



Annual Report 2018/19

Note from the Directors

The Giraffe Conservation Foundation is growing from strength to strength and through working together with our amazing team and partners, GCF's impact on giraffe conservation and management in Africa increases steadily.

There is more interest in giraffe conservation than there has ever been. This growth in interest is absolutely fantastic and is, at least in part, a testament to our hard work as well as those we work with. Governments, conservation organisations, academic institutions, individuals and, of course, the media are slowly recognising the plight of giraffe. On a personal level, we hope that the hours spent with journalists and film teams pay off and raise the much-needed awareness and support in order for GCF to continue its conservation efforts for Africa's giant friends.

Towards the end of 2018, the news that two of the currently recognised giraffe subspecies had been added as 'Critically Endangered' to the IUCN Red List may well have been a shock for many people. Uplisting on the Red List is always a double-edged sword. Even though the uplisting calls attention to the critical fragility of these giraffe's existence, it also increases conservation awareness and draws the relevant attention which is absolutely necessary regarding their plight. It also provides GCF with funding opportunities that were previously reserved for other listed species.

On a positive note, two of the recognised giraffe subspecies have been downlisted: the status of West African and Rothschild's (identical to Nubian) giraffe has been changed from 'Endangered' to 'Vulnerable' and 'Near Threatened', respectively. Both subspecies have received extensive

conservation attention, where GCF has for the past 13 and 6 years supported the conservation of them in Niger and Uganda, respectively. GCF is very proud to have been a part of these conservation success stories, which clearly show that we can make a difference before it is too late! Join us and be a part of the solution!

While there is still some discussion about the exact number of giraffe species, our continued research clearly shows that there are unmistakable differences between the types of giraffe, and on account of this they should not be mixed through human intervention. While giraffe that are different from one another are able to produce viable offspring in zoos, this does not occur naturally in the wild. We are currently taking a closer look at potential hybridisation in Kenya, where three of the four giraffe species occur in ranges that could potentially overlap. Together with the Kenya Wildlife Service, we collected over 300 DNA samples to find out whether the different species mix in the wild; the preliminary results show that they do not! In light of this, we are adamant about doing everything we can to keep giraffe as separate species in the wild. International conservation efforts focus on species levels. If giraffe are so different from one another, we need to make sure this is internationally recognised before it is too late.

Helping to move giraffe back into their former ranges is a tremendous privilege. There is little that beats the feeling while watching giraffe run off a truck – wild and

free to explore their new home – and seeing the smiling faces of the local people, especially because many of them have never seen a giraffe before or only know them from a distant childhood memory. It is important to sometimes sit back and reflect on the impact of our work on African landscapes and its people. Conservation translocations are an important tool, one of many we currently use, but they are also costly operations. We would like to take the opportunity to thank all of you for your help and support!

Working with partners constitutes the core of GCF's conservation model. We could not do this by ourselves and we have no intention of attempting to do so. We are proud to call some of the biggest names in conservation our close allies: African Parks Network, Kenya Wildlife Service, Government of Niger, San Diego Zoo Global, Senckenberg Museum, Smithsonian Conservation Biology Institute, Uganda Wildlife Authority, and Wildlife Conservation Alliance. We are still amazed that our small organisation is named together with all these extraordinary partners. Without the wonderful support of everyone – from the young passionate giraffe fanatic who sells

cupcakes and the coffee fundraisers to the large-scale international funders – none of what has been achieved and is still to be achieved could happen. Thank you!

We always say, "It needs a village to save giraffe!" All of you are our village, and together we can make a difference. So, let us all stand tall together for giraffe in Africa!

*Steph & Julian
Fennessy*



Above: There are only about 111,000 giraffe remaining in all of Africa and their number has dropped by approx. 30% over the past 30 years. Credit: © Dragica - stock.adobe.com

Cover: Credit: © Richard Carey - stock.adobe.com

The Giraffe Conservation Foundation (GCF) is the only organisation in the world that concentrates solely on the conservation and management of giraffe in the wild throughout Africa.

United under a common goal, GCF is a family of organisations consisting of GCF Trust (Namibia), GCF-USA (Ohio, USA), GCF-East Africa (Kenya) and Freunde von GCF (Germany). All four organisations are legally and financially separate entities, working under the umbrella of GCF. Their shared commitment to a sustainable future for all giraffe populations in the wild is governed by a Memorandum of Understanding.

