Namibia Giraffe Conservation Programme

UPDATE REPORT

April 2019

At our home base in Namibia, the Giraffe Conservation Foundation (GCF) runs a comprehensive programme across the country with a focus on giraffe conservation research and environmental education. While this report focuses on the conservation side, you can read more about the environmental education programme in the regular KEEP Update reports online at https://giraffeconservation.org/programmes/keep/.

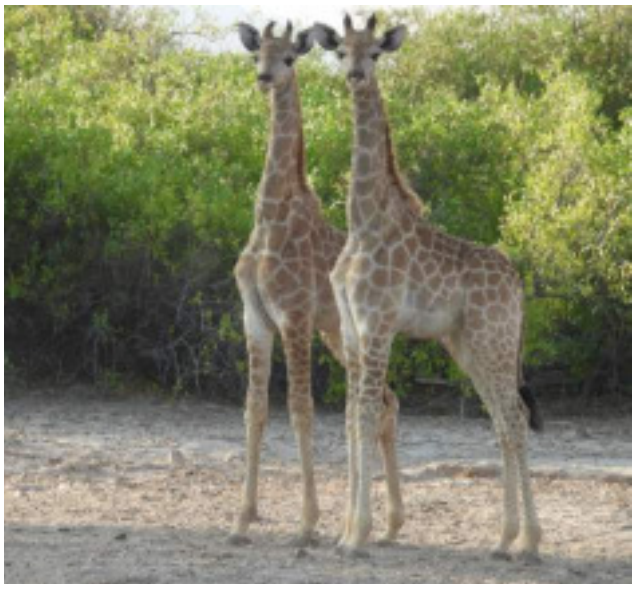
The past few months have seen some exciting developments in our Namibia Programme. If you follow our updates regularly, you might want to skip forward to the brand-new updates and give the background information a miss, but you might also find some interesting information that you were not aware of.

Background

GCF's Namibia Programme focuses on monitoring and supporting the long-term conservation and research of Namibia's desert-dwelling giraffe.

These giraffe roam throughout the northern Namib Desert in the country's northwest. Our work focuses on the ephemeral Hoanib and Hoarusib Rivers and covers an area of approx. 4,500km^2. The area extends from communal conservancies in the east (which support both wildlife and domestic livestock) into the Skeleton Coast National Park bordered by the Atlantic Ocean to the west.

With only a few millimetres of annual rainfall, the programme area is arid to hyper-arid and the wildlife is well adapted to this harsh environment. However, these conditions mean that many species survive at the very edge of their adaptive abilities and as such the ecosystem is fragile and easily disrupted. Grazing for cattle and other livestock, increasing tourism in the region and historical poaching have led to some degradation of the environment and its wildlife. Nevertheless, it remains one of the most beautiful and remote refuges for Africa's remaining mega-fauna.



In this stark landscape of dunes and dry riverbeds, along with elephant, black rhino, lion, cheetah and numerous other species, live the desert-dwelling Angolan giraffe (*Giraffa giraffa angolensis*) – a subspecies of the Southern giraffe (*G. giraffa*). GCF's long-term giraffe conservation programme here offers a unique and valuable opportunity to better understand this subspecies and, through what we learn, provide conservation and management support for other giraffe populations throughout Africa.

In addition to this long-term conservation research, we recently initiated a country-wide assessment of giraffe. In this exciting new programme, we work closely with

government and private land-owners throughout Namibia to better understand the numbers and population dynamics of giraffe in the country. By collaborating with partners, we not only determine giraffe numbers, but also increase education and awareness of giraffe conservation in Namibia and Africa-wide.

News from the field

In our last Update Report we wrote about the start of the dry season and the harsh conditions the giraffe and the other inhabitants of the study area were experiencing. Over the past few months, the far north of the region has continued to suffer severe drought conditions and there has been very little rain. Unfortunately, the catchment areas of the Hoanib and Hoarusib Rivers have not escaped the drought and as already mentioned in the last report, animals have started moving out of the rivers and into the mountains or further afield in search of much needed forage.

These longer movements are not only limited to giraffe. We have observed cattle from the local villages move further into areas that are normally reserved for wildlife. During a recent field trip, we observed cattle far into the vast expanses of the Giribis Vlakte (Afrikaans for 'plains') only approximately 35km north of the Hoanib River. Local communities brought their cattle to these remote plains in search of the last remaining dry grass in the area. However, this means that cattle ranges start overlapping with those of giraffe and other wildlife – and also predators which may lead to conflict.

Due to the diminishing food supply, we spotted fewer Hartmann's zebra, oryx and springbok than usual. Interestingly, in contrast we observed a greater number of kudu in the mountains, feasting on the ever-plentiful *Euphorbia* – a favourite of the black rhino, but highly toxic to humans.

Speaking of, we were treated to several black rhino sightings over the past few months as well as an incredibly rare sighting of a caracal, sitting quietly under a shepherd's bush, deep in the mountains.

Driving west into the Skeleton Coast Park one day we were fortunate enough to see one of the large bull desert elephant sliding down one of the sand dunes to join his companion down the bottom – a rare and somewhat comical sight to see, and highlights how well adapted these massive beasts are to this arid environment.

