UP Faculty of Veterinary Science assistance with surgical intervention saves cheetah's life in East Africa

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A recent collaborative effort between the University of Pretoria's <u>Faculty of Veterinary</u> <u>Science</u> and the Cheetah Conservation Fund (CCF) of Somaliland in East Africa has most likely saved the life of Janet, a cheetah in a sanctuary just outside Hargeisa, the capital of Somaliland, a country in the so-called 'Horn of Africa'.

One of the key role players in the rescue operation was Dr Ross Elliott, a specialist small animal veterinary surgeon in the Faculty's <u>Onderstepoort Veterinary Academic Hospital</u> (<u>OVAH</u>), who was approached by the CCF to assist with what turned out to be quite an intricate situation.

Janet was diagnosed with a fracture of the calcaneus, which is found at the back of the hock joint (the first joint below the knee in the hind leg of a cheetah, of which the angle points backwards – the calcaneus is the bone at the back of this joint). This led to an inability of the common calcaneal tendon or Achilles tendon to support the hock, which in turn led to the dropping of the hock to the ground.

According to Dr Elliott, a surgical repair was previously attempted but failed and this led to chronic bone resorption and osteoarthritis in the calcaneus bone and joints of the hock, respectively.

Thereafter, multiple attempts, as late as March this year, were undertaken to save the function of the joint but all these also failed. Given the lack of bone and the chronic nature of the injury, amputation, euthanasia or pantarsal arthrodesis (surgical immobilisation of the joint) were considered as options. The latter is a procedure carried out using a specifically designed bone plate contoured to the shape and angle of the cat's tarsus and accepting screws of different sizes to match the underlying bone thickness. The aim is to eliminate any instability and associated pain.

While amputation could have provided a chance in life to Janet, it generally would be detrimental to a cheetah's ability to walk and run normally. A decision was made to attempt the arthrodesis as a rescue option and see how Janet responded which took Dr Elliott all the way to Somaliland.

"The concern was that there is very little data on the outcomes of a pantarsal arthrodesis in the cheetah so we were not sure how she would do with the surgery," Dr Elliott says. For more photos of the surgery please click here: https://bit.ly/3q33F65

During the second week of May, Dr Elliott, with the assistance of Somaliland CCF veterinarians Dr Anahi Hidalgo (Head Veterinarian), Dr Ann Fan, Dr Ahmid Usuf and veterinary technician Morgane Alvino, among others, performed the surgery while the Executive Director and Founder of the CCF, Dr Laurie Marker, was also in attendance. The surgery went well while the post-operative radiographs similarly looked good.

It is now up to Janet to see how she recovers. The latest news from Dr Elliott's colleagues at CFF is that she is doing well, the swelling of the paw is minimal at this stage and she seems comfortable.

** The Cheetah Conservation Fund was founded by Dr Laurie Marker in 1990 and is an international non-profit organisation headquartered in Namibia and Somaliland with

operations in the United States, Canada, United Kingdom and Australia, and partner organisations in several other nations.



CCF veterinarian Dr Ahmid Usuf (middle) draws blood from Janet with the help of Morgane Alvino while Dr Hidalgo (left) and Dr Fan (right) prepare the leg for surgery.



The Faculty's Dr Ross Elliott (right), Dr Anahi Hidalgo (2nd from right), Dr Laurie Marker (middle), Dr Ann Fan and Morgane Alvino during the initial approach to Janet's joint.