

# THE SMALL MAMMALS OF THE KRUGER NATIONAL PARK — A SYSTEMATIC LIST AND ZOOGEOGRAPHY

by

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The Kruger National Park, covering some 7,340 square miles in the north-eastern Transvaal Lowveld between  $22^{\circ} 25'$  to  $25^{\circ} 32'$  latitude south and  $30^{\circ} 50'$  to  $32^{\circ} 2'$  longitude east, forms an integral part of the southern savanna subregion of the great Aethiopian geographical region south of the Sahara (Darlington '57).

The secondary subdivision by Roberts (1951) of the primary biotic zones in Southern Africa into a number of secondary zoogeographical sub-zones acquires significance in an analysis of the distribution patterns of small mammals in the Kruger National Park and elsewhere. The area under consideration lies in what is designated by Roberts as the Eastern Low Country, with its inherently distinctive fauna and flora.

Although the Lebombo mountain range, forming the eastern boundary of the Park can not be regarded as a faunal barrier in the true sense of the word, it does exclude from the Transvaal Lowveld faunistically as well as floristically, a number of species which are essentially endemic to the eastern tropical littoral. At two points along the boundary line, however, an encroaching sandveld plateau from Mozambique carries with it a number of inhabitants of this zone into the extreme eastern sections of the Park (Pienaar, 1963).

Similarly, marginal encroachment of other typical inhabitants of the Natal and south-eastern Transvaal midlands, as well as the Eastern Transvaal forested area on the eastern side of the Drakensberg escarpment, is evident in the south-western portion of the Park.

As a broad basis for understanding the diversified faunal patterns of the Transvaal Lowveld, these subdivisions of biotic zones are important, but an interpretation of the individual distribution pattern of each small mammal species in the precincts of the area under discussion, and within the primary biotic zone, can only be sought in their specific habitat preferences.

In a previous paper an attempt was made to describe the more important game habitats differentiated from the vegetational milieu of the Kruger National Park. (Pienaar, 1963). Although these subdivisions have been more specifically defined in respect of the larger mammals, they are in many instances also explanatory of the distributional patterns and zoogeographical affinities of the endemic mammalian microfauna.

It is well to remember that the geographical distribution of mammals in an area like the Kruger National Park is primarily governed or determined by climatic conditions and individual adaptation through the years to the changing surroundings, but within any habitat the abundance or otherwise of a particular species is dependent on the availability of suitable cover or home ranges, food and water, its degree of immunity against diseases and success in inter-specific competition or in avoiding its natural predators.

Many bat species in the Park are seasonal migrants which are attracted by wild fruits or an abundance of insect prey during the wet season. Others are more permanent residents where there are suitable caves or other roosts in the area concerned. One species of elephant shrew and of hare are generally distributed throughout the Park, whereas the other species present are dependent on rupicolous surroundings or *Androstachys johnsonii* forests.

The distribution of spring hares coincides very closely to sandveld areas in the Park, and soil conditions generally also seem to govern to a large extent the distribution of the two indigenous mole-rat species in the Park. One of these, *Cryptomys holosericeus* is found more particularly in heavy, petitic or deep sandy soils along the eastern half of the Park, whereas the other is partial to the sandy, granitic soils of the south and western portions of the Park. A more detailed study of their food requirements and nesting habits will most probably indicate a parallel distribution of bulbous and other plants utilized for food and nesting by the two respective species.

A surprising number of mainly insectivorous mongoose species are found co-existing over large areas of the Park, but here again the individual species occupy different ecological niches and do not compete seriously with one another for food or shelter. Some are nocturnal in habit, whereas others hunt their prey during the day. A few are rock-loving species, whereas others exhibit a predilection for moist surroundings or utilize the disused warrens of other animals such as antbears or old termite hills.

Of the two species of galagos, one is confined to forested areas, whereas the other is commonly found in woodland or woodland savannas.

It is evident that the some seventeen species of indigenous *Muridae* in the Park are all endemic or near endemic to the southern Savanna biotic zone of Moreau (Davis, 1962). *Thamnomys dolichurus*, although a Savanna endemic, is to some extent dependent on forest conditions. Eastern forms

which do not penetrate the South West Arid biotic zone are represented in the Park by *Dasymys incomtus*, *Otomys angoniensis* and *Dendromus melanotis*. Near endemic species which range fairly extensively into the South West Arid zone include the following within our boundaries: *Thalommys paeulcus*, *Praomys natalensis*, *Aethomys namaquensis*, *Aethomys chrysophilus*, *Mus minutoides*, *Lemniscomys grise!da*, *Saccostomus campestris*, *Steatomys pratensis* and *Tatera leucogaster*. *Acomys dimidiatus* and *Dendromus mystacalis* are true Savanna endemic forms which have been found in the Park — the first-named, as an isolated population in rupicolous surroundings in the Punda Milia section of the Park.

Relict populations, the discontinuous distribution of which was determined by the existence in the past of more extensive forest during Pleistocene times, occurring in the north-eastern Lowveld (Limpopo valley) i.e. *Cricetomys gambianus*, have no surviving pockets within the boundaries of the Kruger Park. Neither does *Gerbillus paeba coombsi*, which is endemic to the South West Arid zone but penetrates the Limpopo valley from the west, enter the boundaries of the Park.

Zoogeographically the Kruger Park occupies an important transition zone in so far as it contains the western limits of distribution of the Moçambique hare, *Lepus capensis aquilo*, Limpopo golden mole [*Amblysomus (Chrysotricha) obtusirostris limpopoensis*], Livingstone's suni (*Nesotragus moschatus zuluensis*), and Nyala [*Tragelaphus (Nyala) angasi*], in addition to the south-western limits of distribution of the forest elephant shrew (*Petrodromus tetradactylus*) the north-eastern limits of the range of the Natal Red duiker (*Cephalophus natalensis amoenus*) and the northern limits of distribution of the Transvaal oribi (*Ourebia oribi*) and the red insectivorous mole (*Chlorotalpa sclateri cf. guillarmodi*).

Other rare small mammal inhabitants of the Kruger National Park include the Tomb or White-winged bat (*Taphozous mauritanus*), Hildebrandt's leafnosed bat (*Rhinolophus hildebrandti*), Welwitsch's hairy bat [*Myotis (Chrysopteron) welwitschii*], the scaly anteater [*Manis (Smutsia) temmincki*], the northern red hare (*Pronolagus crassicaudatus* subsp. indet.), the large Sabie ichneumon (*Herpestes ichneumon sabiensis*), Meller's mongoose (*Rhynchogale melleri langi*) and the yellow-spotted Tree hyrax (*Dendrohyrax (Heterohyrax) brucei brucei*).

