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THE GAME ANIMALS
OF
SOUTHERN AFRICA

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charging elephant, or a very frightened one, can easily attain a speed of 20-25 m.p.h., but only for a limited distance.

Elephants usually drink at night or in the late afternoon, but sometimes in the early morning.

So powerful a beast as the adult elephant has no natural enemy, after man, but there are records of young elephants being attacked and killed by lions—mostly of course when for some reason they have become separated from their mothers or else have been seriously injured. There have even been occasional instances of adult cow elephants succumbing to a concerted attack by lions, but these are very rare. Elephants sometimes get completely trapped and burnt to death or very grievously injured during violently raging bush fires.

The trail of elephants is frequently littered with fallen and uprooted trees, broken off and "barked" twigs, bits of bark and scattered foliage, and, of course, the great more or less circular droppings of fibrous matter. In dust, sand or mud the huge roundly oval tracks (more cylindrical in the hind feet) are clearly visible, with the wavy, rugged skin of the sole clearly imprinted upon them.

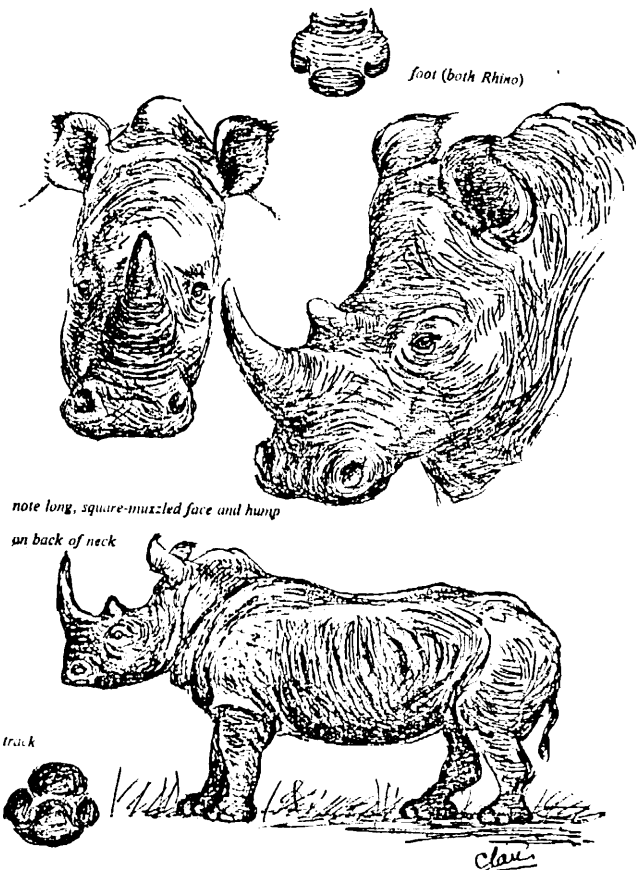
WHITE, OR SQUARE-LIPPED RHINOCEROS : WIT-RENOSTER

(*Ceratotherium simum* Burchell)

Zulu: Mkhombe, Mmkhombo. *Tswana*: Tshukudu, Mogohu, Kgetlwa. *Transvaal Sotho*: Tshukudu, Mogohu. *Venda*: Tshugulu. *Sindebele*: Mhofu.

Field Impression: Very bulky, with *pronounced hump on back of neck* and head usually carried low, with front horn considerably longer than the rear one, projecting almost horizontally. Ears rather trumpet-shaped, fringed with bristly hairs. Colour not strikingly different from that of the "black rhino"—a dull yellowish-grey, but often influenced by colour of local mud or soil. Looks heavier and comparatively shorter on the leg than the black rhinoceros. Muzzle *square* and lips wide and straight-edged. Head proportionately *long*, whereas it is comparatively *short* in the black rhino.

