

Family — *Remizidae*.

Although the grey penduline tit (*Anthoscopus caroli*. Sharpe) is one of the rarer birds in the Park and is seen only occasionally at Pafuri and in the Pretoriuskop area, it deserves special mention as it was probably the first bird species, described for the area known today as the Kruger Park. During the period September 1860—July 1861, the Portuguese trader D. Fernandes das Neves undertook a journey from Lourenço Marques to Zoutpansberg and he must have travelled through the area now known as the Kruger Park. In the area between the Olifants and Letaba Rivers, he spent a night at a Native village and he makes mention of the bird nests seen there in the trees and which were presumably built by "Cotton Birds". His description of the nests leaves no doubt that they were that of the grey penduline tit, and the "Cotton Trees" mentioned are probably "Kannie-dood" trees (*Commiphora glandulosa* or *C. mollis*) which these birds usually choose for nesting at Pafuri.

Family — *Timaliidae*.

Last year during June, the Ranger of Satara Section reported that he had seen the black-faced babbler (*Turdoides melanops*. Hartlaub) of Angola, Damaraland and Tanganyika at Satara, but there is still some doubt as to the authenticity of the identification.

Family — *Turdidae*.

Mocking chats (*Thamnolaea cinnamomeiventris*. Lafresnaye) were observed on the Skukuza Hills, Skipberg and the Malelane Hills and they were seen feeding on the fruits of *Ficus soldanella* (the rock wild fig). During July great numbers of groundscraper thrushes (*Turdus litsitsirupa*. A. Smith) were encountered on the burnt fire-breaks of the Nwashitsaka experimental plots. Arnott's chat (*Myrmecochila arnotti*. Tristram) was recorded from the Mafayeni Spring, Shangoni Hills and the Mbyashishe River. The capped wheatear (*Oenanthe pileata*. Gmelin) has been seen once only, in the trampled veld round the Nwashitsombe Windmill.

Family — *Sylviidae*.

The barred warbler (*Camaroptera fasciolata*. A. Smith) was found on the Skukuza experimental plots and the common fantail cisticola (*Cisticola juncidis*. Rafinesque) is widely distributed, but a complete survey of all the other types of warblers, cape grass birds, cisticolas, cloud-cisticolas and apales has yet to be done.

Family — *Pycnonotidae*.

The black-eyed bulbul (*Pycnonotus barbatus*. Desfontaines) has a wide

distribution and is fairly common locally. The sombre bulbul (*Andropadus importunus*. Vieillot) has been observed at Pafuri.

Family — *Muscicapidae*.

This year paradise fly-catchers (*Terpsiphone viridis perspicillata*. Müller) were observed at Punda Maria, Shingwedzi and Letaba; mouse-coloured fly-catcher (*Bradornis pallidus*. Müller) at Pafuri; black fly-catchers (*Muscicapa striata*. Pallas) at Satara, and the Cape fly-catcher (*Batis capensis*. Linnaeus) at Skukuza.

Family — *Motacillidae*.

From February to April this year pied wagtails (*Motacilla aguimp*. Dumont) and Cape wagtails (*Motacilla capensis*. Linnaeus) were useful as insect destroyers on the Skukuza lawns. Bushveld tree pipits (*Anthus caffer*. Sundevall) were found in large numbers in the Gorge area, during February of this year.

Family — *Laniidae*.

Quite a number of shrikes and bush shrikes have already been identified in the Park and the following represent the best known species:— red-backed shrike (*Lanius collurio*. Linnaeus), puffback shrike (*Dryoscopus cubla*. Shaw), three-streaked tchagra (*Tchagra australis*. A. Smith), bokmakierie (*Telophorus zeylonus*. Linnaeus), grey-headed bush shrike (*Malaconotus poliocephalus*. Lichtenstein), long-tailed shrike (*Urolestes melanoleucus*. Jardine), white helmet shrike (*Prionops plumata*. Shaw), bru-bru shrike (*Nilaus afer*. Latham), fiscal shrike (*Lanius collaris*. Linnaeus), orange-breasted bush shrike (*Chlorophoneus sulphureopectus*. Lesson), black-fronted bush shrike (*Chlorophoneus nigrifrons*. Reichenow), black-crowned tchagra (*Tchagra senegala*. Linnaeus), red-billed helmet shrike (*Sigmodus retzii*. Wahlberg), and white-crowned shrike (*Eurocephalus anguitimens*. A. Smith).

