## LXIII.—*On a Collection of Mammals from Tanganyika Territory.* By P. S. Kershaw.

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This collection, which was sent to the British Museum for identification by the Game Warden of the Territory, Mr. C. F. M. Swynnerton, is of great interest, and has brought to light several new species. Both large and small mammals are included. The former include particularly fine series of spotted hyænas and river-hogs, which admirably illustrate the differences in pelage due to age.

The bulk of the collection was contributed by the Game Warden and his Assistant Game Warden, Mr. Arthur Loveridge, and their native employees. Other specimens were secured by Mr. C. B. Goss and Mr. D. W. Bishopp, Assistant Game Wardens, Mr. D. K. S. Grant, Conservator of Fore ts, while Mrs. Billinge of Rumruli, Iringa, has sent a skin of the rare monkey *Colobus gordonorum,* and two eland skins, one of which needs description as a new form.

All the type-specimens have been presented by the Game Department to the British Museum, as well as those of other species, which in some cases were not represented in the Museum collection. For these valuable donations I beg to express to the Game Warden, Mr. Swynnerton, the thanks of the Trustees.

As many of the localities are not to be found on most maps, I have added the approximate longitude and latitude the first time the names appear in the paper.

### 1. *Colobus palliatus*, Pet.

K. 199 (2 skins). Iringa (?), 35° 35′ E., 7° 50′ S.

### 2. *Colobus* (*Piliocolobus*) *gordonorum*, Matsch.

K. 193. Iringa District (topotype).

This skin, a flat one, is the first example of this species to be received by the Museum. It is much worn, the hairs being very short. The whole dorsal area from the tail to the black of the shoulders is rusty-red with a trace of black. According to Matschie this area should be shining black. He says, however, that the hairs have an orange band below the black tip. The worn state of the pelage will probably account for this discrepancy. In any case, there is much individual variation in the colour of the red members of this genus.

3. *Papio neumanni*, Matsch.

♀. K. 71. Usshora, Mkalama, 34° 25′ E., 4° 25′ S.

4. *Papio cynocephalus*, Linn.

♂. K. 20. Kilosa, 36° 55′ E., 6° 55′ S.
K. 170 (6). Tindiga, near Kilosa.

5. *Epomophorus wahlbergi*, Sund.

K. 200. No data.

6. *Lavia frons*, Geoff.

K. 201. Mangogo, Namanyere.
Namanyere is the district N.E. of Karema on Lake Tanganyika, about 31° to 32° E., 6° to 7° S.

7. *Rhynchocyon swynnertoni*, sp. n.

Most nearly related to *R. reichardi*, from Marungu, S.W. of Lake Tanganyika.

Ground-colour rather lighter than in *reichardi*, due to the light portions of the hairs being light yellow, and not golden or reddish yellow. This feature is most marked on the head, face, and cheeks, which appear almost grey when put in juxtaposition to *reichardi*. On the back are six stripes. The two centre ones are a blackish brown, rather wider than in *reichardi*, and with four yellow spots, not white or yellowish white as in *reichardi*. There are six spots in the second stripe, the anterior one very faint. These are rather lighter in colour than in the first stripe. The third stripes are of a rusty-red colour and obsolescent. They might perhaps escape notice, were not the colour brought out by the four, or perhaps five, light spots. Throat cream-buff. Hairs of chest buff with grey bases. Belly very thinly clothed with ochraceous hairs, succeeded posteriorly by a naked area beginning 50 mm. from the tail, and reaching to the tail-root. The average width of this naked area is 25 mm. Hair between tail and thighs on each side long and rufous-coloured. Forearm rufous above, contrasting with body-colour. Hands cinnamon. Feet russet with some darker markings. Tail of the *cirnei*, not the *stuhlmanni* type; black above, greyish brown below for proximal 142 mm.; smoke-grey above and below for terminal 52 mm. The extreme tip may be missing in this specimen.

Measurements of the type (taken from the dried skin):—

Head and body 270 mm.; tail 194; hind foot, greatest length with nail 76, without nail 68.

