Article XXVI.— MAMMALS FROM BRITISH EAST AFRICA, COLLECTED ON THE THIRD AFRICAN EXPEDITION OF THE AMERICAN MUSEUM BY WILLIAM S. RAINSFORD.

By J. A. Allen.

The third African Expedition left New York in July, 1912, under the direction of William S. Rainsford, with Jenness Richardson as preparator, and returned in April, 1913, with a collection of about 130 mammals and a few birds. The mammals consist mainly of large game animals, carnivores, and monkeys but include also about 60 small mammals, chiefly rodents, 40 species in all being represented. The specimens are exceptionally well prepared and reached the Museum in excellent condition. The smaller species (rodents) are represented by skins and skulls, the larger species by skins and complete skeletons. All have full field data and measurements taken from the animals in the flesh.

The smaller species have all been determined by direct comparison with the British East Africa material in the United States National Museum, collected on the Roosevelt, Rainey, and other expeditions and identified by Edmund Heller, to whom I am indebted for valued assistance. No new forms appear to be represented, the material having been gathered in or near localities that have been well explored by British, German and American collectors during the last ten years, but in a few instances the positively known range of currently recognized forms has been extended. Besides securing important desiderata for mounting, several species still rare in collections were obtained, among them a fine series of Bdeogale jacksoni, Dendrohyrax bettoni, Genetta bettoni, and Erythrocebus whitei.

Mr. Rainsford in his account of the expedition (l. c.) states: "After much study of the question, the Nzoia Plateau, especially the Cheringani Hills at its eastern part, was chosen as the hunting ground, a small area about one hundred miles by seventy in extent, and some one hundred and fifty miles from the railroad.... This country has forests unusual for East Africa. The altitude ranges from a little over 4000 feet above sea level in some of the lower parts to 10,500 feet, where dense woodlands cover the summits of the hills. Impassable ravines and deep swamp-edged narrow streams were met with everywhere and made necessary considerable digging and rough bridging and road-making."

¹ For a general account of the expedition see 'Trackers of the Cheringani Hills,' by W. S. Rainsford. The American Museum Journal, Vol. XIII, No. 7, pp. 299–310, Nov., 1913.

1. Syncerus caffer radcliffei (Thomas). East African Buffalo.

Three specimens, adult male and female and young female, Cheringani Hills (9000 ft.), Nov. 14.

Collector's measurements: total length, \circlearrowleft 3304 mm., \circlearrowleft 2593; tail vertebræ, \circlearrowleft 636, \circlearrowleft 623.

2. Taurotragus oryx pattersonianus Lydekker. East African Eland.

Five specimens, 1 adult and 1 yearling male, 1 adult and 2 young females, Uasin Gishu Plateau (7000–7200 ft.), Oct. 18–25.

Collector's measurements: Total length, 3050, 92923; tail vertebræ, 5050, 9560, 9540.

3. Tragelaphus scriptus delemerei Pocock. Highland Bushbuck.

Four specimens, 2 males (one half grown), 2 females, Cheringani Hills (6600–8000 ft.), Nov. 18 and Dec. 3.

Collector's measurements: total length, \circlearrowleft 1551, \circlearrowleft \circlearrowleft 1398, 1246; tail vertebræ, \circlearrowleft 212, \circlearrowleft \circlearrowleft 233, 23°

4. Redunca redunca wardi (Thomas). HIGHLAND REEDBUCK.

Six specimens, 3 males (including 1 in first pelage), 3 females, Uasin Gishu Plateau (6000–7000 ft.), Dec. 3–25.

Collector's measurements: total length, \eth ad. 1565, \Diamond \Diamond ad. 1422, 1334; tail vertebræ, \eth 165, \Diamond \Diamond 153, 146.

5. Oreodorcas fulvorufula chanleri (Rothschild). Chanler's Reedbuck.

One specimen, adult female, Cheringani Hills (7000 ft.), Nov. 30. Also 2 specimens have been received from the Laikipia Escarpment, collected by A. J. Klein, March 21, 1912.