The last named bred at Pafuri, during November-December. The male and female take turns to remain on the nest, which is an open structure beautifully woven and lined with cobwebs.

Family — *Sturnidae*.

By the 10th April, last year, the Cape glossy starling (*Lamprocolius nitens*. Linnaeus) had returned *en masse* to Shingwedzi. These birds, which are found in small groups in the camp at Skukuza throughout the summer months, re-appeared in large numbers at the beginning of March and were accompanied by Burchell's glossy starling (*Lamprotornis australis*. A. Smith). Red-winged starlings (*Onychognathus morio*. Linnaeus) were seen again at Punda Maria, Pafuri and also Mashikiri Poort. During February large flocks of wattled star-

lings (*Creatophora cinerea*. Menschen) were observed in the Bangu area, between Bangu and Gudzane, and at Satara. Smaller numbers were again recorded at Babahile in the North. Plum-coloured starlings (*Cinnyricinclus leucogaster*. Gmelin) were seen at Punda Maria and also in the Gorge area, at Satara and Tshokwane, and it was noted that they fed exceptionally greedily on the fruits of the rooi-essenhout (*Trichilia emetica*).

Family — *Buphagidae*.

Red-billed oxpeckers (*Buphagus erythrorhynchus*. Stanley) are common throughout all the big game ranges and even in the South have also become to regard the impala as an acceptable host.

Family — *Nectariniidae*.

The rare yellow-breasted sunbird (*Cinnyris venustus*. Shaw & Nodder) has again been observed at Punda Maria. This represents one of the most southern points of its distribution. White-breasted sunbirds (*Cinnyris talatala*. A. Smith) were seen at Pafuri during November, and scarlet-chested sunbirds (*Chalcomitra amethystina*. Shaw) were recorded at Skukuza. The bronze sunbird (*Nectarinia kilimensis*. Shelley) and the Marico sunbird (*Cinnyris mariquensis*. A. Smith) also occur in the Park but have not yet been seen this year.

Family — *Zosteropidae*.

During the summer, Cape white-eyes (*Zosterops pullidus virens*. Sundevall) were frequently noted in the Punda Maria area.

Family — *Ploceidae*.

Sub-Family — *Bubalornithinae*.

During November, buffalo weavers (*Bubalornis albirostris*. Vieillot) started building nests at Gudzane Dam and at Skukuza.

Sub-Family — *Passerinae*.

There is some doubt whether the nests, which were destroyed at the insistence of the former Senior Ranger, at Skukuza and Satara, were those of house sparrows (*Passer domesticus*. Linnaeus) or those of grey-headed sparrows (*Passer diffusus*. A. Smith) which are not foreign.

Sub-Family — *Ploceinae*.

A total of 2,670 spotted-back weavers (*Ploceus cucullatus*. Müller) and lesser masked weavers (*Ploceus intermedius cabanissi*. Peters) were destroyed at Skukuza during the period November 1957 to January 1958. Last attempts

at nest-building were made during the latter month and then the birds gradually disappeared. A total of 48 large knobthorn plus 3 torchwood trees in the rest camp had been infested and were saved from destruction by the birds, by this action. During the first two weeks of July the first spotted-back weavers re-appeared in the camp and until the end of September there were some half-hearted attempts at nest-building but timely action put a stop to these activities.

During February, a small colony of masked weavers (*Ploceus velatus*. Vieillot) bred at the Ngirivane Windmill. During November, spectacled weavers (*Hyphanturgus ocularius*. A. Smith) were very active in the Letaba rest camp. Red-headed weavers (*Anaplectes rubriceps*. Sundevall) started nest-building at Punda Maria towards the end of October.

