

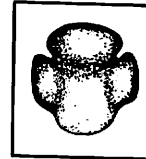
17

THE WHITE RHINOCEROS

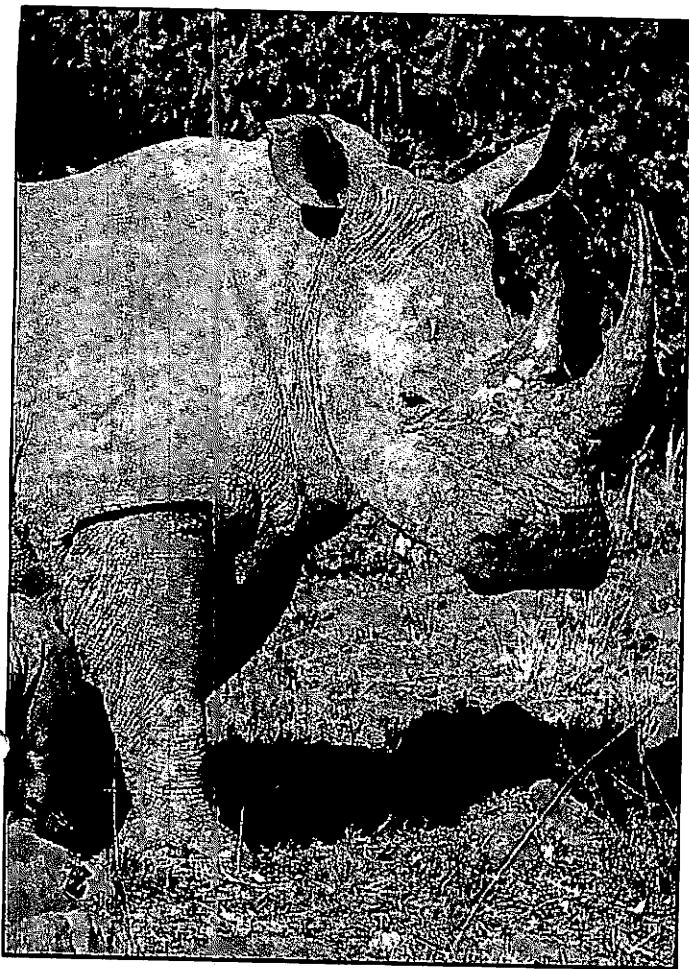
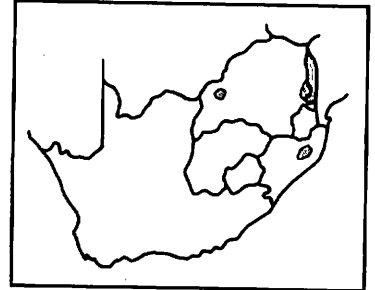
Ceratotherium simum



White rhino



Black rhino



Photograph: Dick Wolff

ALMOST EXTINCT

• At the turn of the century, the white rhinoceros was almost extinct in South Africa. Its numbers were estimated at the time to have been as low as 10 or 20. It disappeared completely from the area now covered by the Kruger National Park in 1896. Helped by strict and successful conservation measures introduced by the Natal Parks Board, their numbers have increased and there are now an estimated 2 000 white rhino in Natal's reserves. The numbers of white rhino

~ continues on p. 16

This brandy represents a complete break with past tradition.

6039

Flight of the Fish Eagle is made the natural rather than the scientific way – every drop is pot-stilled and wood-matured.

The young wine which we carefully select for the distillation of this unique brandy, is completely unmarred by any additive or preservative.

In our quest for purity and smoothness only traditional handmade red copper potstills are used. Twice we distill our brandy and twice we rely on the personal judgement of our distiller. Scientific measurement is never the deciding factor. Our single request is for purity and lightness. So we follow only one method. Art, not science.

Once in the cellar, nature takes over and completes the process in vats of European oak. Here the brandy rests unhurried and untouched, with nothing added. Finally,



when it flows from the wood, every drop is nature's expression of pure perfection.