Descriptive Notes: The long, rather narrow head with its abruptly squared jaw together with the pronounced hump on the back of the neck combine to produce a quite different effect



WHITE, OR SQUARE-LIPPED, RHINOCEROS

from that of the better known black rhinoceros in which the head is comparatively short and full at the sides and, except when dozing, usually held fairly high and almost horizontal. The folds in the hide are less evident in the white rhino, and the skin has a peculiarly granulated aspect when viewed at close quarters. Base of anterior horn straight-edged in front. "The characteristic hump on the top of the neck is formed by muscular and epidermal tissue and is not supported by bone. After death it decomposes very quickly and is therefore not prominent on a carcass" (J. C. Player and J. M. Feely). In the female there is a single pair of *mammæ* on a small udder situated inguinally (Austin Roberts).

Size: "The largest adults known have measured 6½ ft. at the shoulder, but the majority are some 10 in. shorter. The estimated weight of a big adult is about 5 tons, but 3 tons is probably an average weight" (Player and Feely). **Length** (head and body), 12-13 ft.

Horns: The longest anterior horn recorded for the southern race is 62½ in., collected by R. Gordon Cumming, but the usual length of adult horns is between 2 and 3 ft. The *circumference* of the record anterior horn is 22½ in. The *record rear horn* for the white rhino (southern race) appears to be 17½ in. (Selous: Mashonaland), though a specimen from the northern race (from Mongalla, Sudan) is recorded with a rear horn of 21 in. (Rowland Ward: 1922). In the white rhinoceros the anterior horn has a very expanded base and flat frontal surface. Front horns of cows often longer and more slender than those of bulls.

The "horns" of rhinoceroses are of course not true horns at all. They are composed of closely-packed hair-like fibre growing from the skin. They rest on a slightly hollowed base on the skull, from which they can be detached. They are normally present in both sexes.

Present Distribution (southern race): An aerial count taken over the Umfolozi and Hluhluwe Game Reserves and adjacent Crown lands in 1953 suggested a total of 437 individuals according to Messrs I. C. Player and J. M. Feely (*The Lammergeyer*, 1960). Of this total some 269 were definitely located in the eastern and western sections of Umfolozi Game Reserve and in Crown lands; "Corridor" (only half covered) and Hluhluwe Game Reserve only twenty-eight. The remainder counted in the grand total were in Crown lands and unoccupied portions of Native reserves, and therefore in vulnerable circumstances. As these Zululand white rhinos are the only known survivors of the

southern race of one of the rarest mammals in the world today, it is undoubtedly indicated that a considerably larger ecologic area should be included in their present habitat in the two Zululand game reserves, if possible as a national park, to ensure their safe survival. Vol. 1, No. 1 of *The Lammergeyer*, journal of the Natal Parks, Game and Fish Preservation Board, May 1960, offers all details of the problems affecting the adequate preservation of the white rhinoceros in the Umfolozi and Hluhluwe Game Reserves today, and it is strongly recommended to all who are interested.

"The last of the southern square-lipped rhinoceros are now confined to the Umfolozi Game Reserve, the unoccupied State-owned lands adjoining the Hluhluwe Game Reserve, and in small corners of neighbouring Native reserves. Straying to the south, and also less regularly to the west and east, is a seasonal occurrence. The total area of inhabited range was until the middle of 1957 about 232,000 acres. This range has been decreased in subsequent years by some 20,000 acres because of disturbance by Native squatters illegally occupying the State-owned land. Of the 212,000 acres now inhabited, 92,000 are proclaimed game reserves containing about half the present population. The use to which the remaining vacant State-owned land is put will determine the fate of the species in its natural state in Southern Africa" (Player and Feely: *The Lammergeyer*, Vol. 1, No. 1, 1960).

