# A Checklist of the Land Mammals of the

### Tanganyika Territory

AND THE

### Zanzibar Protectorate

By

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#### FOREWORD

This checklist of the land mammals of Tanganyika Territory by Messrs. Swynnerton and Hayman will be welcomed by all who are interested in East African faunas, and will be especially valuable to zoologists.

Such a checklist, carefully compiled, has long been needed and it is to be hoped that comparable lists for Kenya and Uganda will be prepared in the not too distant future.

This checklist with its carefully compiled data showing the known distribution of each form is of particular interest because mammals of Africa play such an important role in so many branches of economic research today.

The value of the present paper has been greatly enhanced by the diligence and extreme care with which Mr. Swynnerton has checked all the available data, not only from published works but in many Museums.

So many of the diseases which affect both man and his domestic animals can be linked in one way or another with the indigenous mammalian faunas, that it is vital to research workers in fields other than mammalogy to have access to good records of the distribution of the many genera and species.

It is unfortunately only too true that the opening up of the country economically, by such means as the vast clearing for groundnuts and bush clearing and game reduction for Tsetse control, probably foreshadows the doom of many animals, except in special reserves and National Parks, while nature, too, is playing its part in this respect as witness to the virtual extinction of the Hippopotamus in the Rukwa basin during a recent drought.

Now that an up-to-date checklist of Tanganyika land mammals has been made available it is to be hoped that numerous observers will be stimulated to collect more data, not only on distribution, but still more on habits, local migrations and breeding rates, etc.

The East African Natural History Society is delighted to have been able to assist in publishing this most valuable paper and will be only too glad to offer its pages to persons who can extend the value of this paper by additional information.

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#### 2. INTRODUCTION

Mammais provided zoologists and others concerned with the mammaian fatha of the continent with an invaluable reference work. With its classified list of all the technical names applied from Linnaeus (1/28) down to 1938, it has simplified very greatly the work of mammaiogists and has proved an indispensable starting point for further investigations.

The present Checklist of the recorded mammals of Tanganyika Territory and the adjacent Lanzioar Protectorate is offered in the benef that further separate lists for each main division of the continent, expanded by the addition of recorded localities for each species, may help to draw attention, within each territory, to the rich mammalian fauna, and sumulate local interest with the object of filling in the numerous gaps in the published information on status, distribution, etc. It is also noped that other workers in the biological neid, such as agriculturists, medical entomologists, pest control workers, and so on, who not infrequently have occasion to refer to the local mammals in the course of their investigations, may find such a list of some value. A further point is that the modern developments now changing or threatening to change, so much of the surface of Africa, are bound to have a serious effect on the fauna and flora, and the mammalian population, in particular, is likely to suffer great changes in numbers and status. Conservation measures will be unlikely to have much effect except in those areas set aside as reserves or national parks, where, it is to be hoped, the hand of "progress" will not be welcomed. In all other areas the easy access by mechanical transport, the increase and shifting of native populations, the large-scale agricultural developments now in progress and not least, the long-term possibilities of opening up to domestic stock, through the scientific developments leading to the control of nagana, immense areas of virgin bush, are all factors that are likely to give a present-day list of the mammals and their distribution a historical value before many years have passed.

There has been only one previous attempt to list the Tanganyika mammals, and that was over fifty years ago. In 1895 Matschie published an account of the mammalian fauna as then known, with descriptions and notes on habits, which, though useful at the time, was necessarily sketchy in places owing to the inadequate exploration of the country at that time. Although it is true to say that there are still parts of Tanganyika unexplored zoologically, the progress made since 1895 is illustrated by a comparison of Matschie's total of some 166 forms with the 437 recorded in the present work. Although it does not seem likely that any striking discoveries remain to be made in the area under review, there is every reason to expect that closer investigation will add to the range of the known forms, will reveal further local races of established species, and will add to the Tanganyika list some forms found hitherto only over the border in the adjacent territories.

From the early travellers and naturalists, among whom Stuhlmann and Emin did pioneer work, down to the present day, there have been many who have added their quota of knowledge to the accumulating store of information on which local faunas, and eventually general natural histories, are based. Of living persons, none has contributed more to our knowledge than Arthur Loveridge whose many collecting expeditions during the past thirty-five years have filled in numerous gaps.

