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Goss

MABERLY'S

Mammals of Southern Africa

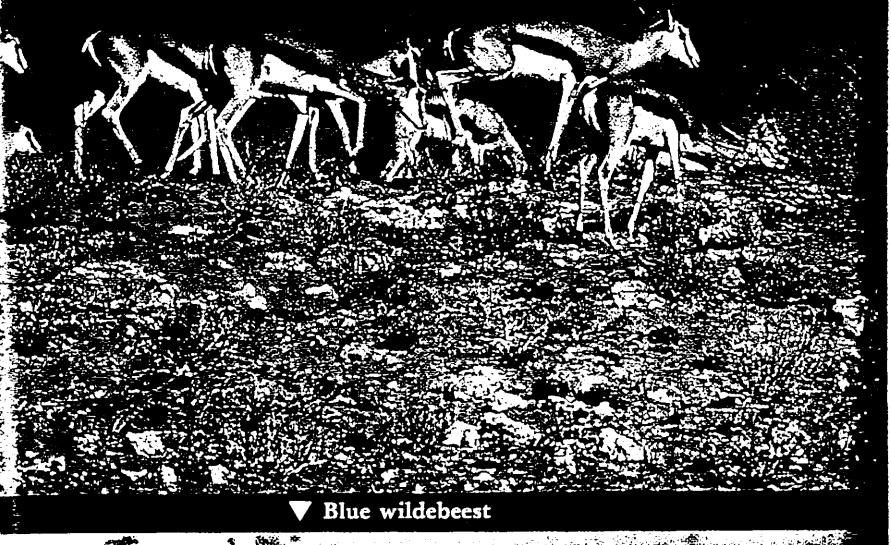
a popular field guide

A revision by Richard Goss
of Charles Astley Maberly's

The Game Animals of Southern Africa

1.1h?

DELTA BOOKS



Descriptive notes

The name 'white' rhinoceros is in fact something of a misnomer since this animal in fact has a grey skin which often takes on the colour of the soil in the area in which it lives. The so-called black rhinoceros is also not black and for this reason the colour of the animal should not be used to tell these two species apart.

The most readily apparent difference between the two is the shape of the head and lips: in the white (square lipped) rhino the head is *longer* and the muzzle wider and more *square* than in the black (hook-lipped) rhino. The white rhino is also larger and has a very *pronounced hump* on the neck just behind the head. The black rhino holds its head almost horizontally whereas the white rhino holds its head much lower. The folds in the skin are less evident in the square-lipped species and its horns differ more in length. The two horns of the rhinoceros are not true horns but are composed of a mass of tubular filaments which are similar to hair and are attached to the skin rather than to the bone of the skull. The front horn is almost invariably longer than the rear and there is normally a greater difference in the length of the black rhino's horns than is the case with the white rhino.

Distribution and habits

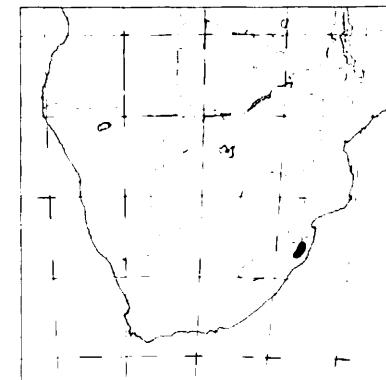
Today there are only two naturally occurring populations of the white rhinoceros: the one in East Africa and the other in Natal. In former times the animals were widespread, but persecution by man and climatic changes have reduced the species' range considerably. At one stage there were said to be only ten of these animals surviving in southern Africa and although this was probably an underestimate the species undoubtedly came very close to extinction in our area. This nucleus was carefully conserved by the Natal Provincial Administration and from it the white rhino has been re-introduced to many parts of its former range including the Kruger National Park (in 1961) where it is now well established.