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Above: Giraffe herds are thought to be fluid, not forming long and strong bonds with the exception of mothers and their calves.
Credit: © Joshua - stock.adobe.com

Below: In some areas giraffe are not dependent on water, however, this varies across their range. Credit: Pixabay

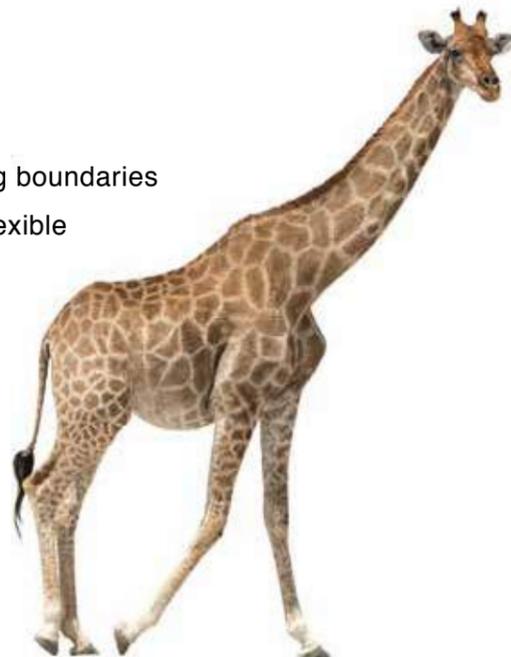


Who is GCF

- An international science-based conservation organisation that provides innovative approaches to save giraffe in the wild.
- The go-to organisation for giraffe conservation that is proactive and reactive, with a strong collaborative and dynamic team working within a network of partners on all levels.
- The leader in supporting a sustainable future for giraffe in/and their natural habitats.
- An organisation that will continue to organically grow and increase awareness to save giraffe in the wild.

What drives GCF?

- To be a bold, independent organisation
- To not be regimented
- To be disciplined and ‘always on’
- To be an open book
- To not over-promise
- To be passionate
- To not be afraid of pushing boundaries
- To be open-minded and flexible
- To be adaptable
- To build trustworthy partnerships and relationships



GCF Objectives & Principle Activities

GCF is dedicated to a sustainable future for all giraffe populations in the wild.

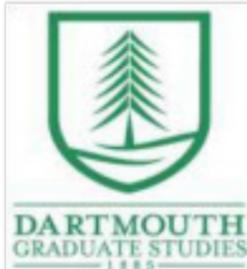
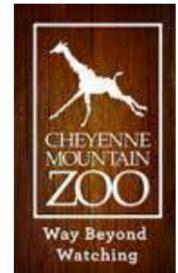
GCF's objective is to raise awareness and support towards securing a future for giraffe and the conservation of their habitat in Africa, and more specifically to:

- support the conservation of viable and existing habitat for giraffe;
- identify key threats to giraffe in Africa and develop innovative ways to mitigate these;
- raise awareness of and promote the value of giraffe conservation in African Range States as well as internationally;
- plan, develop, implement and administer projects and programmes – including the appointment of project staff – in support of its primary aim, in co-operation with local communities and partner institutions, as appropriate;
- collaborate with local, national and international partners on giraffe conservation efforts in the interests of giraffe conservation in African Range States;
- raise funds for giraffe conservation and management throughout Africa; and
- maintain a close working relationship with the IUCN SSC Giraffe and Okapi Specialist Group (GOSG) to provide comprehensive awareness and technical support.

Key Conservation Partners

Working with partners constitutes the core of GCF's values and operational model. Over the past years we have managed to forge key conservation partnerships around the world, particularly throughout Africa. In helping to save giraffe in the wild, we are proud to be able to work closely with all these partnerships.

This financial year, the following key conservation partners have stood out:



PROGRAMME OVERVIEW

FOUR GIRAFFE SPECIES

In 2016 the international Union for the Conservation of Nature (IUCN), with the support of GCF and partners, completed the first detailed assessment of the conservation status of giraffe, revealing that their numbers are in peril. This was further emphasised when the majority of the IUCN-recognised subspecies were recently (re)assessed – two as ‘Critically Endangered’. While this update further confirms the real threat to one of Africa’s most charismatic megafauna, it also highlights a rather confusing aspect of giraffe conservation: how many species/subspecies of giraffe are there? The IUCN currently recognises one species (*Giraffa camelopardalis*) and nine subspecies of giraffe, which is historically based on outdated assessments of their morphological features and geographic ranges. The subspecies are thus divided: Angolan giraffe (*G. c. angolensis*), Kordofan giraffe (*G. c. antiquorum*), Masai giraffe (*G. c. tippelskirchi*), Nubian giraffe (*G. c. camelopardalis*), Reticulated giraffe (*G. c. reticulata*), Rothschild’s giraffe (*G. c. rothschildi*), South African giraffe (*G. c. giraffa*), Thornicroft’s (*G. c. thornicrofti*), and West African giraffe (*G. c. peralta*).