The general system of classification adopted here is that proposed by Simpson (1945) down to genera, while Allen (1939) has been followed in most cases for the species and subspecies. An exception is made in the case of Rodents where we have followed the recent work of Ellerman (1940, 1941, 1950). There has been no attempt to provide a systematic revision of any group, however desirable such a revision might be; such work would be outside the scope of this list. In a few particular instances we have not adhered to the authorities quoted in their usage of certain names, mainly because of a wish to avoid introducing confusion among readers who may be familiar with long-established scientific names. An instance is Simpson's use of the generic name Strepsiceros to include

not only the Kudus but (possibly as subgenera) Tragelaphus (Bushbucks) and Limnotragus (Sitatungas). In this case we have thought it less confusing to continue to use the well-established names Tragelaphus and Limnotragus as full genera.

In its arrangement the present work falls into three sections. The first and major part is the list of recorded names. Under the headings of Orders, Families and Genera the scientific name of each form is given, together with its author and a reference to the original publication in which it was described. All these original references have been checked during the preparation of this paper. Although the original references to nearly all the forms quoted may be found in Allen (1939), they are given here for the sake of completeness and to assist those who are unable to refer to Allen's work. While checking references, full use has been made of the MS notes added to many of the books in the libraries of the British Museum (Natural History) giving the results of Sherborn's, and others', researches into the dates of publication of these works or of the parts of which they are composed. The abbreviations used for scientific periodicals follow those given in the World List of Scientific Periodicals (ed. 2, 1934). Synonyms, which would add greatly to the bulk of the work without forming a corresponding addition to its usefulness, are not given here except in those few instances where we differ from Allen, Ellerman, or Simpson.

In deciding to which author any particular scientific name should be credited we have followed the dictates of custom rather than adhering strictly to the Rules of Zoological Nomenclature. For instance, we have followed most current authors in crediting certain names to Brisson (1762) and Oken (1816), and in considering the use of these names by these authors as valid. Hopwood (1947: 533) and Hershkovitz (1949: 289) have proposed respectively that generic names first used by Brisson in the second edition of his Regnum Animale (1762), and by Oken in his Lehrbuch der Naturgeschschte (1816) are non-Linnæan and therefore not available. It would appear best to refer the question of the validity or otherwise of names appearing in these two works to the International Commission of Zoological Nomenclature for their ruling.

Wherever possible, English and/or Kiswahili names are also given.

The type-locality of each form is given after its name and reference. In the case of Tanganyika localities the details of latitude and longitude are not given in the text since they are included in the gazetteer at the end. In the case of type-localities outside Tanganyika full details of latitude, longitude and altitude are given where possible.

Records of occurrence are listed by Districts, a comma separating localities within the same District, and a semicolon separating localities in different Districts. These records of occurrence are compiled from three main sources: (1) published records in the literature, (2) British Museum (Natural History) records of specimens in the collection, (3) personally collected data. It is hoped that the publication of these occurrence records, inadequate as they may be in many cases, may lead to the local gaps in our knowledge being filled by fresh investigation.

Species and subspecies which have been introduced under domestication are included in the list but are distinguished from the indigenous fauna by being shown enclosed in parentheses. Any taxonomic notes necessary are given as footnotes.

The second part of the work, the bibliography, consists of a list of all the papers and books dealing with Tanganyika mammals, either directly or indirectly, consulted during the preparation of this work, or of importance in relation to the systematics or distribution of some of the groups under discussion.

The concluding part of the work, the gazetteer, contains an alphabetical list of all the Tanganyika localities mentioned in the Checklist. The name of each locality is followed by the political District in which it occurs, altitude to the nearest hundred feet (usually), and the latitude and longitude. Where a locality is situated on a mountain the name of the mountain is also given. The quotation of latitude and longitude is considered of more importance than the name of the political District since the

boundaries and even the names of the latter are not infrequently changed, and in any case many localities are so obscure that exact fixing of their position is only possible by citing latitude and longitude.

We are indebted to various helpers who have given us records of occurrence, in particular Dr. C. H. N. Jackson and Messrs. C. J. P. Ionides and B. Cooper; and to Mrs. L. R. Swynnerton and Mrs. S. N. Hannam for assistance during the preparation of this paper. We also acknowledge our indebtedness to the staffs of the Mammal Room and the General and Zoological Libraries of the British Museum (Natural History), and the Radcliffe Science Library at Oxford, for guidance while unravelling several taxonomic problems and assistance in tracing many obscure references in old books and periodicals.

## 3. SYSTEMATIC LIST OF SPECIES AND SUBSPECIES, WITH NOTES ON DISTRIBUTION

#### Order INSECTIVORA Bowdich.

### Family CHRYSOCHLORIDAE Mivart. Golden "Moles." Kiswahili: fuko.

Genus Chlorotalpa Roberts.

1924. Chlorotalpa Roberts, Ann. Transv. Mus. 10: 64, 31 Jan. Genotype, by original designation, Chrysochloris duthieae Broom.

