N50/7 Cheetah

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REPORT ON THE

FEEDING AND RELEASE OF 30 CHEETAH IN ETOSHA.

1970 J.S. du Preez.

A. GENERAL.

1. An officially approved exchange program whereby the Etosha National Park would acquire 30 cheetah (Acinonyx jubatus jubatus) in exchange for 150 zebra from the Park, was implemented when the 30 cheetah arrived at Ombika during the afternoon of the 13th. January, 1970. Eight cheetah, familiar to one another by having been kept in a common cage previously, were introduced into one of the cages at Ombika. Similarly, another 8 were placed in the adjoining cage and the remaining 14 sent on to Halali. Before being placed in their cages, they were immobilized, examined, innoculated and measured. The process was repeated with the remaining 14 at Halali the next morning with the exception that they were placed in 3 cages and were also weighed. At this time there were 2 other cheetah (acquired elsewhere) being kept in the cages at Halali, bringing the total number of cheetah in the cages at Halali up to 16.

2. The feeding program was handed over to the Professional Officer (Okaukuejo) for two purposes: firstly, to give him assume responsibility for the feeding of the cheetah, and secondly, to enable him to gather scientific data from the animals shot as sourse of meat for the cheetah.

3. Based upon the assumption that each cheetah would consume 7 lbs. of meat per day, 224 lbs. would be required daily to feed the 32 cheetahs being kept in captivity. Upon arrival the cheetah were in poor condition and would consume 7 lbs each, but it was expected that as their condition improved, the forced inactivity would reduce their meat requirements.

4. Because of the large number of zebra present in the Park, it was decided to shoot mainly zebra, but permission was also granted to shoot small numbers of the other species.

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B. FEEDING METHOD.

1. The Professional Officer left Okaukuejo every morning between 7 am and 8 am with 4 Bantu assistants for the area where the shooting was to be done. The rifle calibre used was initially 9.3 mm, but this was discarded in favour of a 30-06 cal. as a greater variety of ammunition is available for it. If a zebra was to be shot, it was selected at random - provided it did not have a foal. Only wildebeest males were shot as there were so many calves present. The same held good for the springbok and gemsbok shot, although females were shot that obviously had no offspring.

2. After the animal had been shot, it was loaded onto the vehicle and transported to the slaughtering place situated near the Bantu compound at Okaukuejo.

3. Here it was measured according to the methods prescribed by Roberts in the "Mammals of South Africa". Ecto-parasites were then collected and the dead animal weighed.

4. The carcase was then dealt with as follows:
   (a) the skin was removed and the carcase weighed.
   (b) the viscera (consisting of intestines, kidneys, stomach, liver, lungs and heart) was removed and the carcase weighed.
   (c) Of the viscera, the heart, lungs, kidneys and spleen were weighed.
   (d) The whole viscera was then examined for endo-parasites, pathological and trace-element samples were taken as well.
   (e) Thereafter all possible meat was removed, from the atlas to the anterior end of the sacrumwhere the skeleton was then severed from the sacrum.
   (f) The sacrum with attached hind-quarters was then weighed before the meat was removed from it.
   (g) Then the skeleton (including head, hooves and bones from the meatless limbs) and all useable meat were weighed separately.

   In some instances the heads were removed at the atlas and weighed. In the horned species the animal was skinned only to the head whilst in the case of the zebra the head was skinned as far as the nose and lips. A metal tag

indicating species, locality, date and collector was fastened onto the skull. The skeleton as such was given to the Bantu as small pieces of flesh still adhered to it. The useable meat was then loaded onto the vehicle and taken to either Halali or Ombika. Each group of cheetahs were fed on alternate days. The animals shot were selected in such a way as to ensure that at least 200 lbs of meat would be available every day.

5. Each cheetah was given a piece of meat weighing approximately 4-5 lbs, and when it had consumed it, it would be given another piece until it would not come back for more meat. As far as possible, care was taken to ensure a fair distribution of meat.

6. The skins were salted and dried for despatch to the tannery whilst the skulls were cleaned of most meat and then placed in a small enclosure to allow further decomposition. These skulls are being cleaned and catalogued at present.

C. RELEASE.

1. Because of the proximity of the boundary fence to the holding pens at Ombika, it was decided to release the cheetah at points further from the fence. This could only be affected once suitable crates had been obtained to load the cheetah into for transportation to the release area. In the case of the cheetah at Halali, it was decided to release them by means of opening the cage doors.

2. The cheetah at Halali were released in two groups: the first group of 9 were released on the 11th, March, 1970, and the second group of 5 on the 13th March, 1970.

3. Grates loaned from Mr. W.Delfs (the supplier of the cheetah) were used to catch the cheetah in at Ombika. This was done by placing the crate in the door of the enclosure, baiting it with meat and closing the door of the crate as soon as a cheetah had entered.

4. On the 3rd April 4 cheetah were caught, crated and released at Gemsbokvlakte.

5. On the 7th April 4 more were caught and released at Gemsbokvlakte.

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6. On the 9th April it was found impossible to entice the remaining cheetah into the crates and they were released at Ombika by opening the enclosure's door as well as the door of the surrounding camp and chasing the cheetah out.

