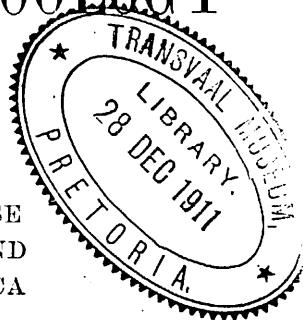


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# SOUTH AFRICAN ZOOLOGY

A TEXT BOOK FOR THE USE  
OF STUDENTS, TEACHERS AND  
OTHERS IN SOUTH AFRICA



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**TRAGELAPHUS SELOUSI**—Sitatunga.

The most aquatic of Antelopes found only in the swamps of Lake Ngami and the Chobe River.

**STREPSICEROS CAPENSIS**—Kudu.

A forest-haunting species found in a good many districts of Cape Colony, and perhaps the most widely spread of all the larger Antelopes. Its range extends northwards to Somaliland.

**TAUROTRAGUS ORYX**—Eland.

The largest of the African Antelopes, formerly abundant all over South Africa, now found only in the Kalahari and perhaps along the Drakensberg in Natal. Elands from the Zambesi Valley and Mozambique are distinguished by having white transverse markings, and may be considered as a sub-species (*T. oryx livingstonii*) of the typical form.

The Cervidae or Deer are completely absent from South Africa. Their horns, called antlers, have no horny sheath, but are bony outgrowths from the frontals, and are periodically shed. Camels (Camelidae), such as the Arabian Camel, *CAMELUS DROMEDARIUS*, with the single dorsal hump of fat, the Bactrian Camel, *C. BACTRIANUS*, with two humps, the Llamas and Alpacas are absent from South Africa as well as Chevrotains.

**Sub-Order IV.—Perissodactyla or Odd-toed Ungulates.**

In this order the third or middle digit of both limbs is symmetrical in itself, that is, the axis of the limbs passes through it (Fig. 187). The number of digits on the hind foot is always odd. The pre-molars and molars are alike, the femur has a third trochanter, and the fibula does not articulate with the calcaneum.

The order includes only three genera, the Tapir, the Horse, and the Rhinoceros (*TAPIRUS*, *EQUUS*, *RHINOCEROS*). The Tapirs have four toes on the fore limbs and three on the hind. The Rhinoceros has three and four on the fore limb, and three on the hind limb. The horse and its allies (*Equus*) have now only one toe on the fore and one on the hind limb, though fossil remains show a gradual transition from a much smaller animal, in the Eocene period, with five digits, through transition forms with four and three digits to the modern form with one only. This single digit consists of three phalanges, the first of which is called the "large pastern," the second the "small pastern," and the third, concealed in the hoof, the "coffin-bone" (Fig. 191). There are sesamoid bones behind the basal joint of the digits and between the second and third phalanx. Not

only are the toes reduced in the horse, but also the metacarpals and metatarsals, the third of which is a stout "canon bone," the second and fourth being reduced to small "splints," which lie alongside of it (Fig. 187). Vestigial digits have been found at the ends of these splints (Ewart). The carpal, which are at the upper end of the metacarpals, though they thus correspond to the "wrist" of man, are usually called the "knee" in the Horse. The joint between the metacarpal and the first phalanx is called the "fetlock," and that between the second and third phalanges the "coffin joint."

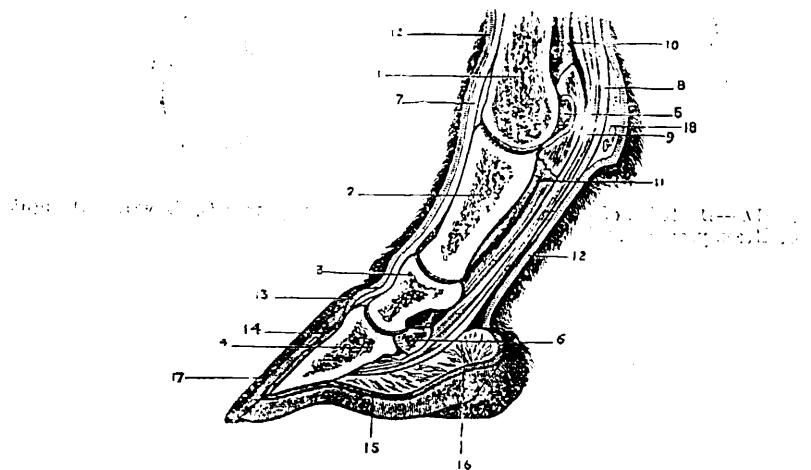


Fig. 191.—Section of foot of Horse. 1, metacarpal bone; 2, first phalanx; 3, second phalanx; 4, third phalanx or coffin bone; 5, sesamoid bone; 6, low r sesamoid or navicular bone; 7, 8, 9, tendons; 10, 11, ligaments; 12, skin of foot covered with hair and continued into sole; 13, the coronary cushion; 14, laminar membrane and 15 keratogenous membrane of Lydekker.)