However, over the past decade GCF and their partner Senckenberg Biodiversity and Climate Research Centre (BiK-F) have performed the first-ever comprehensive DNA sampling and analysis (genomic, nuclear and mitochondrial) of all major natural populations of giraffe throughout their range in Africa. As a result, an updated review of the traditional taxonomy now exists. This study revealed that there are four distinct species of giraffe and most likely six subspecies. The four species are Masai giraffe (*G. tippelskirchi*), Northern giraffe (*G. camelopardalis*), Reticulated giraffe (*G. reticulata*), and Southern giraffe (*G. giraffa*). Nubian giraffe (*G. c. camelopardalis*), Kordofan giraffe (*G. c. antiquorum*) and West African giraffe (*G. c. peralta*) are the three subspecies of the Northern giraffe. Angolan giraffe (*G. g. angolensis*) and South African giraffe (*G. g. giraffa*) fall under the Southern giraffe. Rothschild’s giraffe is genetically identical to the Nubian giraffe, and thus subsumed into it. Similarly, Thornicroft’s giraffe is genetically similar to the Masai giraffe, but is possibly a separate subspecies (*G. t. thornicrofti*). Based on this research, GCF refers to the updated giraffe taxonomy of these four species in all publications and conservation efforts.

Northern giraffe (*Giraffa camelopardalis*) The three subspecies of the Northern giraffe occur across Eastern and Central Africa, with the West African giraffe at the western extent of its range in Niger. These giraffe are in the most danger because they either have very low numbers or experience ongoing serious threats (these were highlighted in the 2018 announcement of the IUCN Red List). Even though on the surface the situation does not appear promising, there is a silver lining because some of the individual populations are increasing. Over the last year, GCF has again increased its efforts for all three subspecies of Northern giraffe.

West African giraffe

only occur in Niger, and have been recently downlisted from ‘Endangered’ to ‘Vulnerable’. The population is now estimated at more than 600 individuals. Our small but dedicated team in Niger continue to provide valuable financial and technical support to the government and the Association for the Valorisation of the Ecotourism in Niger (AVEN) regarding all aspects of giraffe conservation. As an association of ecotourism guides who facilitate giraffe-based tourism in the area, AVEN, with the support of GCF, helps to protect the giraffe population through regular monitoring, supporting bi-annual surveys, and raising awareness of the importance of these animals and their cultural heritage with the local people who share their living space with giraffe in order to help reduce human-giraffe conflict.

In support of the Government of Niger and in partnership with the Sahara Conservation Fund (SCF), GCF undertook the first-ever translocation of West African giraffe in the country

in November 2018. Eight West African giraffe travelled over 800 kilometres in 48 hours and were safely re-introduced to the Gadabedji Biosphere Reserve in Niger, after an absence of almost 50 years. As a result, Niger now boasts two populations of West African giraffe. GCF, in collaboration with the local community and wildlife authority, provides ongoing monitoring support and resources for this new population of giraffe.



Above: Female West African giraffe in Niger. Credit: GCF

Kordofan giraffe

numbers in the wild are low, and with an estimated 2,000 spread across some of Africa's more inhospitable countries they were recently listed as 'Critically Endangered' on the IUCN Red List. Over the last few years we have supported giraffe conservation efforts by African Parks to save the last Kordofan giraffe in the Garamba National Park, Democratic Republic of Congo. Implemented in close collaboration with an MSc student from the Czech University of Life Sciences, GCF developed a solid baseline of the population, assessed the threats, monitored the movements of the giraffe, and drafted a National Giraffe Conservation Strategy and Action Plan for the country. Most recently a local researcher from DRC joined the team, who now coordinates the giraffe monitoring with support from GCF. As part of this support, GCF has provided critical equipment for the local rangers and funding for monitoring, as well as capacity building opportunities in order to develop the local rangers' skills for the long-term management of the population.

In partnership with the Kordofan Giraffe Project and African Parks Network (AP), GCF undertook the first-ever giraffe GPS satellite tagging operation in Chad in January 2019. Zakouma National Park is thought to be home to more than 60%

of the world's Kordofan giraffe in the wild. Recent estimates suggest that the Zakouma population could constitute an even larger part of the world population of Kordofan giraffe, considering the impact ongoing civil unrest in other parts of Central Africa has had on wildlife numbers. The Kordofan Giraffe Project, which is led by a GCF Conservation Fellow, is the first dedicated conservation research effort of the newly listed 'Critically Endangered' Kordofan giraffe within Chad. It aims to provide ongoing baseline data for conserving Kordofan giraffe, which includes an accurate population count; population structure (numbers of females, males, juveniles and fatalities); the role of giraffe in the Zakouma ecosystem; monitoring giraffe predation and scavengers at giraffe carcass sites; identifying the most important habitats and vegetation species for the giraffe; and establishing first-ever (seasonal) movement patterns within (and possibly outside) the park.

