



Namibia Giraffe Conservation Programme

QUARTERLY UPDATE

May – July 2019



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@Save_Giraffe



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 Updates online at <https://giraffeconservation.org/programmes/keep/>.



The past few months have seen some exciting developments in our Northwest Namibia Programme, as well as a continuation of our countrywide giraffe assessments across the continent. 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 Northwest Namibia Programme focuses on monitoring and supporting the long-term conservation and research of Namibia's desert-dwelling giraffe. Over the last few years we have partnered with the University College Cork (UCD, Ireland) and the Namibian University of Science and Technology (NUST) to increase our efforts on the ground.

These giraffe roam throughout the northern Namib Desert in the country's northwest. Our work has focused on the ephemeral Hoanib and Hoarusib Rivers, covering an area of approx. 4,500km², but is slowly expanding north to include a total area of >10,000km². The area extends across 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, gravel plains, mountains and dry riverbeds, elephant, black rhino, lion,



cheetah and a range of antelope including oryx (gemsbok) and springbok, live alongside 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 them and, through what we learn, provide conservation and management support for other giraffe populations throughout Africa.

In addition to this long-term conservation research, GCF has been working more generally across Namibia with government, private land-owners, tourism operators and concessionaires, and local communities to better understand the numbers and population dynamics of giraffe in the country. By collaborating with partners in Namibia, we not only determine giraffe numbers and range, but also increase education and awareness for giraffe conservation in Namibia.

News from the field

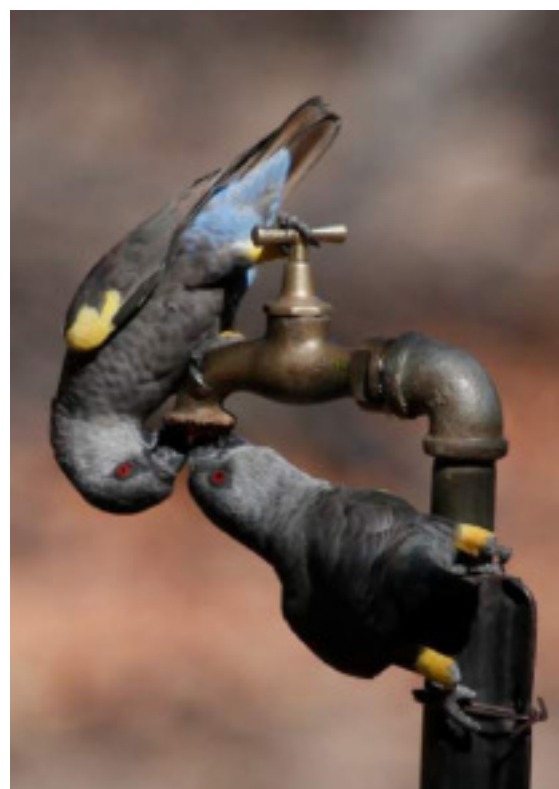
Now halfway through 2019, the severe drought conditions in the far north continues to affect all the animals in the region. The tinges of green we had seen sprouting up before our eyes after the rains of late March have long disappeared – leaving only shades of red and golden sand in their place.

The last remnants of free surface water have dried up throughout the area and there is a distinct lack of grazing – luckily for giraffe browse is still relatively abundant. As a result, many of the local Himba people have moved out of the area along with their livestock in search of sustenance elsewhere.

The Himba are an ancient tribe living in north-western Namibia as well as on the other side of the Kunene River in Angola. They are a semi-nomadic, pastoralist people, belonging to the Bantu family who uphold their traditional lifestyle. Most notably, Himba men and woman wear few clothes apart from a loin cloth or goat skinned mini-skirt. They rub their bodies with red ochre and fat to protect themselves from the sun and also gives their appearance a rich red colour.

It is in hard times like this wildlife appears to stubbornly persist throughout the area but in much reduced numbers whilst their special adaptations to this inhospitable desert home becomes more evident. Elephant, in particular along the Hoarusib River, can be seen using their feet and trunks to dig up fresh water from the aquifer in the apparently dry riverbed – locally known as 'gorras'. They know exactly where to dig to find shallow water but how? Your guess is as good as ours, but likely a combination of information passed down through the generations as well as an incredible sense of smell and ability to guess the depth of the water.

The limiting factor for wildlife in Northwest Namibia is forage and as giraffe can outcompete almost all except elephant, and seasonally vary their diet, the drought is having less of an impact on them.





