

Preliminary notes on the mammals of the Namib Desert Park

by

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ABSTRACT

The known distribution of sixty three species of mammals occurring in the Namib Desert Park, South West Africa is given. Notes on the habitat preferences of most of the species as well as some taxonomic data are included.

INTRODUCTION

These notes are an attempt to list the species of mammals known to occur in the Namib Desert Park, as well as to give some idea of their present distribution. The majority of records are taken from the authors field notes and others from past and present staff of DERU. A number of papers have been published on the mammals of the Namib Desert but little has been done specifically on those species occurring in the Park. Haacke (1963) and Holm (1969) published papers on *Eremitalpa granti namibensis*; Sauer (1971) studied *Macroscelides proboscideus*; Meester (1963), Roer (1971) and Setzer (1971) have contributed to knowledge of the *Chiroptera* of the Park. Schlitter (1973) has examined the *Gerbillus* group. A number of other papers have been published with general references to the mammalian fauna of the Namib Desert Park. Most important is the paper by Coetzee (1969) on the distribution of the mammals of the Namib Desert and the adjoining inland escarpment.

No attempt is made to present any reproductive, feeding or other biological data at this time but this data will be published at a later date. Notes have been added on habitats and taxonomic status however. In some cases the author has indicated those sub-species which are believed to occur in the Park; with other species this has not been attempted because of the need for taxonomic revision of these groups. In such groups as the *Chiroptera* records are meagre as species of this group are difficult to collect and some are only present seasonally. Further collecting in the area, over a period of years and seasons, is essential to build up a complete and clear picture. This checklist and notes on the mammals of the Namib Desert Park is an interim list in order that other workers in the area have access to material already completed. The project is expected to take another three years to complete.

The authors sight records are indicated on the maps by black dots and in some species a stippled overlay has been used to give some idea of possible distribution limits; triangles indicate actual collection sites and squares indicate records other than those of the author.

The distribution of a number of the mammalian species occurring in the Namib Desert Park varies a great deal according to the season. The more obvious of these species are *Oryx gazella*, *Oreotragus oreotragus* and *Xerus inauris*.

The vegetation, habitats and climate of the Namib have been covered previously and for this reason

only a brief description of these are given (Coetzee, 1969). The Namib Desert Park is approximately 1 409 500 hectares in extent and is bounded in the west by the Atlantic Ocean and in the east by the escarpment. The northern and southern boundaries are partially formed by the Swakop and Kuiseb Rivers respectively. Much of the perimeter is fenced. Altitudes range from sea-level to approximately 1 300 metres. The mean annual rainfall varies between 15 and 110 mm at two regularly attended weather stations, Gobabeb and Ganab. The variable rainfall is undoubtedly higher and lower in other areas of the Park. The main habitat types of the Park are enumerated here.

1. Coastal area — lagoon and open sea.
exposed mud flats and sedge meadow.
coastal hummocks.
coastal sanddunes.
2. Riverine — Kuiseb, Swakop, Gaub and Khan Rivers.
The larger washes of the eastern areas.
3. Plains — central gravel plains.
pro-Namib (eastern) plains.
granite hillocks.
sandy and calcrete washes.
4. Open scrub savannah — hill ranges.
sandy washes.
5. Sand dunes — inter-dune valleys.
longitudinal dunes.

The above list is intended to give an idea of the variety of habitats available to the mammals of the Namib Desert Park and is not considered exhaustive. In the systematic list to follow no mention has been made of species no longer occurring in the Park and thus they are indicated here.

Loxodonta africana used to occur in both the Kuiseb and Swakop River courses and was recorded by Pienaar in the late eighteenth century as occurring commonly in the latter. *Lycaon pictus* and *Panthera leo* are now both absent from the area but the former may occasionally pass through the region.

The classification and nomenclature adopted in the systematic list which follows is with some exception that of Meester (1964) and Smithers (1968).

It is hoped that this preliminary work will stimulate others to investigate further.

Order INSECTIVORA

Family Macroscelididae (Elephant Shrews).

Macroscelides proboscideus (Shaw) Short-eared Elephant Shrew.

In South West Africa this species is generally recognised as *M.p. melanotis* but the subspecific status is at present uncertain (Sauer, 1971).

This is a common species of the open plains, wherever granite or limestone rocks are present to provide shelter. The main area of distribution seems to be between 22° 45' and 23° 30' S and 15° 00' and 15° 35' E. Where the ground is sandy the animals

dig shallow burrows under rock shelters but have also been found living in cavities between slabs or on low rocky outcrops (Coetzee, 1969).

Elephantulus rupestris (A. Smith) Rock Elephant Shrew.

Although this species occurs in the same areas as *M. proboscideus* they are separated by their habitat requirements (Shortridge, 1934). A species which seems to be restricted to the rocky hills and outcrops of the Park, Sauer (1971) and Coetzee (1969) record this species from east of 15° 15' E.

Elephantulus intufi (A. Smith) Bushveld Elephant Shrew.

Despite its name this species is found in rocky areas of the Park. Thus far it has not been found further west than 15° 15' E. *E. intufi* and *E. rupestris* apparently occupy very similar habitats in the Namib Desert Park but as yet have not been trapped at the same localities. Roberts (1951) states that in Damaraland and the Namib Desert this species takes refuge under rocks or in rock crevices, whereas in more typical habitat it occurs in thornveld, living in shallow burrows amongst tree roots and scrub.

Family Soricidae (Shrews)

Crocidura cyanea (Duvernoy) Reddish-grey Musk Shrew.

This species seems to be restricted to the riverine areas, namely the Kuiseb and Swakop Rivers. Specimens have been collected at Gobabeb and Homeb in the Kuiseb River and at Palmenhorst in the Swakop River (Coetzee, 1969). It is probably present throughout most of the riverine areas as well as parts of the north-eastern section of the Park but is overlooked because of its small size.

Family Chrysochloridae (Golden Moles)

Eremitalpa granti namibensis Bauer and Niethammer. Namib Desert Golden Mole.

Bauer and Niethammer (1959) first described this subspecies from owl pellet remains. Further collections of this species were carried out by Meester (1962) at Natab; Haacke and Prozesky (1963), Koch (1964), Goode (1965) and Holm and Rautenbach (1967) at Gobabeb; Koch (1966) at Soutrivier. Holm (1969) records *E. granti namibensis* from the Kuiseb River bed.

This animal is endemic to the Namib Desert and seems to be relatively abundant in the sand-dune areas south of the Kuiseb River. It is a creature of nocturnal activity leaving clearly defined surface tunnels and feeding trails.

Coetzee (1969) mentions the possibility of there being another subspecies of golden mole occurring in the area, on the basis of different tracks and a description by Van der Merwe (1964) from two localities: Rooibank and the Swakop River bed. As far as the author is aware this has not been confirmed.

Order CHIROPTERA

Family Pteropodidae (Fruit Bats)

Eidolon helvum (Kerr) Straw-coloured Fruit Bat.

A fruit-bat of the more tropical parts of central Africa which migrates over much of the African Continent, *E. helvum* has been recorded for the Park by Du Preez (1968). This record is of a dead animal taken from the branches of an acacia at Gobabeb.

Family Nycteridae (Slit-faced Bats)

Nycteris thebaica damarensis (Peters) Egyptian Slit-faced Bat.

A fairly widespread species in the Park which seems to occur wherever there are suitable roosting sites.

Often seen hawking insects over the water-holes in the Kuiseb during the early evening. This species has also been observed roosting in the office buildings at Gobabeb.

Family Rhinolophidae (Horseshoe Bats)

Rhinolophus darlingi damarensis (Roberts) Darling's Horseshoe Bat.

This species is recorded by Meester (1962) from a specimen collected at Natab on the course of the Kuiseb River. It is probably far more widely distributed in the Park but because of the inaccessibility of many of the potential roosts this and other members of the *Chiroptera* are probably overlooked.

Family Molossidae (Free-tailed Bats)

Sauromys petrophilus erongensis (Roberts) Flat-headed free-tailed Bat.

Previously it was thought that the range of this species was restricted to the plateau of the Erongo Mountains, Omaruru District, (Roberts, 1951). This species was recorded from Gobabeb by Roer (1971).

Family Vespertilionidae (Simple-nosed Bats)

Eptesicus hottentotus pallidior (A. Smith) Long-tailed House Bat.

A common bat in the Park especially along the course of the Kuiseb and Swakop Rivers. This species roosts in crevices in mica schist and granite banks. Two specimens were found roosting in a hole in a silt bank at Homeb.

Eptesicus zuluensis (Roberts) Aloe Bat.

One specimen has been collected at Gobabeb (Meester, 1962). There are no further records of this species in the Park.

Miniopterus schreibersi natalensis (A. Smith) Schreiber's Bat

This species has been recorded for the Namib Desert Park at Sandwich Harbour and Rooibank, (Meester, 1962). The latter is just outside the Park on the Kuiseb River but this species almost certainly extends further up the water course. Specimens were also observed at Sandwich Harbour in 1973.

Laephotis namibensis (Setzer) Long-eared Bat.

This species of bat was first described from two specimens collected at Gobabeb in 1963 (Setzer, 1971). *L. namibensis* is distinguished from *L. wintoni* by being paler in colour, having larger ears and larger tragus.

Order PRIMATES

Family Cercopithecidae (Baboons and Monkeys)

Papio ursinus (Kerr) Chacma Baboon.

Alexander (1838) records *P. ursinus* from the lower Kuiseb Canyon. This species appears to be restricted to the Kuiseb and Swakop Rivers and the more vegetated areas of the north-eastern parts of the Park. Baboons have been observed at Salem and Riet on the Swakop River; and Hebron, Groot Tinkas and Arachadmab.

There are at least three troops of baboons below the Kuiseb River-bridge and one group above this point. Towards the end of 1973 the three lower troops totaled approximately seventy four individuals, while the Hebron troop consisted of thirty-eight animals.

Order CARNIVORA

Family Canidae (Foxes, Jackals, Dogs)

Otocyon megalotis (Desmarest) Bat-eared Fox.

A fairly widespread species in the eastern half of the Park east of 15° 15' E, but nowhere common. This is a species associated with open plains and has not been recorded from the hilly regions of the Park. They are normally observed in pairs or small family groups and several such groups are commonly present in the Amichab, Hotsas, Ganab area.

Vulpes chama (A. Smith) Cape Fox.

The distribution range of this species partially includes that of *O. megalotis* but seems to extend further west, one animal having been observed at 23° 09' S; 14° 44' E. It seems to favour the drier gravel plains and sandy washes of the central and western areas of the Park. Two animals were observed at Natab in the Kuiseb River. There is one record of this species from the sand-dune area but it is very probable that it crosses the Kuiseb River more frequently than observations would indicate.

Canis mesomelas (Schreber) Black-backed Jackal.

It is possible that there are two subspecies occurring in the Park. *C. m. arenarum* is found throughout South West Africa but *C. m. achrotes* is recognised for the Namib coastal belt. The majority of animals occurring at Sandwich Harbour appear to be paler than those further inland but specimens will have to be collected to confirm this. The distribution of *C. m. achrotes* is given by Meester (1964) as coastal Namib Desert.

This jackal is widespread in the Park and fairly common in some areas. It is found in all the habitat types but seem to prefer the riverine, coastal and grassveld habitats. Animals seem to run singly or in pairs, but along the coast small groups are observed

probably because food is more abundant there. Shortridge (1938) mentions that *C. m. achrotes* is said to forage with parties of *Hyaena brunnea* along the seashore in search of dead fish and other marine refuse.

Family Mustelidae (Polecat, Weasels, Honey Badger, Otters).

Ictonyx striatus (Perry) Striped Polecat.

This species seems to have no marked habitat preferences and is to be found throughout the Park. Coetzee (1969) records it from all the main habitat types for the Namib. Shortridge (1934) includes the coastal Namib and the Kuiseb River in his distribution of this species.

Mellivora capensis (Schreber) Honey Badger.

As with the last mentioned species, *M. capensis* is a very adaptable animal and can be found in most habitats. Coetzee (1969) records this species from riverine growths and the pro-Namib. It is unlikely that it will be found living on the open gravel plains or in the coastal dune-system. Martin (1958) records this animal from the Kuiseb Canyon. The author is not aware of any recent records of *M. capensis*.

Family Viverridae (Civets, Genets, Mongoose, Suricates)

Genetta genetta (Thunberg) Small-spotted Genet.

Restricted to the Kuiseb and Swakop Rivers with only one record outside these areas, (22° 46' S; 15° 38' E). *G. genetta* is fairly common in the vicinity of Gobabeb where they sometimes scavenge from the dustbins. It is possible that this species is widespread in the north-eastern areas of the Park as Smithers (1968) mentions that *G. genetta* is apparently independent of water. It is very likely that this species occurs at Sandwich Harbour.

Herpestes sanguineus (Rüppell) Slender Mongoose.

There are only two definite records for this species, one from Huduob on the Kuiseb River, the other near Hebron in the north-eastern section of the Park.

Helogale parvula (Sundevall) Dwarf Mongoose.

This species has been recorded from several areas in the Namib Desert Park but seems to be restricted to the Kuiseb and Swakop Rivers and to a few granite outcrops in the eastern parts of the Park.

Cynictis penicillata (G. Cuvier) Yellow Mongoose.

Although Roberts recognises a number of subspecies, Lundholm (1955) states that these are all synonyms of the nominate race. This is probably the most common mongoose in the Park occurring widely over the eastern gravel plains. It is often seen in association with *Suricata suricatta* and *Xerus inauris* and has been observed using the same holes.

Suricata suricatta (Erxleben) Suricate.

Meester (1964) and Cabral (1971) recognise *S. s. majoriae* Bradfield, the type being from Saltpan,

ten miles north of Swakopmund. *S. suricatta* is found in even the most arid regions of the flat gravel plains of the Park. The most westerly record to date is the Swartbank range. It has also been observed in several of the small grass/thornveld pockets in the north-eastern Park.

Family Otariidae (Sea Lions).

Arctocephalus pusillus (Schreber) Cape Fur Seal.

This seal occurs fairly commonly at Sandwich Harbour.

Family Protelidae (Aardwolf).

Proteles cristatus (Sparrman) Aardwolf.

This species seems to be mainly restricted to the open plains in the Zebra Pan, Ganab, Hotsas and Anachankirab areas although there are several records for the fairly hilly country around Hebron. Coetzee (1969) records this species as occasionally utilizing riverine growths but thus far the Aardwolf has not been observed in this habitat in the Namib Desert Park, perhaps as a result of it being a species which is not often seen.

Family Hyaenidae (Hyaenas).

Hyaena brunnea (Thunberg) Brown Hyaena.

H. brunnea is probably widespread in the Park but scarce. There are two definite records for the Kuiseb River and one for the coastal area where there is an abundance of food. It is possible that this species is more abundant along the coast; animals moving up the two main water courses and then dispersing onto the gravel plains. *Crocuta crocuta* on the other hand is most abundant in the eastern part of the Park and tends to move down the water courses towards the coast. The Brown Hyaena ranges over great distances at night searching for food; see Roberts (1951). These records are of single animals.

Crocuta crocuta (Erxleben) Spotted Hyaena.

This species is more abundant than *H. brunnea* but is nowhere common. As was mentioned this animal seems to occur chiefly in the eastern areas of the Park, especially on the open plains and in the surrounding hills. Several lairs are known in the Kuiseb Canyon and fresh tracks are often found. *C. crocuta* has been recorded from Gobabeb on several occasions. The most westerly record is of a single animal recorded to the east of the Swartbank range. Those animals occurring in the riverine areas tend to run singly or in pairs whereas those on the plains often seem to run in groups of three or four individuals.

Family Felidae (Cats).

Felis lybica (Desmarest) African Wild Cat.

This species favours areas of riverine vegetation and rocky outcrops but has also been recorded for the thornveld regions of the north-east. The known dens are all in small caves in the rocky banks of the Kuiseb River. One animal has been seen at Anachankirab but none have been observed on the rocky

outcrops on the central gravel plains. By far the commonest small Felid in the Namib Desert Park, this species is probably more common than observations would suggest.

Felis nigripes (Burchell). Black-footed Cat.

The author can find no definite record of this species occurring in the Park although Coetzee (1969) records B. de la Bat as having recorded *F. nigripes* from the rocky banks of dry water courses in the plains to the north of the Anachankirab hills. Smithers (1968) notes that this species seems to be restricted to the arid open plains of the central and south-west Kalahari in Botswana. Probably very scarce in the Namib Desert Park as it is throughout most of its range.

Felis caracal (Schreber) Caracal.

Meester (1964) and Smithers (1968) both recognise the subspecies *F. c. damarensis* (Roberts). Its distribution is generally recognised as being to the east of Damaraland — but possibly occurring over the whole of South West Africa. Coetzee (1969) notes that this species is known from the Erongo Mountains and Kaokoveld. There are only two known records of this species in the Park; one animal was observed by E. Robinson (pers. comm.) at the southwest entrance to the Park and one animal was observed between the hills near Ganab.

Panthera pardus (Linnaeus) Leopard.

Roberts (1951) recognises the subspecies *shortridgei* Pocock, for the whole of the dry west, from South West Africa to the Limpopo valley. However, Ellerman (1953) places all Southern African leopards in the nominate race.

Coetzee (1969) notes that *P. pardus* penetrates the pro-Namib from the escarpment, especially along the canyons and mountain chains. They are known to occur in both the Kuiseb and Swakop Canyons and in the mountainous areas of the north-east. E. Korkie (pers. comm.) observed one animal sitting in close proximity to a troop of baboons in the Huduob area of the Kuiseb River. Tracks and scats are occasionally found in the Kuiseb River-bed and two sets of fresh tracks have been found in the upper areas of the Swakop River. There is one definite record for the Hebron area in the north-east. A small number of these animals were released in the Kuiseb River in the vicinity of Homeb in 1972 (J. E. W. Dixon, pers. comm.).

Acinonyx jubatus (Schreber) Cheetah.

This species is very scarce in the Namib Desert Park and is rarely seen. One animal has been observed in the Ganab area (M. K. Seely, pers. comm.). A small number of cheetah were released in the Blutkoppie region in 1972, (J. E. W. Dixon, pers. comm.). There is one record for Sandwich Harbour, a single animal seen on the dune edge (J. E. W. Dixon, pers. comm.).

A. jubatus is a wanderer and animals may occasionally move into the Park from other areas.

Order TUBULIDENTATA

Family Orycteropodidae (Antbears).

Orycteropus afer albicaudus (Rothschild) Antbear.*O. a. albicaudus* is the recognised subspecies occurring in South West Africa.

This species is fairly widespread in the eastern areas of the Park; especially in the Ganab, Tinkas Flats and the thornveld regions of the north-east. Most of the records are of fresh tracks and burrow activity, however three definite sight records exist. One animal was seen in the Tinkas Flats area moving around during the early afternoon, shortly after torrential rains, (January, 1974), while the other two animals were observed at Arachadmab. As stated by Coetzee (1969) their distribution is probably dependant on termite populations.

Order HYRACOIDAE

Family Procaviidae (Dassies)

Procavia capensis (Pallas) Cape Dassie.

Restricted to the rocky areas of the Park, the most westerly record is of a small temporary colony in the Kuiseb River at approximately 15° 05' E. Below Huduob in the Kuiseb River, the colonies seem to move about considerably; however above this point the groups seem to be more stable. All colonies encountered seem to be small. *P. capensis* also occurs along the course of the Swakop River and on the rocky outcrops of the north-east. Animals have also been recorded at the Tumasberg, Amichab, Heinrichsberg, Langer Heinrich and Anachankirab.

Coetzee (1969) notes that this species was numerous in certain outcrops the year following good rains, however after two years the animals had completely disappeared. The author has noted large deposits of faeces of this species in two localities where there were no signs of recent activity.

Order PERISSODACTYLA

Family Rhinocerotidae (Rhinoceros)

Diceros bicornis (Linnaeus) Black Rhinoceros.

Alexander (1838) records the following for this species in the Kuiseb River; 'The remains of a dead rhinoceros were found near us, which seemed to have been surprised by the sudden rising of the river and drowned.' The brothers Van Reenen and Pieter Pienaar explored and hunted in the Swakop River in 1791, or thereabouts, and came across large numbers of elephant and rhinoceros (in Levinson, 1961). Coetzee (1969) records B. de la Bat as having informed him of a well preserved rhinoceros horn that was excavated near Tinkas water-hole. This species used to occur naturally, along the courses of the Kuiseb and Swakop Rivers; it has since been re-introduced to the Kuiseb River.

Family Equidae (Zebras)

Equus zebra hartmannae (Matchie) Hartmann's Mountain zebra.

Zebra are found in most of the available habitats, especially the rocky hills, the open plains, and the

Kuiseb and Swakop Canyons. *E. z. hartmannae* has also been observed in the inter-dune valleys to the south of the Kuiseb River. This species seems to be subject to a certain amount of local movement; now partially restricted by the boundary fences. The population of this species in the Namib Desert Park is estimated at approximately one thousand animals by Joubert (1972).

Order ARTIODACTYLA

Family Suidae (Pigs)

Phacochoeros aethiopicus shortridgei (St. Ledger) Warthog.

Ellermann (1953) and Haltenorth (1963) recognise *shortridgei* for South West Africa.

This species seems to be restricted to the Kuiseb and Swakop Rivers and to the thornveld regions of the north-east. It is nowhere common and has only been observed running singly and in pairs.

Family Bovidae (Antelopes, Buffalo)

Raphicerus campestris (Zukowsky) Steenbok.

In South West Africa this species is generally recognised as *R. c. steinhardtii*.

This antelope occurs in both the Swakop and Kuiseb Rivers but is especially common in the latter. They also seem to be fairly common in parts of the north-east, and have been recorded from Anachankirab, Zebra Pan, Tumasberg, Ganab, Arachadmab and Groot Tinkas.

Oreotragus oreotragus (Zimmermann) Klipspringer.

This species is confined to rocky outcrops and to the Kuiseb and Swakop Canyons. Klipspringer are often encountered in the scattered rocky hills situated out on the gravel plains, but these animals are probably subject to a certain amount of local movement. The most westerly record for this species is 15° 06' E in the Kuiseb River. It is most commonly encountered in the Kuiseb where it leaves the canyon walls to feed on the riverine vegetation. They are usually observed in groups of two to four animals.

Antidorcas marsupialis (Zimmermann) Springbok.

Recognised as *A. m. angolensis* Blaine, in South West Africa, this species is fairly widespread in the Park especially in the eastern areas. Herds of more than fifteen animals have not been observed west of Anachankirab but smaller groups and single animals have been noted as far west as the Hamilton Range.

It is very possible that occasionally animals move as far as Sandwich Harbour. The larger herds are usually observed in the Ganab, Hotsas and Tinkas Flats areas, although groups of up to seventy animals have been noted in the Anachankirab and Zebra Pan regions. Two rams have been seen twelve miles south of the Kuiseb River in one of the dune-valleys. The author estimates the present springbok population in the Park to be between 1 500–2 000 individuals.

Oryx gazelle (Linnaeus) Gemsbok.

This species is widely distributed in the Park, moving about a great deal. During the dry season fairly large numbers are to be seen in the Kuiseb River area and on the plains to the east of Anachankirab, at the onset of the rains they tend to disperse. Most groups number between five and thirty animals, however one herd of one hundred and eighty-three individuals were observed at Arachadmab. Lone animals are frequently encountered throughout the area. The author estimates the gemsbok population at approximately 2 000–2 500 animals.

Tragelaphus strepsiceros (Pallas) Kudu.

This large antelope is restricted to the two main water courses and the eastern thornveld regions. The majority of the population is situated to the east of 15° 25' E. Animals have been recorded at Blutkoppie and Groot Tinkas. Van der Spuy (1962) states that kudu occur in the following habitat types in the Namib; Namib sand-dune veld, Namib rubbleveld and the Namib Desert margin. It is unlikely that there is a permanent kudu population in the first mentioned habitat in the Namib Desert Park; animals may move into the area following fresh vegetation growth. It is nowhere common and the population is probably in the vicinity of one hundred individuals. However, kudu are subject to a great deal of local movement and it is difficult to give an accurate estimate of numbers.

Order LAGOMORPHA

Family Leporidae (Hares)

Lepus capensis (Linnaeus) Cape Hare.

L. c. narranus Thomas is still a recognised form for the Namib Desert and its original distribution was given as the Namib Desert by Roberts (1951). Specimens were described from Rooibank in the Kuiseb (type). Swakopmund, Karub and Okombahe on the Omaruru River. This is a very pale form and is probably the subspecies found in the Namib Desert Park as a whole.

This species is found commonly on the open gravel plains and in the thornveld regions of the north-east; in addition to Coetzee's (1969) locality records they have been found to be fairly plentiful in the sand-dune areas south of the Kuiseb River. Shortridge (1938) gives the distribution of *L. c. narranus* as being 'the low scrub in the beds of sand rivers in the Namib Desert'. He also states that *L. capensis* avoids hills and the narrow inter-hill valleys. However, this species has been observed in the small inter-hill valleys in the north-east.

Pronolagus crassicaudatus (I. Geoffrey) Red Rock Hare.

The subspecific status of this species is at present uncertain. Restricted to the hills and rocky outcrops of the Park, it is probably more widespread than present records indicate. *P. crassicaudatus* seems to be fairly common in parts of the Kuiseb Canyon and also in the rocky areas of the northeast.

Order RODENTIA

Family Hystricidae (Porcupine)

Hystrix africae australis (Peters) Porcupine.

A not uncommon species in the Park but one that is infrequently encountered. The most westerly record for this species in the Park is at 22° 48' S; 14° 46' E. This species is present in both the main water courses, the north-eastern areas and some of the granite outcrops on the gravel plains. Quills and tracks are often the only indication of their presence.

Family Petromyidae (Rock Rats)

Petromus typicus (A. Smith) Rock Rat.

There are a number of forms described for this species in the Namib Desert but it is unlikely that these are all valid. This is a common animal in the rocky areas of the Park and it is often encountered.

Family Sciuridae (Squirrels)

Xerus inauris (Zimmermann) Ground Squirrel.

A common species of the plains and the inter-hill valleys but has also been observed in the rocky areas of the north-east on a number of occasions. So far it has not been found west of 15° 20' E. *X. inauris* is subject to a great deal of local movement and this is especially noticeable in the Ganab area. During and, for several months, after the rainy season large numbers of this species move out onto the open plains, but as the vegetation begins to die off they move back into the inter-hill valleys. Most of the colonies on the plains seem to number from between five and fifteen animals whereas those occurring in the rocky hills rarely number more than five individuals.

Family Pedetidae (Spring Hares)

Pedetes capensis damarensis (Roberts) Spring Hare.

The subspecies *damarensis* is recognised for Damaland. At present there are only three records of this species in the Park; one from the Ganab area, a second from the sandy/thornveld of the north-east while the third animal was observed in the Anachankirab area (E. Robinson, pers. comm.). The animals were all observed in the vicinity of wide, sandy washes.

Family Muscardinidae (Dormouse)

Graphiurus platyops (Thomas) Rock Dormouse.

Thus far there are only two records of this species in the Park; one animal was collected in the Anachankirab range and the skeletal remains of another specimen were discovered at Heinrichsberg. Both records were taken in very broken granite slides. This species probably occurs throughout the rocky areas of the Namib Desert Park. Coetzee (1969) does not include this species in his list of the mammals of the Namib Desert.

Family Muridae (Rats and Mice)

Aethomys namaquensis (A. Smith) Namaqua Rock Rat.

Two subspecies are present in the Usakos District close to the northern boundary of the Namib Desert Park. They are *A. n. siccatus* and *A. n. namibensis*; although the subspecific status of animals occurring in the Park is uncertain. Meester (1963) considers *A. n. namibensis* to be a synonym of *A. n. siccatus*.

This species appears to be fairly common in areas of suitable habitat, that is rocky hillsides. It has not been collected west of 15° 30' E.

Thallomys paedulus (de Winton) Black-tailed Tree Rat.

Roberts (1951) gives the distribution of *T. p. damarensis* (*T. damarensis damarensis*) as the western edge of Damaraland, bordering the Namib. As noted by Coetsee (1969), this species seems to be restricted to *Acacia giraffae* trees in the Namib. To date this rodent has only been found in the Kuiseb River but is probably to be found in the Swakop River and also the larger washes that are well wooded. The untidy nests of this species are quite easily spotted, and are especially common between Gobabeb and Huduob.

Rhabdomys pumilio (Sparman) Four-striped Mouse.

The subspecific status of this species is still uncertain, however in the Namib Desert Park the following are known: *R. p. bechuanae*, *R. p. namibensis* and *R. p. namaquensis*. The original collection areas are Rooibank on the Kuiseb River, Swakopmund and Gobabeb respectively.

Rhabdomys pumilio occurs widely in the Park and has been found in all the major water courses, the northern fringe of the sand-dune area (amongst *Acanthosicyos horrida*), as well as in some of the grass/thornveld areas of the north-east.

Petromyscus collinus (Thomas and Hinton) Pygmy Rock Mouse.

Roberts recognised a sub-species for the Namib, namely *namibensis*. However, as with most other rodents, the subspecific status is uncertain and in need of revision.

The Pygmy Rock Mouse is common in the rocky areas of the Park and occurs in practically all areas where there is suitable habitat. They have been caught as far west as 14° 50' E, while they appear to be more numerous to the east of 15° 15' E.

Desmodillus auricularis (A. Smith) Namaqua Gerbil.

This species occurs widely on the gravel plains as well as in the grassveld regions of the north-east.

Specimens have also been recorded in the Kuiseb and Swakop Rivers.

Gerbillus paebe (A. Smith) Lesser Gerbil.

This species is fairly widespread but seems to be most abundant in the coastal sand-dunes at Sandwich Harbour, the dune area south of the Kuiseb and on the gravel plains in the vicinity of Gobabeb.

Gerbillus vallinus (Thomas) Brush-tailed Gerbil.

Coetsee (1969) records this species as occurring in the sand-dunes as well as on the gravel plains in the Namib. It is most frequently encountered on the gravel plains in the Anachankirab area.

Gerbillus setzeri Schlitter.

This is a new species recently described by Schlitter (1972), and animals of this species were collected from the following areas within the Park; Gobabeb, Swartbank, Tumasberg and Hope Mine.

Gerbillus tytonis (Bauer and Niethammer).

Bauer and Niethammer (1959) originally described this animal as a sub-species of *G. vallinus*, however Davis (1968) has raised it to specific status. The only specimens known to the author are those collected in the sand-dunes at Gobabeb.