The teeth of the horse when fully developed have the typical mammalian formula, but one of the premolars is usually small or absent. The age of a horse is indicated more or less by the condition of the teeth. At 2½ years old the two new middle incisors of the permanent teeth appear; the two next teeth a year later, and after another year the two outside ones. The age can be told with accuracy up to five years, and after that with some uncertainty by judging of the condition of the wearing down of the ring of enamel round the crown (Fig. 191a).

In South Africa the order is represented by three species of the Zebra, one of the most characteristic South African animals. The True or Mountain Zebra, *EQUUS ZEBRA* (Fig. 192), is found in the mountainous parts of Cape Colony, but is now much scarcer than formerly. Burchell's

Zebra, *EQUUS BURCHELLI*, is still numerous to the north of the Orange River; it is somewhat larger than the Mountain Zebra, has smaller ears, a longer mane, and a fuller tail, and the arrangement of the stripes on the

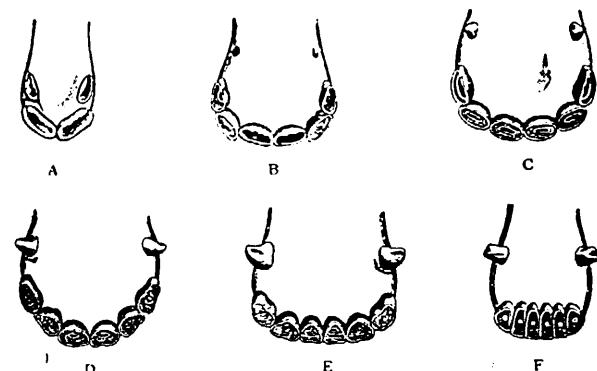


Fig. 191A.—Dentition of Horse; A. thirty days; B. three years; C. six years; D. eight years; E. fifteen years; F. thirty years.

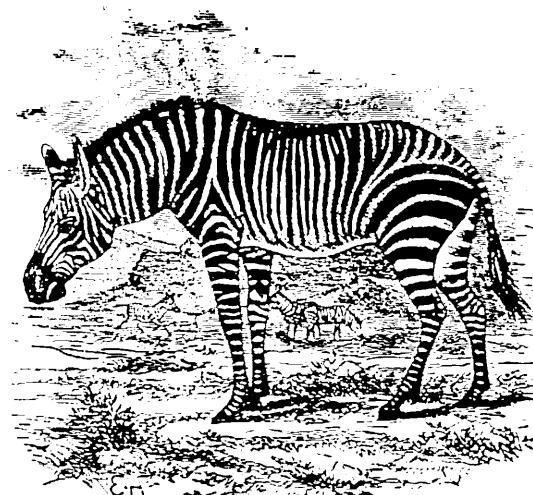


Fig. 192.—The True or Mountain Zebra, *Equus zebra*. (From Flower & Lydekker.)

hind part of the back is different. The third South African species, the Quagga, *EQUUS QUAGGA*, at one time very abundant on the great plains south of the Vaal River, is now extinct. Dark brown stripes were conspicuous on the head and neck, but gradually disappeared towards the hinder parts of the body.

There are two species of Rhinoceros in South Africa, the Common or Black Rhinoceros, *RHINOCEROS BICORNIS*, and the rarer White or square-mouthed Rhinoceros, *R. SIMUS*. The former may be distinguished from the latter by its much smaller size and its possession of a proboscis-like upper lip. It is still found in some of the northern parts of South Africa. Of the White Rhinoceros, once very abundant, only a few now survive in Zululand; next to the Elephant in size among mammals, it afforded a ready prey for the hunter, and its extermination is only a matter of time unless the strict measures now taken for its preservation afford it some protection.

#### Order VII.—Carnivora.

As the name implies, the animals in this order prey on other animals and eat their flesh. The chief features of the order are connected with such a mode of life, and are most apparent in the nature of their teeth. The canines are strong and pointed, being thus well adapted for seizing and holding prey; the molars are usually sharp and have cutting edges; the last upper pre-molar and the first lower molar are specially modified in this respect, and are known as carnassial teeth. There are never less than four digits, and these are usually provided with large sharp claws for seizing. Clavicles are absent or reduced.

This order may be divided into two sub-orders: I. CARNIVORA VERA or FISSIPEDIA, including cats, hyenas, etc. (Aeluroidea), dogs, jackals, etc. (Cynoidea), bears, otters, etc. (Arctoidea); II. PINNIPEDIA, or seals and walruses.

#### Sub-Order I.—Carnivora vera.

These True Carnivores are usually terrestrial; the incisors are usually three in each jaw, and the canines are larger.

The following are a few of the better known representatives of this sub-order in South Africa.

#### Family I.—Felidae.

The Lion, *FELIS LEO*, at one time abundant, even in the neighbourhood of Cape Town, is now quite extinct South of the Orange River. It has gradually become scarcer with the disappearance of the large game on which it lived.

The Leopard, *FELIS PARDUS* (Fig. 193), commonly, but erroneously called the Tiger, in South Africa, has survived, and is still fairly common not far from Cape Town and throughout South Africa. Probably this is