## ETERINARY

## Game for a challenge

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In August 2022, I made my way to South Africa to take part in the Vets Go Wild Impact course, to learn about wildlife medicine. After a long journey from London Heathrow to Port Elizabeth, we loaded up onto minibuses and began the drive to Amakhala Game Reserve. During the drive, the vastness of the landscape was apparent. The topography in the Eastern Cape is characterised by mountain ranges and valleys which are largely grassveld (an Afrikaans term which can be loosely translated to 'prairie'). These areas of land are uncultivated with indigenous grass growing freely and the odd sighting of an impala or kudu; a very different sight to that of the green patchwork fields making up the British countryside. After a few hours we had arrived. Amakhala Game Reserve was established in 1999 as a joint conservation effort between six families who had previously used the land to farm sheep and cattle. The reserve's 18,000 acres has since undergone a re-wilding process to provide habitats for native South African wildlife. Visitors can expect to see a range of species including giraffes, lions, elephants, rhino, buffaloes and cheetahs. Over the next two weeks, we would shadow Dr William Fowlds and Dr Emily Blaxter, getting the chance to work with many of these species and a taste of life as a wildlife vet.





The bread and butter of wildlife work in South Africa is darting animals to anaesthetise them for various procedures or translocation. During the course, we worked as the ground team, monitoring the anaesthetic for many antelope species, giraffes, lions, and black and white rhinos. It was incredible to see these species up close and a great opportunity to practice our basic clinical skills. During the first week, we focused on the translocation of kudus and impalas. In the field, monitoring anaesthesia can prove quite difficult; a lot of the time you are working whilst the animal is being transported in the back of a truck with limited resources. If you can feel a pulse whilst driving over the rough South African terrain, then you'll fly through monitoring pulses in first opinion practice. After honing our monitoring skills working with kudus and impalas, we then moved on to bigger animals. A particular highlight was feeling the pulse of a black rhino whilst the reserve's team replaced its tracker. They are such forceful creatures, and it was a surreal experience to feel the gentle buzz of its pulse. Working with giraffes was another incredible experience. To help maintain genetic diversity and prevent inbreeding, we translocated two juvenile giraffes to another reserve. This proved quite an exercise as the height of the giraffe poses a logistical challenge when they are knocked down by the dart.



To reduce the impact of the fall, a team ran behind the giraffe and encircled it with ropes to help control the fall; a slightly astonishing race requiring the coordination of people, ropes and the giraffe. Once the giraffe was knocked down, we immediately reversed the anaesthetic. Three people then laid on the neck to prevent the giraffe from rising whilst we placed a halter, blindfold and ear plugs. These helped to reduce the sensory stimuli and protect the giraffe's eyes. The giraffe then stood up and we guided her onto a big trailer with the halter and ropes, applying and removing pressure at just the right moments. This was a truly unforgettable experience. During the course, we also helped to place a contraceptive implant into a lioness to prevent the lion population becoming too large. This was a slightly nerve-racking experience; prior to carrying out the procedure, we had to scare off a lion which was mating with the lioness. Rattling guns and making loud noises from the game-viewer, eventually he left. We were then able to carry on but we had to carefully watch for his return. On this day, I had the chance to place my first ever IV catheter. Luckily, it was a little bit easier than most domestic species lions have pretty big veins compared to domestic cats!



Although much of the course was practical, we had a series of lectures to bring us up to speed with the crucial theory behind wildlife medicine and conservation. It became apparent that the work of a wildlife vet stretches far beyond medical procedures. Wildlife vets play a crucial role within One Health, the field focusing on the intersection of animal health, environmental health and human health. Wildlife, in particular, can carry many zoonotic diseases (diseases which are transmissible to humans) such as rabies and anthrax. Wildlife vets work to surveil these diseases and prevent the spill-over into human populations. Additionally, advocacy to protect habitats and promote environmental health will only help to prevent future outbreaks of serious diseases from occurring. When the environment is unstable, disease prevalence will only increase.

Hence, wildlife vets play a central role in the control of wildlife diseases which may have significant human health impacts. We also discussed the socioeconomic impacts of conservation, and the large problems surrounding poaching. Conservation needs to positively impact the surrounding communities for it to be successful. Without communities valuing these animals, they will be at a high risk of poaching. There is a huge market for the illegal trade of wildlife products, and poaching provides an opportunity for many to make money and support their families. A multi-faceted approach will be required to disincentivise poaching and the team at Amakhala is working to increase job opportunities within these communities, provide education on the importance of wildlife to children, and encourage greater animal welfare of domestic species to stimulate a greater perceived value of animals as sentient beings. However, the illegal wildlife trade will continue to threaten critically endangered species, meaning that there is a large necessity for anti-poaching campaigns.



Although wildlife populations are declining due to human activity, learning about the work of wildlife vets such as Dr William Fowlds and Dr Emily Blaxter has been hugely inspiring. I often reflect on my time at Amakhala as a very formative experience; it is fairly remarkable to witness these animals in their natural habitat. Their extinction would be deplorable, but as future veterinarians we have the unique opportunity to protect them and work towards building an environment which benefits both humans and animals.



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