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A New Subspecies of Sable Antelope, *Hippotragus niger* (Harris 1838)

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INTRODUCTION

In the process of collecting data and measurements for a taxonomic revision of the genus *Hippotragus*, it became apparent that there is an undescribed subspecies of *H. niger* (Harris 1838), the Sable Antelope, in E. Zambia and Malawi. With the news that a book on the mammals of Malawi is in preparation (W.F.H. Ansell, pers. comm.) it becomes necessary to describe and name this new form as soon as possible. A full revision of the genus will appear in due course.

SUBSPECIES IN *Hippotragus niger*.

In contrast to many ungulates, including congeneric *Hippotragus equinus* (Roan Antelope), *H. niger* shows clear-cut geographic variation, such that distinction of subspecies is relatively unambiguous.

Ansell (1971) recognises four subspecies, as follows:

H. n. niger (Harris 1838): Southern Africa,

H. n. kirkii (Gray 1872): Zambia and adjacent parts of Zaïre,

H. n. roosevelti (Heller 1910): Southeastern Kenya, northeastern Tanzania,

H. n. variiani (Thomas 1916): a limited area of Angola.

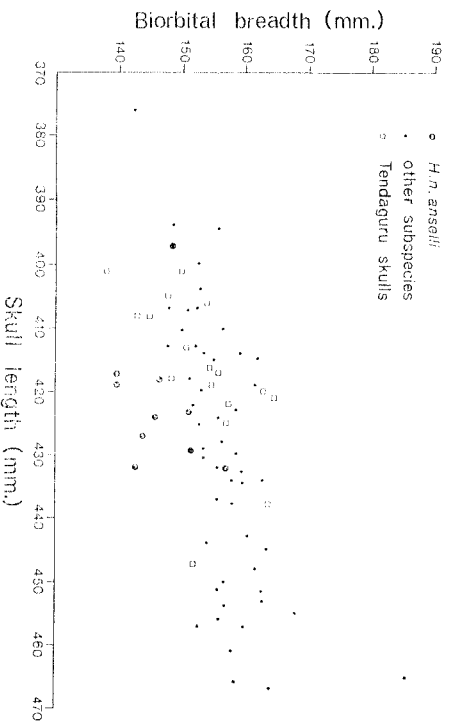


Fig. 2. — Plot of Biorbital Breadth against Total Skull Length in *H. niger*.

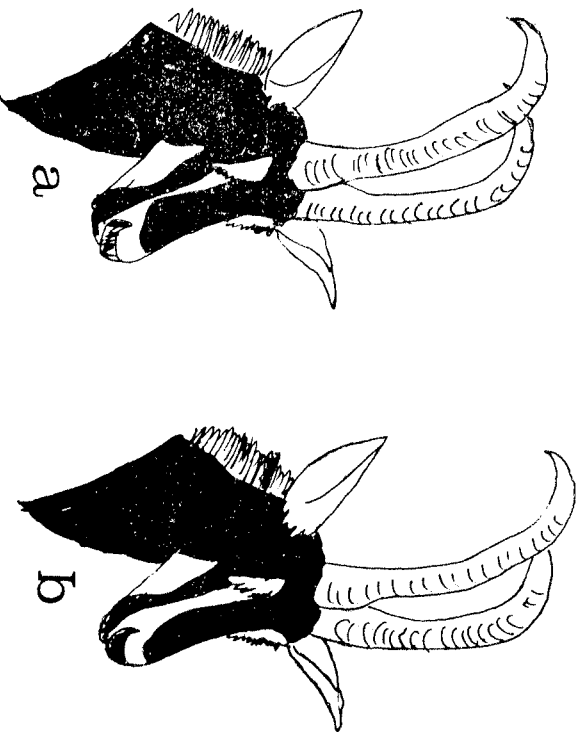


Fig. 3. — Typical facial pattern of (a) most Sable Antelope; (b) *H. n. anselli*.

(but not as small as *H. n. roosevelti*); female relatively large, only slightly smaller than male; colour of female rich chocolate brown, as in *H. n. kirkiti*, and so darker than *H. n. roosevelti* but lighter than *H. n. niger* and *H. n. variani*.

Etymology: Named in honour of W.F.H. Ansell, whose name has long been associated with the study of the mammals of the Zambia/Malawi region — their taxonomy, morphology, distribution, and conservation.

