

Northwest Namibia – Field Report

July 2019



Emily Kay & Robert Stoop, Wellington Zoo.

The Giraffe Conservation Foundation (GCF) is working across the African continent to preserve a future for giraffe in the wild. Total giraffe populations have faced an overall 30% decline, with giraffe as a species now recognised on the IUCN Red List as *Vulnerable*. We had the incredible opportunity to assist GCF in their work with the Angolan giraffe (subspecies of Southern giraffe) in the wild of north-western Namibia.

One of GCF's continent-wide initiatives is *Twiga Tracker*, where wild giraffe throughout the African continent are fitted with 'ossi-units' (solar powered GPS satellite tracking units) to gather data on giraffe movements, habitat use and behaviour. This data provides invaluable information to guide decision making in the conservation of giraffe populations throughout Africa. The specific data from north-western Namibia will also inform potential future translocations of Angolan giraffe back into Angola.

In July 2019, we travelled to Namibia with GCF to assist with the *Twiga Tracker* programme. After several long flights, we arrived in Windhoek where we were collected by GCF researcher Emma. After a good night's rest, we spent the first day meeting some of the GCF team, preparing the gear for the trip, packing the Hilux and shopping for all the food needed for our time in the field. That night we met up with Sarah Ferguson (GCF Uganda), Arthur Muneza (GCF Kenya) and Billy and Jamie from Twycross Zoo (UK) at Joe's Beerhouse, a restaurant in Windhoek famous for its game meat.

Early the next day, together with Emma and Sara, we piled into the GCF Hilux and made our way north to Opuwo. Camp was made on the outskirts of the small town that night. There we met up with four MSc students from the Namibian University of Science and Technology (NUST) who would be accompanying the team for the trip.



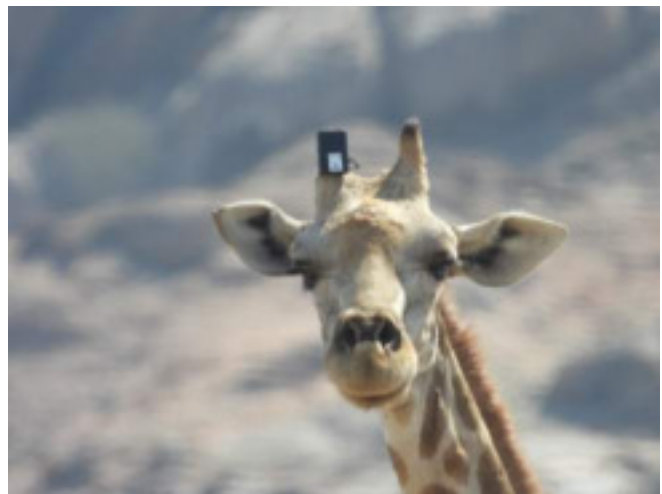
We broke camp early the following morning and the team set off. The previous day had seen the end of paved roads and from here on we would travel on dirt and gravel only. Travelling further north-west took the team through incredibly varied landscapes; barren plains, rocky valleys and we saw numerous village communities. Wildlife began appearing in increasing volume; with ostrich, springbok and zebra becoming

regular sights. Late in the afternoon we found an ideal location to camp in the Ensengo River: a dried riverbed with moderate plant life. Spore from zebra, antelope and giraffe all around the campsite showed that wildlife would be in abundance in the area.

The severity of the drought that Namibia is experiencing was very apparent in the dryness of the landscape. The livestock kept by the local Himba people appeared to be struggling significantly with this, however, remarkably, the majority of the wildlife appeared to be in excellent condition. For two nights the team camped in this location, venturing out into the surrounding areas during the days to locate giraffe.

Whenever giraffe were located, they were photographed from both sides and GPS coordinates and photo identification recorded. Many of these giraffe were individuals that had been previously sighted, while others of them were newly discovered individuals. DNA tissue biopsies were taken from several giraffe to contribute towards genetic research on giraffe in the area. This process was repeated with the many giraffe that were sighted during the remainder of the trip.

