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**JOURNAL
OF THE EAST AFRICA NATURAL HISTORY SOCIETY
AND CORYNDON MUSEUM**

VOL. XXIV No. 3 (107)

June 1963

CONTENTS

The Distribution of Some Large Mammals in Kenya.

by

D. R. M. and J. Stewart

(Published 1/6/1963)

Price Shs. 10/-



EAST AFRICA NATURAL HISTORY SOCIETY AND CORYNDON MUSEUM

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Introduction

Detailed distribution maps of wild animals play a useful part in the study of the ecology and status of the species concerned, and form a basis for comparison in future years. They are also a valuable aid to the sound planning of conservation and exploitation measures affecting wild life. The distribution maps of large mammals presented in this paper have been prepared as part of the programme of the Fauna Research Unit of the Kenya Game Department. They refer only to the distribution of the species within Kenya, although it would be desirable when possible to extend the work beyond this biologically meaningless boundary. We have dealt only with the pachyderms and the larger carnivores and antelopes; we have omitted some of the smaller members of the last two groups because we have as yet been unable to obtain sufficiently detailed information about their distribution. A complete list of the larger Carnivora (i.e. excluding the Mustelidae and Viverridae), the Proboscidea, Perissodactyla and Artiodactyla occurring in Kenya appears at the end of this paper. Those species appearing in brackets have not been dealt with in this paper.

The distribution maps are accompanied by four others showing:- (1) physical features, place names, and conservation areas; (2) altitude; (3) rainfall; and (4) vegetation. These are drawn from maps in the Atlas of Kenya (1959), with the gratefully acknowledged permission of the Director of Surveys, Kenya. The nomenclature used throughout this paper follows "Southern African Mammals" by Ellerman, Morrison-Scott and Hayman, 1953 whenever the species concerned is dealt with in this work, and otherwise "A Checklist of African Mammals" by Allen, 1939.

The present distribution of each species was originally plotted on 1 : 2,000,000 maps of Kenya divided into ten-minute squares. Within each square the presence or absence of the species was recorded. These original maps are kept at Game Department Headquarters in Nairobi and are constantly brought up to date as new information becomes available or the range of the species alters. On each map reproduced here the present range (July, 1962) of the species concerned is shown by solid symbols, which imply that the species has actually been recorded in the area indicated. On all maps, therefore, the maximum range of a species is shown - in many cases during long periods of dry weather the range becomes limited by the availability of permanent water or of food supplies. The hollow symbols indicate areas from which the species is known to have disappeared during the last seventy-five years.

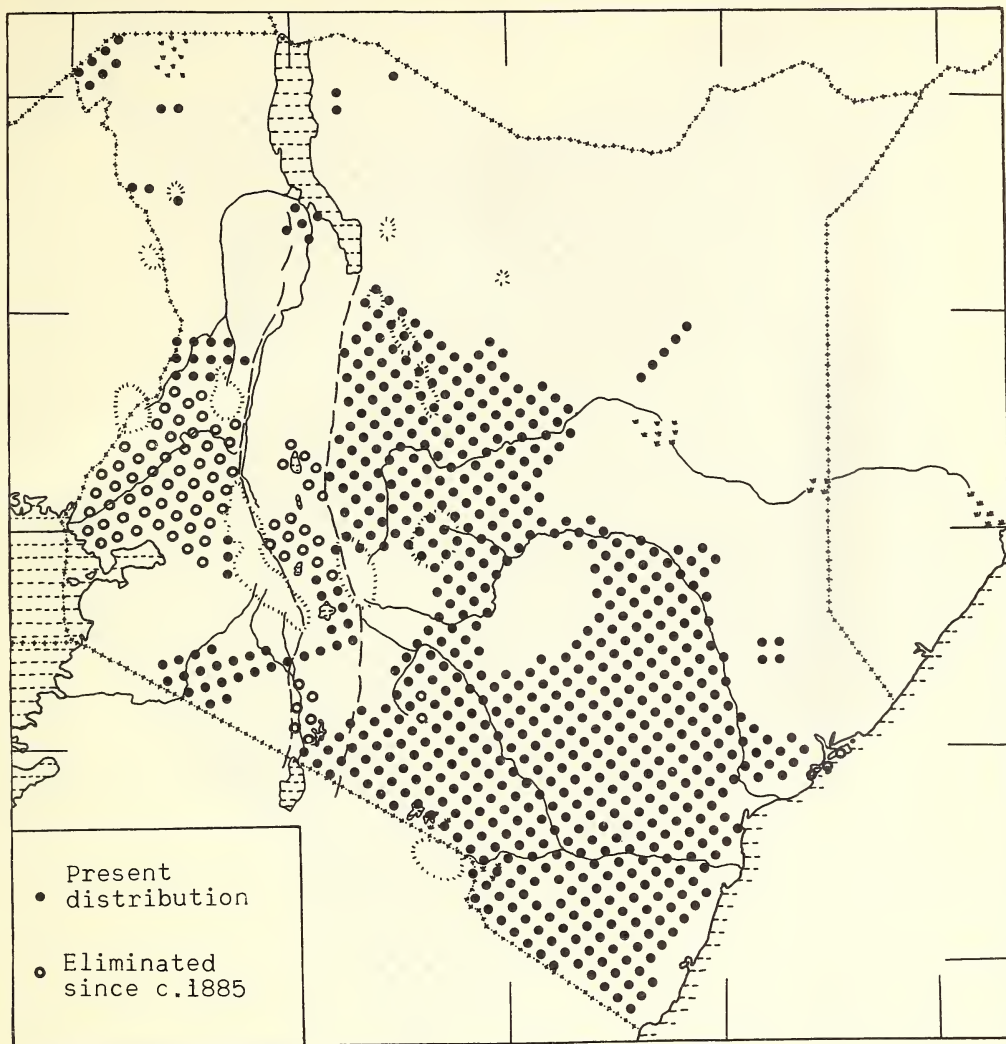
The notes below each map indicate the present habitat preferences in Kenya of the species concerned, with reference to the vegetation map, and its approximate altitudinal limits. They also suggest reasons for any marked changes which are known to have taken place in the species' range or numbers during the last seventy-five years.

Information on present day distribution has been gained by our personal observation and by questioning reliable observers from all parts of the country. These persons, too numerous to name individually, include game wardens, honorary game wardens, National Parks'

The Distribution of Some Large Mammals in Kenya

staff, white hunters, foresters, agricultural and veterinary officers, farmers and many others. Without their help the maps could not have been prepared, and we owe each of them a very great debt of gratitude for the time which they have spent on our behalf. We take, however, full responsibility for the information given and opinions expressed in this paper. The information on past distribution, which is necessarily less complete than that concerning the present day, has been obtained from the publications of travellers and naturalists, from the records of former members of the game department and persons resident in Kenya for many years and from the maps showing the distribution of East African fauna published by Roosevelt and Heller (1914). These are the only authors who have published maps showing the recorded occurrence and probable range of East African mammals. However, in the present paper we have only taken into account their actual records when mapping past distributions, as they point out in their preface that "owing to the vastness of the area covered and the lack of records for many of the species.. it has been necessary to map [the ranges] somewhat approximately."

NOTE: For reasons of space we have had to omit references to sources of information in the text of the paper, but a list of the principal literature consulted is given at the end.

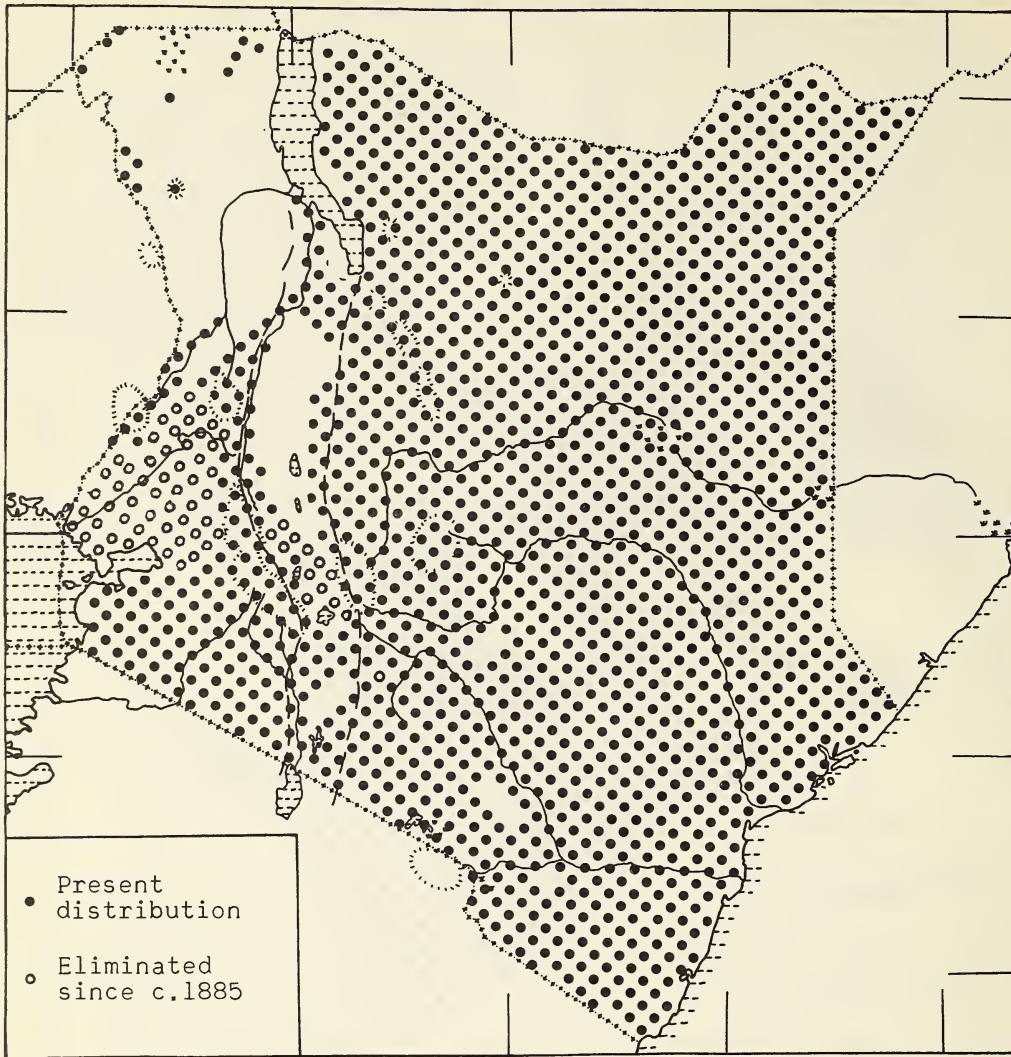


Hunting Dog (*Lycaon pictus* Temminck)

HABITAT: Found at all altitudes and occurring in all vegetation types. Its occurrence in any one area is extremely sporadic, since any one pack may range over a vast distance. The species has been observed above the snowline on Mt. Kenya, and on the summit of Mt. Kilimanjaro (19,340 feet).

PAST DISTRIBUTION: The hunting dog has been greatly reduced throughout much of Kenya especially in the west, partly by disease but principally because it was regarded as vermin by many sportsmen and therefore destroyed at every opportunity.

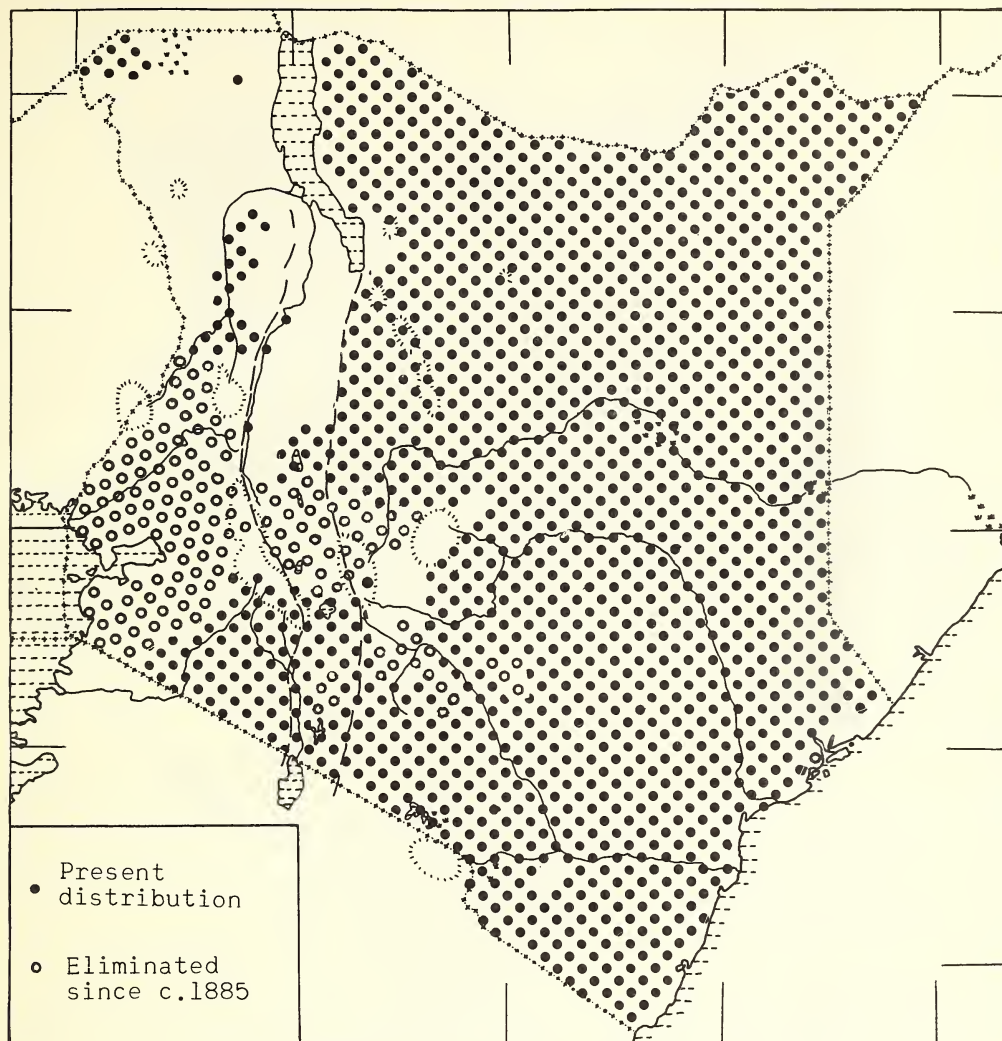
The Distribution of Some Large Mammals in Kenya.



Leopard (*Panthera pardus* Linnaeus)

HABITAT: Present in all vegetation types from sea level to 13,000 ft. principally in highland forest, tree-grassland and desert grass-bush near water. A carcass has also been found at 19,000 ft. on Mt. Kilimanjaro.

PAST DISTRIBUTION: Formerly present in all those suitable habitats in west Kenya from which it is now absent; it has disappeared largely as a result of increasing settlement. It has also been reduced in many other areas by poaching for its valuable skin. Its nocturnal and secretive habits, and ability to exist on a variety of small prey species, will however enable it to survive longer than many species.

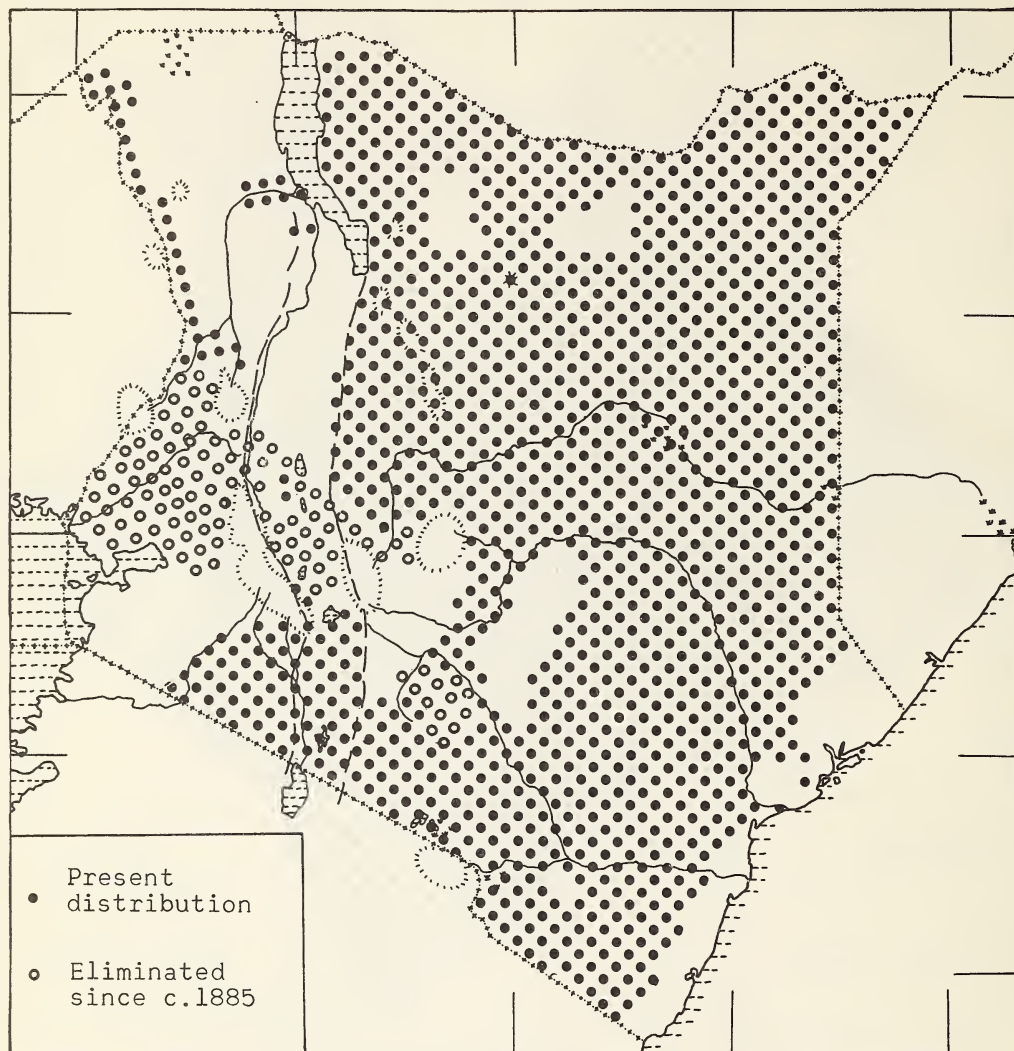


Lion (Panthera leo Linnaeus)

HABITAT: Occurs in all vegetation types from sea level to about 8,000 ft., although only seasonally in much of the desert scrub, and rarely at higher altitudes in highland forest and moorland. Moves considerable distances at certain times of the year following the migrations of prey species (including in some areas the movements of domestic stock).

PAST DISTRIBUTION: Formerly abundant in many areas from which it is now absent or where it is now uncommon, especially in the settled areas of west Kenya. In general its numbers have been considerably reduced throughout most of the country. This reduction has occurred as a result of the disappearance of suitable prey species from many areas, and because of control measures necessitated by agricultural interests. In the early part of this century over-hunting probably contributed significantly to the decrease in the numbers of lions.

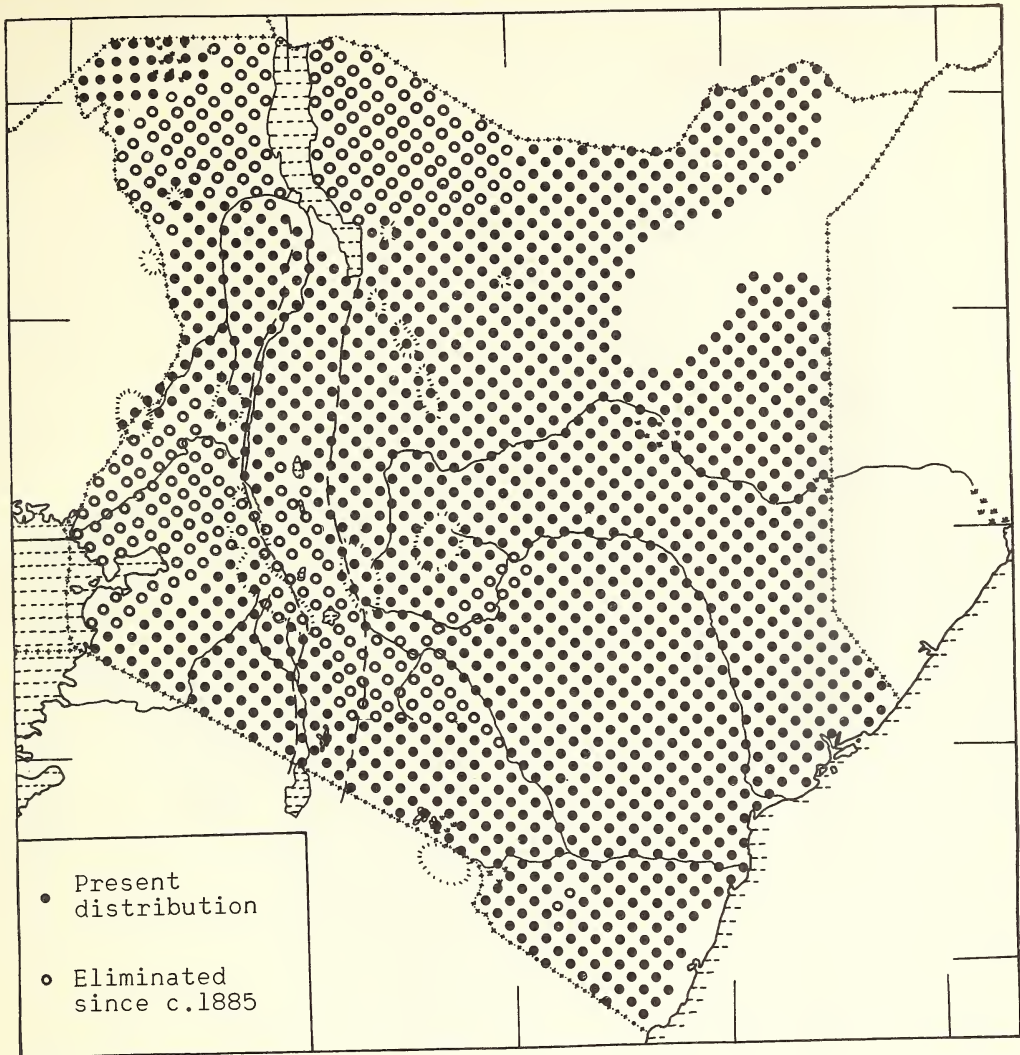
The Distribution of Some Large Mammals in Kenya.



Cheetah (Acinonyx jubatus Schreber)

HABITAT: From sea level to 6,000 ft., rarely above, preferring scattered tree-grassland and open grassland, and desert grass-bush.

