Cape Fur Seal predation by Brown Hyaena in the Namib-Naukluft Park, Namibia

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Received August 1992; accepted December 1992

ABSTRACT

A single brown hyaena *Hyaena brunnea* was found on the fresh carcase of a Cape fur seal *Arctocephalus pusillus* in the Meob Bay area of the Namib-Naukluft Park, Namibia. Evidence showed that the hyaena approached the seal and killed it by biting and crushing its skull. Although no previous records of this type of predation could be traced, brown hyaena may hunt seals more commonly than is known.

INTRODUCTION

Brown hyaena *Hyaena brunnea* occur commonly on the Namib Desert coast where their scats reflect prey abundance in the area they frequent (Skinner & van Aarde 1981; Skinner & Smithers 1990). The Cape fur seal *Arctocephalus pusillus* is abundant along this coast where it congregates in breeding and non-breeding colonies of tens of thousands, and brown hyaenas closely associate with such colonies (Skinner & van Aarde 1981). One non-breeding aggregation, which regularly hauls out on the beach, is located between Meob Bay and Conception Bay at approximately 14°30'E, 24°15'S. Single seals frequently occur along the beach to the north and south of this aggregation. These may be healthy individuals resting and sleeping or they may be injured, diseased or debilitated. As can be expected from a seal population of this magnitude, natural mortality accounts for many of the carcases which are found ashore, but it is well known that seals often are fatally injured or destroyed by boat fishermen along the entire Namibian coast. There is consequently no shortage of food for a medium-sized scavenger like brown hyaena, which is also the largest resident terrestrial carnivore on the Namib-Naukluft Park's coast.

RESULTS AND DISCUSSION

On 10 June 1992 at 08h45 we located a full grown brown hyaena on a seal carcase 10 km north of the Lange Wand in the Meob area (c. 14°37'E, 24°30'S). The seal, a female, was not fully grown judging from the unworn teeth and body mass which we estimated at 50 kg (*vide* 75 kg given by Smithers 1983). It had been killed by a bite on top of the head which crushed the cranium; the brain was eaten and the anal area slightly fed on (Figure 1). There were also tooth marks on the back, presumably made when the hyaena tried to carry off the carcase at our approach; instead it dropped its kill and ran to shelter among neighbouring dune hummocks. The blood was still fresh and the carcase warm, indicating the kill had occurred shortly before our arrival. There was no evidence that the seal was sick or debilitated.

Tracks showed that the seal had hauled out of the sea, probably after the most recent high tide, which occurred about midnight the previous evening. It moved 40 m above the high water mark to a dune hummock, where it rested and possibly slept. Hyaena tracks were found approaching the beach from the inland. The tracks crossed the seal's drag marks whereupon they followed the

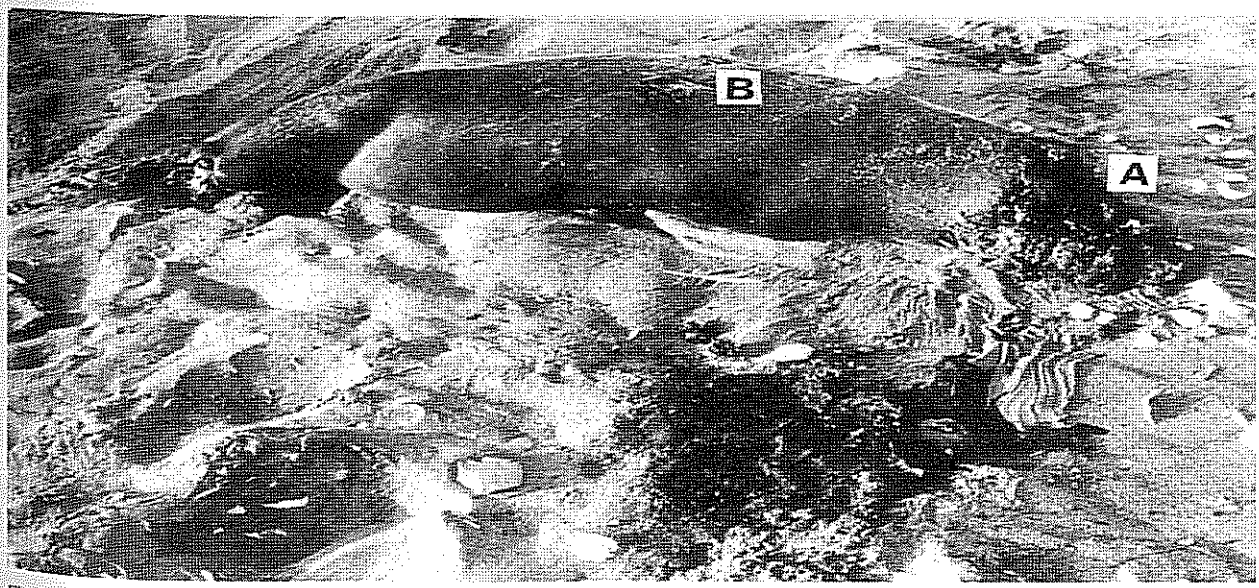

Figure 1: Carcase of a Cape fur seal killed by brown hyaena, showing "A" the crushed skull, and "B" marks on the back where the hyaena attempted to carry the carcase.

marks, diverting to an adjoining dune hummock where the hyaena lay down about 5 m from the resting seal. According to the signs, the hyaena attacked the seal where it lay, killed it after a struggle, then began to feed on the brain.

We left the carcase and returned the following morning to find the seal had been dragged about 150 m inland to a shallow depression between vegetated dune hummocks. Approximately 90% of the carcase had disappeared, leaving portions of the skin and skeleton remaining. There were numerous hyaena and black-backed jackal *Canis mesomelas* tracks around the remains. In the same depression we found evidence of earlier scavenging in the form of three seal skulls and one skull and horns of gemsbok *Oryx gazella*. These skulls were all from fully grown animals, and it is unlikely they were carried there by jackal. Several old hyaena scats were present, indicating a latrine (Skinner & van Aarde 1981), although no signs of a den in the immediate area could be found.

Brown hyaenas are predominantly scavengers, their kills being largely restricted to small mammals, birds, reptiles and insects, although they are known to kill sheep, goats and calves (Skinner & Smithers 1990). While brown hyaenas in the Kalahari spend little time and energy hunting prey, with no records of large herbivores being hunted (Mills 1990), they will indulge in a brief chase and grab at their prey, quickly giving up if unsuccessful (Owens & Owens 1978). Their close association with seal colonies is for scavenging benefits, with 75% of coastal brown hyaena scats containing seal remains (Skinner & van Aarde 1981). These authors raise the possibility of live seals being killed by brown hyaena although they never record this. We have subsequently seen a video recording where a brown hyaena attacks, kills and carries off a newly born seal pup which was separated from its mother.

We contacted eight persons who collectively spent 60 years as workers and nature conservators in the Skeleton Coast Park to the north of the Namib-Naukluft Park, where brown hyaenas and seals also occur commonly. They had no records of seal predation by brown hyaenas, although they on several occasions located the latter on seal carcases. Together with our own experience of 15 years, this is the first instance of such predation recorded on the Namib coast. However, because the secretive nature of the brown hyaena plus the isolation and restricted access to 80% of the 1 400 km Namibian coastline which is either proclaimed game reserve or protected diamond area, it is possible that brown hyaena kill seals more commonly than is presently known.

ACKNOWLEDGEMENTS

We thank Messrs. R. Braby, S. Braine, P. Bridgeford, T. Cooper, T. Hall, E. Karlowa, R. Loutit and P. Tarr, all of whom contributed to our search for previous records.

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