The small mammal species described in the systematic list below represent the results of a six year survey period and it will be noted that despite intensive efforts to ascertain the contrary, several well-known inhabitants of the eastern low country which have been collected near the southern and western boundaries of the Park, are conspicuous by their absence. Some of the missing bat species such as *Eidolon helvum*, *Rhinolophus swinnyi*, *Rhinolophus simulator*, *Rhinolophus blasii*, *Pipistrellus rusticus*, *Pipistrellus kuhli* and *Kerivoula lanosa* may, because of their migratory habits, yet be found during years to come, but the absence

of others are more difficult to explain. Of the *Muridae*, the common striped field mouse (*Rhabdomys pumilio dilectus*) has been collected at Legogote near the south-western boundary of the Park. A specimen of the lesser white-tailed mongoose (*Paracynictis selousi*) was obtained from the main road between Klaseri and Hoedspruit, not far from the western boundary of Kingfisherspruit section. The Forest shrew (*Myosorex* sp.) is not uncommon along the southern banks of the Crocodile River (the southern boundary of the Park) and has been collected near Hectorspruit. Despite exhaustive searches none of these forms [included also is the snake mongoose (*Poecilogale albinucha transvaalensis*)], have yet materialized within the Kruger Park.

On the other hand, the small mammal survey of the Park has so far brought to light two species of small mammals which hitherto were unknown to science. The first is a shrew, which is still only known from skeletal material obtained from pellets collected at the roosts of barn owls in the Park. According to Meester (1961) it is almost certainly a *Suncus* sp., but one of which the skull dimensions are appreciably larger than that of any other known *Suncus* species in the Republic of South Africa or the adjoining territories. The other is an elephant shrew (*Elephantulus rupestris* subsp. indet.) which inhabits the Lebombo mountain range as far south as the Olifants Poort, as well as the broken country north of the Punda Milia—Pafuri road and south of the Levubu River. This isolated population has no geographic link with any other known community of this species in the Transvaal and without doubt represents a hitherto unknown race.

The distribution of individual species is presented in summarized form in the respective distribution maps at the conclusion of this paper — the various sight records or collecting localities being indicated by coloured dots.

The classification and nomenclature adopted below is that of Ellerman, Hayman and Morrison-Scott as amended by various specialists such as Meester (1962) and Davis (1962).

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SYSTEMATIC LIST OF THE SMALL MAMMALS OF THE KRUGER NATIONAL  
PARK WITH NOTES ON THEIR DISTRIBUTION AND  
HABITAT PREFERENCES

CLASS — MAMMALIA

SUB-CLASS — THERIA

INFRA-CLASS — EUTHERIA (PLACENTALIA)

ORDER — PRIMATES

SUB-ORDER 1 — PROSIMII

FAMILY — LORISIDAE  
SUB-FAMILY — GALAGINAE

1. *Galago senegalensis moholi* A. Smith  
Night Ape. Nagaap.

Not a common species in the Park, but fairly generally distributed in woodland and woodland savanna particularly along the western half of the Park and in *Acacia delagoensis* communities. Apparently absent from mountainous areas. [Fig. (i)].

Habits: Solitary, sometimes in pairs. Arboreal and nocturnal.  
Diet: More or less omnivorous. Wild fruits and insects preferred.

Breeding: No records in the Park.

2. *Galago (Otolemur) crassicaudatus umbrosus* Thomas.  
Bush Baby. Bosnagaap.

Sparsely distributed in forested areas throughout the Park where their weird calls may often be heard at night. [Fig. (i)].

Habits: Like *Galago senegalensis*, but also partially terrestrial.

Diet: As *G. senegalensis*. Are known to raid Mlala-beer "factories" of local Bantu tribes at night.

SUB-ORDER 2 — ANTHROPOIDEA  
FAMILY — CERCOPITHECIDAE  
SUB-FAMILY — CERCOPITHECINAE

1. *Cercopithecus aethiops cloetei* Roberts.  
Vervet Monkey. Blou-aap.

Commonly distributed throughout the Park with a decided preference for riparian growth or forested areas near water. [Fig. (ii)].

Habits: Gregarious, diurnal, arboreal as well as terrestrial.

Diet: Mainly vegetarian. A list of food items has been published in a previous paper. (Brynard & Pienaar, 1960).

Breeding: A single young is born and births have most commonly been recorded during spring and early summer.

2. *Cercopithecus mitis schwarzi* Roberts.  
Samango Monkey. Samango-aap.

These primates are not permanent residents of the Park but have on occasion been recorded in the gallery forest along the banks of the Levubu River at Pafuri, which they enter from the lower reaches of the Limpopo River in Mozambique during exceptionally wet years. [Fig. (iii)].

An arboreal and gregarious species of which no breeding records exist in the Park.

3. *Papio (Chaeropithecus) ursinus orientalis* Goldblatt.

Chacma Baboon.

Chacma-bobbejaan.

A common species in the Kruger Park and may be found in troops varying in number from a few to as many as a hundred and more throughout the whole area. More partial to woodlands and particularly to riparian forests and rocky hills and not often encountered in the more open savanna regions. [Fig. (iv)].

Habits: Gregarious. Terrestrial and arboreal. A diurnal species taking their nightly abode in trees or on suitably protective rocky ledges or boulders.

Diet: Omnivorous. Many instances of baboons killing and feeding on young antelopes such as nyala, bushbuck and impala as well as hares have been noted in the Park. A few cases of cannibalism have been recorded. (For a list of food items see Brynard & Pienaar, 1960). A species particularly prone to begging traits in National Parks and Nature Reserves with a heavy tourist traffic.

Breeding: No fixed breeding season. Usually a single young per birth but authentic cases of twin-births have been recorded near Skukuza.

ORDER — INSECTIVORA\*

SUPER-FAMILY — CHRYSOCHLORIDEA

FAMILY — CHRYSOCHLORIDAE

1. *Amblysomus (Chrysotricha) obtusirostris limpopoensis* (Roberts).

Limpopo Golden Mole.

Limpopo Geelkruipmol.

A small fossorial species with cryptic golden-yellow colour and very restricted range in the Park. Confined to the Nyandu and Machai sandveld plateau on the eastern boundary between 22° 30' and 23° latitude south. [Fig. (v)].

Diet: Particularly fond of termites and *Tenebrionid* larvae. The young of various burrowing lizards are probably also taken.

Breeding: No records to date.

2. *Chlorotalpa sclateri* nr. *guillarmodi* Roberts.

Red insectivorous mole.

Rooikruipmol.

Insectivorous moles of similar dimensions than the preceding species but with less brightly coloured fur. Also of limited range and only found in suitable sandy areas along the extreme south-western boundary of the Park between the Nsikazi River and the headwaters of the Mlambane-spruit. [Fig. (v)].

The subspecific status of this form has not been definitely determined.

\*Family: *Erinaceidae*.