6. Ourebia montana cottoni (Thomas). UASIN GISHU ORIBI.

Four specimens: Uasin Gishu Plateau (7000 ft.), 1 young female, Dec. 20; Cheringani Hills (6300-7000 ft.), 2 males and 1 female, Dec. 1 and 2.

Collector's measurements: total length, \circlearrowleft ad. 1041, \circlearrowleft ad. 1004; tail vertebræ, 70, 76.

7. Sylvicapra grimmia nyansæ Neumann. Uganda Bush Duiker.

Two specimens, females, Uasin Gishu Plateau (6500–7000 ft.), Oct. 29 and Feb. 1.

Collector's measurements: total length, 875; tail vertebræ, 90. (One specimen without measurements.)

8. Cephalophus monticola musculoides Heller. NANDI BLUE DUIKER.

Two specimens, adult male and female, Elgeyo Forest (6000 ft.), Jan. 23. Collector's measurements: total length, ♂ 711, ♀ 711; tail vertebræ, ♂ 80, ♀ 82; ear, ♂ 58, ♀ 54.

9. Damaliscus korrigum jemala (Matschie). Topi.

Two specimens, male and female, Uasin Gishu Plateau (7000 ft.), Oct. 24 and Dec. 20.

Collector's measurements: total length, ♂ 2135, ♀ 1893; tail vertebræ, 445, 343.

10. Raphicerus campestris neumanni (Matschie). Masailand Steinbok.

One specimen, adult male, Uasin Gishu Plateau (7000 ft.), Oct. 22. Collector's measurements: total length, 768; tail vertebræ, 314.

11. Bubalis lelwel jacksoni Thomas. Jackson's Hartebeest.

Five specimens, 3 males, 1 female and a young calf, Uasin Gishu Plateau (5700–7000 ft.), Oct. 17–22 and Dec. 22.

Collector's measurements, 3 males, 1 female: total length, \circlearrowleft 1930, 2120, 2260, \circlearrowleft 2210; tail vertebræ, \circlearrowleft \circlearrowleft 343, 387, 432; \circlearrowleft 432.

12. Potamochærus koiropotamus dæmonis Major. East African Bush Pig.

Two specimens, an adult male and a young male in striped coat. Cheringangi Hills, Nov. 6.

Collector's measurements: total length, ♂ ad. 1587; tail vertebræ, 395.

13. Diceros bicornis somaliensis Potocki. Somali Black Rhinoceros.

Four specimens, 1 male, 2 females and 1 young female, Cheringangi Hills (6000–7000 ft.), Nov. 4–Dec. 8.

Collector's measurements: total length, 3 3560, 9 9 3305, 3355; tail vertebræ, 3 660; 9 9 497, 560.

14. Dendrohyrax bettoni Thomas & Schwann.

Five specimens, 3 females (2 fully adult) and 2 young about one quarter grown, Uasin Gishu Plateau, Dec. 23. The two young specimens are still in the soft, woolly first pelage, but closely resemble the adults in coloration.

Collector's measurements: 3 females, total length, 457, 464, 495; tail vertebræ, 32, 36, 38; hind foot, 61, 66, 67. Skull: condylobasal length, 80, 89, 89; zygomatic breadth, 43, 46, 46.3.

15. Tachyoryctes splendens badius Thomas.

Two specimens: Uasin Gishu Plateau (7800 ft.), 1, Oct. 11; Elgeyo Forest (6000 ft.), 1, Jan. 15.

16. Arvicanthus nairobæ Allen.

One specimen (juv.), Cheringangi Hills (6400 ft.), Nov. 2.

17. Lemniscomys pumilio dimidiatus (Thomas).

Four specimens: Elgeyo Forest, 3, Jan. 19; Uasin Gishu Plateau, 1, Oct. 8.

18. Lemniscomys massaicus (Pagenstecker).

Two specimens: Elgeyo Forest, Jan. 29; Uasin Gishu Plateau, Oct. 8.