In light of the drought conditions, over the last few months we have started to look a little more closely at the population dynamics trends during the last few years. Specifically, we started to look at our observations of new-born calves over the last four years and their re-sightings (see Table 1). Our preliminary results show a very encouraging average survival rate of almost 70% for giraffe calves in the study area. This data is extremely valuable as long with similar (even better) results from Niger, Uganda and other populations we are finding out that the 'assumed 50%' survival rate of giraffe in the wild in their first year varies across the continent. Of course variation is expected in each population, and the main reason why we at GCF with partners have such an expansive giraffe conservation efforts in Africa.

Table 1: Recorded births and re sights of giraffe calves in Northwest Namibia (2016-2019)

	2016	2017	2018	2019	TOTAL
Births	12	16	37	17	82
Re-sighted	8	11	26	12	57
Percentage	67%	68.75%	70%	70.58%	

Undertaking regular (monthly) monitoring in key areas of Northwest Namibia is not a total count and we do not always see each animal they often roam far and wide. Table 2 shows the numbers of giraffe observed by month during this reporting period. In June for example, our team observed 31 giraffe as well as a bonus 23 elephant – including four young elephant calves in a single day of surveying in the Hoanib River. Exciting times! After spending much of their time during the previous months inside the Skeleton Coast Park, the giraffe are starting to make their way east again along the river in search of additional forage sources – much to the delight of the tourists visiting the area.





Table 2: Numbers of giraffe sighted in Northwest Namibia this quarter

	Giraffe	Male	Female	Unknown	New Adults	New Juveniles	Herd Size	Average herd size
April	122	58	52	12			29	4.21
May	183	82	86	14		5	52	3.52
June	227	91	111	25		2	59	3.85
July	59	26	22	11	5		14	4.2

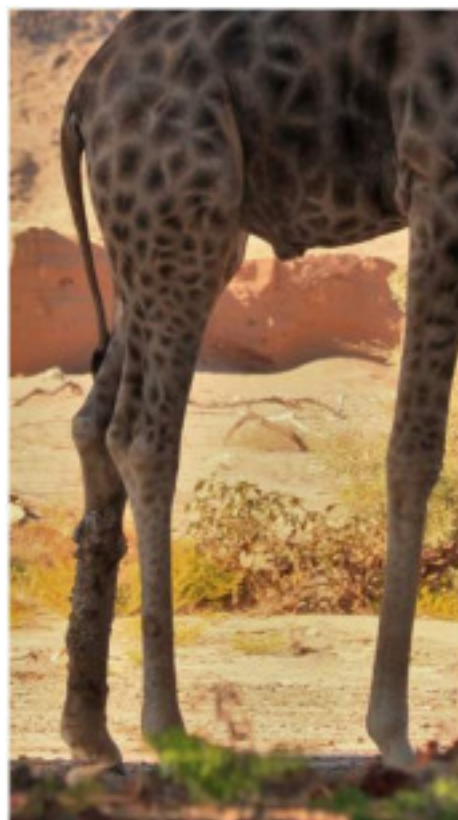
**July sightings were affected by limited data collected during the month due to other activities.*

The following day had another treat in store for our team with a lion kill not far from our 'base'. Two females and their 10-month-old cubs were feasting on not one but two zebra!

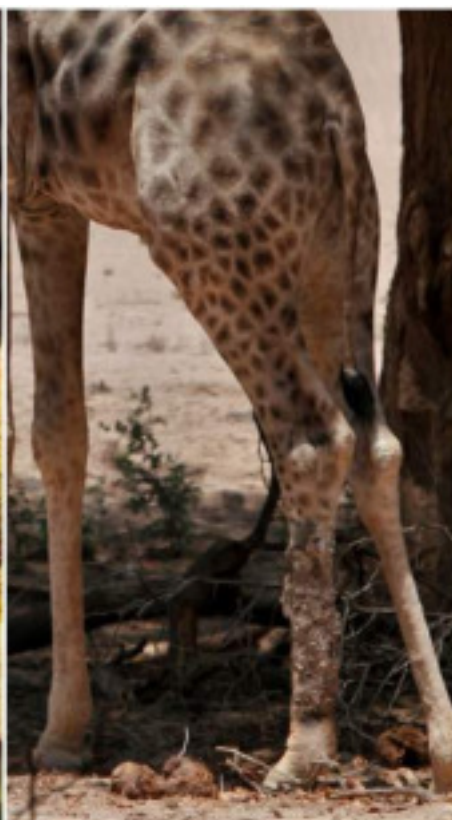


In June, we spotted one of the oldest and most recognisable male giraffe in the Hoarusib River, 'Goober'. We have observed

