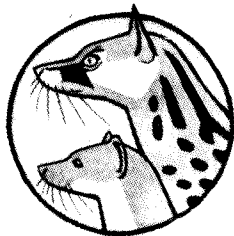


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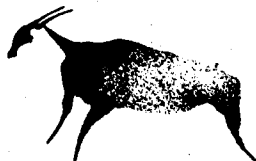


The Newsletter and Journal of the IUCN/SSC
Mustelid, Viverrid & Procyonid Specialist Group

IUCN
The World Conservation Union

Number 29

October 2003



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A note on the diet of the Water Mongoose *Atilax paludinosus* in the central Great Karoo, South Africa

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Although the diet of the Water Mongoose *Atilax paludinosus* has been studied at several locations in South Africa (Rowe-Rowe, 1977; Du Toit, 1980; Whitfield & Blaber, 1980; Stuart, 1981; Louw & Nel, 1986; Baker, 1989), it has to date not been looked at in the arid interior.

Previous authors have found this to be an opportunistic feeder and this has been substantiated by this study in an extreme environment. The study was undertaken on the farm 'Slypfontein' (31° 33.41' S / 022° 39.60' E; 3122 CB) that lies between the villages of Loxton and Victoria West. The landscape is a mix of flat plains and broken hill country with several stream courses, dry for much of the year, although springfed pools were present in one river bed throughout the year. Evidence from tracks indicated that the mongooses were ranging widely along and away from the water courses although dung middens were only located along the stream with permanent pools. The three located middens were on flat dry areas some three metres above the stream bed. The vegetation of the area is predominantly low karroid scrub, with mainly exotic trees and grass thickets along the main water course.

In the present study scat analysis was used to investigate the diet of the Water Mongoose in the central Great Karoo. Water Mongoose scats were collected regularly at three midden sites. A total of 92 scats were collected and processed over a total of nine months from April 2001 to April 2002. A summary of the scat contents is given in Table 1, with relative occurrence of the different diet groups in the 92 Water Mongoose scats also being presented in Fig. 1. Invertebrate remains occurred in 78 of the 92 scats. Beetle adult and larvae (Coleoptera) remains were of consistently high occurrence in all samples and ranged from a low

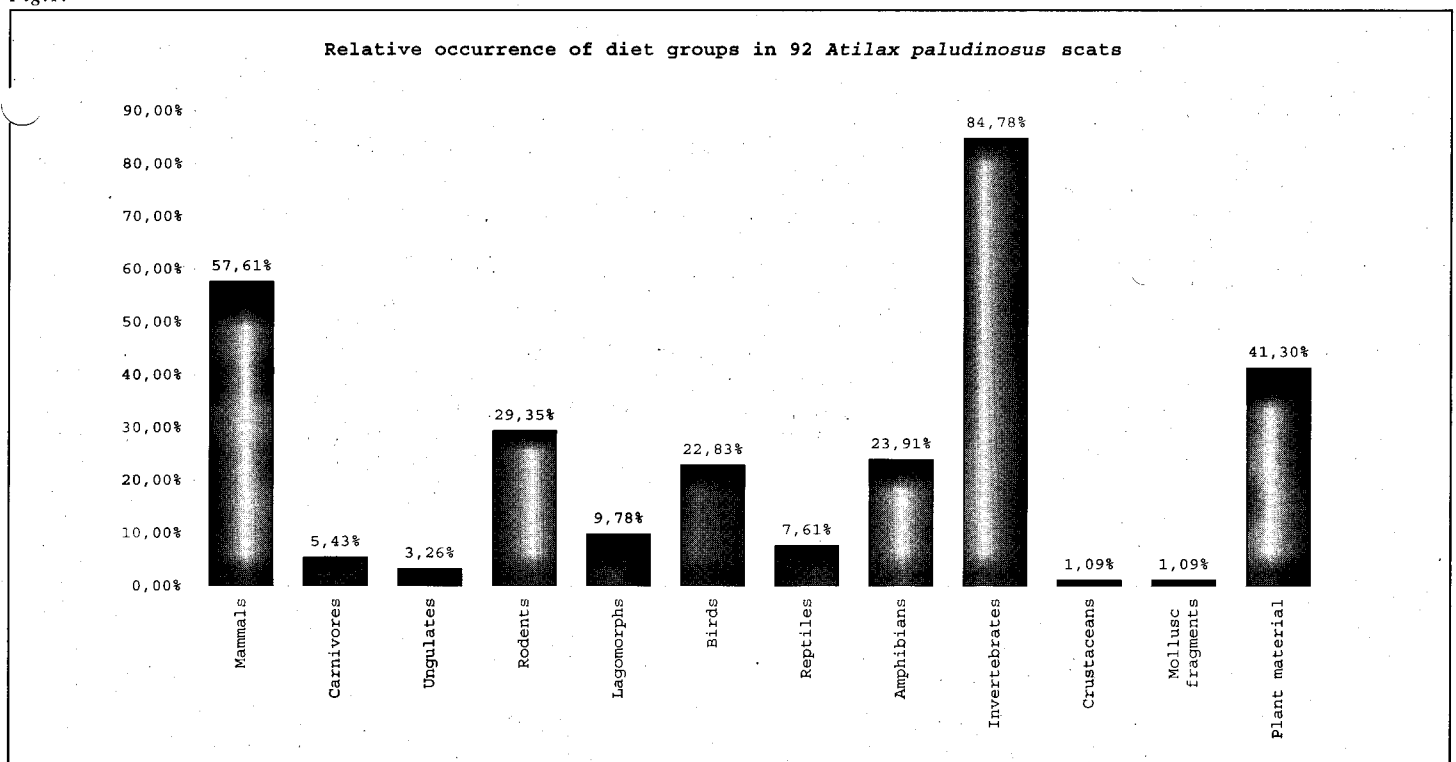
of 52% in July and 100% in April, May and September. Termites (Isoptera), predominantly *Hodotermes*, occurred in all samples except November and ranged from a 24% to a 69% occurrence. Grasshoppers and crickets (Orthoptera) were absent in samples from four months but with a surprisingly high 80% occurrence in June. Other invertebrate remains were not of great importance.

