Content of Hyaena brunnea and Canis mesomelas scats from southern coastal Namibia

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Limited information has been published on the diet of *Hyaena brunnea* and *Canis mesomelas* from the coastal area of Namibia (Shortridge, 1934; Siegfried, 1984; Skinner and Van Aarde, 1981; Stuart, 1976). The strong association between these two terrestrial predators and the Cape fur seal (*Arctocephalus pusillus*) colonies along the coastal zone of the Namib Desert has been mentioned by Siegfried (1984) and Skinner *et al.* (1981).

Stuart (1976) found that C. mesomelas at Sandwich Harbour (2314 AD), south of Walvis Bay, was an opportunistic feeder. Large numbers of birds frequent this area and carcasses of bird casualties are fairly abundant, although a certain amount of active hunting does take place. It was found that 94,7 % of all C. mesomelas scats collected at Sandwich Harbour contained bird remains. Insect fragments were present in 11,5 % of scats. Skinner *et al.* (1981) came to the conclusion that *H. brunnea* has a catholic diet in the southern coastal Namib, and found that 75,0 % of all scats examined contained A. pusillus remains, with Desmodillus auricularis fragments occurring in 19,1 % of all scats. Siegfried (1984) found that 98,0 % of the scats collected in his study contained Cape fur seal remains. The same author recorded bird remains in a third of his sample.

One of the authors (P.D.S.) made collections of both H. brunnea and C. mesomelas scats at irregular intervals between 1976 and 1980. Each scat was kept in a separate plastic bag to await processing in the laboratory. The procedure of scat analysis has been described by Stuart (1976).

H. brunnea and *C. mesomelas* scats were collected in the vicinity of Van Reenen Bay, with a few having been taken at Wolf Bay. The Van Reenen Bay site $(26^{\circ}24'S, 15^{\circ}21'E)$ was estimated to have as many as 60 *C. mesomelas* subsisting within the vicinity of the fur seal colony. At least 10 jackals were present at the Wolf Bay colony $(26^{\circ}08'S, 15^{\circ}07'E)$.

Table 1 summarises the content of the analysed scats. Ninety seven percent of the C. mesomelas scats contained the remains of A. pusillus, and 81% of H. brunnea scats had A. pusillus fragments present. The bulk of all scat contents containing A. pusillus remains consisted of hair and skin, and in the case of H. brunnea a fairly high level of bone fragments and calcium. Deciduous teeth from A. pusillus juveniles were present in 17,0% of scats. To what extent active hunting of Cape fur seal pups by H. brunnea and C. mesomelas actually takes place is unknown but it is suspected that many are in fact scavenged.

All other items recorded in the scats were of much lower importance, with only bird prey presence in *H. brunnea* scats, at 19,2 %, reaching any significant level. In contrast to the findings of Skinner *et al.* (1981) no rodent remains were found in the current sample. Siegfried (1984) found non-fur seal mammal remains in only 3,3 % of his sample.

MAMMALIA

TABLE 1. — Food consumed by H. brunnea and C. mesomelas in southern c	coastal Nami-
bia as determined from remains found in scats.	

	H. brunnea	C. mesomelas
No. of scats	26	33
Species identified (% occurence)		
Arctocephalus pusillus	81,0	97,0
Feathers - unidentified	19,2	
Seeds - unidentified	3,8	6,1
Lepus capensis		6,1
Fish	7,7	
Crustaceans (crab)	7,7	
Arachnid (scorpion)		3,0
Orthoptera (grasshopper)	3,8	

Canis mesomelas and *H. brunnea* scats were collected at the beginning, middle and end of the year but there was little difference detected in the composition of their diet.

A mixed batch of crushed *H. brunnea* scats consisted almost entirely of calcium and Cape fur seal hair and skin. The stomach content of a brown hyaena killed by a car to the east of Luderitz (collector P. Best) contained scavenged bones (cut by a saw), crab, fish and bird remains. The stomach content of a blackbacked jackal killed by a brown hyaena (P.D.S.) contained *A. pusillus* remains.

The findings of this study serve to confirm that both H. brunnea and C. mesomelas are opportunistic feeders and will utilise an abundant food resource when available.

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