

NOTES ON THE SMALLER MAMMALS OF THE EASTERN CAPE NATIONAL PARKS

by

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Introduction

During November/December 1965, at the invitation of the National Parks Board, a survey was made of small mammals (insectivores, bats, smaller carnivores, rodents and lagomorphs) occurring in the National Parks of the eastern Cape. The aim was threefold: to determine which smaller, and therefore less conspicuous mammal species were present and to assess their relative abundance and distribution in the various habitats available in each park. Parasites were also collected. The following is a preliminary note on the small mammals of the Mountain Zebra National Park, the Addo Elephant National Park, and the Tsitsikama Forest and Coastal National Park. The survey was undertaken by using various types of traps, sight records, owl pellet analyses (when available) and published sources. Further visits are envisaged. Trapping was undertaken at localities which seemed typical of the various habitats, and no line transects were used.

Mountain Zebra National Park

This park is situated in the South West Arid zone (Davis, 1962) with an annual rainfall of less than 20 in. Heavy rainfall during the second half of 1965 had the result that the veld was in good condition, with plenty of grass cover. Skead (1965), on the basis of bird distribution, divided the vegetation into nine zones ranging from riverside scrub, hillside scrub, *Acacia*-veld, open areas, the summit of the Bankberg, kranse, boulders and rocks to man made habitats including homesteads, dams and disused arable lands. Broadly speaking, this habitat classification can also be used for mammalian distribution.

Nine trapping localities were established, sampling riverside scrub, hillside scrub, *Acacia*-veld, open areas and disused lands. The brief period of the visit precluded sampling all Skead's habitats. Mole traps, live and snap traps were used. Live and snap traps were used in the ratio of 36:221 trap nights, yielding 3 and 21 specimens, i.e. an 8.3% and 9.5%

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yield respectively. Riverside scrub and disused lands were the most productive. Five bats were procured by hand in the eaves of the Nature Conservator's house.

The following specimens were collected: *Saccostomus campestris* (pouched mouse) (4); *Rhabdomys pumilio* (Cape striped field mouse) (11); *Myotomys unisulcatus* (bush Otomys) (5); *Praomys natalensis* (multimammate mouse) (3); *Cryptomys hottentotus* (Hottentot mole-rat) (1); and *Eptesicus capensis* (Cape house bat) (5).

The following species were seen: *Procavia capensis* (rock dassie), living in flourishing colonies on the rocky kranses, probably without serious predation; *Hystrix africae-australis* (porcupine); *Cynictis penicillata* (yellow mungoose) and *Lepus capensis* (Cape hare).

According to Labuschagne and Van der Merwe (1963) the following are known to occur but were not observed: *Erinaceus frontalis* (hedgehog), *Suricata suricatta* (suricate), *Xerus inaurus* (ground squirrel) and *Pedetes capensis* (spring hare).

The *Praomys* specimens were infested with tapeworms, *Hymenolepis* sp. and *Syphacea* sp. In *Saccostomus* and *Rhabdomys* specimens *Catenotaenia* sp. was encountered.

Addo Elephant National Park

This park is situated in the South West Cape biotic zone (Davis, 1962) although merging with the drier South West Arid zone, as the annual rainfall is about 15 in. (Liversidge, 1965). The vegetation is dominated by spekboom *Portulacaria afra*, covering 90% of the park. The rest is made up of Karoo veld, mixed shrub and grassveld, bontveld and coastal bush. During the time of the visit the park was drought-stricken, as reflected in the condition of the veld, apart from the spekboomveld.

At the following localities traps were set: bordering the pond at the Nature Conservator's house; on Suurkop; in the Antelope camp and on the perimeter of the elephant enclosure. Live and snap traps were used in the ratio of 20:275 trap nights, yielding two and 32 specimens (10% and 11.6%) respectively.

The following specimens were collected: *Saccostomus campestris* (1); *Rhabdomys pumilio* (14); *Myotomys unisulcatus* (1); *Praomys natalensis* (2); *Aethomys namaquensis* (Namaqua rock mouse) (7); *Otomys irroratus* (vlei rat) (4); *Aethomys* spp. (possibly subgenus *Micaelamys*) (4) and *Crocidura cyanea infumata* (reddish-grey musk shrew) (1).

Observed species were *Lepus capensis* and *Pronolagus crassicaudatus* (Natal red hare).

Known to occur are *Vulpes chama* (silver jackal) and *Pedetes capensis* (Labuschagne and Van der Merwe, 1963).

Tsitsikama Forest and Coastal National Park

This park is situated in the evergreen coastal forest belt of the southern Cape Province. It consists of two portions: a coastal part extending

approximately one-half-mile inland and one-half-mile seaward from the coast; and another portion situated on the high coastal plain extending up the slopes of the Tsitsikama mountains. This visit sampled the coastal section only.

The coastal forest peters out at places in grassy areas before reaching the rocky shoreline. At the western boundary of the park (at Nature's Valley), swampy areas and reedbeds connect the scrub bush and forest to a freshwater lagoon where a sandy beach (atypical of the coastline) is present.

Trapping localities were established near the main camp in grassy areas (just above the rocks of the shoreline). Only two species, viz. *Otomys irroratus* (8) and *Rhabdomys pumilio* (2) were collected. Live and snap traps were used in the ratio of 41 : 14 trap nights (yielding 25 % and 0 % respectively, a rather unexpected trapping yield). An Egyptian freetailed bat *Tadarida aegyptiaca bocagei* and a dwarf shrew *Suncus etruscus* were collected at the Nature Conservator's homestead on the forest fringe.

Mole mounds of *Cryptomys hottentotus* were common on both the steep slopes of the dunes and near the shore — often covered by surf-froth. Large molehills on the slopes of the dunes indicate the presence of the Cape dune mole *Bathyergus suillus*, and/or the blesmol *Georychus capensis*. At Nature's Valley the winding tunnels of golden moles (Chrysochloridae) were observed, while *Otomys* runways were seen in the swampy areas bordering the lagoon at this spot.

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