19. Lophuromys aquilus zena Dollman.

Three specimens: Elgeyo Forest (6000 ft.), 2, Jan. 17, 24; Uasin Gishu Plateau (7800 ft.), 1, Oct. 9.

20. Cricetomys gambianus elgonis Thomas.

Five specimens, 2 males, 3 females (all adult): Elgeyo Forest (6000 ft.), 3, Jan. 26, 27; Uasin Gishu Plateau (7800 ft.), 2, Oct. 2.

Collector's measurements: 2 males, total length, 792, 761; head and body, 398, 380; tail, 394, 381; hind foot, 76, 75: 3 females, 692, 704, 727; 365, 330, 330; 362, 362, 274; 73, 76, 73.

Skull, occipitonasal length, of 75; zygomatic breadth, 35.

"	"	"	♂ 75;	"	"	36.
"	"	"	♀ 71;	"	"	_
"	"	"	♀ 71;	"	"	34.
"	"	"	♀ 71:	"	"	35.6.

21. Enomys hypoxanthus bacchante Thomas.

One specimen, adult male, Uasin Gishu Plateau (6000 ft.), Dec. 25.

22. Epimys tullbergi peromyscus Heller.

Three skins with skulls and one additional skull, Uasin Gishu Plateau (7800 ft.), Oct. 2, 11.

23. Epimys hindei medicatus Wroughton.

One specimen, Uasin Gishu Plateau, Dec. 29.

24. Otomys irroratus elgonis Wroughton.

Eight specimens (4 adult, 4 juv.): Elgeyo Forest (6000 ft.), 7, Jan. 17–26; Uasin Gishu district (7800 ft.), 1, Oct. 9.

25. Tatera dundasi Wroughton.

Two specimens, Uasin Gishu Plateau, Oct. 16.

26. Heliosciurus rufobrachiatus nyansæ Neumann.

One specimen, Uasin Gishu Plateau (7800 ft.), Oct. 6.

27. Felis pardus suahelica (Neumann). East African Leopard.

Three specimens, 2 males, 1 female, all adult: Elgeyo Forest (6000 ft.), male, Jan. 23; Cheringangi Hills (6400-9000 ft.), male and female.

Collector's measurements: total length, \circlearrowleft 1807, 2135, \circlearrowleft 1778; tail vertebræ, \circlearrowleft \circlearrowleft 685, 927, \circlearrowleft 750; hind foot, \circlearrowleft 267, 223 (?), \circlearrowleft 235.

28. Felis serval serval Schreber. SERVAL CAT.

Two specimens, adult males, Uasin Gishu Plateau (6000 ft.), Dec. 25 and 27.

Collector's measurements: total length, 790, 1092; tail vertebræ, 229, 280; hind foot, 140, 197.

29. Bedeogale crassicauda jacksoni (Thomas).

Six specimens, 4 males, 2 females, Elgeyo Forest (6000 ft.), Jan. 19–27. All are adult except one of the males, which has just acquired the permanent dentition, the canines being still only about half up.

Collector's measurements: 3 adult males, total length, 854 (835–863); tail vertebræ, 316 (301–324); hind foot, 107 (105–108); 2 females, total length, 800, 838; tail vertebræ, 508, 527; hind foot, 292, 311. Skull: 3 males, condylobasal length, 109.3 (110, 110, 108); zygomatic breadth, 58 (59, 58, 57); 2 females, 102, 103; 54, 55.

There is also a specimen (skin only) in the Museum collection from Nairobi, and another from Komphombene referable to this subspecies.

30. Nandinia binotata arborea Heller.

One specimen, adult male, Elgeyo Forest (6000 ft.), Jan. 25. (Compared with type.)

Total length, 1083; tail vertebræ, 581; hind foot, 100. Skull, condylobasal length, 101; zygomatic breadth, 65.

31. Genetta bettoni Thomas.

Eight specimens, 5 males, 3 females, all adult, Elgeyo Forest (6000 ft.), Jan. 16–28.

