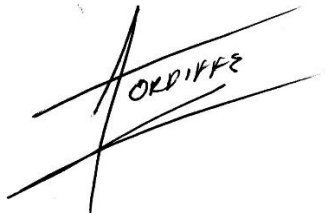


# INSPECTION REPORT

## Emoya Big Cat Sanctuary

5<sup>th</sup> April 2018



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## **Background and experience**

I have been a veterinarian for almost 21 years. I obtained my BVSc degree from the University of Pretoria in 1997. I worked in a small animal veterinary practice in the United Kingdom for 8 years before returning to South Africa to study further. In 2007, I obtained an MSc degree in African Mammalogy (*cum laude*) at the Mammal Research Institute of the University of Pretoria. I then worked as a clinical and research veterinarian at the National Zoological Gardens of South Africa. During this time I managed the preventive medicine programme for the zoo and treated a wide range of species, from fish and reptiles to elephants. My key interest has, however, always been mammalian carnivores. During my time at the zoo, I became an accreditation auditor for the African Association of Zoos and Aquaria (PAAZA). I evaluated several zoos between 2011 and 2015 for PAAZA accreditation. In 2015 I took up a Senior Lecturer position in Veterinary Pharmacology at the Faculty of Veterinary Science, University of Pretoria and in 2017 obtained my PhD degree in biochemistry from North-West University. My thesis was titled “The metabolic profiling of captive and free-ranging cheetahs: A systems biology approach to understanding the diseases they suffer in captivity”. I have published 25 peer-reviewed journal papers to date, most of which are on captive or free-ranging carnivores.

## **Declaration**

I hereby declare that I have no conflict of interest in completing this report. Other than my professional fee and travel expenses for the inspection, I have no financial or other connection to Emoya Big Cat Sanctuary.

## **Inspection overview**

I was asked to carry out an independent assessment of the facilities, operations and condition of the animals housed at the Emoya Big Cat Sanctuary in the Vaalwater region of Limpopo Province of South Africa. The inspection took place, by prior arrangement, on the 5<sup>th</sup> of April 2018 between 10h30 and 13h30. I obtained background information on the history and current management of the facility from Mrs Minunette Heuser and Ms Savannah Heuser. I did not ask for access to any financial or legal documents during the inspection, but rather focused on the facilities, enclosures and animals. I was assured that all the required legal permits from the Limpopo Department of Economic Development, Environment and Tourism were in place for the animals housed at the facility. Accompanied by Ms Savannah Heuser, I visually inspected the 38 lions and 2 tigers housed at the sanctuary in their management/feeding enclosures, as well as the food preparation and storage facilities.

Overall, I found the enclosures and facilities to be of a high standard, suitable for the long-term housing of the animals at the sanctuary and in a good state of repair. I found the animals to be in good physical condition, taking into consideration the malnutrition and poor care they suffered in the countries from which they came. I found the operational procedures, as described by Ms Savannah Heuser, to be of a suitable standard to ensure the

safety, health and general wellbeing of the animals housed at the sanctuary. I only have a few minor comments and suggestions on how the operations and facilities can be improved.

## **Enclosures**

The 38 lions at the sanctuary are housed in groups of 1 to 6 animals in 15 separate enclosures ranging from 1.2 to 3.0 hectares in size. Each camp has between 2 and 7 smaller associated enclosures for management and feeding purposes. To allow for better visual inspection of the animals, most of the animals were retained in the smaller management camps at the time of the inspection. In each enclosure the gates are surrounded by a second fenced area to prevent escape in the event that any of the gates are accidentally left open. The fences are electrified and of a suitable height and quality to safely accommodate habituated adult lions. The electrification is provided by solar panels at each enclosure and a back-up battery. The electric fencing systems have functional indicator lights and an alarm system to indicate malfunction. Appropriate locks were present on the enclosure gates.

The enclosures are of a suitable size for the number of animals. They have more than adequate shade and cover in the form of natural shrubs and trees. Additional A-frame shelters are provided in the management enclosures and some of the larger enclosures. Water is provided in each area in concrete, automatic refilling drinking troughs. The enclosures were clean and free of bones and faeces at the time of the inspection. The drinking troughs were clean and appeared to be in a good state of repair.

The two Siberian tigers were housed in two separate large enclosures (1.5 and 3 hectares). Both enclosures were clean and spacious, providing adequate shade and privacy for the cats. Shallow swimming baths were also available for them to use. The perimeter fences are electrified and of a suitable height and quality to accommodate tigers.

## **Security and staff**

Security at the sanctuary appears to be adequate. Guards are provided by a private security company, both at the main gate and patrolling the enclosures 24-hours a day. I was asked to sign in at the main gate and in the enclosure area by the security personnel. The current security seems to be an appropriate response to the poaching incidents that claimed the lives of two lions at the sanctuary.

Measures to ensure staff and volunteer safety appear to be sufficient and emergency procedures in the event of an animal escape appear to be in place.

The staff appear to have adequate training and experience in the management of the animals.