The status of the red-billed quelea (*Quelea quelea lathamii*. A. Smith) is determined in co-operation with the Section Entomology of the Department of Agriculture. The history of the breeding colonies in the Park during the past few years (until 1954) has been ascertained and all new breeding colonies are visited and their size is determined. This year, since October, small swarms of queleas have been observed on various occasions e.g. at Kowa-Kulu, Satara, Mashikiri Poort, along the Nahpe road at Muwawi, Faai, and Punda Maria. However, only two actual breeding colonies were reported — one at Lindanda and the other in the Mlondozi area (the latter consisted of a number of separate, smaller colonies). All these colonies came to grief on account of the activities of birds of prey (Wahlberg's eagle, marabou stork, etc.), baboons, mongoose, snakes, etc. A few hundred young birds were ringed. Large swarms of queleas were observed on lands beyond the Park boundaries, in the Malelane region, but according to the Ranger there, the birds had bred outside the Park.

A single red bishop bird (*Euplectes orix*. Linnaeus) was seen at Sand River bridge and a few were also observed in the reeds above the Manung Dam. During December, large numbers of red-collared widow-birds (*Coliuspasser ardens*. Boddart) were seen by the Ranger of Pretoriuskop Section in the Numbi area. In February, a white-winged widow-bird (*Coliuspasser albonotatus*. Cassin) was recorded near Satara aerodrome. The golden bishop bird (*Euplectes afer*. Gmelin) was observed along the Shisha.

Sub-Family — *Estrildinae*.

During November, at Pafuri, cut-throat finches (*Amadina fasciata*. Gmelin) took possession of the nests of redheaded weavers as soon as they were built.

Melba finches (*Pytelia melba*. Linnaeus) were found at Pumbe and their nests were probably parasitized by paradise widow-birds (*Steganura paradisaea*. Linnaeus). The following have also been recorded: Blue waxbill (*Urae-*

ginthus angolensis. Linnaeus), Jameson's ruddy waxbill (*Lagonosticta jamesoni jamesoni*. Shelley), little ruddy waxbill (*Lagonosticta senegala senegala*. Aar-tert), and the bronze mannikin (*Lonchura cucullata*. Swainson).

Sub-Family — *Viduinæ*.

The pin-tailed whydah (*Vidua macroura*. Pallas) was again recorded from Crocodile Bridge and the Pretoriuskop area. Last year, during autumn, an exceptionally large number of paradise whydahs (*Steganura paradisaea*. Linnaeus) were found in the central and northern districts. These birds are rare in the south and only one was observed at Nahpe during December.

The steel-blue widow-finch (*Hypochera amautopteryx*. Sharpe) was seen at Satara and the black widow-finch (*Hypochera funera*. de Tarragon) at Punda Maria and Pafuri. The former is a parasite of the nests of the red-billed fire-finch.

Family — *Fringillidae*.

Golden-breasted buntings (*Emberiza flaviventris*. Stephens) are fairly numerous and are widely distributed.

Yellow-eye canaries (*Serinus mozambicus*. Müller) were found at Satara and Tshokwane, Cape buntings (*Frigillaria capensis*. Linnaeus) in the Punda Maria Hills, and a single rock bunting (*Frigillaria tahapisi*. A. Smith) at Pafuri.

5. M A M M A L I A.

A. HISTORY OF DISTRIBUTION AND PRESENT DISTRIBUTION OF THE LARGER MAMMAL SPECIES.

Historical data, with regard to the distribution and numbers of the larger mammal species, before, as well as after the establishment of the Kruger Park, is being compiled. During the year, we succeeded in procuring copies of the Warden's Annual Report (of the Sabie and Shingwedzi Reserves) for the years 1902—1905 (the foundation years), 1911—1913, as well as that of 1925, immediately before the proclamation of the Kruger National Park. There are still large gaps in the overall picture, especially during the periods before and after the first world war, but the reports at present at our disposal supply valuable information of the period, immediately after the inception of the Sabie and Shingwedzi Reserves and during the first struggling years of their existence, on the appearance and numbers of game in the Lowveld as

well as population movements, fluctuations and increases or decreases during the later years.