Unlike the black rhino whose numbers have dwindled from 65 000 to 7 000 in the last fifteen years, this species'

White Rhinoceros (Square-lipped Rhinoceros)

Ceratotherium simum

Witrenoster



er height: 180 cm
♂: 2 200 kg
♀: 1 500 kg
horn (average): 63 cm
(record): 158 cm
speed: 40 km/h
naturality: 4.5 years
n: 16 months
of young: 1 calf
(rarely 2)
weight: 40 kg
g: 12 months
y: 45 years

Artiodactyla
Rhinocerotidae

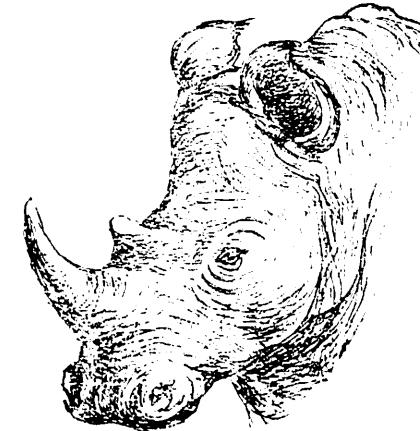
numbers have increased from 35 000 to 40 000 over the same period as a result of the South African conservation effort. The population in East Africa is, however, in an extremely precarious and rapidly deteriorating position with large numbers of the animals being poached annually for their horns which fetch up to US\$ 10 000 per kilogram in the East where they are used as an aphrodisiac, and in the Far East where they are used for medicinal purposes. There is also a great demand for rhino horn in the Yemen Arab Republic where it is used in the manufacture of traditional dagger handles.

Apart from its appearance the white rhinoceros differs in many important ways from the smaller and more widely distributed, though not more numerous, black species. Firstly, it is essentially a *grazing* animal, eating mainly short grasses which can be cropped to within a centimetre of the ground, and for which it is well equipped with its wide flat mouth. The black rhino is, however, essentially a *browsier*, eating leaves and shoots principally, hence its pointed, prehensile lip for grasping. As a result of its preference for sweeter grass it is often found in woodland or denser forms of forest in Natal where these grasses are most abundant.

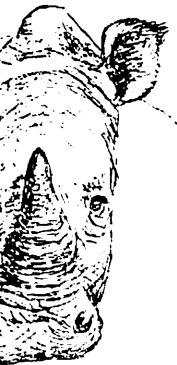
In temperament the two species differ profoundly: the white rhino, in spite of its superior bulk and height, is gentle and placid and rather lethargic; whereas the black rhino is well known for its nervous, irritable and quite unpredictable disposition. Both are equally short-sighted so that poor vision cannot be the sole explanation for the latter's apparent aggressiveness. Provided the wind is in your favour (the animals have a very acute sense of smell and hearing) and reasonable care is taken, it is not difficult or dangerous to approach within a few metres of unsuspicious white rhinos, even on foot. Maberly recounts how, when visiting the Umfolozi Reserve, he was constantly amazed at the ease with which one could do this. As the beasts gradually became suspicious of his presence they stopped grazing or dozing, slowly raised their ponderous heads a trifle and stood listening intently, motionless except for the constant movement of the trumpet-like ears which swung slowly backwards and forwards to catch the slightest sound. Presently they would curl their tails in a loop over their rumps — a sure sign of alarm — and depart at a

lumbering trot (with the graceful action of trotting cart-horses!).

The white rhino is more gregarious than the black rhino species and is often observed in groups consisting of a dominant or territorial bull, a number of subordinate bulls, and cows and calves. Player and Feely found that 'the ties between mother and calf are lasting, and females are regularly seen with the calf of the year and another three-quarters grown. Such groups frequently join up forming parties of from four to eighteen in number', but groups normally number between four and eight animals. Dominant adult bulls maintain territories which vary in size from less than one square kilometre to almost five square kilometres. The territories are demarcated by latrines which the dominant bull uses, and by his spray-urinating along the boundaries. If the bull happens to be outside his own territory then he will urinate without spraying, in the same way that subordinate bulls urinate. Before and after defecating, scratching movements are made with the hind legs; the droppings are large and rounded, not unlike those of an elephant. The type of vegetation consumed (grass or leaves and shoots) is clearly apparent on examination of the droppings and one can easily differentiate between white and black rhinoceros' latrines in this manner.