Habits: It is time that the name "white rhinoceros" should be abandoned because it is utterly misleading. Burchell's or, best of all, the *square-lipped* rhinoceros is far more apt. There have been a variety of suggestions as to why the species became known as "white," the best I think being that offered by T. R. H. Owen—that it is a corruption of the term "wyd mond" or "broad mouthed" originally applied by the old Boer hunters. In actual colour, of course, there is little difference if any between both the black and the white rhinos, and "black" is equally misleading. Both are grey, though as both are great wallowers in mud their hides are frequently stained with the hue of the local soil (which in some areas is almost white of course).

Apart from its appearance the square-lipped rhinoceros differs in many important ways from its smaller and more widely-distributed cousin. Firstly, it is essentially a *grazing* animal, eating only various grasses, whereas the "black" rhino is essentially a *browser*, eating leaves and shoots principally, hence its pointed, prehensile upper lip for grasping. According to

Player and Feely, the most frequently eaten grasses in Zululand are "certain sweet species of *Urochloa*, *Panicum* and *Digitaria*." Therefore, except when travelling, square-lipped rhinos are "usually found in woodland or denser forms of forest where the preferred grasses are most abundant."

In temperament the two species differ profoundly: the "white" in spite of its superior bulk and height being gentle and placid, and rather lethargic: whereas the "black" is well known for its nervous, irritable and quite unpredictable disposition. Both are equally short-sighted, so that faulty vision cannot be the sole explanation of the black rhino's apparent aggressiveness. Provided the wind is in your favour and reasonable care is taken, it is not difficult or dangerous to approach within a few yards of unsuspecting white rhinos, even on foot; and when I visited the Umfolozi Reserve I was constantly amazed at the ease with which one could do this. As the beasts gradually became suspicious of our 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—sure sign of alarm—and depart at a lumbering trot (with the action of trotting cart-horses!). "When in a hurry the usual gait is an extraordinarily rapid and graceful trot, timed from a vehicle at 18 m.p.h. They will also canter and gallop for short distances at 25 m.p.h." (Player and Feely).

Although black rhino are solitary creatures, seldom met with in groups of more than three (cow, bull and calf), and mostly single or in pairs (except, perhaps, when individuals gather at a water-hole), white rhino are more gregarious, and are often observed in small groups of from four or five to possibly seven or eight at a time. "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" (Player and Feely). 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 mother leads the way, her young following her. According to the same authorities, if an adult male is permitted to accompany such a group of cows and calves he is only tolerated if he does not attempt to copulate. "Any such attempts are savagely repulsed

and indeed may result in the death of the male." Apparently the male is very jealous of the young and will only tolerate them if they do not approach him too closely. "A calf accompanying a female on heat is in constant danger, and if it remains close to its mother may be killed by the bull." Hence, no doubt, the stern attitude of the females towards adult males in such collective groups.

Longevity: Most natural causes of death seem to occur from wounds inflicted in fighting, other causes are the result of accident: "getting stuck in mud, falling over a cliff, drowning in floods and getting stuck between rocks." "The oldest known individual in the reserve is a female of 36 years, who is now showing her years though still bearing calves" (Player and Feely).

Breeding: Very little detailed information is available at present about breeding data, and again I quote extracts from the careful records of Player and Feely. Females in period (most frequently in July-September, but also individually in other months) are in all cases attended by more than one male; much fighting among the latter takes place and many combatants are killed or subsequently die of mortal wounds. "Copulation takes place a number of times while the female is in oestrus. It is a lengthy procedure and males are known to stay mounted for over an hour." The male places both feet on the female's back and does not grasp round the flanks. *Gestation period* "is estimated (on the observations of the late Mr W. E. Foster on a female marked by a slit horn), probably with little error, to be 18 months (547 days), but it is not possible to say whether this figure is close to the mean of the species." A single calf is the normal birth, but twins have been noted, once personally by the writers, and by others. The calf can accompany its mother within 24 hours of birth. It begins to graze when a week old, but suckles for at least a year.

"For the purpose of computing the *average breeding rate* of the whole population it is probably best to use 3 years."

