

THE
MAMMALS
OF
SOUTH AFRICA

by the late

AUSTIN ROBERTS, D.Sc., C.M.Z.S.

(Edited by Dr. R. BIGALKE, Dr. V. FITZSIMONS and Prof. D. E. MALAN)

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ORDER PERISSODACTYLA

Family RHINOCEROTIDAE: Rhinoceroses

Members of this family are characterized by their large size, bulky figure, short thick legs, thick practically hairless hide, short, but prominent ears, short tail terminating in some stiff hairs, and the presence of one or two horns on the muzzle, the posterior shorter than the anterior, situated on the top of the snout, not composed of bone but of a hard fibrous tissue attached to the bone, broad at the base and tapering to a point. Eyes very small, midway between ears and nostrils. There are three toes, at the base of which small hoofs are situated. The skull is elongate, with a small brain-case and the nasals heavy, projecting beyond and high above the premaxilla, and carrying the anterior horn; the lambdoid crest large and projecting backwards. The dentition usually does not include incisors or canines (though there are sometimes two pairs of the former above and below), and a lower canine in non-African species, the four premolars and three molars above and below of much the same character even when of various sizes: the patterning of these back teeth is fairly straight on the outside, but in double semicircular lobes on the inner edges, the enamel formed in a double line along the outer side and in two double inner lines, of varying shape. This enamel patterning varies in shape according to the state of wear.

Within South African limits, there are two genera, with a single species in each, which may be defined as follows:—

Size larger, height at shoulders about six feet, length of head and body about twelve to thirteen feet; length of skull about 750 mm.; upper lip squared

CERATOTHERIUM

Size smaller, height at shoulder about five feet, length of head and body about eleven feet; length of skull about 580 mm.; upper lip protruding slightly in the middle

DICEROS

CERATOTHERIUM Gray

Ceratotherium Gray, 1867: *Rhinoceros simus* Burchell.

CERATOTHERIUM SIMUM SIMUM (Burchell). **White Rhinoceros.** Witrenoster. Col. pl. XI, 5; photo. pl. XXVI, 3. Native names: van Warmelo: Zu. *umkhombe*; Rh. Ndeb. *umhofu*; Tsw. *tshukudu*, *mogohu*, *kgêthwa*, *kôbaôba*; Tvl So., *tshukudu*; *mogohu*; Ve. *tshugulu*. Shortridge: I, p. 425.

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Rhinoceros canus Griffith, 1827: Southern Africa.

Rhinoceros burchellii Lesson, 1827: Interior of Cape of Good Hope.

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DESCRIPTION—In colour yellowish-brown, but often obscured by the colour of the mud in which it bathes; the eyes light chestnut-brown. This species apparently does not tend to form folds of the skin around the neck and base of limbs like the smaller Black Rhinoceros, and besides having a broad, square upper lip, the anterior horn is situated rather farther forward than in the smaller species, so that the front of the horn is level with the upper lip and tends to wear flat at the base in front. In the female there is only a single pair of mammae on a small udder situated inguinally. As it has never been kept in captivity, there are no records of the length of gestation or of life;* but being the largest species in the family, no doubt these periods are longer than in the smaller Black Rhinoceros.

MEASUREMENTS—As per Table 41.

* Editors Footnote.—There are now two specimens (♂ and ♀) in the National Zoological Gardens, Pretoria; but, as these are still young, no records of gestation etc., have been possible.

DISTRIBUTION—Formerly it probably extended farther south than our records show, as Barro records its occurrence behind the Hantam Mountains. It is still preserved in Zululand in the Umfolo Game Reserve, but seems to have been exterminated within memory in Transvaal and Griqualand West northwards to Southern Rhodesia, Ngamiland and northern parts of South-West Africa. It does not extend beyond the Zambesi River, but occurs again north of the Equator in the Lado Enclave, where the animal is regarded as a different subspecies.