Skull missing.

*Type.* Adult female. Original number K. 29. B.M. no. 23. 3. 4. 5. Collected 22nd November, 1921, by Mr. C. F. M. Swynnerton.

*Type-locality.* Kipera, Kilosa.

Although not so gaily clad as *reichardi*, this species is more brightly coloured than any others of the subgenus hitherto described.

8. *Rhynchocyon* (*Rhinonax*) *petersi*, Boc.

K. 166. Lushoto Forests, Usambara.

9. *Elephantulus renatus*, sp. n.

A species with sternal gland. General colour of head and back drab. A large patch behind each ear whitish, passing into yellowish white. White markings about the eye large, but not so conspicuous as in *E. ocularis*. Hairs of under surface white with very short slaty bases. Colour of snout in front of the eyes drab-grey. Hands and feet white. Hairs of tail brown above, white below.

Dimensions of the type (taken in the flesh):—

Head and body 135 mm.; tail 122; hind foot 32; ear 22.

Skull: greatest length 36; nasals 13·5; interorbital breadth 6·4; length of upper tooth-row 17·6.

*Type-locatity.* Gwao's, near Itigi, Singida, 30° 40′ E., 4° 25′ S., about 85 miles N.W. by N. of Kilimatinde.

*Type.* Adult female. Collector's number K. 56. B.M. no. 23. 3. 4. 6. Collected by Mr. Arthur Loveridge.

*E. renatus* is distinguished by the absence of any russet colour and by the conspicuous white patch behind the ears. It appears to be most nearly related to *E. pulcher* and *ocularis*, but is quite different in colour from either.

10. *Felis serval hindei*, Wrought.

♂. K. 174; ♀. K. 177. Kilosa.

K. 173. Mkalama.

The Mkalama skin has a much lighter ground-colour than the Kilosa skins, this being buff except in the middle of the back instead of ochraceous-buff.

11. *Felis ocreata*, Gmel.

♂. K. 85. Otto Plantation, Kilosa.

The body-colour of this specimen is a light grey, thickly covered on the sides and shoulders with small cinnamon

spots. Face and hind limbs striped. End of tail irregularly ringed, with black tip. There are thin black stripes on the head. Down the centre of the dorsal area the spots coalesce so as to form indistinct stripes. Hands and feet light yellowish brown.

This may prove hereafter to be a distinct local race.

12. *Acinonyx jubatus raineyi*, Hell.

K. 167. Purchased from native.

Although the locality is not given, the skin agrees so well with Heller's description that I have ventured to give the subspecific name. It is better to disregard Hilzheimer's *A. guttatus ngorongorensis*, which was a Zoological Gardens specimen. In any case, the present skin does not conform at all to his account.

13. *Civettictis civetta orientalis*, Matsch.

♂. K. 49. Wami River (Karani Hussein's), Morogoro, 37° 35′ E., 6° 55′ S.

14. *Genetta suahelica*, Matsch.

♂. K. 46; ♀. K. 45. Mkata River (Karani Chibabwa's), Morogoro.

♂. K. 44. Mkata Station, Morogoro.

♂. K. 47. Kanga Camp, Mkata R., Morogoro.

♂. K. 43. Kimamba Station, Morogoro.

K. 226. Gongwe, Namanyere, 30° 30′ E., 7° S.

K. 175. Malolo, Kilosa.

♂. K. 62. Mdjengo's, Singida.

15. *Helogale undulata*, Pet.

♂. K. 59. Jumbe Mbulu's, near Singida.

♂. K. 69. Mdjengo's, Singida.

16. *Mungos mungo*, Gmel.

♀. K. 72. Usshora, Mkalama.

17. *Hyæna hyæna schillingsi*, Matsch.

K. 24. Malolo, Kilosa (without skull).

♂. K. 66. Mtali's, Mkalama.