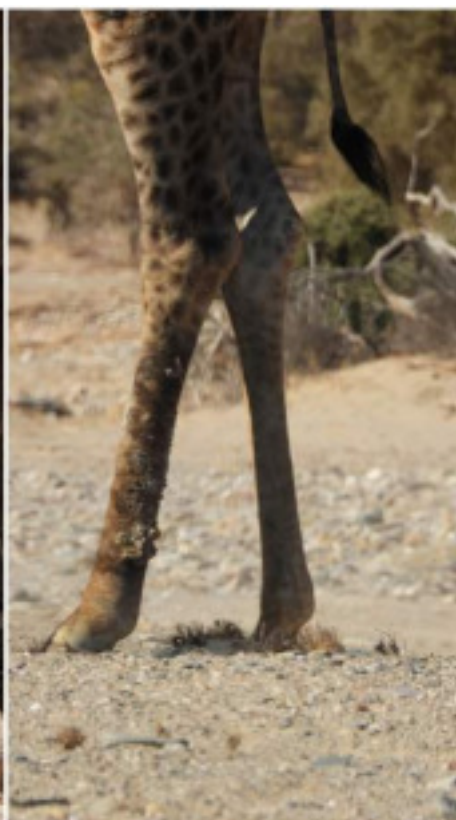
Goober rather closely as he had developed a form of skin disease on his left hind leg, which had been getting progressively worse over the last year or so (see images below). The skin disease had taken the form of large, wart like lesions. We have often observed this old bull dragging his left hind leg, making



Goober in June 2018



October 2018



June 2019



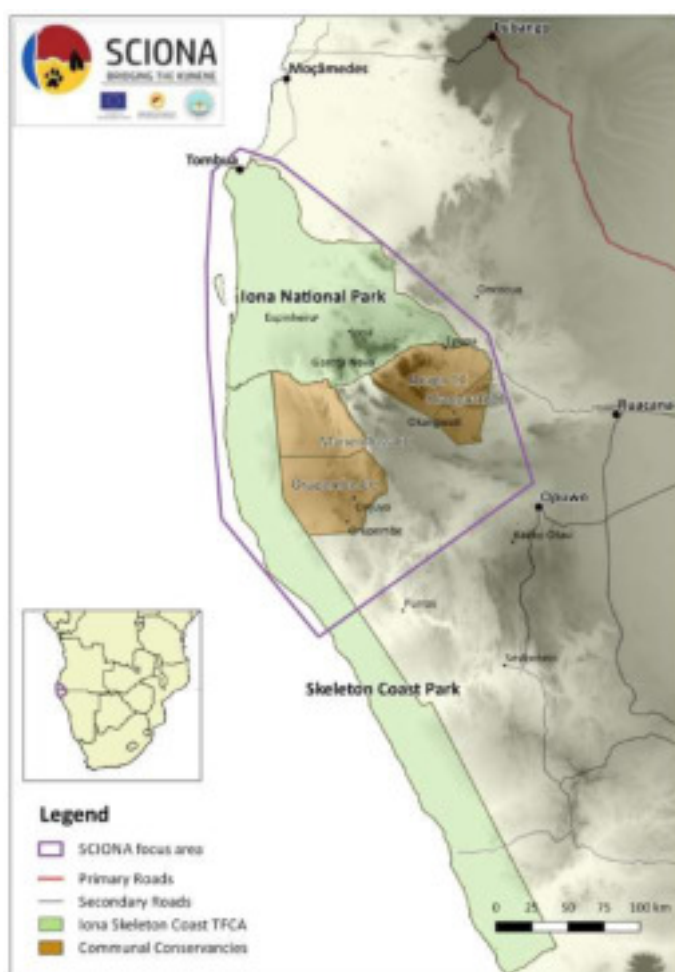
distinctive tracks in the sand. Despite his lameness, Goober regularly travels between the Hoanib and Hoarusib Rivers, crossing inhospitable and mountainous terrain, and an expanse of approx. 70km each way.