During the period September 1860—July 1861, a Portuguese merchant, Fernandes das Neves, undertook a trading journey from Lourenço Marques to Zoutpansberg. A copy of his travel journal was procured and it contains numerous references to game species, vegetation, native tribes and topography of the Lowveld regions, part of which are today known as the Kruger Park. Although this gentleman sometimes gives free rein to his imagination e.g. his descriptions as to the size and ferocity of the elephant, on the whole his journal must, in many respects, be regarded as a pioneer work, as, together with Trichardt's Diary, it is probably the only documentary evidence of conditions in the Transvaal Lowveld before 1870.

Of particular interest is the description of the encountering of sable antelope between the Crocodile and Komati Rivers — an important record, as the Crocodile is usually regarded as the southern boundary of this species' distribution in the Lowveld.

In 1873 a geologist, Dr. E. Cohen, travelled on foot from Lydenburg to Lourenço Marques. He drew an excellent route map and his descriptions of the geographic distribution of game, vegetation, tsetse-fly, Natives, rock formations, etc., observed on his way through the Park (7 miles south of Pretoriuskop, past Newukop and across the Crocodile River to the north east of Malelanel), represent the first reliable data on conditions in the southern district of the Park. The document has been traced and photostatic prints are awaited. This information is of great value, particularly at present, as special attention is being devoted to the deterioration of the Pretoriuskop area as game habitat.

With the exception of the works of Glynn, Kirby, Altenroxel and the route-map of the Swiss missionary Berthout, the historical data on conditions in the Lowveld during the early years, is very poor. In every instance all appropriate historical information is selected and recorded.

A complete set of distribution charts, representing the present distribution of all larger mammals in the Park, have been completed and are still being added to (e.g. as new localities are recorded) and checked where possible. It is already possible, however, by means of a planimeter, to determine the actual surface of the distribution area of the majority of the herd animals, giraffe and others — either during the winter months, when most are concentrated round the permanent water and the accessibility of waterholes acts as a stabilising factor on movements, or during the rainy season when there is a general dispersal over a larger area.

This information is indispensable in the analysis of census data or in the estimates of population density or growth in the Park as a whole.

B. GAME CENSUS AND COUNTS.

Regular monthly game counts are still being received from all sections and a three year period has been covered. At the beginning of the fourth year, it was decided to change the routes in some sections, so that these would be more representative or pass through regions requiring special attention. Two additional routes were given to the new technical assistant stationed at Shingwedzi, and a new route was also determined for the Ranger at Mahlangene.

Since May, last year, monthly counts have also been taken along the western boundary of the Tshokwane Section. All counts, received to date, have been analysed and entered in a special register. From this, the following information can be supplied at any time:— an analysis of the community composition along the determined routes, seasonal fluctuations, the density of the various species per square mile, and reproduction data — such as the nett increase in numbers of every species along these routes, with reference to the gradual decrease in the numbers of young animals during the first few months after the calving and lambing season.

Preparations are under way for the five-yearly game census (the first was completed in 1954) which commences in July, as well as a census of elephants (and other animals) from the air, which is planned for later.

The table below indicates the community density per square mile, calculated for the respective monthly game-count routes, as well as a comparative index of impala numbers during 1958—1959 and for the preceding period 1957—1958.

Section	Route	Distance	Period	Community density per sq. mile	Density of impala per sq. mile
1	Pretoriuskop-Numbi Gate, Skukuza via Hippo Pool road — Pretoriuskop via Doispans and Shabeni.	80 Miles	May-Nov. 1957	208.2	198.5
			June-Nov. 1958	265.7	225.5
2	Malelane to Skukuza on main road back to Malelane via Hlabamaduba circle, Bumi and Crocodile River road.	80 Miles	May-Oct. 1957	36.8	33.3
			Aug.-Dec. 1958	35.09	29.65
3	Crocodile Bridge to Kemps Cottage via Randspruit. Interrupted count. Then from Lower Sabie via Nhlolwa road back to Crocodile Bridge.	45 Miles	May-Nov. 1957	175.1	137.5
			June-Nov. 1958	125.2	97.01

