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Notes on *Hippotragus niger roosevelti* (Heller, 1910)¹

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Without a doubt, the tribe Hippotragini Simpson, 1945, contains some of the most impressive of those artiodactyls we call antelopes. This tribe, comprised of the three recent genera *Hippotragus* Sundevall, 1846; *Oryx* De Blainville, 1816; and *Addax* Rafinesque, 1815, is predominantly African in distribution, although a single species *Oryx leucoryx* (Pallas, 1777), the almost extinct Arabian Oryx, does reach south-western Asia. In its geological history members of this particular tribe, of which there are fourteen fossil genera, can be traced back as far as the Lower Pleistocene of Europe and Asia. As far as is known the Hippotragini only appeared in Africa during the Pleistocene, making this continent their stronghold and evolving into the forms which we know today.

Of the recent genera *Addax* contains but a single species, *nasomaculatus* (BLAINVILLE, 1816) with no recognized subspecies. *Oryx*, on the other hand, has three species; *tao* (H. SMITH, 1827) with no subspecies; *leucoryx* (PALLAS, 1777) with no subspecies; and *gazella* (LINNÉ, 1758) with five presently recognized subspecies. The validity of certain *gazella* subspecies is open to question.

Hippotragus, like *Oryx*, also has three species. The first of these *Hippotragus leucophaeus* (PALLAS, 1766) is the now extinct Blaaubok (fig. 1.) of the



Fig. 1. Adult male Blaaubok, *Hippotragus leucophaeus* (Pallas, 1766) from the environs of Swellendam, Cape Province. (Photo: Rijksmuseum van Natuurlijke Historie, Leyden)

¹ For Dr. Erna Mohr, 70 years old.

Boers. This animal, the first of the great African game animals to be exterminated by man, disappeared from its restricted range in the Valley of Soete Melk, Swellendam, Cape Province, about the year 1800. Today only five mounted examples remain in the museums of Upsala, Stockholm, Vienna, Paris and Leyden (HARPER, 1945). There is also a skull in Glasgow discovered in 1949, a frontlet with horns in the British Museum (N. H.) and an imperfect skull in the Museum of the Royal College of Surgeons.

The second species, *Hippotragus equinus* (DESMAREST, 1804), the Roan Antelope has seven recognized subspecies. HALTENORTH (1956) considers the Blaaubok as representing a subspecies of the Roan. On the basis of the preserved specimens, of which I have seen both those in Leyden and Paris, it is difficult for me to agree with HALTENORTH'S opinion. The Blaaubok differs not only in the direction and length of the hairs on the face, neck and throat; the length of the ears, the longer and less massive horns, but also in stature. The Leyden bull stands 122,6 cm. At the shoulder while the average for the South African Roan, *Hippotragus equinus equinus*, is 137,5 cm. Probably the most important difference between the two animals is the conspicuous absence of the black facial markings in the Blaaubok so characteristic of the Roan and present in the latter from a very early age.

The only other species of the genus in question is the Sable Antelope, *H. niger* (HARRIS, 1838) with three subspecies. Ranging throughout Southwest Africa, northern Transvaal (Kruger National Park), Nayasaland, Rhodesia, Portugese East Africa and southern Tanganyika, the South African Sable Antelope, *Hippotragus niger niger* (HARRIS, 1838), is the more common subspecies with the greatest distribution. It is replaced in Angola by the Giant or Varian's Sable Antelope, *Hippotragus niger variani* (THOMAS, 1916) confined to a very limited area between the upper Cuzanza and Luando Rivers. This animal, although somewhat smaller than the South African form, is characterized by the immensity of its horn formation, the record length being 64—7/8 inches (102 cm) (WARD, 1962). The record animal is the property of the Madrid Natural History Museum.

Originally ranging along the coast of Kenya, from the Sabahi River, southward to the region of the Kigani River in Tanganyika, the remaining subspecies, the East African Sable Antelope, *Hippotragus niger roosevelti* (HELLER, 1910) is now confined to the Shimba Hills in the extreme southeastern corner of Kenya. Unfortunately, the present range of this animal does not include any of the existing national parks and reserves (MABERLY, 1960). The East African or Roose-



Fig. 2. Adult bull East African or Roosevelt's Sable Antelope, *Hippotragus niger roosevelti* (HELLER, 1910). (Photo: San Diego Zoological Society)

velt's Sable Antelope was described by HELLER in 1910 on the basis of three specimens shot by KERMIT ROOSEVELT in the Shimba Hills, southwest of Mombasa and preserved in the Smithsonian Institution. Sir JOHN WILLOUGHBY first recorded this antelope in British East Africa in 1886, but failed to take specimens (ROOSEVELT and HELLER, 1915).