The Kilosa specimen agrees very well with Matschie's description of *schillingsi*, the only difference being that the ground-colour is light yellowish grey instead of whitish grey. The Mklama skin is very much lighter. The ground-colour is practically white. The hairs of the long mane have very extensive white bases, so that the general effect is a light

greyish brown. The hairs of the tail are white with very short black tips. The feet are dirty whitish brown. This agrees in some respects with Matschie's account of *H. h. bergeri*. For geographical reasons, however, and pending the arrival of sufficient material for a judgment to be formed as to individual variation in this genus, I have placed the specimen under the earlier name.

It may be noted that the skull of K. 66 shows the second upper premolar in the diagonal position mentioned by Hollister in his paper on "East African Mammals" (Bull. 99, Smithsonian Inst. U.S. Nat. Mus. part i. p. 140, 1918).

18. *Crocuta crocuta germinans*, Matsch.

K. 184, K. 186 (2) ; ♀. K. 4. Kilosa.
K. 25. Malolo, Kilosa.
♀. K. 26. Mbwengi, near Kilosa.
K. 183. Rudewa, near Kilosa.
K. 185. Kidodi, near Kilosa.
K. 184. Ugalla, 32° E., 6° 20′ S.
K. 187. Kigoma, 30° E., 4° 40′ S., on Lake Tanganyika.
♂. K. 73. Simbo, Tabora, 33° E., 5° S.
♂. K. 67. Mtali's, Mkalama.
♂. K. 242. Handeni, Usegua, 38° E., 5° 45′ S.
♂. K. 243. ? Mwanza.

In this fine series of spotted hyænas, there is an immense range in colour-variation. No two skins are alike, even those from the same locality. Age seems to be the dominating factor. The young in this series are grey with a brown dorsal tinge, black spots, dark brown feet, and long hair. The old are buff and white, with greyish-brown or russet spots, white or cream-buff feet, and very short hair. In the transition-period from youth to old age, the ground-colour appears to pass from grey to russet, clay-colour, and tawny, becoming lighter till the buff and white of old age is reached. The spots, which vary in size and regularity, change gradually from black to dark russet and grey-brown. The long hair of youth becomes short and mangy-looking in old age, while the feet change from black-brown to cream-buff or white.

19. *Canis mesomelas mcmillani*, Hell.

♂. K. 63. Mlawa, near Mkalama.
K. 172. Mkalama.
K. 194. No data.
All have the tail black-tipped.

20. *Mellivora capensis*, Schreb.

♂. K. 42. Jumbe Abdullah Funge's, Mkindo River, Morogoro.

An old female with a white mantle and skull-length of 135 mm. This animal seems to be quite different from the Kilimanjaro form, *M. sagulata*, Holl.

21. *Funisciurus vexillarius*, sp. n.

A large handsomely marked squirrel, allied to the *carruthersi* group, with a large and very broad skull.

Fur long and very thick, not so soft as in *carruthersi*. Hairs of back of two kinds, (1) the shorter ones, which are blackish-slate at the base, becoming dark mummy-brown, with cream subterminal rings and black tips; (2) the longer ones which are black throughout their length. The general result is a cream-grizzled greyish brown. Rings of hairs on head and muzzle yellowish brown instead of cream. Lower half of ear with a conspicuous fringe of white hairs. Parts about the mouth tawny ochraceous. Hands tawny ochraceous. This colour deepens up the arm till it becomes a rich red-tawny covering the shoulder. Feet tawny ochraceous, which colour tinges the thighs and flanks, but the colour here is less vivid than on the arm. Hairs of underparts dark grey with long cream tips. Tail for the two proximal thirds clothed with hairs ringed pure black and white, the distal third being pure tawny. These tawny hairs, which are 70 mm. in length, have very short (3 mm.) black bases.

The rings on the tail-hairs are quite different in character to those of *F. carruthersi* and *F. c. tanganyikæ*. In the two latter there is a very long basal light ring, followed by one shorter black ring with a light tip. In *vexillarius* there are five white rings and four black of approximately equal length, the basal and terminal ones being white. This gives the tail a totally different appearance to that of *carruthersi*.