PAST DISTRIBUTION: Formerly common in many of those parts of west Kenya from which it is now absent, and more numerous elsewhere than at present. Reduced by settlement and by poaching. Despite complete protection in recent years it has not increased, and is probably in more danger of elimination than most species.

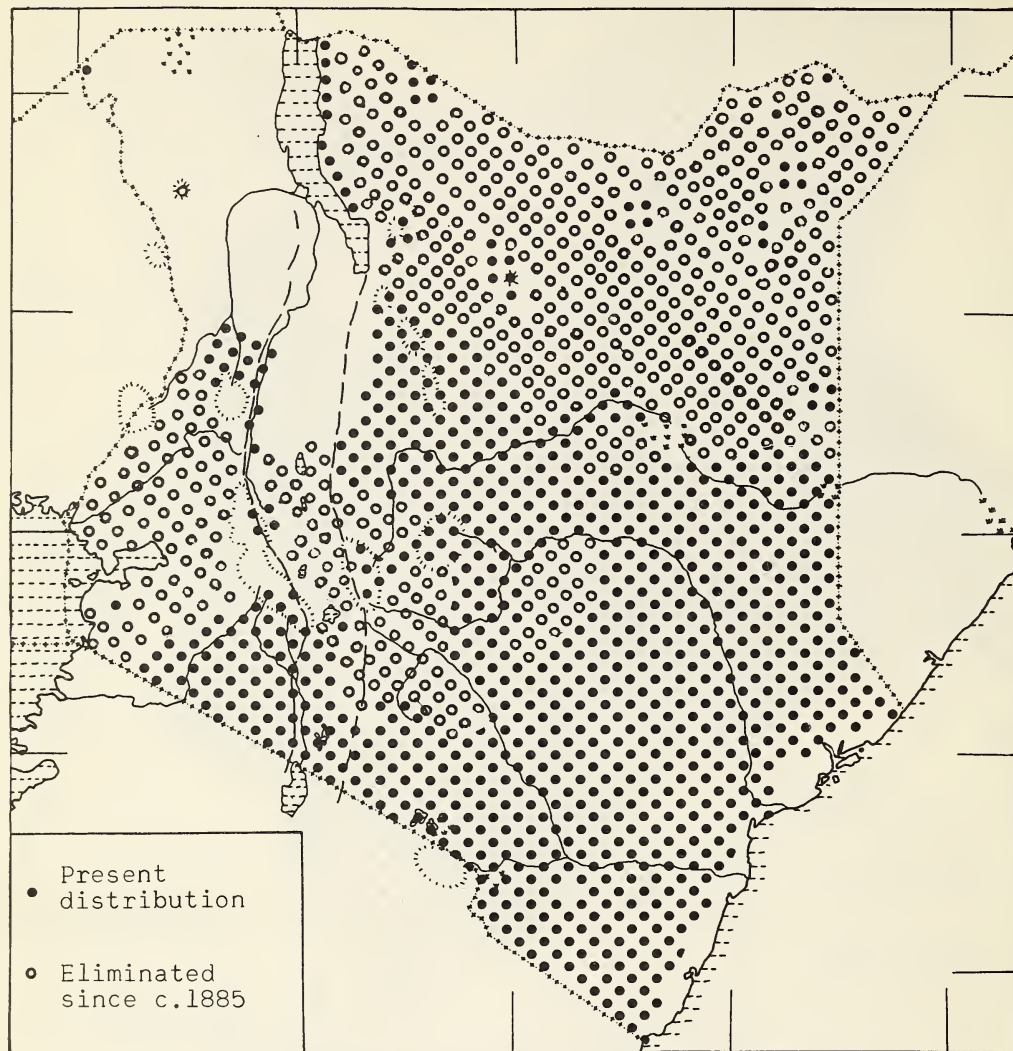


Elephant (*Loxodonta africana* Blumenbach).

HABITAT: All vegetation types from sea level to about 12,000 ft., especially highland and coastal forest, grouped tree-grassland and desert grass-bush. Restricted to a large extent to highland, riverine and coastal forest during the dry seasons, and moving long distances into other areas during the rains.

PAST DISTRIBUTION: During the past seventy-five years the elephant has finally disappeared from the country on either side of the northern two thirds of Lake Rudolf and has been eliminated from a number of other areas. Elsewhere, however, it is one of the few species to have increased in recent years, especially in the neighbourhood of Isiolo and Maralal, the Mara river, and the Athi and Galana rivers. Where it has decreased this has been due to large scale hunting for ivory, both legal and illegal, and to the spread of cultivation. Increases have in part been natural, but elsewhere have been due to an influx of animals from areas which they have been forced to leave by the spread of human activity.

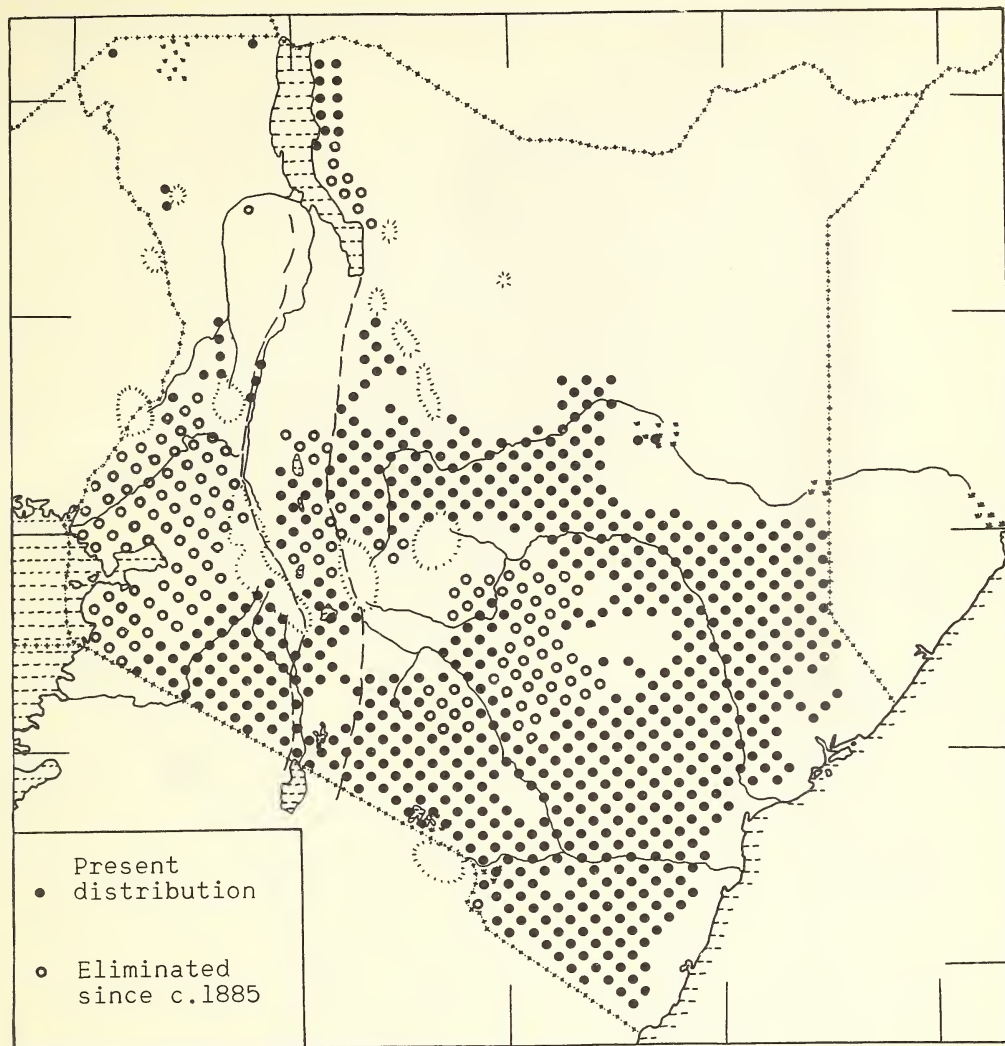
The Distribution of Some Large Mammals in Kenya.



Black Rhinoceros (Diceros bicornis Linnaeus)

HABITAT: From sea level to about 12,000 ft., in all vegetation types where sufficient cover exists.

PAST DISTRIBUTION: This species has been eliminated from much of west and south-west Kenya by the spread of settlement and cultivation; it has also been eliminated from or greatly reduced in north-east Kenya and much of the Rift Valley by poaching. In south and south-east Kenya poaching and severe drought have effected a great reduction in numbers. Any lessening of the present degree of control of poaching would be likely to result in the rapid elimination of the species from all but a few parts of its range in Kenya.

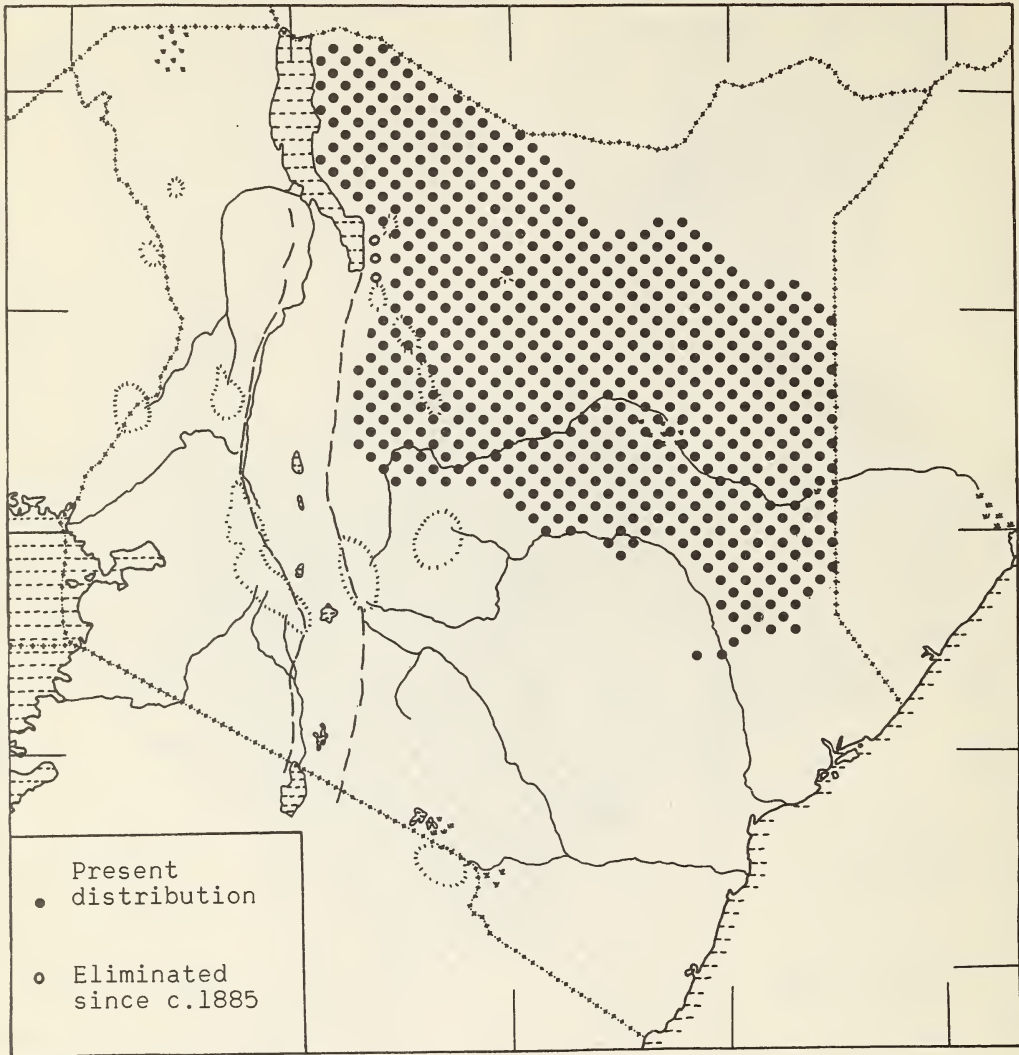


Common Zebra (Equus burchelli Gray)

HABITAT: Tree-grassland, open grassland and desert grass-bush, from sea level to about 8,000 feet, and occasionally up to 14,000 ft., on the moorlands of Mt. Kenya. Absent from most of the desert scrub of north Kenya, where it is replaced by Grevy's zebra (Equus grevyi Oustalet).

PAST DISTRIBUTION: Formerly common throughout the settled areas of west Kenya, from which it is now absent; numbers have also been reduced on the plains between Mt. Kenya and the Aberdare Mountains, to the south-east of Mt. Kenya and in the Rift Valley in the vicinity of Lakes Nakuru and Naivasha. Reduction in numbers has been effected principally by agricultural interests, and to a lesser extent by a wartime demand for meat, which resulted in large numbers being shot in certain areas.

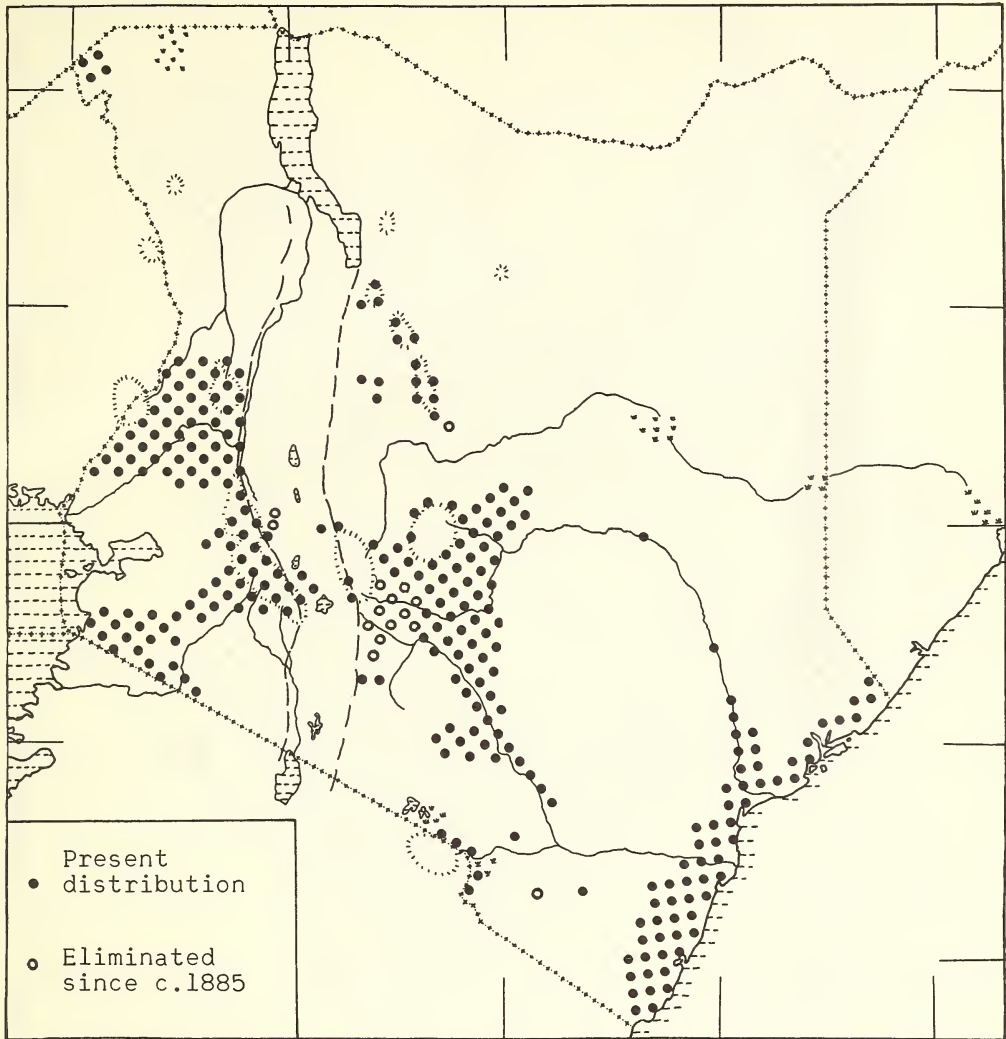
The Distribution of Some Large Mammals in Kenya.



Grevy's Zebra (Equus grevyi Oustalet)

HABITAT: Desert grass-bush and scrub from 500 to 4,500 ft. above sea level.

PAST DISTRIBUTION: As far as can be ascertained there has been no significant change in range or numbers of this species during the past seventy-five years. Stigand (1913) recorded Grevy's zebra on the Turkwell river north of Mt. Elgon, and one other observer is alleged to have seen six in the Marich Pass in 1951. However, since there is no confirmation from other sources of the occurrence of this species west of the Rift Valley, we have omitted these records from our map.

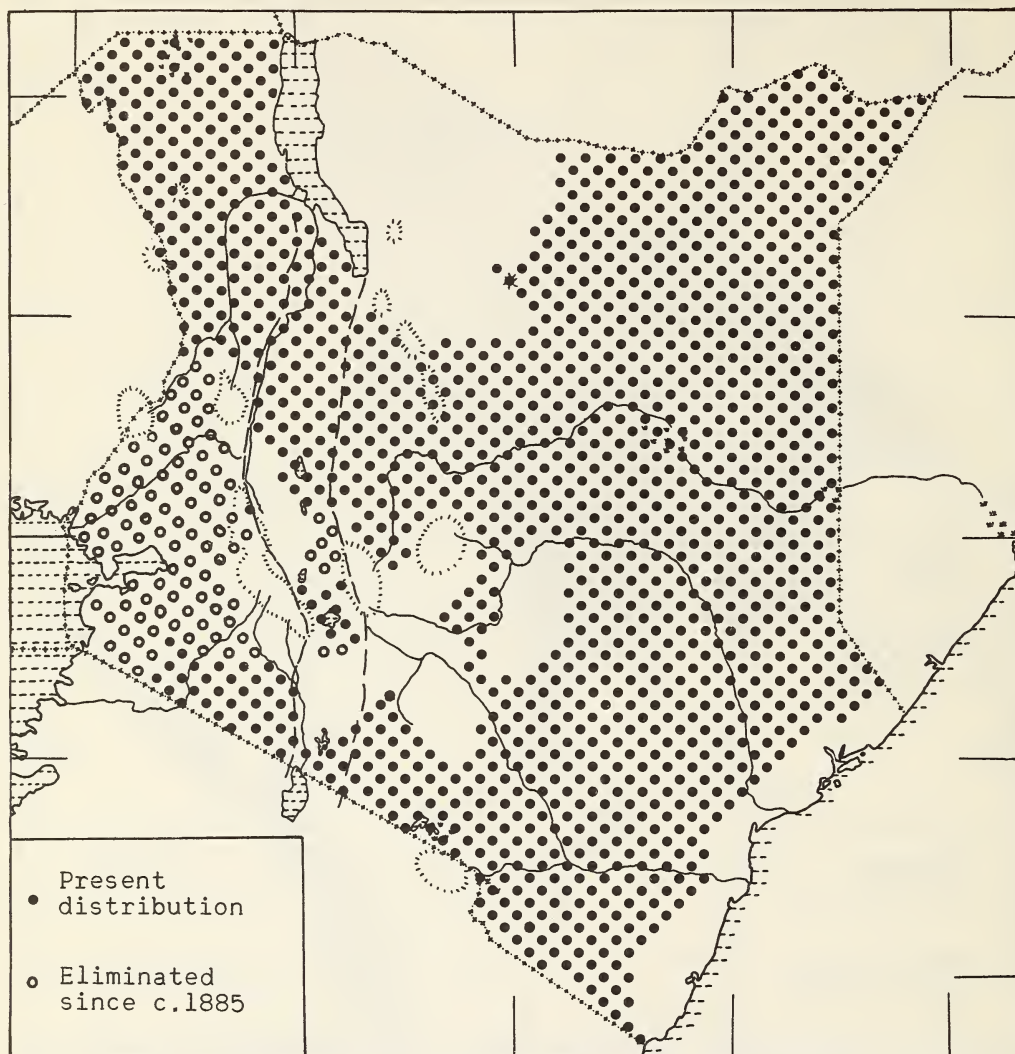


Bushpig (*Potamochoerus porcus* Linnaeus)

HABITAT: Highland forest, tree-grassland, riverine woodland and bush and coastal bush, from sea level to about 12,000 ft.

PAST DISTRIBUTION: There is no evidence to suggest any significant change in this species' range during the past seventy-five years. Numbers have probably declined significantly only in areas brought under cultivation.

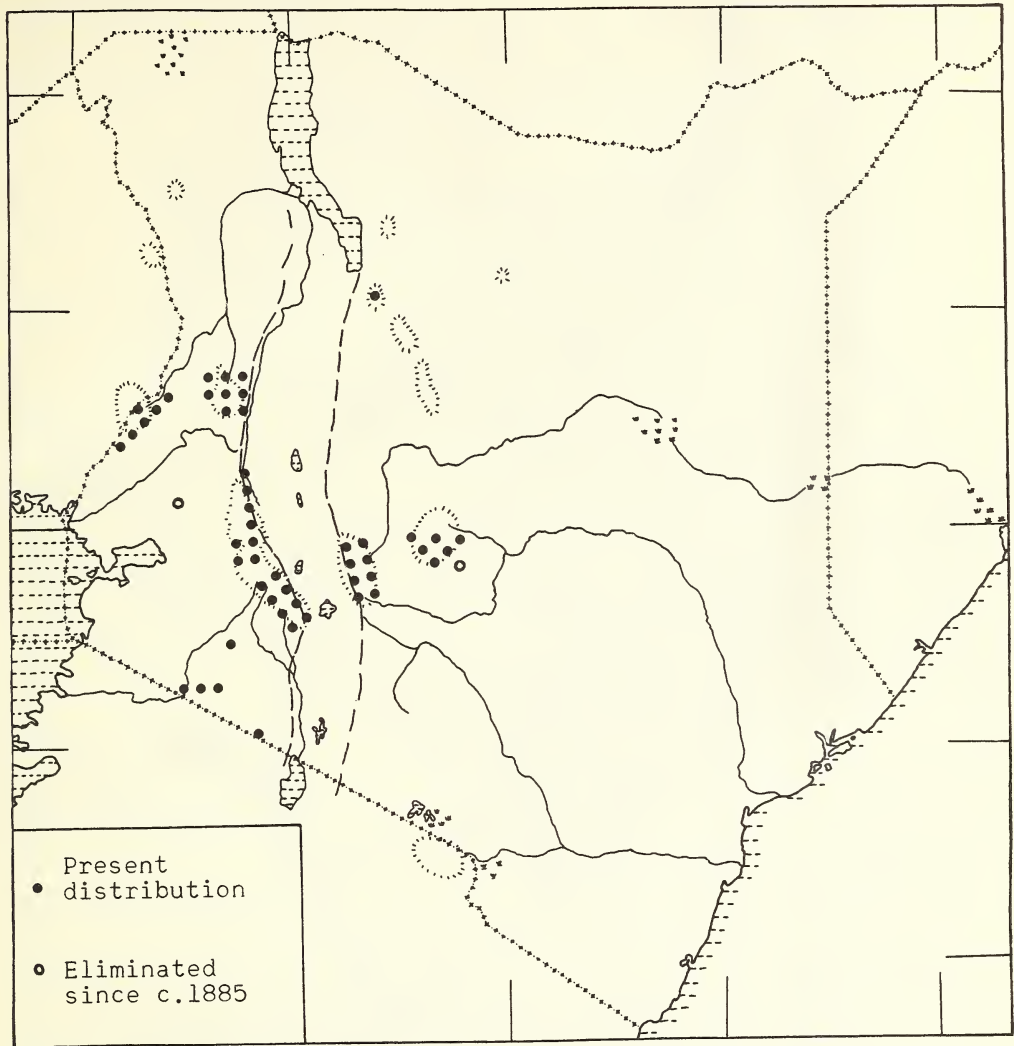
The Distribution of Some Large Mammals in Kenya.