Hedgehogs, *Erinaceus frontalis*. A. Smith have recently been rediscovered for the first time near Mlakeni and Kambane in the Pretoriuskop area, since allegedly reported in 1933.

SUPERFAMILY — MACROSCELIDEA  
FAMILY — MACROSCOLIDIDAE

i. *Elephantulus (Nasilio) brachyrhynchus* A. Smith.

Short-snouted Elephant Shrew. Kortsnoetklaasneus.

Records from the northern and southern districts of the Park, but probably occurs in woodlands and dry thickets throughout the area. [Fig. (vi)].

A solitary terrestrial form partly diurnal but feeding mostly at night. No breeding records.

2. *Elephantulus rupestris* (non Smith).

Lebombo Elephant Shrew. Lebombo-klipklaasneus.

A montane form confined to the Lebombos north of Olifants Poort and the broken hill country north of the Punda Milia—Pafuri road. Fairly common in suitable rupicolous surroundings particularly around the edges of *Androstachys johnsonii* communities, and very active during the day-time. [Fig. (vi)].

Semi-communal and several are often seen in the same area. Must be partly nocturnal as skull remnants have been found in owl pellets. Most probably a hitherto unknown race of *rupestris* and additional material will have to be collected to supplement the four specimens at hand.

3. *Petrodromus tetradactylus* Peters.

Four-toed Forest Elephant Shrew. Bosklaasneus.

These large and strikingly-coloured elephant shrews are relatively common in suitable habitats (forested areas and thickets, particularly *Androstachys johnsonii* forests) in the Park, but their range is restricted to the Punda Milia section of the northern district. [Fig. (vi)].

In habit they are largely nocturnal although some may be seen abroad on dull days or during dusk. The local specimens are the first records of this form within the boundaries of the Transvaal.

Diet: Believed to be mainly termites and ants. (Ansell, 1960).

Breeding: A single suckling youngster was found under a loose boulder in broken country during January.

SUPERFAMILY — SORICOIDEA  
FAMILY — SORICIDAE

1. *Crocidura hirta* Peters.

Subsp. indet. Red Shrew. Rooiskeerbekmuis.

General distribution throughout the Park in most types of habitat. [Fig. (vii)]. Judging from the number of skull remnants found in the pellets of barn owls, they are the most common shrew species in the Park and also the one with the highest population density. (Coetzee, 1963).

2. *Crocidura bicolor bicolor* Bocage.

Dwarf Shrew.

Dwergskeerbekmuis.

Distribution very similar to that of the preceding species and covers the whole of the Park. Less numerous and rarely caught in traps. [Fig. (vii)]. Breeding: Two newly-born young found at Skukuza early in December.

3. *Crocidura silacea* Thomas.

Marico Shrew.

Marikoskeerbekmuis.

In size intermediate between *C. hirta* and *C. bicolor* and so far only recorded from the banks of the Sabie River near Skukuza and the Machi-indudzi area of Punda Milia section. [Fig. (vii)].

4. *Crocidura cyanea infumata* (Wagner).

Reddish-grey Shrew.

Rooigryskkeerbekmuis.

A single specimen has been collected at Malelane on the north bank of the Crocodile River. [Fig. (viii)].

5. *Suncus* sp.

A number of skull remnants of shrews obtained from owl pellets at Pretoriuskop, Skukuza-koppies, Nwanedzi, Shilowa and Malahlapanga were identified by Meester (1960) as belonging to a hitherto unknown species of *Suncus*. Whereas the skull length of the known South African *Suncus* species varies from 14-17 mm., the measurements of intact skulls of this form vary from 20-21 mm. in length. This suggests an animal appreciably larger than any of the known dwarf shrews. Unfortunately no live specimens have as yet come to hand despite all our efforts to obtain some, and a description of this animal, the distribution of which seems to cover most of the Park, will have to be left in abeyance until trapping operations are successful. [Fig. (viii)].

ORDER — CHIROPTERA

SUBORDER 1. — MEGACHIROPTERA

FAMILY — PTEROPODIDAE

SUB-FAMILY — PTEROPODINAE

1. *Epomophorus crypturus* Peters.

Lesser Epauletted Fruit Bat.

Kleiner Witkolvrugtevlermuis.

A migratory species often attracted in great numbers to riparian and other forested areas in the Park by ripening wild fruits (particularly *Ficus* spp.) during the wet season. Their monotonous bell-like calls are then an integral part of the night symphony. [Fig. (ix)].

Breeding: Single young attached to their mothers have been recorded during December and January.



2. *Epomophorus wahlbergi wahlbergi* Sundevall.

Wahlberg's Epauletted Fruit Bat.      Wahlbergse Witkolvrugtevlermuis.

A larger species and of more stout build than the former.

So far only recorded from Pretoriuskop and Malelane in the southern section of the Park, although they doubtless also visit suitable localities in northern areas. [Fig. (ix)].

Diet: Mainly fruit, but judging from the remnants of beetles and other insects in the stomach contents of some specimens examined, also partly insectivorous.

The large Straw-coloured Fruit Bat (*Eidolon helvum*) has not yet been recorded in the Kruger Park, nor has the Cape Fruit Bat (*Rousettus aegyptiacus* E. Geoffroy).

SURORDER 2. — MICROCHIROPTERA

FAMILY — EMBALLONURIDAE

1. *Taphozous mauritanus* E. Geoffroy.

Tomb or White-winged Bat.      Witlyf- of Tombervlermuis.

An endemic of Madagascar extending over most of the Aethiopian region and also entering the Palearctic region. In the Park it is rare and solitary specimens or pairs have been recorded at Malelane, Hartebeesfontein and near Shipikane hills. [Fig. (x)].

FAMILY — NYCTERIDAE

1. *Nycteris capensis* A. Smith.

Cape Slit-faced Bat.      Kaapse Langoorvlermuis.

A communal species frequently encountered in suitable roosts (caves and hollow tree trunks) throughout the Park. [Fig. (xi)]. Often found also in disused buildings.

FAMILY — RHINOLOPHIDAE

SUB-FAMILY — RHINOLOPHINAE

1. *Rhinolophus clivosus* Cretzschmar.

Geoffroy's Horseshoe Bat.      Geoffroyse Blaarneusvlermuis.

So far only a single specimen has been collected at Punda Milia rest camp. [Fig. (xii)].

2. *Rhinolophus darlingi* K. Anderson.

Darling's Horseshoe Bat.      Darlingse Blaarneusvlermuis.

A gregarious species sometimes found in large numbers in certain caves throughout the Park. Often in company with other species such as *Nycteris capensis* and *Miniopterus schreibersi*. [Fig. (xiii)].

3. *Rhinolophus landeri lobatus* Peters.

Lander's Horseshoe Bat. Klein Horingneusvlermuis.