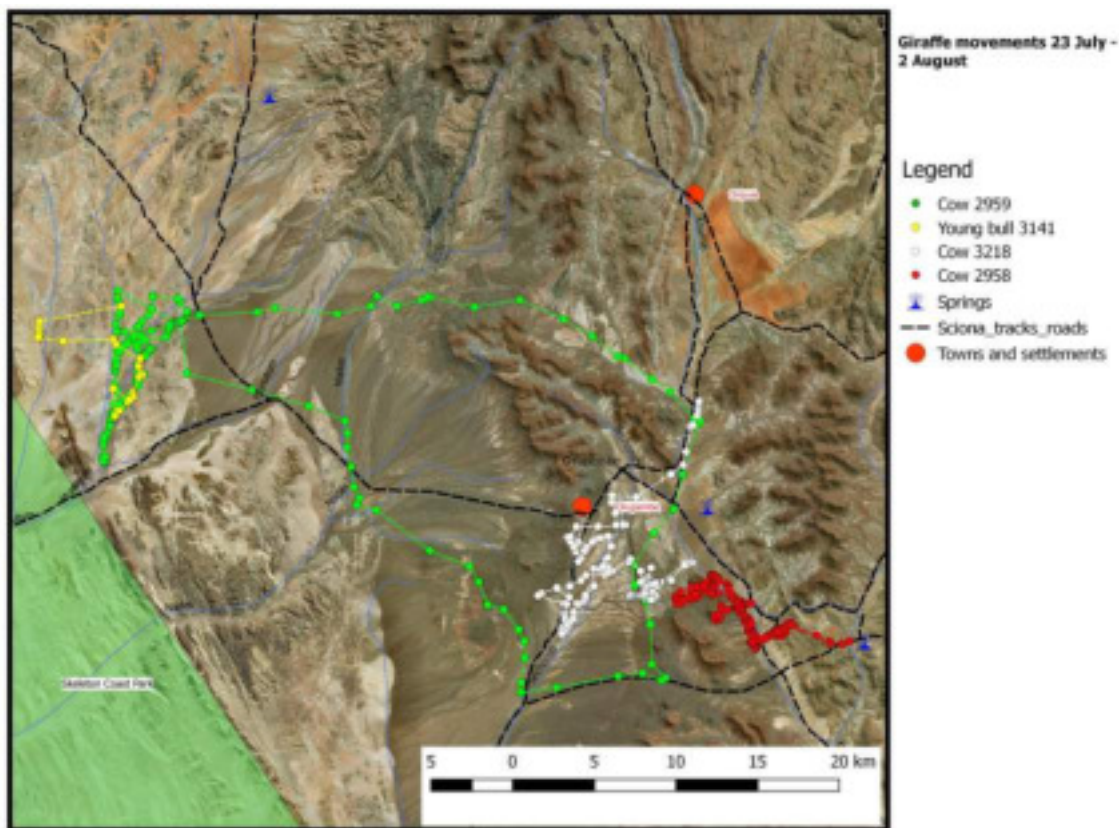
During this recent encounter with Goober, we took several photos and on closer inspection realised a marked improvement in his skin disease. The lesions have almost disappeared, and Goober again walked without a limp. Without invasive testing we cannot determine the cause of the disease or the extent of it, however, seeing this improvement is great news for him – and also us.

Since earlier this year, we have included the area north of the Hoarusib River into our regular surveys. We now regularly travel further north towards the Kunene River and the Angolan border in search of giraffe in the ephemeral riverbeds of the Nadas, Khumib and Ensengo Rivers. These extended surveys feeds into a larger study to assess the current conservation status of the Angolan giraffe in far Northwest Namibia as part of the Skeleton Coast-Iona National Parks (SCIONA) Trans Frontier Conservation Area.

As part of this larger conservation effort, we are working closely with the Namibia University of Science and Technology (NUST) to conduct a translocation viability assessment for giraffe into Iona National Park, Angola, which lies just across the Kunene River. For this assessment, we are working closely with MSc student Jackson Hamutenya and his NUST supervisors (Drs. Morgan Hauptfleisch and Vera De Cauwer) to better understand giraffe habitat availability, spatial ecology and potential threats in both Northwestern Namibia and Southwestern Angola. If all comes together over the next year or so, maybe we can support the respective governments and partners to bring Angolan giraffe back into this part of their nominate country. Stay tuned!

As part of our Africa-wide initiative *Twiga Tracker* and also in collaboration with the SCIONA project, GCF embarked on yet another giraffe tagging mission to fit GPS satellite units to giraffe in Northwestern Namibia in July. 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. The new tracking technology was first tested in Namibia and so far, we have deployed >115 'ossi-units' on giraffe in Chad, Kenya, Namibia, Niger, Uganda and Zimbabwe. Preliminary data analysis has just begun, but already we are seeing some fascinating results and are learning so much more about giraffe and their movements.