On day four we broke camp early and travelled south, surveying the Nadas River for giraffe. We found several giraffe in the river which were perfect candidates for collaring. Late in the day we made it to Marble Camp, where we met up with the rest of the collaring team which included Julian Fennessy, Billy & Jamie from Twycross, H.O. the veterinarian, Morgan from NUST and some EU vloggers. The whole team met in a clearing for a briefing from Julian and H.O., then the “capture team” ran through several practice captures where Morgan or Julian acted as the giraffe.



The next day we headed back to the Nadas River where we put our capture skills to the test! We successfully fitted ossi-units to three giraffe – two females and a sub-adult male. One of these females was one of Julian’s original study animals from the early 2000s. It was fascinating to learn that she is still in the same river system after all these years. It is going to be interesting to see her continuous movements now that she has been fitted with an ossi-unit.

On day eight, the team packed up camp at Marble Camp and travelled south to the Purros conservancy. Travelling through the Khumib River we saw dozens of giraffe, countless gemsbok, springbok and steenbok.

Purros is a village on the Hoarusib River. The community campsite is situated amongst thick vegetation and the team encountered numerous elephant during our time there (the elephant were responsible for some plumbing problems on one occasion: they could smell the water in the pipes running to the campsite toilets and pulled the pipes out for an easy drink). This was the most densely vegetated area we encountered during our trip, and the number of wildlife around reflected this.

Over the next few days the team travelled back to the Khumib River to fit ossi-unit on some of the giraffe that we had identified during the journey from Marble Campsite.



To fit an ossi-unit, a giraffe is darted by the vet from the back of the capture vehicle. After about five minutes the ultrapotent drugs takes effect and the animal starts to run. At this point, Julian positioned the vehicle and signalled to the capture team to jump out ahead of the animal. Two members of the team then took either end of a rope and ran into position. Careful communication was essential to ensure that the animal ran into the rope. Once the giraffe had made contact, two additional ropers joined at each end. The team then ran



alongside the giraffe, applying tension to the animal in order to slow down its momentum. Once the giraffe had slowed enough, the teams on either end of the rope criss-crossed behind the giraffe. This prevented the forward motion of the giraffe, tripped it and caused the animal to fall to the ground.

The moment the animal was on the ground a member of the team took control of the head, and 2-3 others applied their weight to the neck, whilst making way for the veterinarian H.O. to immediately deliver the antidote to the opioid. A blind fold was placed over the head, and the ears plugged.

During each immobilisation the team worked as quickly as possible to fit the ossi unit, take morphometric measurements, photographs for identification, a tissue sample to provide DNA for future genetic work, hair samples for stable isotope analysis and the incisor teeth were examined to estimate age. Each member of the team had a specific job, Robert participated in the capture and restraint of each giraffe, taking responsibility for control over the head during the procedures and at recovery. Emily assisted the vet to record data for each animal, age the giraffe and collect the morphometrics and tissue samples. The average time for each procedure from dart in to end took less than 30 minutes.



On day eleven the team disbanded and went separate ways. Emily, Robert & Emma drove south, through the mountains between the Hoarusib and Hoanib Rivers. After a long drive we reached Palmwag Lodge, where we camped for the night before returning to Windhoek the following day.

We had the incredible opportunity to assist with GCF's work in the wild of Namibia as part of the Africa-wide *Twiga Tracker* programme. The team captured seven wild



Angolan giraffe (six females and one male) to fit them with GPS satellite tracking units (ossi-units) and gather tissue samples and morphometrics for ongoing research on giraffe. Studying the giraffe fitted with tracking units will provide information on habitat use and behaviour that will help to inform future conservation and management efforts throughout Africa. The specific data from north-western Namibia will also inform potential future translocations of Angolan giraffe back into Angola.



We were not only privileged to participate in real-world and hands-on conservation efforts on giraffe, but we also returned to Wellington Zoo with a wealth of knowledge and experience that we can now apply to our future work in zoo giraffe management and veterinary care. We each gained experience and developed skillsets within our respective areas of expertise; the trip was extremely inspiring for both of us on a professional and personal level.