CHLOROTALPA STUHLMANNI (Matschie). Ruwenzori Golden Mole.

1894. Chrysochloris stuhlmanni Matschie, S.B. Ges. naturf. Fr. Berl. 1894: 123. Karevia, 4,000 feet, Butagu River, in Ukonjo, west slopes of Mt. Ruwenzori, Belgian Congo [0° 20' N., 29° 46' E.] [fide Moreau, Hopkins and Hayman, 1946: 393].

Records.—Uzungwa Mts. at Ihanganya, Kigogo, Ludilo; Livingstone Mts. at Madehani; Rungwe Mt. in the Nkuka Forest; Poroto Mts.

Chlorotalpa tropicalis G. M. Allen and Loveridge. Uluguru Golden Mole. 1927. Chlorotalpa tropicalis G. M. Allen and Loveridge, Proc. Boston Soc. nat. Hist. 38: 418, Dec. Bagiro, ca 6,000 feet, north slopes of Uluguru Mts., Morogoro

Record.—Known only from the type-locality.

District, Tanganyika Territory.

### Family ERINACEIDAE Bonaparte. Hedgehogs. Kiswahili: kalunguyeye.

Genus Atelerix Pomel. African Hedgehogs.

1848. Atelerix Pomel, Arch. Sci. phys. nat. 9: 251, Nov. As a subgenus of Erinaceus Linnaeus; genotype, by subsequent designation (Thomas, 1918, Ann. Mag. nat. Hist. 1: 195, Feb.), Erinaceus albiventris Wagner.

#### ATELERIX PRUNERI HINDEI (Thomas). Ukamba Hedgehogs.

1910. Erinaceus hindei Thomas, Ann. Mag. nat. Hist. 5: 193, Feb. Kitui, 3,500 feet, in Ukamba, Kitui District, Kenya Colony [1° 22' S., 38° 1' E].

Records.—Southern Masailand, south of Naabi Hill; Mpwapwa; Mbulu; Irangi, Isabi, Kondoa, Kwa Mtoro; Dodoma; Ikungi, Puma, Singida, Ushora; Ukara Island; Shinyanga; Tabora.

ATELERIX PRUNERI KILIMANUS Thomas. Kilimanjaro Hedgehogs.

1918. Atelerix kilimanus Thomas, Ann. Mag. nat. Hist. 1: 232, March. Rombo, 5,300 feet, south-east slopes of Kilimanjaro, Moshi District, northern Tanganyika Territory.

Record.—Known only from the type-locality.

#### Order PERISSODACTYLA Owen.

Suborder HIPPOMORPHA Wood.

Family EQUIDAE Gray.

Genus Equus Linnaeus.

1758. Equus Linnaeus, Syst. Nat., ed. 10, 1: 73. Genotype, by tautonomy, Equus caballus Linnaeus.

Subgenus Equus Linnaeus. Horses.

Kiswahili: farasi.

(Equus caballus Linnaeus. Domesticated Horse.

1758. Equus Caballus Linnaeus, Syst. Nat., ed. 10, 1: 73. Europe and Asia. Status.—Introduced under domestication.)

Subgenus Asinus Gray. Asses.

1824. Asinus Gray, Zool. J. 1: 244, June. Genotype, by tautonomy, Equus asinus Linnaeus.

Kiswahili: punda.

(Equus asinus Asinus Linnaeus. Domesticated Ass.

1758. Equus Asinus Linnaeus, Syst. Nat., ed. 10, 1: 73. Asia.

Status.--Introduced under domestication.)

Subgenus HIPPOTIGRIS H. Smith. Zebras.

1841. Hippotigris H. Smith, Jardine's Naturalist's Libr., Mamm. 12: xv (nomen mudum), 321, pl. 21-25, June. Genotype, by subsequent designation (W. L. Sclater, 1900, Fauna S. Afr., Mamm. 1: 282), Equus zebra Linnaeus.

Kiswahili: punda milia.

Equus Burchellii\* Bohmi Matschie. East African Burchell's Zebra.

1892. Equus böhmi Matschie, S. B. Ges. naturf. Fr. Berl. 1892: 131. Ruvu (or Pangani) River, north-eastern Tanganyika Territory.

Records.—Ubiquitous in suitable localities.

#### Suborder CERATOMORPHA Wood.

Family RHINOCEROTIDAE Owen.

Genus Diceros Gray. African Black Rhinoceroses.

1821. Diceros Gray, Lond. med. Repos. 15: 306, 1 April. Genotype, by monotypy and original designation, Rhinoceros bicornis Linnaeus.

Kiswahili: faru.