Warthog (*Phacochoerus aethiopicus* Pallas)

HABITAT: Scattered tree-grassland and open grassland, desert grass-bush and scrub, from sea level to about 8,000 ft.

PAST DISTRIBUTION: Apart from the settled areas of west Kenya, where the species has been almost eliminated, there is no evidence to suggest any significant changes in range or numbers during the past seventy-five years.

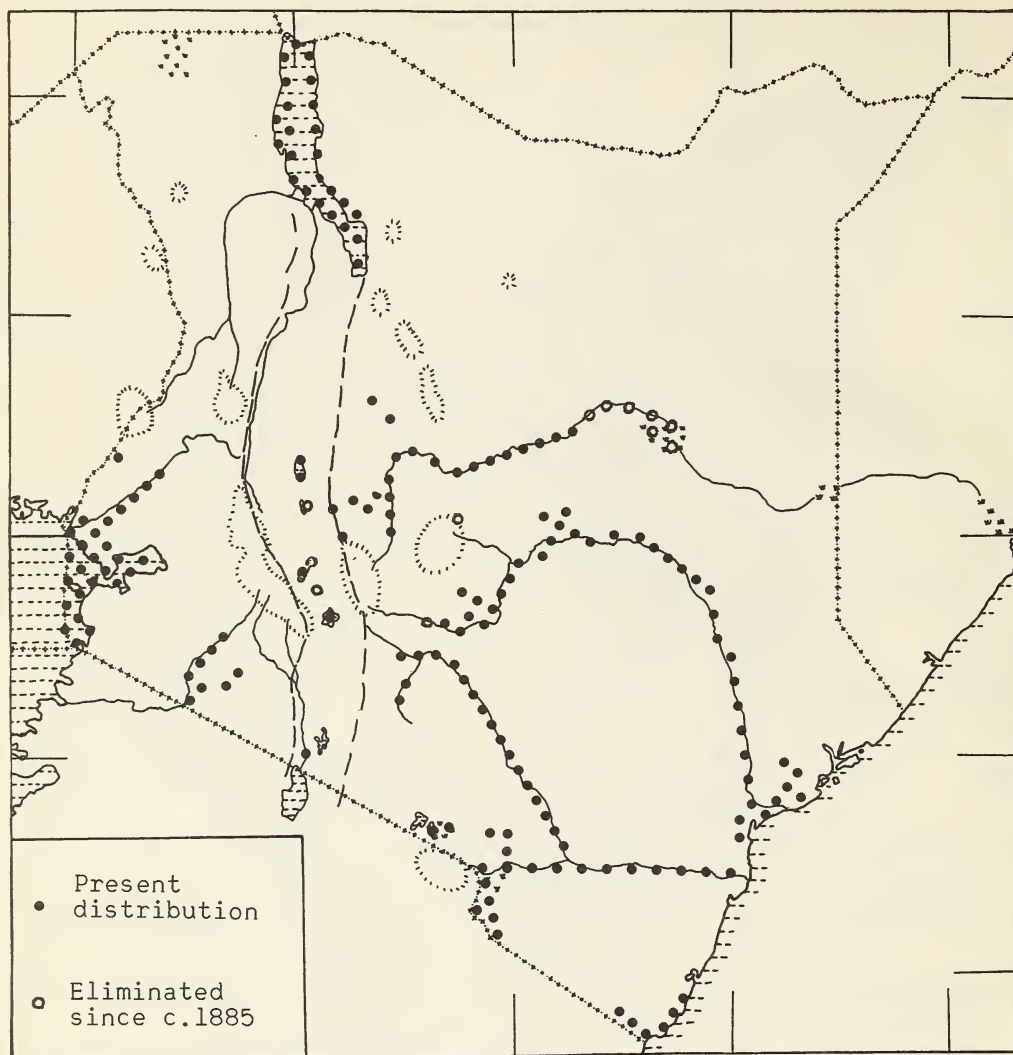


Giant Forest Hog (Hylochoerus meinertzhageni Thomas)

HABITAT: Highland forest and grouped tree-grassland from 5,000 to about 10,000 ft. above sea level.

PAST DISTRIBUTION: There is little evidence concerning the former range or numbers of this species.

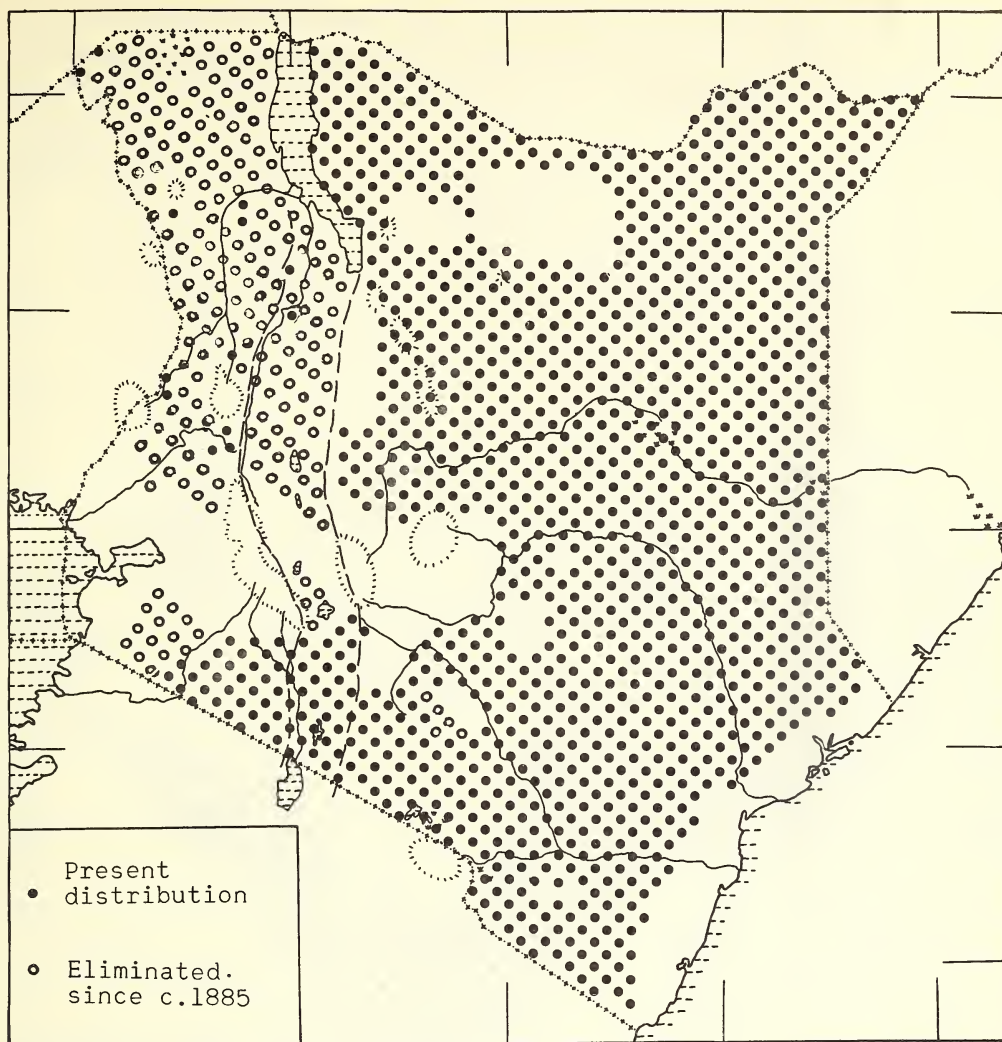
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Hippopotamus (Hippopotamus amphibius Linnaeus)

HABITAT: Most lakes, swamps and rivers having sufficient water. The range is extended further up rivers and into temporary pools during the rains.

PAST DISTRIBUTION: The species has disappeared from one or two swamps which have dried up, notably the Lorian Swamp from which it has been absent since 1951. In other parts of its range, especially Lakes Rudolf and Baringo and the Galana river, poaching has resulted in a considerable reduction in numbers.



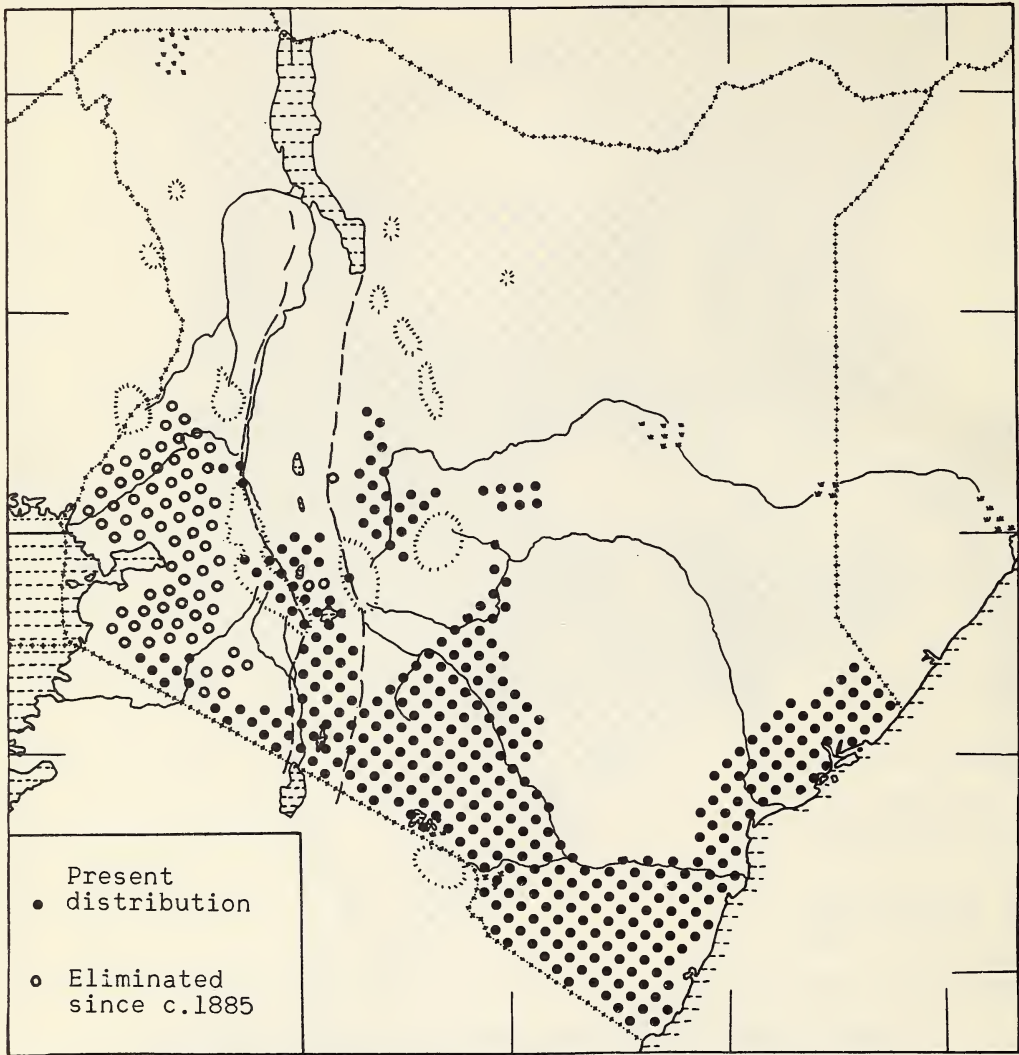
Common Giraffe (*Giraffa camelopardalis* Linnaeus)
 Rothschild's Giraffe (*G. c. rothschildi* Lydekker)
 Reticulated Giraffe (*G. reticulata* De Winton)

HABITAT: Tree-grassland, desert grass-bush and scrub, and coastal forest, up to about 8,000 ft. above sea level.

PAST DISTRIBUTION: Whilst *G. camelopardalis* and *G. reticulata* are increasing in parts of east and south Kenya, *G. c. rothschildi* has decreased greatly in the west. In 1909 Rothschild's giraffe was described as being "in large numbers" north of the Nzoia river, and in 1921 as "very plentiful" in north west Kenya and "plentiful" in Baringo district. The reduction in numbers since then has occurred largely as a result of poaching, and control by farmers.

NOTE: Whilst the giraffe north of the Tana river are typical of *G. reticulata*, and those south-west of the Athi river of *G. camelopardalis*, there are in the intervening area many places where a form apparently intermediate between the two species may be seen. It is therefore not possible to draw a dividing line between the two species, if in fact they are distinct species (Ellerman et al. regard *G. reticulata* as a form of *G. camelopardalis*).

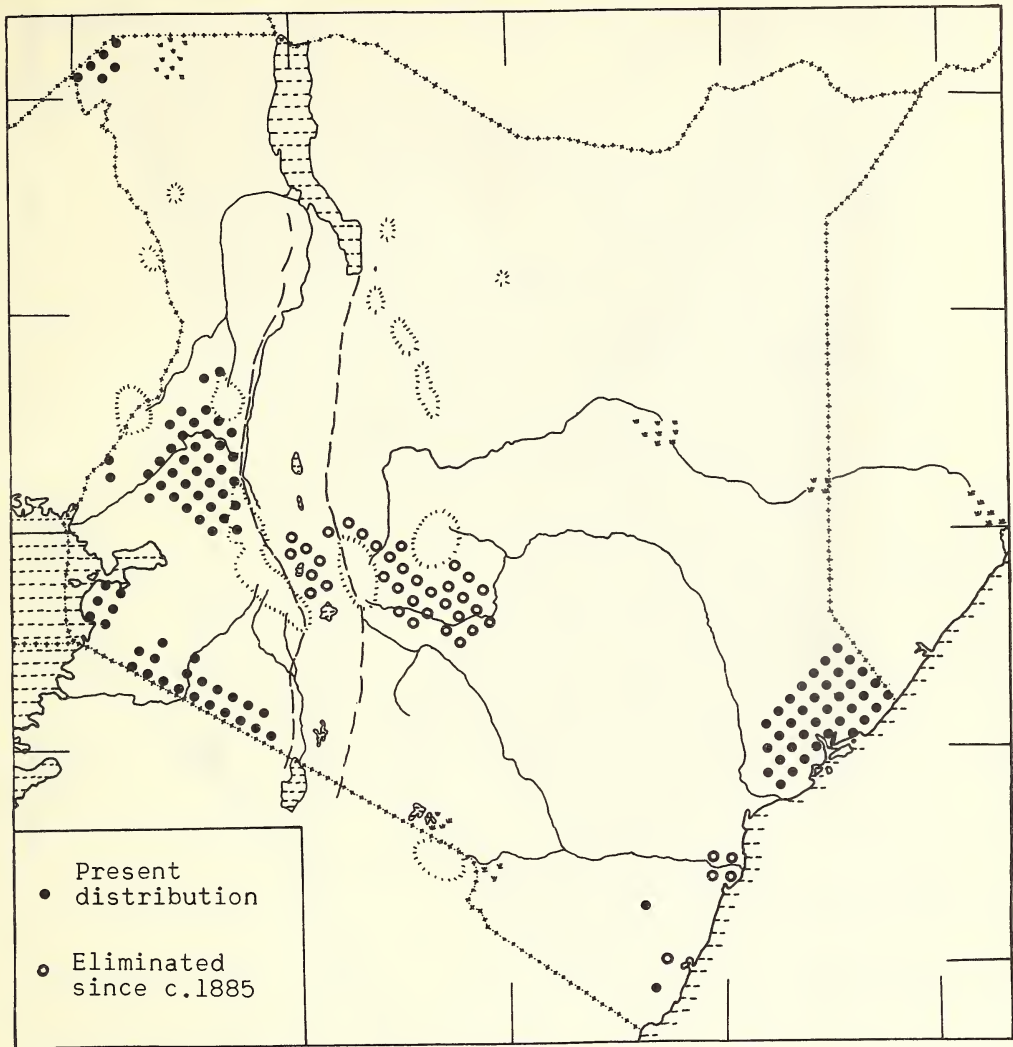
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Steinbok (Raphicerus campestris Thunberg)

HABITAT: Up to 8,000 ft. above sea level in tree-grassland, coastal bush and forest, and in desert grass-bush to a limited extent.

PAST DISTRIBUTION: This species was formerly common in parts of the settled areas of west Kenya where it is now absent or rare. Elsewhere there is no evidence of any significant change in range or numbers. The reduction has probably largely been due to increased settlement.



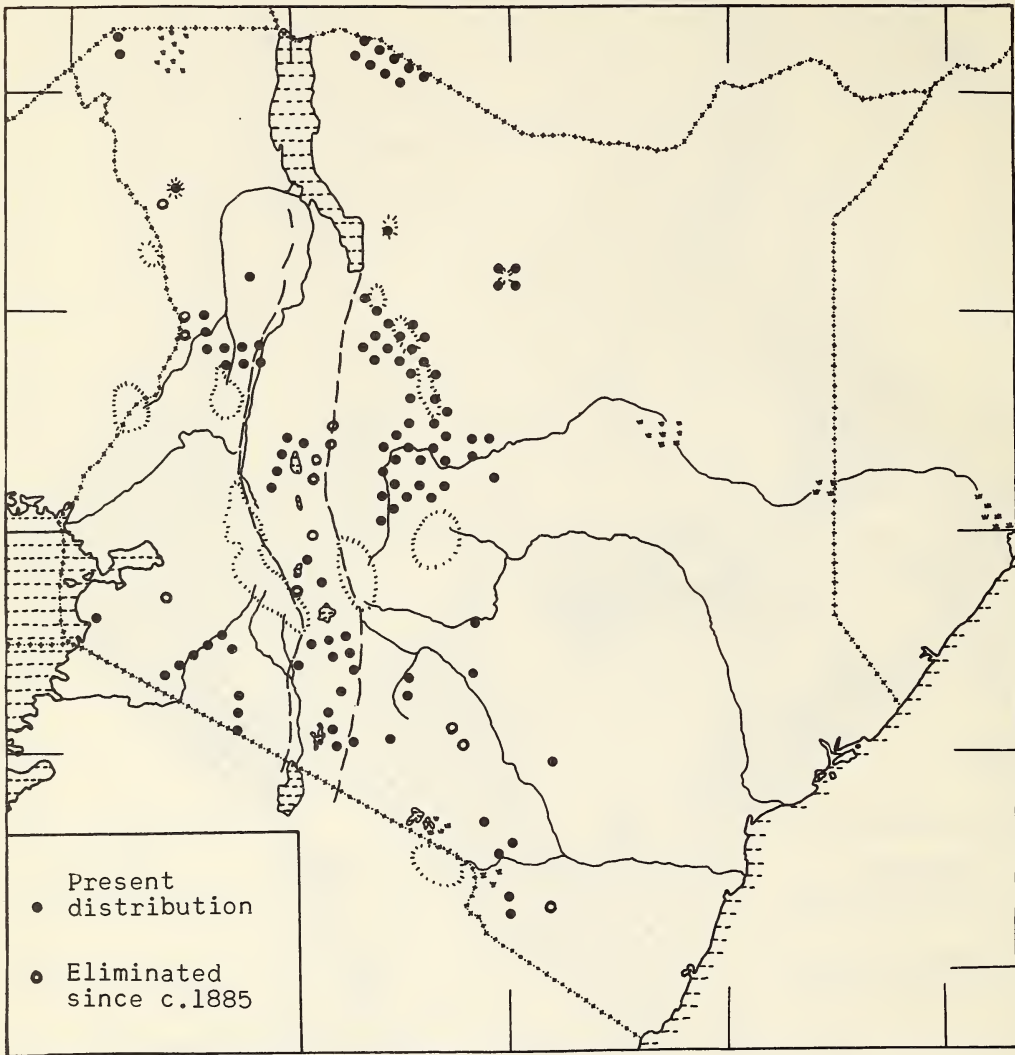
Oribe (Ourebia ourebi Zimmermann)

HABITAT: Coastal bush and forest, and tree-grassland up to 8,000 ft. above sea level.

PAST DISTRIBUTION: Whereas this species has probably increased in parts of west Kenya in recent years, where it is preserved on a number of farms, it has been eliminated from the plains between Mt. Kenya and the Aberdare Mountains and south-east of Mt. Kenya, where it was formerly numerous. The discontinuous distribution of the present day possibly indicates that this species was at one time much more widespread.

NOTE: Some authors (e.g. Allen, 1939) consider that there are several species of the oribi in Kenya; others (e.g. Guggisberg, 1949) regard them as local races only.