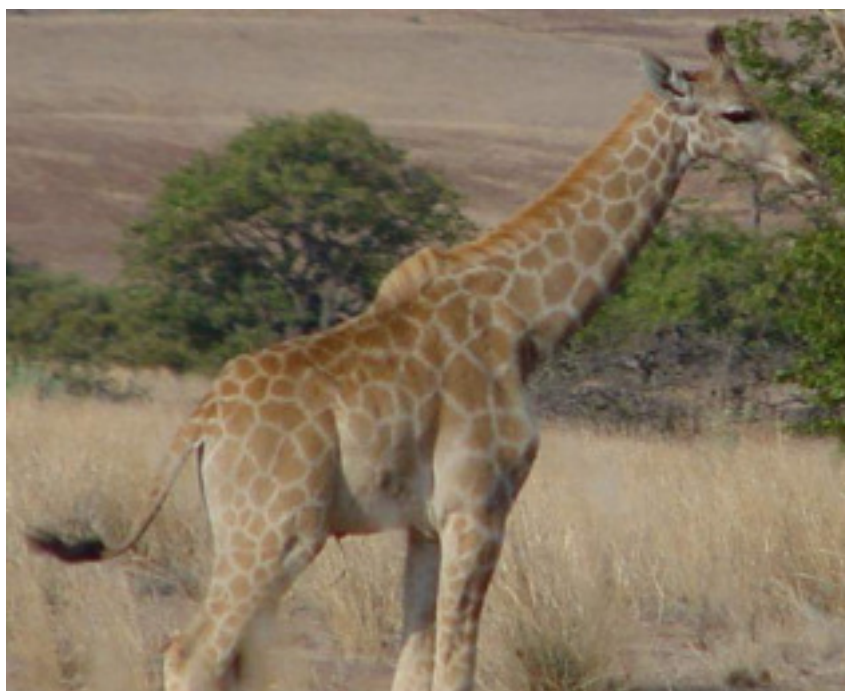
Fitting these units needs a cohesive, dedicated team to get the job done, as such, the GCF team was joined by Namibian wildlife veterinarian HO Reuter – who incidentally worked with GCF Directors to fit the very first giraffe GPS satellite units in the early 2000s, our conservation partner Ultimate Safaris, several students and a lecturer from NUST, as well as a few volunteers to complete the capture team. Over the course of six days, seven 'ossi-units' were fitted in the northern extent of the study area – the Nadas and Khumib Rivers, as we know little about the movements of these animals. Interestingly, one of the tagged animals was



the tagged animals was 'Supergirl'. She was first identified and documented by Dr Julian Fennessy in the late 1990s and is now estimated to be at least 25 years old, which makes her one of the oldest known giraffe in the study area and possibly in Africa. The data from her unit and the other six animals will be used as a valuable part of the NUST students' translocation assessment and give us fascinating insights into how far these giraffe move in search of food and breeding opportunities.



With the help of our keen eyes and with a little help from 'Hotspotter', an online pattern recognition software programme which is the basis of GCF and partners 'GiraffeSpotter' programme (giraffespotter.org), we have been able to match several more of the historical study subjects from the late 1990s and early 2000s with those giraffe we currently see. Matching animals by eye can be difficult at times and a little AI help does not go amiss and takes the guess work out of this exercise. One such example is 'Gilly'. Named after one of Julian's old Aussie mates, 'Gilly' was first spotted in 2003 as a young juvenile of approximately two months of age. In July 2018, we had our first re-encounter with him as a battled and scarred bull – if only giraffe could talk!



Gilly (KHBM032) in 2003

Gilly in 2018

This year we celebrated World Giraffe Day 21 June – the longest day or night of the year, depending on where you live – in style in Northwest Namibia. While surveying the Hoanib River on World Giraffe Day, we spotted 'Windy' – again another one of the original study animals. From the looks of her, we suspect she is pregnant, which comes as a surprise as she is at least 20 years old. We will be watching her progress closely over the next few months and will keep you up-to-date.

During the period GCF hosted a number of Conservation Supporters: Scarlett Stomer (Humboldt University), Becca Schneyer (Franklin Park Zoo), Ashley Ullrich and Kimberly Good (Lion Country Safari), Emily Kay and Bobby Stoop (Wellington Zoo), Jamie Stimpson and Billy Florek (Twycross Zoo) and a group from Ultimate Safaris. We were also joined by NUST students Jackson Hamutenya, Chris Muashekele, Milciades Chicomo and George Lyanabu, and their supervisor Dr Morgan Hauptfleisch.

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



Thank you for your support!

