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Abstract: Two female cheetahs from the Kapama Cheetah Centre have been released into the Mthethomusha game reserve in South Africa on 14 May 1994. The two females were totally inexperienced and dependent on people for food supply. One of the females was probably killed and eaten by hyenas.

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INTRODUCTION OF CHEETAH INTO MTHETHOMUSHA GAME RESERVE. SOUTH AFRICA

Compiled by Michele Ferguson

INTRODUCTION

The Mthethomusha Game Reserve (which means "new law") was established in 1986 and is situated between latitude 25 25'and 25 32' South and longitude 31 11' and 31 20' East in the Eastern Transvaal, South Africa. It lies approximately 30km east of Nelspruit. The Kruger National Park abuts the reserve on the eastern side along the Nsikasi River (See Map).

The Mthethomusha Game Reserve is on land that belongs to the Mphakeni tribe under the leadership of Chief Bongani Charles Nkosi and the land is managed on their behalf by the Kangwane Parks Corporation. The reserve is 8000 ha in size and is of low agricultural potential because of the lack of surface water and poor grazing.

VEGETATION

The terrain of the reserve is mountainous and rugged. There are few open areas and a large proportion of the reserve is covered with dense woody vegetation. The vegetation of Mthethomusha belongs to the so-called Malelane Mountain Bushveld. There has been initial work done on the vegetation communities based on elevation. There have been three major types of woodland identified.

- 1. Low-elevation woodlands occur between 350 and 550 m elevation and have strong affinities with the arid/eutrophic savannas.
- 2. Mid-elevation woodlands occur between 550 and 750 m elevation. They are transitional between the low and high elevation woodlands.
- 1. High elevation woodlands are found above 750m elevation.

The area and veld favours large numbers of bulk grazers such as buffalo and zebra.

CHEETAH INTRODUCTION

As the reserve has had much game introduced including 17 elephant, 230 buffalo, 20 rhino, 6 and approximately 6 leopard the best utilisation strategy for this area would be the serve/tourism option. The Bongani Mountain Lodge is situated in the reserve and tourists are served 2 open vehicle safaris a day in the reserve.

the cheetah were introduced for 2 reasons:

1: To perform the ecological role as large carnivores in the reserve. There is a male in the reserve and it was anticipated that these females would breed with him and thus increase the population.

2. To improve game sightings of the cheetahs in the reserve as a tourist operation is run from the Bongani Mountain Lodge within the reserve.

2 female cheetah were obtained from Kapama Cheetah Centre in Hoedspruit, South Africa and held in a borna in the reserve for 8 weeks. These animals were sisters and about 2 years old. They had been captivity breed and raised but they were not hand-raised or tame. They were very accustomed to people.

Both animals were fitted with transmitting devices which were placed in the stomach lining. The transmitters were supplied by Telonics, USA and were fitted by Prof. Meltzer of Onderstepoort Veterinary Faculty. University of Pretoria. These transmitters allowed them to be accurately tracked and their movements monitored. The frequency of each transmitter is different and the 2 cheetah were tracked on 04 (148.04 MHZ) and 03 (148.03 MHZ).

Both animals were released on 14 May 1994. On release they were very cautious but attempted to stalk and chase a herd of impala but without success. They were closely monitored for 2 days during which time it was observed that they stayed together - calling to each other to keep in contact. If they became separated they called to each other until they found each other and licked each other in greeting. When they were out in the bushveld they appeared nervous and reacted to all sounds they heard. Being captivity bred and raised they were unable to select suitable habitat and stayed in dense bush. They made a few attempts to catch impala but due to inexperience were unsuccessful. They were also observed attempting to catch unsuitable prey species such as nyala bulls in very thick vegetation on steep gradients.

They finally settled into the section of the reserve bordering the Kruger National Park - mainly as they had found a good source of water. They exhibited typical cheetah behaviour by selecting termite mounds to rest up. They did not catch any prey and had to be fed weekly. They were also observed trying to catch lizards and were extremely hungry. During this time they lost condition and appeared stressed. One female (03) injured her right front leg presumably while chasing a potential prey - this was not a serious injury and did not hamper her movements.

During the time that they were in the reserve the sightings were excellent. This was mainly due the lack of fear of people and their familiarity with vehicles. They often came very close to the vehicles in search of food. This was often very distressing for the guests who could see how hungry the animals were and for the cheetahs who did not get food. It was policy not to feed these animals when guests are present.

On the 31 May 1994 Ranger Elvis Cibi tracked the 2 cheetah while on a morning game drive. At 8:35 am he found the remains of the female (03). It appeared that she had been killed and eaten by hyaenas. There were extensive spoor of more than one hyaena at the site and it is known that there is a hyaena den in close proximity to the site. The transmitter was retrieved (it had been chewed by the hyaenas) and the remains of the carcass removed (ie: the head and feet as all the rest had been eaten by the hyaenas).

This is an unfortunate incident since both cheetah were valuable to the reserve - particularly in terms of game sightings for the guests. It is suspected that the cheetah wrongly assumed that the hyena were a potential prey species ie: they could hunt them OR both cheetah were caught unawares at night and were attacked by a group of hyaenas. As cheetah are diurnal their night vision is not exceptional and they are very vulnerable to attack by nocturnal animals.

Both these animals were totally inexperienced when released and highly dependent on us for a supply of food. During the 2 week period in the reserve their inexperience, due to being captive animals all their lives, was clearly visible in their habitat and prey selection. They were open targets for a host of species as it was the first time that they were in the wild and having to fend for themselves.

In addition most of Mthethomusha is unfavourable habitat for cheetah having dense vegetation, rough terrain and limited water points. Of the limited open areas, that cheetah favour, that are available in the reserve there is the potential for competition with other species such as lion and the resident male cheetah.

On 4 June 1994 the remaining female cheetah was seen in close to the main entrance gate of the reserve. She was extremely hungry and stayed close to the Ranger Gate Post. She was nervous and continued to call for her sister. Due to the risk of her escaping from the reserve when the gates were opened it was decided to try and lure her back into the reserve using meat as a bait. This was unsuccessful.

A capture box and impala meat were stationed at the gate in the early morning of the 5 June 1994. The cheetah had been scared away from the gate by a troop of baboons but had moved to the vicinity of the fence bordering the Kruger National Park. She was lured into the box with relative ease using impala meat. She appeared in poor condition - looking thin and dusty.

The remaining female was released into the boma without incident and was there for 3 days. During this time she was feed 4kg of buffalo meat a day by one person and no game drive vehicles were permitted near the boma. Staff of the Kapama Cheetah Centre came to fetch her. It was reported that she is recovering well and is in good health.

Although the cheetah introduction into Mthethemusha Game Reserve was not a success it did give some valuable information. It appears that female cheetahs do not adjust into the wild if they have been captive bred and raised. It has been suggested that a better approach to getting cheetah back into the reserve would be to introduce animals that have been captured in the wild and know how to fend for themselves.

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