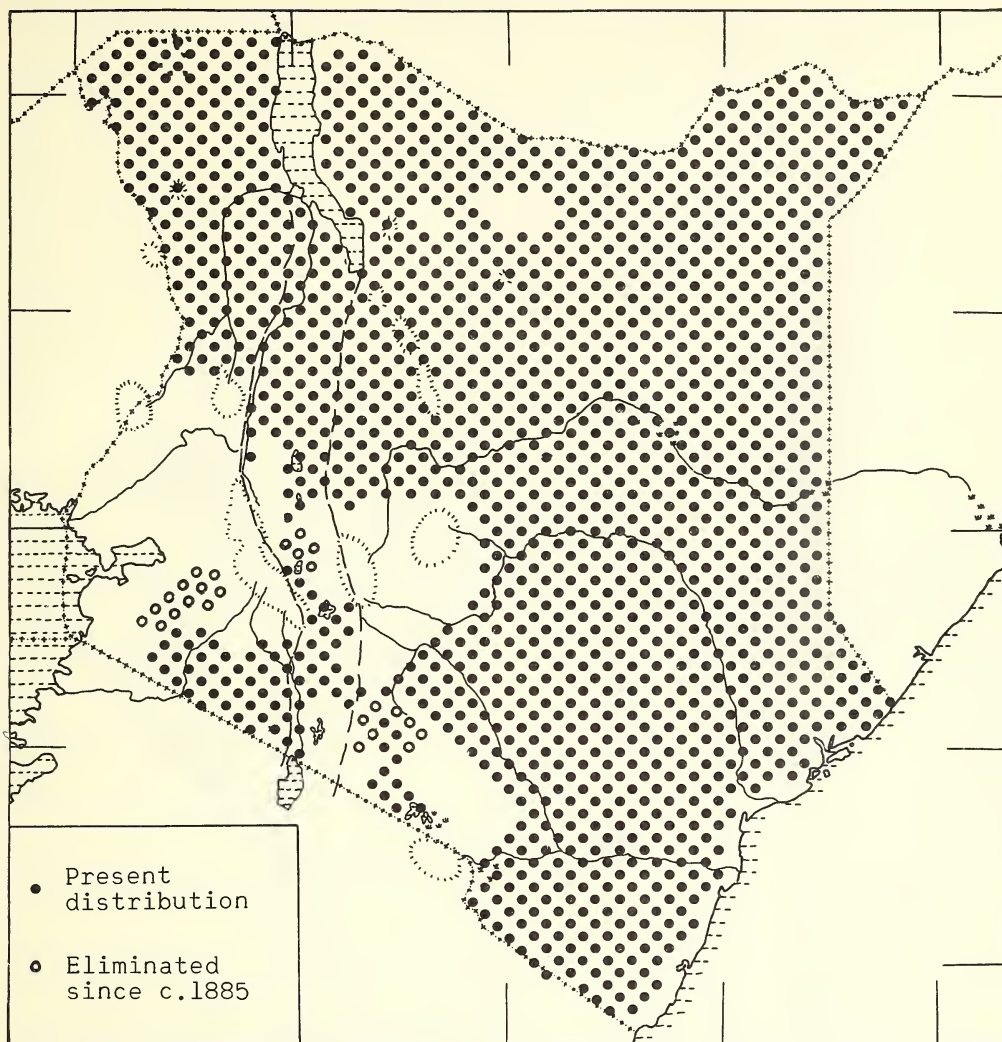
The Distribution of Some Large Mammals in Kenya.



Klipspringer (Oreotraquus oreotraqus Zimmermann)

HABITAT: Rocky hills, up to about 8,000 ft. above sea level.

PAST DISTRIBUTION: There is no evidence of any significant change in the numbers or range of this species during the past seventy-five years.

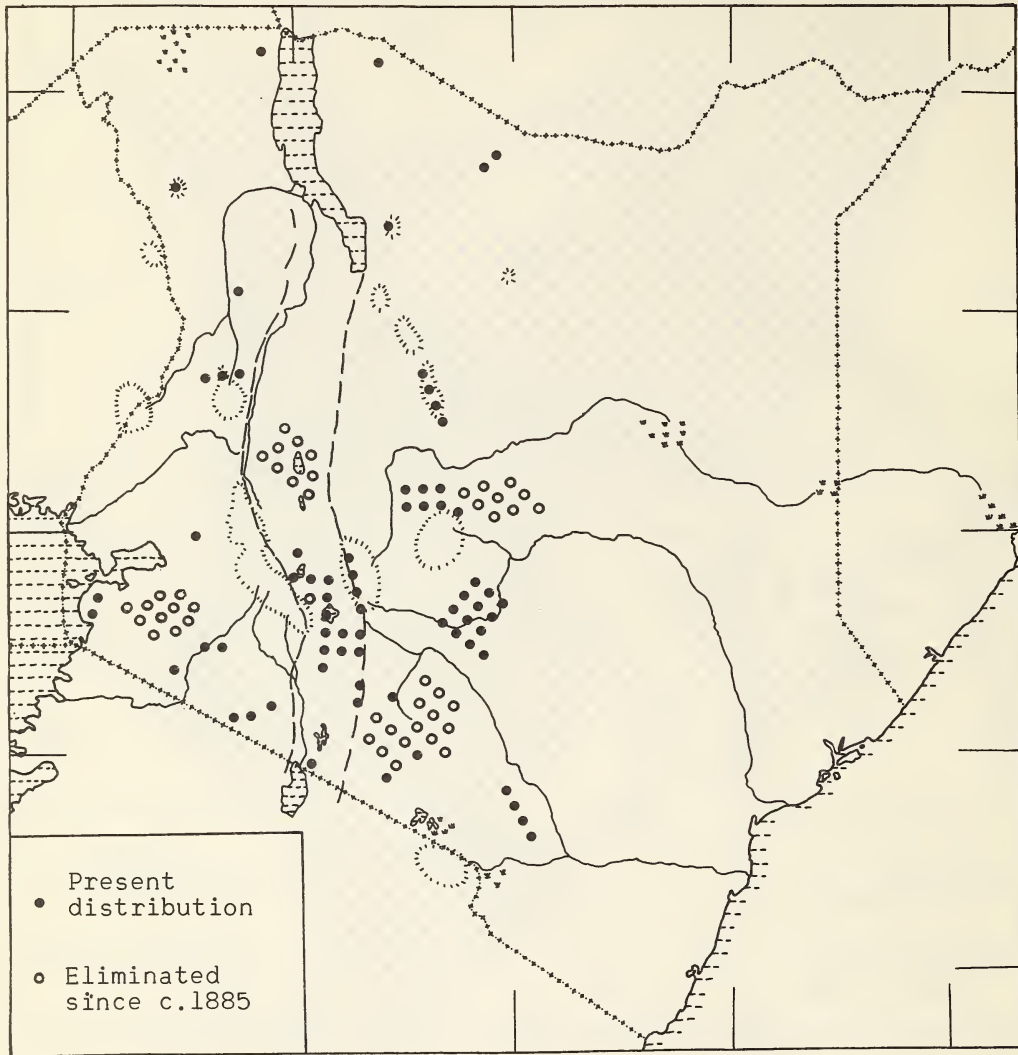


Dik-dik (Rhynchotragus kirkii Gunther)
 and
 (R. quentheri Thomas)

HABITAT: Desert grass-bush and scrub and coastal bush, below 4,000 ft., and to a lesser extent in tree-grassland up to 7,000 ft. above sea level. R. quentheri occurs north of Lake Baringo and the northern Usao Nyiro river, and R. kirkii elsewhere.

PAST DISTRIBUTION: The species has been reduced by increased human activities in certain areas south-east of Mt. Kenya and in the vicinity of Nairobi, but elsewhere there is little evidence of its range or numbers having altered significantly.

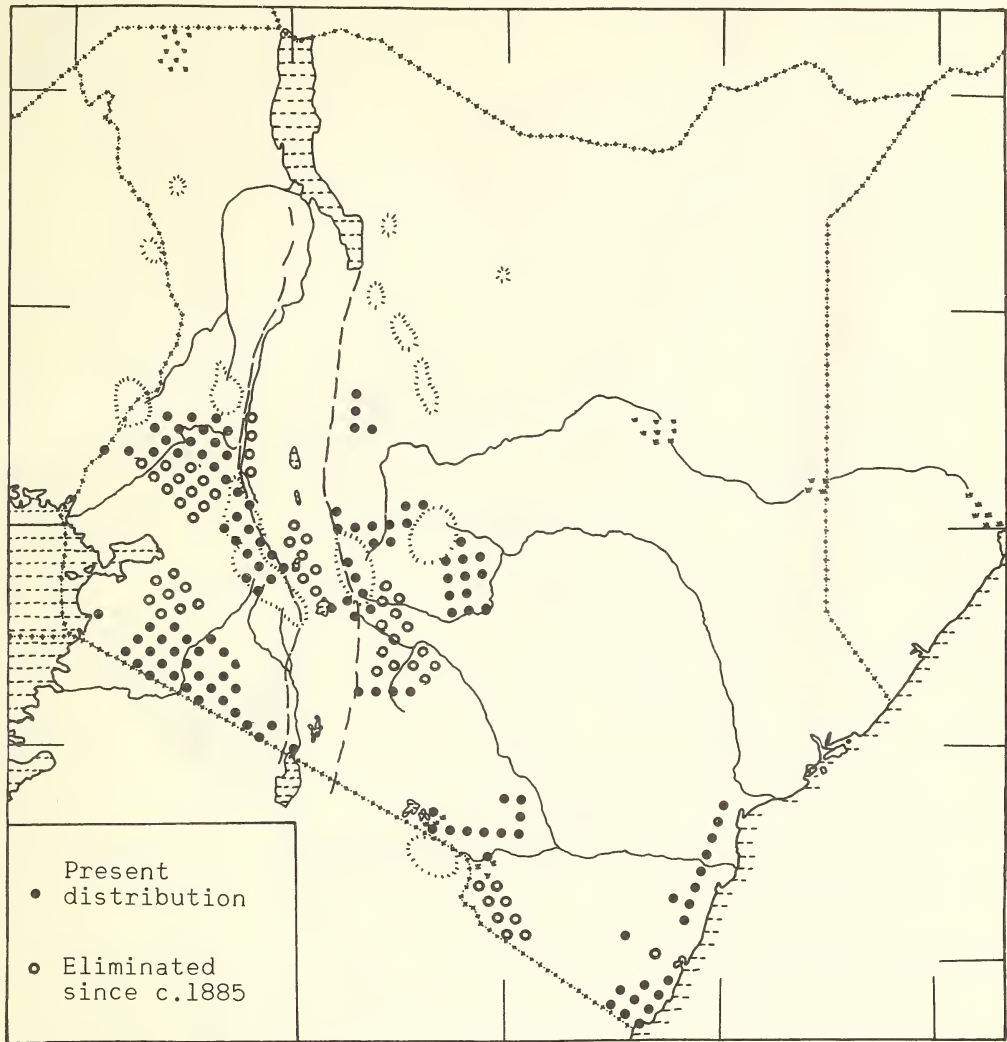
The Distribution of Some Large Mammals in Kenya.



Chanler's Mountain Reedbuck (*Redunca fulvorufula chanleri* Rothschild)

HABITAT: Open grassland on hills and mountains up to 12,000 ft. above sea level, and to a lesser extent tree-grassland.

PAST DISTRIBUTION: Elimination of this species from various areas has probably been due to a combination of farming activities and both legal and illegal hunting.

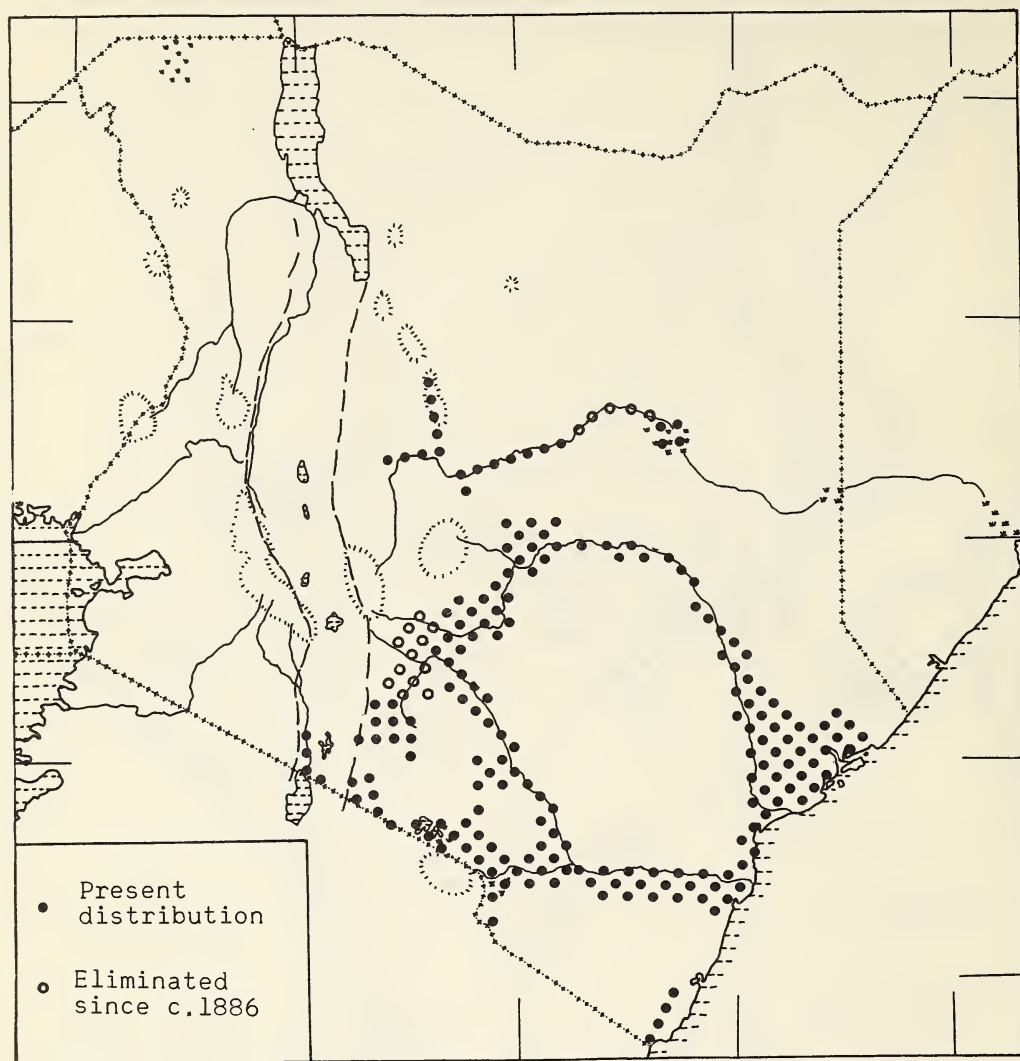


Bohor Reedbuck (*Redunca redunca* Pallas)

HABITAT: Highland grassland and tree-grassland between 4,000 and 7,000 ft. above sea level, and coastal bush.

PAST DISTRIBUTION: This species has been greatly reduced in certain areas, and eliminated from others, as a result of the spread of human activities.

The Distribution of Some Large Mammals in Kenya.

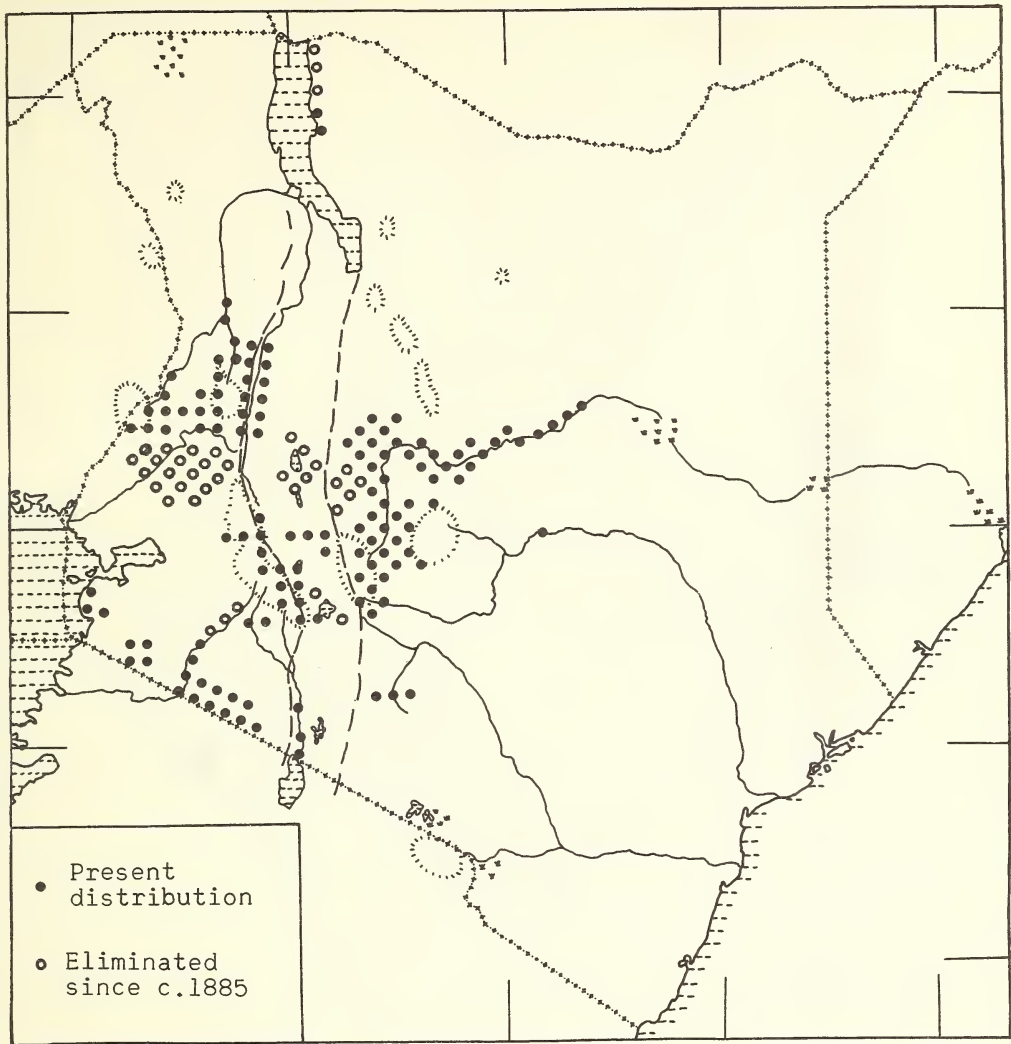


Common Waterbuck (Kobus ellipsiprymnus Ogilby)

HABITAT: Riverine woodland and bush, and well-watered tree-grassland, from sea level to 6,500 ft.

PAST DISTRIBUTION: There is little evidence to suggest any significant changes in range or numbers of this species during the past seventy-five years.

NOTE: The range of this species overlaps with that of K. defassa on the southern and northern Uaso Nyiro rivers and on a small part of the Athi river near Nairobi. In these areas it is sometimes difficult to refer an individual animal to one species or the other.

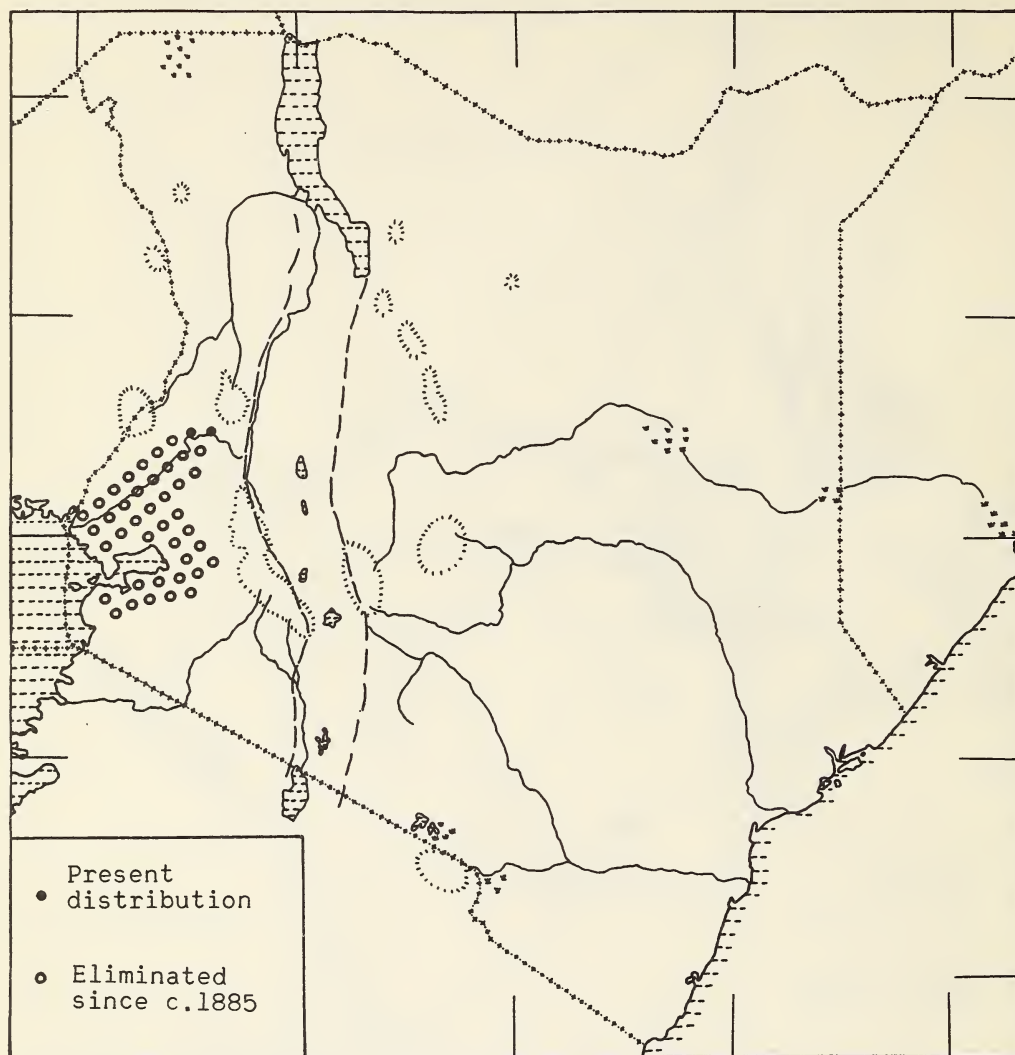


Defassa Waterbuck (Kobus defassa Ruppell)

HABITAT: Riverine woodland and bush, and well-watered tree-grassland, from 2,000 to 13,000 ft.

PAST DISTRIBUTION: This species has been eliminated from the vicinity of Lakes Baringo and Hannington, and from much of the Uasin Gishu Plateau west of the Rift Valley, but there is otherwise little evidence of any significant change in its range. Numbers, however, have decreased considerably in many areas as a result of control by farmers and poaching.