Rhinos must drink at least once every three or four days (usually at night); if water is not available in his territory, then a bull will leave it in order to drink. If he is encountered in another territory then he will normally avoid



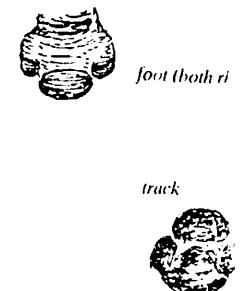
a fight by returning to his own territory but if a female on heat is present then a violent confrontation may take place. A number of subordinate bulls are allowed to reside in the territory of a dominant bull and they usually remain in or near this area; cows, however, move over areas as large as twenty square kilometres and may overlap the territories of as many as seven bulls.

White rhinoceros communicate by snarling, grunting, puffing and squealing. A number of subtle displays such as pulling back the ears are also used.

Rhino calves are vulnerable to attack by lions and spotted hyaenas but the females defend them very aggressively. Only very occasionally are the adults killed by lions and there has been a report of elephants killing one at a water-hole in the Kruger Park. Most natural causes of death seem to occur from wounds inflicted in fighting; other causes are the result of such accidents as getting stuck in mud, falling over cliffs, drowning in floods and getting stuck between rocks.

White rhinos depend largely on red-billed oxpeckers to remove ticks and other ectoparasites from their vast hides: the birds also warn the rhinos of approaching danger. The rhinos frequently wallow in mud pools in order to rid themselves of ticks by coating their bodies with mud which is later rubbed off or falls off, with the parasites encrusted therein.

territories with accompanying squeals and horn clashing. They will also keep subordinate bulls at bay and violent fighting may result in the combatants being killed or dying later of their wounds. Copulation takes place a number of times while the female is in oestrus. It is a lengthy procedure and males may stay mounted, with their legs stretched out and feet on the female's back, for over an hour. Calves are born throughout the year and can accompany their mother within twenty-four hours of birth. The female white rhino always follows close behind her calf, guiding it with her horn, except in the case of the very young which follows its mother; the black rhino calf always follows the mother. The calf begins to graze when it is about a week old; it suckles for about a year (during which time it moult the outer horny layer of skin twice) and eventually leaves the mother when it is between two and three years of age.



Breeding

A female on heat is detected by the territorial bulls which will then actively attempt to prevent her from leaving their

ck inoceros -lipped Rhinoceros)

os bicornis

artrenoster



Descriptive notes

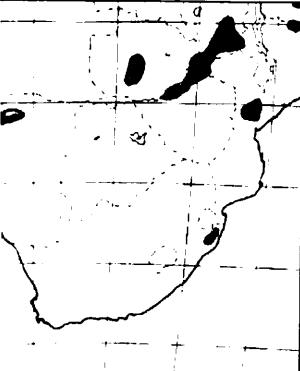
The 'black' rhinoceros is no more black than the 'white' rhinoceros is white. The animals' grey skins take on the general colour of the soil on which they live and the mud in which they frequently wallow. The hook-lipped (black) species is best distinguished from its square-lipped white counterpart by its pointed muzzle with prehensile, forward-curved upper lip. The animal is also less bulky and taller on the leg (though of lesser height and smaller size) and also has a shorter head which is held erect and more or less horizontal when walking or running. The neck is longer and the ears are shorter and rounder. The horns are composed of tubular, hair-like filaments which are attached to the skin rather than to the bone. The rear horn in the black rhino is usually nearly as long as, and often longer than, the front horn and there have been occasional instances of three-horned animals. The black rhino also does not have the hump at the back of the neck which is so characteristic of the white species. Cows are the same size and weight as bulls.

Distribution and habits

The black rhinoceros has historically had a much wider distribution than the white rhino. The coach of Simon van der Stel was upset by one near Piquetberg in 1685, and in Jan van Riebeeck's diary for 1653 he records it as 'common on the Cape Flats and on the slopes of Table Mountain'.

The reason for its wider distribution is no doubt on account of its *browsing* habit, there being a greater variety of bushes, leaves, and twigs available for it in more varied country than the comparatively few selected grasses essential for its larger counterpart.