The skull is remarkable for its large size and exceptional breadth, while the teeth are correspondingly large.

Dimensions of the type (from the dried skin):—

Head and body 242 mm.; tail 210; hind foot without claws 52.

Skull: greatest length 54; basilar length 44·4; palatilar length 24·5; zygomatic breadth 33·6; interorbital breadth 17·5; nasals, length 16, greatest breadth (at posterior end) 9; breadth of brain-case 24·2; length of upper tooth-series, exclusive of $p^3$, 9·2, with $p^3$ 10·5; greatest length of mandible (without incisors) 33; greatest depth 19·6.

*Type.* Adult. Original number K. 202. B.M. no. 23. 3. 4. 24. Collected by Mr. C. F. M. Swynnerton.

*Type-locality.* Wilhelmsthal, Lushoto, Usambara.

Excepting the species next to be described, it would perhaps be proper to regard *carruthersi* as the nearest relative of this elegant and striking species. There is no sign of a side-stripe nor any other characters to connect it with the *pyrrhopus* group. The great size and exaggerated breadth of the skull are different to anything else in the genus.

The curious bright tawny tip to the tail is perhaps part of the process of some seasonal change. It certainly has a somewhat unnatural appearance.

### 22. *Funisciurus byatti*, sp. n.

This is another large species differing in colour and skull-characters from *vexillarius*.

The quality of the fur is much the same as in *vexillarius*, but much scantier. General colour of back grizzled mummy-brown, becoming greyer on the sides and dull rufous on the flanks and outside of thighs. Individual hairs as in *vexillarius*, but ochracous-buff subterminal rings. Nose, parts about mouth, and a broad streak running through the eye to the ear rufous. Crown like back, but with a slight rufous tinge. Ear without a white fringe. Arms and shoulders dark rufous. Underparts as in *vexillarius*, but darker, the hairs having much shorter cream tips. Hands and feet tawny ochraceous. Tail coloured for one-fifth of its length like the back. The distal four-fifths is clothed with hairs having three buff rings and two black, the subterminal black ring, especially towards the end of the tail, being very broad. These rings are very apparent when the tail is viewed from the lower side. The tip of the tail is buff, not black as in *carruthersi*.

The skull, which is nearly as long as in *vexillarius*, is nevertheless very much narrower. The brain-case is more than 2 mm. smaller in breadth, the interorbital space 2 mm. narrower. The nasals of *vexillarius*, though of the same length as those of *byatti*, appear to be short and stunted when compared with them, owing to the great breadth of the former. Teeth not so broad as in *vexillarius*.

Measurements of the type (taken from the dried skin) :—

Head and body 264 mm. ; tail 210 ; hind foot 52.

Skull : greatest length 53 ; basilar length 43 ; palatilar length 24·8 ; zygomatic breadth 31 ; interorbital constriction 15·5 ; nasals 16 × 8 ; breadth of brain-case 22 ; greatest length of mandible (without incisors) 33, greatest

depth 19·6; length of upper tooth-series exclusive of $p^3$ 9·2, with $p^3$ 10·4.

*Type.* Adult. Original number K. 203. B.M. no. 23. 3. 4. 25. Collected by Mr. C. F. M. Swynnerton on the 3rd May, 1920.

*Type-locality.* Moshi, Kilimanjaro.

This species is named in honour of Sir Horace Byatt, the Governor of Tanganyika Territory, who has done so much to promote the study of the natural history of this imperfectly-known zoological region.

23. *Paraxerus palliatus suahelicus*, Neum.

♂. K. 35. Wami River, Morogoro.
♀. K. 34. Mkata River, Morogoro.

24. *Paraxerus ochraceus*, Huet.

♀. K. 36. Mkindo River, Morogoro.

25. *Paraxerus ochraceus aruscensis*, Pag.

K. 204. Moshi-Aruscha, Kilimanjaro.

26. *Dipodillus luteus*, Dollm.