The exotics *Mus musculus* and *Rattus rattus* have both been recorded from Sandwich Harbour.

ORDER CETACIA

Family Delphinidae (Dolphins)

The two members of this family recorded at Sandwich Harbour were identified from skeletal material found on sand-banks.

They are *Delphinus delphis* (Linnaeus), European Dolphin and *Cephalorhynchus heavisidei* (Gray), Heaviside's Dolphin.

SUMMARY

The distribution of the mammalian fauna of the Namib Desert Park is considered. Distribution data and habitat information are given and selected taxonomic notes are included. The distribution data is presented on maps of the Park.

ACKNOWLEDGEMENTS

The author wishes to thank all who contributed in the compiling of the distribution data presented especially present and past members of D.E.R.U. who compile game counts and make distribution notes as the opportunity arises. Mr. E. R. Robinson and Dr. M. K. Seely of the *Desert Ecological Research Unit* are sincerely thanked for critically reading the manuscript. Dr. Peter Best is thanked for identifying the dolphin remains.

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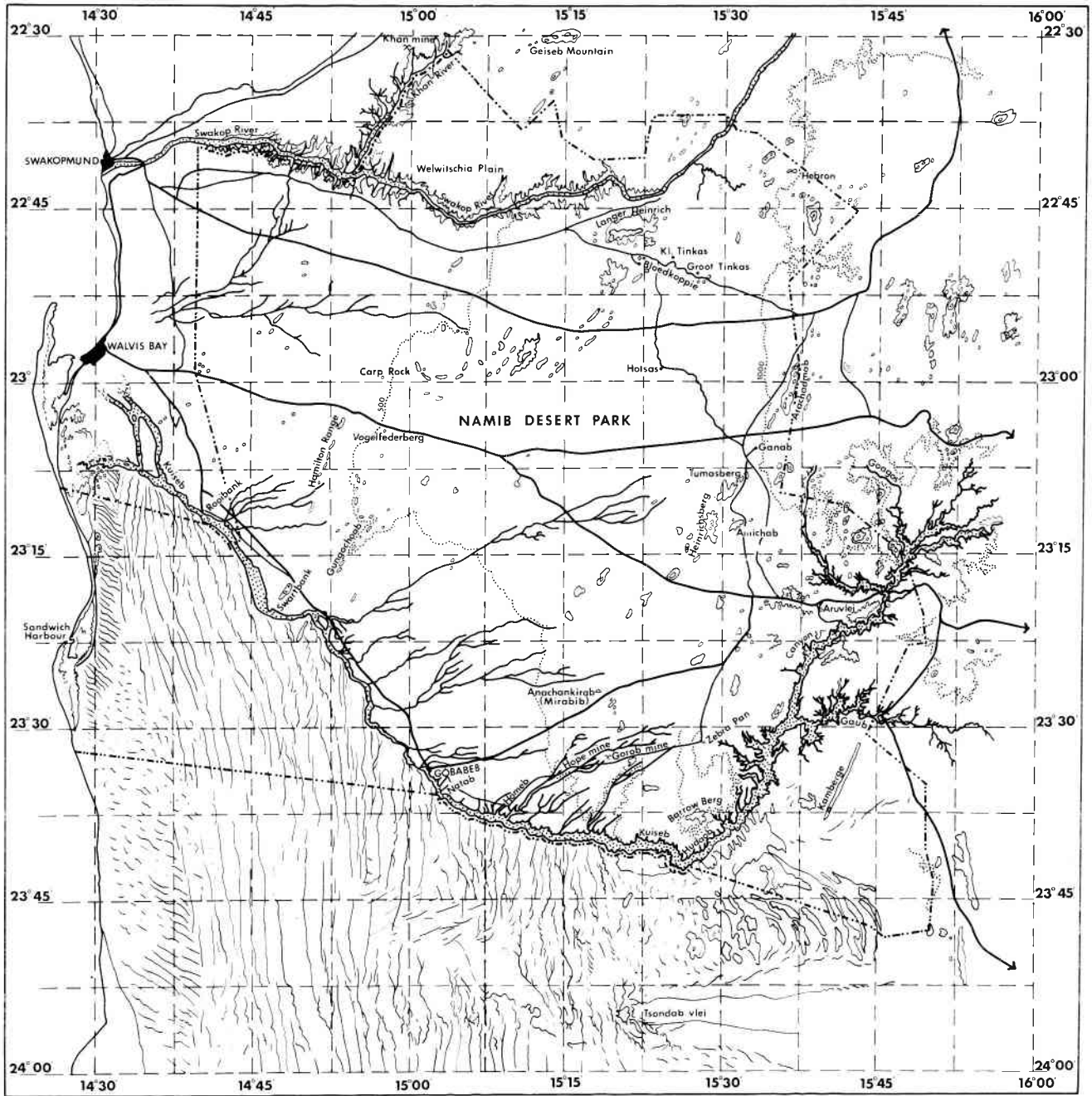


Figure 1. Map of the Namib Desert Park.

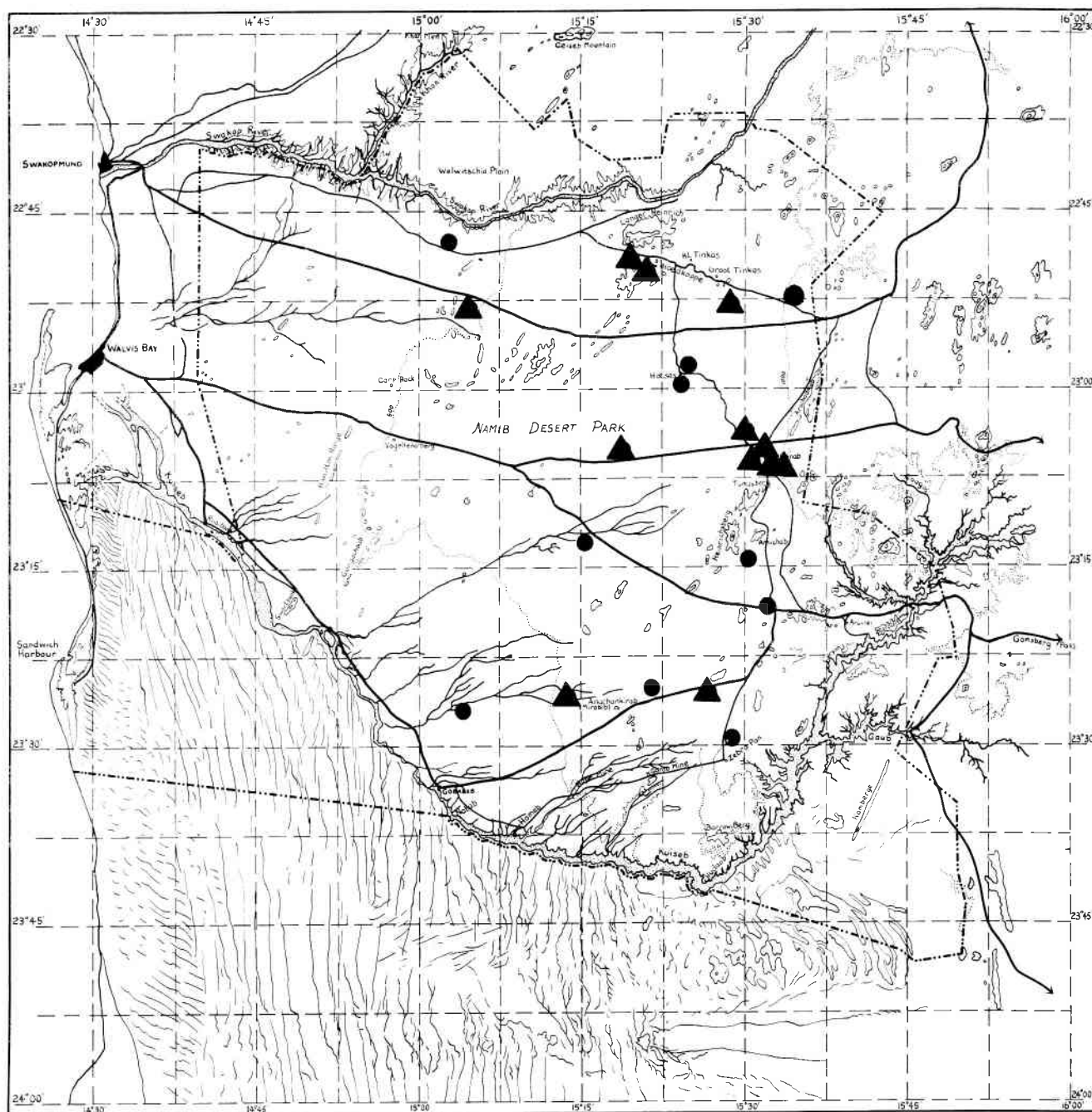


Figure 2. *Macroscelides proboscideus*

● Authors sight records ■ Sight records, other than those of the author ▲ Collected specimens