Today, although the black rhino has a wider range than the white rhinoceros, most of this area (particularly in East and Central Africa) is inadequately patrolled and protected and, as with the white rhino, its numbers, which have been decimated in the past, are continuing to dwindle at an alarming rate. The world population of the black rhino was estimated at 65 000 in 1970 and in 1985 there were only



7 000 left. This species is also poached for its horn which can be powdered and easily smuggled past the authorities. The price of rhino horn is now up to US\$ 10 000 per kilogram, almost thirty times as high as it was six years ago, as a result of its scarcity. Apart from its use as a supposed aphrodisiac in the East, it is also in great demand in the Yemen Arab Republic for making traditional Arab dagger handles.

In southern Africa, a nucleus of black rhino were protected in Natal just in time to save the species from extinction in our area. From this group they have established themselves successfully in Natal and have also been relocated in many parts of their former range where they are now afforded protection e.g. four animals were released into the Kruger National Park in 1961 after an absence of twenty-five years.

This rhinoceros tends to be solitary, with only occasional temporary associations between individuals taking place. Although the black rhino (like the white species) spray urinates and sometimes defecates at latrines, this behaviour is apparently to advertise the animal's whereabouts rather than to demarcate territorial boundaries as is the case with the white rhino. Their habit of kicking their dung about and spreading it around with their horns may aid in making their presence known. Since they do not have territories, black rhino bulls make every effort to avoid other bulls and for this reason confrontations are rare. An exception to this is when there is an oestrus female around: in these situations extremely violent fighting accompanied by a great deal of screaming, squealing, snorting and growling may take place. These fights frequently result in the death or serious injury of at least one of the contestants. Serious fighting may also take place between adult square-lipped and black rhino bulls, but this is the exception rather than the rule.

Calves may fall victim to lions and hyaenas but in most cases adult rhino emerge victorious from encounters with these predators. Most other mammals are ignored but conflicts between this species and buffalo and elephant do take place, normally when they are competing for water.

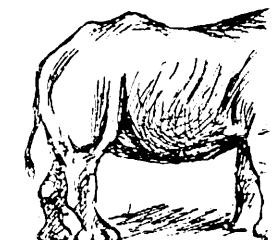
The black rhinoceros feeds mainly at night, and during the earlier part of the day and the late afternoon. It utilises a wide variety of woody plants and selects shoots,

shoulder height: 1
weight: 800 - 1 000
running speed: 35
sexual maturity: 6
gestation: 15 months
number of young: 1
birth weight: 40 kg
longevity: 40 years

Records

front horn (southern
(East Africa): 120

Order: *Perissodactyla*
Family: *Rhinocerotidae*



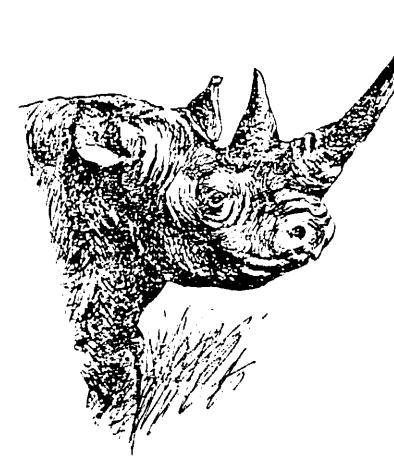
twigs or thorns depending on the plant species. As a result of this diet the black rhino is one of the few species which has its habitat improved by ranching, because of the overgrazing and subsequent bush-encroachment which usually occurs with this form of agriculture. Under wet conditions it will eat small quantities of grass and it spends the heat of the day resting in the shade, often lying down on its haunches or flanks like an enormous pig. Its dully greyish hide merges perfectly with the often dry, desiccated scrub or bush of its habitat and, provided the wind is right, to stumble on a deeply-sleeping rhino in such circumstances is not difficult – with often startling results! Fortunately, however, it is nearly always accompanied by its faithful guardians red- or yellow-billed oxpeckers, which cling incessantly to, or clamber about, its huge frame, eagerly extracting the ticks with which rhinoceros are burdened. Ever alert and watchful, at the first suspicion of alarm, these birds fly up with chirring cries, and the slumbering, dozing or feeding rhino is instantly on the alert.