DISCUSSION

The subspecies of *H. niger*, now five in number, fall into three size groups as far as the males are concerned (Table 1): *H. n. variani* and *kirkiti* are the largest (the former being the largest of all), *H. n. anselli* and the nominate race fall in between, and *H. n. roosevelti* is the smallest. The females do not however follow this gradient: *H. n. niger* and *kirkiti* females are 5% smaller than their respective males, but in *H. n. anselli* they are only 2% smaller (and comparable in size to those of *H. n. kirkiti* although the males are considerably smaller), while in *H. n. roosevelti* they are about the same size.

Females of *H. n. niger* and *variani* are almost as dark as the males; in *H. n. roosevelti* they are a beautiful red-gold; in *H. n. kirkiti* and *anselli*, intermediate.

The pattern of the white and dark areas on the face has long been used to distinguish *H. n. variani* from the other races. In this form typically only the tufts medial to the eyes are white, although an obscure brownish line may go down to the muzzle. Other previously described forms have a clearly yellowish or off-white line from eye-spot to muzzle on either side. In all five skins of *H. n. anselli* this line is noticeably broader and less obfuscated than in nearly all other specimens, of whatever race.

The narrowness of the skull of *H. n. anselli* is shown by the Bivariate plot, Biorbital Breadth against Skull Total Length (Fig. 2). Separation from other races is almost total, with the exception of a series of skulls from the southeastern corner of Tanzania: Tunduru (10°55'S - 37°30'E), Tendaguru (9°40'S - 39°20'E) and Kilundu (near Kilwa, 8°45'S - 39°25'E), all these skulls (n = 14, 8/6) with the exception of that from Tunduru (which is in the British Museum (Natural History

ry)) being in the Zoologisches Museum, Berlin. These show an exceptionally wide scatter, extending through the ranges of *H. n. anselli* and the remainder. Additionally, they show an almost equal division between the two premaxilla types (Table 2). Unfortunately only one of these skulls, the Tunduru specimen, is associated with a skin: this has a broad, white face-stripe like the new race, not narrowed and obfuscated as in *H. n. kirkii* or *roosevelti*. The Tunduru-Tendaguru-Kilwa specimens would therefore appear to be intergrades between *H. n. anselli* and *roosevelti*, giving some indication how far to the north-east from Malawi the former's range may extend. It is interesting that specimens in the Powell-Cotton Museum from Chera (8°42' S - 36°50' E) and Nenura (8°30' S - 37°10' E) are typical examples of *H. n. roosevelti*, so the zone of intergradation would seem to be rather narrow; while in Mozambique north of the Zambezi (at Lakua, 13°10' S - 39° 11' E, and at Mopecu, not found in a gazetteer), nominate *H. n. niger* is found.

ACKNOWLEDGEMENTS

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TABLE 1.
 Selected skull measurements of *Hippotragus niger*.

	Total skull length							Biorbital breadth						
	Male			Female				Ratio	Male			Female		
	Mean	s.d.	n.	Mean	s.d.	n.	Mean		s.d.	n.	Mean	s.d.	n.	
<i>H. n. varians</i>	453.5	11.67	10	—	—	—	—	161.8	7.95	14	150.0	—	2	
<i>H. n. kirkii</i>	444.8	11.66	9	420.3	20.55	3	105.8	160.7	6.88	17	153.6	4.57	8	
<i>H. n. niger</i>	422.8	8.42	12	403.2	17.95	6	104.9	156.5	4.41	20	150.7	4.91	9	
<i>H. n. anselli</i>	427.8	3.77	4	417.6	12.97	5	102.4	152.2	5.08	6	145.0	3.54	5	
<i>H. n. roosevelti</i>	406.5	8.48	6	406.8	6.02	4	99.9	156.9	6.15	7	145.0	—	2	
Tendaguru	428.7	11.17	6	411.1	6.30	10	104.3	158.4	5.91	7	150.3	4.30	10	

TABLE 2.

Types of premaxilla-nasal contact in *H. niger*.

	Premaxilla forms point contact with nasal	Premaxilla forms long suture with nasal
<i>H. n. varians</i>	1	12
<i>H. n. kirki</i>	2	16
<i>H. n. niger</i>	6	13
<i>H. n. ansetti</i>	9	2
<i>H. n. roosevelti</i>	2	6
Tendaguru	9	8