinos were managed by the private sector on a custodianship basis (223) than were conserved in state run protected areas (116). In 1997 a further 171 black rhino were managed under custodianship in Kenya, Namibia and Swaziland; with 62 being privately owned in South Africa. 167 black rhino in Namibia, Kenya, Mozambique and Tanzania occurred on communal land.

Approximately three quarters of both Africa's rhino species are conserved on State land in gazetted National Parks, Game Reserves and Nature Reserves. These Parks and Reserves are run by formal State conservation bodies. South Africa pioneered the private ownership of white rhino when the first animals were sold to the private sector in the late 1960's. By 1997, a fifth of Africa's southern white rhino (1 785/8441) were conserved on 163 private reserves in South Africa, up from only 791 on 80 private reserves a decade earlier; with private owners in Kenya, Namibia and Zimbabwe conserving an additional 242 white

rhino. A recent AROA survey by Daan Buijs has confirmed that numbers of white rhino on private land in South Africa have continued to increase over the last two years.

In 1990 the first black rhino were sold on auction to approved buyers in South Africa, and in 1995 Namibia also sold black rhino for the first time. While numbers of privately owned black rhino have grown, total numbers are still small, accounting for only 2.4% of Africa's black rhino population in 1997.

In 1997, three out of the eleven AfRSG-rated Key white rhino populations in the world and a further 12 of the 20 AfRSG-rated Important white populations occurred on private land. Of these rated populations on private land, 2 Key and 9 Important populations occurred on South African private land, with Kenya holding the other Key private population and Zimbabwe, Namibia and Swaziland each having one Important white rhino population on private land.

In contrast to the pattern with white rhino, there are many black rhinos on private land in Kenya, Zimbabwe, Swaziland and Namibia that are managed on a custodianship basis for the State (as opposed to being privately owned). By 1997, two of the twelve AfRSG-rated Key populations of black rhino were managed on a custodianship basis in privately run Zimbabwean conservancies. None of the AfRSG-rated black rhino populations in 1997 were privately-owned.

Of the 15 rated Important black rhino populations in 1997, 3 were custodianship populations on private land (2 in Zimbabwe and 1 in Kenya - the latter being on the borderline of being classified as a Key population). An additional Important custodianship black rhino population has since been founded in Zimbabwe.

A total of 394 (15.2%) black rhinos were managed by the private sector on a custodianship basis in 1997. This model has proved successful in both Kenya and Zimbabwe where during periods of heavy poaching in the past, black rhinos fared better in private reserves than on State land.

Other

Black rhino numbers have in general declined markedly over the last decade on much of the communal land where they used to occur. However, there have been exceptions, and in 1997 16.2% of the south-western black rhino were con-

Continued on page 7



served on communal land. Overall, 6.6% of Africa's black rhino occurred on communal land in 1997 compared with only 0.2% of Africa's white rhino.

In South Africa, Kenya and Tanzania there are a limited number of Reserves and conservation areas run by local area or municipal authorities. The Masai-Mara National Reserve in Kenya is run by the local Narok and Trans Mara county councils; while in Tanzania, the Ngorongoro Area Conservation Authority manages Ngorongoro and the surrounding area. South Africa has a number of small municipally owned and run parks that have a few white rhino. All local authority managed black rhino are of the eastern subspecies and make up 8.9% of this subspecies in the wild.

The number of rhino under other management models (eg military or zoo owned reserves) is negligible.

AfRSG Rated Key and Important Populations in 1997

Out of the 248 white rhino and 84 black rhino populations in 1997, there were 12 AfRSG rated Key black rhino populations (14.2%) and 11 Key white rhino populations (4.4%) as well as an additional 15 AfRSG rated Important black rhino populations (17.9%) and 33 Important white rhino populations (13.3%). About two-thirds of the black rhino populations (66.9%) and about four-fifths (82.3%) of the white rhino populations in 1997 did not qualify to be rated.

Of the 12 Key black rhino populations in 1997, nine were on State protected areas, two were privately managed on a custodianship basis and one was on communal land. Of the 15 Important black rhino populations in 1997, 11 were on State protected

areas, three were privately managed on a custodianship basis and one was in a municipal reserve run by county councils.

Of the 11 Key white rhino populations in 1997, seven were on State protected areas, one was in a Park which combines both State protected land and adjoining privately owned land, and three were privately managed and owned. Of the 33 Important white rhino populations, 19 were privately managed, and the remaining 14 occurred on State protected areas. Thus although many of the privately owned white rhino populations are small, half (22) of the Key and Important white rhino populations are privately owned or managed.

Table 1: Numbers of White and Black Rhinoceros in Africa in 1997. By country and subspecies (compiled by the IUCN SSC's African Rhino Specialist Group)

WHITE RHINO						
	Northern <i>C.s. cottoni</i>	Southern <i>C.s. simum</i>	Total	Trend		
Botswana	—	23	23	up		
Cameroon	—	—	—	—		
Chad	—	—	—	—		
D. R. Congo	25	—	25	down		
Ethiopia	—	—	—	—		
Ivory Coast	—	4	4	stable		
Kenya	—	137	137	up		
Malawi	—	—	—	—		
Mozambique	—	—	—	—		
Namibia	—	141	141	up		
Rwanda	—	—	—	—		
South Africa	—	7 913	7 193	up		
Swaziland	—	50	50	up		
Tanzania	—	—	—	—		
Zambia	—	6	6	stable		
Zimbabwe	—	167	167	up		
Totals	25	8 441	8 466	up		