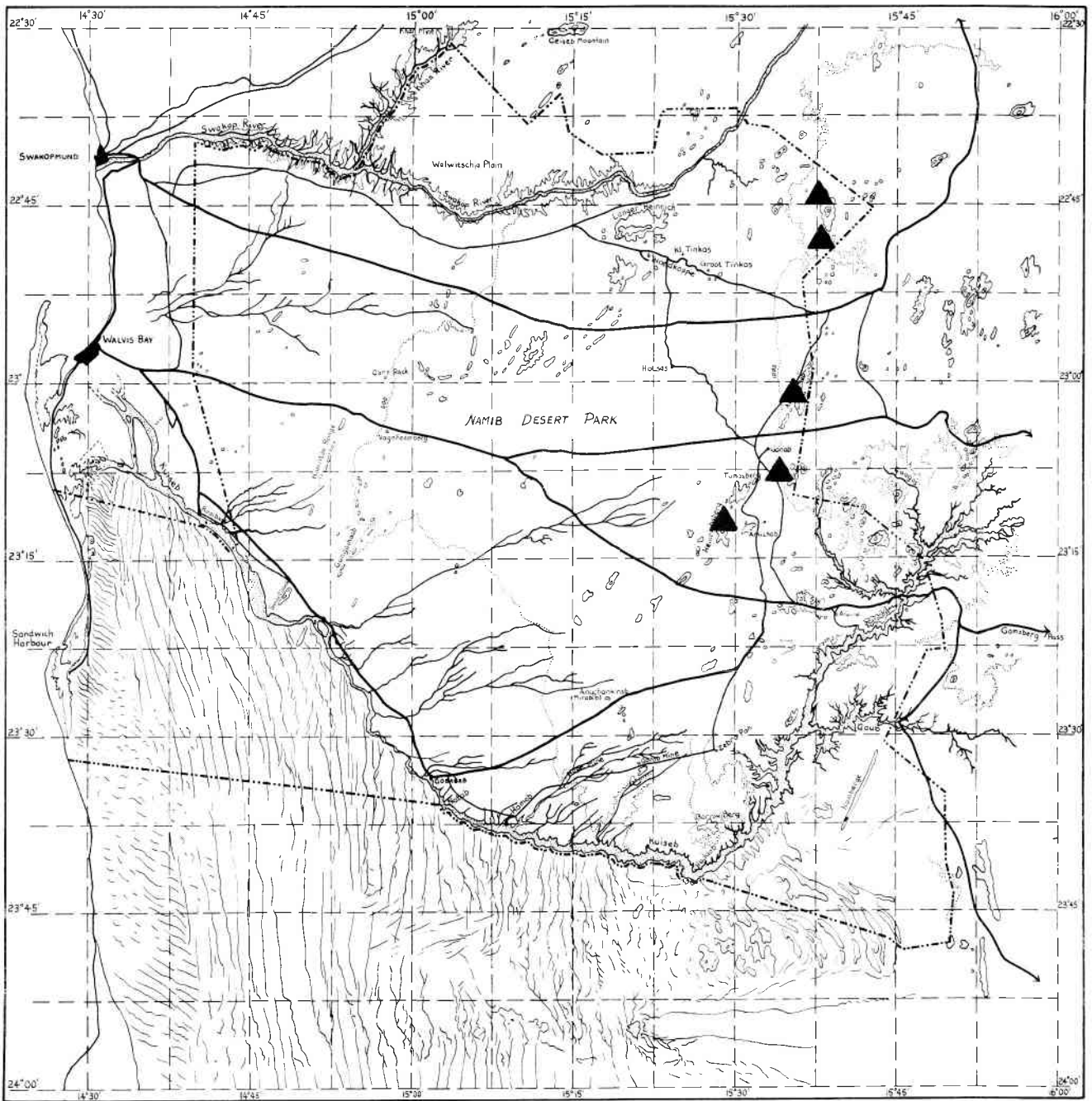


Figure 3. *Elephantulus rupestris*

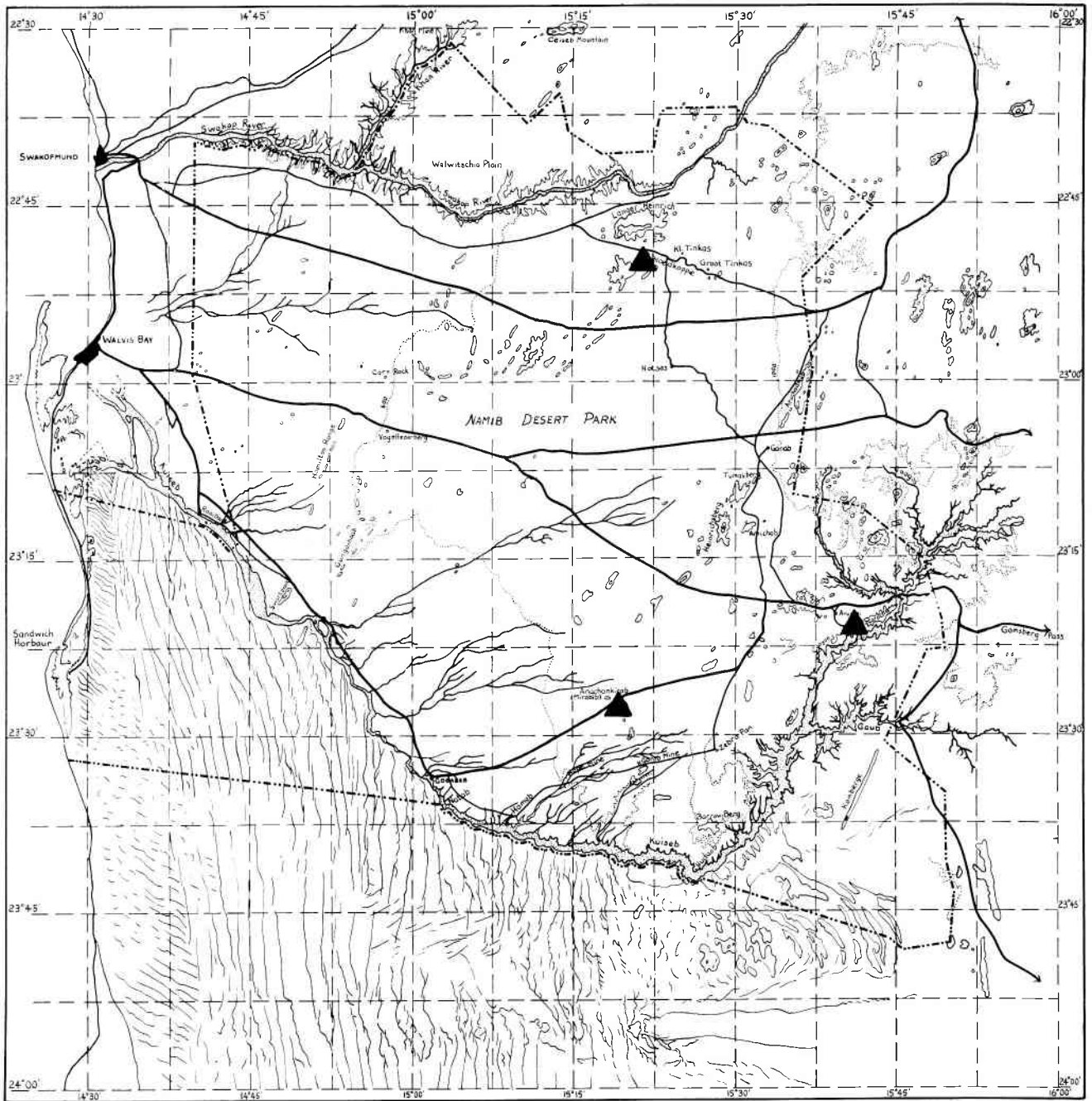


Figure 4. *Elephantulus intufi*

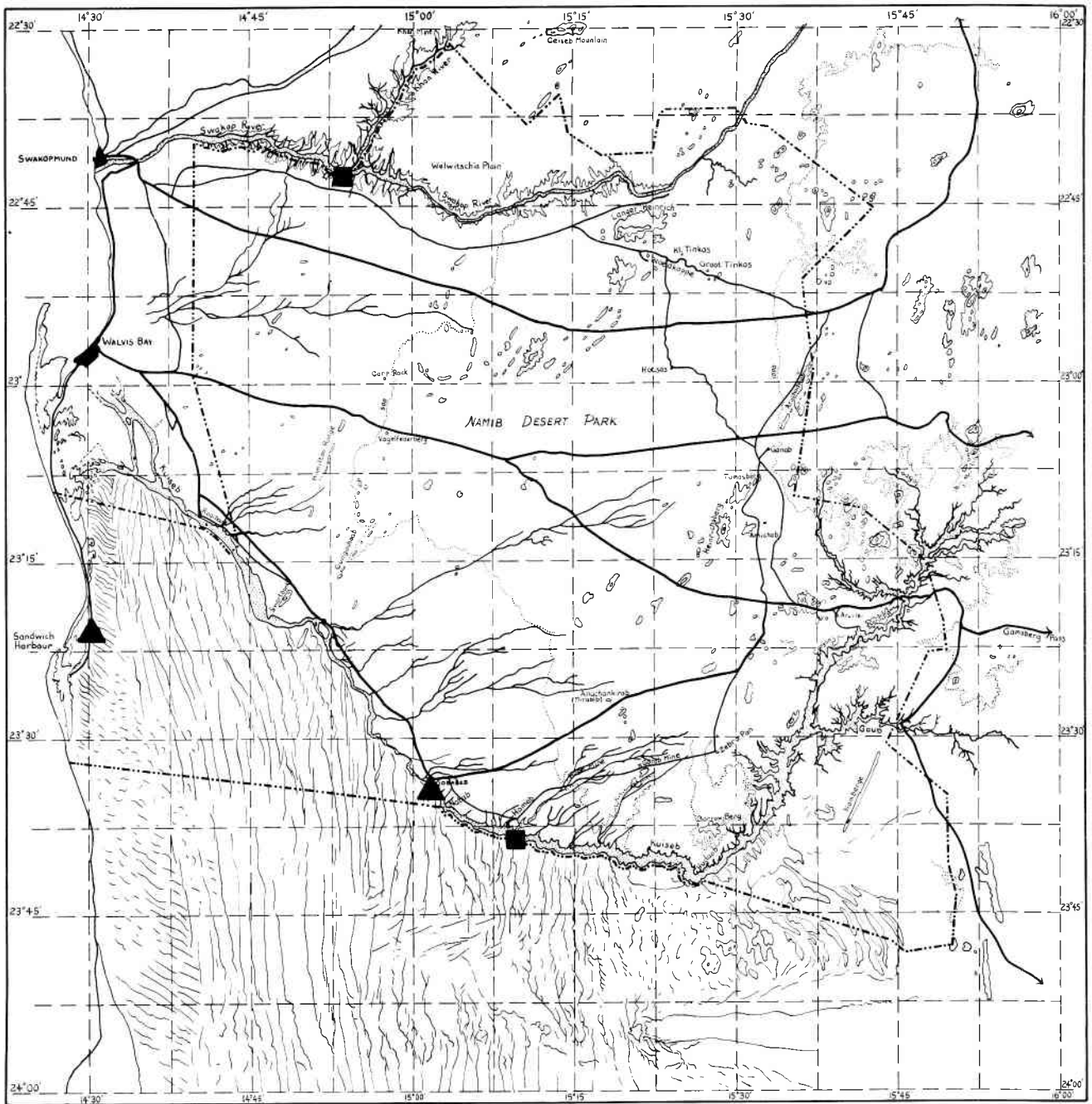


Figure 5. *Crocidura cyanea*

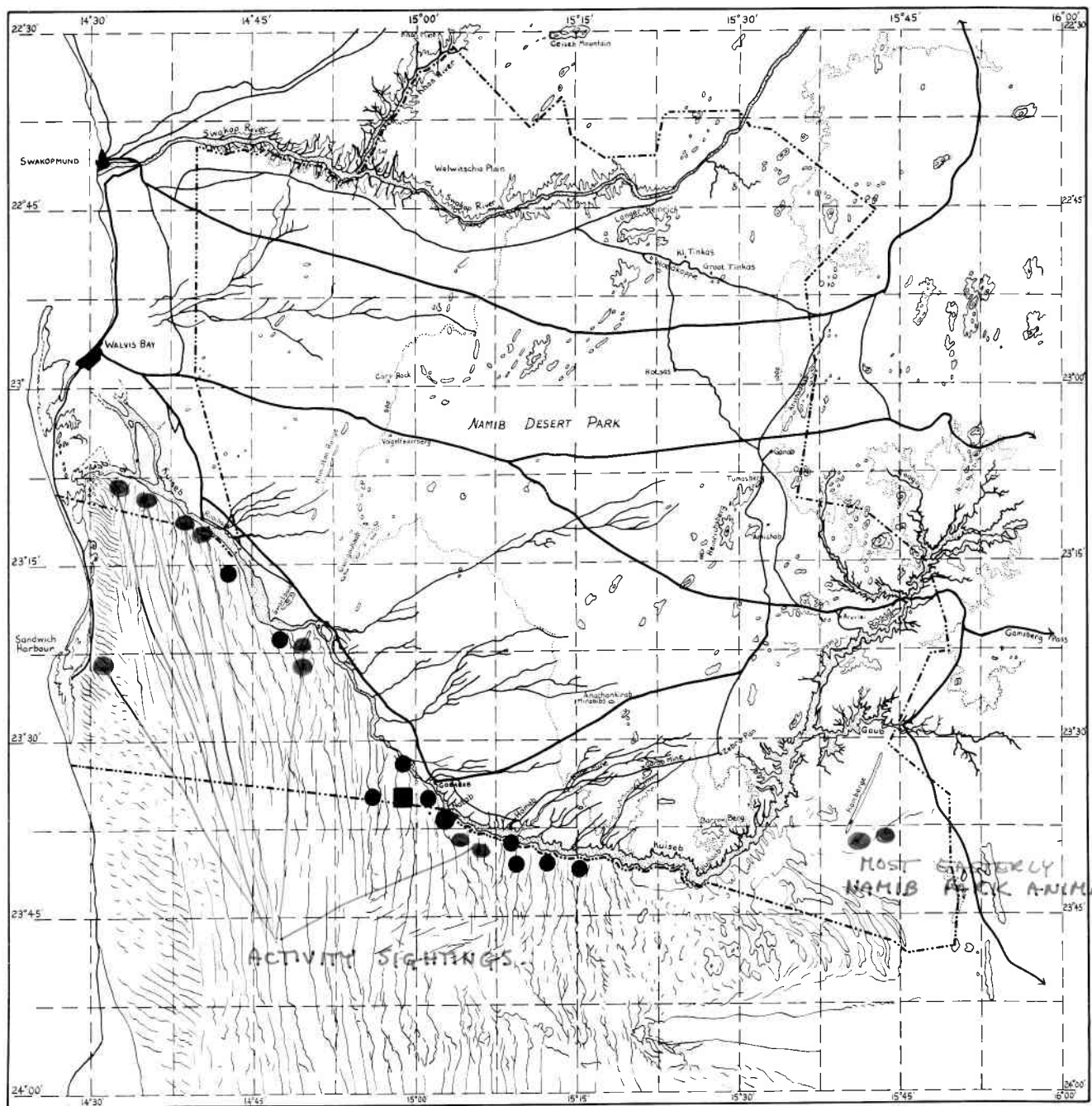


Figure 6. *Eremitalpa granti namibensis*

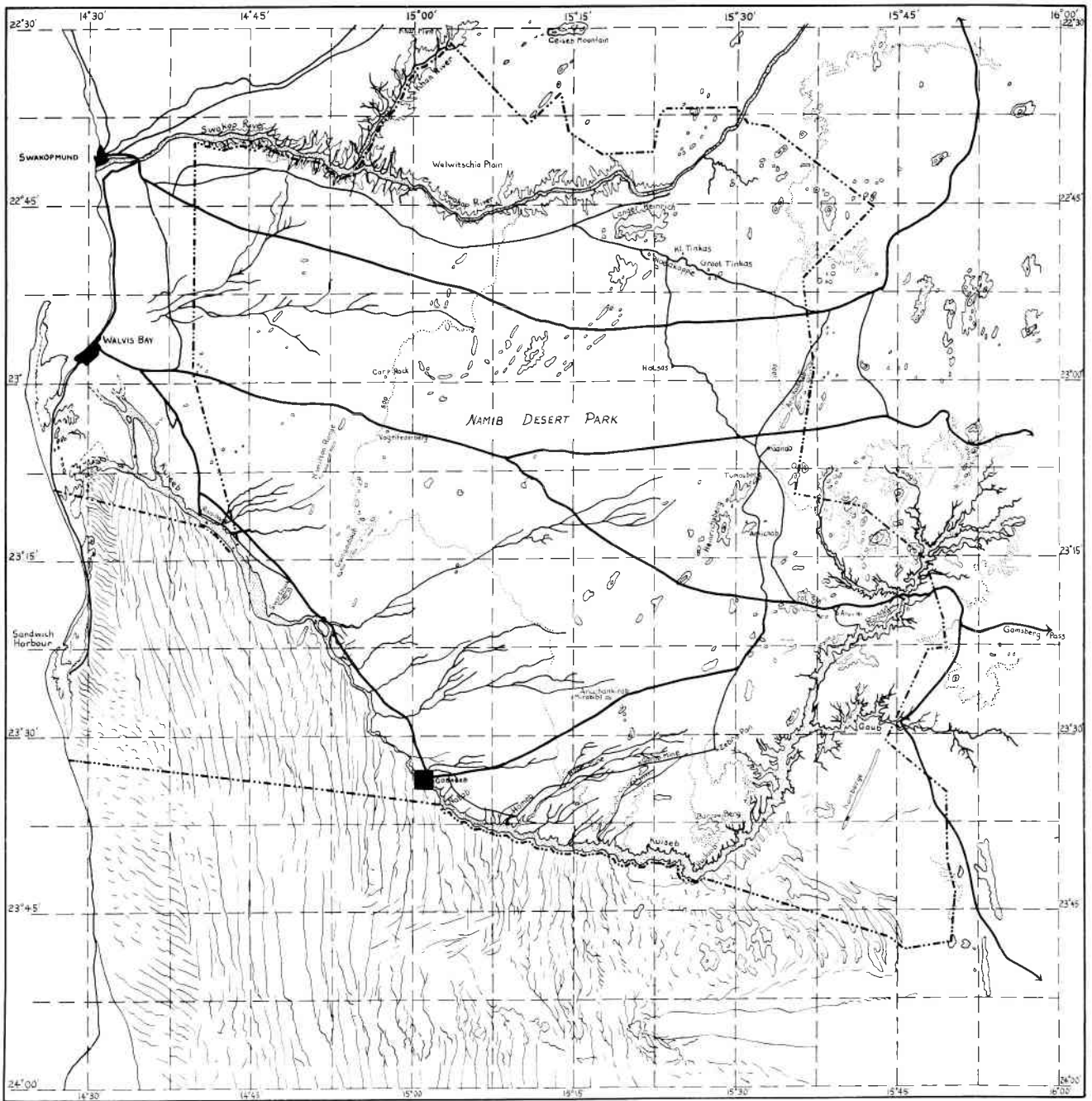


Figure 7. *Eidolon helvum*

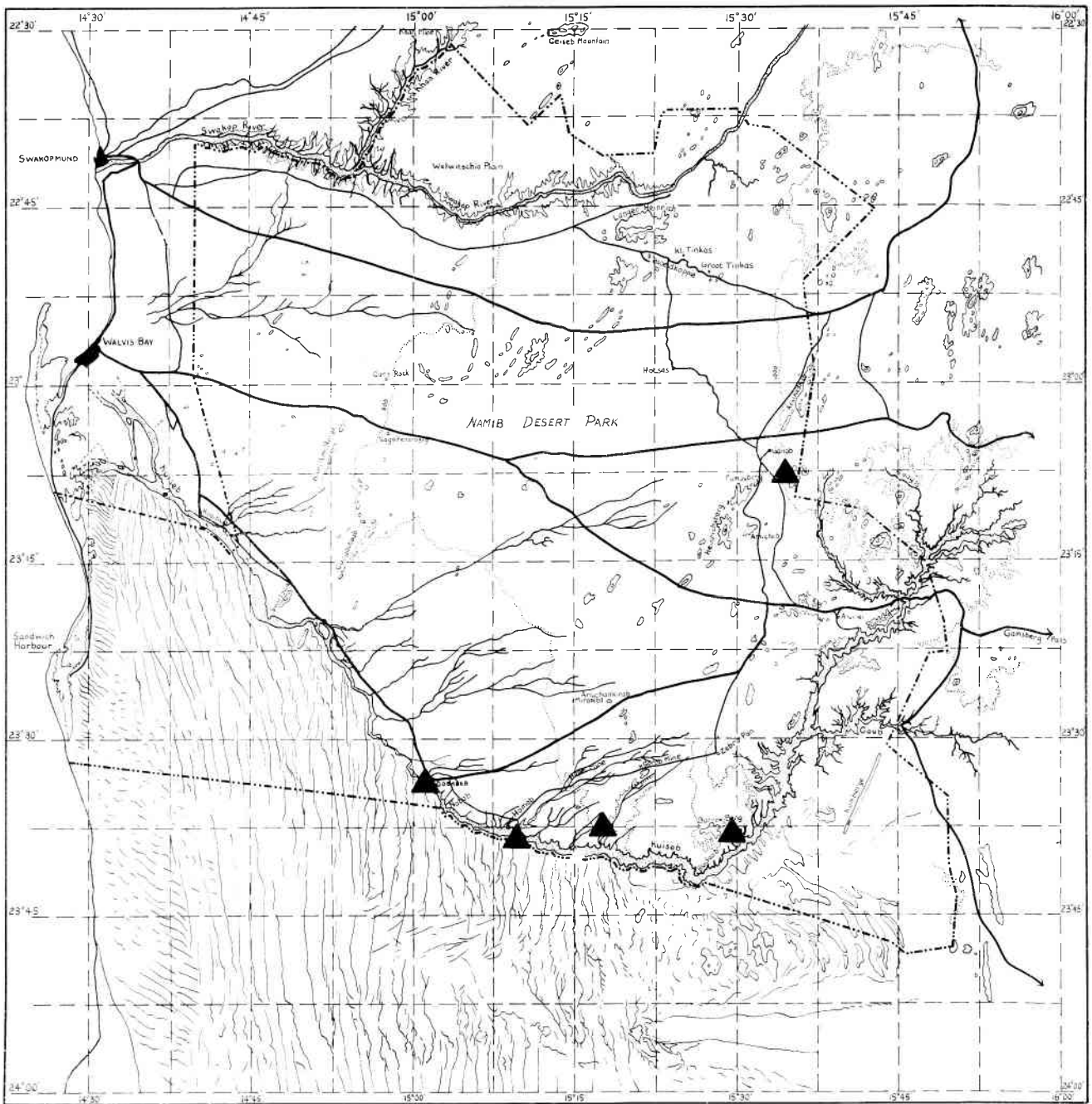


Figure 8. *Nycteris thebaica damarensis*

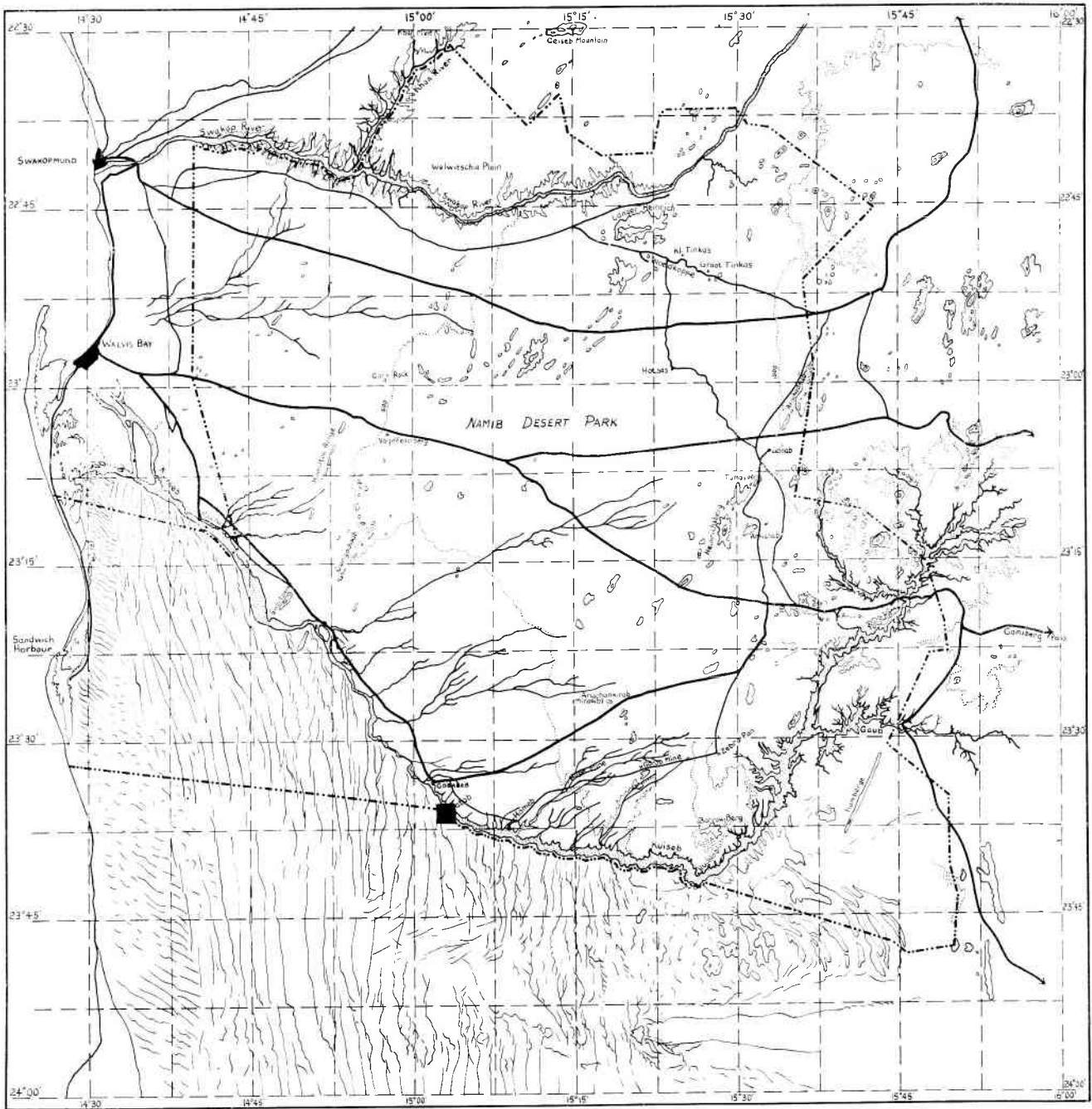


Figure 9. *Rhinolophus darlingi damarensis*

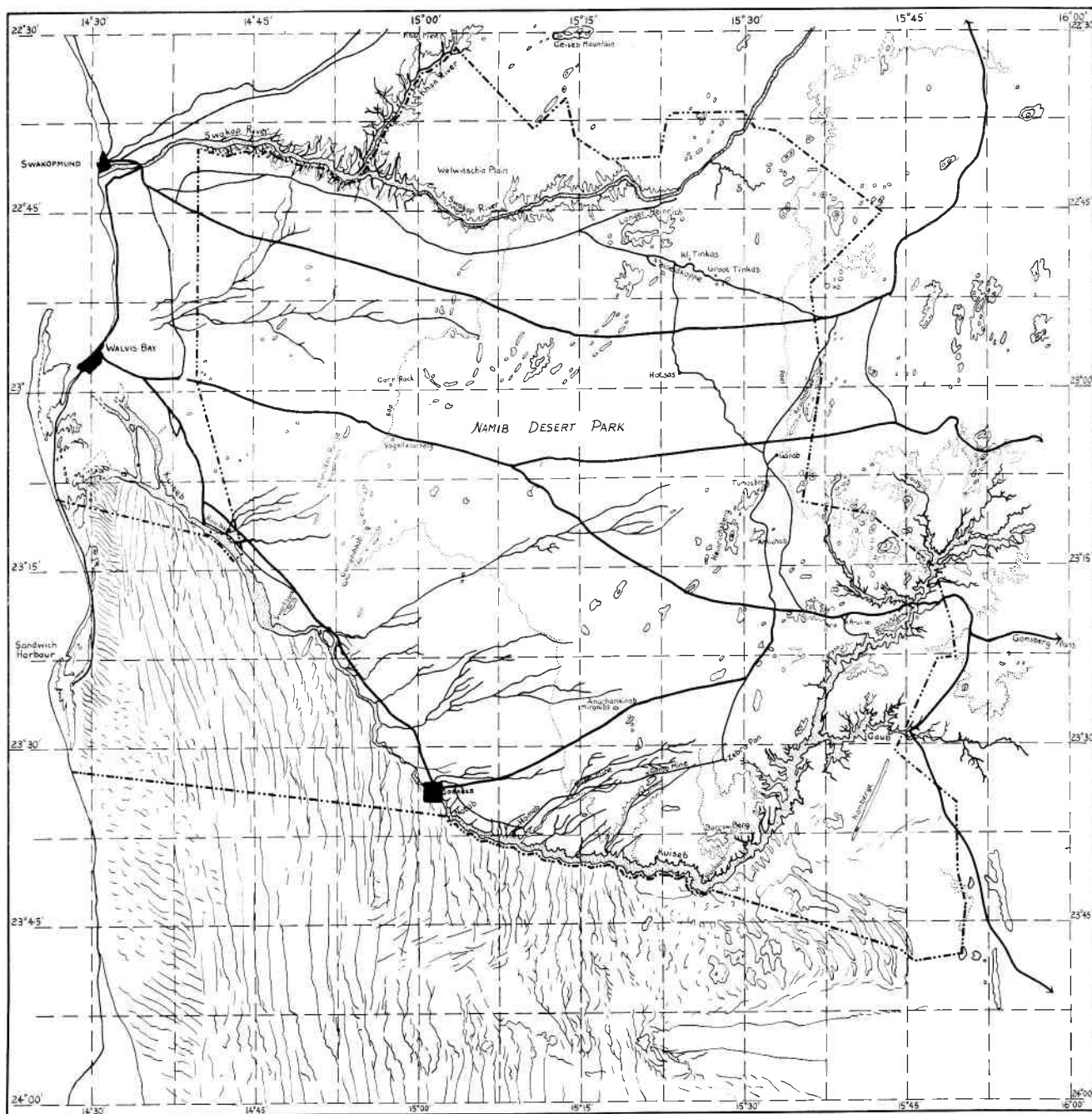


Figure 10. *Sauromys petrophilus erongensis*

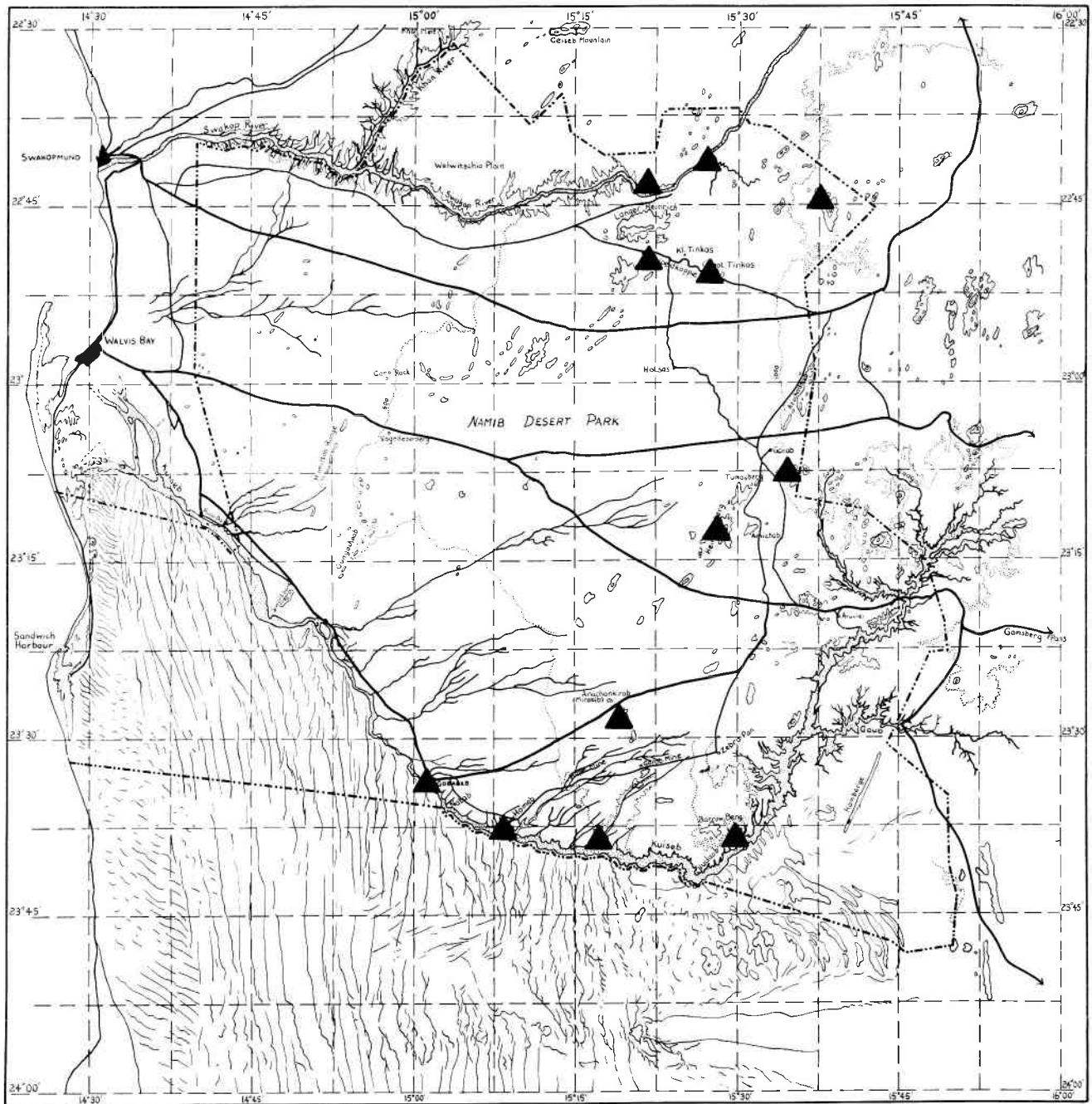


Figure 11. *Eptesicus hottentotus pallidior*

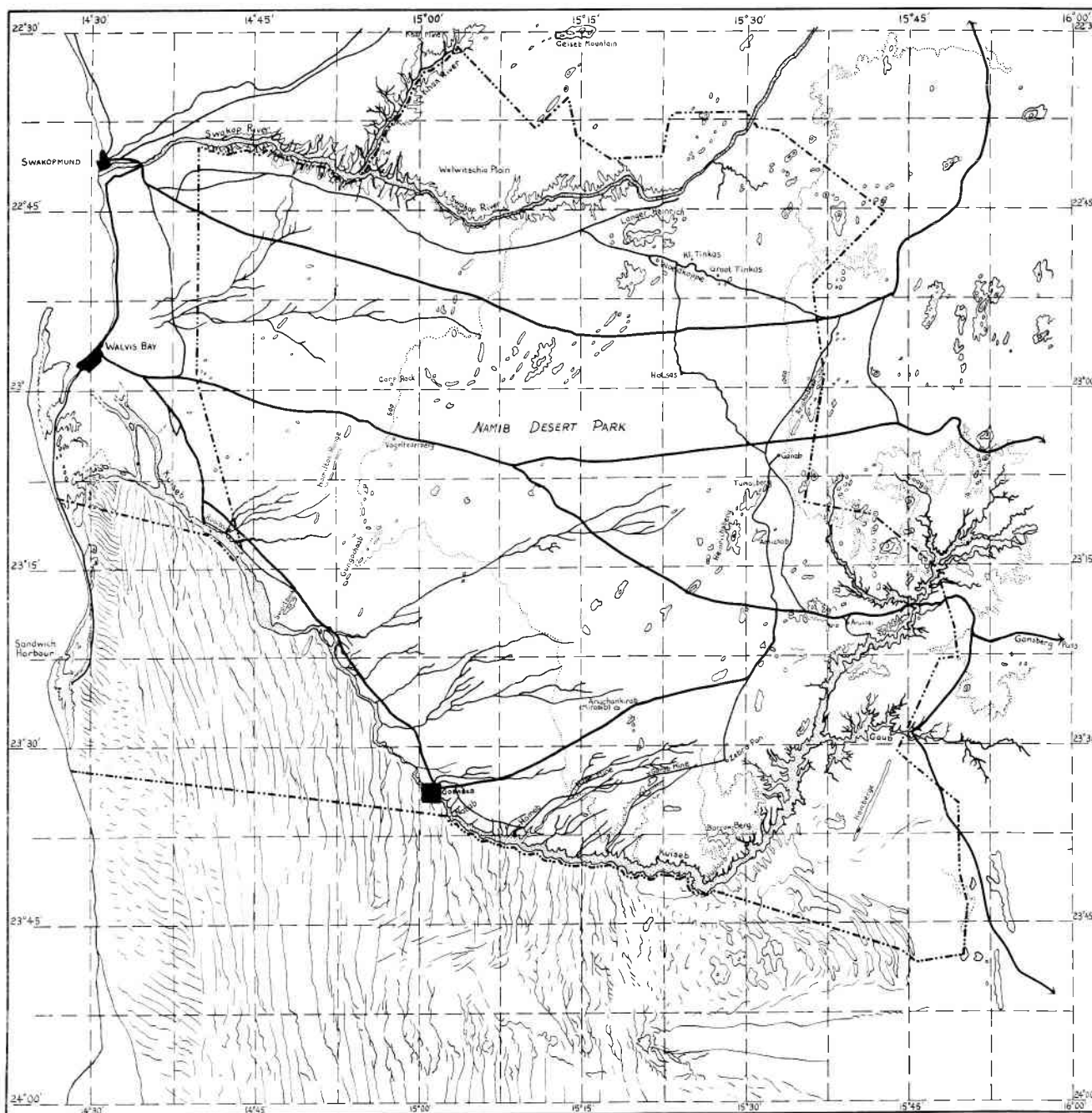


Figure 12. *Eptesicus zuluensis*

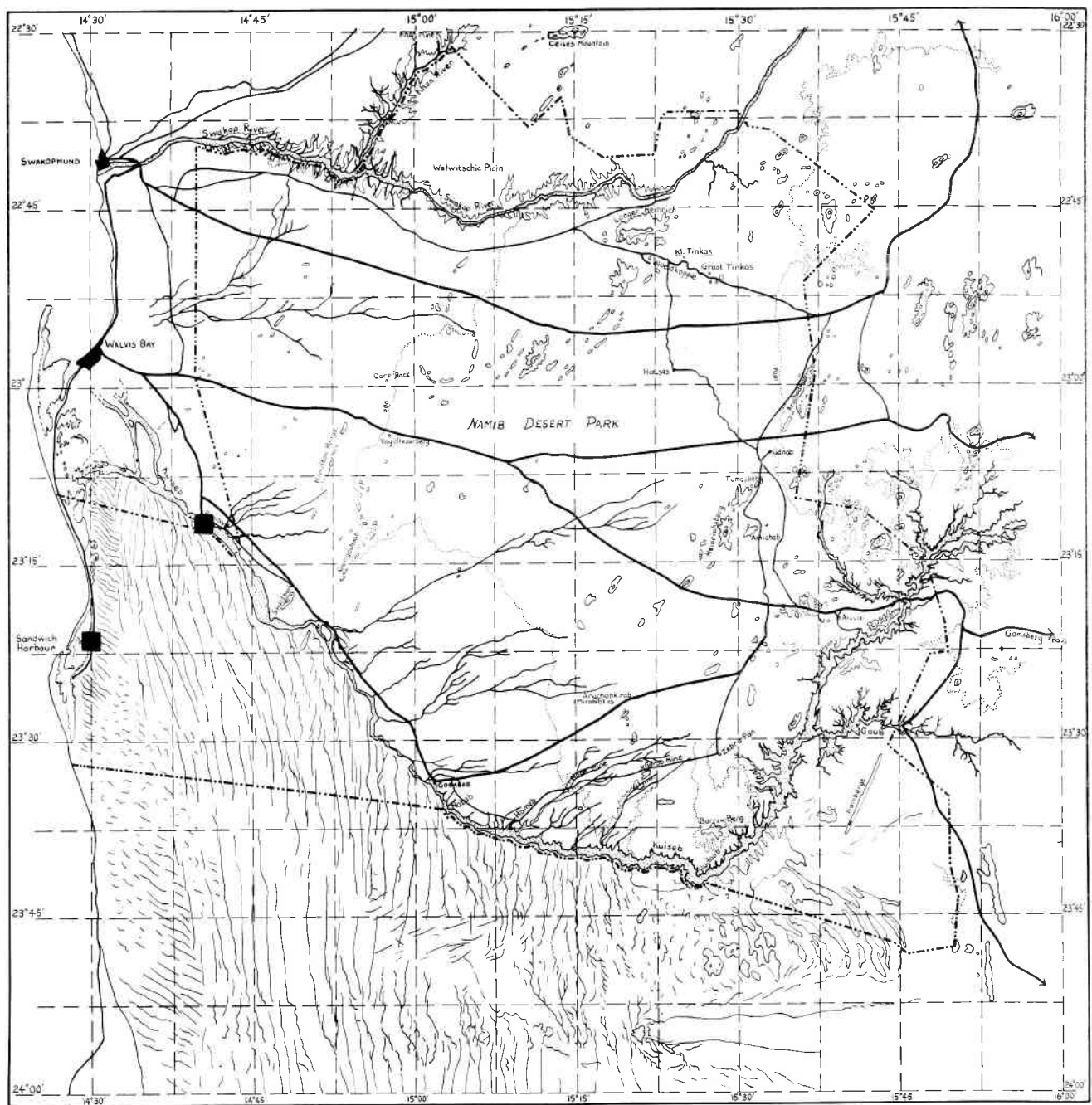


Figure 13. *Miniopterus schreibersi natalensis*

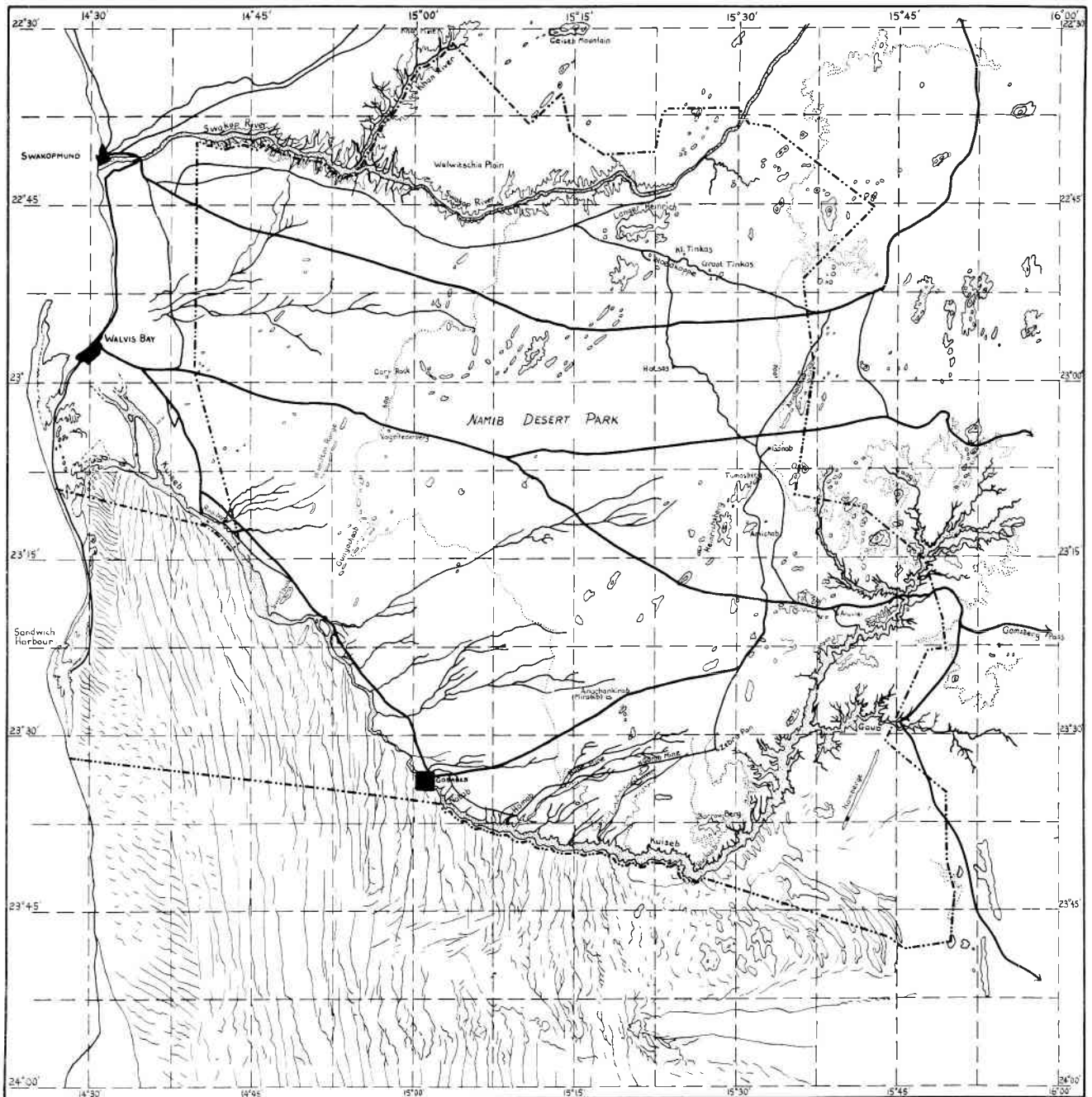


Figure 14. *Laephotis namibensis*

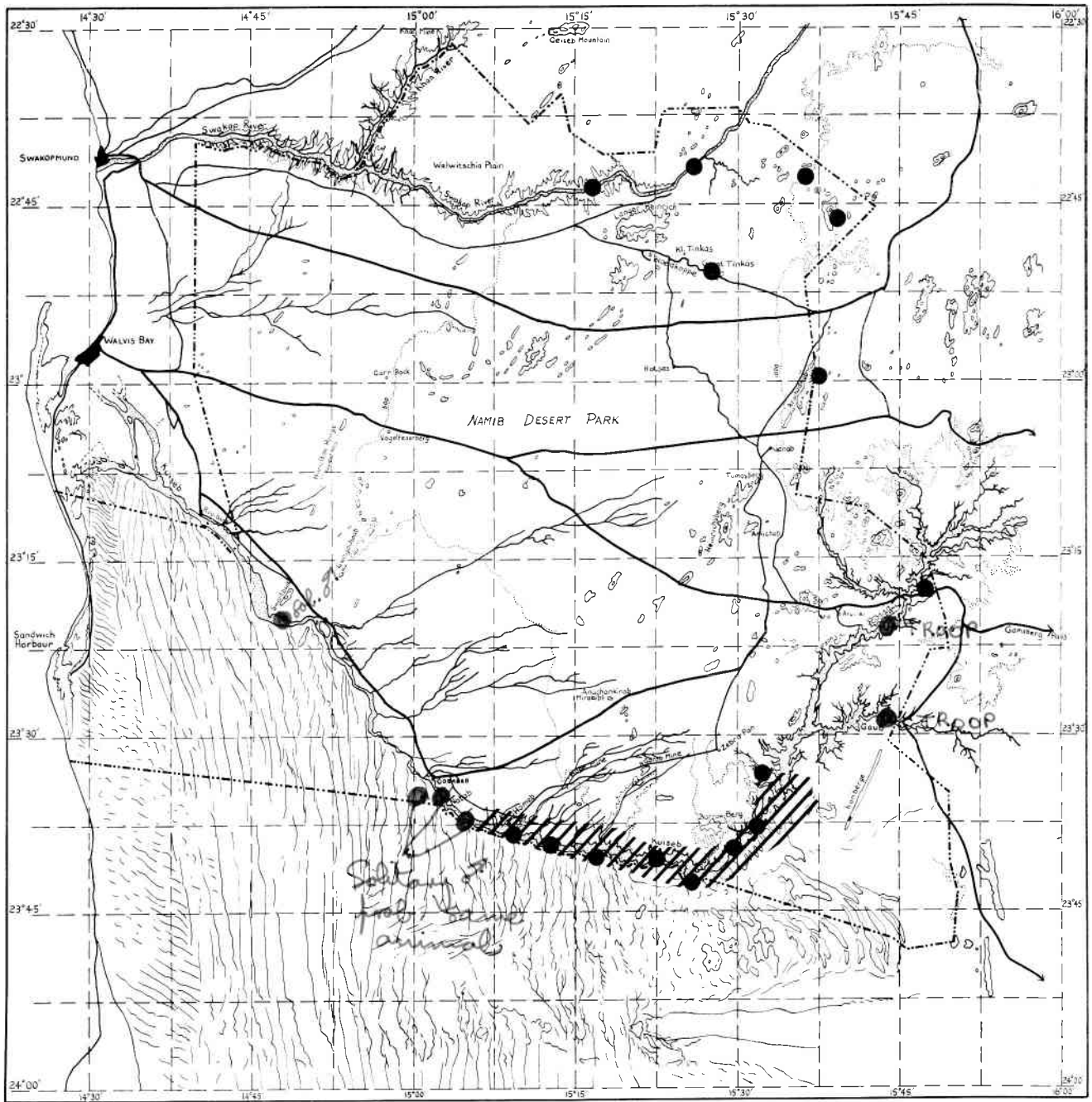


Figure 15: *Papio ursinus*

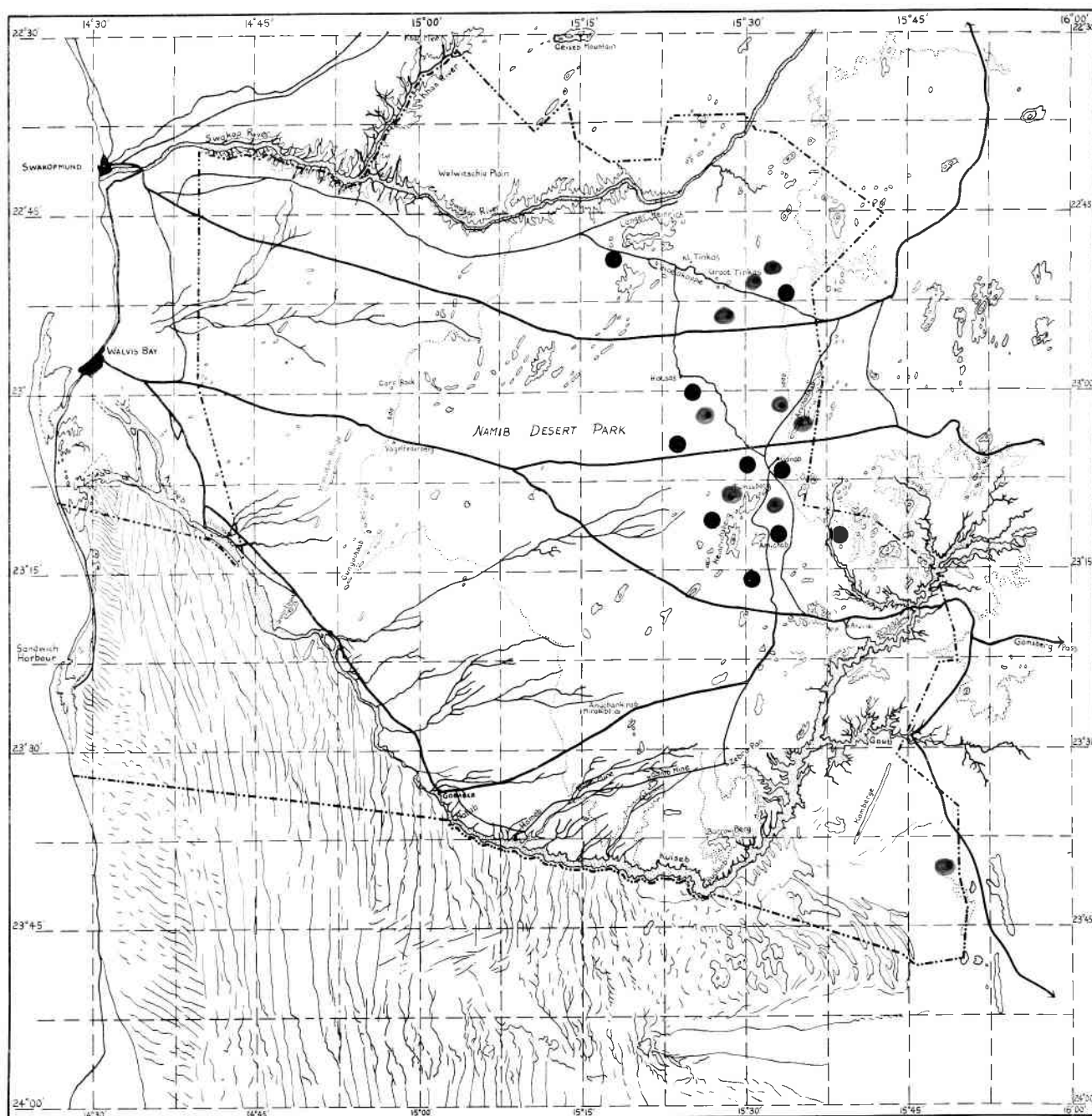


Figure 16. *Otocyon megalotis*

ALL NEW RECORDS WITHIN
EXPECTED RANGE.