♂. K. 74. Ulugu, Usshora, Mkalama.
K. 55. Gwao's, near Itigi, Singida.

27. *Taterona vicina*, Pet.

♀. K. 64 *a*, K. 64 *b*. Mlewa, near Singida.
♀. K. 54. Mbono, near Itigi, Singida.

28. *Tachyoryctes ibeanus*, Thos.

♀. K. 86. Nairobi, Kenya Colony.

29. *Rattus alexandrinus*, Geoff.

♂. K. 224 (3); ♀. K. 224 (4); ♂. K. 223; ♀. K. 223. Kilosa.
♂. K. 216. No locality.

30. *Rattus* (*Mastomys*) *coucha microdon*, Pet.

♂. K. 39; ♀. K. 39 (3). Bogoti, Wami River.
♀. K. 37 (3). Wami River.
♀. K. 81 (4). Kipera, near Kilosa.
♂. K. 75. Tabora.
♂. K. 57 (3). Jumbe Mbulu's, near Singida.
♂. K. 38; ♀. K. 38. Mkindo River, Morogoro.
K. 207, K. 227. No data.

31. *Rattus* (*Æthomys*) sp.

♂. K. 54. Mbono, near Itigi, Singida.

Allied to the *chrysophilus* group, but with smaller feet. The skull is unfortunately missing.

This opportunity may be taken to describe a new species of rat recently received from Uganda. It may be called

*Rattus somereni*, sp. n.

A small mouse-like form with tail equal in length to head and body.

This rat bears a superficial resemblance—except, of course, in tail and feet—to a young *Taterona*, the usual streaked mouse-brown of the back passing into the lighter and richer tawny of the sides till it meets the sharply separated pure white of the underparts, the hairs of which are white to their bases. Hands and feet white. Tail thickly clothed throughout its length with extremely short hairs, brown above, whitish below.

The skull is very similar to that of *R. blainei*, from Bahr-el-Ghazal, but the zygomatic plates are set more vertically, causing the infraorbital foramina to be narrower. Also the anterior internal cusp of $m^2$ is somewhat reduced.

Dimensions of the type :—

Head and body 93 mm.; tail 93 ; hind foot 20 ; ear 15.

Skull : condylo-incisive length 25 ; basal length 25 ; breadth of brain-case 11 ; nasals (median line) 9·5 ; interorbital breadth 4·8 ; upper molar series 4·5. Palatal foramina as in *R. blainei* extend back to about the centre of $m^1$.

*Hab.* Kabaroni, North Bugishu, Bukedi District, Eastern Province, Uganda, in the western foot-hills of Mount Elgon. Caught in grass on the mountain side, 7000 feet.

*Type.* Young male. Collector's number 108. B.M. no. 22. 12. 13. 31. Collected by Mr. W. N. van Someren, 13th February, 1922, and presented to the British Museum by the Chief Sanitation Officer, Entebbe.

The specimen, judging from the teeth, is young, and has clearly not grown to its full size. Unfortunately it is a male, so that the mammary formula has yet to be ascertained. Its affinities appear to be with the group of small multimammate rats, such as *R. blainei* and *gambianus*.

32. *Leggada bella*, Thos.

♂. K. 41. Jumbe Abdullah Funge's, Mkindo River, Morogoro.

K. 213. No data.

33. *Lophuromys aquilus*, True.

♂. K. 219 (2); ♀. K. 219. Bismarck Hut, Kilimanjaro.

K. 218 (3). No data.

♂. K. 53; ♀. K. 53 (2). Bagito, Uluguru Mts.

34. *Arvicanthis abyssinicus tenebrosus*, subsp. n.

♂. K. 76 *c*; ♀. K. 76 *a*, K. 76 *b*. Tabora.

A form darker in colour than any other subspecies of *abyssinicus* hitherto described.