Section	Route	Distance	Period	Community density per sq. mile	Density of impala per sq. mile
4	Tshokwane to Lower Sabie Bridge, on Mlondozi circular drive and back to Tshokwane via Saliji River road.	80.6 Miles	May-Nov. 1957 May-Nov. 1958	165.7 140.7	97.30 105.24
5	Satara to Olifants River Bridge and back to Satara via Gudzane and Nwanetzi.	78.8 Miles	Dec. 1957 April 1958 Oct.-Nov. 1958	132.4 136.7	52.6 51.2
6	Letaba via river road to Olifants River and up to Olifants-Letaba confluence and back via main road.	42 Miles	May-Nov. 1957 May-Nov. 1958	109.1 116.4	91.00 89.53
6	Letaba to Malopene gate and along the western boundary up to Mahulule.	40 Miles	May-Nov. 1957 May-Nov. 1958	12.34 12.46	6.34 7.55
7	Shingwedzi via main road to Dzombo, then along Dzombo fire-break road to the Shilowa road and back to Shingwedzi via Kostine Poort and the southern river road.	47 Miles	June, July Aug., Nov. 1957 July-Oct. 1958	36.05 27.82	22.5 13.94
8	Punda Maria along the main road up to Muwawi cross road and back to Punda Maria via the Dzundwene circular road.	38 Miles	Jan.-Dec. 1957 June-July 1958	12.33 8.26	3.22 4.07
8	Punda Maria to Pafuri via main road and back along the river road and the Klopfontein circular road.	53 Miles	May-Nov. 1957 June-Nov. 1958	76.1 96.08	45.56 62.75
9	Changoni to Shingwedzi along northern river road and back along southern river road.	60 Miles	May-Nov. 1957 May-Nov. 1958	132.6 119.68	93.77 73.30
9	Shangoni along the western boundary up to the Pongola picket.	22 Miles	June-Dec. 1957 May-Aug. 1958	31.3 26.51	22.0 20.14

Section	Route	Distance	Period	Community density per sq. mile	Density of impala per sq. mile
11	Kingfisherspruit, along the western boundary up to the Olifants River.	51 Miles	Jan.-Dec. 1957 June-Nov. 1958	95.35 81.57	27.4 20.73
Biol. Sect.	Skukuza along Lower Sabie Road to Sabie Rest Camp.	26 Miles	May-Dec. 1957 May-Nov. 1958	639.3 593.2	486.4 542.09
Biol. Sect.	Skukuza to Pretoriuskop via Nahpe road and back.	49 Miles	May-Dec. 1957 June-Dec. 1958	87.03 46.48	81.0 31.32
Biol. Sect.	Skukuza — Western boundary from Sabie River bridge up to the Lipape dam. Nwasintsonso dam up to Native Ranger Picket — Manzindhlovu fire-break road.	57 Miles	June-Oct. 1958	137.27	36.74
Total	1956 (13 routes)	717.4		98.03	68.30
Total	1957 (15 routes)	792.4		129.98	93.17
Total	1958 (16 routes)	849.4		123.07	88.17

C. ZOOLOGICAL SURVEYS, SPECIES DATA AND GENERAL POPULATION OBSERVATIONS.

In co-operation with the Transvaal Museum and the Plague Research Unit of the Medical Institute, preliminary surveys of the smaller mammals, (hares, rock-rabbits, moles, rats, mice, shrews, elephant-shrews, bats, mungoose, etc.) in the Kruger Park have already been commenced. Initially the work was delayed due to difficulty experienced in obtaining the necessary apparatus, but this problem has been solved to some extent, and as soon as other duties permit, the survey will be continued more intensively and extensively. All specimens collected have been properly preserved and will be taken up in the reference museum. Distribution data, already at our disposal, as well as the species, which according to indications will be found in the Park, are listed in the general discussions and preliminary check list. The previous annual report of this section is referred to for an account of the distribution of the larger mammals and new localities only will be indicated.

We have found it necessary to revert to the classification of Ellerman, Hayman and Morrison-Scott, as that of Roberts is no longer generally accepted

and the former classification (with a few exceptions) has thus been adhered to in the systematic summary of the type data recorded during the year.

CLASS : MAMMALIA.

Sub-Class: *Theria*.

Infra-Class: *Eutheria* (*Placentalia*).

ORDER 1 : INSECTIVORA.