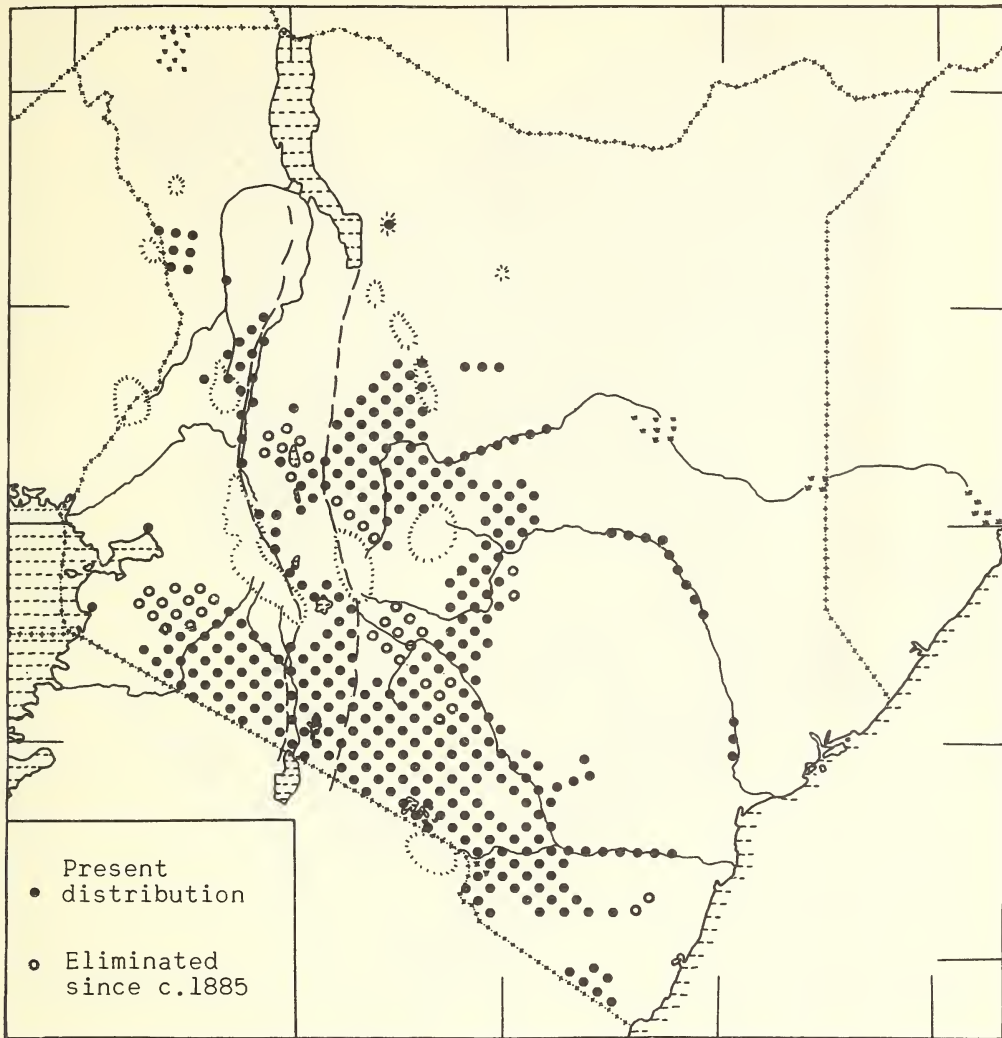
The distribution of Some Large Mammals in Kenya.



Uganda Kob (Adenota kob thomasi Sclater)

HABITAT: Grouped tree-grassland.

PAST DISTRIBUTION: The range of this species in Kenya has always been restricted, but it was formerly more widespread along the Nzoia river and in the vicinity of Lake Victoria. Its range has been greatly reduced as a result of increasing settlement.

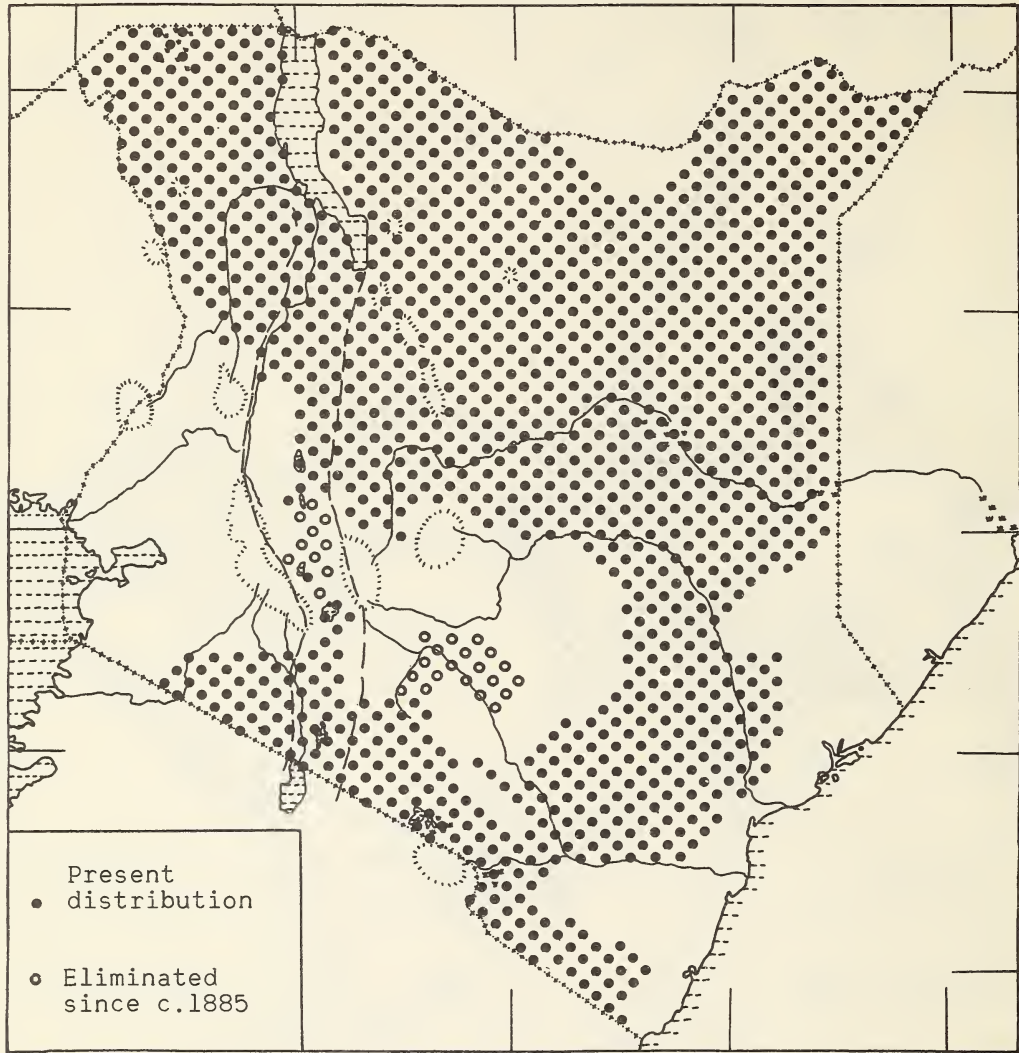


Impala (Aepyceros melampus Lichtenstein)

HABITAT: Riverine woodland and bush and well-watered tree-grassland and desert grass-bush, up to 6,500 ft. above sea level.

PAST DISTRIBUTION: Apart from areas to the east of Lake Victoria from which the impala has disappeared, the range of this species has probably not altered significantly during the past seventy-five years. Numbers have however been greatly reduced, especially by poachers, in many areas, although in others they may have increased as a result of bush encroachment, which in some circumstances tends to create a habitat favourable to this species.

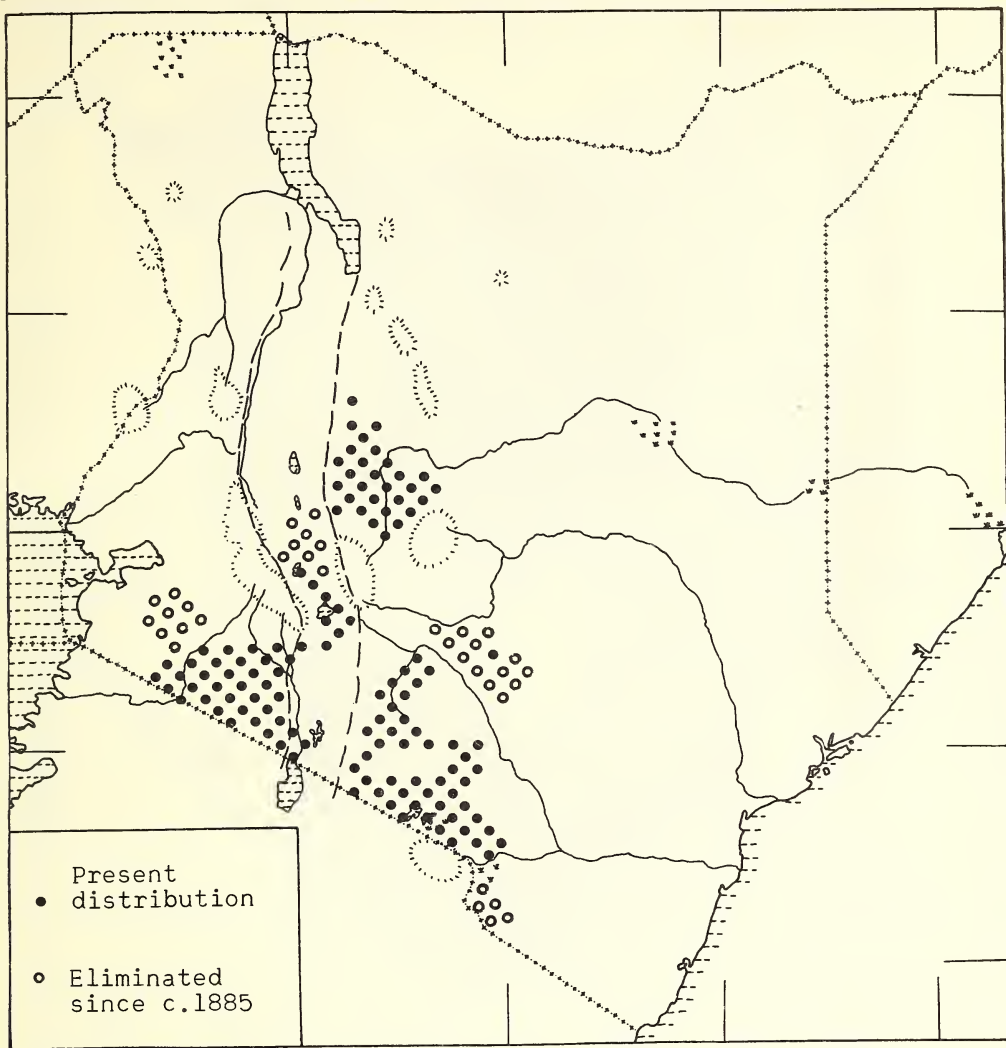
The Distribution of Some Large Mammals in Kenya.



Grant's Gazelle (Gazella granti Brooke)

HABITAT: Desert grass-bush and scrub, scattered tree-grassland and open plains up to 6,500 ft. above sea level.

PAST DISTRIBUTION: There is little evidence to suggest any significant change in this species' range during the past seventy-five years, except that it formerly occurred further to the north-east of Nairobi than at present and was more abundant in the Rift Valley.

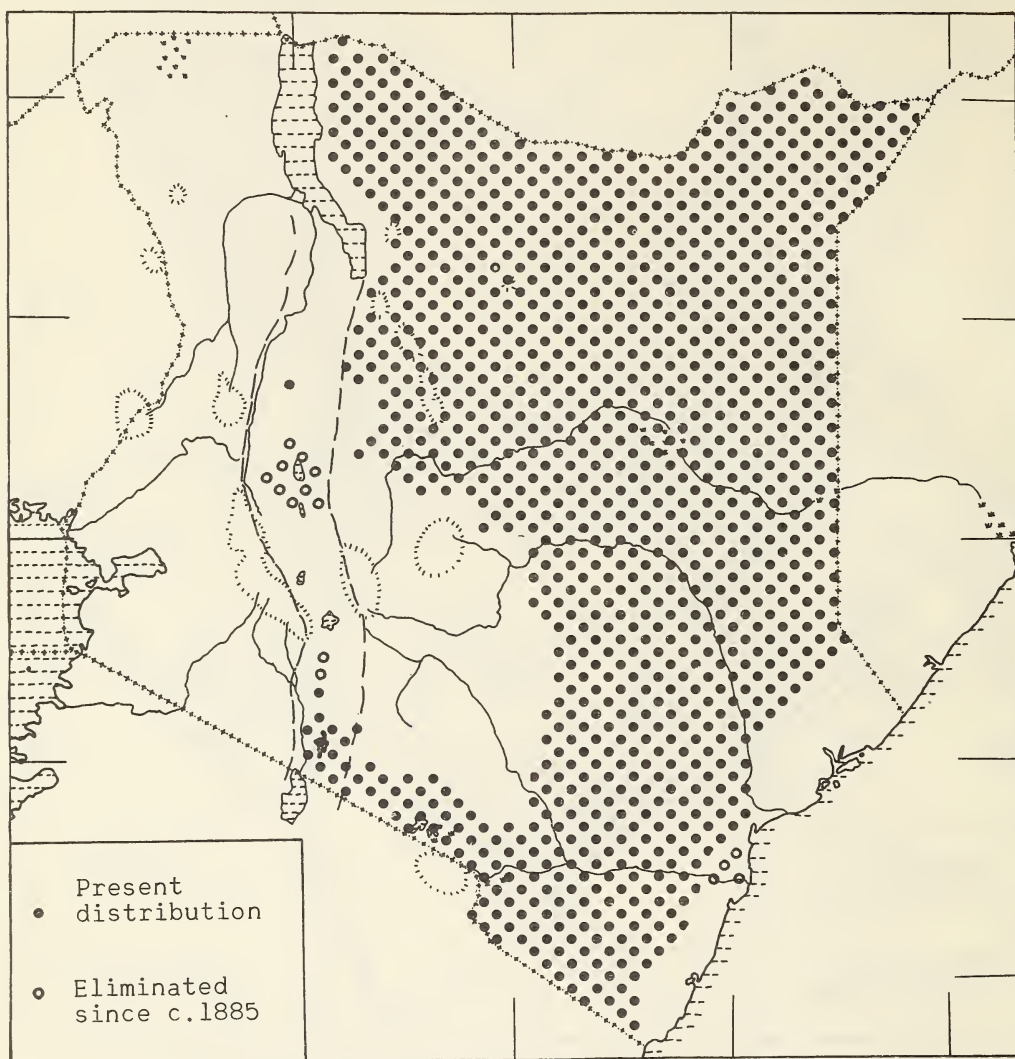


Thomson's Gazelle (*Gazella thomsonii* Gunther)

HABITAT: Open grassland, scattered tree-grassland and desert grass-bush between 3,500 and 7,000 ft. above sea level and, exceptionally, at 2,000 ft. near the southern Uaso Nyiro river.

PAST DISTRIBUTION: This species has been eliminated from several areas by farming activities, and from east of the Athi river (except for a very small remnant) by poaching. On the Athi plains south of Nairobi it is probable that a decrease in numbers has been caused by overgrazing and consequent degradation of the pasture.

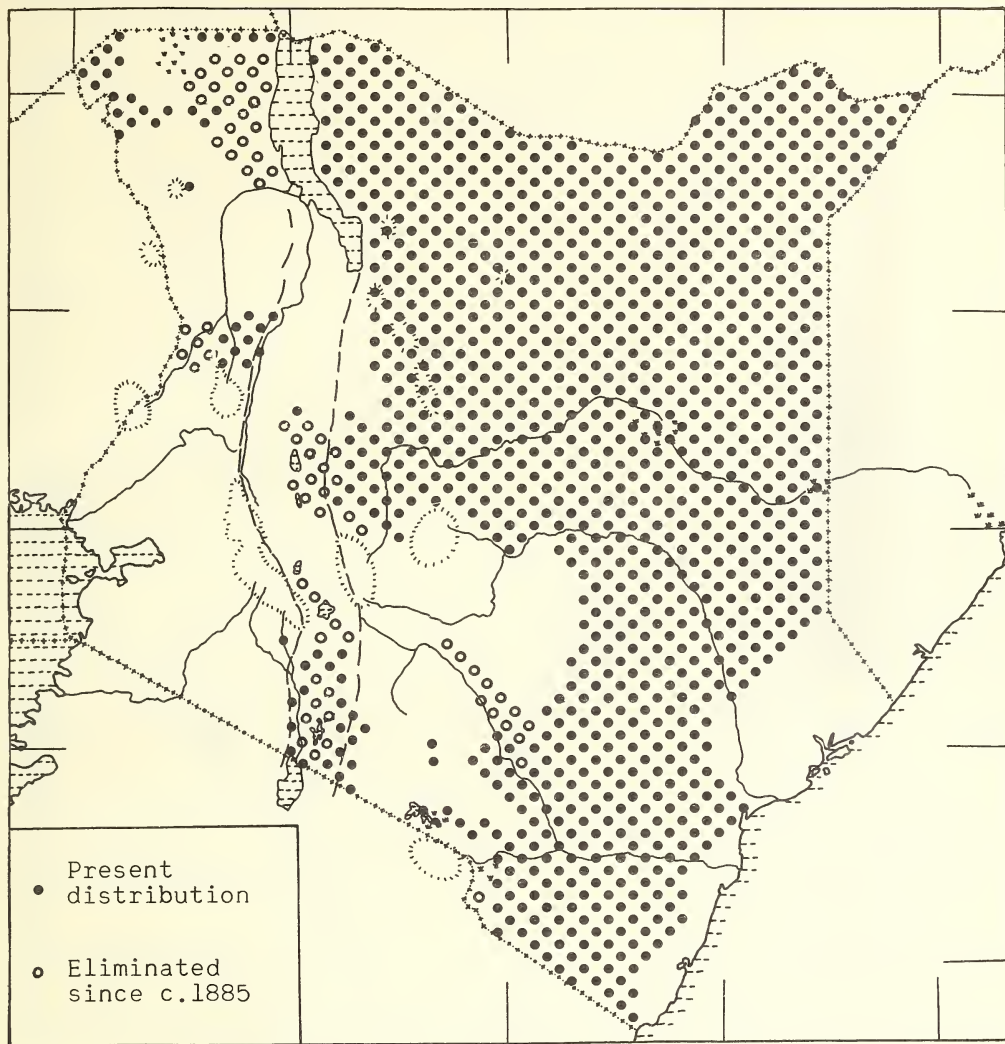
The Distribution of Some Large Mammals in Kenya.



Gerenuk (*Litocranius walleri* Brooke)

HABITAT: Desert grass-bush and desert scrub, from sea level to about 4,000 ft.

PAST DISTRIBUTION: The species has been eliminated from the vicinity of Lake Baringo, where it was formerly plentiful, and from the area south of Lake Naivasha. Elsewhere there is no evidence of its range or numbers having altered significantly. In some areas it is probably increasing in numbers.



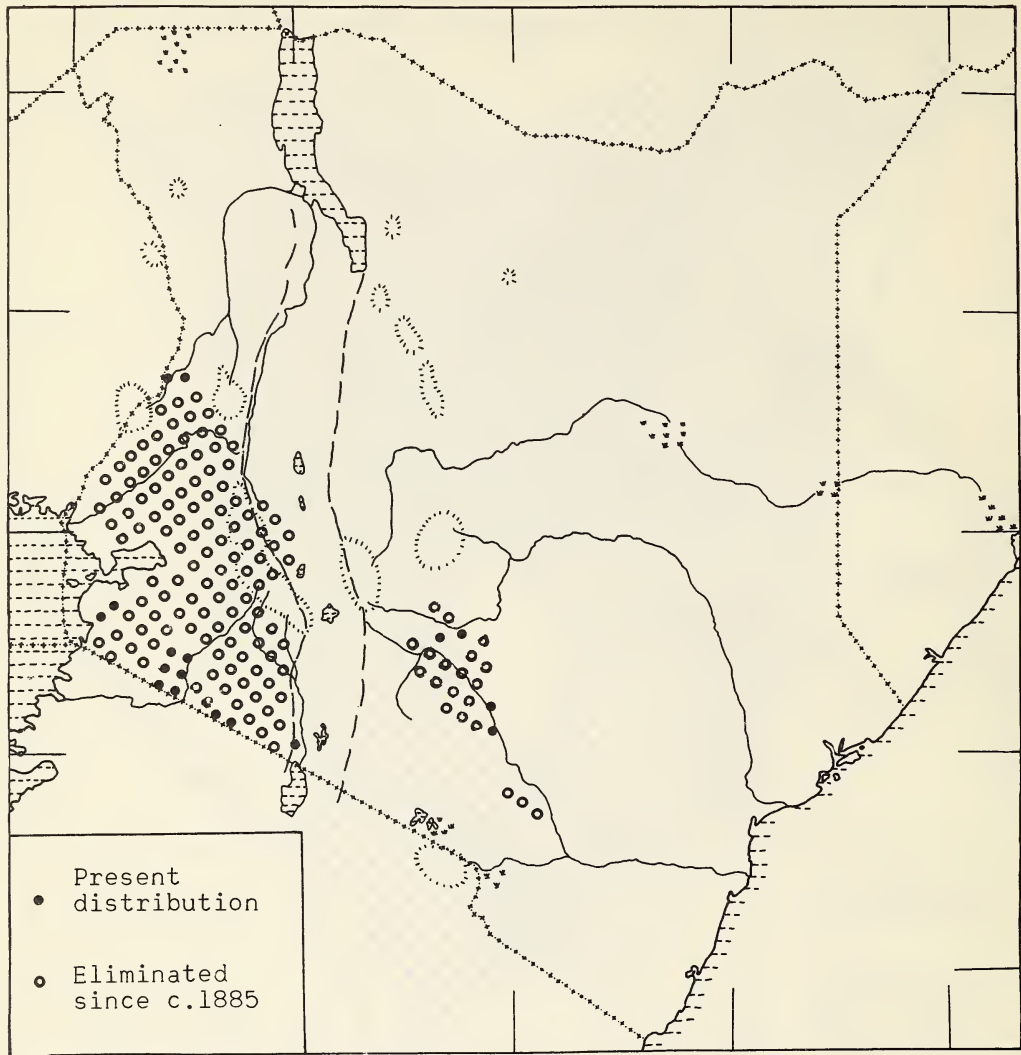
Beisa Oryx (Oryx beisa beisa Ruppell)
 Fringe-eared Oryx (O. b. callotis Thomas)

HABITAT: Desert grass-bush and desert scrub, and to a lesser extent scattered tree-grassland and open grassland, from sea level to 6,500 ft.

PAST DISTRIBUTION: Formerly more numerous in north-west Kenya and the Lake Baringo area (O. b. beisa) and south and south-east of Lake Nakuru (O. b. callotis). Reduced by poaching and to some extent by conflicting agricultural interests.

NOTE: O. b. beisa is the northern race and O. b. callotis the southern; the dividing line is formed by the Tana river and the Aberdare Mountains. There is apparently no overlap between the races.