No trace of a dorsal stripe. General colour between seal- and clove-brown. The light rings on the hairs much reduced. When viewed from in front, these rings are very inconspicuous, so that the pelage appears remarkably dark, especially on the head and shoulders. Viewed from behind the light rings show up more, producing a grizzled greyish-brown appearance. Halfway down the back a russet tinge appears, which increases over the flanks and root of the tail. Head the same colour as fore part of the back. Ears seal-brown. Fore feet dark seal-brown. Hind feet tinged with russet. The usual bicoloured tail. Under surface of body brown washed with grey.

Dimensions of the type:—

Head and body 125 mm.; tail 120; hind foot 30; ear 18.

Skull: greatest length 34; condylo-incisive length 33; basilar length 28; zygomatic breadth 18·2; nasals (median line) 12·5; interorbital breadth 5·1; brain-case breadth 14; diastema 8·7; upper molar series 7·2.

*Type-locality*. Tabora.

*Type*. Adult female. Original number K. 76 *a*. B.M. no. 23. 3. 4. 32. Collected on the 20th November, 1921, by Mr. Arthur Loveridge.

*A. a. tenebrosus* is remarkable for the darkness of its pelage, which is much darker than in *nubilans*. Its nearest neighbours are the light-coloured *A. a. neumanni* to the east in Irangi and *A. a. muansæ* to the north, the colour of which is said by Matschie to be not unlike Peters's figure of *Pelomys fallax*, though more drab.

35. *Lemniscomys griselda rosalia*, Thos.

♀. K. 40. Bogoti, Wami River.

♀. K. 82. Kipera, near Kilosa.

36. *Lemniscomys barbarus* subsp.

♂. K. 60. Poona, Singida.

This specimen conforms exactly to Osgood's account of

*L. b. albolineatus* of Lukenya Mountain, Kenya Colony, except in the colour of the ears, which are tawny ochraceous instead of buff or cream-buff. There are three specimens among the abundant material in the British Museum—one from Fashoda, one from Bahr-el-Ghazal, and one from Northern Nigeria—with just this light type of coloration, all of which, so far as colour goes, are precisely similar to the one under notice. These three occur as isolated examples in districts occupied by *L. b. zebra* and *L. b. nigeriæ*. It should be noted that the type of *albolineatus* was also unique, and I am not aware that any more examples have come to light. These facts create a suspicion that these light-coloured individuals may be only aberrations from the true types.

37. *Rhabdomys pumilio diminutus*, Thos.

♀. K. 220. Bismarck Hut, Kilimanjaro.

38. *Otomys angoniensis elassodon*, Osg.

♀. K. 85. Rumruli, Iringa District.

39. *Thryonomys swinderianus variegatus*, Pet.

♂. K. 171. Kipera, Kilosa.

40. *Rhynchotragus kirki nyikæ*, Hell.

♀. K. 248. Tabora.

41. *Damaliscus korrigum eurus*, Blaine.

K. 247. Lake Chada, Namanyere.

A duiker antelope, received by the British Museum from Mount Elgon, is found to be a new species, and is here described:—

*Cephalophus barbertoni*, sp. n.

*Type*. Adult male (B.M. 23. 2. 15. 1). Collected and presented by Mr. I. Mitford-Barberton, F.R.G.S.

A medium-sized duiker with stout horns, allied to *C. ignifer*. Colour of back ochraceous rufous, brighter than in *ignifer*. A few black hairs appear on the nape and withers mixed with the others. Occipital tuft and crown a deep red-chestnut, the latter with a few black scattered hairs. A black line from the centre of the upper part of the eye to

the muzzle, above which it meets a similar line from the other eye. Below this line and starting from the eye there runs an ochraceous-rufous line 40 mm. long and 5 wide towards the muzzle, forming an "eyebrow." Below this the sides of the face are russet. Outside of ears dark brown with russet bases. The inner margin and lower third of the outer shortly fringed with white hairs. Throat and chin white. Belly brown in the middle line, ochraceous rufous at the sides. Parts between thighs white. Tail missing. Legs from "knees" and hocks to hoofs seal-brown. Hairs of occiput directed forwards, those of the nape backwards.