Super-Family: *Chrysochloridea*.

Family — *Chrysochloridae*.

1. *Amblysomus* (*Chrysotricha*) *obtusirostris limpopoensis* (Roberts) — Golden mole.

The type specimen was collected at Masiene, north of the Limpopo River mouth in Portuguese East Africa. During the construction of the new fire-break road between Machindudzi and Machai, on the eastern boundary of the Punda Maria section, a golden mole was uncovered by the bulldozer, in the sandveld immediately north of the Machai pan. Unfortunately the animal was somewhat damaged, yet could be identified, with reasonable certainty, by the mammologist of the Transvaal Museum, as being an example of the above-mentioned species. There are sufficient signs that these animals occur everywhere and in great numbers in the Malonga and Wambia sandveld, but further material is required to establish their identity with certainty. This is the first time that this species has been collected within the boundaries of the Union.

Super-Family: *Erinaceoidea*.

Family — *Erinacidae*.

Erinaceus frontalis (A. Smith) — Hedgehog.

In spite of vague reports in this regard, these animals have as yet not been recorded in the Park.

Super-Family: *Macroscelidea*.

Family — *Macroscelididae*.

1. *Petrodromus tetradactylus* subsp. (?) — Forest elephant shrew.

This agile and exceptionally interesting species is found in fairly large numbers in the Punda Maria area. They are frequently seen at dusk as they dart quickly across the road. Already recorded from the Mopani forest, near Klopferfontein, the hills beyond Punda Maria, and the sandveld on the way

to Magobane. No specimens have as yet been collected and the sub-species must still be determined.

2. *Elephantulus (Nasilio) brachyrhynchus* (A. Smith) — Short-snouted elephant shrew.

Probably more widely distributed than the former species and has been collected 16 miles north of Shingwedzi on the way to Punda Maria. Has also been seen along the Shingwedzi River and at Skukuza. There is a possibility that the rock elephant shrew (*Elephantulus rupestris myurus*. Thomas and Schwann) invades the Punda Maria hilly country from the west, but as yet there is no concrete evidence.

Super-Family : *Soricoidea*.

Family — *Soricidae*.

Sub-Family — *Crocidurinae* (Shrews).

There are sufficient indications that quite a number of types of shrews occur in the Park and some of these animals have been seen by Native Rangers, but as yet no specimens have been procured. Types, which might be found here, include — *Crocidura hirta flavidula* (Thomas & Schwann) — lesser red musk shrew; *Crocidura pilosa sylvia* (Thomas & Schwann) — black musk shrew; *Crocidura flavescens* (Geoffroy) — red musk shrew; *Suncus lixus* (Thomas) — greater grey dwarf shrew; and possibly *Suncus (Myosorex) varius* (Smuts) — forest shrew.

These types have all been collected in the Lowveld close to the boundaries of the Park.

ORDER 2 : CHIROPTERA.

Sub-Order 1 — *Megachiroptera*.

Family — *Pteropodidae*.

Sub-Family — *Pteropodinae*.

1. *Epomophorus wahlbergi wahlbergi* (Sundevall) — Wahlberg's epauletted fruit bat.

Plentiful at Punda Maria and has also been observed at Satara along the Shitsakana Spruit.

2. *Epomophorus cryptures* (Peters) — Lesser epauletted fruit bat.

Possibly the type already observed at Tshokwane and Pretoriuskop, yet still to be collected and compared. The giant, yellow fruit bat or flying fox (*Eidolon helvum*. Kerr) and the Cape fruit bat (*Rousettus aegyptiacus*. Geoffroy) may yet be found in the Park.

Sub-Order 2 — *Microchiroptera*.

Family — *Emballonuridae*.

Existing distribution data indicates the possible appearance of the tomb bat (*Taphozous mauritanus*. Geoffroy) in the Park, but it has not yet been collected.

Family — *Nycteridae*.

1. *Nycteris thebaica capensis* (A. Smith) — Cape long-eared bat.

This type was collected by the late Colonel Stevenson-Hamilton at Skukuza.

Family — *Rhinolophidae*.

Sub-Family — *Rhinolophinae*.