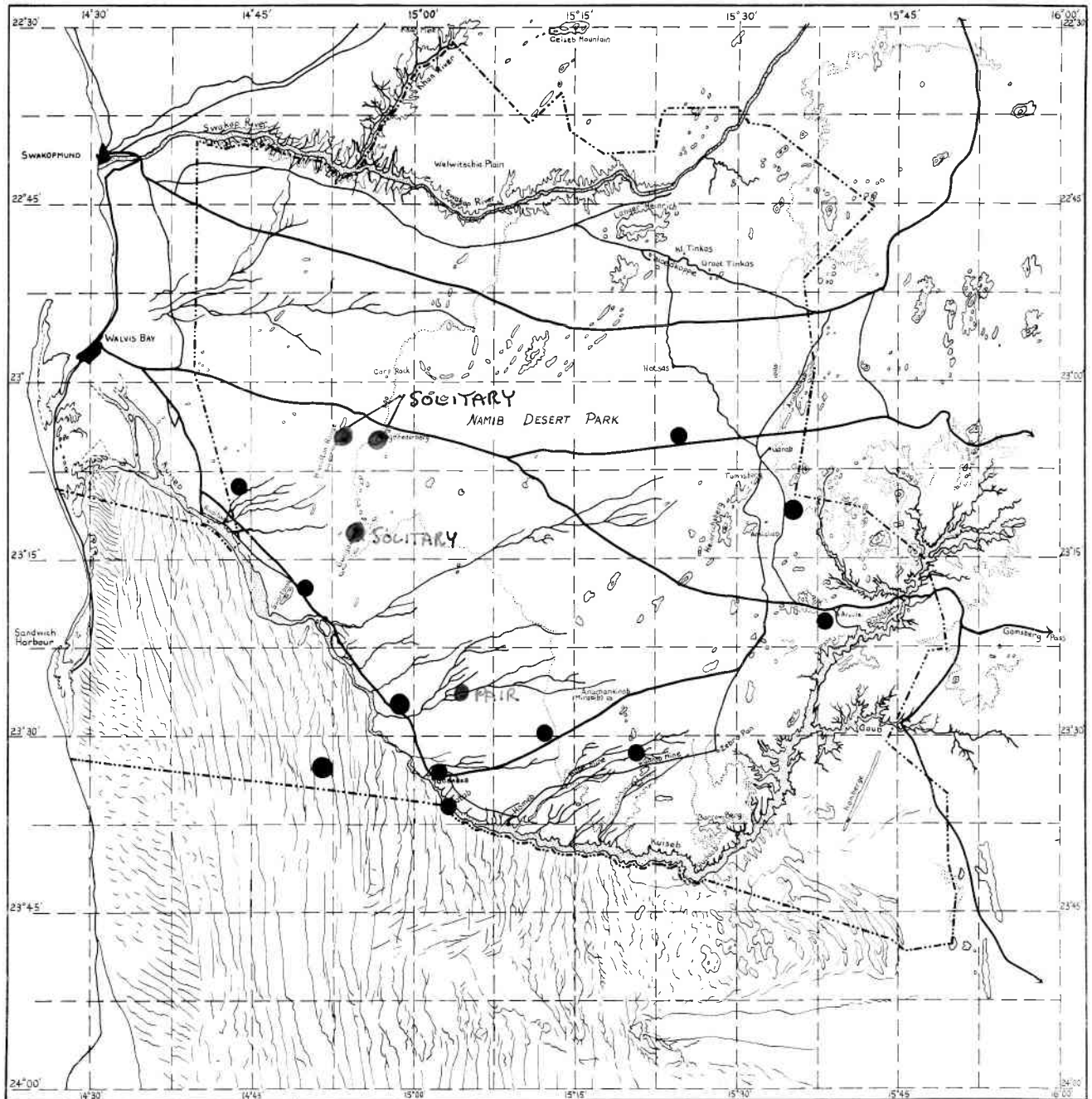


Figure 17. *Vulpes chama*

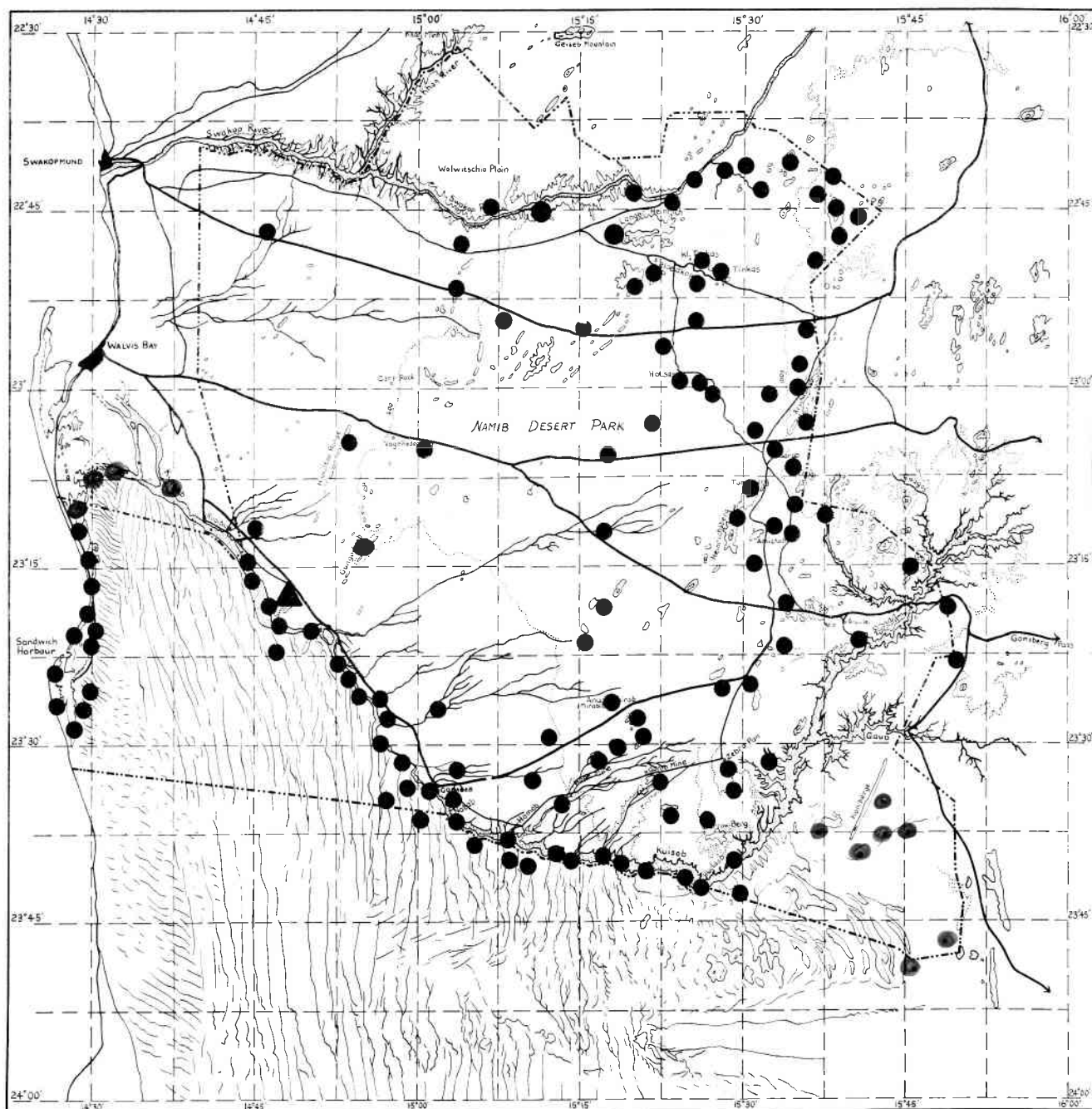


Figure 18. *Canis mesomelas*

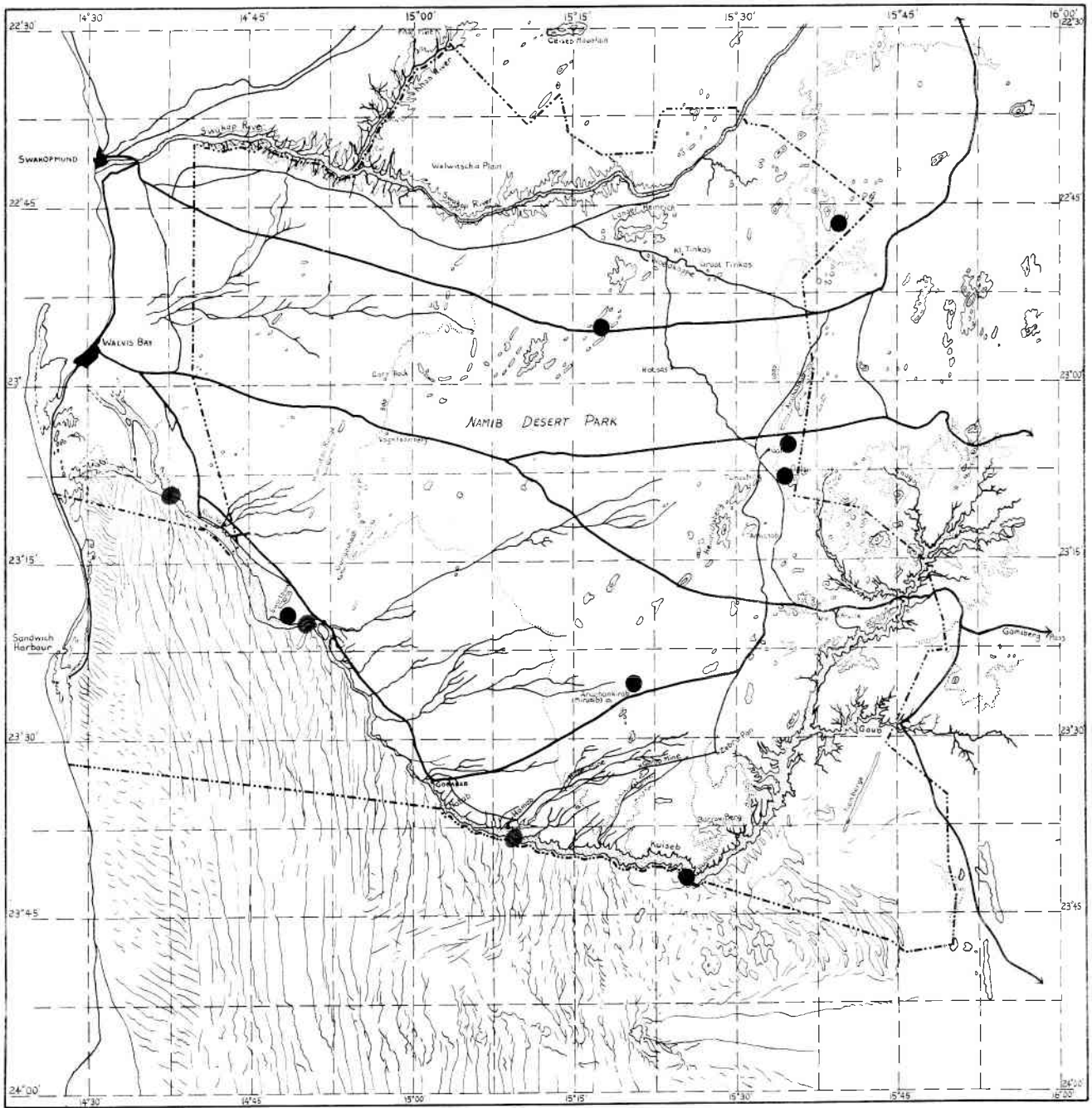


Figure 19. *Ictonyx striatus*

● NIGHT SIGHTINGS

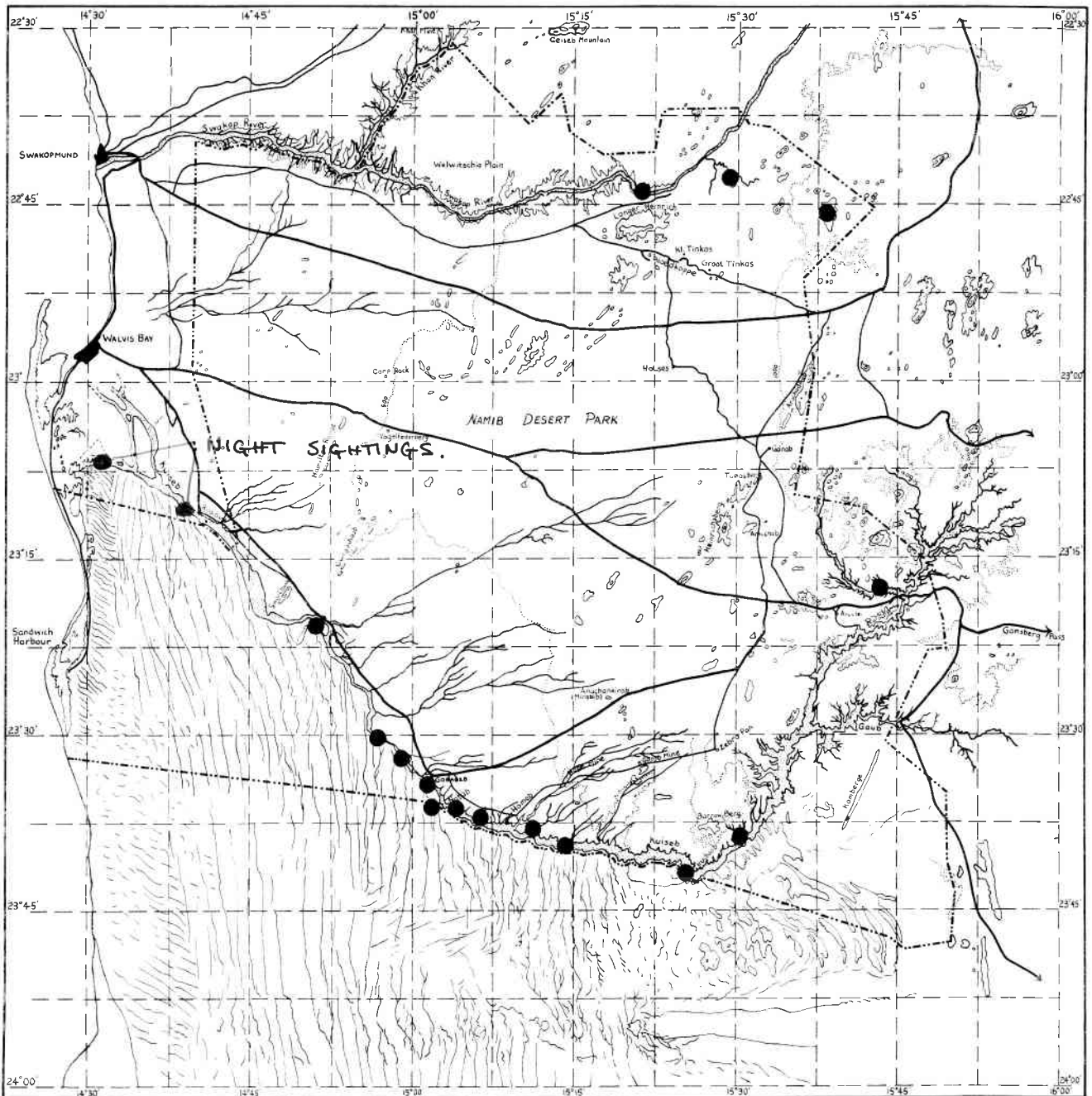


Figure 20. *Genetta genetta*

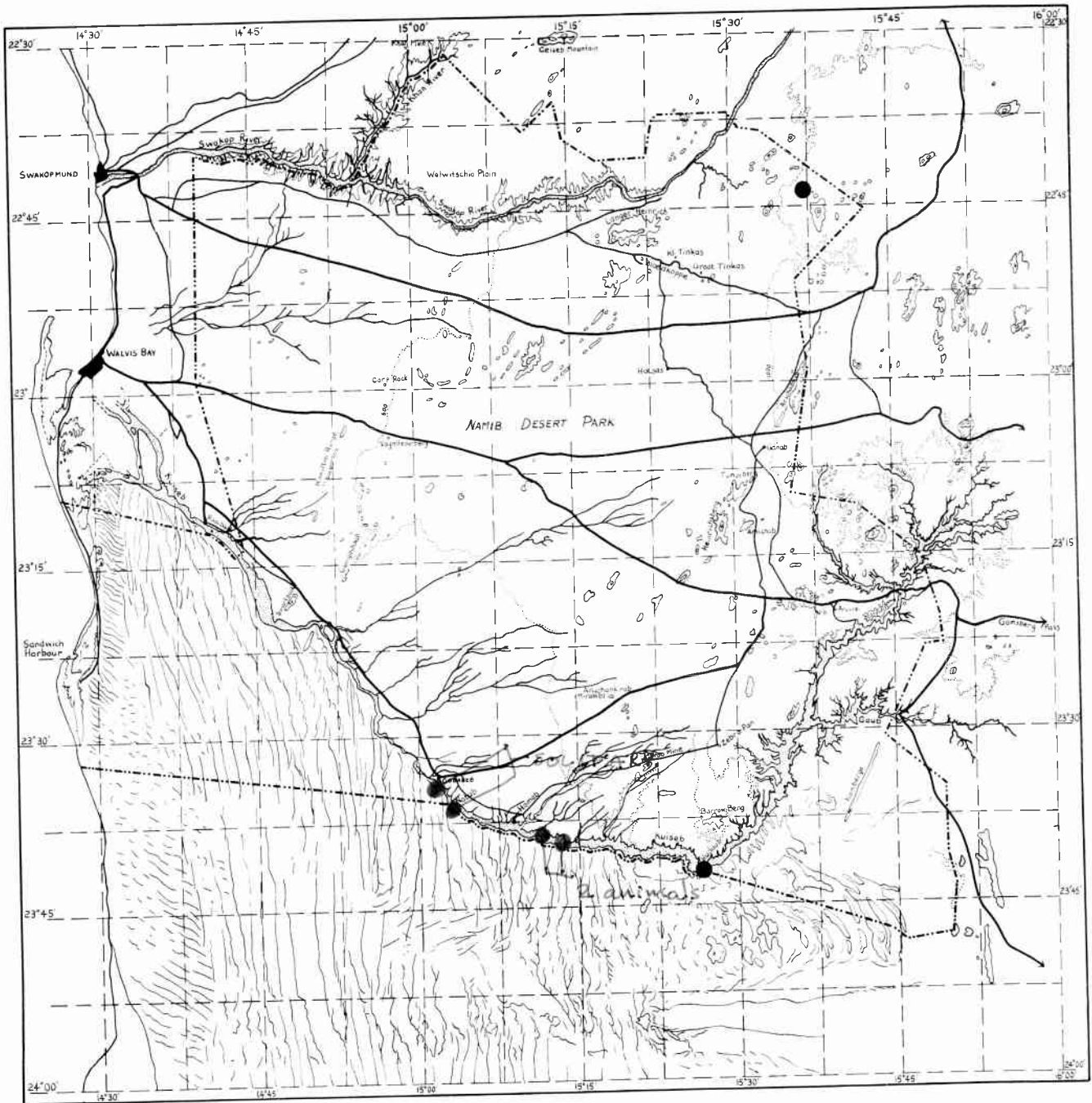


Figure 21. *Herpestes sanguineus*

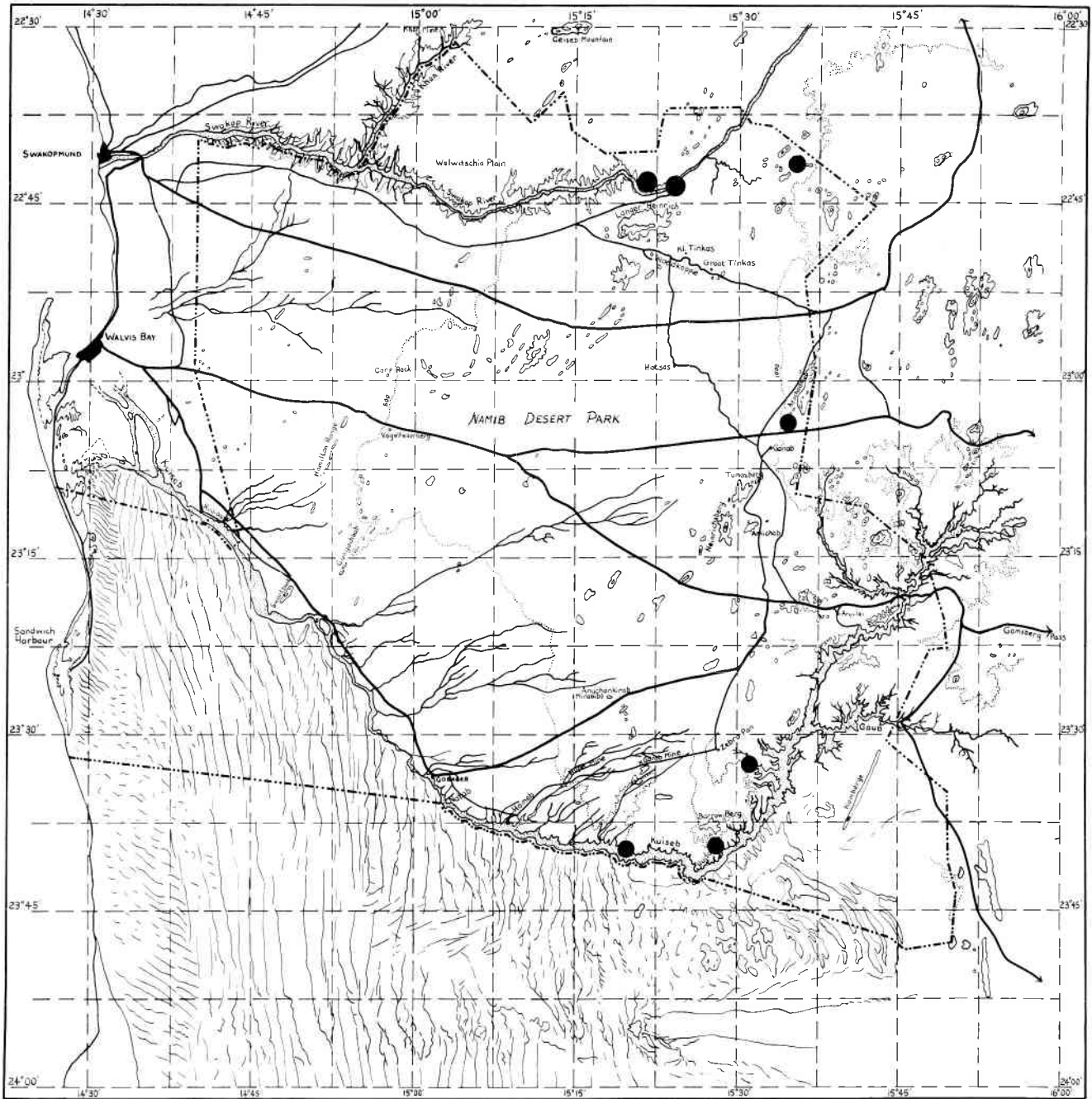


Figure 22. *Helogale parvula*

SIGHTING - 3 ANIMALS, 68km inland from Swakopmund on main Windhoek road.