HABITS—This species is found more often in small parties than the Black Rhinoceros, though often solitary, and in disposition does not seem to be so aggressive, there being few records of its charging hunters. No doubt its mild temper accounts for its more rapid extermination than the more aggressive Black Rhinoceros. It is said to be more of a grazer than a browser, feeding on grass and low shrubs rather than leaves of trees. In Zululand it feeds on euphorbias (“isihlehle” of the Zulus), which in some places grow in the form of dense thickets and form convenient hiding places for this and other animals. It is fond of wallowing in muddy pools, but drinks only at clear pools or in flowing streams, which it visits mainly at night, retiring for the daylight to denser thickets up to three miles from the drinking place and sleeping while lying down during the heat of the day. It takes regular courses to and fro, wearing more or less furrowed pathways when near and at the river banks. Its dung is often dropped at certain places in heaps, and is said not to be scattered afterwards as is done by the Black Rhinoceros. Major Vaughan-Kirby states this dung is always composed of green material, owing to its diet being almost exclusively grass.

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Opsiceros occidentalis Zukowsky, 1922: Kaokoveld-Kunene, S.W. Africa.

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Diceros bicornis bicornis, Shortridge, 1934. G. M. Allen, 1939.

DESCRIPTION—Although called the “Black Rhinoceros,” this species is dark yellowish-brown to dark brown in colour. It is distinguishable from the “White Rhinoceros” not so much by its colour as its smaller size, shorter head, and the rather pointed and slightly protruding upper lip, which is more in advance of the anterior horn than in the “White Rhinoceros,” the horn rounded in the front at the base and shorter than in the larger species.

MEASUREMENTS—As per Table 41.

DISTRIBUTION—Although formerly distributed over the whole of South Africa, the Black Rhinoceros has been exterminated in all but the Game Reserves of Umfolosi, Hluhluwe and Mkusi in Zululand and the Kruger National Park, Transvaal, and beyond the Union is found only in a few of the wilder parts of Portuguese South-East Africa, Southern Rhodesia, Northern Bechuanaland and northern South-West Africa.

HABITS—This species is a browser on low vegetation and is partial to acacia thorn country; although it drinks regularly at night, it is found even in the dry western districts where waterholes and streams are scarce. Its regular practice of going to waterholes to drink causes pathways, especially near the waterholes. It is not a sociable species, more than a pair and their young one being seldom found together, except, of course when they happen to meet at the waterholes. It is inquisitive of suspicious-looking objects, and from long experience of man, directly it “gets his wind,” will charge headlong upwind without regard to what bushes may be in the way and if thoroughly alarmed does not stop until several miles away. It also charges deliberately at man at times, and if the opportunity avails will toss a man in the air from its horn, which is a formidable weapon. It has probably learned from experience that the best form of escape is by such attacks, though in my experience it prefers to get away without doing so. When charging they often snort, especially when in aggressive mood, and when wounded are said to utter a squealing sound. In Boror, inland from Quelimane, in 1908 I often watched this rhinoceros charging blindly upwind directly it got our “wind”. As I was then at times on stony hills above it, I could watch its course for a long distance as it charged madly through the savannah bush. On one occasion one was found sleeping while standing up and, on another, while lying down on its side. Along the course of their paths, certain places always contained their excreta, which was usually scattered by the feet. Although the hide is thick and a protection against the matted thorn-bush, natives kill them with spears by attacking in large parties, and since the introduction of fire-arms, have been responsible for the destruction of great numbers.

There are no definite records of the period of gestation, though stated to be 16 to 18 months. Only one young one is born at a time, and the animals become adult in about five years, their growth being much more rapid than that of the elephant, and probably they do not live to be much older than 25 years.

Family EQUIDAE: Horses and Zebras

This family is so well-known from the domestic Horse that its general appearance hardly needs description; but a description is necessary in connection with its relationship to other animals. To it belong the indigenous Zebras in South Africa, and although the horse proper does not exist today as a wild animal in this country, a large, heavily built Horse is known from fossils (*Equus capensis*). Externally the Zebras are at once distinguishable from horses by the banded markings of the head, body and limbs. In shape they are like horses, with prominent ears, a strong mane and flowing tail, and the third elongated digit encased in a roundish hoof, the two lateral digits fused with it at the base and inconspicuous—the only mammals in South Africa characterized by using only one enlarged visible toe. This condition of the feet enables the animal to run at great speed, as in the case of the Ostrich, in which the toes are reduced to two where other birds have at least three. The skull as shown in the photograph is elongate in the forepart, broad and flattened above in the middle, with the postorbital processes broad, fused and enclosing the rather small orbits; the lambdoid crest protrudes somewhat behind the

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