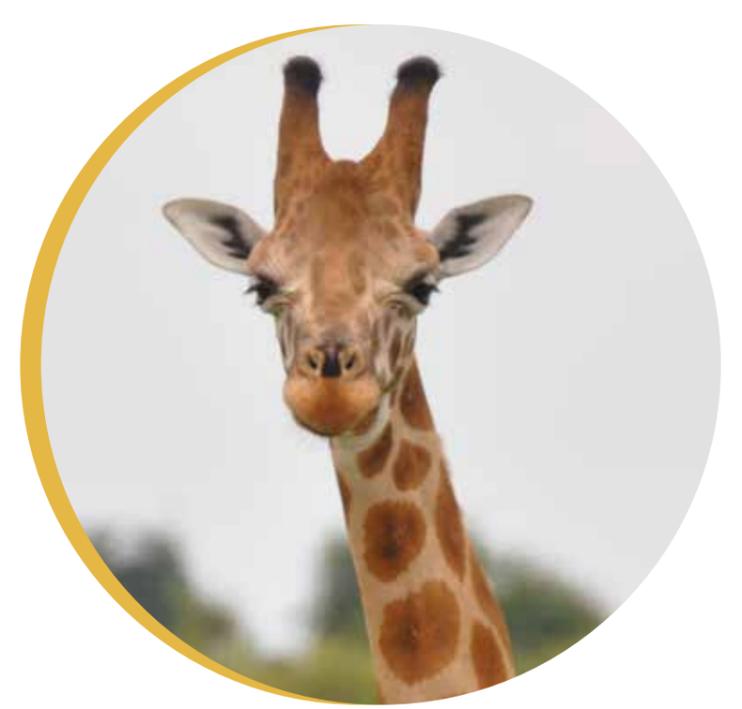
In northern Cameroon, GCF financially supported the Bristol Zoological Society to undertake an assessment of Kordofan giraffe in order to better understand their numbers and distribution. Due to the security situation in the country, the focus was on camera trapping and the use/training of drone technology. Cameroon and the neighbouring Central African Republic are currently facing challenging times of considerable civil unrest and jihadist militant activities. With limited opportunities for field work, GCF works with partners such as African Parks and the Wildlife Conservation Society to provide technical advice on giraffe conservation and management efforts throughout all range countries in the region. GCF is committed to making a difference for giraffe in Central Africa before it is too late. Stay tuned for new and bigger efforts in the coming year.

Nubian giraffe

have been recently added as 'Critically Endangered' on the IUCN Red List. Their numbers have dramatically declined (more than 95%) over the last three decades. Through our ongoing conservation taxonomy work, we now know that Rothschild's giraffe are actually Nubian giraffe because they are genetically identical. Despite the fact that Nubian giraffe numbers are increasing in Kenya and Uganda, their total population number is very low. GCF directs significant efforts for their conservation in both countries.

Uganda is one of GCF's flagship programmes and we continue to support a range of giraffe conservation efforts in this country. As a result, giraffe numbers are increasing steadily and exciting news has been received regarding the newly established populations: Lake Mburo boasts 7 new calves, and at least 8 new calves were spotted on the southern side of the Nile River in the Murchison Falls National Park (NP). After many decades of them having been absent, these calves are testament to the successful re-introduction of giraffe into these areas.

In 2018, GCF provided significant financial and technical support to UWA. All giraffe populations are surveyed and monitored regularly in order to identify trends and establish up-to-date population numbers, assess threats, and aid their management. One of the key programmes this year was the translocation of 14 giraffe from the Murchison Falls NP to the Kidepo Valley NP to help augment the relatively stagnant existing population. GCF continues to directly support field partners in the country to monitor some of the giraffe populations. Our detailed surveys in the Murchison Falls NP, conducted together with the Dartmouth College, are helping to get a good handle on its large population, which is a valuable source population for the country. Our long-



Above: Nubian giraffe in Uganda. Credit: GCF

term surveys, initiated in 2014, will be invaluable in assessing whether the planned oil developments in the park will have an impact on the local giraffe population. They will allow all partners to act swiftly and effectively if changes were to be observed because the vast majority of giraffe are individually identified and we have a good understanding of their current movement patterns.

In partnership with UWA, GCF fitted solar-powered GPS satellite units to more than 25 giraffe in the Kidepo Valley NP and Murchison Falls NP, which includes some of the translocated individuals. Using new and innovative technology helps us to better understand how they use their habitat, where they move, and to identify potential threats related to these movements (i.e. when they move into community areas or across the border to South Sudan). As a result, this information will enable proactive recommendations on how best to manage these giraffe.

Our local partner, Giraffe Education and Research (GEAR), in Lake Mburo National Park continues to monitor the re-introduced giraffe population, particularly their health. The importance of this programme was recently highlighted when the



Left: Kordofan giraffe in Chad. Credit: GCF



GEAR team reported that one of the new calves appeared to be injured. UWA deployed their veterinary team for a quick intervention. The calf, which had been attacked by a leopard, was successfully treated. GEAR also focuses on conducting outreach in communities adjacent to the park, and they regularly facilitate local school group visits into the park to increase local awareness of wildlife, particularly giraffe. Importantly, giraffe have significantly increased the profile of Lake Mbuoro National Park and it is quickly developing into a key tourism destination in its own right – which is all part of the increasing industry in the country.