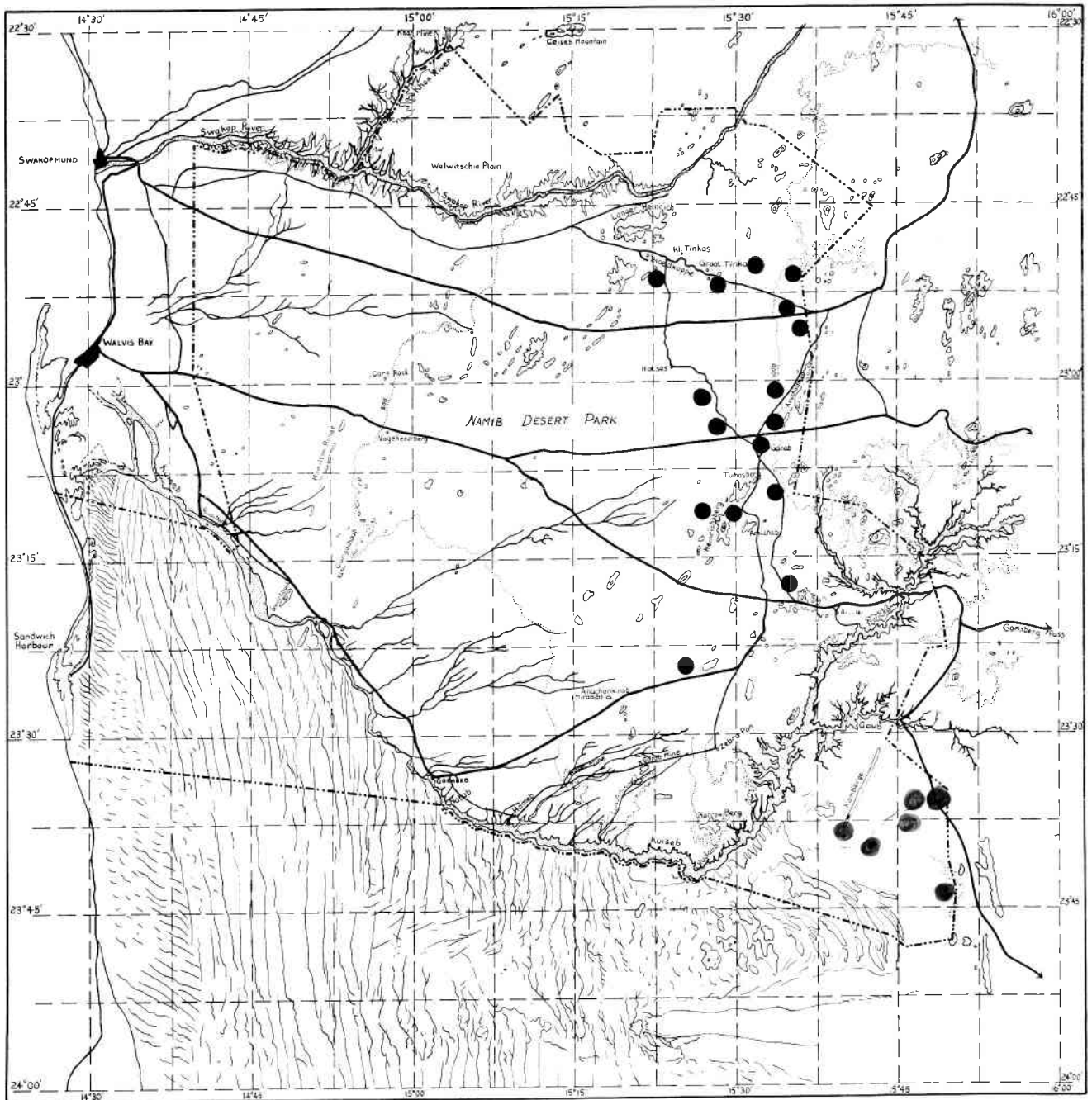


Figure 23. *Cynictis penicillata*

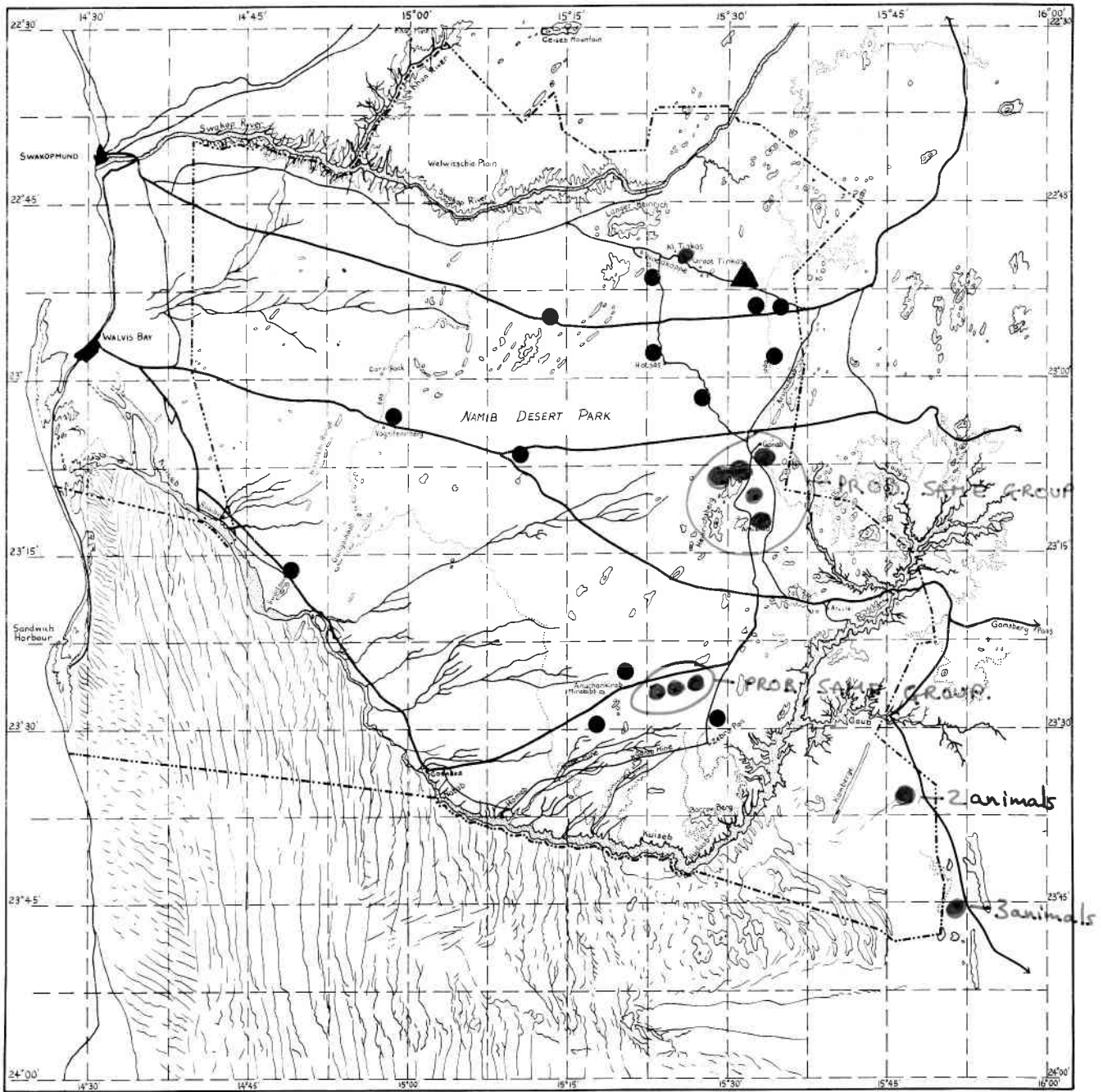


Figure 24. *Suricata suricatta*

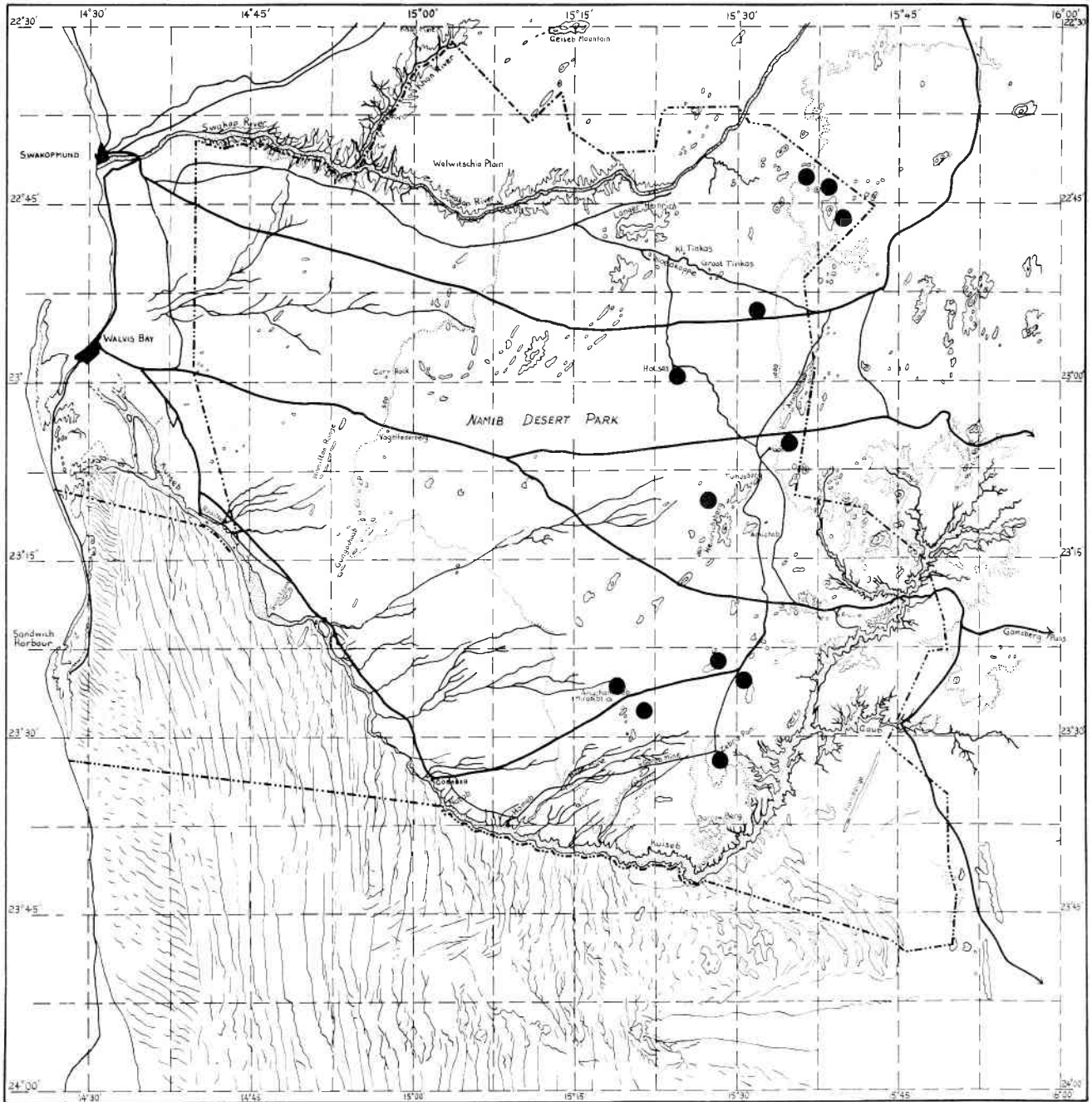


Figure 25. *Proteles cristatus*

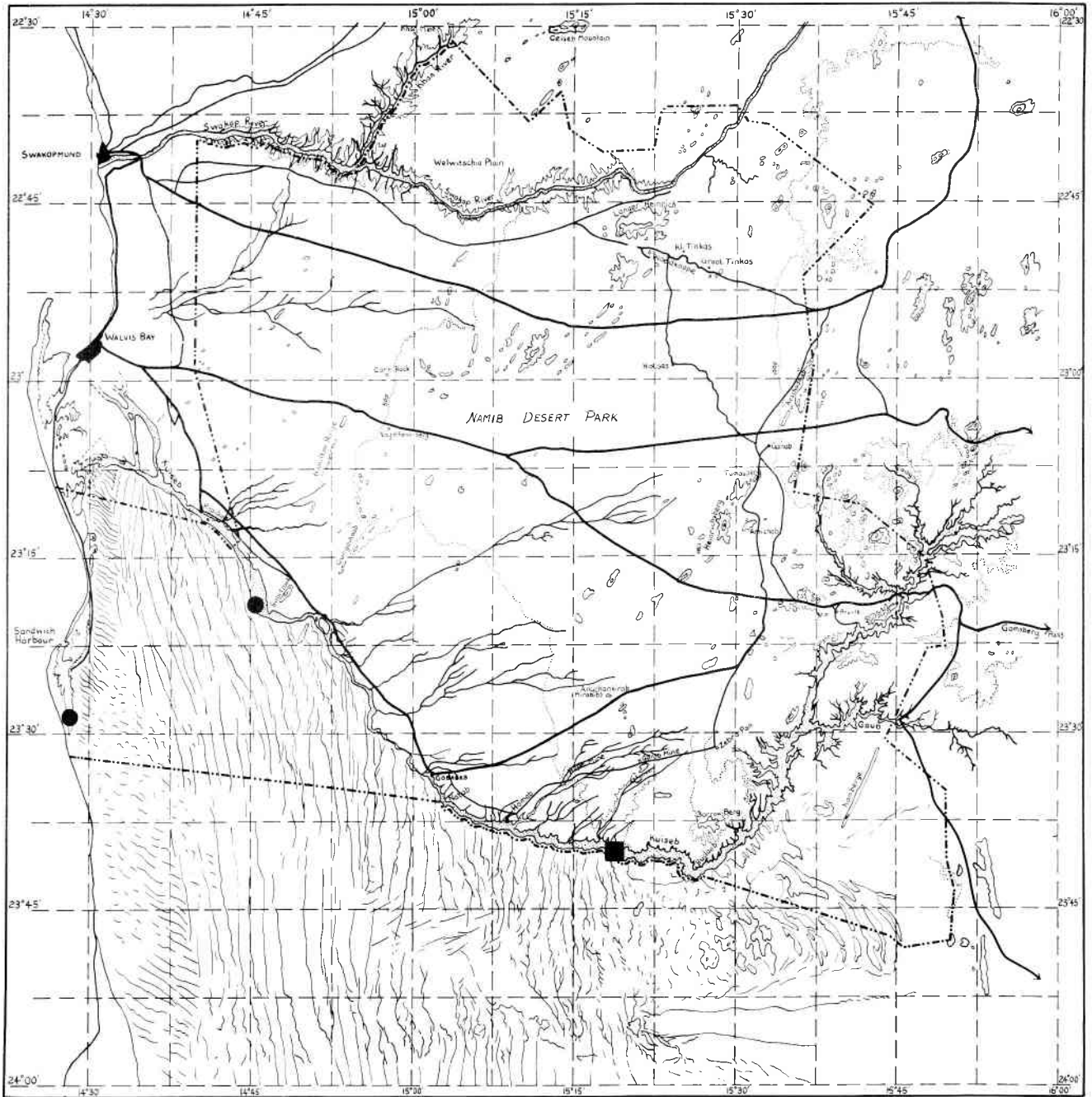


Figure 26. *Hyaena brunnea*

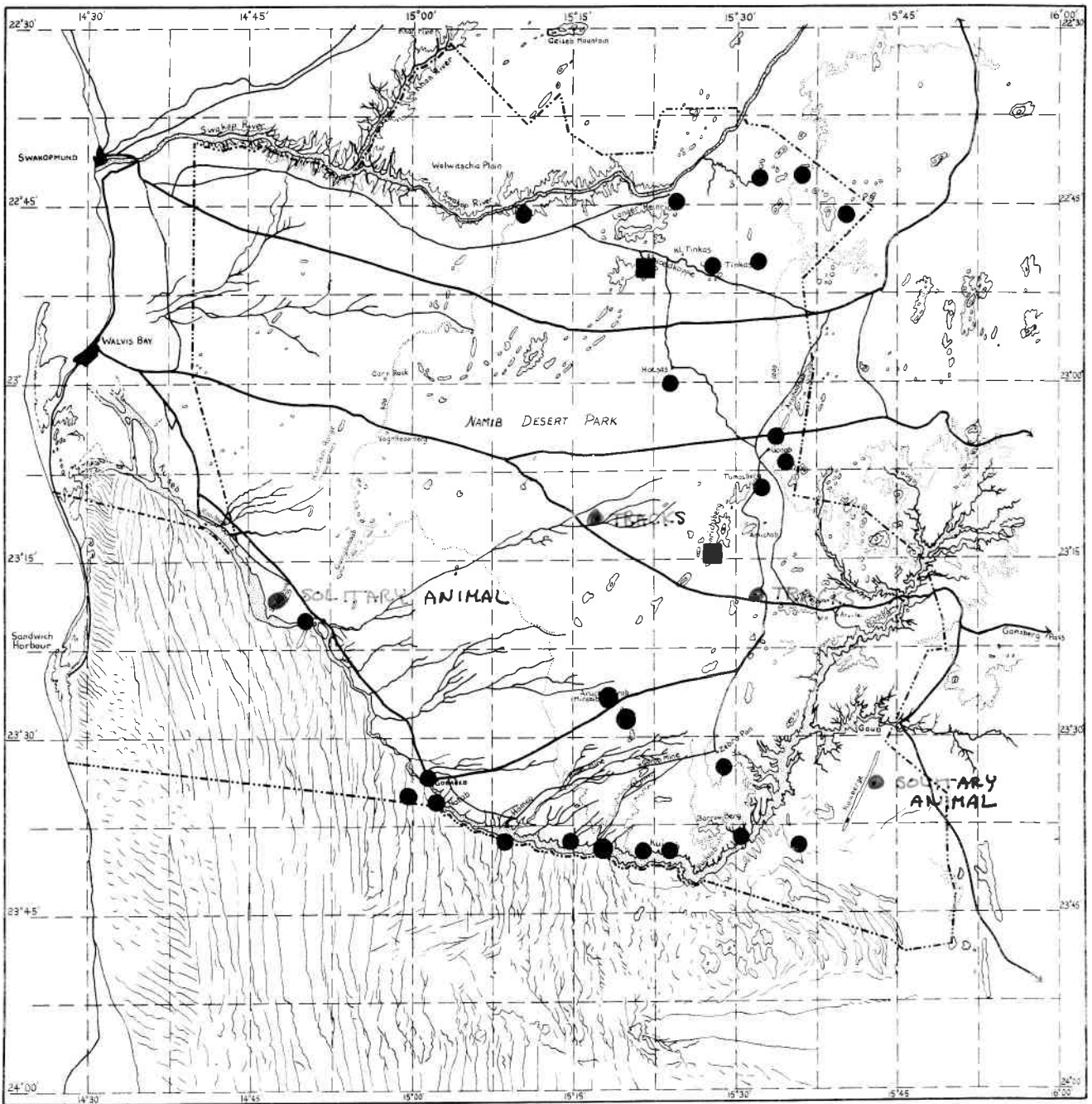


Figure 27. *Crocuta crocuta*

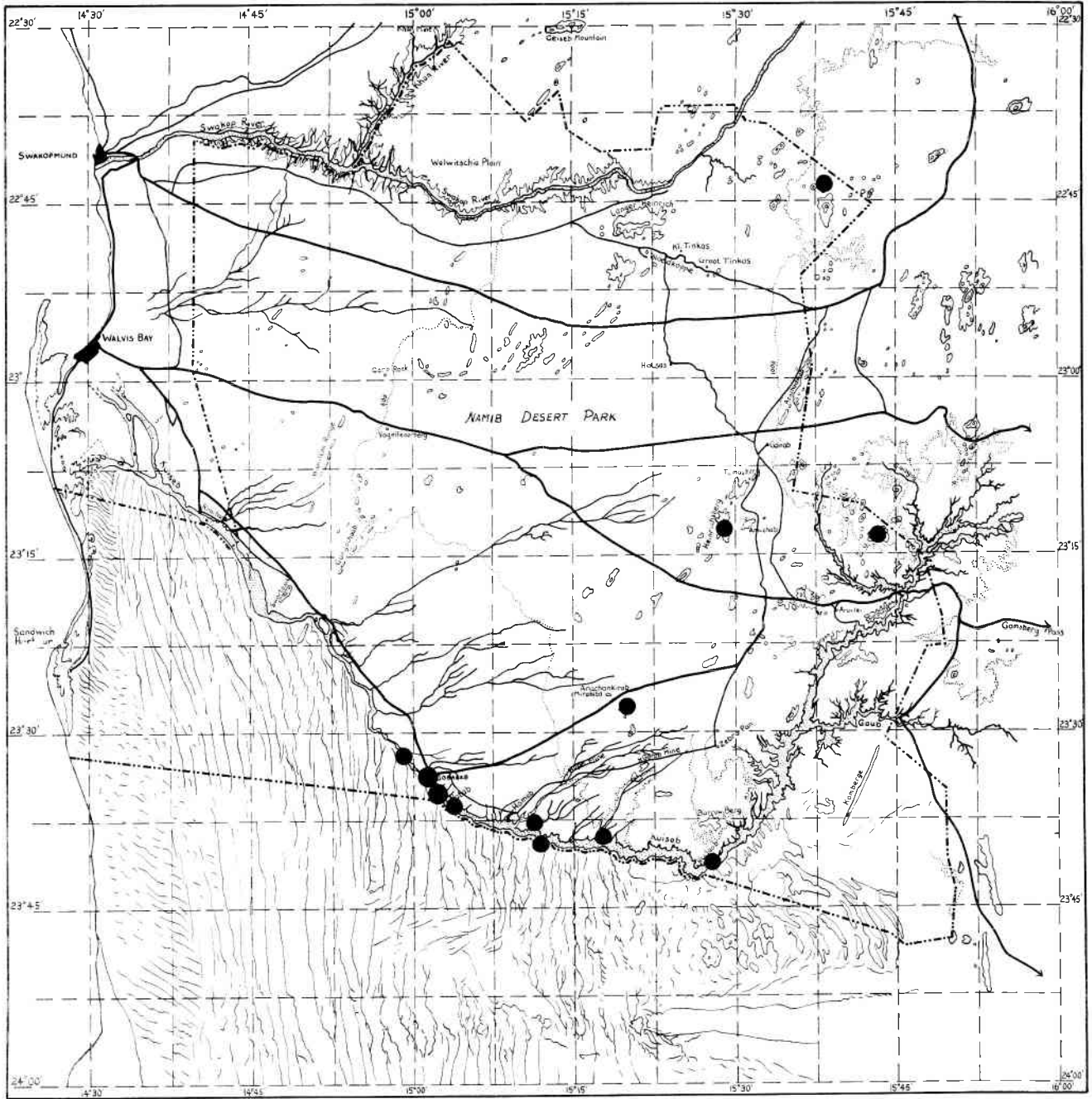


Figure 28. *Felis libyca*

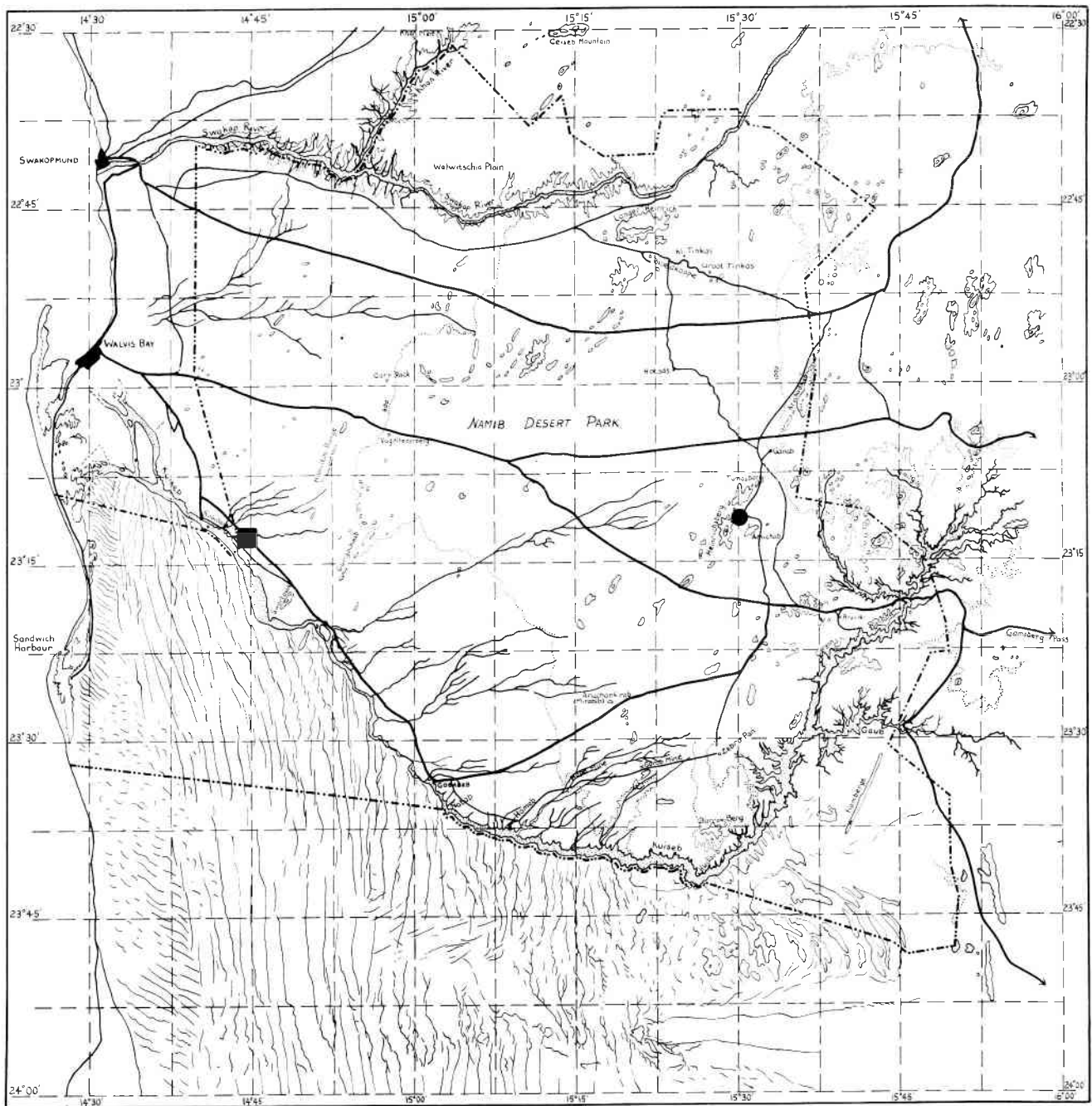


Figure 29. *Felis caracal*

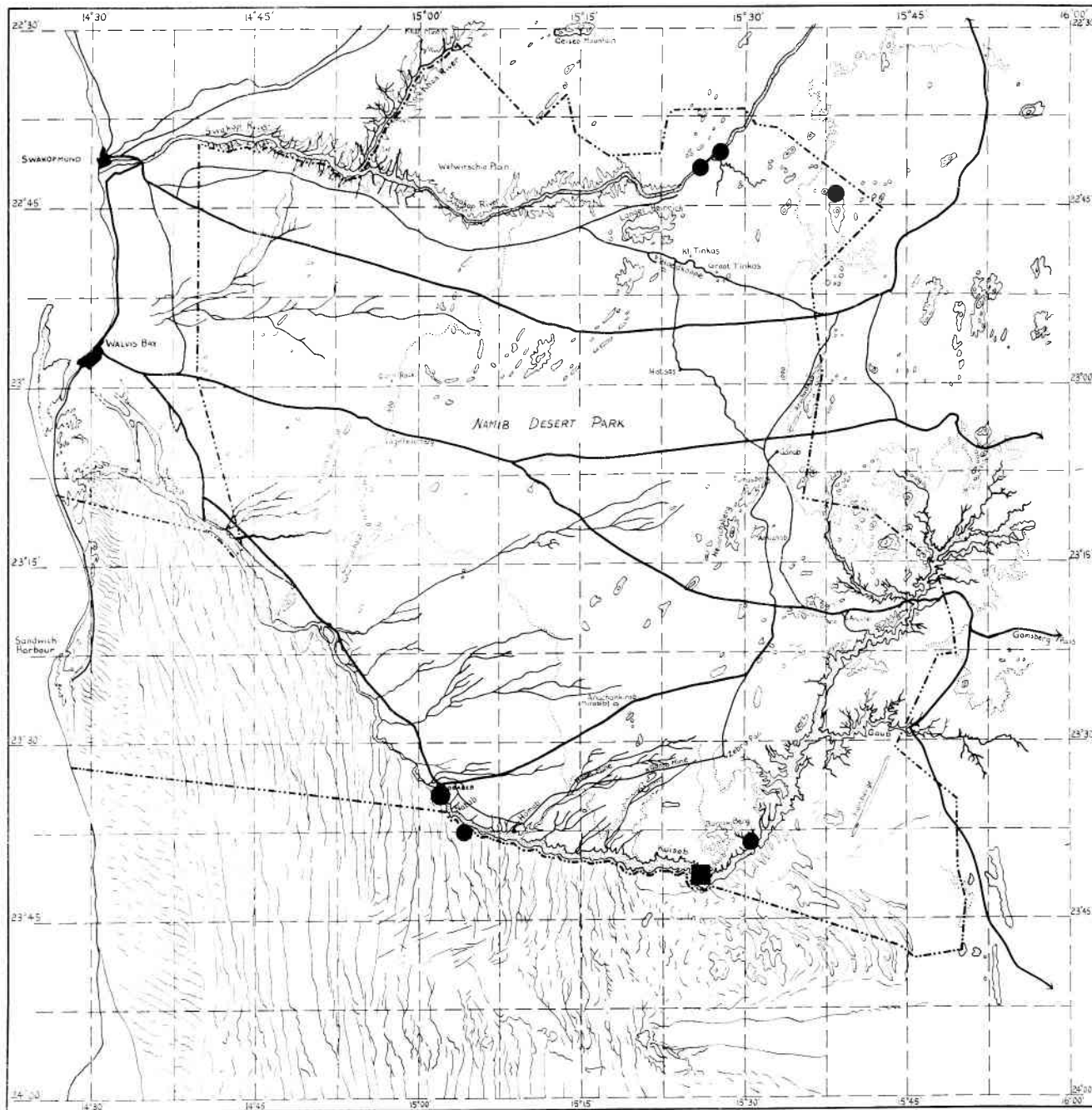