1. *Rhinolophus clivosus zuluensis* (K. Andersen) — Horse shoe bat.
Also collected by the late Colonel Stevenson-Hamilton at Skukuza.
2. *Rhinolophus hildebrandti* (Peters) — Hildebrandt's Horse shoe bat.
Last year, during October, a single specimen of this rare bat was caught in a hollow baobab tree along the Machindudzi-Malunga fire-break road.

Related kinds, which may also occur locally, include — *Rhinolophus darlingi* (K. Andersen), *R. swinnyi* (Gough), *R. simulator* (K. Andersen), *R. landeri* (Martin) and *R. blasii* (Peters).

Sub-Family — *Hipposiderinae*.

Two (possibly three) species may be expected in the Park, i.e. *Cloeotis percivali* (Thomas) — African Trident Bat, *Hipposideros caffer* (Sundevall) — Cape leaf-nosed bat, and perhaps also *Hipposideros (Phyllorhina) commersoni* (Geoffroy) — Commerson's leaf-nosed bat. This has still to be confirmed.

Family — *Molossidae*.

1. *Tadarida (Chaerephon) pumila elphicki* (Heyman) — Lesser free-tailed bat.

Plentiful in the south, where they invade the roofs of houses in large numbers. Quite a number of specimens have been collected at Skukuza and Malelane.

2. *Tadarida aegyptiaca* (Geoffroy) — Egyptian free-tailed bat.

A number of specimens were collected by the late Colonel Stevenson-Hamilton at Skukuza.

The related forms *Tadarida africana* (Dobson) and *Tadarida (Mops) condylura* (A. Smith) may still be found locally.

Family — *Vespertilionidae*.

Sub-Family — *Vespertilioninae*.

1. *Pipistrellus nanus* (Peters) — Banana bat.

These small bats usually shelter in the rolled-up leaves of banana plants during the day and have been collected at Skukuza.

2. *Scotophilus viridis* (Peters) — Lesser yellow bat.

A single specimen of this small, pretty bat was caught at the Nsemane windmill in the Satara Section.

3. *Eptesicus capensis gracilior* (Thomas & Schwann) — Cape serotine.

Collected at Skukuza by the late Colonel Stevenson-Hamilton.

Other species of this group which will probably be found in the Park, include — *Pipistrellus (Eptesicops) rusticus* (Tomes), *Pipistrellus (Romicia) kuhli* (Kuhl), *Scotophilus nigrita dingani* (A. Smith), *Myotis tricolor* (Temminck), *Myotis (Chrysopteron) welwitschii* (Gray), *Glauconycteris variegata papilio* (Thomas), *Nycticeius (Scoteinus) schlieffeni* (Peters) and *Eptesicus zuluensis* (Roberts).

Sub-Family — *Miniopterinae*.

1. *Miniopterus schreibersi* (Kuhl) — Clinging bat.

Yet another species collected by the late Colonel Stevenson-Hamilton at Skukuza.

Sub-Family — *Kerivoulinae*.

The only type of this group which may occur in the Park, is *Kerivoula lanosa lucia* (Hinton) — Lesser wooly bat.

ORDER 3 — PRIMATES.

Sub-Order 1 — *Prosimii*.

Family — *Lorisidae*.

Sub-Family — *Galaginae*.

1. *Galago senegalensis moholi* (A. Smith) — Night ape.

Distributed throughout the Park, yet are seldom seen and are nowhere numerous. Fairly large numbers are probably burnt to death in their tree shelters during veld fires. The only new locality recorded during the year is at Mutlumubi Drift.

2. *Galago (Otolemur) crassicaudatus umbrosus* (Thomas) — Thicktailed bush-baby.

Until recently this species was known only from the Levubu River forest with localities at Pafuri, Makahanja, Madziringwe mouth, Magobane and

Dongadziba. During March last year, however, the cry of the animal was heard at night at the Sabie Picket and since then, it has also been reported from the Nwanetzi-Sweni confluence, and the Bangu-poort.

Sub-Order 2 — *Anthropoidea*.

Family — *Cercopithecidae*.

Sub-Family — *Cercopithecinae*.

1. *Cercopithecus aethiops cloetei* (Roberts) — Vervet monkey.