Collector's measurements: 5 males, total length, 823 (790–855); tail vertebræ, 380 (361–400); hind foot, 80.6 (76–85); 3 females, 802 (793–814); 365 (359–368); 76 (73–79).

Skulls: males, condylobasal length, 81.4 (79–82.5); zygomatic breadth, 39.7 (38–40.5); 3 females, 79 (78.5–80); 37.4 (36–40).

In general coloration the series is unusually uniform, the chief variation being that some specimens are slightly darker than others in general effect. The number of light rings on the tail is usually 9, with a light brownish tip, but varies from 8 to 10. The width of the white tail rings varies from one fourth to one half of the width of the black interspaces.

32. Genetta pardina (? stuhlmanni Matschie).

Three specimens, 1 male, 2 females (all adult), Elgeyo Forest (7000 ft.), Jan. 15, 20, and 26.

These specimens vary greatly in coloration, the male being of the usual color, with all the light tail-rings clear white on dorsal and lateral sides, yellowish white on ventral; one of the females is heavily suffused with fulvous, and has the light tail-rings yellowish white below and deep yellowish rufous above; the other female is entirely brownish black with the dark markings deep black — a beautiful example of melanism.

Skull: condylobasal length, \nearrow 89, \bigcirc 83.5, \bigcirc .87; zygomatic breadth, \nearrow 45, \bigcirc 42.6, \bigcirc 45.5.

These specimens are provisionally referred to Genetia stuhlmanni Matschie.

33. Canis mesomelas Schreber.

Three specimens, adult males Uasin Gishu Plateau (7200-7900 ft.), Oct. 25-27.

Collector's measurements: total length, 984, 1030, 1005; tail vertebræ, 325, 341, 330; hind foot, 160, 160, 153.

34. Canis lateralis Sclater.

One specimen, adult female, Uasin Gishu Plateau (7900 ft.), Oct. 27. Collector's measurements: total length, 1668; tail vertebræ, 350; hind foot, 165.

35. Lavia frons frons (Geoffroy).

Two specimens, Uasin Gishu Plateau, Dec. 23.

36. Crocidura flavescens nyansæ Neumann.

One specimen, Elgeyo Forest, Jan. 27.

37. Galago braccata albipes Dollman.

Two specimens, adult male and female, Uasin Gishu Plateau (6000 ft.), Dec. 29.

Collector's measurements: total length, \circlearrowleft 406, \circlearrowleft 438; tail vertebræ, \circlearrowleft 247, \circlearrowleft 260; hind foot, \circlearrowleft 70, \circlearrowleft 70.

38. Lasiopyga sp. indet.

Two specimens, adult females, Cheringani Hills (6400 ft.), Nov. 5. Collector's measurements: total length, 933, 940; tail vertebræ, 121, 130.

39. Erythrocebus whitei Hollister.

Seven specimens, practically topotypes: 2 young adult males, 1 old female, and 4 young, one fourth to one half grown, all from Uasin Gishu Plateau (6000–7900 ft.), Oct. 19–26 and Dec. 27. Also an adult male from "Uganda," collected by Dr. Rainsford on a previous expedition and presented by him to the Museum.

Collector's measurements: old \circ , total length, 1865; tail vertebræ, 547; hind foot, 167.

40. Colobus abyssinicus roosevelti Heller.

Seven specimens: Uasin Gishu Plateau (6700 ft.), Oct. 1, 10, 2 males and 1 female; Elgeyo Forest (7000 ft.), Dec. 30, Jan. 13, 14, 21, 28, 4 females (only one adult) and 1 young one, probably not more than two weeks old, in the short, woolly first pelage. It is white except the muzzle and the face to a little behind the eyes, the hands and feet, and the apical third of the tail (except the extreme tip), which parts are blackish, or grizzled with blackish; the shoulders and forearms are slightly grizzled or grayish.

Collector's measurements: 3 adult males, total length, 1174, 1232, 1283; tail vertebræ, 565, 560, 565; hind foot, 165, 165, 180.