Naturally, this brandy does not conform to traditional tastes. Being a natural brandy, it merely requires a little springwater to release the bouquet. Natural fruit juices, especially fresh orange, create an appealing drink.

Should you wish to know more about our brandy, please write to: The Production Director, Distillers Corporation, Private Bag 5001, Stellenbosch 7600.

Flight of the Fish Eagle

Natural Brandy
A remarkable brandy

This brandy is a tribute to the African Fish Eagle, the remarkable bird which possessively guards the wild waterways of our continent.

WHITE RHINO

CONTINUED FROM P. 9

re-introduced to the Kruger Park from the Natal's reserves, have now increased to 1 250 animals. The South African population now stands at over 4 000 animals.

- In contrast with the above success stories, the future seems bleak in most other African countries for the survival of this impressive pachyderm.

- Rhino horn and products have been traded and used for more than 2 000 years. The popularity of rhino horn, used for making dagger handles and for its claimed aphrodisiac and fever-reducing properties, has largely been responsible for the large-scale slaughter and extermination of rhino in many parts of Africa. It is to be hoped that the internationally imposed, stricter control measures to curb the illegal trade in rhino horn, will be more successful than in the past.

- The Natal Parks Board has, as part of its highly successful 'operation rhino' project, relocated more than 3 000 white rhino to other areas within Africa and throughout the world.

- White rhino breed well in captivity. In 1983 there were already more than 637 individuals in more than 200 zoological collections.

THE THIRD LARGEST . . . AND NOT WHITE!

- The white rhino, next to the elephant and hippo is the largest land mammal in Africa.

- The name 'white' rhinoceros may be confusing as it originally referred to the shape of the species' mouth ('wide mouth') compared to that of the black rhino, and not to the colour of the animal. The name square-lipped rhinoceros is probably more appropriate for the white rhinoceros and the name hook-lipped rhinoceros more descriptive for the black rhino, as the white rhino is not really white and the black rhino not really black.

- The white rhino's wide lips are used for grazing grass whilst the prehensile upper lip of the black rhino enables this predominantly browsing species to strip leaves from the trees and to break off smaller twigs and branches.

- Apart from the shape of its mouth, the white rhino can also be distinguished from the black rhino by its longer head, which is carried lower, and by the prominent hump on the upper part of the neck.

- The two horns on the rhino's nose grow continuously at a rate of about 0,5 cm per month and if broken off accidentally, will usually be replaced from the underlying skin. The horns are not part of the skull and consist of compact hair-like material.

- The front horn is usually the longest. The very longest horn recorded for the Southern African region is stated to have been almost two metres in length.

- The front horn usually has a flattened and polished surface because of regular contact with the ground during feeding. Exceptionally, the front horn is used for digging roots and tubers.