Figure 30. *Panthera pardus*

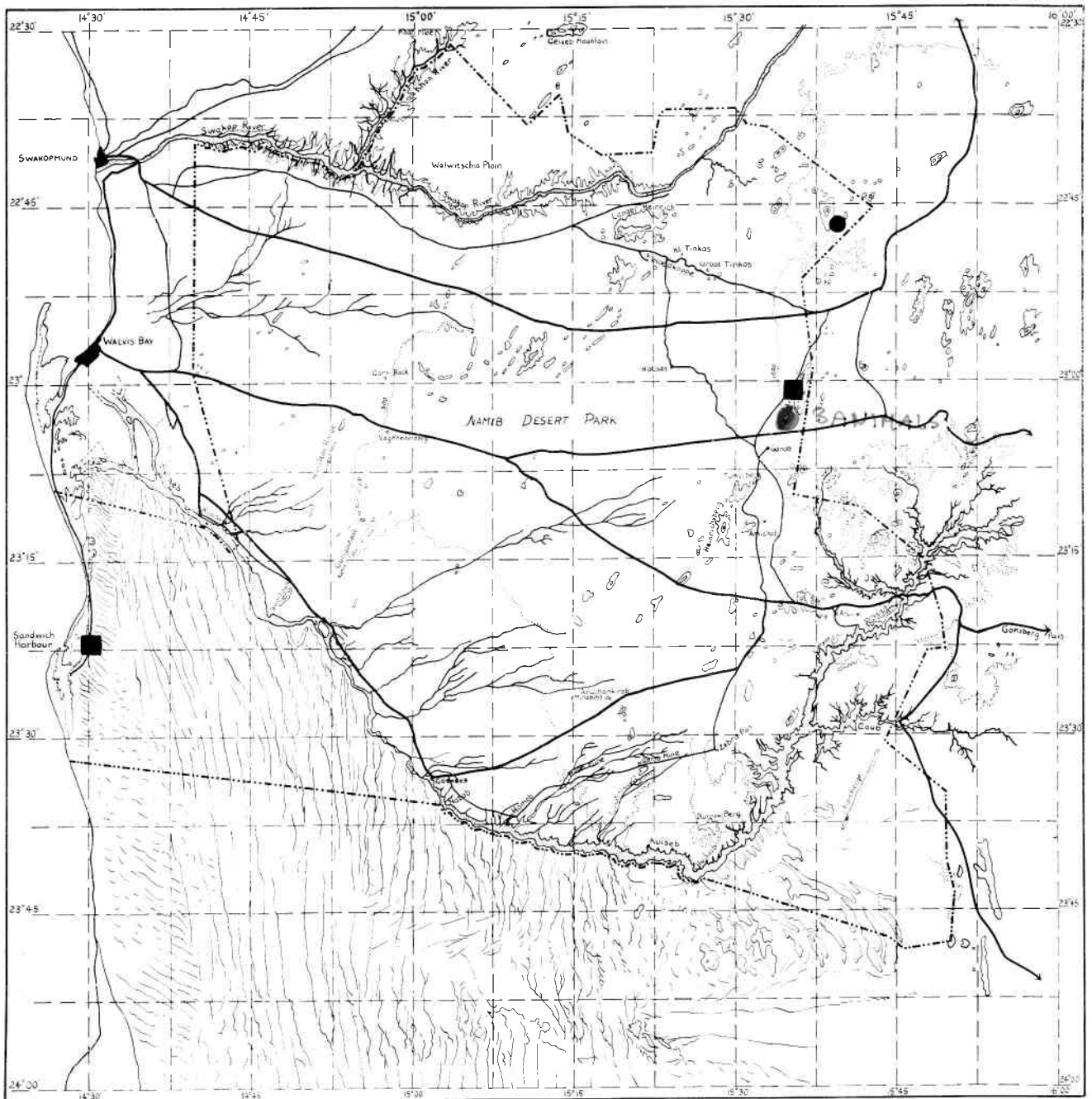


Figure 31. *Acinonyx jubatus*

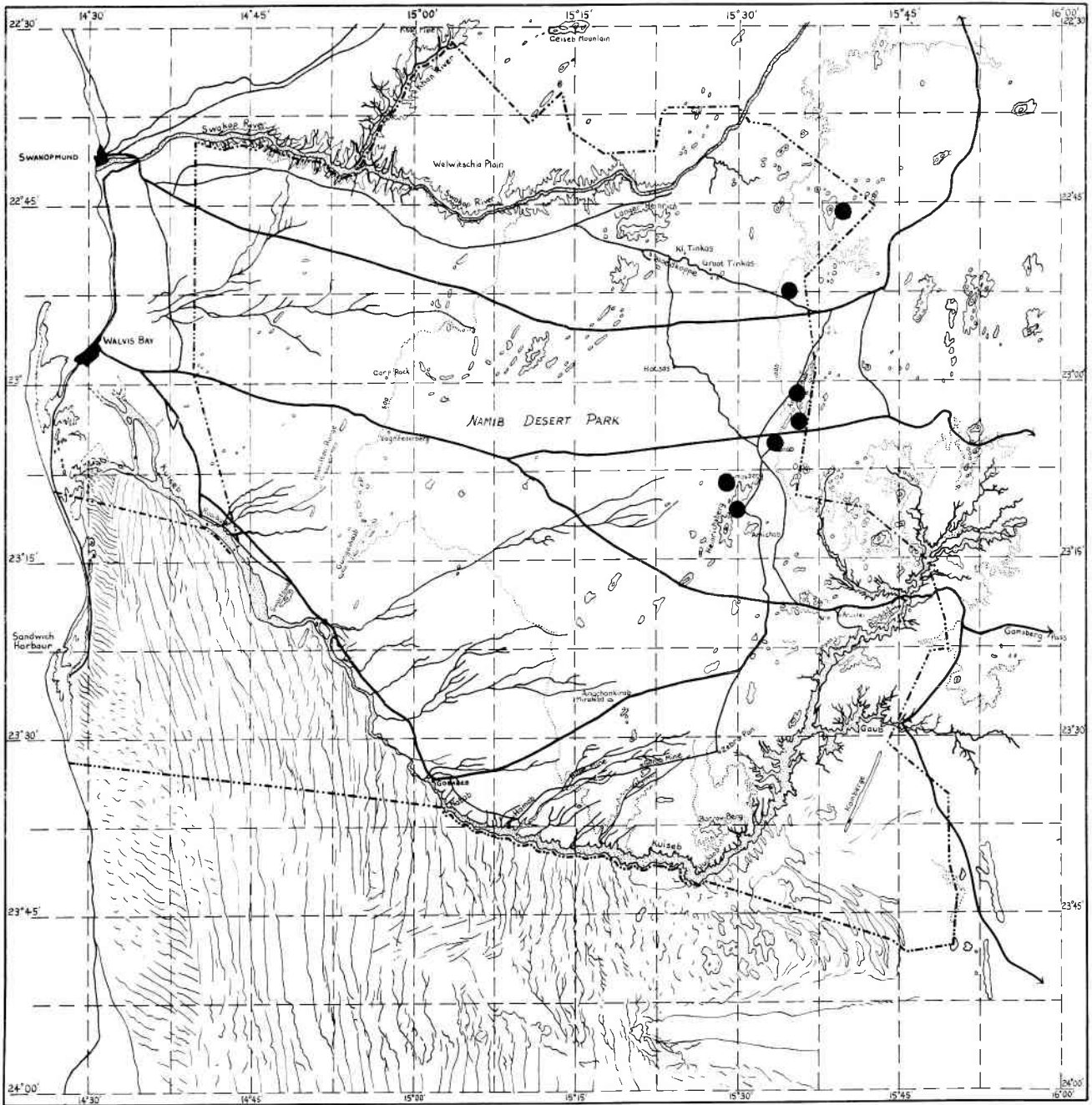


Figure 32. *Orycteropus afer*

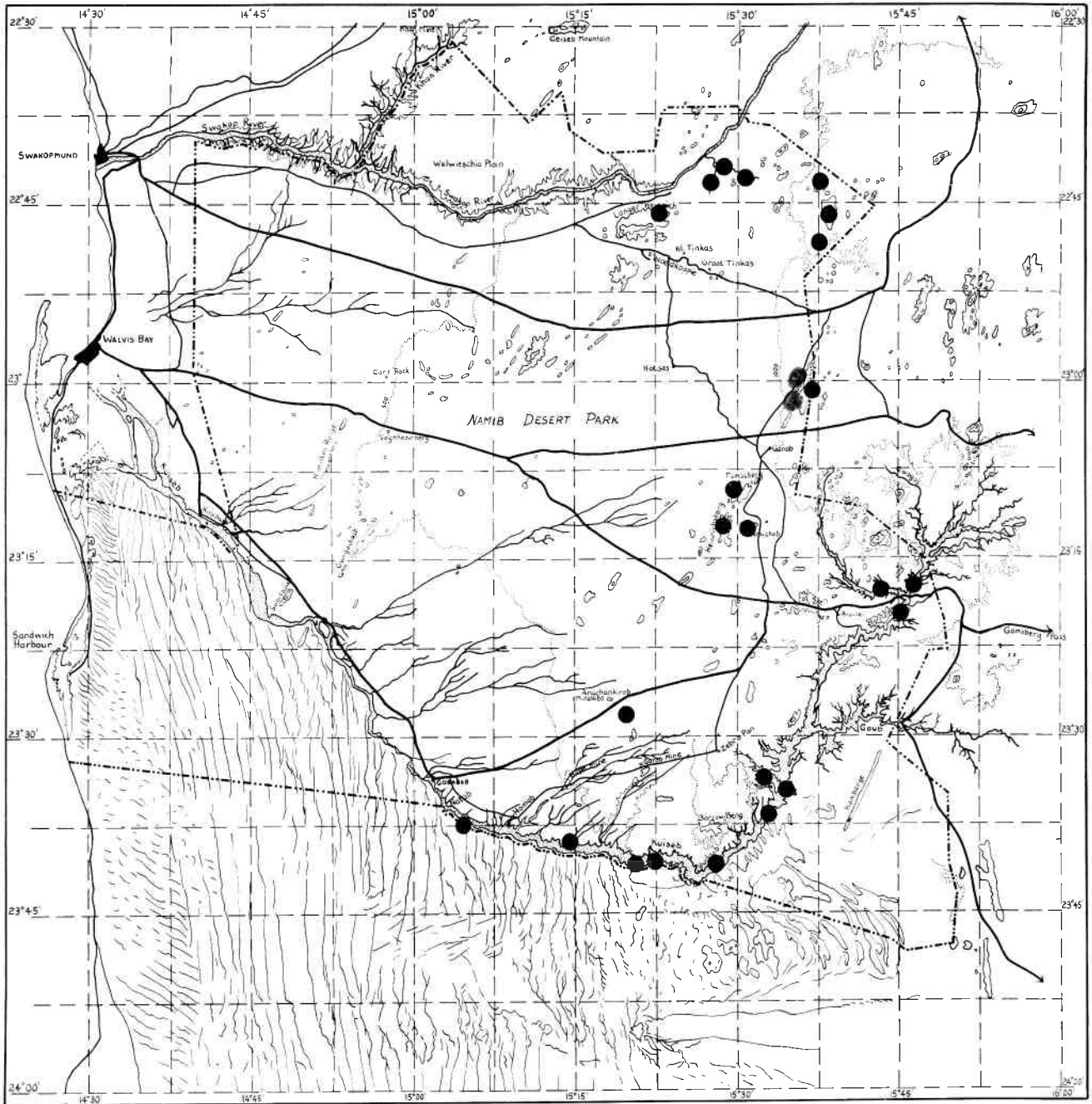


Figure 33. *Procavia capensis*

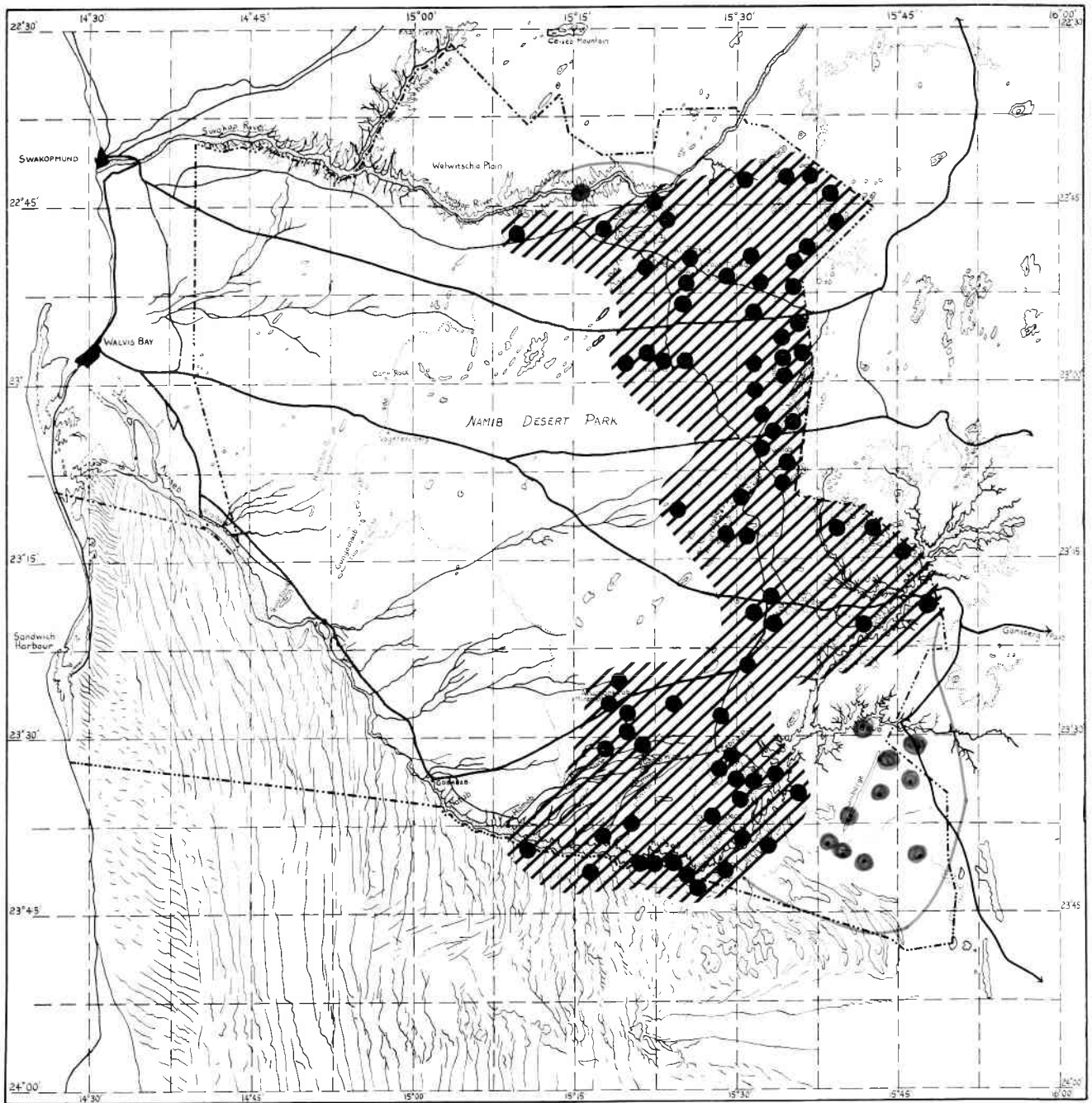


Figure 34. *Equus zebra hartmannae*

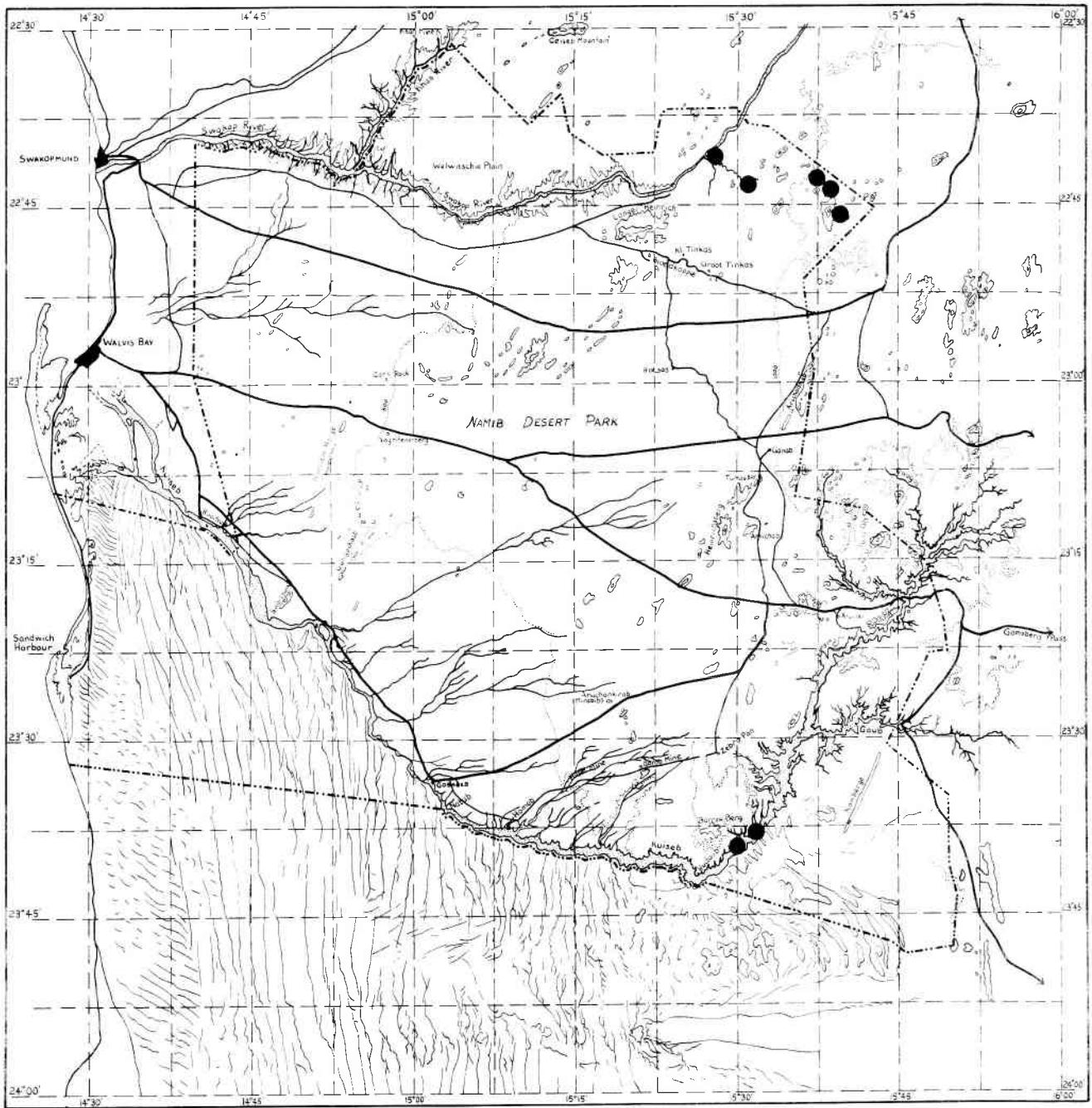


Figure 35. *Phacochoeros aethiopicus*

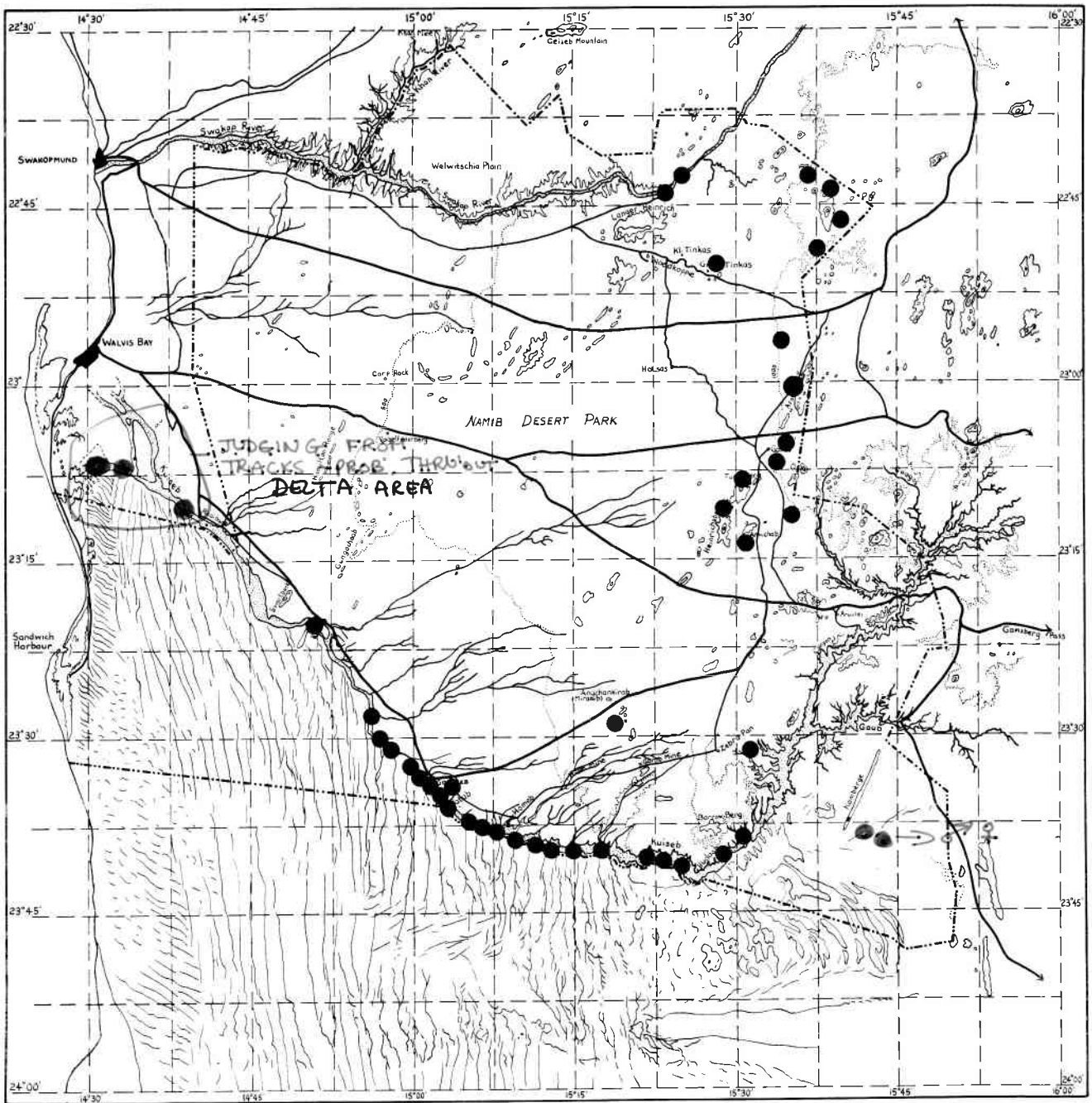


Figure 36. *Raphicerus campestris*

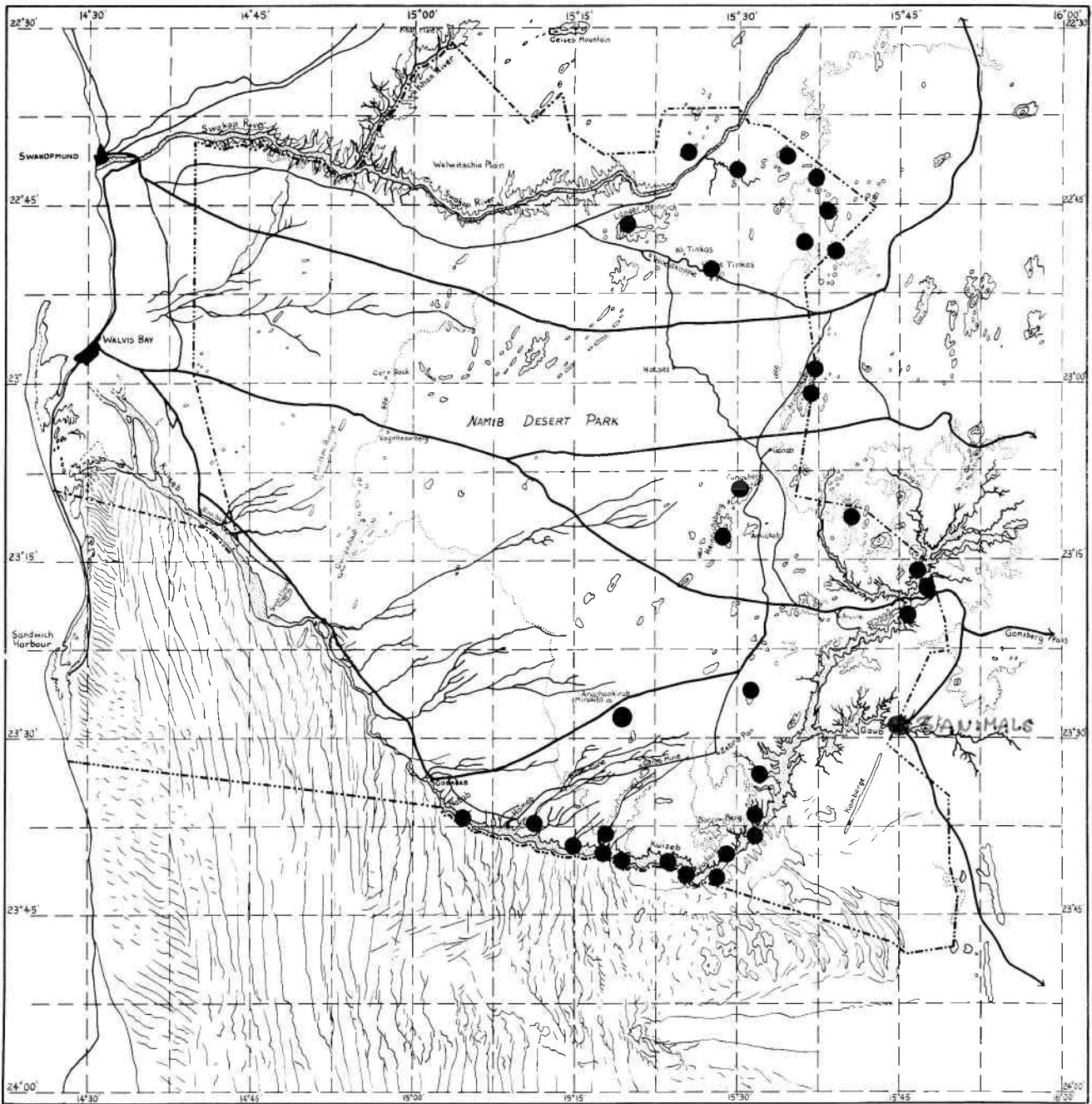
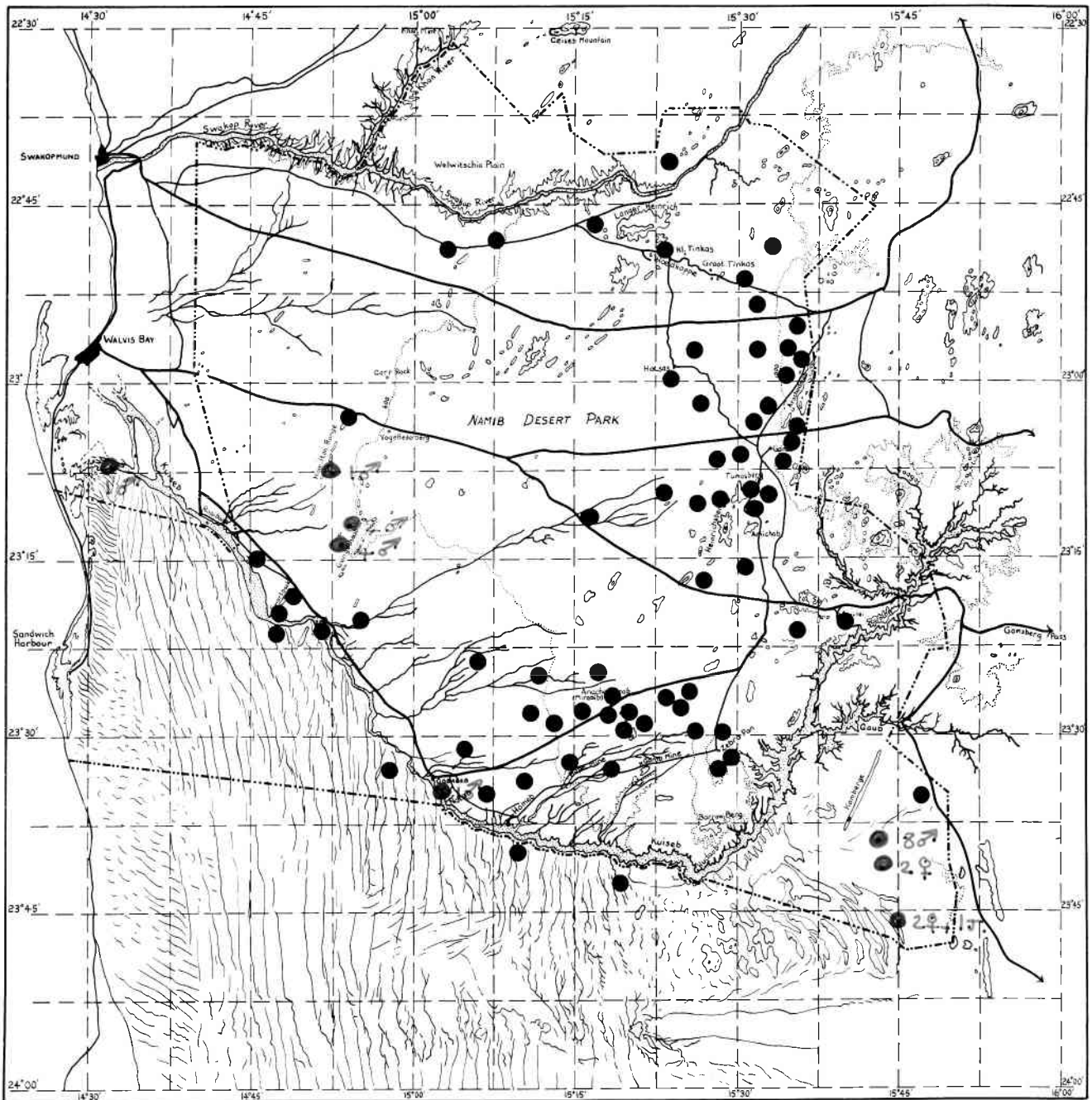