Distributed throughout the entire Park yet seldom, if ever, found far from permanent water. The Ranger of Crocodile Bridge reports that there is apparently a difference in size between the vervet monkey along the Sabie River and those in the Lebombo ranges — the former are apparently larger and heavier. Another official was an eye-witness of an extremely interesting event at the confluence of the Levubu-Limpopo Rivers at Pafuri. A vervet monkey troop was pursuing another monkey, (apparently an intruder) through the tree-tops with great hue and cry. A few males overtook the fugitive and threw him into the water without any further ado. The animal immediately swam to the side but as it clambered out, it was flung into the river for a second time by the waiting troop. The drowning animal swam desperately to the opposite bank, but before it reached safety it fell prey to a hungry crocodile.

2. *Cercopithecus mitis schwarzi* (Roberts) — Schwarz's samango monkey.

This rare and exceptionally timid monkey is an inhabitant of the dense mountain forests e.g. at Mariepskop and Woodbush, and until recently was completely unknown in the Park. It was thus with great interest that we learned that the hippo pool guide, stationed at Pafuri, observed three of these animals at Bobomene drift, last year during July. The Bavenda name for this animal is "Dulu", and after questioning, it was apparent that he knew this type of monkey well and that they are frequently seen further down the Limpopo in Portuguese East Africa.

3. *Papio (Chaeropithecus) ursinus orientalis* (Goldblatt) — Cape or chacma Baboon.

A thriving community and distributed throughout the Park, in either larger or smaller family groups in the vicinity of sufficient water. Unfortunately no decrease in begging habits has been noticed in some troops in the neighbourhood of rest camps and tourist roads, and last year it was seen that some young baboons climbed into cars in their quest for titbits. It was observed in the Malelane section, along the Mbyamide River, that baboons robbed the nests of spotted-back weavers of young birds and eggs. At the beginning of this year, baboons were also the chief pillagers of the unsuccessful quelea breeding-colonies at Lindanda and along the Mlondozi.

During October a baboon female, accompanied by twins, was found near Skukuza. A fully-grown baboon male, shot in the garden of one of the staff, weighed 75 lbs.

ORDER 4 — PHOLIDOTA.

Family — *Manidae*.

1. *Manis (Smutsia) temmincki* (Smuts) — Scaly anteater.

A rare animal, seldom seen, yet distributed throughout the entire Park. Three new localities have been recorded during the year, viz. the "Tier Koppie" on the western boundary of the Kingfisherspruit section, near Mahembane windmill in the north, and in the vicinity of Skukuza.

ORDER 5 — LAGOMORPHA.

Family — *Leporidae*.

Sub-Family — *Leporinae*.

1. *Lepus europaeus zuluensis* (Thomas & Schwann) — Scrub hare.

Exceptionally numerous and distributed throughout the Park, on the Lebombo Plain and westwards. Seen in large numbers on the roads, particularly at night. After the veld-burning in February, these hares fed greedily on the young green grass (*Cenchrus ciliaris*) and (*Ischaemum glaucostachyum*).

It is thought that there are also Cape or yellow-footed hares (*Lepus capensis ermeloensis*. Roberts) in the Malelane and Pretoriuskop Sections, but as yet no specimens have been procured.

2. *Pronolagus crassicaudatus ruddi* (Thomas & Schwann) — Natal red hare.

So far red hares have been recorded only from the Punda Maria section (Dongadziba and Punda Maria ridges), Shipikane and Mbyashishe ridges, yet will probably still be found elsewhere — e.g. on the Lebombo, at Shingwedzi Poort, etc. A related form, *Pronolagus randensis* (Jameson) may possibly be that colonising the hilly regions of the southern district.

ORDER 6 — RODENTIA.

Family 1 — *Bathyergidae*.

1. *Cryptomys holosericeus* (Wagner) — Greater grey mole-rat.

Last year during October, a bulldozer uncovered a specimen in the sandveld to the north of Machai pan, which is possibly a young animal of this species.

Traces of grey mole-rats are plentiful throughout the Park and one or more of the following species may probably be found locally: *Cryptomys hot-*