

ANALYSIS OF FELIS LIBYCA AND
GENETTA GENETTA SCATS FROM
THE CENTRAL NAMIB DESERT,
SOUTH WEST AFRICA.

Accepted: July 1976

INTRODUCTION

C. T. STUART

*Desert Ecological Research Unit, Gobabeb,
South West Africa**

Two collections of *Felis libyca* scats and two of *Genetta genetta* were made in the vicinity of the Namib Desert Research Station, Gobabeb, which is situated on the northern bank of the Kuiseb River in the Namib Desert Park, South West Africa. It is approximately 110 km from Walvis Bay.

*Present address: Nature Conservation Station,
Private Bag 614, Robertson.

7566

The riverine vegetation in the area where the collections were made consists chiefly of *Acacia albida* and *A. erioloba*, *Tamarix usneoides*, *Salvadora persica* and *Euclea pseudebenus*.

The four collections were made on the northern bank of the Kuiseb River. The *Felis libyca* scats were collected on top of a large granite boulder and those of *Genetta genetta* were taken from a rock overhang just above the river-bed. Both species are common in the vicinity of the Kuiseb River (Stuart 1975) and are rarely found far away from it, as to the south lies the almost vegetationless 'dune-sea' and to the north, bare open gravel plains.

In a study of the diet of *Canis mesomelas* (Stuart 1976) in the same area, it was found that this species relied heavily on plant food, this being in contrast with the present findings on the diet of *F. libyca* and *G. genetta*.

METHOD

In the case of *F. libyca* one scat collection was made in January (50 scats) and a second in July (149 scats) while the *G. genetta* material comprised one collection in March (50 scats) and one in December (75 scats). Each scat was macerated in water and sieved to remove sand. Scat contents were then grouped and undigested portions were identified by macro-analysis. Many of the food items could not be identified to species level, particularly in the case of the *G. genetta* scats. Small mammal prey items could only be identified when mandibles were present. Percentage occurrence of food items in Tables 1 and 2 indicates what percentage of the various groups (e.g. bird) occurred in the scats, for example in January (Table 1) mammal remains were present in 90 per cent of all scats and insect remains in 72 per cent of all scats.

TABLE 1

Felis libyca scat contents, Namib Desert Park. The percentage of scats containing specific items. (50 scats in January; 149 scats in July).

Item	Month	
	January	July
Mammal	90,0	96,6
Bird	14,0	10,7
Reptile	—	0,7
Insect	72,0	75,0
Arachnid	10,0	10,0
Plant material	18,0	12,2

TABLE 2

Genetta genetta scat contents, Namib Desert Park. The percentage of scats containing specific items. (50 scats in March and 75 scats in December.)

Item	Month	
	March	December
Mammal	98,0	96,0
Bird	—	5,3
Reptile	—	1,3
Insect	72,0	53,0
Arachnid	2,0	1,3
Plant material	6,0	10,7

RESULTS

Felis libyca. In both the collections small mammal material was predominant and occurred in 90 per cent of the scats in January and 96,6 per cent of scats in July. *Gerbillurus* sp, *Thallomys paedulus*, *Desmodillus auricularis* and *Crocidura cyaneae* remains were identified. In five scats (two in January and three in July) steenbok *Raphicerus campestris* faecal pellets were found. It is possible that

they were accidentally swallowed during feeding. Of the bird material only *Francolinus adspersus* could be identified, from one scat. Reptile remains (a piece of snake skin) were only found in one scat collected in July. Scorpions (Arachnidae) were found in a number of scats from both collections. The incidence of insect material was high in both the January and July collections, Orthoptera and Coleoptera were predominant. *Acanthophorus capensis* was the only species identified. The occurrence of plant food was not high, 18 per cent in January and 12,2 per cent in July. *Euclea pseudebenus* fruits and leaves (the latter almost certainly accidentally taken), one *Acacia albida* seed, *Salvadora persica* seeds and grass were identified. The percentage occurrences are summarized in Table 1.

Genetta genetta. As in the case of *F. libyca*, small mammals (mainly rodents) dominated both scat collections (March 98 per cent and December 96 per cent); however as material was finely particled it was difficult and often impossible to identify many of the items. Only *Thallomys paedulus* was identified with any certainty. An aluminium bird-ring found in one scat made possible the identification of the bird prey item, *Zosterops pallidus*. Reptile material (lizard skin) was only found in one scat; however, as was discussed by Stuart (1976) some food items could be completely broken down and would show no trace in the scat. This could apply to any small reptiles taken by *Genetta genetta*.

Insect material was abundant in both collections, Orthoptera and Coleoptera being predominant. The arachnid material was made up entirely of scorpion particles. The quantity of plant items was low, 6 per cent in March and 10,7 per cent in July and only *Euclea pseudebenus* (seeds and leaves) and *Salvadora persica* (seeds) were identified. Table 2 summarizes the scat contents.

DISCUSSION

In the present study it was found that Muridae constituted the most common food of both *Felis libyca* and *Genetta genetta*. Smithers (1971) found that Muridae were the most common food of these two small carnivores in Botswana. Insects (Orthoptera and Coleoptera) were found to be important in Namib samples for both species. In Botswana (Smithers 1971) insects were also of importance as food items but *Felis libyca* apparently showed a slight preference for arachnids, whereas in the present study insects were by far the most important invertebrate food items. The incidence of plant food in both the Namib and Botswana (Smithers 1971) is very low.

ACKNOWLEDGEMENTS

Professor J. du P. Bothma is thanked for reading and commenting on the manuscript. The Council for Scientific and Industrial Research and the Transvaal Museum are thanked for funds whilst the author was in the latter's employ. The Division of Nature Conservation (SWA) is thanked for granting permission to work in the Namib Desert Park.

REFERENCES

- SMITHERS, R. H. N. 1971. *The Mammals of Botswana. Mem. natn. Mus. Rhod.* 4: 1-230.
- STUART, C. T. 1975. Preliminary notes on the mammals of the Namib Desert Park. *Madoqua* 2 (4): 5-68.
- STUART, C. T. 1976. Diet of the black-backed jackal *Canis mesomelas* in the central Namib Desert, South West Africa. *Zool. afr.* 11: 191-204.