

A WILD & JAG

Vol 3/2

APRIL - JUNIE 1997

R8.50 BTW-ING
VAT-INC

GAME & HUNT



see page 2-3

• Veldbestuur
• 4x4's



The Black Rhino,
Eerste veilingspryse



9 771025 422016

- Mopanieveld
- Gamebird management

Die winsgewende volhoubare benutting van die RSA se wild- en natuurbates, op 'n geordende wyse, tot voordeel van die land en al sy mense.

The profitable, sustainable utilisation of the RSA's game and nature resources, in an orderly manner and to the benefit of the country and all its people.

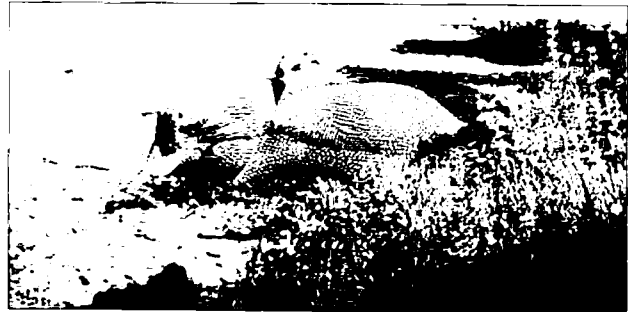
Voorbladfoto: Natal Parkeraad

INHOUD/CONTENTS

Wild/Game	
Black Rhino	6
Kommentaar/Comment	9
Briewe/Letters	10
Bemarking/Marketing	
Eerste wildveiling 1997	11
Prysbepaling in die wilbedryf	37
Hunting/Jag	
Jag is 'n saak van lewe en dood	15
Game farmers, manage your gamebirds	29
Produksie	
Mopanieveld	19
Die belangrikheid van veldbestuur	23
Organisasie/Organisation	



SAWO-nuus	27
Bosveld Jagters- en Wildbewaringsvereniging	43
Transvaal Wildvereniging	44
Kookkuns/Cuisine	
Hantering van wildsvleis	32
Veldvoertuie/Off Track Vehicles	
Hoekom 'n 4 x 4?	45
Adresse/Addresses	46



Erkende publikasie van die SA Wildorganisasie en die Konfederasie van Jagtersverenigings van Suid-Afrika.

Acknowledged publication of the SA Game Organisation and the Confederation of Hunting Associations of South Africa.

Redakteur/Editor
Jan van der Walt

Mede-redakteurs/Co-editors:
Prof Wouter van Hoven, dr Hym Ebedes en André van Dyk

Drukker/Printer:
Promedia

Advertensies en redaksioneel/ Advertising and editorial:

Jan van der Walt
Tel: (012) 322-6980,
Fax: (012) 322 5585/320-0557.
Posbus/PO Box 4722, Pretoria 0001.

Advertensies Wes-Kaap/ Advertising West Cape:

Lesley MacKay
Tel: (021) 406-2008
Faks/Fax (021) 406-2939
Huis/Home: (021) 462-2370
Sel/Cell: 082-891-7319

Uitgewer/Publisher
JLO-uitgewers vir Jan Louis

Ondernemings
CK/92/19549/23.

Produksie/Production:
Mandi Repro & Print

Die redakteur behou die reg voor om artikels te verander en/of te verkort. The editor reserves the right to change and/or shorten articles. Die uitgewer aanvaar geen verantwoordelikheid vir die inhoud van advertensies nie. Die mening van medewerkers is nie noodwendig die mening van die blad nie. The publisher accept no responsibility for the content of advertisements. The opinions of contributors are not necessarily those of the magazine.

Black rhino (*Diceros bicornis*)

Danie Pienaar, National Parks Board, Skukuza

Taxonomy

Up to seven subspecies of black rhino have been described, but more recent genetic research have not supported this degree of taxonomic splitting. The African Rhino Specialist Group (of the IUCN) now recognises four conservation units within the continent. These are a north-western group in Cameroun and the Central African Republic (designated as *D. b. longipes*), an eastern group in Kenya and northern Tanzania (*D. b. michaeli*), a desert group in Namibia (*D. b. bicornis*) and the relatively large bushveld group extending from Natal through Zimbabwe and Zambia into southern Tanzania (*D. b. minor*).