In Kenya, we have been undertaking a year-long assessment with the Kenya Wildlife Service (KWS) of Nubian giraffe numbers, dynamics and distribution in two key neighbouring populations: Lake Nakuru National Park and the Soysambu Wildlife Conservancy. Together with the Ruma National Park and Mwea Nature Reserve, which we surveyed last year, these populations make up 90% of Kenya's Nubian giraffe. A key component of this programme, as with most other GCF programmes, is the training and capacity building of students and staff of partnering organisations, focusing on field conservation, research and monitoring. As part of this specific programme, we are enhancing the capacity of the KWS's and African Fund for Endangered Wildlife – Giraffe Center's staff in Nairobi.

All giraffe conservation efforts in Kenya are guided by the National Giraffe Recovery Plan, which was launched by the KWS in 2018. As part of GCF's efforts to increase conservation and management, together with KWS we facilitated and co-hosted the first-ever National Nubian Giraffe Working Group meeting at Soysambu Conservancy. This meeting offered the first opportunity for partners to come together and discuss and plan the conservation management of Nubian giraffe in Kenya. The meeting laid the basis for Nubian giraffe conservation in Kenya – a true success!



Southern giraffe (*Giraffa giraffe*) Southern Africa is home to more than 50% of Africa's giraffe – a current conservation hotspot for giraffe. Both the Angolan and South African giraffe subspecies occur throughout the region.

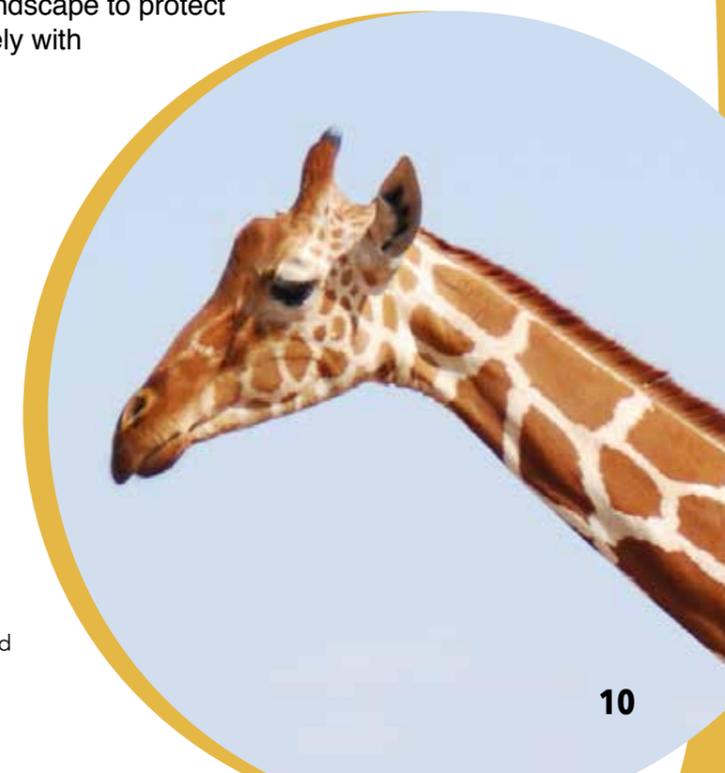
With our base in Namibia, the country continues to be one of our focus areas for giraffe conservation. Our long-term conservation research and monitoring programme on the desert-adapted **Angolan giraffe** in the far northwest communal conservancies is helping to provide a better understanding of their ecology, behaviour, and seasonal and long-term movement patterns. With limited long-term scientific monitoring data available on giraffe, this programme provides important insights and information to help guide giraffe conservation in the country as well as throughout Africa. A key component of this programme is training and capacity building while working closely with local and international students, local conservancy members and community-based tourism operators – all to increase their education, awareness and support for conserving these giraffe.

GCF's work on **South African giraffe** focuses on Zambia and Zimbabwe, where we continue to build relationships with the governments to increase the profile and giraffe-related conservation activities in order to get giraffe on their conservation agendas. Furthering giraffe conservation in the region is key, and we have initiated conversations with the Kavango Zambezi (KAZA) Transfrontier Conservation Area Initiative for a KAZA-wide Giraffe Conservation Strategy and Action Plan. As most giraffe in South Africa live in small management units, GCF's involvement is limited.

Reticulated giraffe (*Giraffa reticulata*)

In northern Kenya, the Reticulated giraffe population is rebounding from an estimated decline of almost 80% in the last 30 years. To better understand their numbers and range, we have partnered closely with the Kenya Wildlife Service (KWS), San Diego Zoo Global, and other local and international partners: Northern Rangeland Trust, The Nature Conservancy, Loisaba Conservancy, Smithsonian Conservation Institute of Biology, and Senckenberg Museum. Through this initiative we play a valuable role in encouraging community-based conservation efforts within the Reticulated giraffe range. As part of this initiative, Twiga Walinzi (Swahili for Giraffe Guards) work across a large landscape in northern Kenya to monitor the Reticulated giraffe population, as well as provide valuable education and awareness in

the local communities. Increased support for Reticulated giraffe conservation is important and is provided through a multi-faceted approach to reduce poaching, better understand local perceptions, and assess spatial ecology, numbers and range. With most of Africa's wild Reticulated giraffe occurring in Kenya, it is an important landscape to protect collaboratively with its people.