Mammal remains, especially rodents, were second in occurrence. The most important identified rodent prey consisted of Bush Karoo Rat *Otomys unisulcatus* and the Namaqua Rock Rat *Aethomys namaquensis*. Scrub Hare *Lepus saxatilis* (Lagomorph) remains occurred in scats collected in April (24%) and July (20%) but were absent in all other months. One scat from May contained the remains of a Smith's Red Rock Rabbit *Pronolagus rupestris*. The presence of sheep hair in scats from May and August probably represents scavenging. The carnivore material identified was dominated by Water Mongoose hair and was almost certainly a product of self-grooming. Small Grey Mongoose *Herpestes pulverulentus* hair and bones in a single scat during April was the only confirmed carnivore. It is not clear whether this was actively predated, hunted or scavenged.

Frog and toad (Amphibian) bones were present in scats from all months except July (the coldest month). The highest levels of occurrence were from September to April, when most rain falls in this region. The most abundant species in the area are *Bufo garipeensis*, *Afrana fuscigula* and *Xenopus laevis*, but bones were not identified to species level.

Reptile remains identified included hatchling Leopard Tortoises *Geochelone pardalis* in two scats, newly hatched Tent

Fig. 1.



	Absolute occurrence	Relative occurrence
Mammals	53	57,61%
Carnivores	5	5,43%
Ungulates	3	3,26%
Rodents	27	29,35%
Lagomorphs	9	9,78%
Birds	21	22,83%
Reptiles	7	7,61%
Amphibians	22	23,91%
Invertebrates	78	84,78%
Crustaceans	1	1,09%
Mollusc fragments	1	1,09%
Plant material	38	41,30%

Table 1. Summary of all 92 scats - *Atilax paludinosus*

Tortoise *Psammobates tentorius* fragments in one sample and those of a single Helmeted Terrapin *Pelomedusa subrufa* from August. A single snake and lizard were not identified.

Plant remains occurred in a surprisingly high number of the scats (>40%), with the most important being the fruit skins and seed of the indigenous Blue Bush *Diospyros lycioides*. When fully ripe many fruits fall to the ground and become available to terrestrial

foragers. The greatest presence was recorded in July (72%). Other plant remains were identified from *Lycium hirsutum*, *Tamarix ramosissima* and the seeds of the exotic Sweet Prickly Pear *Opuntia ficus-indica*. Grass was present in four of the months sampled but it is unlikely it was eaten as a food source.

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