D. POST RELEASE OBSERVATIONS OF THE CHEETAH.

1. The cheetah released in the Halali area reacted as expected they came back on successive nights to their holding pens before finally moving off into the surrounding bush. Upon their initial release they all made off in a southerly direction.

2. The first group to be released at Gemsbokvlakte made off in a northerly direction whilst the second group went south.

3. Those released at Ombika all headed north, towards the water-hole, but spent the whole of the following day around the quarantine camp before moving away at dusk. On Saturday the 11th April it was reported that two marked cheetah had been shot after killing a goat, and that two more had been sighted on the same farm (Leeupoort) which is adjacent to Ombika. A patrol along the fence, 5 miles to either side of Ombika, showed no breaks in the fence that had been used by cheetah.

4. Sightings of cheetah as from the date on which the first were released, are as follows:

(a) 30/3/1970. Two marked cheetah seen at Goas.
(b) 1/4/1970. Three cheetah seen at Goas.
(c) 10/4/1970. One marked cheetah seen stalking an hare at Gemsbokvlakte. It's condition was said to be poor.
(d) 7 or 8/4/1970. Five cheetah seen on the Nuamses road near Goas. Condition satisfactory.
(e) 24/3/1970. Two marked cheetah seen at Rietfontein.
(f) 21/4/1970. Two very tame cheetah seen near Namutoni.
(g) 22/4/1970. Cheetah tracks were found going under the fence, 8 miles west of Stark's no.2 camp.
(h) 29/4/1970. Two marked cheetah seen near Halali.
(i) 15/4/1970. Two unmarked cheetah in poor condition were

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found next to the fence opposite the farm Hestria. A week later one was found dead at the same place whilst the other one made off into the bush. It was in very poor condition. The dead one was examined and showed no signs of having been ear-marked. Death was probably due to dehydration and starvation. (The following day an attempt was made to capture the remaining one, but to no avail, and then afterwards it was not to be found in that vicinity.

(j) 15/4/1970. Cheetah tracks were found at Stark's no.2 camp. That night they drank water left out for them. This camp is 10 miles east of the Gobaub/fence road junction and about 20 miles west of the place where the dead cheetah was found. At this time there was very little game near the boundary.

Of these sightings only 4 were of marked cheetah; some of the others could be classified as doubtful as to whether they were actually unmarked. It is encouraging to note that two marked cheetah were observed near Halali, more than a month after they were released - providing they were of those released at Halali.

E. CONCLUSIONS.

1. Thirty cheetah were transported from Windhoek to the Etosha National Park. All but two survived the journey and one died at a later date from causes not connected with the transportation.
2. The method employed for feeding the cheetah proved to be satisfactory but rather time consuming. Had a cool-room been available meat could have been processed in advance and there would have been considerably less wasteage.
3. The shooting of one to three animals in the same area, per day, had no lasting effect on the herds as such.
4. Much valuable data was gained from the shooting: more could have been gained had it been able to spread the shooting over a period of a year.

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5. The cheetah had been kept in captivity (at Etosha) for a period of no less than two months before being released under three different conditions: a) directly from their cages, (Halali)
   (b) directly from their cages, but in close proximity to the boundary (Ombika), and
   (c) removed from their cages and released at some distance (Gemsbokvlakte).

   Time alone will tell which of these conditions were best, bearing in mind the way this project was planned.

F. POINTS FOR DISCUSSION.

In project of this nature there is always room for improvement and thereby increasing the rate of success. The following points may lead to greater success in similar projects.

1. Location of holding-pens (cages, enclosures). Proximity to water and optimum habitat.

2. Design of holding-pens (cages, enclosures).

Animals shot for feeding purposes.

Zebra		39m	14f	Total= 53.
Gemsbok		5m	5f	= 10.
Wildebeest		14m	0f	= 14.
Springbok		20m	2f	= 22.
TOTALS	=	78m	21f	= 99.

These animals were shot at the following places:

Okaukuejo	21
Charitsaub	1
Gemsbokvlakte	2
Ombika	5
Gasib	6
Airport	34
Pan	1
Leeubron	10
Wolfsnes	11
Wit Olifant Dam	6
Leeupan	2

Average time required to process 250 lbs meat (B,1 - 4): 4 hours.

APPENDIX "B"

Scientific data acquired during this project.

1. From the cheetah.
   a) Standard body measurements
   b) Weights.
   c) Some skulls.

2. From the animals shot.
   a) Standard body measurements
   b) Weights of dead animals.
   c) Weights of skins (wet)
   d) Weights of skinned carcases
   e) Weights of skinned and gutted carcases.
   f) Weights of hearts, livers, lungs, spleens and kidneys.
   g) Weights of complete hind-quarters.
   h) Weights of meat yield per carcase.
   i) Weights of meatless carcases.
   j) Weights of heads.
   k) Ecto and endo-parasites.
   l) Some ovaries and eyes were also collected.

The above data will be processed for publication.