During my personal experience I only heard one sound, apart from snortings, and that was uttered by the bull of a pair as they trotted away from us. It is described in my notes as "a curious, deep sort of whinny—somewhat like the opening notes of that of a stallion." Player and Feely, however, record many diverse sounds uttered by the species ranging from the deep bass bellows of fighting bulls, "and this continues for hours at a time," to the squeaking sounds of calves separated from their

mothers or otherwise in trouble, and the rumbling bellow of warning made by an old bull when a young one approaches a female in oestrus.

During the heat of the day white rhinos usually lie down and sleep in the shade. One such group that we were able to approach on foot to within about 30 ft. consisted of a large bull, two adult cows, a young cow and a very small calf—the latter snuggling up against the flank of its mother. Some lay on their flanks, others crouched on their haunches, with their heads extended along the ground. All of them were sleeping soundly, the only movements being those of the ears which repeatedly turned and twisted and wagged backwards and forwards!

The droppings are huge, almost circular (one in my possession measures 6 in. \times 5 in.), dark greenish when fresh, becoming dry and nearly black, and much resembling those of elephant in aspect and composition. They are deposited usually in heaps along well-used paths, mainly because individuals tend to defecate where dung already occurs. Before and after defecating, scratching movements are made with the hind legs. Urine is sprayed out backwards between the hind legs.

Like the black rhinoceros, the white rhino depends very largely on the "tick birds" or oxpeckers (*Buphagus*) which constantly search its vast hide for ticks, to give it warning of approaching danger, and it reacts instantly to the warning cries of the ever-watchful birds.

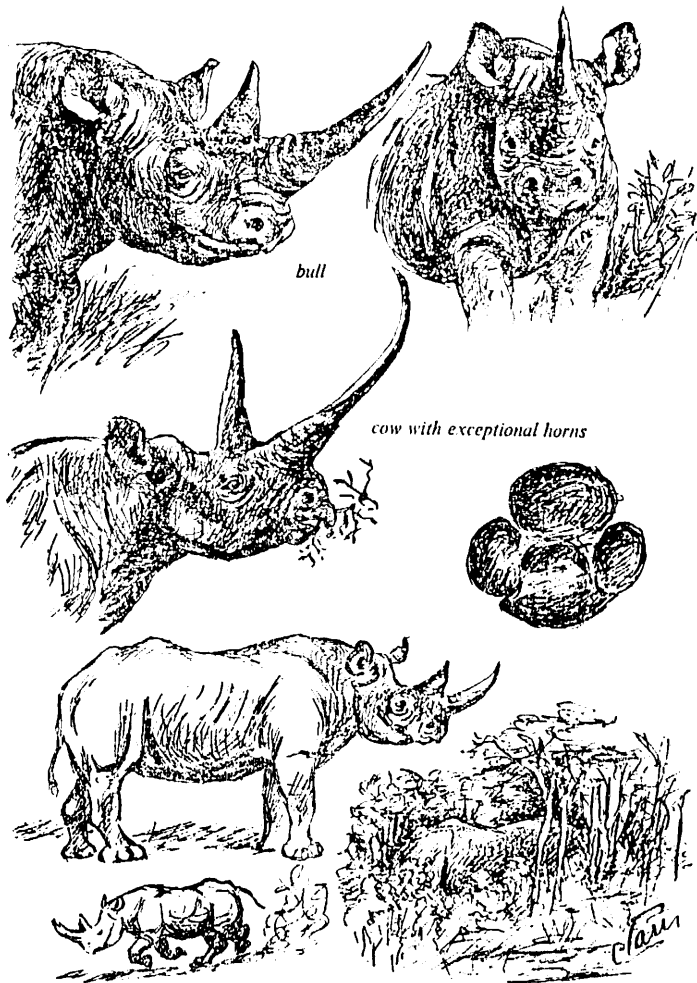
On 14th October 1961 four square-lipped (white) rhinoceros were re-introduced into their former habitat in Kruger National Park. They were captured and transported from the Umfolozi Reserve by rangers of the Natal Parks, Game and Fish Preservation Board. They have also been re-introduced to the Willem Pretorius Game Reserve in the Orange Free State, and also into Southern Rhodesia (Matopos National Park).