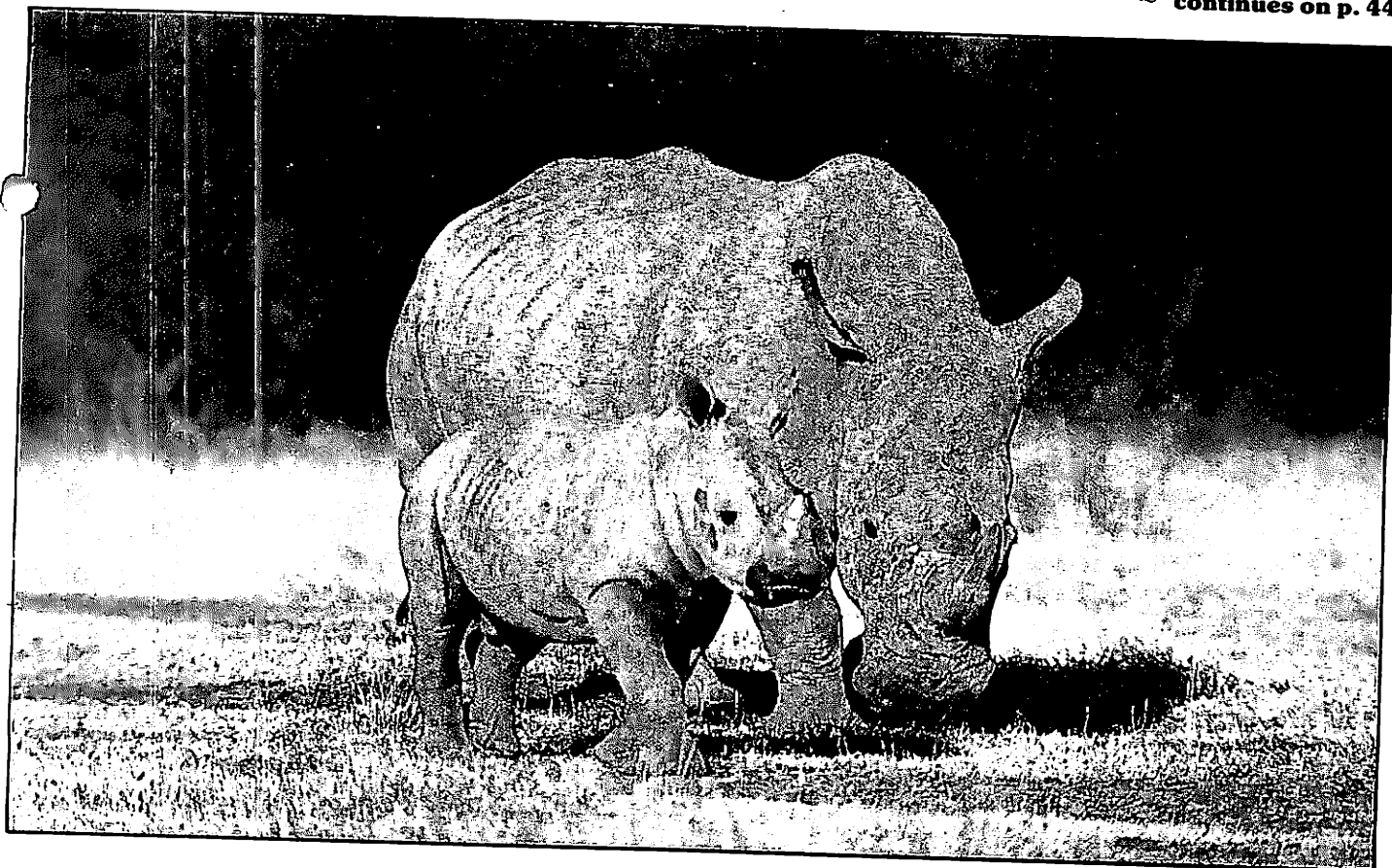
- The rhinoceros spoor is characterised by the marks left by three toes on each foot. The spoor of the front foot is slightly larger than that of the hind foot. The indentation on the posterior side of the white rhino's spoor distinguishes it from that of the black rhino, where the spoor is more rounded at the back. (See comparative sketches.)

HUMAN ENCOUNTERS . . . AND NATURAL ENEMIES

- Apart from man, the white rhino has few enemies to fear. Lions may prey on the calves and are known to have seriously wounded a fully grown cow. An exceptional case has also been reported by Dr. Tol Pienaar when a rhino was killed by an elephant at a waterhole.

- The rhino can hear and smell very well, but has poor eyesight. They can hardly see further than about 25 metres and find it difficult to spot a non-moving object. Dr. Norman

~ continues on p. 44



Photograph: Koos Delport

WHITE RHINO

CONTINUED FROM P. 16

Owen-Smith reckons that a rhino could smell a human as far as 800 metres when the wind carries the smell towards the animal.

- Although of a more patient nature than the easily provoked black rhino, the white rhinoceros can be dangerous, particularly when molested, and has been known to seriously injure and even kill people.

- Rhino communicate vocally, by 'body talk' and by scent marking. The strange, squeaking call of the rhino, when perfectly imitated, can lure even wild rhino to a very short distance.