Distribution

The black rhino is one of five rhino species. The black rhino and the white rhino (*Ceratotherium simum*) occur in Africa, the greater Indian rhino (*Rhinoceros unicornis*) occur in India and Nepal, the Javan rhino (*Rhinoceros sondaicus*) in Indonesia and Vietnam and the Sumatran rhino (*Dicerorhinus sumatrensis*) in Sumatra and Malaysia. The Indian rhino and the Javan rhino have only one horn while the white, black and Sumatran rhinos have two horns.

Whereas the white rhinoceros historically occurred in two discrete populations in Africa, the black rhino occurred through most of Africa south of the Sahara except the tropical rain forests. Van Riebeeck's diary of 1652 recorded black rhino as occurring on the slopes of Table Mountain and as being common on the Cape Flats. As the black rhino can lift his head higher than his shoulders and can swim,



Two Black rhino, Etosha, Namibia
Photo: H Ebedes

major rivers are not such a barrier for them as it is for white rhino.

The decline of the rhino

Rhino numbers worldwide have declined alarmingly due to poaching and loss of suitable habitat. Present worldwide numbers for the 5 different species are as follows:

White rhino	7 600
Black rhino	2 420
Indian rhino	1 900
Javan rhino	<100
Sumatran rhino	400 - 500

In Africa black rhino numbers are as follows: *D. b. longipes* = 10, *D. b. michaeli* = 480, *D. b. bicornis* = 630 and *D. b. minor* = 1 300. The following estimates show how black rhino numbers have declined in Africa in the past 40 years: 1960 - 100 000; 1970 - 63 000; 1980 - 15 000; 1990 - 3 000.

In South Africa there are presently about 7 100 white rhino and 1 030 black rhino. This shows what an important role South Africa plays in rhino conservation. South Africa also conserve three of the black rhino ecotypes, these being *D. b. michaeli* = 33; *D. b. bicornis* = 29 and *D. b.*

minor = 968.

Since the Natal Parks Board sold the first black rhino in 1990 on auction to private buyers, the black rhino numbers on private game ranches in South Africa have increased to almost 50 animals. With more black rhino being put up for sale, in future the private game farmer will play an increasing role in black rhino conservation in South Africa.

Description

Adult black rhino stand about 1,6 m at the shoulder and have a maximum mass of about 1 200 kg. East African and Namibian specimens are somewhat heavier and weights of 1 400 kg have been recorded. White rhino males weigh up to 2 400 kg.

Characteristic features which distinguish black rhino from white rhino, include their possession of a prehensile upper lip which aids browsing. Black rhino have a shorter head and they lack the prominent nuchal hump of a white rhino. The ears of a black rhino are rounded compared to the pointed ears of a white rhino. A black rhino also carries his head higher and have a distinct hollow backed appearance. The overall colour is dark grey but rhinos took on the colour of the soil where they live. Many authors have stated that there is no colour difference between the black and white rhino. The skin of the two rhino species have a different texture, and numerous observations on captured rhinos have convinced me that a black rhino is somewhat darker coloured than a white rhino. Unfortunately I have no way of quantifying this colour difference.

The skin of a black rhinoceros is thick, up to 2 cm on the rump, with a sparse scattering of hairs. Scattered

throughout the skin are sweat glands which exude rosy coloured sweat droplets when the animal is under stress.

Each foot has three toes with broad, stout nails which mark clearly in the spoor and the front feet are larger than the hind. The pads are rounded at the back and lack the indentation characteristic of the white rhino and the spoor is also smaller than that of a white rhino.

Black rhino has distinctive skin lesions caused by a filaria parasite that is transmitted by biting flies. When fully developed, these lesions are blood-encrusted which ulcerate and haemorrhage and are usually situated on the skin behind the shoulders although also occurring on the chest and forelegs. Namibian and East African black rhino do not show these skin lesions, no doubt to the absence of the fly vectors.