BLACK RHINOCEROS : SWARTRENNOSTER (*Diceros bicornis* Linnaeus)

Zulu: Bhejane. Transvaal Sotho: Makgale. Xhosa: Mkhombe.
Tswana: Tshukudu, Bodile. Venda: Thema. Herero: Ngava.
Kung Bushman: Khi. Sindebele: Bhejane.

Field Impression: Less bulky and taller on the leg (though of lesser height and smaller size) than the white rhinoceros. Head

BLACK RHINOCEROS



comparatively short, *without hump at back of neck*, and usually held more or less erect, and more or less horizontal when walking or running. *Muzzle pointed*, with prehensile, forward-curved upper lip. Rear horn often nearly as long as, and occasionally even longer than, anterior horn. Ears less fringed at tips, less trumpet-like in form. There is no appreciable difference in colour. Its outline is more hollow-backed than that of the white rhinoceros.

Descriptive Notes: Shoulder height of bulls from 5 ft. to 5 ft. 6 in. Females average up to 4 ft. 10 in. *Weight* about 2 tons. Minimum *Live Weight* of one 3-4 year old specimen (East Africa) 1,584 lb. (L. and M. Talbot). *Total length* about 11 ft. from tip of snout to base of tail which, as in the white rhinoceros, is only moderately long and scantily tufted at tip with bristly hairs. *Circumference round belly* about 10 ft. The upper lip is fairly pointed and prehensile, as the beast is a *browser* and twigs and leaves are grasped with the lips. *Feet* (also in the case of the white rhino) relatively small and compact, having three hoof-like toes on each foot—the central one broad and the two lateral ones smaller—producing a characteristic track like the ace of clubs. *Mammæ:* one pair, inguinal.

Horns: Front horns measure up to 43 in. The record length for South Africa (Zululand) is *front horn length on outside curve*, 41½ in. *Rear horn length on outside curve*, 10 in. Circumference of front and rear horns, respectively 20½ in. and 16½ in. (Rowland Ward: 1922). The front horn of the black rhino is rounded at base and shorter than that of the white rhino. There have been occasional instances of three-horned black rhino.

Present Distribution: In the Hluhluwe Game Reserve of Zululand there are at present a fair number of black rhinoceros, and this is the largest remaining concentration of this species in Southern Africa. A few exist in the Mkuzi and Ndumu Zululand reserves, and also in the Umfolozi Reserve. Eight (from East Africa) have recently been introduced into the Addo Elephants National Park. Formerly abundant in the Northern and Eastern Transvaal, one or two survivors were from time to time reported in the dense Lower Sabi thorn bush in Kruger National Park, but "subsequent to 1940 no traces of the animals have been found, and I am inclined to think that the species must be written off as a Kruger Park resident" (Stevenson-Hamilton: 1945). Elsewhere in Southern Africa today it is only still found in a few of the wilder parts of Portuguese south-

east Africa, Southern Rhodesia, northern Bechuanaland and northern South West Africa (Austin Roberts). It is nowhere plentiful throughout its present range and, as the result of considerable poaching (its horn [and that of the white rhino] obtains high prices among Orientals on account of its supposed aphrodisiac properties), it is rapidly becoming rarer all over Africa, except in the most carefully-guarded game reserves and national parks. In the Wankie National Park only one is still known to be wandering over an area in which they were plentiful at the end of the last century.

Habits: The black rhinoceros has always had a much wider distribution all over Africa than the white rhinoceros, even during the times when the latter was relatively abundant in suitable country. 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 last shot in the Orange Free State was at Renoster Kop, south of the Vaal in Kroonstad district in 1842. In 1853 was the last record for a Cape rhino, shot on the Coega River close to Port Elizabeth (Hall).