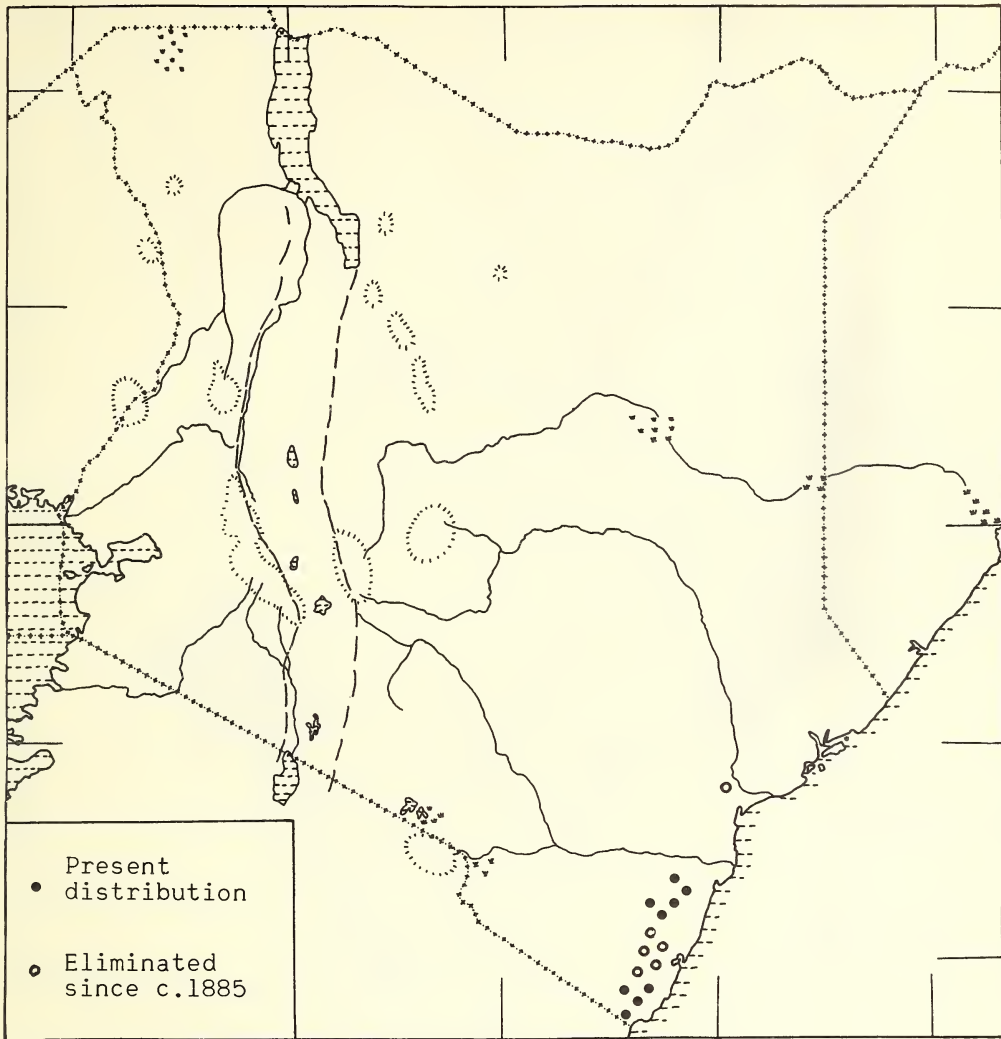
The Distribution of Some Large Mammals in Kenya.



Roan Antelope (Hippotragus equinus Desmarest)

HABITAT: Grouped tree-grassland, from 3,000 to 7,000 ft. above sea level.

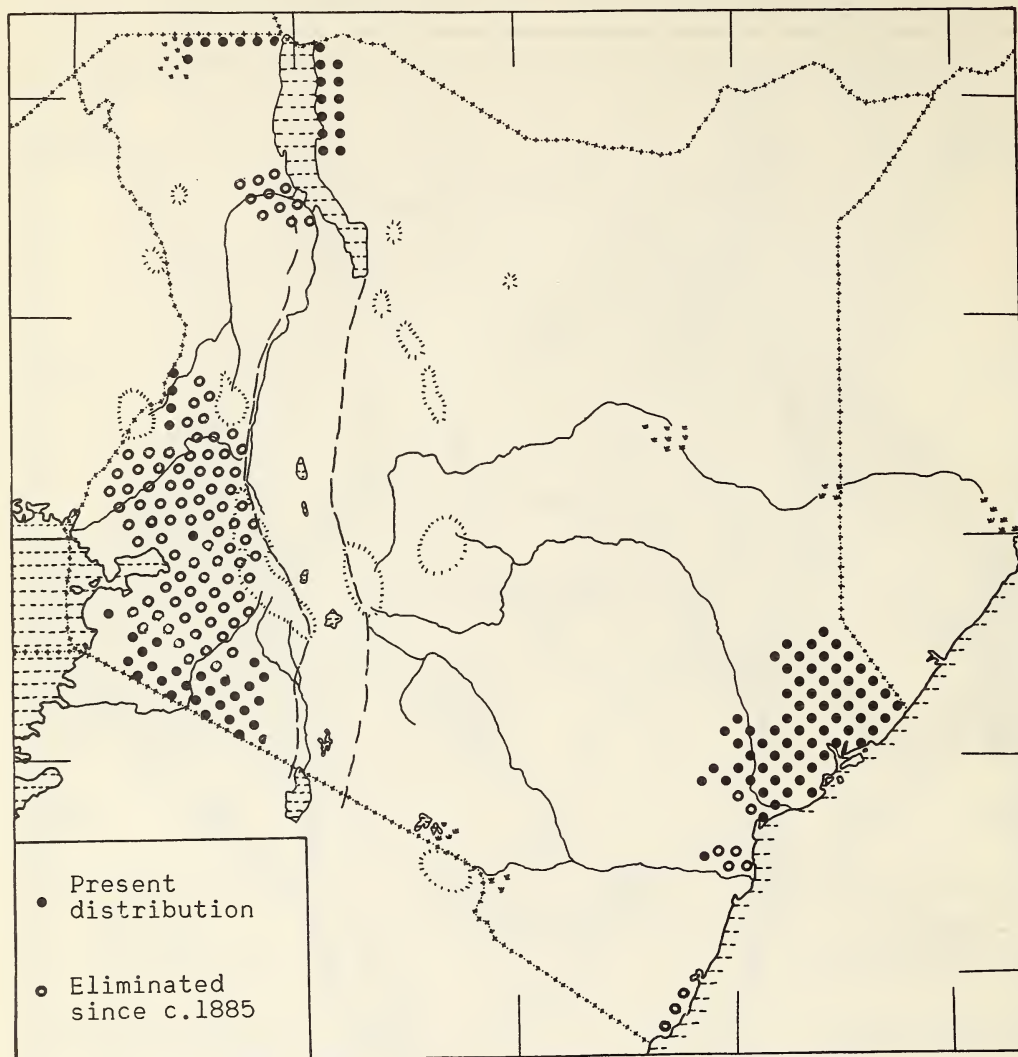
PAST DISTRIBUTION: This species was formerly more plentiful in south-west Kenya, but has always been fairly restricted in its distribution. It is declining in most of the scattered localities in which it still exists, and in the south-west is threatened in one of its last strongholds, near Lake Victoria, by the spread of cultivation.



Sable Antelope (*Hippotragus niger* Harris)

HABITAT: Confined to coastal bush and hills near the coast covered with tree-grassland.

PAST DISTRIBUTION: Although the numbers of sable antelopes in Kenya have probably been reduced slightly, their range has apparently altered little during the past seventy-five years.

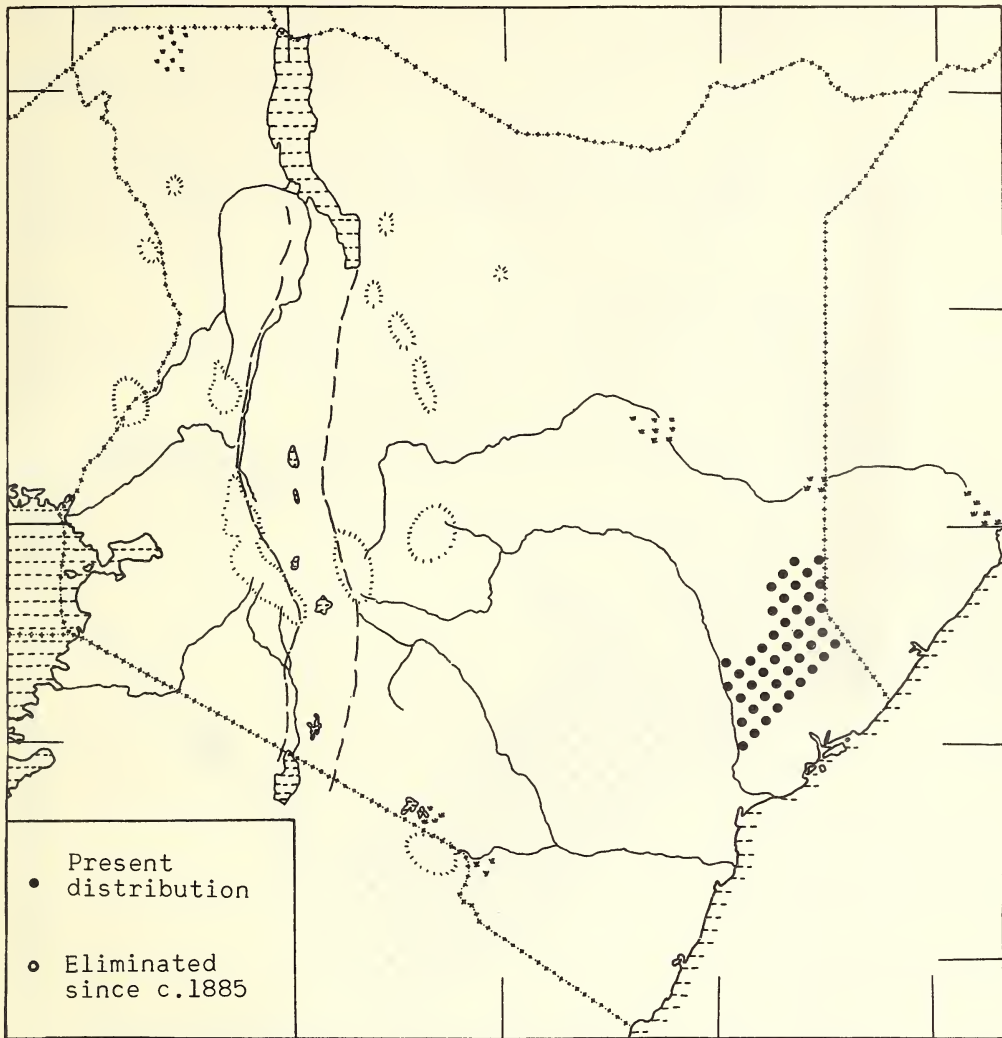


Topi (Damaliscus korriqum Ogilby)

HABITAT: Highland grassland, tree-grassland, coastal forest and bush and exceptionally, desert-scrub, from sea level to about 7,000 ft.

PAST DISTRIBUTION: This species has been reduced to a greater extent than most in Kenya. Early in this century the topi was recorded as being "very numerous" on the Turkwell river near Lake Rudolf, and very common near the coast south of Mombasa, in addition to its present range. It was also more widespread over the "northern part of the Protectorate" (Percival, 1909), although to what extent is not known. In the first two localities it no longer exists, and in the last it is very restricted. More recently it has been almost eliminated from the settled areas of west Kenya, largely as a result of control measures by farmers and wartime food requirements. (We have not included the isolated record of two topi seen on Mt. Marsabit in 1911 (Percival)).

NOTE: The animals to the north-west of Lake Rudolf are the tiang (D.k. tiang Heuglin); the remainder are the Topi (D. korriqum Ogilby).

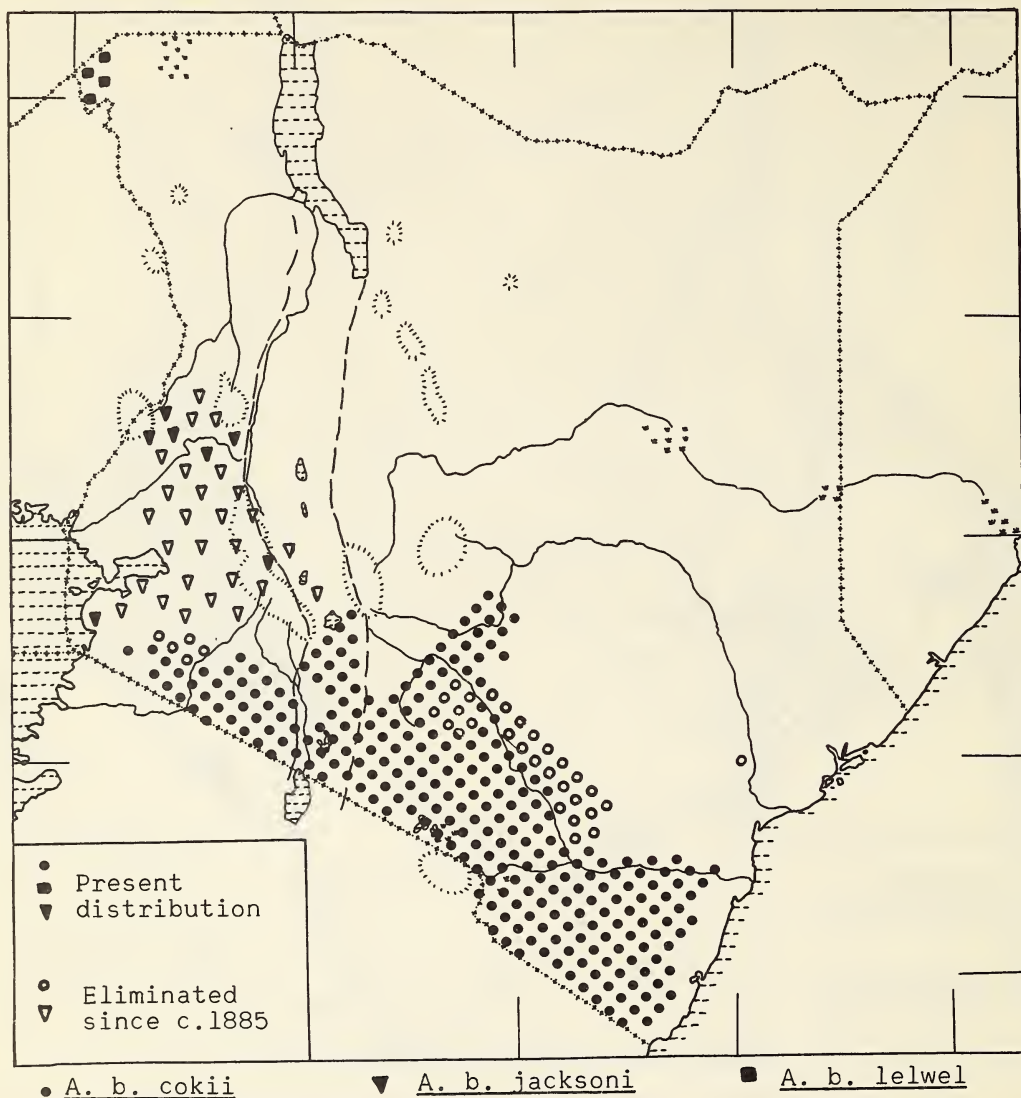


Hunter's Hartebeest (Damaliscus hunteri Sclater)

HABITAT: Desert grass-bush between 200 and 400 ft. above sea level. The western end of the species' range is in Kenya, and it extends eastwards into the Somali Republic.

PAST DISTRIBUTION: What little information exists about this species suggests that its range and numbers in Kenya have not altered significantly during the past seventy-five years.

The Distribution of Some Large Mammals in Kenya.



Coke's Hartebeest (Alcelaphus buselaphus cokii Gunther)

HABITAT: Tree-grassland and open grassland from sea level to about 6,500 ft.

PAST DISTRIBUTION: Formerly much more abundant especially south-east of Mt. Kenya, near Lake Naivasha and on the Athi Plains south of Nairobi. Its range has been reduced east of the Athi river and probably also between the Galana and Tana rivers although there is very little information about this area.

Jackson's Hartebeest (A. buselaphus jacksoni (Thomas))

HABITAT: Tree-grassland and open grassland between 5,000 and 7,500 ft. above sea level.

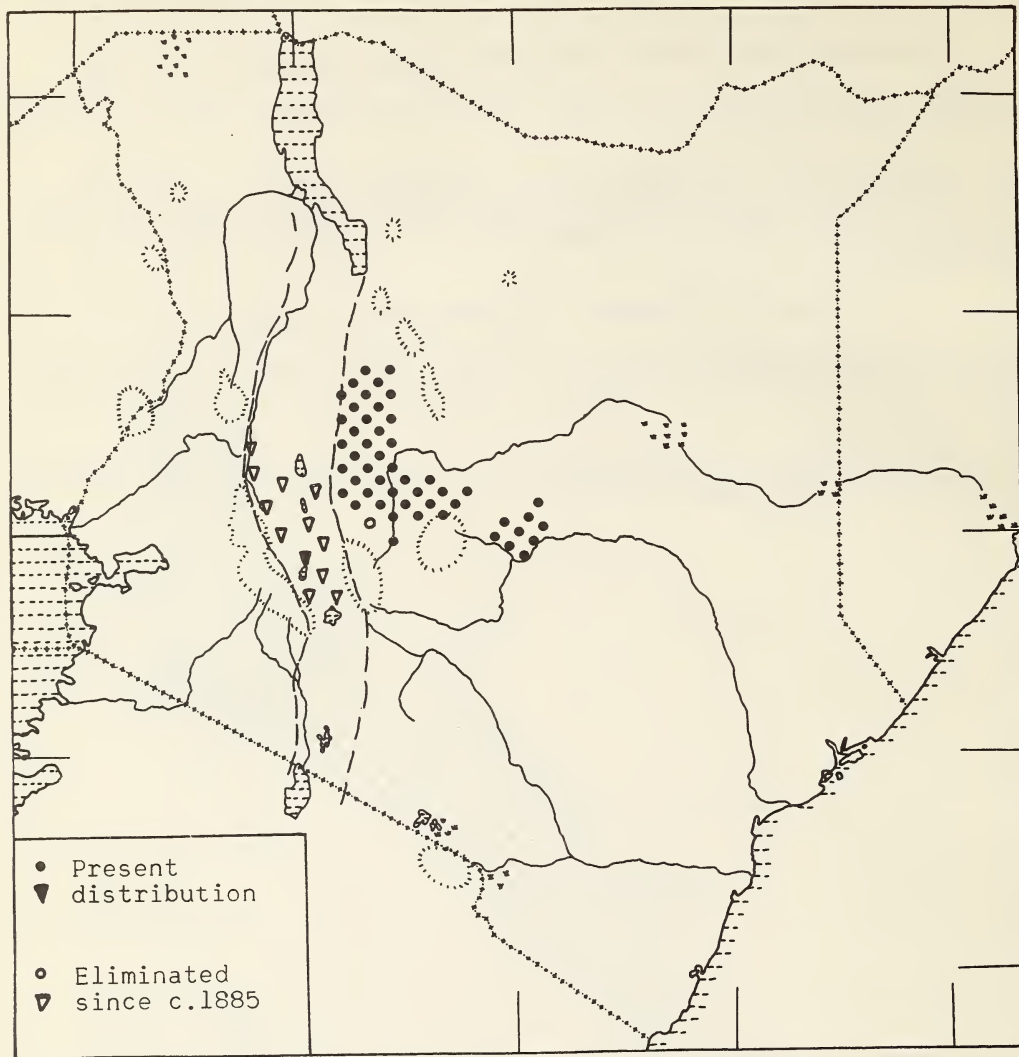
PAST DISTRIBUTION: Formerly common throughout much of west and south-west Kenya but now only abundant in one small area near Lake Victoria; reduced because of farming interests and wartime food requirements.

Lelwel Hartebeest (A. buselaphus lelwel Heuglin)

HABITAT: Restricted in Kenya to a small area of desert grass-bush in the extreme north-west, between 1,000 and 3,000 ft. above sea level.

PAST DISTRIBUTION: No evidence exists to suggest that this species was ever more widespread in Kenya.

The Distribution of Some Large Mammals in Kenya.



Hartebeest - hybrids

Ruxton and Schwarz (1929) consider both the Kenya and the Nakuru hartebeests to be hybrids of A. b. jacksoni and A. b. cokii; these animals are found in the neighbourhood of the Rift Valley where the ranges of the latter subspecies were contiguous. Ruxton and Schwarz regard the Kenya hartebeest as being more of the jacksoni type, and the Nakuru as an intermediate form.

(a) Kenya Hartebeest

HABITAT: Tree-grassland from 3,000 to 6,500 ft. above sea level.

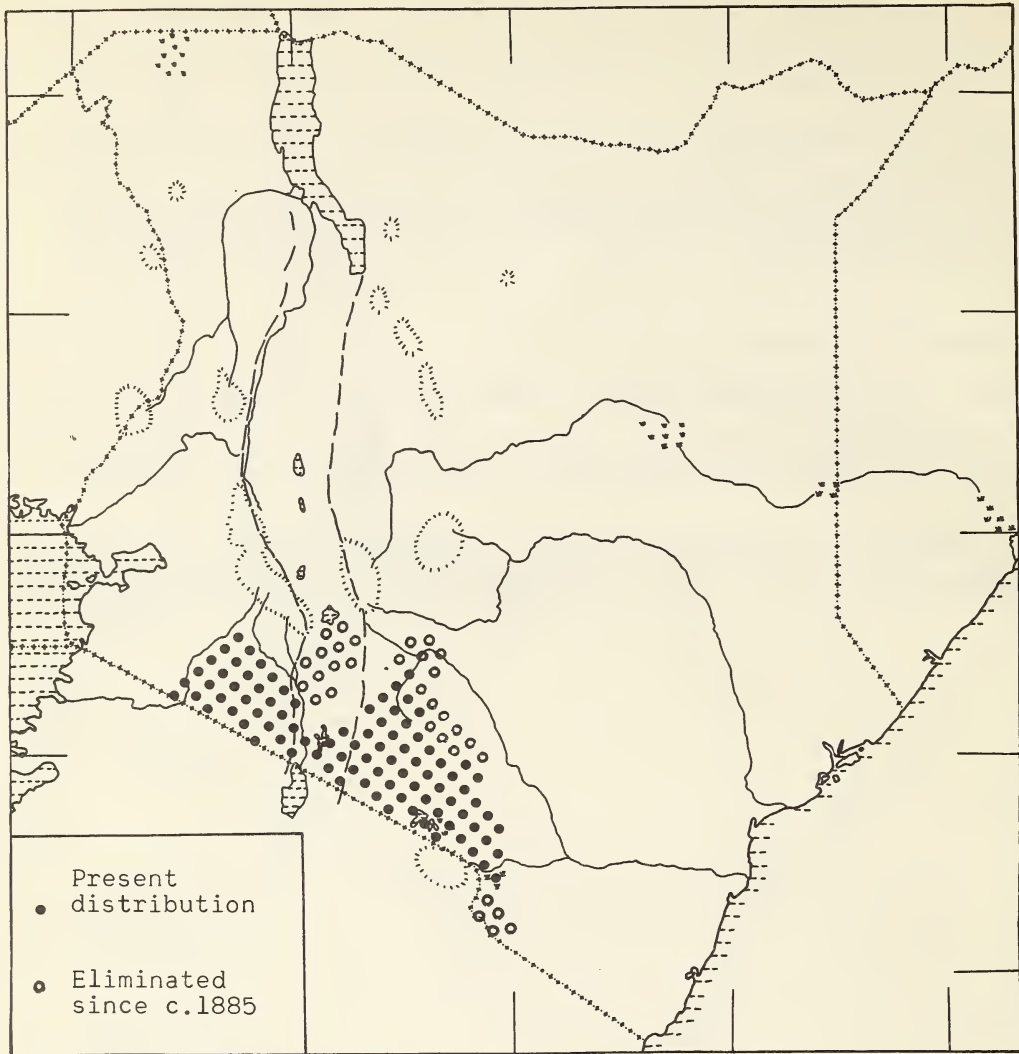
PAST DISTRIBUTION: There is no evidence to show that this form was ever more widespread, but its numbers were greatly reduced by war-time food requirements and more recently by disease, and are only now slowly increasing.