Figure 37. *Oreotragus oreotragus*

Figure 38. *Antidorcas marsupialis*

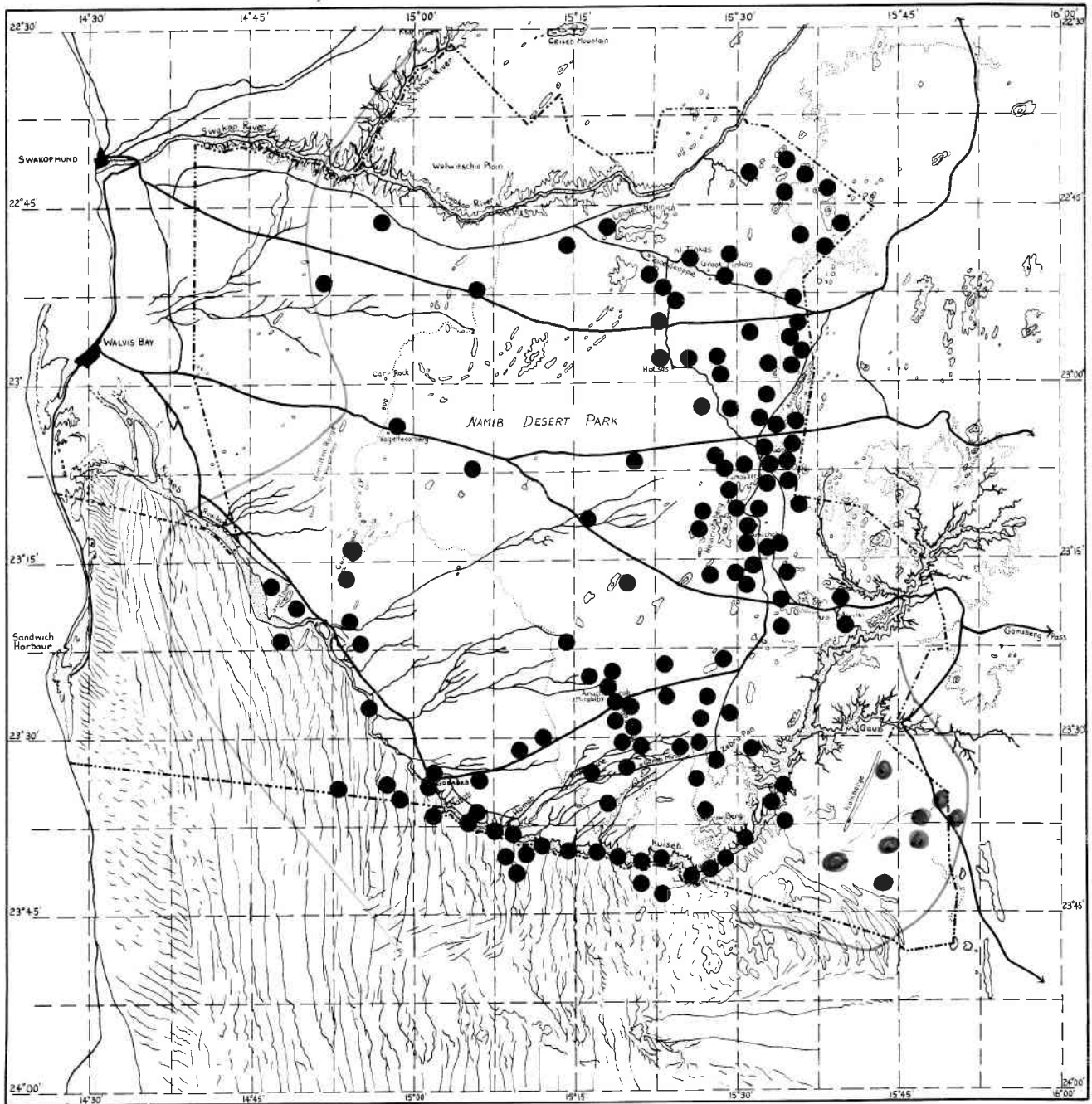


Figure 39. *Oryx gazella*

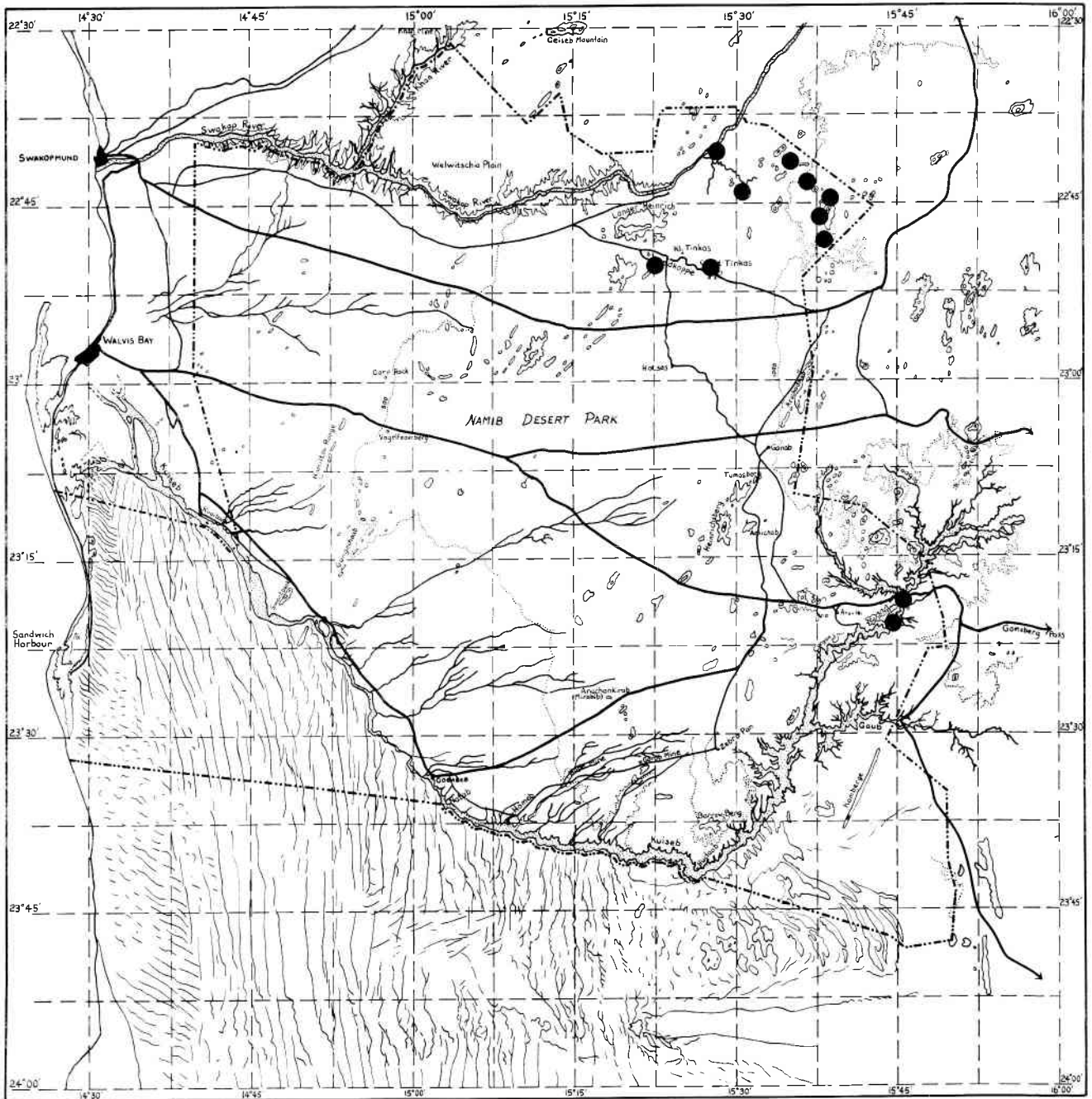


Figure 40. *Tragelaphus strepsiceros*

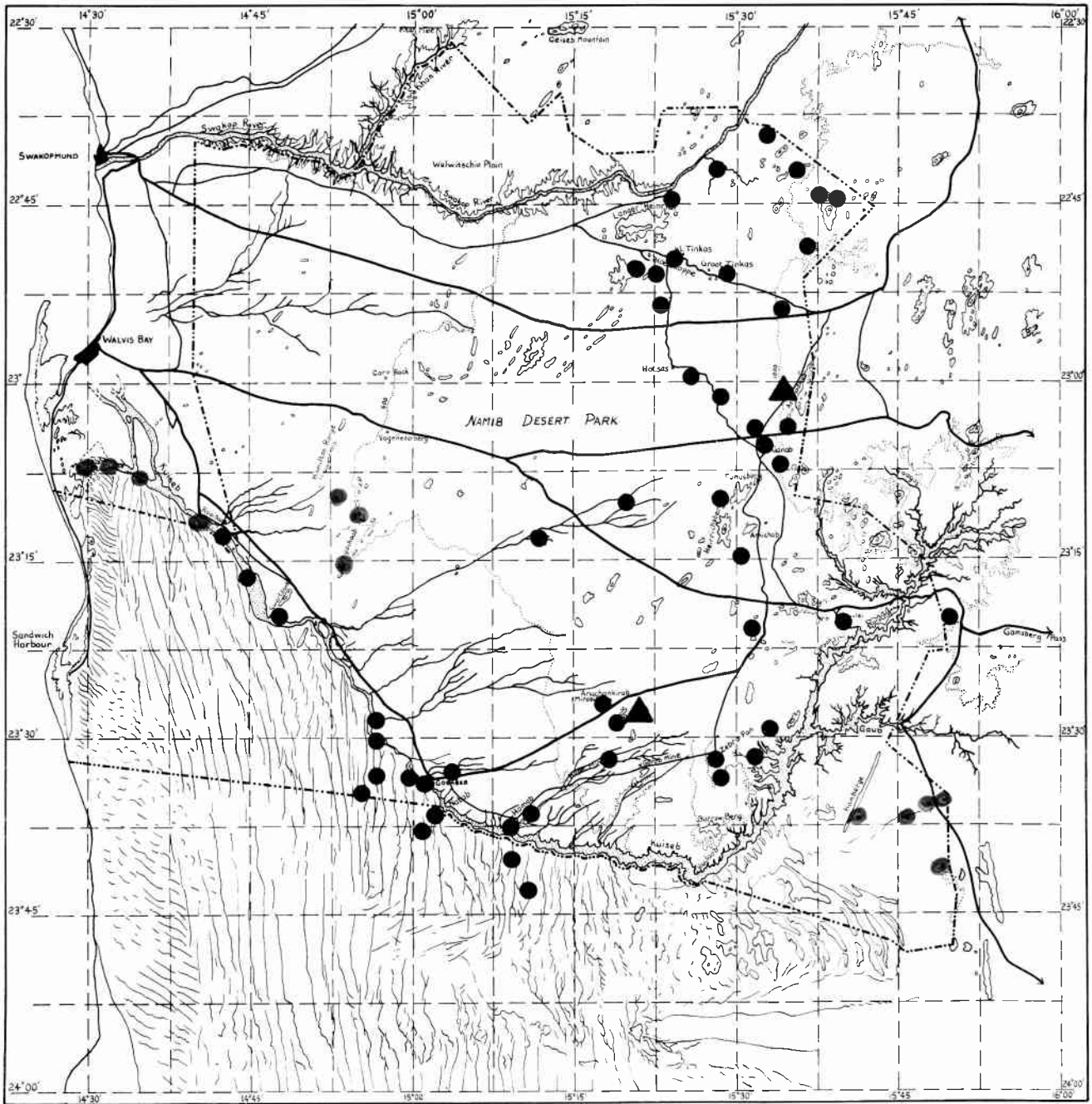


Figure 41. *Lepus capensis*

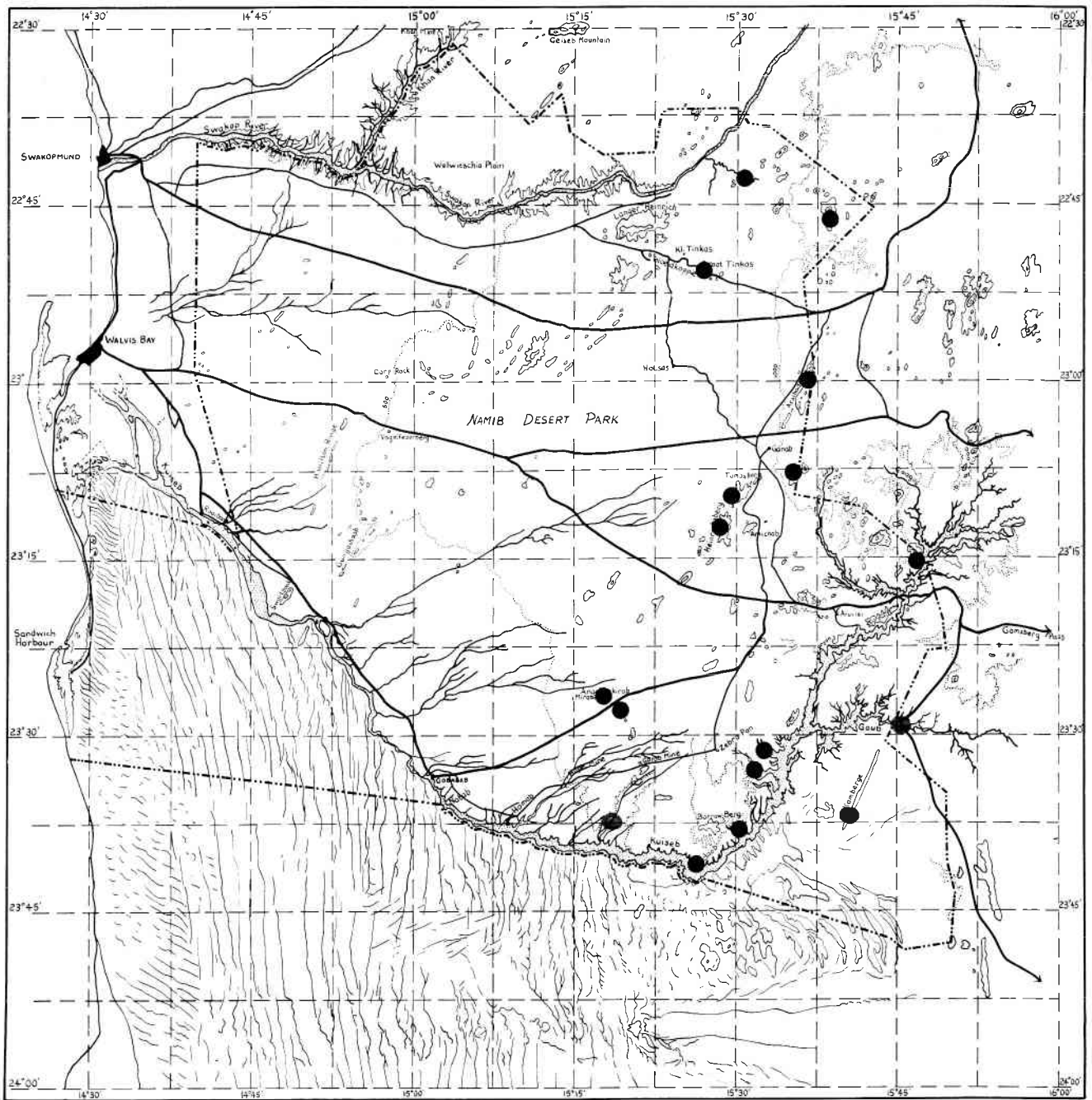


Figure 42. *Pronolagus crassicaudatus*

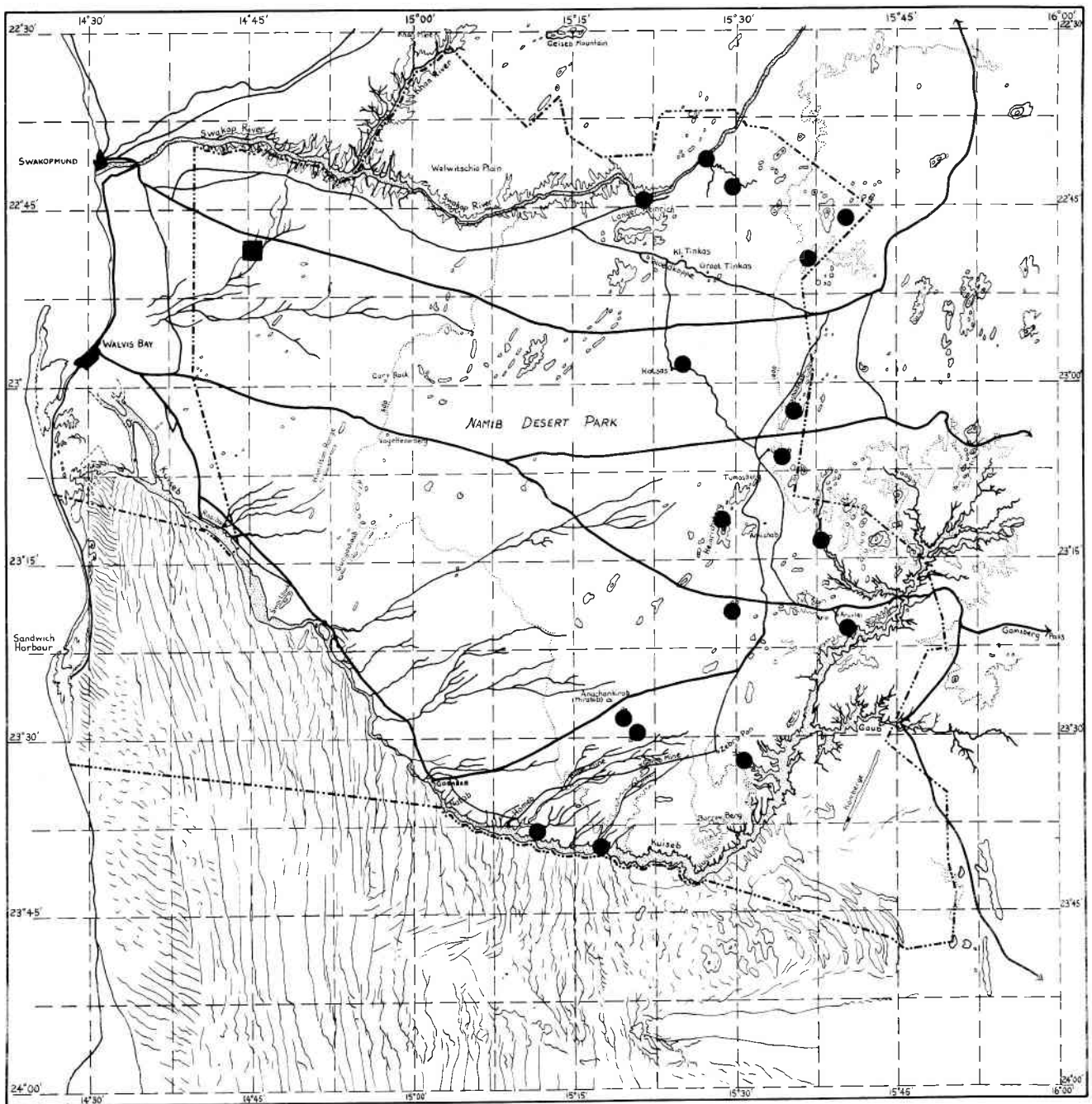


Figure 43. *Hystrix africae australis*

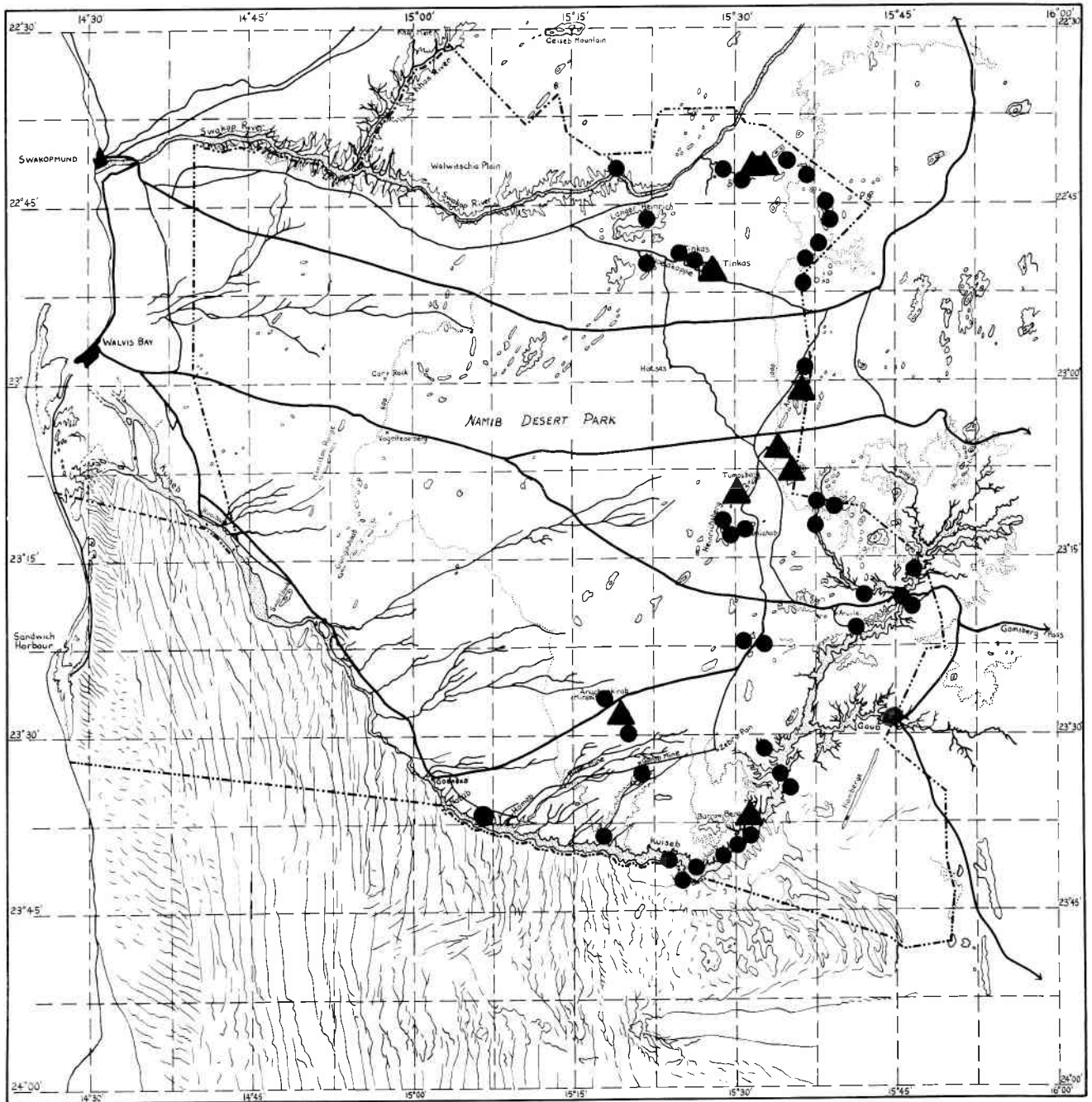


Figure 44. *Petromus typicus*

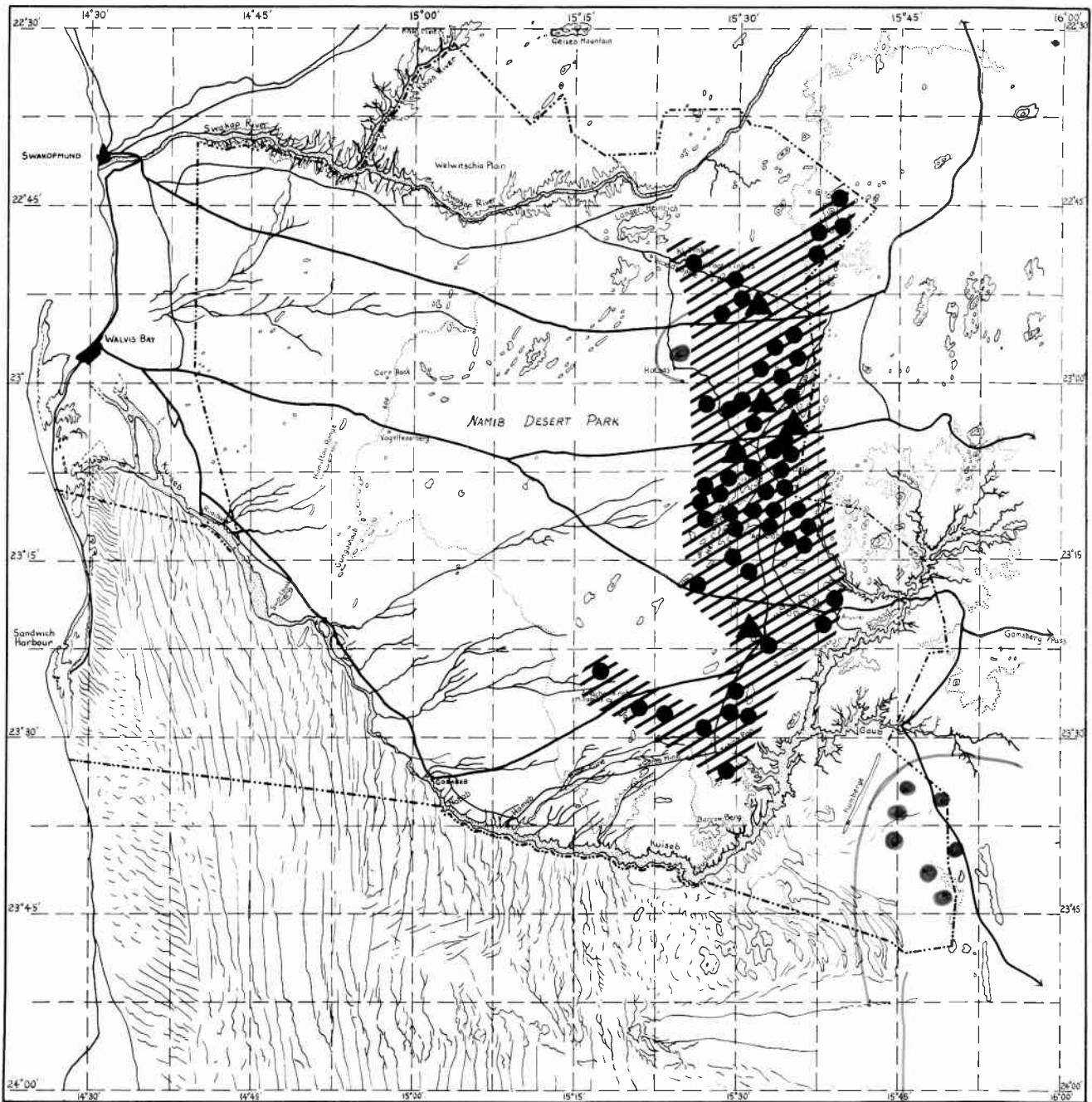


Figure 45. *Xerus inauris*

THIS POPULATION CUT OFF FROM ANIMALS N.W. OF CANYON AREA. G-SQUIRRES OCCUR WIDELY IN PRO-NAMIB FROM HERE SOUTHWARDS.