Its eyesight is exceedingly poor (it probably cannot distinguish a motionless object beyond about 15 m), but hearing, and especially scent, are good. When suspicious, it will stand perfectly still, ears cocked and grotesque head raised with widely distended nostrils as it searches the wind. If its fears are confirmed, it will either utter a few piercingly loud, blast-like snorts, loop its tail over its rump and trot away through the scrub at a slinging, rather zigzag pace until it presently wheels about to stare and snort once more before finally vanishing from view, or else it may elect to come at a lumbering gallop straight for the cause of its alarm. Such 'charges' in the majority of cases are merely impulsive and confused rather than deliberately aggressive. In these cases the tail is not looped over the rump and provided there is time, the animals can usually be dodged or can be made to turn away by shouting loudly.

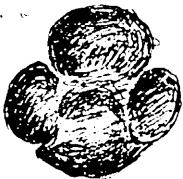
Nevertheless, in areas where rhinos have been much disturbed they can become exceedingly vicious and dangerous, and they should never be taken on trust, and should be given a reasonably wide berth. The rhino charges with its head held high in order to give it better vision and it is only lowered in the last few paces as it attempts to batter or throw the object of its rage with its formidable horn.

The final appearance of that battering-ram-like head lowered with the horns pointing right at you as he comes at an ever-increasing gallop is alarming enough – even if you are perched, with camera, on the back of a skilfully-manoeuvred jeep!

The average rhinoceros is an odd mixture of timidity, inquisitiveness, pugnacity and nervous irritability. They have been known to charge an oncoming train in Kenya twice in succession – in each event being the worse for the encounter. A young calf will guard the carcass of its shot mother with pathetic gallantry, repeatedly charging, with shrill squeals of rage, anything that approaches, regardless of size. Black rhinos differ greatly in individual temperament, and they also tend to vary locally in this respect: those in disturbed areas are invariably more savage and aggressively inclined than those in conserved areas. However, one has always to beware of the odd naturally truculent individual.



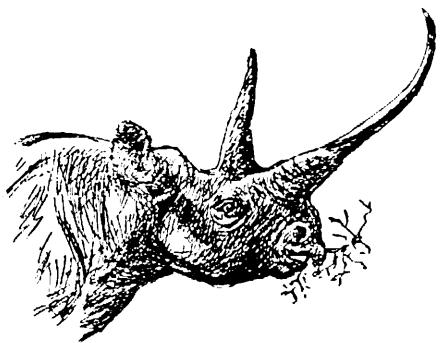
Every adult black rhino in Natal develops sores, normally on the shoulders, which discharge quantities of blood and fluid. Until quite recently these sores were thought to have a sexual significance but they have been found to be caused by a filaria parasite. These lesions are found on the chest and sides of younger animals but occur behind the shoulders of adults. They are aggravated by the attentions of the oxpeckers and even occur on perfectly healthy animals.



Black rhinoceros normally drink in the evening or at night, sometimes travelling long distances to water. They are noisy and very quarrelsome. If they should gather at a solitary waterhole, they chase one another about and brawl over 'water-rights'. On such occasions they can produce some quite extraordinary sounds — ranging from deep hippo-like grunts or short roars to high-pitched squeals of indignation, and, of course, the usual locomotive-like snorts.

Breeding

Courtship in the black rhinoceros may last several hours and is a complex procedure. The ritual involves the squirting of urine by the female, horning of the cow by the bull, the cow attacking the bull at times and sparring bouts with the horns. The bull may mount the cow a number of times before successfully copulating; an act which may take thirty minutes or more, with the cow emitting periodic low-pitched squeals.



Female black rhinos drop a single calf at any season about once every three years. It can walk and suckle within three hours of birth and starts to browse after a few weeks. If they are separated the mother and calf communicate with each other with high-pitched mews and squeals. Many young rhino calves are killed by lions and spotted hyaenas but things are not always easy for the predators and a cow rhino has been known to kill a lion in

defence of her calf. The calf will be rejected (sometimes violently) by the mother during her next pregnancy or when her next calf is born. The rhino is sexually mature at six years of age.