(b) Nakuru Hartebeest

HABITAT: Tree-grassland between 5,000 and 6,000 ft. above sea level.

PAST DISTRIBUTION: This form, which is now reduced to less than ten animals, was formerly numerous over a restricted area of the Rift Valley.

NOTE: Neumann's hartebeest, probably a hybrid between A. b. lelwel and A. b. tora (which occurs north of Kenya), is now apparently extinct; it formerly occurred on the north-east shores of Lake Rudolf.

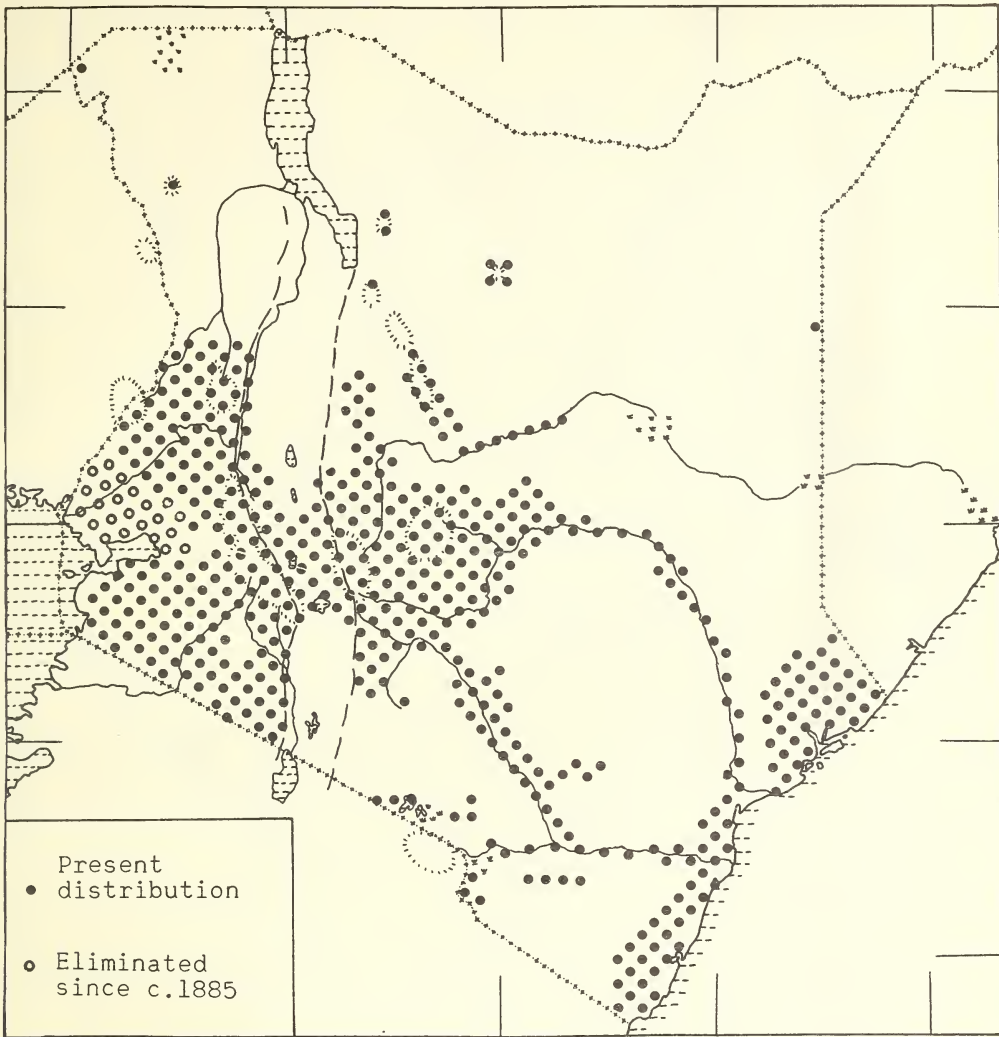


Wildebeest (*Connochaetes taurinus* Burchell)

HABITAT: Open grassland and tree-grassland from 2,000 to 6,000 ft. above sea level. The Kenya population is at the extreme north of the species' range. Those west of the Rift Valley are continuous with the wildebeest population on the Serengeti Plains of Tanganyika, and there is considerable movement of animals between the two countries.

PAST DISTRIBUTION: The species' range formerly extended a few miles further north-east of Nairobi, and it was also occasionally recorded as far north in the Rift Valley as Lake Naivasha. Otherwise its range has apparently altered little. After a decline in numbers in the early part of the century wildebeests were recorded as having "increased tremendously" by the 1920s in the western part of their range.

NOTE: The wildebeest resident in the vicinity of Lake Magadi are distinctly lighter in colour than those to the east and west, and are possibly a distinct race.

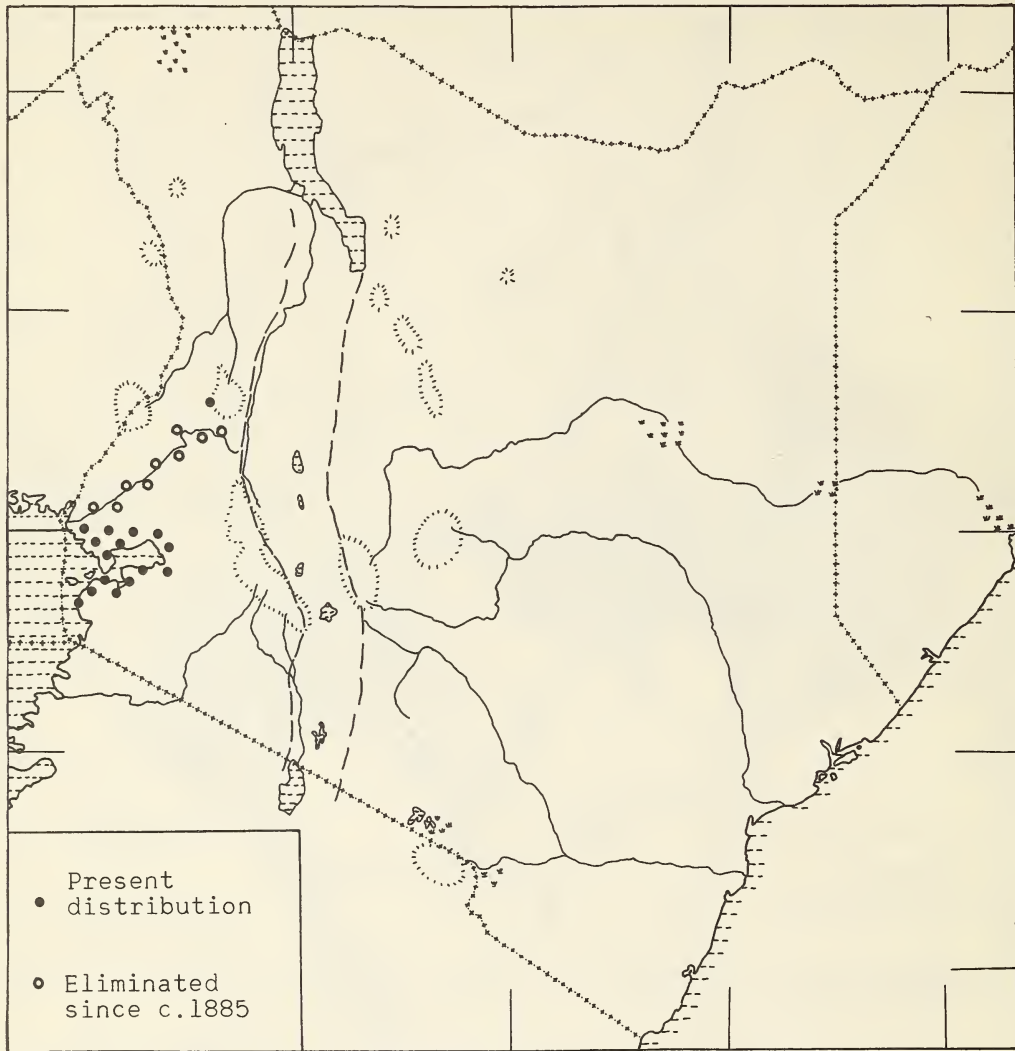


Bushbuck (Tragelaphus scriptus Pallas)

HABITAT: Highland forest, coastal forest and bush, riverine bush and woodland, and well-watered tree-grassland; from sea level to about 13,000 ft.

PAST DISTRIBUTION: No evidence exists to suggest that the species' range has altered significantly, except in west Kenya near Lake Victoria, but numbers have probably been reduced in many areas as the result of the spread of cultivation. Poaching and rinderpest also effect some reduction in the numbers of bushbucks.

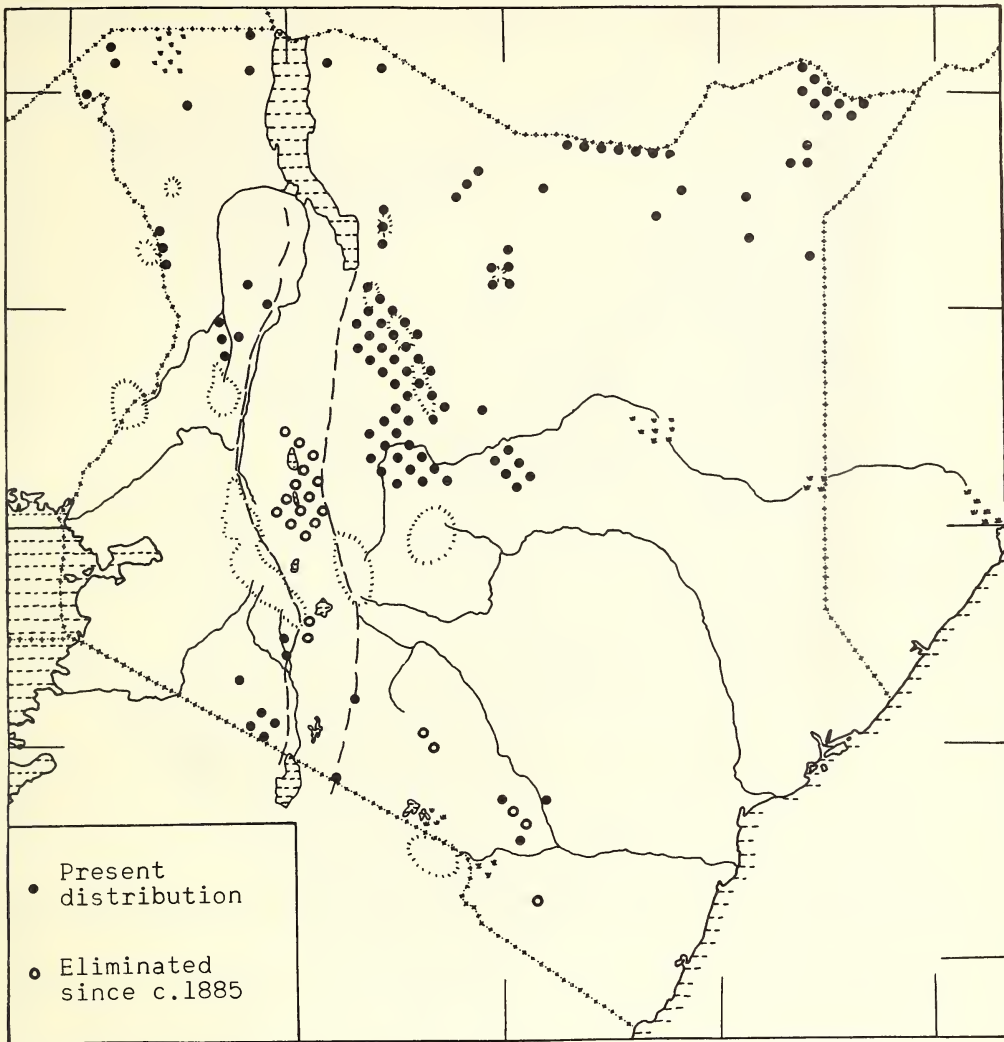
The Distribution of Some Large Mammals in Kenya.



Sitatunga (Tragelaphus spekei Sclater)

HABITAT: Restricted to papyrus and other swamp vegetation affording dense cover.

PAST DISTRIBUTION: At the beginning of the century the species was recorded as common on other rivers of west Kenya in addition to the one it now frequents, as well as on the shores of Lake Victoria where it is probably still fairly common.

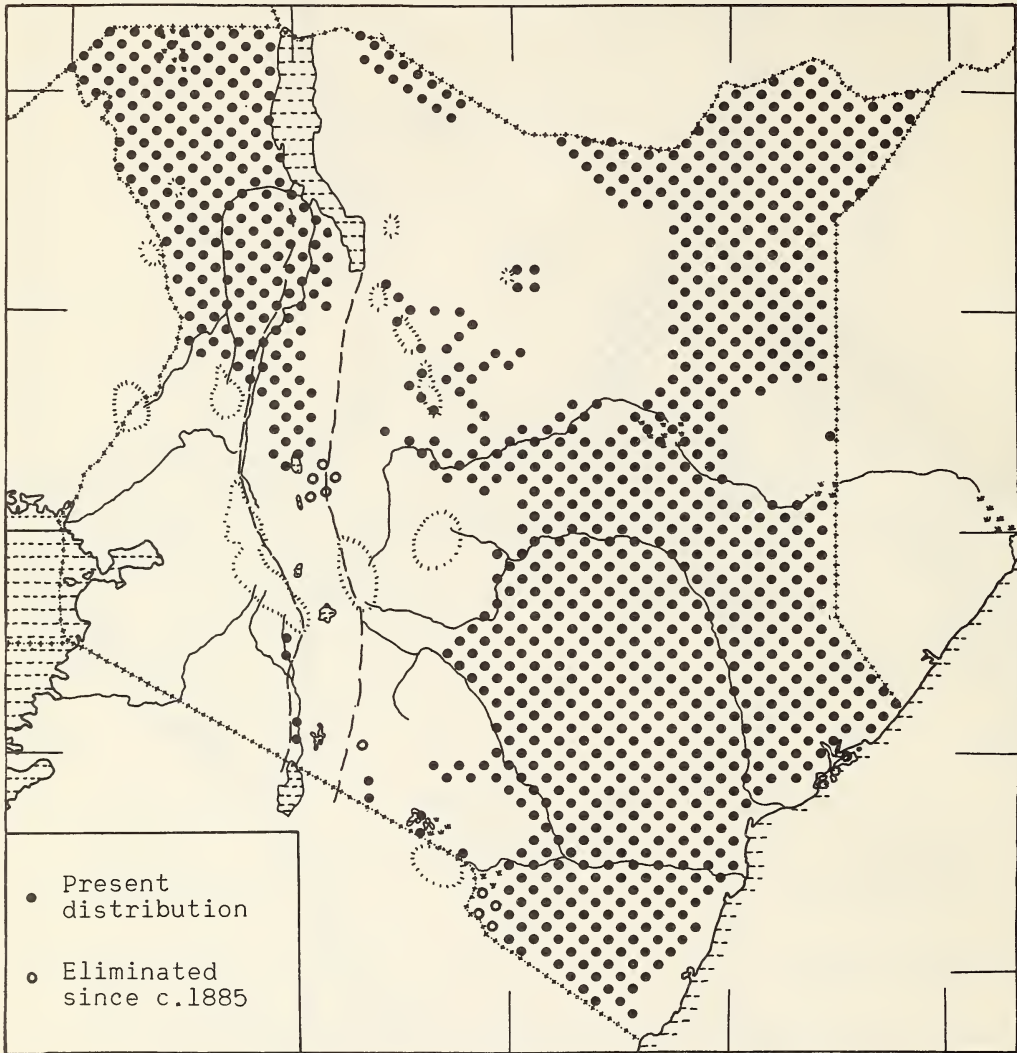


Greater Kudu (Tragelaphus strepsiceros Pallas)

HABITAT: Isolated hills, particularly in desert-bush, and to a lesser extent in tree-grassland; from 1,000 to about 8,000 ft. above sea level.

PAST DISTRIBUTION: This species is now absent from, or rare in a number of areas in which it was once fairly common; such areas include the Mau escarpment south of Lake Naivasha, and the vicinity of Lakes Baringo and Hannington. It appears to have declined considerably in numbers in most parts of its range during the past seventy-five years. This decline was initiated by severe outbreaks of rinderpest during the second half of the last century, and since then further outbreaks of rinderpest, and to some extent poaching, have prevented the greater kudu from having more than a very localised distribution in Kenya.

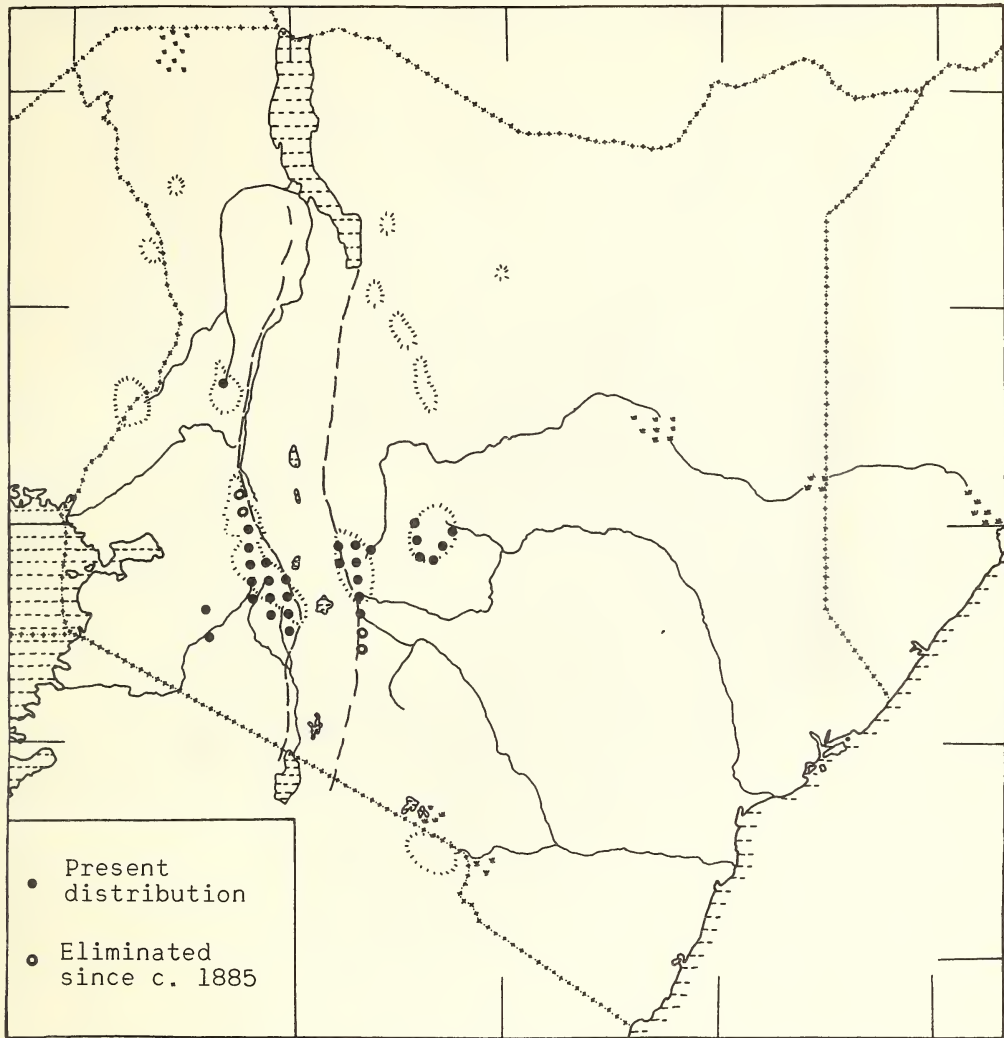
The Distribution of Some Large Mammals in Kenya.



Lesser Kudu (Strepsiceros imberbis Blyth)

HABITAT: Desert grass-bush and scrub, and coastal bush and forest, from sea level to 4,000 ft.

PAST DISTRIBUTION: As far as can be ascertained the range and numbers of this species have not altered significantly during the past half century, although its numbers are periodically reduced by rinderpest in some areas.

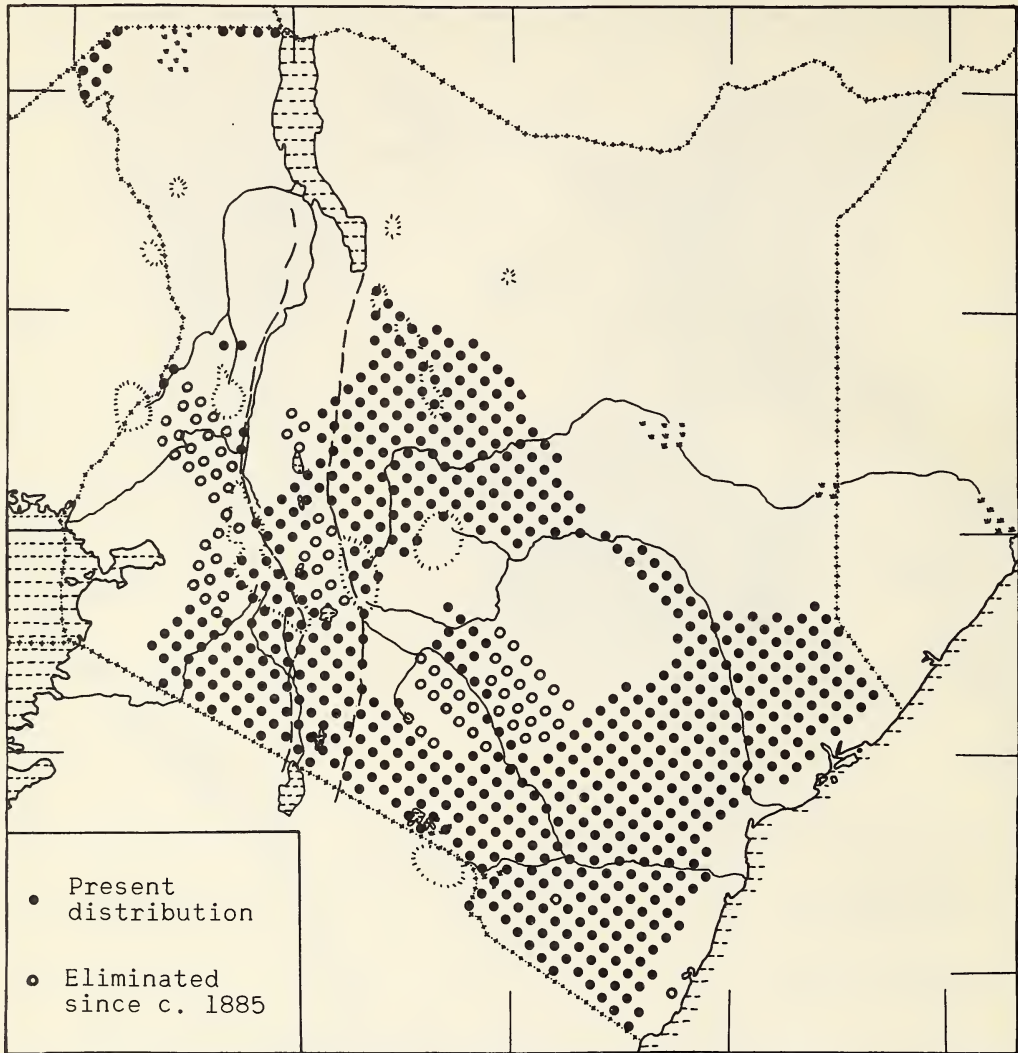


Bongo (Boocercus eurycerus Ogilby)

HABITAT: Highland forest, usually between 7,000 and 10,000 ft. above sea level.