Skull broad and heavily built with large brain-case, exceptionally deep preorbital fossæ, and short anterior palatal foramina. Premaxillæ just reach nasals.

In the following measurements the numbers in brackets refer to *ignifer* (the type-specimen).

Dimensions of the type (taken from the dried skin) :—

Head and body 897 mm. (810) ; hind foot with hoof 225 (240) ; ear 81 (81).

Skull : basal length 161 (162) ; greatest breadth 84·5 (79·5) ; muzzle to orbit 91·5 (94) ; nasals 75·5 × 34 (73 × 32) ; anterior palatal foramina 20 (25) ; palatilar length 96 (97) ; length of upper tooth-row 51·4 (53) ; of three upper premolars 22·3 (23·4) ; interorbital breadth, taken at the centres of the posterior margins 77 (70·5) ; greatest breadth across frontals at points midway between orbits and horn-cores 65·2 (60·5) ; greatest cranial breadth 67·4 (60).

Horns 92 (98) long, 86 (82) round the base, and with a basal diameter of 32 (31).

*Type-locality.* Mount Elgon, 7000 to 8000 feet, N.E. of Lake Victoria Nyanza.

*C. barbertoni* differs from *ignifer* mainly in the brighter chestnut of the pelage, the reduced dark face-markings, the white throat, the large brain-case, the deep preorbital fossæ, and the short anterior palatal foramina.

42. *Cephalophus* (*Sylvicapra*) *grimmi shirensis*, Wrought.

♂. K. 330. Mpiana, Namanyere.

43. *Redunca redunca tohi*, Hell.

♀. K. 249. Kachungu, Namanyere.

44. *Redunca fulvorufula chanleri*, Roths.

♀. K. 250. Maturiga, Namanyere.

45. *Kobus ellipsiprymnus*, Og.

♀. K. 232. Jumbe Nyani, Kissaki, Morogoro.

46. *Kobus defassa*, Rüpp.

♀. K. 228. Busenga, Ugalla River, Namanyere.

47. *Æpyceros melampus suara*, Matsch.

K. 111 (2). Rudewa, Kilosa.

The horn of one specimen measures in a straight line 19½ inches (50 cm.).

48. *Tragelaphus scriptus massaicus*, Neum.

♂. K. 252. Kangamoja, Kigoma.

♀. K. 13 (2). Kilosa.

♂. K. 18. Kilosa (skull only).

49. *Strepsiceros strepsiceros* subsp.

K. 255. Malolo, Iringa.

There are nine stripes on each side, the anterior one rather faint. This skin was obtained from natives, and lacks the head, legs, underparts, and tail. The number of stripes shows that it must be related to *S. s. frommi*, Matsch.

50. *Taurotragus oryx billingæ*, subsp. n.

♀. R. 190. Uleti, Iringa (type).

The female and young elands of the Iringa District are so remarkable in their coloration, and differ so much from other forms, as to deserve a subspecific name. It appears to be a highland form. Mrs. Billinge of Rumruli, Iringa, in whose honour the subspecies is named, in March 1922 presented the skull and skin of an adult female, which she had shot, to the Game Department of the Tanganyika Territory. The Department has sent the skin to the British Museum for identification, and has kindly permitted it to be added to the Collection.

The skin lacks the head and hoofs.

The neck is a dusky fawn. The back, from the withers to the tail is bright bay, reminiscent of the colour of the Bongo, *Boocercus*, but rather lighter. This colour is continued along the upper part of the tail to the tuft at the end. Median line black, except for a short space behind the withers, where it is white. Eight clearly marked vertical stripes, and a few fainter ones behind them over the quarters. The bay-colour of the back passes gradually into the white of the belly. A black patch above the hind surface of knee.

So far as can be judged from the remains of the pasterns, they are black as in *pattersonianus*.