Right: Reticulated giraffe in Kenya.
Credit: GCF

Masai giraffe (*Giraffa tippelskirchi*)

Gaining a better understanding of Kenya and Tanzania's Masai giraffe population is important as this giraffe species is the second most numerous on the continent – despite a considerable drop in the last 30 years. As part of these efforts, we have provided valuable technical support to finalise the first National Giraffe Conservation Strategy and Action Plan in Kenya, which was launched in December 2018; contributed to the first-ever Masai giraffe IUCN Red List Assessment; and facilitated

discussions and the development of the first-ever draft Tanzanian Giraffe Country Profile which outlines their conservation status and threats, historical and current. Additional to the above, valuable support from World Giraffe Day 2017 helped to equip our team and partners across the Masai giraffe range in southern Kenya this year with much-needed monitoring tools in an effort to better understand the impact and drivers of illegal hunting (poaching), human perceptions of giraffe locally, and to support transboundary conservation movement of giraffe. We are also slowly developing a better understanding of local communities' views and perceptions of giraffe in southern Kenya. This understanding is important as it helps to guide action planning for the National Working Group of Masai giraffe, which GCF has technically and financially supported.

In Zambia, through one of our key partners, the Leiden Conservation Foundation, we continue to support the long-term giraffe conservation efforts of the Zambian Carnivore Programme, in close collaboration with Conservation South Luangwa, in anti-poaching and giraffe monitoring. Using individual photographic mark-recapture surveys, a more accurate assessment of the population in the Luangwa Valley has indicated that more giraffe are present than previously thought. This is exciting news and the work is forming part of an MSc project we are supporting, linking the real need to build capacity of our future conservationists.



Above: Masai giraffe in Tanzania. Credit: Billy Dodson

While GCF has established itself as the leader in giraffe conservation, we are also helping to build the future of giraffe conservation in Africa and internationally. GCF continues to support a host of local and international students at different levels, all working throughout the continent to save giraffe.

KEEP

The Kommas Environmental Education Programme (KEEP) has become one of the key programmes of GCF. Since its inception in 2016, over 6,600 primary school students and over 200 teachers have directly participated in this field-based conservation programme. In 2018 alone, over 2,500 Grade 3 and 4 students from 26 different schools enjoyed a fun day with our team in the bush, where they learned about their environment and how best to conserve it.

KEEP's aim is to get 'city kids' out of the classroom and into nature. This takes place in a small game reserve 20km outside of Windhoek, the Namibian capital. During an exciting day in the bush, the students spend time tracking wildlife, identifying plants and animals, and learning more about environmental challenges that have an impact on conservation in Namibia. GCF believes that KEEP can help build a culture of environmental awareness, and social responsibility and action that will equip our future leaders with the skills to live more sustainably.

There is never a dull day in the bush and no two field days are ever the same. The students get to see different wildlife and participate in exciting activities and games. The one thing that is a certainty is that the students love their time out with KEEP. This experience helps the children to connect and develop a positive attitude towards nature as well as each other – it is a first step for many towards becoming custodians of their beautiful Namibia.

GCF employs a young and enthusiastic team of three to implement KEEP. All three are recent Nature Conservation graduates from the Namibia University of Science and Technology, providing a positive role model for young Namibians.

"Our team just loves the opportunity to share our passion for giraffe and nature with young learners every day. Not many of our fellow graduates enjoy their jobs as much as we do! It is also exhausting at times – especially on hot summer days – but still, we love what we are doing." – Naemi Antonius, **KEEP** team leader at GCF.

KEEP is now entering its fourth year of operation, and GCF is committed to making the programme accessible to all schools and working hard to source outside funding to provide a free service whenever possible.

KEEP is endorsed and supported by the Ministry of Environment and Tourism (MET) as well as the Ministry of Education. Both ministries have recognised the need for a dedicated Environmental Education programme in the region.

The **KEEP** field experience is best summarised in some of the teachers' feedback:

"My highlight of the **KEEP** field day was the joy on my learners' faces. Some of them have never seen a giraffe or a zebra before. Thanks to **KEEP**, now they have."

"My best highlight of the day was seeing my learners enjoy tracking animals. They enjoyed learning about the importance of protecting the environment and were all fascinated by all the things they learnt about nature."



As part of its programme to help build the capacity of conservation leaders throughout Africa and internationally, GCF also provided financial and/or technical advice and supervision to a host of students.