The reason for its wider distribution is no doubt on account of its *browsing* habit, there being a greater variety of bushes, twigs, leaves, etc., available for it in more varied country than the comparatively few selected grasses essential for its larger cousin. It is particularly partial to the tenderer shoots of the thorny *Acacia karroo*—the so-called "mimosa"—and to the buffalo thorn (*Zizyphus mucronata*) and the tomboti tree (*Spirostachys africana*) which has such a lovely fragrant scent in its wood. It is said also to relish the vines of the terrible "hell fire" beans, or *brandboontjies*, whose attractive clusters of golden, furry pods will drive you mad with irritation at the slightest touch. The fruit of the "sausage tree" (*Kigelia pinnata*) is mentioned by W. F. H. Ansell, who also avers that though a browser mainly, it grazes to some extent.

The black rhinoceros feeds mainly by night, and during the earlier part of the day and the late afternoon. It spends the heat of the day resting in the shade, often lying down on 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 to 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, the red- or yellow-billed

oxpeckers or "tick birds" (*Buphagus*), 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 15 yds.), 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 being merely impulsive and confused rather than deliberately aggressive. Provided there is time, they can usually be dodged. 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. With regard to the attitude of the charging black rhino, T. R. H. Owen insists: "The charging rhino does *not*, as in popular illustrations, charge from afar with his head lowered. He keeps his head raised high, for the obvious reason that he can see better, and only lowers it in the last pace or two when he is near his enemy." 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, stupidity and nervous irritability. It has been known to charge an oncoming train in Kenya twice in succession—in each event being the worse for the encounter. A baby 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 invariably being more savage and aggressively inclined than those in preserved areas. However, one has always to beware of the odd, naturally-truculent individual.

Captain H. B. Potter, former Game Conservator, Zululand,

records: "The speed of a charging black rhino has been tested several times in the reserve by means of a light motor truck. Twenty m.p.h. is its limit, and that only for a short distance.

"There is an extremely interesting phenomenon which, up to now, little attempt has been made to explain from a scientific point of view. Every adult black rhino, both male and female, develops a sore on each side of its body near the shoulder blade. In the mating season the sores become the size of small plates and discharge quantities of blood and fluid. In due course these sores heal up, only to open again the following year. At birth the young rhino show only signs of this sore on each side, but it is not until the animals reach puberty that any discharge takes place. I am firmly of the opinion . . . that these sores, with their discharge, are purely a sexual matter. The odour of the discharges appears to be highly attractive to the opposite sexes; and it may be Nature's method of bringing the males and the females together for mating purposes in such a huge expanse of country—especially in the case of comparatively mute animals such as black rhino. The white rhino shows no sign, at any part of its lifetime, of such a sore. It is a notable fact, however, that the white rhino has a definite squeal, or 'whinny,' which can be heard from some distance." Captain Potter also alludes to the presence of smaller and more aggressive types of black rhino in the Hluhluwe Reserve which the Zulu distinguish by the name "*Punyana*," and claims that the existence of this specific type is so evident that it should be given subspecific rank. Of these *Punyana* he says (*The Field*, circa 1947): "There are at least a dozen of these *Punyana* in the reserve. They are much smaller than the ordinary black rhino. They are most aggressive and bad-tempered creatures, and will often charge with mouth wide open and tail twisted up in a spasm of fury. They frequent the lower areas of the reserve, mostly near the rivers." So far as I know, no such local subspecies has been recognised by the zoologists.

Rhinos usually drink at night, sometimes travelling long distances to water. They are noisy and very quarrelsome. If they should gather at a solitary water-hole, they chase one another about and brawl over "water rights." On such occasions they can produce some 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.

The usual gait is a fairly fast walk, head lower than shoulders but held almost horizontally. This is varied with a shambling

rather bouncing trot; and in extreme alarm, or when charging, this can be increased to a gallop. In actual attack, an attempt is made to toss the victim with the front horn. The tail is looped over the rump only in alarm, not when charging. The female always walks or trots ahead of her calf.