Has been recorded from a cave near Ngirivane (a single specimen) and from an outbuilding at the W.N.L.A. quarters at Pafuri (a fairly large community). Many different colour phases ranging from dull grey to bright orange are apparent. [Fig. (xii)].

4. *Rhinolophus hildebrandti* Peters.

Hildebrandt's Horseshoe Bat. Hildebrandtse groot Blaarneusvlermuis.

A large species usually found singly or in pairs in certain caves, disused buildings and hollow Baobab trunks in the northern half of the Park. Sometimes it shares the roost with such species as *Hipposideros caffer* and *Miniopterus schreibersi*. [Fig. (xiii)].

SUB-FAMILY — HIPPOSIDERINAE

1. *Hipposideros caffer caffer* Sundevall.

South African lesser Leafnosed Bat. Kaapse Blaarneusvlermuis.

A common species and an inhabitant of caves and disused buildings throughout the Park, often sharing the abode with other species. Many different colour phases are found which may be determined by seasonal or dietary factors. Often in very large colonies. [Fig. (xiv)].

FAMILY — MOLOSSIDAE

1. *Tadarida (Chaerephon) pumila elphicki* (Heyman).

Lesser Freetailed Bat. Klein-losstertvlermuis.

An inhabitant of the roofs of staff-dwellings in the Park, where they often congregate in immense numbers with the accumulating guano constituting a menace to ceilings. [Fig. (xv)]. Young have been observed clinging to their mothers during the summer months. Very swift in flight.

2. *Tadarida (Chaerephon) limbata* Peters.

Pale-winged Freetailed Bat. Witvlerek-losstertvlermuis.

As yet only recorded from Punda Milia where they were found co-existent with *T. pumila elphicki*. [Fig. (xv)].

3. *Tadarida aegyptiaca* E. Geoffroy.

Egyptian Freetailed Bat. Egiptiese Losstertvlermuis.

A few specimens were collected at Skukuza many years ago by the late Warden, Col. J. Stevenson-Hamilton, but have not since been recorded in the Park. [Fig. (xv)].

4. *Tadarida (Mops) condylura* A. Smith.

Angola Freetailed Bat.

Angola-Losstertvlermuis.

In contrast to the *Tadarida* and *Chaerephon* species, the larger Angola freetail bats have also been found to colonize caves in the Kruger Park. An albino specimen was collected at Skukuza in the loft of the old Warden's residence. [Fig. (xvii)].

FAMILY — VESPERTILIONIDAE

SUB-FAMILY — VESPERTILIONINAE

1. *Myotis (Selysius) tricolor* Temminck.

Cape Hairy Bat.

Kaapse Langhaarvlermuis.

Not common in the Park at all, and only a single specimen has been collected at dusk at Satara. [Fig. (xvii)].

2. *Myotis (Chrysopteron) welwitschii* (Gray).

Welwitsch's Hairy Bat.

Welwitschse Langhaarvlermuis.

A single specimen of this very rare form was collected during the day where it was roosting in a scrubby bush in the Lebombos, near Shingedzene, on the eastern boundary. [Fig. (xvii)].

3. *Eptesicus capensis gracilior* Thomas & Schwann.

Cape Serotine.

Kaapse Dakvlermuis.

A common species in the higher-lying regions of the Republic, but in the Kruger Park it is relatively rare, although it has been recorded throughout the length of the area. [Fig. (xvii)].

4. *Pipistrellus nanus* Peters.

Banana Bat.

Piesangvlermuis.

As the name implies, this bat is common in or near banana plantations where they roost in the curled-up leaves of these plants. In the Kruger Park it has been collected at Skukuza, Pretoriuskop and Malelane. [Fig. (xviii)].

5. *Nycticeius (Scoteinus) schlieffeni australis* Thomas & Wroughton.

Schlieffen's Dwarf Bat.

Schlieffense Dwergdakvlermuis.

The smallest of all our endemic bat species and a common sight at dusk near permanent water throughout the Park. Extremely agile in flight and hunt their insect prey over the water's surface. They roost in large numbers in rock crevices and sometimes also in the lofts of disused buildings. [Fig. (xviii)].

6. *Scotophilus nigrita dingani* A. Smith.

Yellow House Bat.

Geeldakvlermuis.

These large and swift-flying house bats have so far only been recorded from the southern half of the Park. [Fig. (xix)].

7. *Scotophilus viridis* Peters.

Lesser Yellow Bat.

Klein-geelvlermuis.

Considerably smaller than *S. nigrita* and with bright yellow fur. Only a single specimen has been collected at Nsemane windmill near Satara. [Fig. (xix)].

SUB-FAMILY — MINIOPTERINAE

1. *Miniopterus schreibersi* Kuhl.

Schreiber's Gregarious Bat.

Gesellige Vlermuis.

A common species in the Park, often congregating in great numbers in suitable roosts such as caves, rock crevices and the lofts of houses. [Fig. (xx)].

SUB-FAMILY — KERIVOULINAE

1. *Kerivoula lanosa* A. Smith.

Lesser Woolly Bat.

Klein-wolhaarvlermuis.

Sight records of this form, which often utilize the disused nests of weaver birds, in the southern section of the Park, have not been confirmed without doubt.

ORDER — PHOLIDOTA

FAMILY — MANIDAE

1. *Manis (Smutsia) temmincki* Smuts.

Cape Pangolin (Scaly Anteater).

Ietermagô.

Although seldom seen, these shy and peculiar mammals are generally distributed throughout the Park in habitats where there is an abundance of termitaria. [Fig. (xxi)].

In habit they are solitary and nocturnal (but also, at least in part, diurnal). No breeding records in the Park, but according to Ansell (1960) a single young is born.

SUPER-ORDER — FERAEE

ORDER — CARNIVORA

SUB-ORDER — FISSIPEDIA

SUPER-FAMILY — CANOIDEA

FAMILY — MUSTELIDAE

SUB-FAMILY — MUSTELINAE

1. *Ictonyx striatus maximus* Roberts.

Zorilla, or Striped Polecat.

Stinkmuishond.

A nocturnal species which is not at all common in the Kruger Park, and very few records have been compiled over the last six years. Apparently more common in the southern section, but has been seen as far north as Punda Milia. [Fig. (xxii)].

A sight record of the White-naped weasel or Snake Mongoose (*Poecilogale albinucha*) near Letaba Camp many years ago, has not been confirmed.

#### SUB-FAMILY — MELLIVORINAE

1. *Mellivora capensis capensis* Schreber.

Honey Badger.

Ratel.

A species that is well represented in the Kruger Park, and distributed throughout in practically all types of country. [Fig. (xxiii)].

Habits: Solitary or in pairs these truculent and extremely courageous animals roam for food mainly during the day but also at night.