PAST DISTRIBUTION: There is little evidence to suggest that the range or numbers of this species have altered significantly during the past seventy-five years, although poaching, rinderpest and destruction of its habitat all take some toll of the bongo.

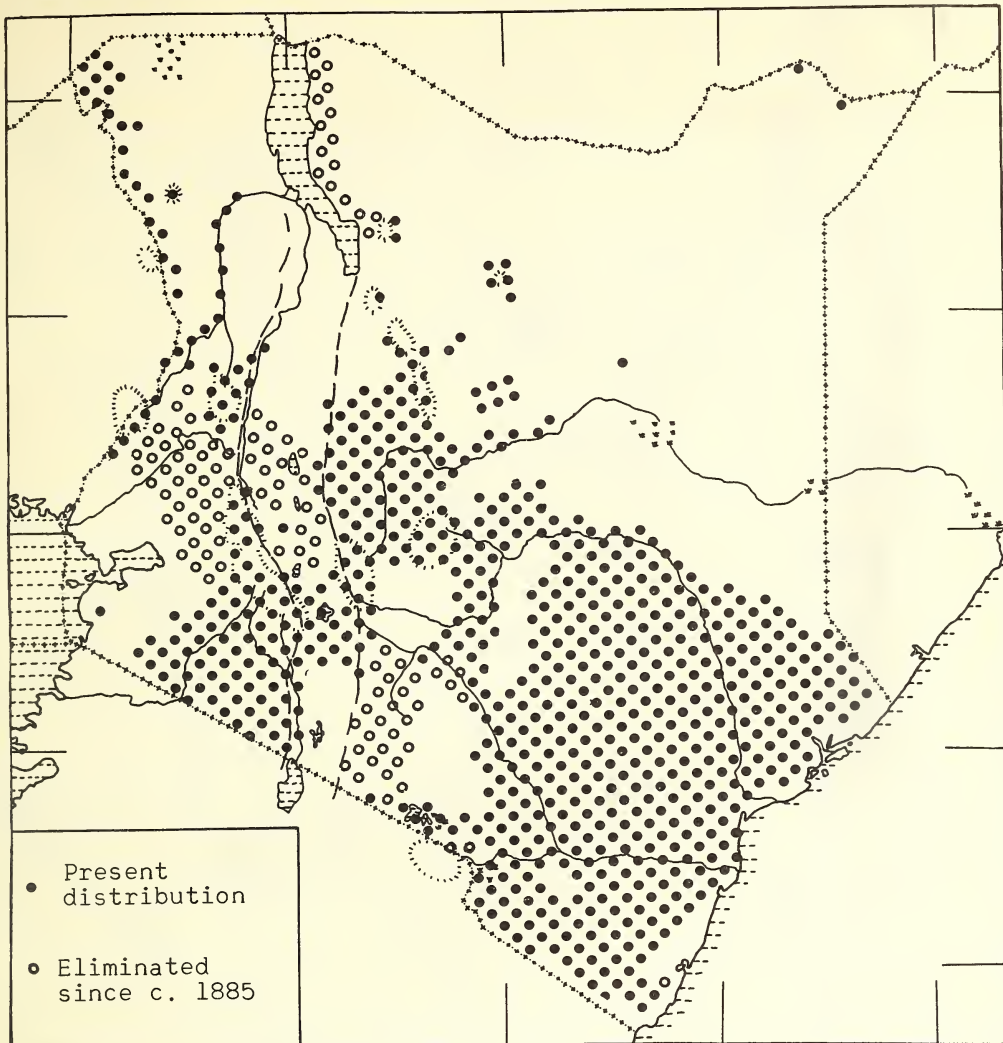
The Distribution of Some Large Mammals in Kenya.



Eland (Taurotragus oryx Pallas)

HABITAT: Highland grassland, tree-grassland and open grassland, and desert grass-bush, from sea level to about 14,000 ft.

PAST DISTRIBUTION: Formerly common in some of the settled areas of west Kenya from which it is now absent, and much reduced in areas such as the Rift Valley between Lakes Baringo and Nakuru and the plains near the Tana river south of Mt. Kenya. Reduction in numbers has resulted from control by farmers, wartime food requirements and poaching, and periodically from rinderpest in some areas.

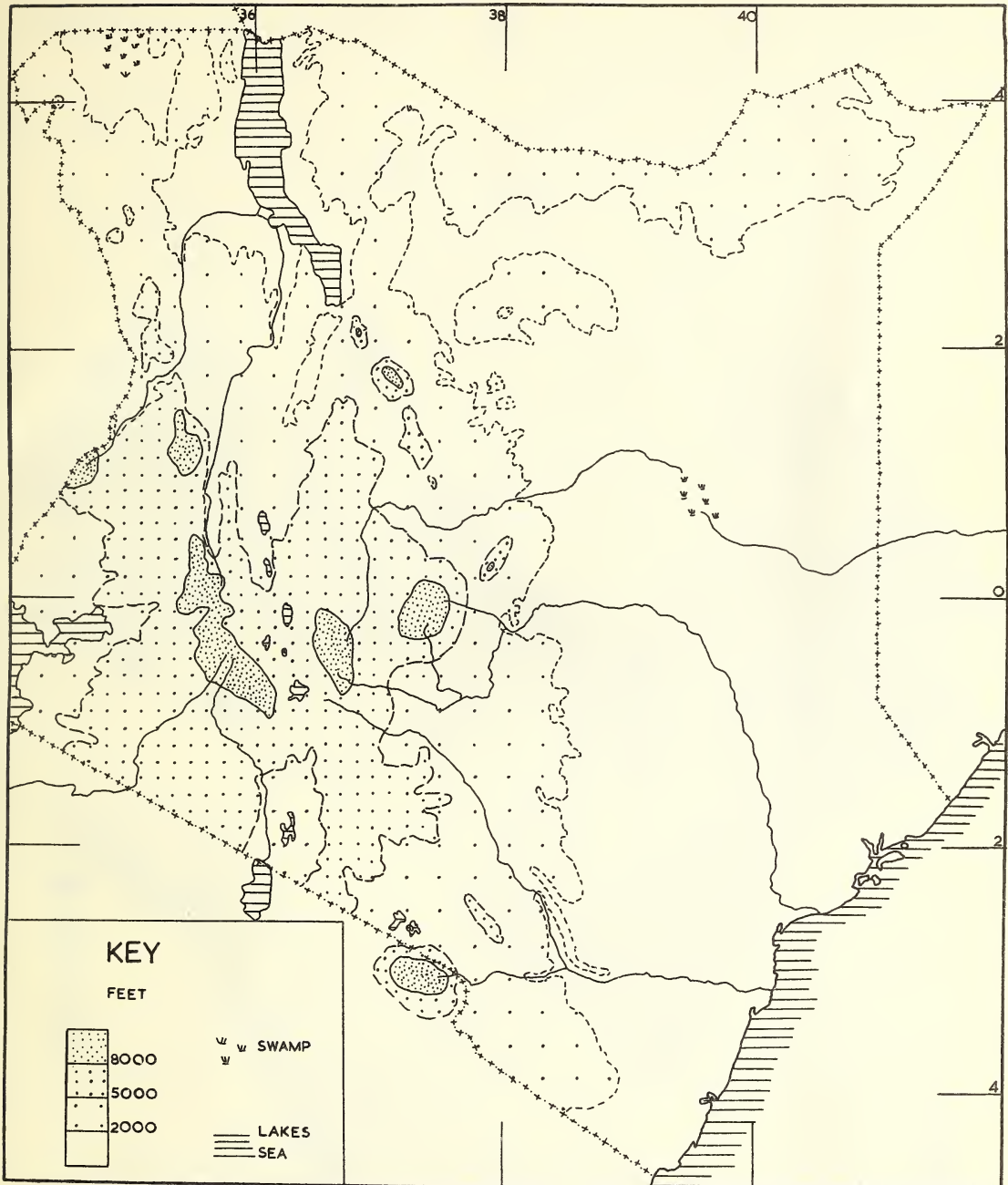


Buffalo (*Syncerus caffer* Sparrman)

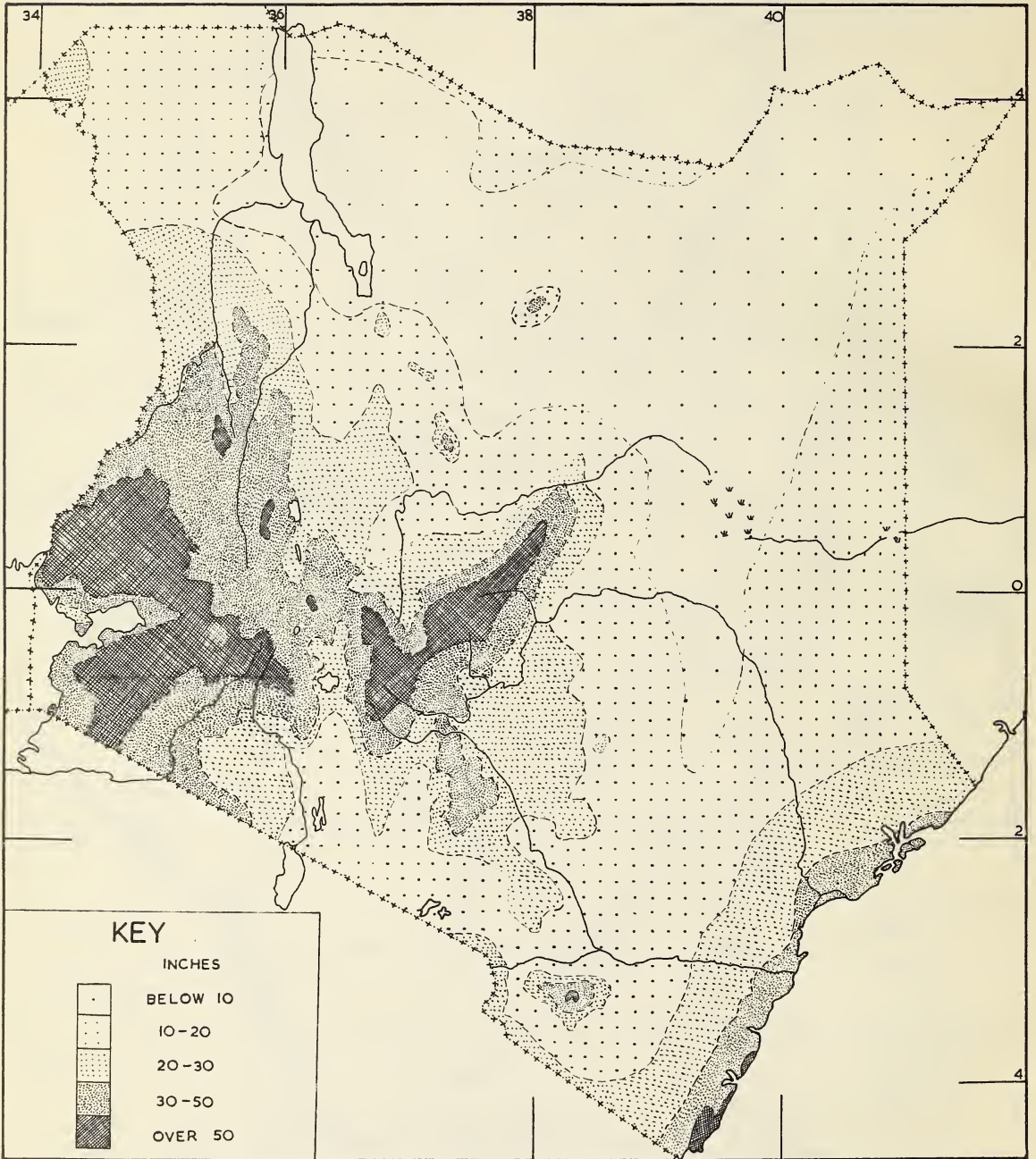
HABITAT: From sea level to over 12,000 ft., principally in highland, riverine and coastal forest, and tree-grassland, extending into desert grass-bush and scrub during wet seasons.

PAST DISTRIBUTION: Neumann (1898) records that towards the end of the last century buffaloes were scarce in many areas to the east and north of Mt. Kenya where they are now fairly common; this was the result of severe outbreaks of rinderpest earlier in the century. In the immediate vicinity of Mt. Kenya, and to a lesser extent further north, rinderpest still periodically results in the death of a considerable number of buffaloes, although numbers seem to increase again fairly rapidly after each outbreak. The species has disappeared from the settled area of west Kenya, the vicinity of Lake Baringo, the eastern shore of Lake Rudolf and the Athi Plains south of Nairobi as a result of the spread of cultivation or because of poaching. In other areas it is one of the few species to have increased to a considerable extent; these areas include the vicinity of the Mara river in south-west Kenya, the Athi and Galana rivers and parts of the Tana river.

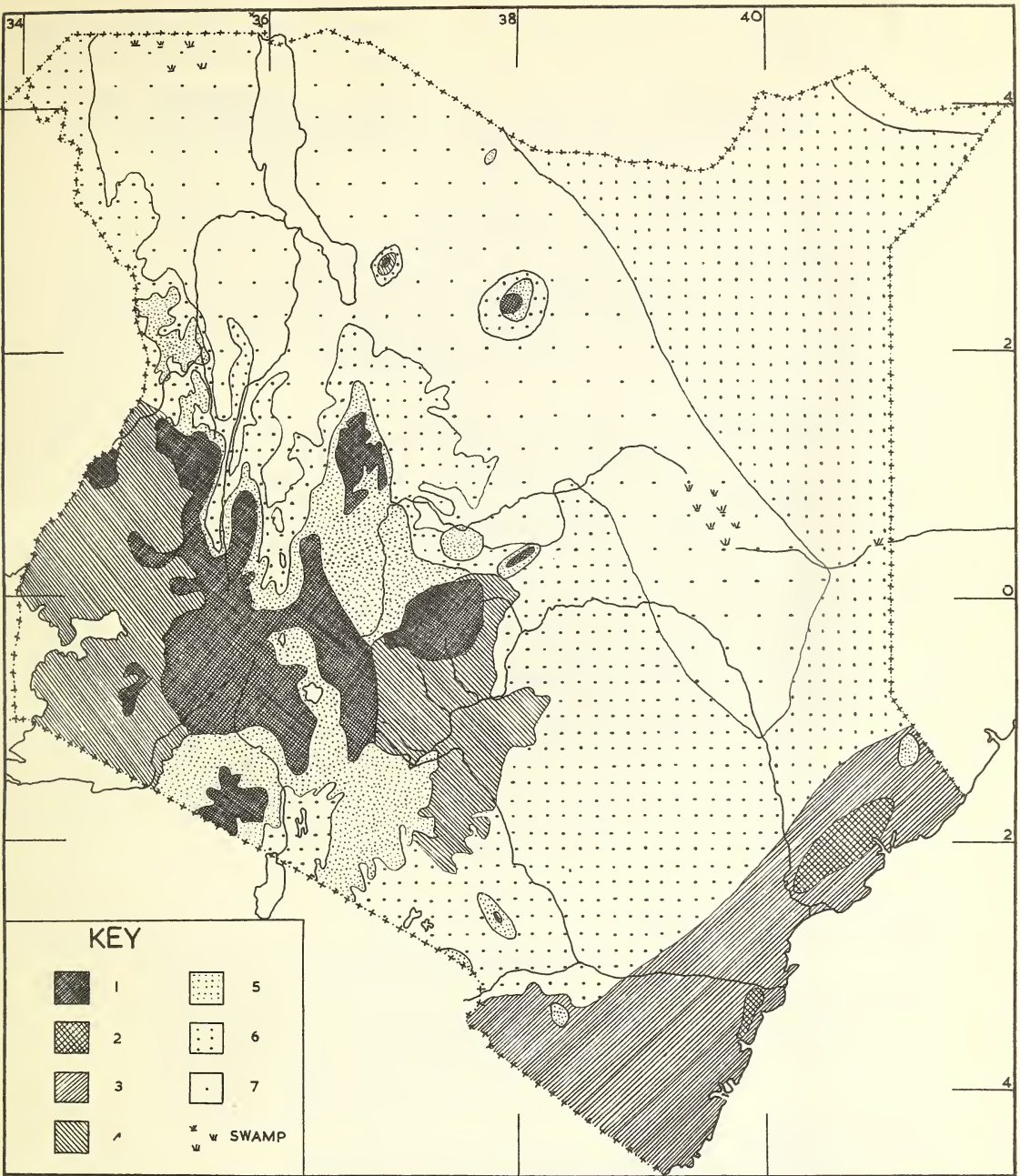
ALTITUDE



MEAN ANNUAL RAINFALL



VEGETATION



KEY

- 1 = Highland grassland and Highland forest
- 2 = Coastal forest
- 3 = Coastal grass-bush
- 4 = Grouped tree-grassland (including Low tree- High grass)
- 5 = Scattered tree-grassland and Open grassland
- 6 = Desert grass-bush (Dry bush with trees)
- 7 = Desert scrub (and lava ridges, desert grass and shrub, and true desert)

The Distribution of Some Large Mammals in Kenya.

Members of the Orders Carnivora (excluding the Mustelidae and Viverridae), Proboscidea, Perissodactyla and Artiodactyla occurring in Kenya. (Those shown in brackets are not dealt with in this paper).

Order Carnivora

Family Canidae:

- (Bat-eared Fox - Otocyon megalotis Desmarest)
- (Black (Silver)-backed Jackal - Canis mesomelas Schreber)
- (Side-striped Jackal - Canis adustus Sundevall)
- (Oriental (Golden) Jackal - Canis aureus Wagner)
- Hunting Dog - Lycaon pictus Temminck

Family Protelidae:

- (Aardwolf - Proteles cristatus Sparrman)

Family Hyaenidae:

- (Spotted Hyaena - Crocuta crocuta Erxleben)
- (Striped Hyaena - Hyaena hyaena Meyer)

Family Felidae:

- (African Wild Cat - Felis libyca Forster)
- (Serval - Felis serval Schreber)
- (Caracal - Felis caracal Schreber)
- Leopard - Panthera pardus Linnaeus
- Lion - Panthera leo Linnaeus
- Cheetah - Acinonyx jubatus Schreber

Order Proboscidea

Family Elephantidae:

- Elephant - Loxodonta africana Blumenbach

Order Perissodactyla

Family Rhinocerotidae:

- Black Rhinoceros - Diceros bicornis Linnaeus

Family Equidae:

- Common Zebra - Equus burchelli Gray
- Grevy's Zebra - Equus grevyi Oustalet

Order Artiodactyla

Family Suidae:

- Bushpig - Potamochoerus porcus Linnaeus
- Warthog - Phacochoerus aethiopicus Pallas
- Giant Forest Hog - Hylochoerus meinertzhageni Thomas

Family Hippopotamidae:

- Hippopotamus - Hippopotamus amphibius Linnaeus

Family Giraffidae:

- Giraffe - Giraffa camelopardalis Linnaeus
- G. c. rothschildi Lydekker
- G. reticulata De Winton

Family Bovidae:

- (Red Duiker - Cephalophus natalensis A. Smith)
 (Yellow-backed Duiker - C. silvicultor Afzelius)
 (Blue Duiker - C. monticola Thunberg)
 (Hook's Black-fronted Duiker - C. nigrifrons hooki St. Leger)
 (Grey Duiker - Sylvicapra grimmia Linnaeus)
 Steinbok - Raphicerus campestris Thunberg
 Oribi - Ourebia ourebi Zimmermann
 (Suni - Nesotragus moschatus Von Dueben)
 Klipspringer - Oreotragus oreotragus Zimmermann
 Dik-dik - Rhynchotragus kirkii Gunther
R. quentheri Thomas
 Chanler's Mountain Reedbuck - Redunca fulvorufula
chanleri Rothschild
 Bohor Reedbuck - Redunca redunca Pallas
 Common Waterbuck - Kobus ellipsiprymnus Ogilby
 Defassa Waterbuck - K. defassa Ruppell
 Uganda Kob - Adenota kob thomasi Sclater
 Impala - Aepyceros melampus Lichtenstein
 Grant's Gazelle - Gazella granti Brooke
 Thomson's Gazelle - Gazella thomsonii Gunther
 Gerenuk - Litocranius walleri Brooke
 Oryx - Oryx beisa beisa Ruppell
O. b. callotis Thomas
 Roan Antelope - Hippotragus equinus Desmarest
 Sable Antelope - Hippotragus niger Harris
 Topi - Damaliscus korrigum Ogilby
 Hunter's Hartebeest - Damaliscus hunteri Sclater
 Coke's Hartebeest - Alcelaphus buselaphus cokii Gunther
 Jackson's Hartebeest - A. b. jacksoni (Thomas)
 Lelwel Hartebeest - A. b. lelwel Heuglin
 Hybrid Hartebeests - Nakuru and Kenya Hartebeests -
A. b. jacksoni x A. b. cokii Ruxton
 & Schwarz
 (Neumann's Hartebeest -
A. b. lelwel x A. b. tora Ruxton &
 Schwarz)
 Wildebeest - Connochaetes taurinus Burchell
 Bushbuck - Tragelaphus scriptus Pallas
 Sitatunga - Tragelaphus spekei Sclater
 Greater Kudu - Tragelaphus strepsiceros Pallas
 Lesser Kudu - Strepsiceros imberbis Blyth
 Bongo - Boocercus eurycerus Ogilby
 Eland - Taurotragus oryx Pallas
 Buffalo - Syncerus caffer Sparrman

The Distribution of Some Large Mammals in Kenya

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