- White rhino are frequently accompanied by red billed oxpeckers, which usually warn the rhino of approaching humans. When first alarmed, the animals will immediately react by raising their heads, the ears erect. With their buttocks touching, and facing in opposite directions they will quietly wait until they have established the direction from which danger threatens before breaking away at a fast gallop.

- Although a rhino, when forced to do so, can run at about 40 km/h they normally walk very slowly, with the heads held very low.

PREFERRED FOOD AND FEEDING BEHAVIOUR

- Being animals of habit, they tend to use the same foot paths over and over. They sometimes move over high ridges and through dense forests to get to water or suitable grazing.

- In Natal, Dr. Owen-Smith found that four grass species, i.e. *Themeda triandra*, *Panicum maximum*, *P. coloratum* and *Urochloa mosambicensis* constitute 74 percent of the white rhino's total food intake. *Cynodon dactylon* ('kweek') is very well utilized, where and when available. In general, the white rhinoceros prefers short, sweet grass and will give preference to new growth.

- It is quite unbelievable how selective the white rhino, with its huge mouth, can be when feeding. The big nostrils are used to scan the vegetation and unpalatable grasses and herbs are avoided.

- Dr. Owen-Smith found that white rhino spend about 48 percent of daylight time grazing. The food is partially chewed, but not regurgitated and rechewed, as the rhino is not a ruminant. Whilst feeding, the head is moved in semi-circles, to and fro, and all edible grasses are cut to very short lengths. Then it moves forward a step and the whole process is repeated.

- When water is readily available, white rhino will drink regularly. During water shortages, they may go without water for as long as three to four days. They visit watering places most frequently during the late afternoon and early evenings, but may drink any time of the day or night.

TERRITORIALITY AND SOCIAL GROUPING

- White rhino are found singly, or in small groups usually consisting of a single dominant bull, cows and calves.

- White rhino bulls are strongly territorial and will fight with bulls entering their territories. Each territory is about 0,75 to 2,6 square kilometres in size, according to the rhino expert, Dr. Owen-Smith, which is smaller than the average territory for black rhino. The bulls adhere strictly to their particular territories and will only leave their domain for water or when they are defeated by an intruder.

- The sexually mature, territorial breeding bulls mark their well demarcated territories in various ways to indicate their presence to other bulls. Territorial dung piles are established throughout the territory, at a density of up to 15 per square kilometre. Only the territorial bulls kick their dung heaps apart and undisturbed dung piles along regularly used tracks between feeding areas and waterholes are therefore most probably deposited there by cows, juveniles and non-territorial rhino.

- Urine spraying by territorial males, another form of scent marking, is restricted to the boundaries of the territory. When patrolling his boundaries, the territorial bull frequently emits short bursts of urine spray to continually remind possible male intruders to 'stay out'.

- Fighting does not always occur when bulls of adjacent territories meet, as the rights of the owner of a particular territory are usually respected by others that may accidentally trespass. When attending to a cow in oestrus, however, vicious fighting may result.

- Bruising of the face due to fighting can cause excessive bone growth in the vicinity of the naso-lacrimal duct, i.e. the duct draining the tears from the animal's eye to its nasal passages. When the duct becomes obstructed by the bony obliteration, the tears will run down the animal's cheek, resulting in cancerous growths which may occlude the eye and even lead to blindness and the eventual death of the unfortunate animal.

- In confined areas with high rhino density, adult males who do not possess a territory and which are not strong enough to acquire one by active fighting, may be found living in another bull's territory. As long as the socially inferior bull behaves in a submissive way, and as long as there is no female in oestrus around, the inferior bull will be tolerated as a subsidiary in the other male's territory.

- The territorial bull has a few preferred resting places within his territory where he can usually be found. Whilst resting the rhino will either stand or lie on his brisket or on his side.

- According to Dr. Owen-Smith, the cows have definite home ranges, from 6 to 20 square kilometres in size. Their home ranges overlap, and the living area of a single cow may span over the territories of up to seven different territorial bulls. This largely precludes inbreeding in extensive, natural areas and contributes to competition among bulls, favouring the stronger bulls to breed and to produce more vital offspring.