Diet: Omnivorous. Very fond of wild honey and will take great pains to obtain this delicacy. Predatory to a degree and have been seen to hunt cane rats and to dig up mole rats. Has been suspected to attack the young of many antelope species and even full-grown animals. Pythons are often attacked, killed and eaten.

Breeding: Mating has been observed in June and in February and a female carrying two newly-born young in her mouth was encountered in December.

#### SUB-FAMILY — LUTRINAE

1. *Lutra (Hydricteis) maculicollis maculicollis* Lichtenstein.

Spotted-necked Otter.

Kleinotter.

Not at all common in the Transvaal Lowveld and has so far only been recorded without doubt in the Crocodile and Letaba Rivers. [Fig. (xxiv)]. The diet consists mainly of frogs, fish and the eggs of water-birds, although other small vertebrates are doubtless also taken. More often than not encountered in family groups.

2. *Aonyx capensis capensis* Schinz.

Cape Clawless Otter.

Groototter.

The common otter of the Kruger National Park and frequents all the perennial rivers and also some seasonal rivers draining the area. [Fig. (xxiv)]. Usually solitary or in pairs and the characteristic spoor is a common sight in the wet sand or mud along the water's edge. They feed mainly on crabs, but frogs, fish and other small vertebrates are also important items of their diet. No breeding records in the Park.

#### SUPER-FAMILY — FELOIDEA

#### FAMILY — VIVERRIDAE

#### SUB-FAMILY — VIVERRINAE

1. *Viverra (Civettictis) civetta civetta* Schreber.

Civet.

Sivetkat.

Common throughout the Park and although it is of nocturnal habit

and is often encountered on the roads during night-driving, particularly in the dry season, odd individuals are not infrequently met with abroad on overcast days or early in the morning. [Fig. (xxv)]. Prefers areas near permanent water, especially palm-thickets.

Diet: Omnivorous to a large degree and small mammals, birds, eggs, small reptiles, insects and wild fruits are taken with equal relish.

Breeding: Lactating females carrying a single young in their mouths have been seen in November and December. Known to give birth to as many as three cubs. (Ansell, 1960).

2. *Genetta genetta pulchra* Matschie.

Small-spotted Genet.

Kleinkolmuskejaatkat.

This is the more common species of genet in the southern and western portions of the Park although the Russet-spotted genet is also found in these areas in sympatric association with them. [Fig. (xxvi)].

Diet: Very much more a true carnivore than the civet. Are known to prey on scorpions, however, which they take in large numbers during certain times of the year. Frogs are also hunted at night around the edge of pans or streams. A persistent and extremely cunning raider of bird nests and the poultry runs of staff in the Park.

3. *Genetta rubiginosa letabae* Thomas and Schwann.

Russet-spotted Genet.

Roolkolmuskejaatkat.

More commonly found in the northern and eastern sections of the Park but specimens have been recorded as far south as Malelane and Crocodile Bridge on the Crocodile River. [Fig. (xxvii)].

Diet: Similar to that of the preceding species.

Breeding: Three newly-born cubs were found in a mass of driftwood on the banks of the Sabie River in February.

4. *Herpestes ichneumon sabiensis* Roberts.

Large Grey Mongoose or Sabie Ichneumon.

Groot-grysmuishond.

The largest of our indigenous mongoose species but despite the fact that the type of this form was collected at Satara (Roberts, 1951), these animals are decidedly rare and have so far only been recorded with certainty south of the Olifants River. [Fig. (xxviii)].

In habit it is solitary, terrestrial and largely diurnal, preferring habitats near permanent water, but has been encountered in woodland and woodland savanna as well.

Diet: Small terrestrial vertebrates and the eggs of ground-nesting birds.

Also known to take crabs and fish if obtainable.

No breeding records.

5. *Herpestes (Galerella) sanguineus cauxi* A. Smith.

Slender Mongoose.

Transvaalse Rooimuishond.

A common species distributed throughout the whole area in suitable surroundings where it may be met with singly during the daytime. [Fig. (xxviii)].

Although it is mainly carnivorous, not much is known of their feeding or breeding habits. Snakes are particularly sought after and killed with surprising ease. Large birds of prey such as the Martial eagle are important enemies of these animals.

6. *Helogale parvula parvula* Sundevall.

Dwarf Mongoose.

Dwergmuishond.

Another common species in the Kruger Park, where they are more prominently represented in the western half of the area. Being a gregarious species, they are more often than not seen as small troops or family groups occupying disused termitaria, hollow tree trunks or some other suitable abode. [Fig. (xxix)].

Diet: Omnivorous to a certain extent, but probably mainly insectivorous.

Deadly enemies of the snake population of their chosen habitat.

Breeding: No records. (2-3 cubs are born. Ansell, 1960).

7. *Mungos mungo senescens* Thomas and Wroughton.

Banded Mongoose.

Gebandemuishond.

A gregarious and rupicolous species which may be met with in rocky surroundings throughout the Park. [Fig. (xxx)]. Sometimes also in woodland or Acacia thickets where they occupy disused anthills. Diurnal, and search for food (often in close association with baboons) in troops numbering as many as 75 animals.

Diet: Largely insectivorous, but wild fruits may also be taken.

Breeding: Cubs (usually two) are born in summer.

8. *Atilax paludinosus paludinosus* Cuvier.

Marsh or Water Mongoose.

Kommetjiesgatmuishond.

A rare animal in the Kruger Park and only a few genuine records exist. This may be misleading, however, in view of the shy nature of these large mongooses and the fact that they spend much time in the water or amongst the reed beds and thickets at or near the water's edge. Have been seen singly or in small family groups. [Fig. (xxx)].

Diet: Crabs, frogs, fish and other small vertebrates, as well as the eggs of birds and probably reptiles.

No breeding records, although young animals have been seen running with their parents in December.

9. *Rhynchogale melleri langi* Roberts.

Meller's Mongoose.

Meller se Muishond.

This rare species has so far only been collected in the mountainous country around the headwaters of the Machuluane spruit, in the Malelane section. Sight records from Pretoriuskop area have not been confirmed [Fig. (xxxii)].

Not much is known of their diet, but they may be partially omnivorous, feeding on wild berries, termites, beetles, grasshoppers, lizards and such like.

10. *Ichneumia albicauda grandis* Thomas.

Large White-tailed Mongoose.

Groot-witstertmuishond.

Not at all uncommon, especially south of the Olifants River, but being a nocturnal species, these large mongooses are rarely seen abroad. [Fig. (xxxii)]. Cases of melanism have been recorded, with little or no evidence of the characteristic white tail. They are solitary animals and feed mainly on insects and small mammals. No breeding records.

FAMILY — PROTELIDAE

1. *Proteles cristatus transvaalensis* Roberts.\*

Aardwolf.