BLACK RHINO						
	S. West <i>D.b. bicornis</i>	Western <i>D.b. longipes</i>	Eastern <i>D.b. michaeli</i>	South Central <i>D.b. minor</i>	Total	Trend
Botswana	—	—	—	—	—	—
Cameroon	—	10	—	—	10	down
Chad	—	—	—	—	0	—
D. R. Congo	—	—	—	—	—	—
Ethiopia	—	—	0	—	0	—
Ivory Coast	—	—	—	—	—	—
Kenya	—	—	424	—	424	up
Malawi	—	—	—	3	3	up
Mozambique	—	—	—	13	13	?
Namibia	707	—	—	—	707	up
Rwanda	—	—	4	—	4	?
South Africa	34	—	33	979	1 046	up
Swaziland	—	—	—	10	10	stable
Tanzania	—	—	24	22	46	?
Zambia	—	—	—	—	—	—
Zimbabwe	—	—	—	339	339	up
Totals	741	10	485	1 366	2 602	up

Table excludes speculative guestimates and orphans that are not free ranging. Numbers were compiled at the 1998 AfRSG meeting held in Namibia from 11-19 April 1998, with some totals updated in June 1998.

Richard H. Emslie, IUCN SSC African Rhino Specialist Group (AfRSG) Scientific Officer, P.O.Box 13053, Cascades 3202
E-mail: remslie@npb.co.za

THE
**RHINO & ELEPHANT
JOURNAL**

VOL 12 DECEMBER 1998



THE RHINO AND ELEPHANT FOUNDATION

THE RHINO & ELEPHANT JOURNAL

VOL 12 DECEMBER 1998

Editorial Panel

Clive Walker
Dr Kees Rookmaaker

Design and Layout

TOPS Desktop Publishing cc

Reproduction

Bowens Bureau

Printing

Colorpress (Pty) Ltd

President

Dr M. G. Buthelezi

Patrons

Dr Ian Player DMS
David Shepherd OBE

Founders

Anthony Hall-Martin
Peter Hitchins
Clive Walker

Board of Trustees

Clive Walker (Chairman)
Noelle Bolton
Steve Bales

Dr A. McKenzie (Director)
C. V. Styles (Deputy Director)
H. C. Cowie (Executive Officer)

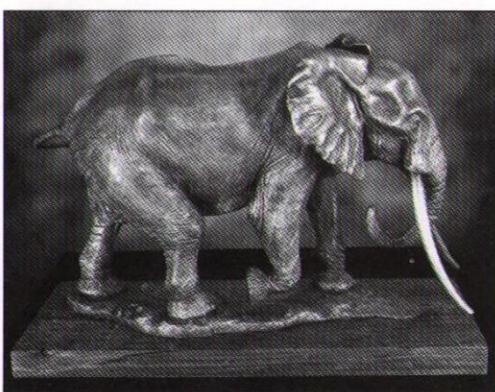
Rhino Museum

Curator: Dr Kees Rookmaaker
PO Box 157 Vaalwater 0530
Tel: 014 7552 Ask 4041
Fax: 014 7650116
e-mail: chw@ref.org.za

The views expressed in this journal are not necessarily those of the Rhino & Elephant Foundation.



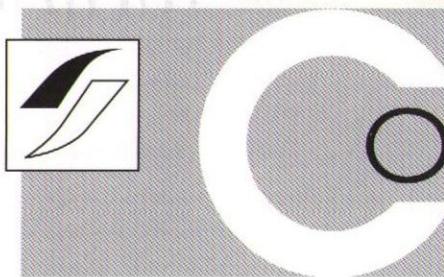
The Rhino & Elephant Foundation
is a member of
IUCN, the World Conservation Union



Cover Story: "Mafunyane"

Alan Ainslie, South African wildlife painter and sculptor, was born in Port Elizabeth and grew up on a farm near Graaff-Reinet in the Eastern Cape. His works rank amongst the finest in the world and today, his sculptures, paintings and drawings grace the homes of art collectors worldwide. Committed to the conservation of wildlife in South Africa and elsewhere in the world, Ainslie has donated part of the proceeds from his work to numerous wildlife organisations, including REF.

Details on the raffle of this magnificent bronze of Mafunyane can be obtained through www.ref.org.za or tel: 453-9829



Contents

Profile: Dr Hym Ebedes (B. V.Sc.) - by Clive H Walker	2
African rhinos increase to 11,000 in the wild - by Richard H. Emslie	4
Albrecht Dürer's Rhinoceros - by Kees Rookmaaker	8
Elephants on the beach: The Maputo Elephant Reserve - by Fred de Boer and Cornelio P. Ntumi	12
Exploring management of biodiversity in the Kruger National Park: Elephants as agents of change - by Angela Gaylard	16
The studbook of African rhinoceroses in captivity - by Heinz-Georg Klös	20
Rewards and incentives help rhino conservation in Assam, North-East India - by Lucy Vigne and Esmond Bradley Martin	24
Samuel Daniell's new species of rhinoceros found in 1801 - by Kees Rookmaaker	32
The Rhinoceros Library in the Waterberg - by Kees Rookmaaker	36
The Elephant Orphanage at Pinnawela in Sri Lanka and the fate of some "tourist elephants" - by Marian E Garaï	37
Book reviews - by Clive H Walker	41
Chairman's Report - by Clive H Walker	43