Mrs. Billinge, writing to the Game Department, says: "The elands here [Iringa] are very short in the leg, round, and heavy, and not tall. The cows are very red indeed, with black manes, and many long and distinct stripes. The younger cows are far redder than the accompanying skin, and, with the sun on them, appear as red as any animals can. The bulls, three of which I have observed closely and through glasses, are absolutely blue, and appear, even on the inside of legs, to have no fawn at all. The mane is black and very heavy. They have little below the neck, but a great deal above. The horns of both sexes are very short, massive, and heavy, with very wide spreads, and, so far as I can observe, the tips invariably point outwards; whereas in the others [Ruaha] they point inwards in all those I have seen. The contrast in colour is the sharpest I have ever seen between sexes in mammals. The country they frequent is the high cold parts, with huge great boggy and grassy plains, and the slopes, where they spend most of the year, thick, but low and scrubby, mahobohobo forests. They will face hills, when chased, that goats would think twice over, and, in spite of huge size and short legs, appear to go up them and among the boulders with the greatest of ease. They are in small herds of about four or five, the biggest I have seen consisting of about ten. I have never seen a small calf, so conclude that these are 'laid by.' The natives say that elands do this."

### 51. *Taurotragus oryx* subsp.

♀. R. 189. Kazera's, Kiganga, Ruaha, about 35° 37′ E., 7° 30′ S.

In this skin, also sent by Mrs. Billinge, the head and the entire legs are wanting. This is more of the ordinary eland type, though there is a distinct ruddy tinge on the back. The stripes are few, three on one side and two on the other, on the shoulders. This eland will probably be found to be identical with *pattersonianus*, but the skin is too fragmentary for this question to be settled.

Mrs. Billinge, of the eland from the Ruaha River, writes: "These elands are much higher on the leg, flatter-sided, and taller, and do not appear such heavily built animals, though actual difference in weight cannot be much. They are all, bulls and cows alike, the fawn-red of the present skin. A very old bull may look a little bluer, but not much.

None of them, except yearlings and two-year-olds, have many or distinct stripes, which are very short and apparently disappear when they grow up. Their horns are long and light, and turn in at the points, and all I have seen and watched had a very narrow spread between the horns. Also their faces are much longer and narrower than the Uleti elands, which have short, comparatively broad, faces, almost like cattle. They seem to me very different in type—the bulls even more than the cows."

52. *Choiropotamus choiropotamus dæmonis*, Major.

K. 32. Kilimanjaro Reserve (skull only).

The skin is said to have been "black with a little white."

53. *Choiropotamus choiropotamus johnstoni*, Major.

K. 196 *a*, K. 196 *b*, K. 197 *a*, K. 197 *b*. Ilonga near Kilosa.

54. *Phacochœrus æthiopicus massaicus*, Lönnb.

K. 195 (2 skulls, 1 skin). Rudewa, Kilosa.

55. *Procavia matschiei*, Neum.

K. 244 (5 skins). Mwanza, south coast of Victoria Nyanza.

Also 13 skulls, all from Mwanza.

These are all topotypes of *matschiei*. Neumann's account is very meagre. In fact, all that can be gathered from it is that it is a large species belonging to the large-toothed group of *capensis*, etc.

It may be said here that the skulls are large and heavily built, with an average basal length in the adults of 98 mm., and zygomatic breadth 60. The colour of the skins varies from yellowish brown to dark brown, and in all cases the crown of the head is suffused with rufous. Perhaps the light-coloured animals are young, as the skins are smaller, but unfortunately the skulls are not numbered.

56. *Heterohyrax brucei victoria-njansæ*, Brauer.

K. 244 (1 skin). Mwanza.

Also 3 skulls, all from Mwanza.

The quality and colour of the fur are quite different to the preceding species, being soft, short, and grey tinged with brown. Hairs of underparts white with grey bases. Dorsal spot tawny ochraceous, with central hairs tipped with white. Head missing.

Skull: basal length 79 mm.; zygomatic breadth 49·5.

Kershaw, P S. 1923. "LXIII.—On a collection of mammals from Tanganyika territory." *The Annals and magazine of natural history; zoology, botany, and geology* 11, 586–600. https://doi.org/10.1080/00222932308632893.

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