Maanhaarjakkals.

These timid and much maligned beasts which are so often falsely accused of carnivorous traits, are particularly rare in the Kruger Park and it is only in the Pretoriuskop section and along the western half of the remainder of the area where they are infrequently met with at night. Occasionally one may be seen abroad during overcast days feeding on termites which they dig out. [Fig. (xxxii)].

An attempt will be made in the near future to augment the small Aardwolf population within our boundaries with specimens caught south of the Crocodile River, where they still occur in fair numbers.

Diet: Largely termites, but other insects are also taken. Have been seen to feed on maggots but do not normally touch carrion.

Breeding: No local records. 3-4 Cubs are born in summer. (Ansell, 1960).

FAMILY — FELIDAE

1. *Felis lybica cafra* Desmarest.

African Wild Cat.

Vaalboskat of Groukat.

Of the three small feline species in the Kruger Park, the African wild cat has the widest distribution, but being of more nocturnal nature than the other two species, it is only rarely seen during the day. Not very common in the southern district. [Fig. (xxxiii)].

\*The jackals of the Kruger National Park have been dealt with in a previous paper. (Pienaar, 1963).



Diet: Carnivorous, preying on small mammals and ground-nesting birds and their young. Frogs and certain invertebrates (eg. *Solifugids*) are also taken. (Ansell, 1960).

Breeding: Cubs (2-3 in number) have been recorded during June and February. A case of hybridization with a domestic Siamese cat occurred at Shingwidzi.

2. *Felis (Lynx) caracal caracal* Schreber.

Caracal. Rooikat.

These graceful and extremely rapacious carnivores have been recorded throughout the Park, but more often in woodland areas at or near rocky surroundings. [Fig. (xxxiii)]. They are solitary animals, but are occasionally seen in pairs and are partly nocturnal in habit.

Diet: Carnivorous, feeding on small mammals, the smaller antelope and their young, and such birds as they can catch. (Rock hyrax and grey-footed squirrels are favourite items on their diet.)

Breeding: Single youngsters have been recorded during May, July, January and February. More than one cub may be born.

3. *Felis (Leptailurus) serval hamiltoni* Roberts.

Serval. Tierboskat.

Again, rather a common species in the Park and often encountered along the roads at night, but are rarely seen during the day. Found in most types of country, but apparently more common in the palm-studded plains of the northern Lebombo-flats. [Fig. (xxxiv)].

Diet: Carnivorous, feeding on any small mammal or bird that it can kill.

Also partly insectivorous and large terrestrial beetles are often taken.

Breeding: Half-grown cubs (a few months old) have been recorded in May and August.

There is no evidence whatsoever of the existence on the Babalala flats of the Kruger National Park of the Blackfooted cat (*Felis nigripes* Burchell), as was claimed by the late Col. M. Rowland-Jones. This small feline is an inhabitant of the arid north-western regions of Southern Africa (including the Kalahari and Bechuanaland), and the Orange Free State and Western Transvaal constitute its eastern limits of distribution.

ORDER — TUBULIDENTATA

FAMILY — ORYCTEROPODIDAE

1. *Orycteropus afer afer* Pallas.

Ant Bear. Erdvark.

A common species in the Kruger National Park judging from the number of freshly dug warrens which may be encountered in most parts of the area, but particularly in sandveld regions, where there is an abundance of anthills. Because of the timid nature and nocturnal habits

of these strange beasts, they are seldom seen however. [Fig. (xxxv)].

Diet: Ants and termites.

Breeding: No records in the Park.

## ORDER — HYRACOIDEA

### FAMILY — PROCAVIIDAE

#### 1. *Procavia capensis letabæ* Roberts.

Rock Hyrax.

Klipdassie.

Inhabitants of most suitable montane areas and boulder-strewn koppies between the Olifants and Bubube Rivers in the northern district of the Park. [Fig. (xxxvii)]. Surprisingly absent from similar habitats between the Olifants and Sabie Rivers.

The existence of a southern race (most probably *Procavia capensis coombi* Roberts) in the mountainous region north-west of Malelane and along the Nsikazi River [Fig. (xxxvii)], has not been established beyond doubt.

Diet: Vegetarian. (Probably mainly grazing, but also some browsing).

Breeding: No records.

#### 2. *Dendrohyrax (Heterohyrax) brucei brucei* Gray.

Yellow-spotted Hyrax or Tree-dassie.

Geelkoldassie.

A gregarious species like the Rock hyrax and are found in large numbers in the broken, forest-clad hills and mountains north of the Punda Milia—Pafuri road and along the eastern boundary as far south as Malonga spring. [Fig. (xxxvii)].

In habit they are semi-terrestrial and rupicolous, but are also adept at climbing trees.

Diet: Vegetarian. (Probably mainly browsing).

Breeding: No records.

## ORDER — LAGOMORPHA

### FAMILY — LEPORIDAE

#### 1. *Lepus europæus zuluensis* Thomas & Schwann.

Lowveld Scrub Hare.

Laeveldse Kolhaas.

The common hare of the Transvaal Lowveld regions and occurs, except for montane areas, in suitable habitats throughout the Kruger Park. May be encountered in large numbers along the roads at night. Single or in pairs. [Fig. (xxxviii)].

Diet: Vegetarian — largely grazing.

Breeding: A gravid female with three well-developed embryos was collected in March.

2. *Lepus capensis aquilo* Thomas & Wroughton.

Moçambique Hare.

Mosambiekse Vlakhaas.

So far known in the Park only from a single specimen, which was collected near Shingomene on the eastern boundary, north of Shingwidzi. [Fig. (xxxviii)].

3. *Pronolagus crassicaudatus* I. Geoffroy.

Red or Mountain Hare.

Rooihaas.

A large species inhabiting certain mountainous areas in the Park — particularly north of the Olifants River. No specimens have been collected to date and it is possible that the northern form will be found to be *P. rupestris* A. Smith, being the southern limits of distribution of the Vumba (S. Rhodesian) race. On the other hand, those south of the Olifants River are more likely to be *P. crassicaudatus ruddi* Thomas & Schwann, of which specimens have been obtained from Legogote, near White River. [Fig. (xxxviii)].

ORDER — RODENTIA

FAMILY — BATHYERGIDAE

1. *Cryptomys hottentotus* Lesson.

Subsp. indet.

Common Mole-rat or Hottentot Mole-rat.

Hottentotse Grysmol.

The systematics and distribution of the mole-rats of the Kruger National Park are at present under investigation by de Graaff (vide also de Graaff, 1962). It is evident from a substantial series of specimens collected, that the range of distribution in the Park of the common mole-rat is restricted to the area south of the Olifants River, and they are particularly abundant in the more sandy soils towards the south and west. [Fig. (xxxix)].