BREEDING DATA

- Mating and calving may take place at any time of the year, with peak calving times in March and July ~ as recorded for Natal.

- While moving through male territories a cow on heat will advertise her availability and whereabouts by the frequent squirting of a mist of urine (perfume) as she wanders along.

- A cow on heat will obviously be much in demand by the bulls of the area. A territorial bull will do everything possible to prevent her from straying from his territory.

- Mating is a lengthy affair. With his feet firmly placed on the cow's back, the bull may stay mounted for over an hour.

- When a female in oestrus is accompanied by a calf, the latter may occasionally be killed by the bull.

- Before the cow has her calf, she chases away her previous calf, which then usually joins up with one or more other sub-adults. Although already weaned at the age of about 12 months, it only leaves its mother when about two years old.

- Shortly before calving, the cow will leave the herd. The newly born calf, weighing about 40 kilograms, is rather unsteady on its feet for the first three days. Thereafter it will go where mother goes, or is it the other way round? The white rhino calf usually leads the way, with the cow directing it gently with her horns. It is interesting to note that in the case of the black rhino, the mother usually takes the lead, with the calf following when they are on the move.
- A calf is born every 2 to 4 years and about 10 calves can be produced from a single cow.

GENERAL INFORMATION FOR GAME FARMERS

- White rhino seem to increase at a rate of about 4 to 9 per cent each year, and suitable habitats seem to hold an average of one rhino per 97 hectares, according to Dr. Owen-Smith.
- A rhino-proof fence can be constructed by sinking strong metal posts of railway tracks into the ground, so as to protrude some 1,5 metres above ground level. With these posts spaced at 10 metre intervals, with two steel cables, stretched between them, 60cm and 120cm above ground level and kept parallel by treated timber droppers every 3 metres, few rhino would ever succeed in crossing the fence. The perfect rhino-proof fence has been described in more detail in *Natura* no. 6, p.33. Nowadays, game fences are made rhino-deterrent by the incorporation of electrified fencing.

Dr. Martin Brooks of the Natal Parks Board is thanked for revising the script.

Natura readers who are interested in learning more about the mammals of Southern Africa, are reminded of the excellent book, 'The Mammals of the Southern African Subregion' by Professor John Skinner and Dr. Reay N. Smithers, published by the University of Pretoria. The book is presently being revised and will be available in bookshops during the first half of 1990.

SUMMARIZED INFORMATION ON THE WHITE RHINOCEROS

Natural distribution (Southern Africa): The white rhinoceros was originally distributed widely throughout Southern Africa.

Relative abundance: Previously almost extinct. Now locally common and doing well in nature reserves and on game farms in South Africa. Very much threatened elsewhere in Africa.

Limiting factors: Poaching, fighting, accidental injuries, drought and drowning in floods.

Habitat: Savanna and grasslands within reach of open water and dense bush.

Preferred food types: Short grass, but is well adapted to feeding on long grass.

Sexual maturity: At about 4 to 5 years of age.

Gestation period: Approximately 480-490 days.

Calving interval: About 2 to 3 years.

Mating season: Throughout the year.

Calving peaks: Not well defined. March and July in Natal. Breeding throughout the year.

Number of young: A single calf at a time. Twins have been recorded but are very exceptional.

Longevity: 40 years.

Body weight (adults): Bull 2 000 to 2 300 kg (4 400 to 5 060 lbs.); cow 1 400 to 1 600 kg (3 080 to 3 520 lbs.)

Shoulder height (adults): 180 cm (72 in.)

Horns: Both sexes carry horns which are generally longer and thinner in the female.

Record horn length: 2 m. (6 ft 6 in.)

Rowland Ward record

African record: 62¼ in (155,6 cm)

Min. to qualify: 28 in. (70 cm)

Safari Club International record

Max. score 111⅜

Min. to qualify 70



Gerhard Wille's tame herd of white rhino on his farm near Ficksburg

**SOUTHERN AFRICA'S
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Natura

No. 19

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Photograph: S.A. Tourism Board



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