Roosevelt's Sable Antelope differs from the nominate form in its somewhat smaller size. The bulls stand approximately 135,0 cm at the shoulder and reach a weight of up to 500 lbs = 227 kg. Adult bulls (fig. 2.) are dark seal-brown, sometimes tending to black. The belly, inner upper portions of the hind legs and the rump are pure white. The tail, like the body, is seal-brown with a long black tuft. In front of the eye there is a patch of white hairs prolonged into a white streak along the side of the muzzle. The forepart of the cheeks, the chin and throat are white, and the forehead and upper muzzle are black. The ears are tawny-rufous posteriorly, white inside and tipped

with seal-brown. The females of this subspecies are bright reddish-brown darkening on the dorsal portions of the head and body, though never becoming black as in *Hippotragus niger niger*. Calves (fig. 3.) are light fawn with but an indication of the facial markings. In general, the horns of the East African animals average about 30 cm shorter than the South African form, although the record of 100 cm. (WARD, 1962) exceeds that of many specimens of *Hippotragus niger niger*.



Fig. 3. East African or Roosevelt's Sable Antelope calf showing the juvenile facial markings. (Photo: San Diego Zoological Society)

15 individuals. Adult bulls are met with in small groups or solitary. When disturbed, the animals gallop off in a compact troop unlike their near relative the Roan Antelope. If alarmed they omit a horse-like snort.

The Sable Antelope normally inhabits well wooded hill country or mixed bush and grassland, never far from the proximity of water and is migratory during dry periods. During the heat of the day the animals retire to cover, emerging in the morning and early evening to graze.

Prior to the First World War, the Sable Antelope was represented in many of the larger European collections, as well as during the period from 1918 to 1941. At the present time I do not know of any living specimen in Europe. The first Sable Antelope to be exhibited in the United States was in the Philadelphia Zoological Garden in 1896. From that time on these antelopes were to be found in many of the larger North American collections. Unfortunately, it is impossible to tell which form all these animals belong to, although it would be safe to assume that they were *Hippotragus niger niger*. It is quite possible that some of the animals exhibited in London and certain German zoos belonged to the race *roosevelti*.

The Sable Antelope is a gregarious animal, running in herds averaging

The first definite East African Sable Antelope imported into the United States arrived in San Diego on November 1, 1943. These animals are of particular interest since they were transported from East Africa by the American Branch of the firm RUHE during the height of the Second World War. The imported pair began breeding in 1944 and young are still being produced by their descendants. Our present herd numbers seven individuals. Between 1948 and 1960, seven Sable Antelopes were sent to other zoological gardens in the United States.

At the present time the San Diego specimens represent the only members of their subspecies breeding in captivity, although the nominate form is represented by 2,2 individuals at the Catskill Game Farm and 1,2 in the Oklahoma City Zoo. Considering the unsettled political conditions in Africa and the limited range occupied by this animal, the San Diego herd of *Hippotragus niger roosevelti* (HELLER, 1910) may prove instrumental in saving this magnificent antelope from joining its smaller cousin the Blaaubok in extinction.

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Mallophageneier im Haarkleid von Stachelschweinen¹

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Bei der Bearbeitung der Haarbildungen von Stachelschweinen fand Frau Dr. h. c. ERNA MOHR auf den Stacheln von *Coendou pruinus* THOMAS aus Ocumare in Venezuela langgestreckte, 0,75 mm lange, mit der Seite fest aufgeklebte Hüllen von Mallophageneiern (Abb. 1). Da diese bisher noch nicht bekannte, durch die Dicke der Stacheln bedingte breite Anklebeform von der üblichen Anklebeweise der Mallophageneier an Säugetierhaaren durch einen die Basis des Eies umgebenden Kelch aus Kittsubstanz sehr stark abweicht, ist der Fund bemerkenswert. Leider konnten keine Mallophagen gefunden werden, so daß die Bestimmung der Artzugehörigkeit der Eier unsicher bleiben muß. Nach WERNECK kommen auf *Coendou pruinus* zwei Mallophagenarten vor: *Eutrichophilus lobatus* EWING, 1936, und *Eutrichophilus comitans* WERNECK, 1950, die sich allerdings nur im männlichen Geschlecht unterscheiden lassen sollen. Einer dieser Arten müssen wohl die Eier zugeschrieben werden. Es ist erstaunlich, daß diese Mallophagen die dicken Stacheln für ihre Eiablage wählen, obwohl ja auch dünne Wollhaare zur Verfügung stehen. An ihnen konnten aber im vor-

¹ Dr. h. c. ERNA MOHR zum 70. Geburtstag gewidmet.