DICEROS BICORNIS BICORNIS (Linnaeus). Cape Black Rhino.

1758. Rhinoceros bicornis Linnaeus, Syst. Nat., ed. 10, 1: 56. Cape of Good Hope, Cape Province, South Africa [fide Thomas, 1911, Proc. zool. Soc. Lond. 1911: 144, 22 March].

Records.—Generally distributed in suitable localities in northern Tanga, Pare, Rufiji, Morogoro, Kilosa, Ulanga, Moshi (Kilimanjaro up to about 9,000 feet), Arusha, Masai, Mbulu, Kondoa, Mpwapwa, Dodoma, Manyoni, Singida, Iringa, north-eastern Mbeya, northern Chunya, Musoma, Maswa, Biharamulo, Bukoba, Shinyanga, Kahama, Tabora and Kigoma Districts. Umba Steppe; a few between the Matandu and Mbemkuru Rivers; Lihangwa River, between Nangu and Ngarambi; a few near Kandalu and Shimililo, quite a few along the Njenje River and the lower Mbarangandu, Luwegu and Kilombero Rivers; one shot at Ruo.

<sup>\*</sup> Equus burchellii (Gray, 1824, Zool. J. 1: 247, pl. 9, f. 1, 2, June) and its subspecies are probably best regarded as subspecies of Equus quagga Boddaert (1785, Elenchus Anim., p. 160).

#### Order ARTIODACTYLA Owen.

#### Suborder SUIFORMES Jaeckel.

#### Family SUIDAE Gray.

#### Genus Potamochoerus Gray. Bush-pigs.

- 1843. Choiropotamus Gray, List Spec. Mamm. Coll. Brit. Mus., pp. xxvii (spelt Koiropotamus, nomen nudum), 185, 13 May. Genotype, by original designation, Choiropotamus africanus Gray=Sus koiropotamus Desmoulins. Not Chaeropotamus Desmarest, 1822, in Mammalia (Suidae).
- 1854. Potamochoerus Gray, Proc. zool. Soc. Lond. 1852: 129, 130, pl. 34, 27 June. Genotype Choiropotamus pictus Gray. New name for Choiropotamus Gray, preoccupied.

#### Kiswahili: nguruwe.

Potamochoerus porcus daemonis Major. Kilimanjaro White-faced Bush-pig. 1897. Potamochoerus choeropotamus daemonis Major, Proc. zool. Soc. Lond. 1897: 367, pl. 25, f. 1; pl. 26, f. 3, 1 Aug. Kilimanjaro, northern Tanganyika Territory. Records.—Rain forest on Kilimanjaro and Mt. Meru.

Potamochoerus koiropotamus of P. K. Johnstoni Major. North Nyasa Savannah Bush-pig.

1897. Potamochoerus johnstoni Major, Proc. zool. Soc. Lond. 1897: 367, pl. 25, f. 3; pl. 26, f. 1, 1 Aug. Ngaramu Valley, in Nkana, North Nyasa District, northern Nyasaland.

Records.—Ubiquitous in suitable localities; present on Mafia and Zanzibar Islands, absent from Pemba Island.

#### Genus Sus Linnaeus. Common Pigs, Wild Boars.

1758. Sus Linnaeus, Syst. Nat., ed. 10, 1: 49. Genotype Sus scrofa L'nnaeus.

Kiswahili: nguruwe.

#### (Sus scrofa Linnaeus. Domesticated Pig.

1758. Sus Scrofa Linnaeu, Syst. Nat., ed. 10, 1: 49. Southern Europe.

Status.—Introduced under domestication to several parts of Tanganika; present on Mafia and Pemba Islands.)

#### Genus Phacochoerus G. Cuvier. Wart Hogs.

1817. Phaco-choerus G. Cuvier, Règne Anim., ed. 1, 1: 236, footnote. Genotype, by monotypy, Sus aethiopicus Gmelin=Aper aethiopicus Pallas.

#### Kiswahili: ngiri.

Phacochoerus aethiopicus aeliani (Cretzschmar). Sudan Wart Hog. 1828. Phascochaeres Aeliani Cretzschmar, in Rüppell's Atlas Reise nördl. Afr., Säugeth., p. 61, pl. 25, 26. Kordofan, Anglo-Egyptian Sudan.

Distribution.—Ubiquitous in suitable localities.

#### Genus Hylochoerus Thomas. Giant Forest Hogs.

1904. Hylochoerus Thomas, Nature, Lond. 70: 577, 13 Oct.; 1905, Proc. zool. Soc Lond. 1904 (2): 193, 18 April. Genotype, by original designation, Hylochoerus meinertzhageni Thomas.