Both African rhino species lack incisors and canine teeth. Both have three premolars and three molars and in the black rhino the molars are lower-crowned with high cusps, in support of its browsing habit.

Habitat and food

The black rhino prefer a habitat providing an adequate low shrub stratum (<2m), including well developed woodland or thickets in which to shelter during the heat of the day or in inclement weather. A water supply, not only for drinking but also for mud-wallowing, is also important.

Although the black rhino is not usually associated with open plains country, they occur in a wide range of habitats ranging from forest to woodland and scrub savanna, from sea level to up to 2 700 meters in East Africa.

While black rhino do not need to drink daily, they are dependant on water and seldom found more than 10 to 15 km from it. Where surface water is not available, they will dig for it in the sand in riverbeds.

Black rhino prefer to feed on shrubs and forbs lower than 1 meter in height. They are very selective when it comes to the species and size class of their food. Black rhino select for *Acacia spp* and *Dichrostachys sp*



Black rhino (*D. b. minor*) fact sheet

Shoulder height	140 - 165 cm
Mass adult	800 - 1 200 kg
Age at sexual maturity	
Male	8 years
Female	5,5 - 6 years
Age at first calving	7 - 8 years
Gestation period	15 months
Calving interval	2 - 3 years
Calf birth mass	45 kg
Age at weaning	18 months
Life span	35 - 40 years

lower than 1 meter in height while *Spirostachys africana* (Tambothi) up to 3 meter are selected for. These taller tambothi trees are pushed over and then fed upon. Other preferred woody plant species are *Berchemia zeyheri*, *Ehretia rigida*, *Grewia spp*, *Acalypha glabrata* and *Pappia capensis*. Forbs such as *Indigofera*, *Tephrosia*, *Ipomoea*, *Hibiscus*, *Justicia* and *Sida* species are important dietary items.

Drainage line woody vegetation is very important in providing dry-season food for black rhino. These plants have a high moisture content, palatability and nutrient status.

Grass also affects black rhino feeding and areas where the grass is dense and taller than 75 cm, will be rejected even if preferred food species occur there. Regular burning also have a beneficial effect on black rhino habitat. It removes the tall grass and it keeps preferred shrubs from growing too tall for black rhino to browse on.

The ecological carrying capacity (ECC) of an area for black rhino increases with the average annual rainfall, except on lower nutrient soils where, above 800 mm rainfall per year, the ECC declines. The incidence of frost also have an effect on black rhino habitat in that it leads to

woody plant die-off and/or leaf drop. Frost also usually occurs in low-lying areas which is preferred feeding areas for black rhino. The occurrence of frost decreases the ECC compared to frost-free areas.

Horns

Rhinoceros horn is composed of a mass of tubular keratinous fibres. They grow from the skin and are not attached to the underlying nasal bone. The nasal bones under the bases of the horns are rough to allow firm attachment of the skin to these areas. The skull of an adult male has nasal bones that is broader and more rugose than what is normally found for adult females. This difference is mirrored in the anterior horn where black rhino males have a greater basal horn circumference than females.

Anterior horn lengths of up to 105 cm has been recorded for *D. b. minor* and 120 cm for *D. b.*

michaeli. The mean horn mass (anterior + posterior) per animal for black rhino, ranges from 2,7 kg to 3,5 kg for different populations. Compared to this, a mean mass of 5,8 kg of horn per white rhinoceros was recorded.

Intrinsic anterior horn growth is fast in juvenile animals, it slows to about 6 cm per annum for young adult animals and could be less than 3 cm for very old animals. This can cause the anterior horn of old animals to shorten annually as the amount they rub off is more than the intrinsic growth. Males seem to rub their horns more than females.

Mortalities

Fighting is the greatest cause of mortality in black rhino. In reserves where black rhino were introduced in two batches, a few years apart, the second introduction was invariably less successful than the first. The resident rhino killed unacceptable high numbers of the newcomers.

Spotted hyaena predation could influence black rhino calf mortality. A number of calves with pieces of ear or tail missing has been observed in

Continued on p 35