Breeding: Probably no definite calving season (Ansell). Rhinoceros are slow breeders. Three years are said to elapse between the birth of each calf; *period of gestation*, 11-13 months.

A curious habit of the black rhinoceros is that of repairing to regular, selected places in which to deposit its dung, which resembles that of hippo or small elephant, except that it is full of twiggy matter. After voiding, the dung is scattered and kicked about with the hind feet and sometimes rootled about with the front horn.

The greatest present danger to the rhinoceros (of both species) is the high prices for the horn, in powdered form, offered to African poachers by unscrupulous traders at the coast. T. R. H. Owen states that "a year or two ago it was worth £4 10s. per pound on the legitimate market in Uganda, and doubtless more under the counter." Ground into powder, it can be dodged past the authorities with considerable ease, and the use of poisoned arrows, at any rate throughout Central and East Africa, regardless of sex or size, is a most deadly threat to the species.

Evidently in the majority of cases when black and white rhinoceroses encounter each other at close quarters in the Zululand game reserves they appear to be tolerant, even friendly disposed, towards each other.

In September 1961 four black rhinoceros were re-introduced into the Kruger National Park. They were captured and transported from the Umfolozi Game Reserve of Zululand by rangers of the Natal Parks, Game and Fish Preservation Board.

THE ZEBRAS

The zebras are the wild equines—or horses—of Africa. In addition to their well-known striped colouring, which varies in the different species, it may be said that "the head is lengthened, neck adorned with a mane; tail with long hairs; naked patches on the insides of the forelegs; mammae two in number. Feet encased in a horny box or hoof. Dentition: incisors 3-3, canines 1-1, premolars 4-4, molars 3-3 (total 44). The first premolar is small and drops out early in life, not being replaced, so that the mature dentition totals 40" (Haagner).

In Southern Africa there are two existing species of zebra and one extinct one—the quagga. The existing types are the Burchell's zebra, and the Cape mountain zebra with its closely-related form—Hartmann's zebra.

The quagga (Equus [Quagga] quagga Gmelin) is now generally considered to be the southernmost representative of Burchell's zebra, though Austin Roberts insists that "more careful examination of the dental characters has shown that the quagga was distinct from Burchell's zebra." Its colouring was markedly different from all other zebra types, being predominantly a lighter or darker rufous-bay, with whiter stripes only on the head, mane and neck and forequarters, fading in intensity behind the shoulders, and in some individuals appearing in broken form along the flanks. The legs and tail were completely white, with no striping at all.

The quagga formerly abounded all over the Karoos of the Cape and the plains of the Orange Free State, but "did not cross the Vaal River, practically coinciding with the range of the black wildebeest" (Austin Roberts). In 1843, when Gordon Cumming was hunting in South Africa, he recorded that the plains of the northern Cape, especially round Colesberg, were inhabited by large numbers of quaggas, but that even then the colonists were shooting them wholesale, and that during his stay on the flats adjoining Thebus Mountain "scarcely an hour elapsed at morning, noon or eve but the distant booming of a Dutchman's gun saluted the ear."

White colonists were entirely responsible for the final extermination of the quagga, which, according to Lydekker, occurred between 1865 and 1870 in the Cape Colony, and between 1870 and 1873 in the Orange River Colony. Fortunately a few photographs exist of living quaggas in European zoological gardens, and the last individual quagga is said to have died in the Amsterdam zoo on the 12th August 1883 (A. C. van Bruggen). In addition to the few available photographs, we have the fine watercolours of Captain (later Sir) Cornwallis Harris, painted during his hunting trips in South Africa in 1837, and his detailed descriptions of the quagga herds, and also a fine oil painting from life done from one in captivity by the great English animal artist George Stubbs circa 1820, which is now in the possession of the Royal College of Surgeons. There is a mounted specimen of a quagga foal in the South African Museum, Cape Town.