## **Veterinary care**

Dr Peter Caldwell, a veterinarian with many years' of experience in large carnivore care, provides most of the veterinary services for the sanctuary. According to Ms Heuser, he visits the sanctuary every 3 to 4 months, but has contact with the sanctuary on a weekly basis. He is based in Pretoria, 2.5 to 3 hours' drive from the sanctuary. In the case of an emergency,

several other wildlife veterinarians are potentially available from the closer towns of Vaalwater or Thabazimbi.

## **Animals**

All the lions and tigers were found to be in good body condition, neither over- nor underweight. Evidence of previous malnutrition and neglect were evident for some of the animals that came from Columbia and Peru. Some of these still have ocular, dental, neurological or musculoskeletal abnormalities, largely due to poor management prior to their arrival at the sanctuary. Overall, their medical issues were however being adequately managed to ensure acceptable comfort and quality of life. All the animals appeared to be calm and relaxed and none of the animals showed any evidence of stereotypic behaviour. Two male lion was receiving a serotonin uptake inhibitor (fluoxetine) for inappropriate aggression, but this was being provided on prescription from the sanctuary's veterinarian (Dr Caldwell). This individual appeared to be somewhat sedated, but calm during the inspection. Several had had either dental or ocular surgery after their arrival at the sanctuary. Several of the lions still have known dental problems that need to be addressed. I recommend that these treatments should be prioritised as a matter of urgency.

None of the animals had evidence of external parasites and it was good to see that none of the lions or tigers had biting fly damage on their ears or noses.

It was also good to see that efforts were being made to habituate animals to crates prior to transport to the veterinarian. This kind of habituation results in less stress to the animal and reduces the need for sedation during transport.

I did not see evidence of environmental enrichment during my inspection, but I was satisfied that Ms Savannah Heuser was adequately informed on suitable environmental enrichment options recommended for lions and tigers and that these were being implemented from time to time.

The animals appear to have been adequately vaccinated and treated for internal parasites according to the programme suggested by Dr Caldwell. There was no evidence of the breeding of lions or tigers at the sanctuary and reproductive sterilization and contraception measures appear to be in place.

## **Feeding**

Venison meat is purchased from a single supplier for the animals. This consists mostly of giraffe, wildebeest and zebra muscle meat from the game industry. Crocodile and chicken carcasses are occasionally also available. The skin, internal organs and blood are removed from the carcasses and carcass portions are provided in plastic crates. Some animals with limited dentition are given muscle meat without bones. Additional vitamin and mineral supplements are added to the meat on an individual basis, depending on their needs. Dietary instructions from Dr Caldwell appear to be closely followed. The vitamin and mineral supplements are provided by his practice. All the animals are fed daily. The food is thrown over the fence into the enclosure. This may lead to the meat being contaminated with sand

prior to ingestion. Sand contamination of the meat has been shown to cause severe dental wear in cheetahs. It is therefore recommended that food is placed on concrete slabs or on conveyor belting to prevent sand contamination.

The food for each animal is thawed from the walk-in freezer, prepared, weighed and placed in a marked plastic bucket in the walk-in refrigerator on the day before feeding. Each animal is fed individually. Records are kept on the amount of food fed and consumed. Any medication that is added to the food is also recorded and kept on file. The medication and feed supplements are stored adequately in a room next to the refrigeration facilities. Medication records and health observation records are kept for each animal.

The food handling and storage facilities were clean and well maintained. The walk-in refrigerator and freezer temperatures were monitored by thermometers above the door. The refrigerator temperature was adequate at 2°C, but the freezer temperature was at -5°C at the time of the inspection (should be closer to -20°C). The food in the freezer was however fully frozen. Records of the refrigerator and freezer temperatures were not made over time. Since only a single refrigerator and freezer are available, it is not clear what plans are in place to maintain the cold chain if either of these should malfunction. It is therefore recommended that backup facilities are created to prevent loss of food cooling in the case of refrigerator or freezer malfunction.

The owners reported that 4 lions were previously affected by botulism and two unfortunately died. Since then they have sourced the meat for the animals from a single reliable supplier and have addressed any issues related to the maintenance of the food cold chain. These measure, together with the removal of uneaten bones in the enclosures, should minimize the risk of further cases of botulism.

## **Recommendations**

- The most important priority at this stage is the completion of the dental evaluations and treatments. Given the level of dental disease in these lions, this should be prioritised.
- Meat should be placed on concrete slabs or conveyor belting to prevent sand contamination and subsequent dental wear.
- Back-up refrigeration and freezer facilities should be installed so that the cold chain can be maintained in case of refrigeration malfunction
- Refrigerator temperatures should be recorded on a log sheet twice daily to detect and address suboptimal cooling.
- After discussions with the owners of the sanctuary, it was clear that there were no plans in place to ensure the ongoing care of the animals in the event of their simultaneous death. I would recommend that plans are drawn up to make sure that the animals are adequately cared for in the case of such an event.