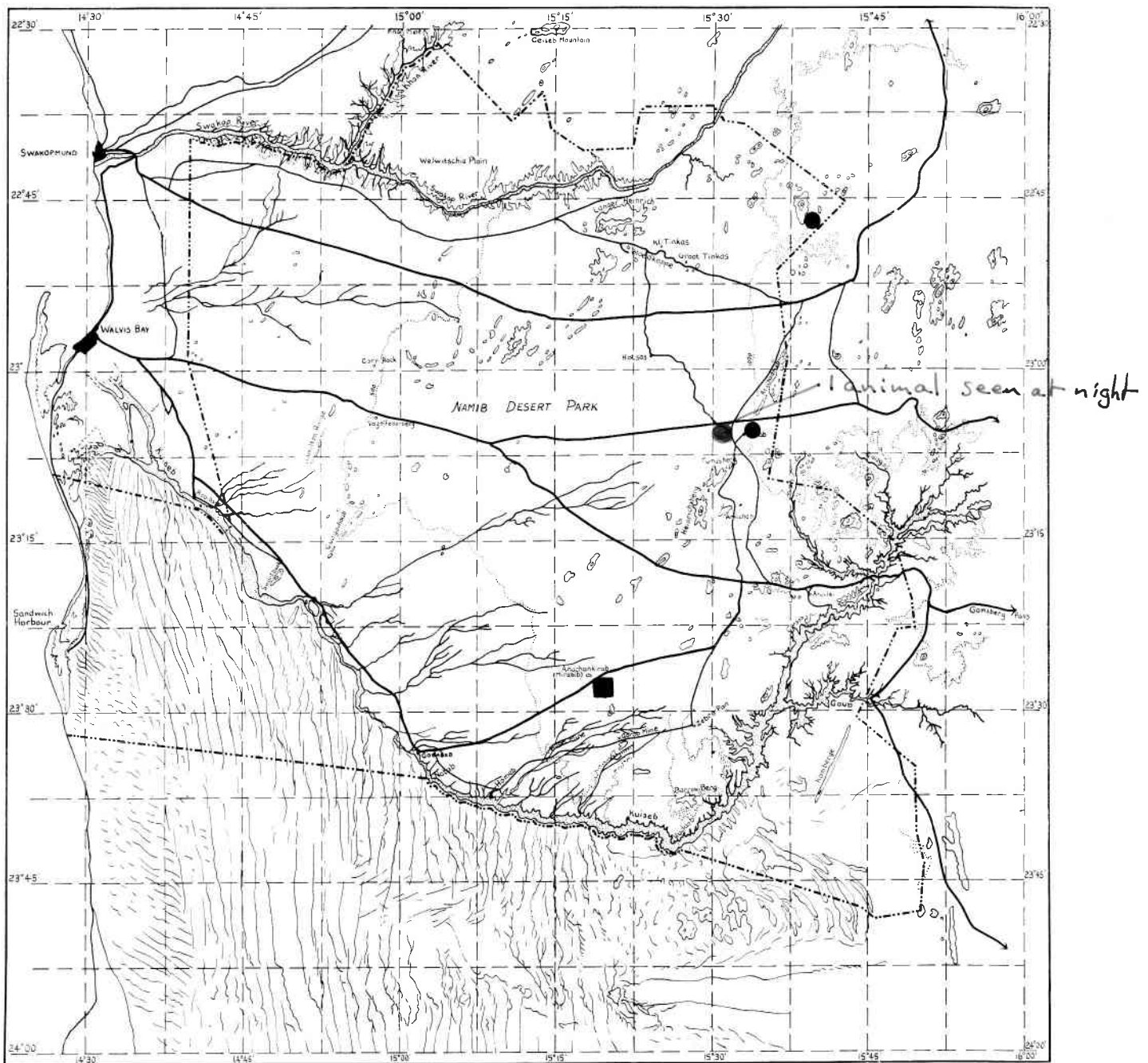


Figure 46. *Pedetes capensis*

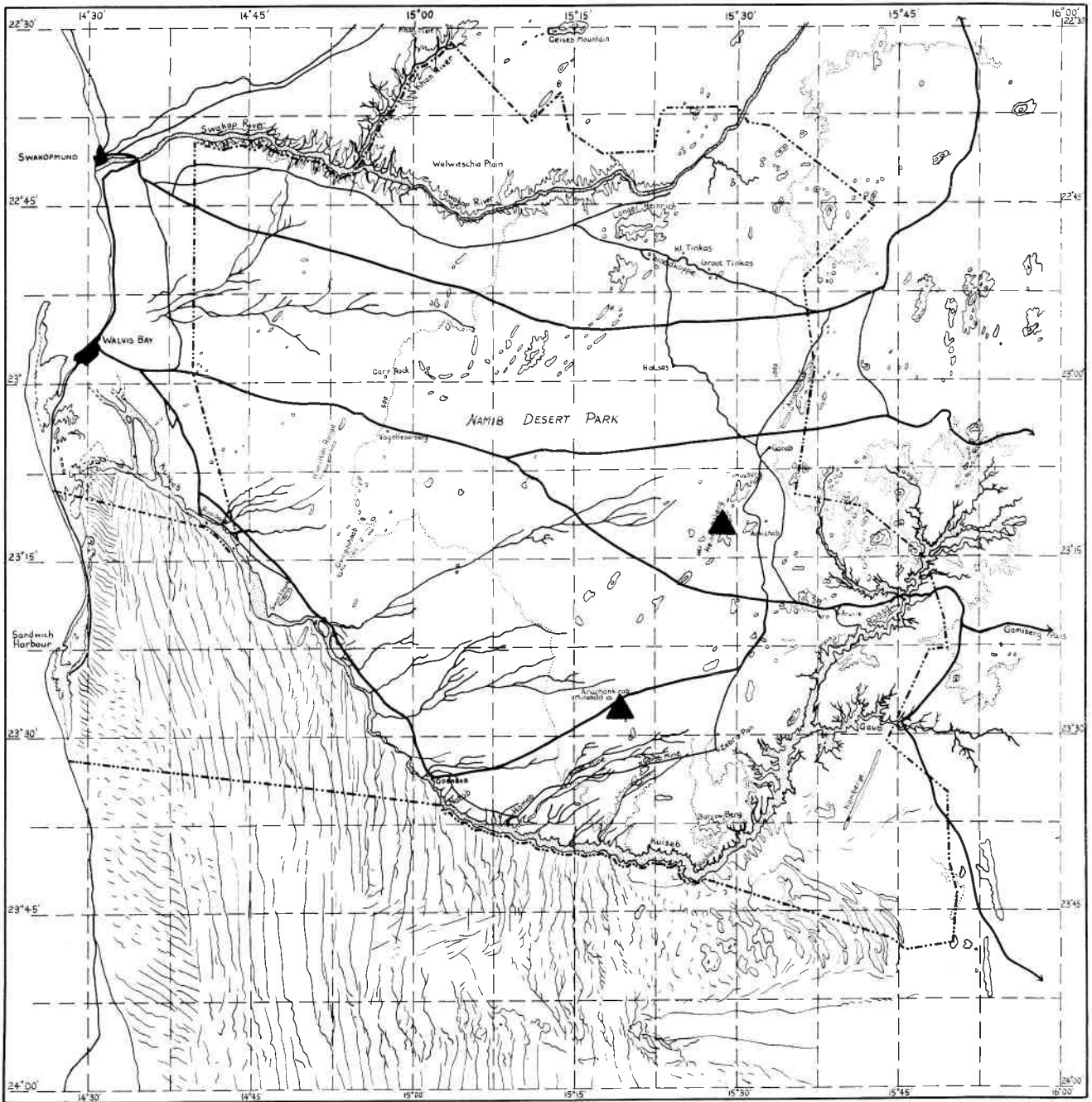


Figure 47. *Graphiurus platyops*

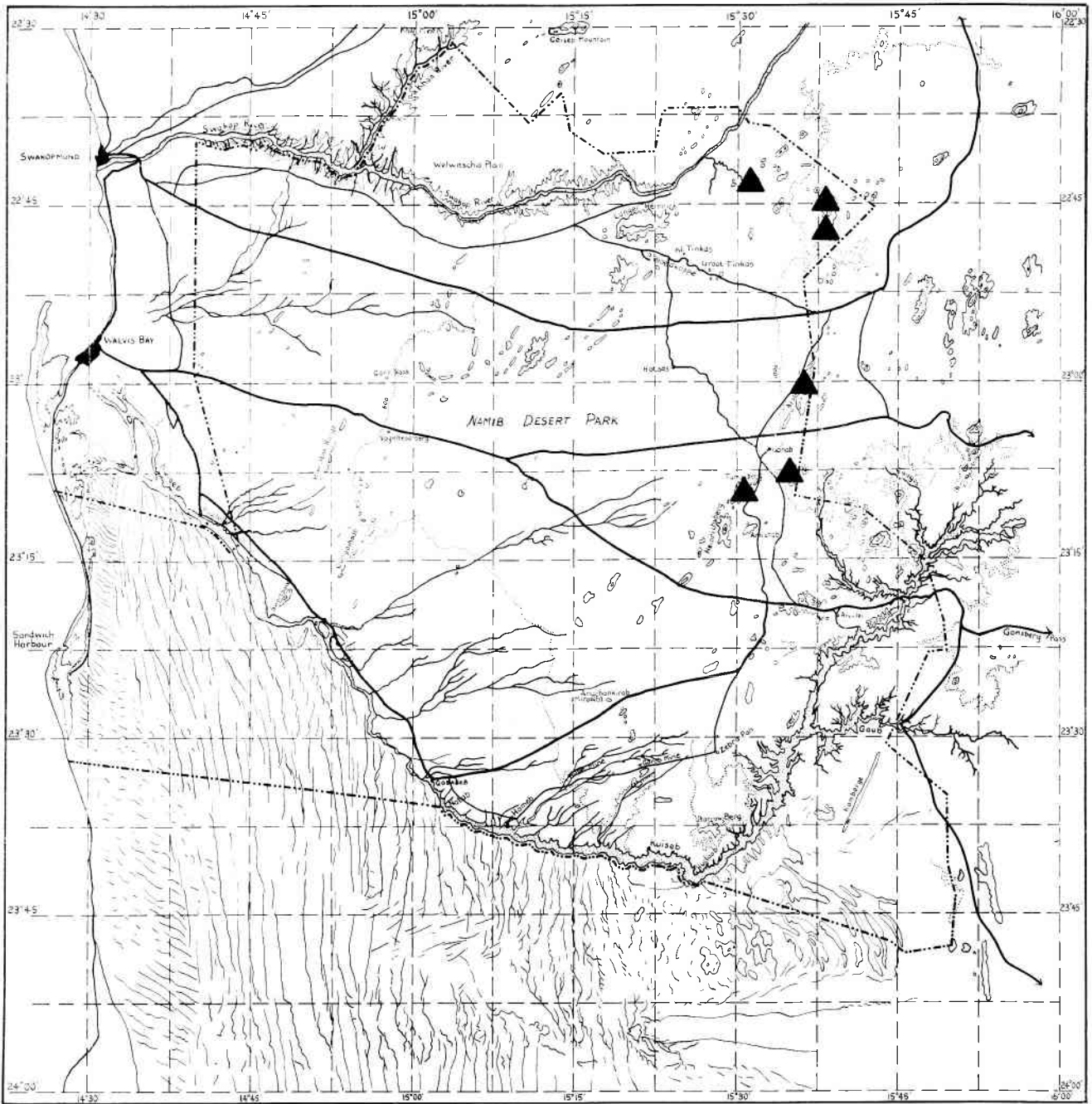


Figure 48. *Aethomys namaquensis*

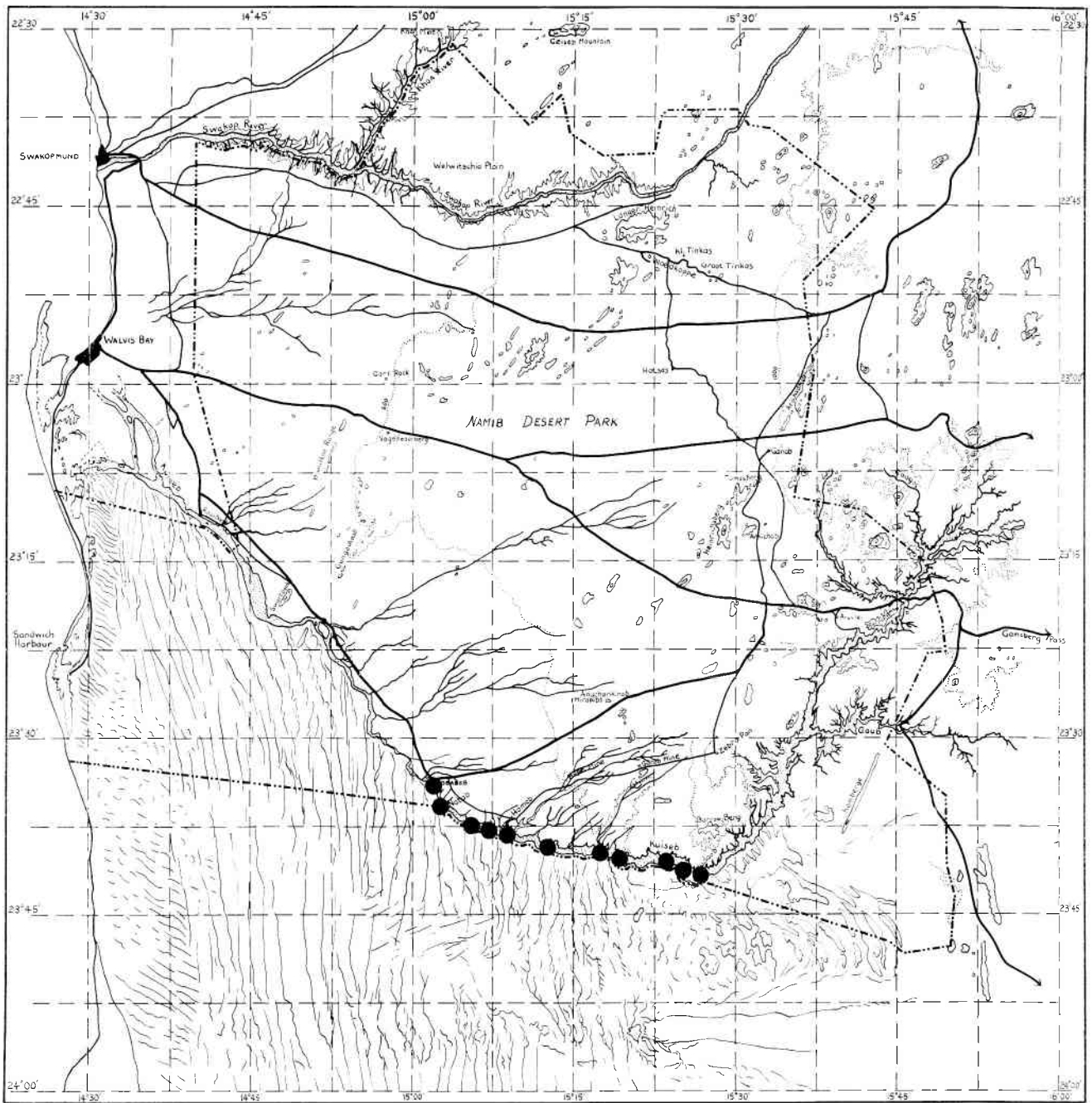


Figure 49. *Thallomys paedulus*

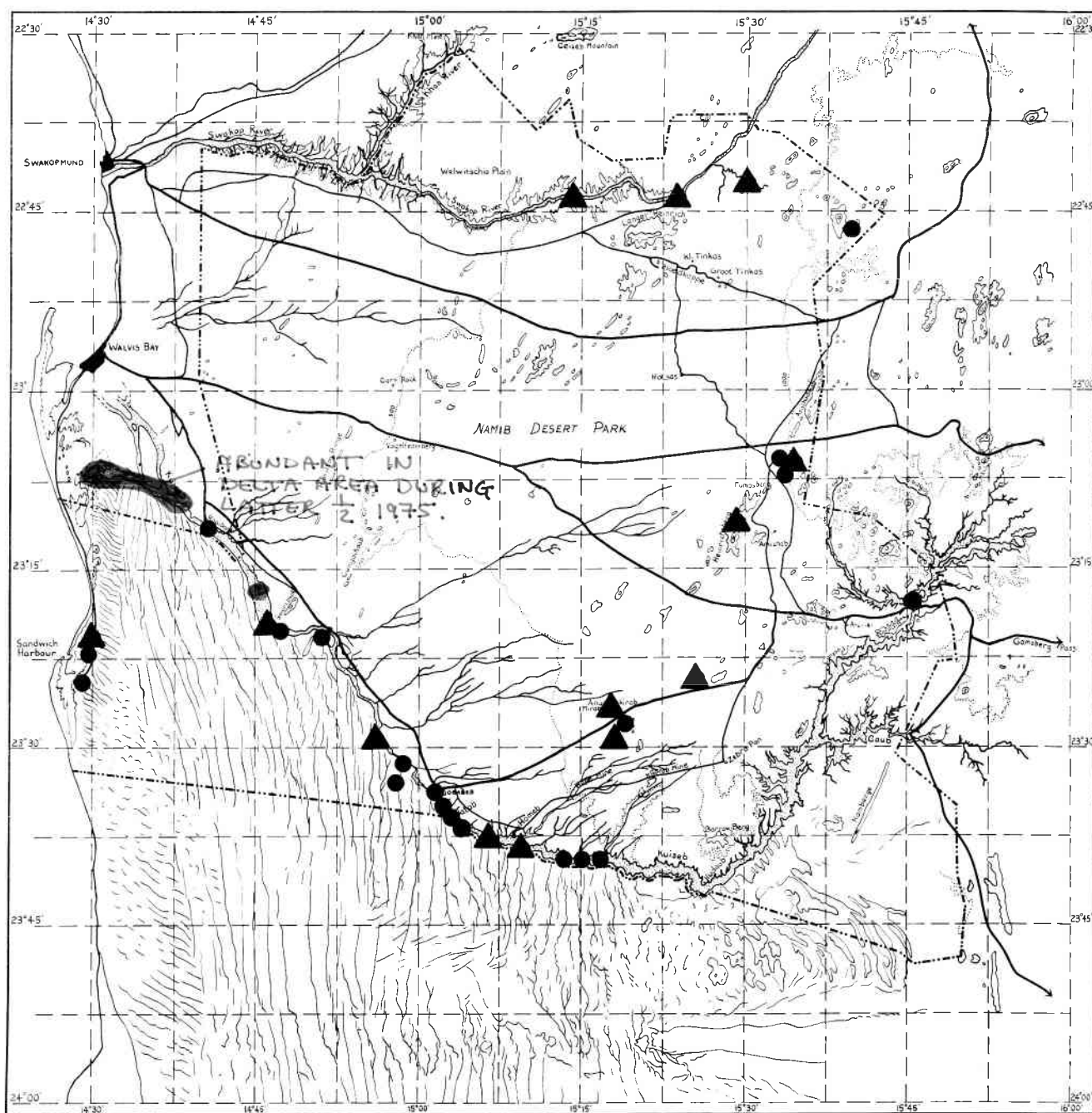


Figure 50. *Rhabdomys pumilio*

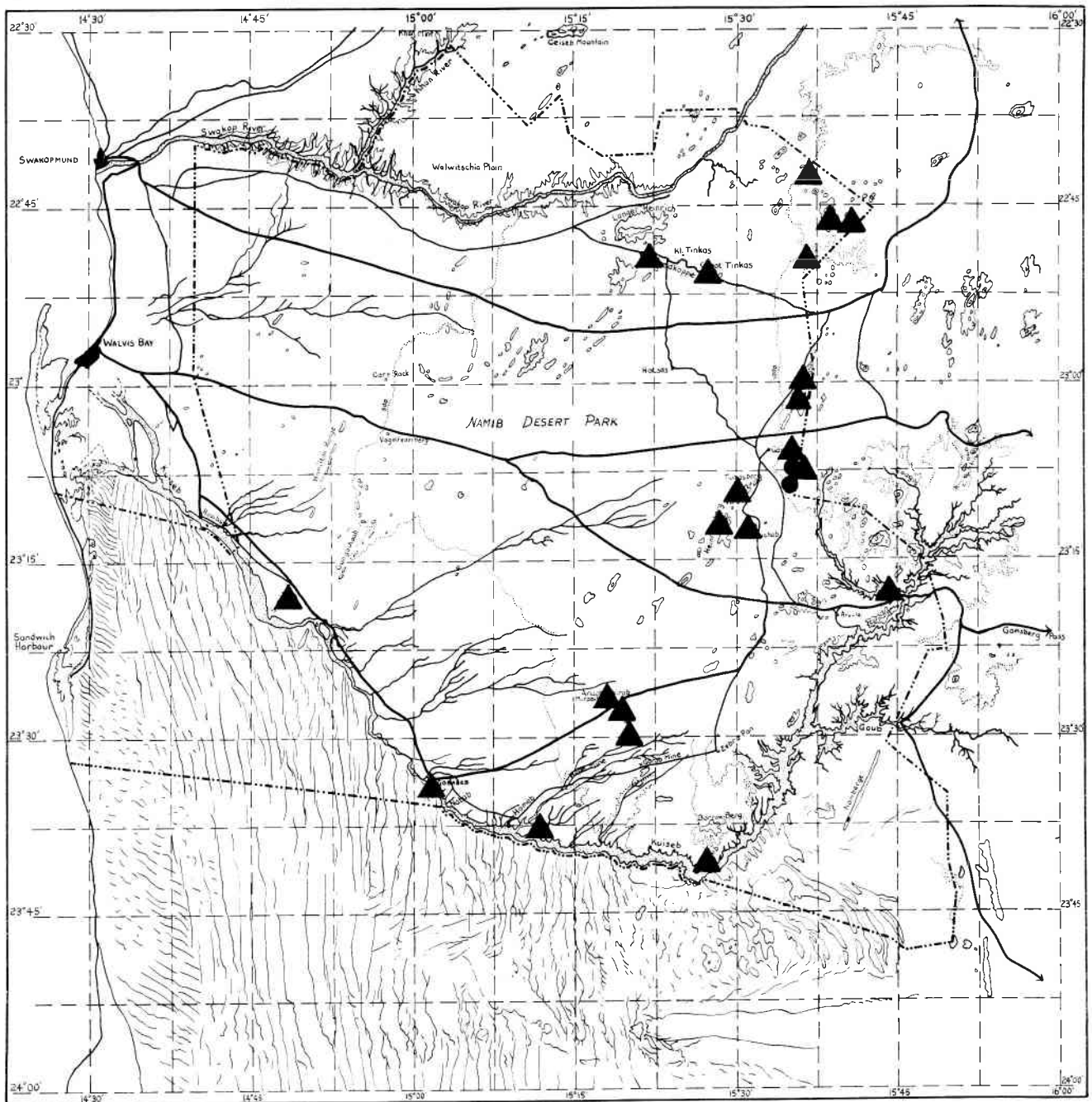


Figure 51. *Petromyscus collinus*

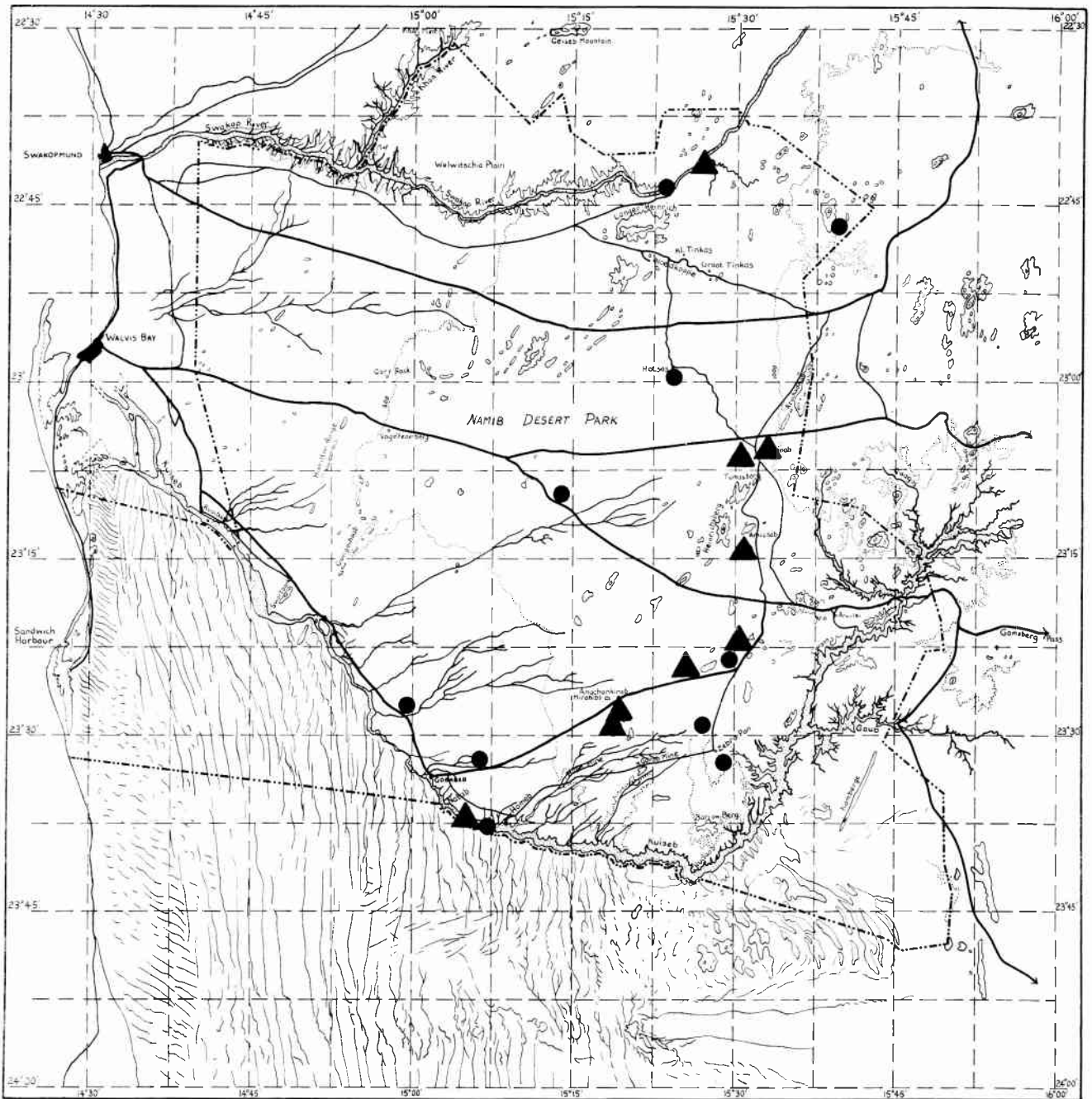


Figure 52. *Desmodillus auricularis*

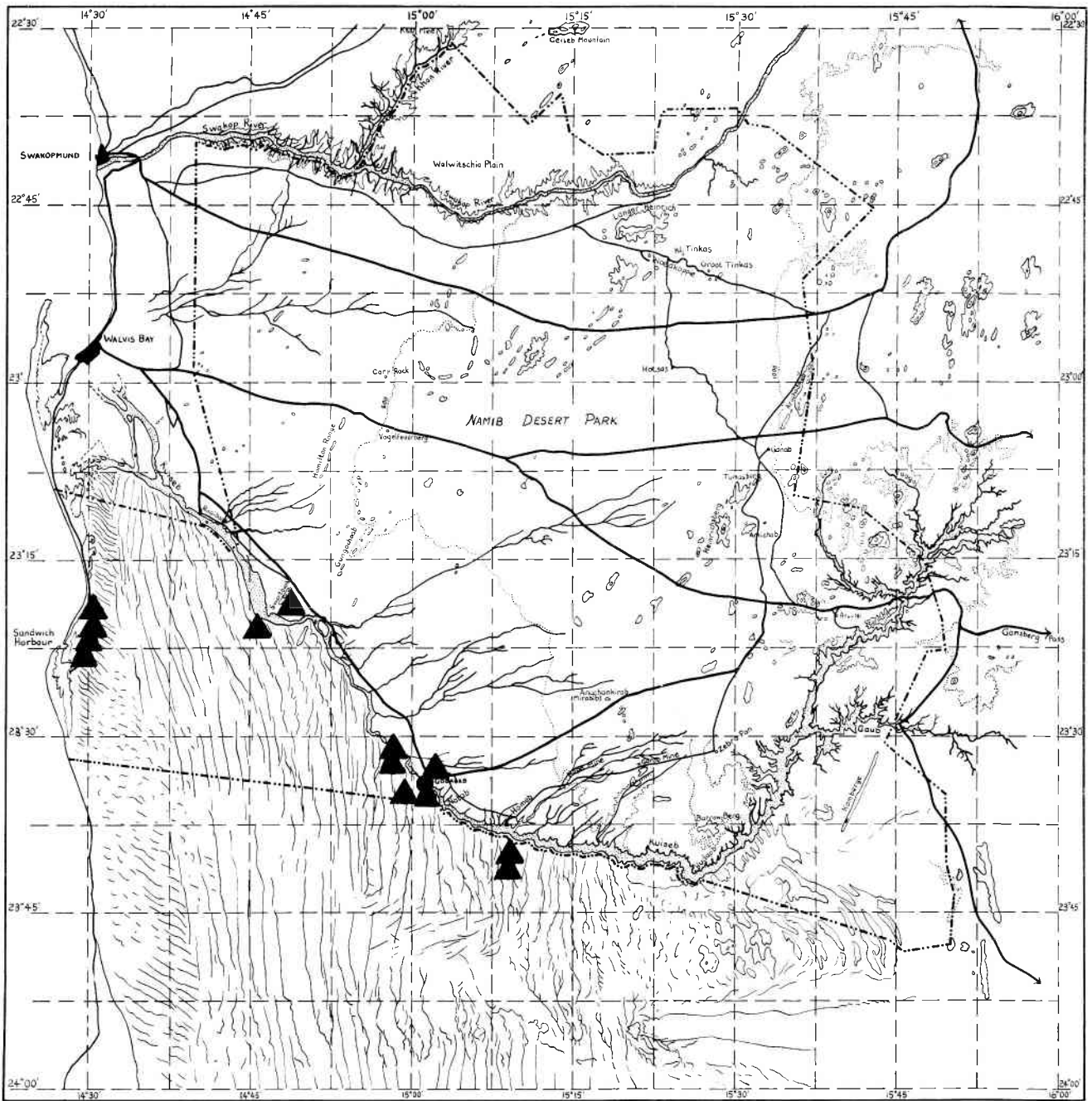


Figure 53. *Gerbillus paebe*

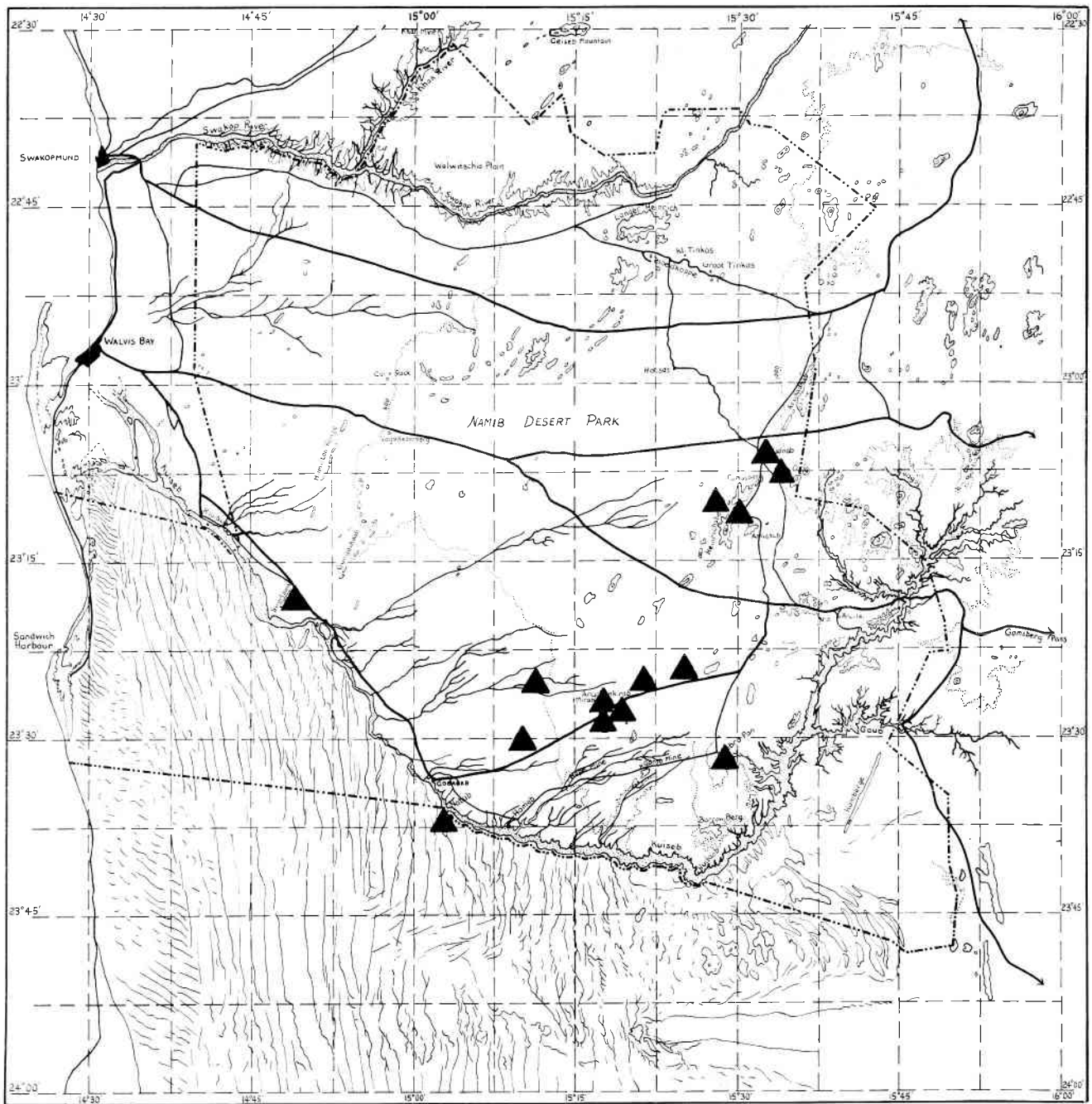


Figure 54. *Gerbillus vullinus*

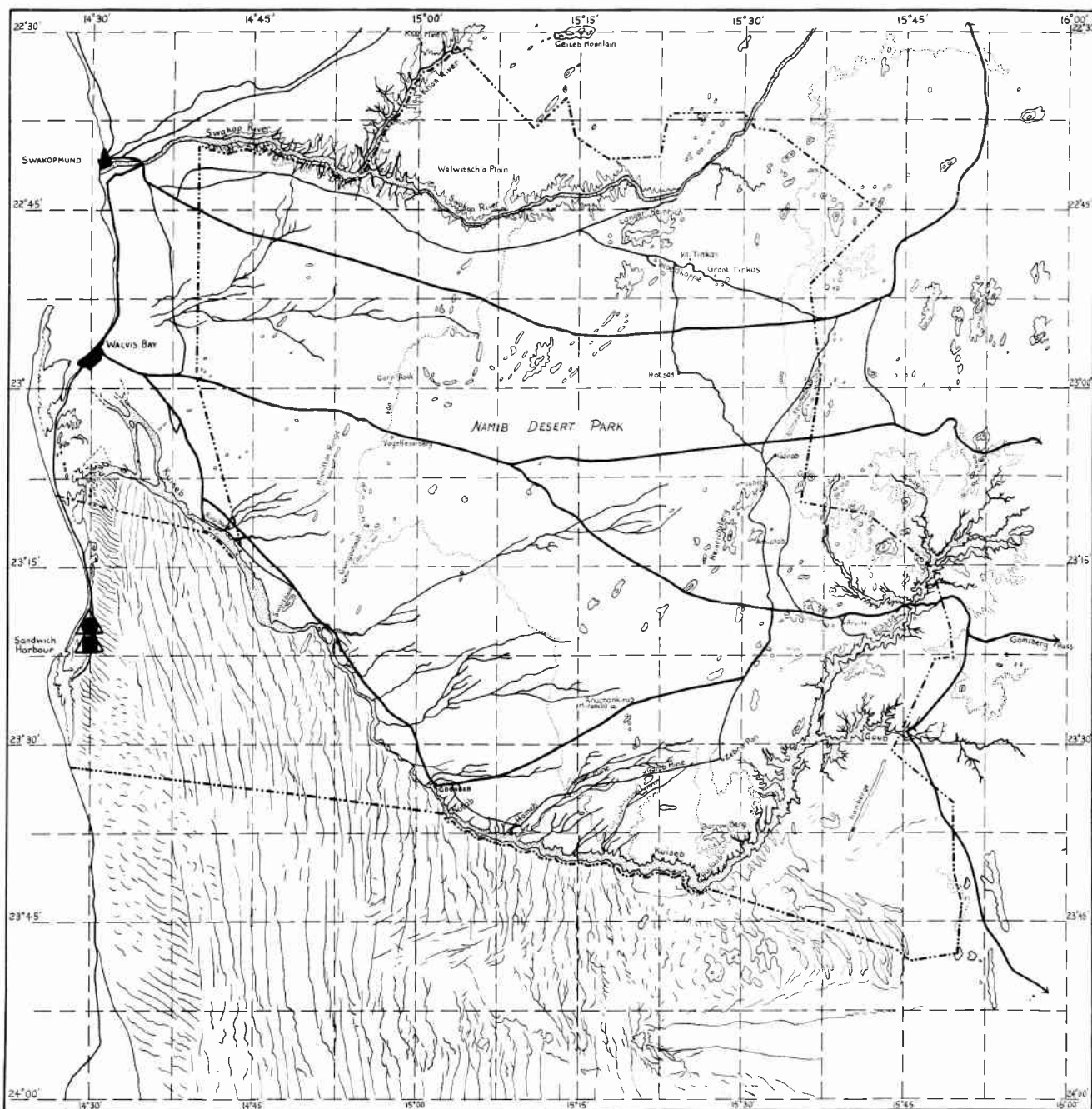


Figure 55. *Mus musculus* and *Rattus rattus*.