These fossorial and communal or semi-communal (sometimes solitary) rodents apparently feed almost entirely on roots, tubers and other underground vegetable matter, the fibre of which is also utilized for nest-building (de Graaff, 1962). Evidence has been found that they sometimes leave their burrows at night and feed on the leaves of certain low shrubs.

Breeding: Under investigation.

2. *Cryptomys holosericeus* Wagner.

Subsp. indet.

Greater Grey Mole-rat.

Groter Grysmol.

An inhabitant of the rich basaltic and sandy soils of the northern and eastern regions of the Park. The centre of distribution lies mainly north of the Olifants River, although a number have also been collected south of this river, particularly in the Pumbe sandveld. [Fig. (xxxix)].

## FAMILY — HYSTRICIDAE

### 1. *Hystrix africae-australis* Peters.

Porcupine.

Ystervark.

Inhabits practically all types of country and is distributed throughout the Park. Particularly common in habitats where there is an abundance of rocky crevices, caves or other suitable shelters. Spoor and shed quills are often found along game paths. [Fig. (xli)]. Carnivora hunting them often sustain serious wounds around the mouth and paws, which more often than not become septic and may prove fatal.

Diet: Mainly vegetarian (Brynard & Pienaar, 1960). Have been seen to ring-bark trees, such as *Erythrina* spp., *Ficus* spp., and *Spirostachys africanus*, and also gnaw old bones and ivory which they frequently drag into their burrows.

Breeding: Mating has been observed during May and females with 2-3 young have been recorded in April and May.

## FAMILY — OCTODONTIDAE

### SUB-FAMILY — THRYONOMYINAE

### 1. *Thryonomys swinderianus* Temminck.

Cane Rat.

Rietrot.

Cane rats inhabit reedbeds or patches of dense, tall grass along river banks and streams throughout the Park. Are often flushed from vleis in large numbers by veld-fires. [Fig. (xlii)]. Excellent swimmers and at least partly amphibious. Considered a delicacy by the local African population and often fall victim to poaching parties hunting them with traps and dogs.

Diet: Grass and young reed stalks.

Breeding: No records.

## FAMILY — SCIURIDAE

### 1. *Paraxerus cepapi cepapi* A. Smith.

Bush or Grey-footed Squirrel.

Geelpooteekhorinkie.

Without doubt one of the most common and widely distributed of all small mammal species in the Kruger Park and may be encountered in diverse ecological surroundings and habitats, even in the dense Msimbit forests of the northern sandveld regions. [Fig. (xliii)].

Habits: Diurnal, solitary or in pairs, arboreal but terrestrial to a degree.

Diet: The kernels and seeds of many indigenous trees and shrubs as well as the leaves of Aloes and other succulents. (Brynard & Pienaar, 1960).

Breeding: Mating has been observed during August.

## FAMILY — PEDETIDAE

### 1. *Pedetes capensis salinae* Wroughton.

Spring Hare.

Springhaas.

Spring hares are not common in the Kruger National Park and their

distribution is strictly confined to certain sandveld areas north of the Olifants River. It is significant that the only spring hare community south of the latter river inhabit the tiny sandveld spit at Pumbe, along the eastern boundary. [Fig. (xliii)].

A strictly nocturnal species of which little is known as regards feeding and other habits. Population data are difficult to obtain, but there appears to be considerable seasonal and other fluctuations in their numbers.

FAMILY — MUSCARDINIDAE

SUB-FAMILY — GRAPHIURINAE

1. *Graphiurus (Claviglis) murinus streeteri* Roberts.

Forest Dormouse.

Boswaaiertermuis.

Have been found singly or in pairs in hollow trees in woodland areas throughout the Park and often also in staff dwellings where they make nightly sorties in search of food. [Fig. (xliv)]. Although they are probably mainly vegetarian in their feeding habits, it has been established that they are particularly fond of certain millipede species (such as the large *Doratogonus flavifilis*), and kill them in considerable numbers.

FAMILY — MURIDAE

SUB-FAMILY — MURINAE

1. *Thamnomys dolichurus* (Smuts).

Subsp. indet.

Thicket Rat or Forest Mouse.

Bosmuis.

A single specimen was collected in the riverine forest at the confluence of the Limpopo and Levubu Rivers. [Fig. (xlv)]. The subspecies has not yet been determined, but it may either be *baliolus* Osgood 1910 (Wood-bush) or possibly *vumbaensis* Roberts 1938 (Vumba).

2. *Rattus rattus* (Linnaeus).

House Rat or Common Black Rat.

Swartrot.

An introduced species which has fortunately only been found at Skukuza rest camp, where all attempts are being made to eradicate it and prevent it from spreading. [Fig. (xlvi)].

3. *Aethomys chrysophilus* de Winton.

African Bush Rat.

Rooveldrot.

A common rodent species distributed in woodland areas throughout the Park. The local subsp. is probably *tzaneenensis* Jameson 1909, but there is some doubt as to the validity of this race. [Fig. (xlvii)].

A female with 5 newly-born young was captured in February.

4. *Aethomys namaquensis* A. Smith.

Rock (or Golden) Rat. Klipmuis.

The untidy and rather massive grass and twig nests of this form is a common sight under loose boulders or suitable rocky crevices in rupicolous surroundings, throughout the Park, and live specimens have been taken at most of these localities. [Fig. (xlvi)]. The subspecific status of the endemic form is somewhat doubtful, but it may be *drakensbergi* Roberts 1926.

5. *Thallomys paedulus acaciae* Roberts.

Black-tailed Tree Rat. Swartstert- of Doringboomrot.

An arboreal species most often found in open *Acacia* tree savannas or woodland savanna where their nests have been found in *Acacia tortilis* and *Spirostachys africanus*, as well as *Pseudocadia zambesiaca* trees. So far no records have been forthcoming from the area south of the Sabie River. [Fig. (xlvii)].

It has been pointed out that all Transvaal and Natal forms of *T. paedulus* could possibly be classified under the subsp. *paedulus* Sundevall 1846 (Magaliesberg).

6. *Praomys (Mastomys) natalensis* (A. Smith).

Multimammate Mouse. Vaalveldmuis.

Probably the most common and generally distributed rodent species in the Park and has been collected in diverse surroundings throughout the area. [Fig. (xlviii)].

Subspecies probably *natalensis* A. Smith 1834, of which *microdon* Peters 1852: Tete, seems to be a synonym.

7. *Mus minutoides* A. Smith.

Dwarf Mouse. Dwergmuis.

In varied habitats throughout the Park. [Fig. (xlviii)]. The local subspecies is probably *marica* Thomas 1910: Beira. A female with six newly-born young was collected in February.

8. *Mus musculus* Linnaeus.

House Mouse. Huismuis.

Another introduced species which has only once been collected at Shangani ranger's station on the western boundary of the Park. [Fig. (xlviii)].