In late February, during a field trip joined by Megan Cline (Columbus Zoo) and Christine Dear (Greenville Zoo), both the Hoarusib and Hoanib Rivers flooded, giving life giving water to both river systems. However, as so often with this ephemeral river systems, hardly any rain actually fell in the study area. Both rivers have vast catchments, which means that rain can fall hundreds of kilometres away from the area, while the water eventually makes its way down to the lower reaches, often in a raging torrent.

Despite the plentiful supply of *Faidherbia* and *Vachellia* (*Acacia*) trees along the river beds, many of the giraffe moved away to look for other food at this time of year. Small herds of giraffe were observed in the mountains between the rivers, far down river in the Skeleton Coast Park and also north in the Khumib River. We spotted a group of ten giraffe one afternoon in the Khumib River – all clustered around a small tree vying for a meagre bit of shade. In the Hoarusib River area we encountered large herds of 15-20 giraffe as there is still abundant food available.

In late March, GCF embarked on yet another giraffe capture mission to fit GPS satellite units to giraffe as part of the larger Twiga Tracker programme. Twiga Tracker is the largest giraffe GPS satellite tracking programme ever in Africa ('twiga' is Swahili for giraffe). Giraffe were listed as Vulnerable to extinction on the IUCN Red List of Threatened Species in 2016. Giraffe numbers in Africa have plummeted by a staggering 30% over the last 30 years. We estimate today that there are only approximately 111,000 giraffe remaining in all of Africa.

To save giraffe in Africa, we need to gain a better understanding of where giraffe live, where they move and how they use their habitat. Twiga Tracker aims to track a minimum of 250 giraffe across their range with innovative GPS satellite solar units. So far, we have deployed tracking units in Botswana, Chad, DRC, Ethiopia, Namibia, Niger, Kenya, Uganda and Zimbabwe and initial data is showing some interesting results. Twiga Tracker is a collaborative initiative of some of the biggest names in field conservation and science: GCF has partnered with the Smithsonian Conservation Biology Institute, San Diego Zoo Global and Wildlife Conservation Alliance to achieve this logistically and financially ambitious goal.

Fitting these GPS satellite units is a daunting task and an entire team is needed to get this job done. As such, the GCF team was joined by wildlife veterinarian extraordinaire Dr Pete Morkel, who brought is lovely wife Estelle and son Benoit along, a team from our Namibian conservation partner Ultimate Safaris, as well as long-time supporter James Weckerle

and our very own Audi Ekandjo, from our KEEP team. To complete the team, we were also joined by a German TV production team filming GCF's work for a German documentary series. Stay tuned for more news on this, but it is scheduled to air in the first half of 2020 on German public TV channel ZDF in their popular series Terra X.

For a week we traversed the mountains between the Hoanib and Hoarusib Rivers, all the while followed by the film crew recording our work to help spread the word. Our team had surveyed the area in search of suitable candidates for tagging before the arrival of the vet and capture team. Many small herds of giraffe were observed but as we know they do not stand still!

The first giraffe was captured, tagged and released successfully in a near-textbook exercise. Still, filming a giraffe capture is not easy and in particular when you didn't quite know what to expect. Luckily, we had planned to tag several giraffe, so there was no need to panic and the film crew could plan additional shots and angles for the next captures. A second giraffe was tagged successfully, and valuable data started coming in via satellite. However, what we had not taken into account was the weather.

In an arid environment like northwest Namibia, everyone gets excited when it rains. No one is ever upset about rain – never. Not even when it means that giraffe disperse in the hills overnight and areas previously teaming with giraffe (or at least what we consider 'teaming with giraffe' in a desert environment) are suddenly bare – with no giraffe to be seen. Anywhere.

So, when the much-anticipated rains started to fall in the area and giraffe dispersed, we took it as a sign of good luck. The newly tagged giraffe cow and bull, together with previously tagged animals in the area will provide fascinating accounts of their movements throughout northwest Namibia and ultimately help us to inform giraffe conservation measures throughout their range in Africa.

Here an example of the movements of the tagged giraffe in northwestern Namibia.

While part of the team returned to civilization after the tagging exercise, the field team continued to Puros, were they were lucky enough to witness the Hoarusib River still in flood four days after it had come down for the first time this season. Not only that, we saw giraffe strolling through the river and even enjoying a refreshing drink!

It is incredible to see how quickly the arid northwest flourishes after such a small amount of life-giving rain. On our way home tinges of green covered the ground where rain had fallen as new life sprung from the barren earth.

Importantly, our work is a collaborative effort in northwest Namibia and over the last year we have worked closely to build the capacity of our key conservation partner Natural Selection and their guides at the Hoanib Valley Camp (HVC). The HVC is helping with the long-term conservation monitoring of giraffe in the study area. During the first three months of 2019 the HVC team recorded total of 105 giraffe encounters. They took ID photos of 412 giraffe, which were identified as 132 unique individuals. Through this partnership we now receive additional data, which is extremely valuable for our understanding of giraffe herd structure and movements as part of our long-term programme. We now estimate that there are 363 giraffe residing in the vast landscape from the Hoanib River north all the way to Angola – an area spanning over 25,000km^2 in total. We are very happy to report that since we started working in the area over 20 years ago, this giraffe population has continued to grow. One of the many giraffe conservation success stories in Africa.

Stay tuned for more news from Namibia as we look forward to keeping you updated.

Thank you for your support!