These students are as follows:

Ali Abagana (Niger), PhD
– Maridi University, Niger

Michael Brown (Uganda), PhD
– Dartmouth College, USA

Anna Lena Burger (Namibia), PhD
– Goethe University Frankfurt, Germany

Mathias D'haen (DRC), MSc
– University of Life Sciences, Czech Republic

Kateřina Gašparova (Niger), PhD
– Czech University of Life Sciences, Czech Republic

Jackson Hamutenya (Namibia), MSc
– Namibian University of Science and Technology, Namibia

Emma Hart (Namibia), PhD
– University College Dublin, Ireland / Namibian University of Science and Technology, Namibia

Arthur Muneza (Kenya), PhD
– Michigan State University, USA

Symon Masiaine Ole Ranah (Kenya), MSc
– Michigan State University, USA

David O'Connor (Kenya), PhD
– Goethe University Frankfurt, Germany

Marine Simonet (Niger), MSc
– Paris Diderot University, France

Eric Thiel (Namibia), PhD
– Goethe University Frankfurt, Germany

Matthew Wachira (Kenya), MSc
– Nairobi University, Kenya

Veterinary Training

Another important aspect of supporting giraffe conservation is providing additional professional training for young African professionals. There are many well trained and capable wildlife veterinarians working in African government positions. Most of their experience is gained over time on the job, under the guidance of experienced senior staff. Game capture and wildlife demobilisation is a part of their jobs, and this requires a lot of experience and confidence. Some of this experience and confidence can be 'leap-frogged' by attending the 10-day intensive Chemical and Physical Capture of Wildlife Course in Malilangwe, Zimbabwe. Gaining acceptance for this course is very competitive, but a targeted partnership enabled us to support a young African veterinarian, who was nominated and sponsored by GCF. This year, Dr Domnic Mijele from the Kenya Wildlife Service was offered the opportunity. During his successful participation he learned new skills and techniques which he can now put to use in his daily work in Kenya.

In addition to the training, course participants also establish important networks which they can call upon in the future for ad hoc advice or to source drugs and other veterinary equipment that might be difficult to find. We are excited to continue this support for additional African veterinarians in the years to come.



Above: Giraffe are some of the most charismatic megafauna. Let's all stand tall to ensure their future in Africa. Credit: Pixabay

Giraffe Conservation Science Symposium

Populations of giraffe, one of the most charismatic species on Earth, have dwindled precipitously over the past few decades. Now considered 'Vulnerable to Extinction' by the IUCN, it is estimated that approximately 111,000 giraffe remain.

The causes of population declines are multi-fold. Habitat loss and fragmentation, disease, competition with livestock, and local bush meat trading are all major factors; however, all of them are most likely linked to human population growth. Conserving giraffe, as with any wildlife species in Africa, is complex and it requires both scientific understanding and action from multiple stakeholders.

In May 2018, 35 experts, working directly on giraffe or in thematic areas relevant to conservation-based decision-making, from NGOs, academia and African governments came together to develop a unifying Africa-wide Giraffe Conservation Science Management Framework. During this first-ever Giraffe Conservation Science Symposium, the group identified key gaps that need further assessment as well as opportunities for developing partnerships and working collaboratively throughout Africa to help save giraffe before it is too late.

Four key thematic areas were identified, each including the most burning

questions that must be better understood in order to secure a future for all giraffe populations in Africa:

- **Taxonomy:** How many different giraffe are there? What genetic tools can we use to better understand giraffe? What other tools exist to help understand why they do not interbreed?
- **Ecology:** How many giraffe are there really in Africa and where do they live? How do they use their habitat? What key habitats and forage is needed to conserve them?
- **Health:** What is causing the emerging skin disease, and what impact does disease have on their survival? What can we learn in the wild to better look after captive giraffe and vice versa? What other key giraffe medicine-oriented questions do we need to understand?
- **Human dimensions:** How are giraffe perceived in Africa by Africans? Is giraffe trade a threat to giraffe?

In the spirit of collaboration, the Symposium was jointly hosted by the Giraffe Conservation Foundation, San Diego Zoo Global, Senckenberg Biodiversity and Climate Research Centre, and the Smithsonian Conservation Biology Institute (SCBI) at their campus in Front Royal, Virginia, USA.

This initiative is just the beginning, and we hope that more experts, organisations, governments and institutions will join us to find sustainable solutions for giraffe conservation in Africa.

Giraffe Conservation Science Symposium Participating Organisations: African Wildlife Foundation, Brown University, Center for Conservation Peacebuilding, Cheyenne Mountain Zoo, Dartmouth College, Giraffe Conservation Foundation, Kenya Wildlife Service, Sahara Conservation Fund, San Diego Zoo Global, Senckenberg Biodiversity and Climate Research Centre, Smithsonian Conservation Biology Institute, Tanzania Wildlife Research Institute, Utah State University and Vulcan.



Twiga Tracker



Above: Fitting GPS satellite tracking units to giraffe is no easy task. Credit: Ami Vitale

Using modern technology to save giraffe and their habitat

As giraffe are the towers of the African savannah, it makes perfect sense that we initiated the Africa-wide Twiga Tracker ('twiga' is Swahili for giraffe) programme to better understand what the different giraffe species are doing throughout the continent. Twiga Tracker is the largest giraffe GPS satellite tracking programme ever in Africa. Giraffe were listed as 'Vulnerable to Extinction' on the IUCN Red List of Threatened Species in 2016, and as such it is a perfect time to increase our efforts.