9. *Dasymys incomtus incomtus* Sundevall.

Swamp Rat. Waterrot.

A water-loving species which has to date been recorded only from damp vleis and the banks of water-courses in the long grass-veld of Pretoriuskop area. [Fig. (xlviii)].

A female with three juveniles were captured during April.

10. *Lemniscomys griselda sabiensis* Roberts.

Single-striped Grass Mouse.

Enkelstreepmuis.

An inhabitant of grassy plains and woodlands throughout the Park. [Fig. (xlix)].

The validity of the subspecies is in doubt as all forms intergrade very evenly throughout the geographical range of the species.

11. *Acomys dimidiatus* (Cretzschmar).

Spiny Mouse.

Stekelmuis.

A rupicolous species so far only recorded from Punda Milia in the extreme north-west of the Park. [Fig. (xlix)]. According to Davis (1963), the local form is not *cahirinus* Desmarest as in Ellerman (1953), as this is the commensal species of Egypt, while *dimidiatus* is the wild one. To be on the safe side, it might be best referred to as *Acomys spinosissimus* Peters 1852: Tete.

The subspecies would then be *transvaalensis* Roberts 1926: Newgate farm, Louis Trichardt.

12. *Saccostomus campestris campestris* Peters.

Pouched Mouse.

Wangsakmuis.

Another inhabitant of woodland and woodland savanas throughout the whole area, but not particularly common anywhere. [Fig. (xlix)]. The highest percentage catches were obtained in the Nyandu sandveld along the eastern boundary and at Pafuri.

SUBFAMILY — DENDROMURINAE

1. *Steatomys pratensis pratensis* Peters.

Fat Mouse.

Vetmuis.

An analysis of the pellets of barn owls has indicated that these rodents are particularly prized and constitute an important item of their prey. (Coetzee, 1963). Skull and other remnants have been found in considerable number in owl pellets collected throughout the Park, and live specimens were trapped at Shingwedzi and near the Bubube dam. [Fig. (1)].

2. *Dendromus mystacalis jamesoni* Wroughton.

Lesser Climbing Mouse.

Klein-klimmuis.

As yet not recorded from the central district of the Park, but has been collected in areas of long grass-veld in the north and particularly in the Pretoriuskop section. [Fig. (1)].

3. *Dendromus melanotis vulturinus* Thomas.

Grey or Black-eared Climbing Mouse.

Swartoorklimmuis.

The vernacular name is not particularly well chosen as it is mainly terrestrial in habit. This form constructs a subterranean nest in contrast

to the lesser climbing mouse, which fashions a neat grass nest on tall grass stalks or amongst twigs of low shrubs. The only record so far is from Willem picket near Pretorius Kop. [Fig. (1)].

#### SUBFAMILY — OTOMYINAE

1. *Otomys angoniensis* Wroughton.

Angoni Vlei Rat.

Vleirot.

Another inhabitant of swampy areas or reedbeds and has been collected in suitable habitats in the northern and southern districts. [Fig. (1i)]. Doubtless also occurs in the area between the Sabie and Olifants Rivers, but not a common species anywhere.

A female with three well developed embryos was collected in August.

As subspecies *sabiensis* Roberts 1929: Mariepskop is possible, but the local race is more likely to be *tugelensis* Roberts 1929: Klipspruit, Natal. (Davis, 1963).

#### SUBFAMILY — GERBILLINAE

1. *Tatera leucogaster* (Peters).

Bushveld Gerbil.

Laeveldse Nagmuis.

A common species particularly in sandveld areas throughout the Park, and their characteristic burrows are easily detected under low bushes or shrubs. [Fig. (1ii)].

According to Davis (1963) the various races of *T. leucogaster* intergrade and it is doubtful whether one should recognise subspecies. The population south of the Letaba River may possibly be classified as subspecies *salsa* Wroughton 1906, and those north of this river are nearer to subspecies *lobengulai* de Winton 1898.

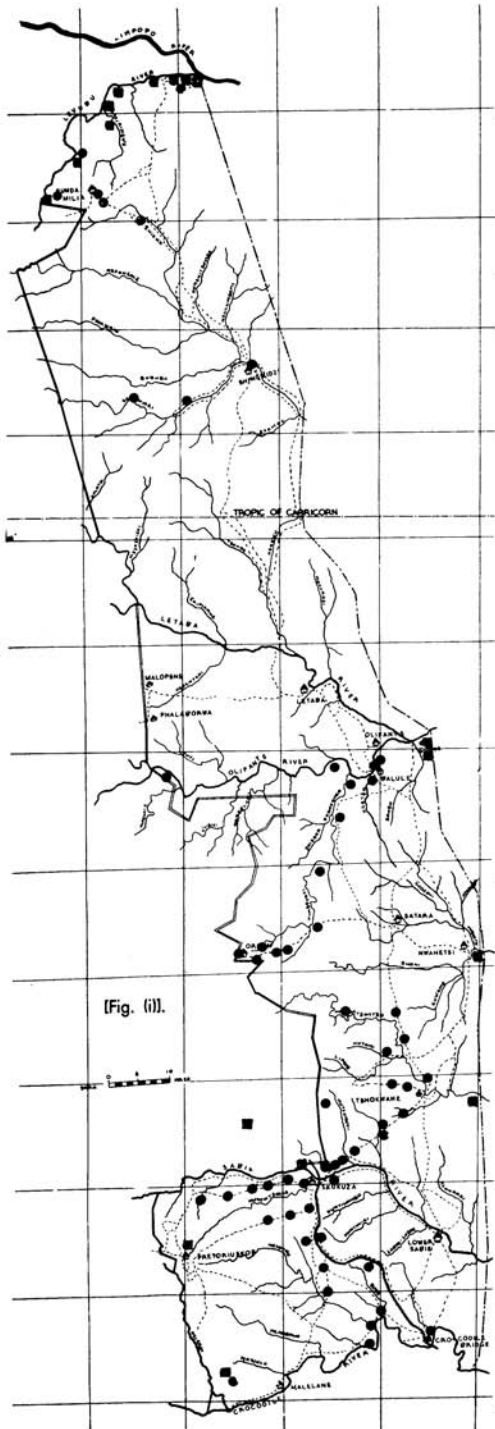
#### R E S U M É

A systematic check-list of the small mammals of the Kruger National Park is provided with notes on their distribution, habitat preferences and other habits, diet and breeding. Distribution data and locality records compiled over the last six years are presented in the series of maps at the end of this paper.

#### ACKNOWLEDGEMENTS

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● : *Galago senegalensis moholi* A. Smith.  
 ■ : *Galago (Otolemur) crassicaudatus umbrosus* Thomas.

*Cercopithecus aethiops cloetzi* Roberts.