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 throughout their range with innovative GPS satellite solar units.

Twiga Tracker is a collaborative initiative of some of the biggest names in field conservation and science. GCF leads this initiative and has partnered with the Smithsonian Conservation Biology Institute, San Diego Zoo Global, BiK-F Senckenberg and Wildlife Conservation Alliance to achieve this logistically and financially ambitious goal.

Over the past year, GCF fitted GPS satellite units to almost 50 giraffe in Africa (25 in Uganda, 13 in Namibia, 8 in Chad, 3 in Niger) in order to better understand their spatial movements and habitat use in the wild. Uganda is at the forefront of giraffe conservation with these trials of new technology. In recent years, the UWA conducted three successful giraffe translocations and the country recently finalised its first-ever draft National Giraffe Conservation Strategy and Action Plan – all with the support of GCF.

Nubian giraffe numbers have dropped by >95% in the past 30 years alone, and it is critical to better

understand their needs now to help protect these threatened giraffe and their refuges. While technology can help conservation, it is important to compliment these technological advances with on-ground field-based monitoring to understand the full picture. GCF, in collaboration with UWA and other partners such as Dartmouth College, USA, have done just that for the past four years and the results are helping us to make informed management decisions, especially in light of increased infrastructure development in some of their key areas. This is just one example of the valuable findings helping GCF and its partners to better manage giraffe in the wild.

When fitting each unit an expert veterinary team coordinates the effort and, at the same time, important biodata is collected, which includes measurements, genetic and blood samples, skin disease assessment, tail hair samples, etc., while the giraffe are also treated with medication to help with potential current and future health problems.

Since their first use, giraffe satellite units have gone through quite a design evolution. These new units are small (i.e. the size of 3 matchboxes) and less obtrusive, and they have increased technology and battery capacity compared to the giraffe collars and head harnesses that were used in the past. Interestingly, the first-ever giraffe GPS satellite units were trialled by GCF Directors Dr Julian & Steph Fennessy in Namibia in 2001, and several design iterations have since evolved. Developed in partnership with Savannah Tracking, Kenya, GCF has continued to adapt these new light-weight solar powered units, and have already fitted them to giraffe in several African countries.

Even though conservation efforts benefit some giraffe, others are in serious trouble...

The International Union for Conservation of Nature (IUCN) Red List of Threatened Species once again drew attention to the plight of giraffe. The IUCN Red List revealed that they are in serious trouble, with some now being considered as 'Critically Endangered'. Many people first became aware of the declining numbers of the iconic giraffe when they were uplisted to 'Vulnerable' on the IUCN Red List in 2016. The IUCN Red List update for 2018 comes as a further reminder that some of the currently IUCN-recognised giraffe subspecies are in real trouble. From our side, GCF is happy to have played an integral role in the review of all seven subspecies, where many members of the team were leading authors and a considerable amount of data was collected during our work and that of our partners throughout the continent.

The conservation status of seven of the currently IUCN-recognised nine giraffe subspecies has been assessed – five of these subspecies for the first time ever. For many, it comes as a shock that two of the giraffe subspecies are now listed as 'Critically Endangered' (Kordofan and Nubian giraffe), and one species as 'Endangered' (Reticulated giraffe), while the others range from 'Vulnerable' (Thornicroft's and West African giraffe) to 'Near Threatened' (Rothschild's giraffe). Only the Angolan giraffe – with their stronghold in Botswana, Namibia and Zimbabwe – seem to be out of trouble and were listed as 'Least Concern'. Only the South African and Masai giraffe are yet to be assessed. While South African giraffe appear to be doing well, Masai giraffe have plummeted and will most likely be placed within one of the threatened categories of the IUCN Red List.

The updated assessments of these giraffe subspecies were undertaken by the IUCN Species Survival Commission (SSC) Giraffe & Okapi Specialist Group (GOSG), which was hosted by the Giraffe Conservation Foundation (GCF) and the Zoological Society of London (ZSL) – who already, two years ago, sounded the alarm for the 'silent extinction' of giraffe.

"Whilst giraffe are commonly seen on safari, in the media and in zoos, people – including conservationists – are unaware that these majestic animals are undergoing a silent extinction. While giraffe populations in southern

Africa are doing just fine, the world's tallest animal is under severe pressure in some of its core ranges across East, Central and West Africa. It may come as a shock that two of the currently recognised nine subspecies are now considered 'Critically Endangered', but we have been sounding the alarm for a few years now." – says Dr Julian Fennessy, co-chair of the IUCN SSC GOSG, and Director of the Giraffe Conservation Foundation (GCF)

In spite of this, there is also positive news in this latest IUCN announcement. Two subspecies that were previously considered 'Endangered' (West African and Rothschild's giraffe) have since improved their conservation status. Concerted efforts by African governments and conservation organisations, under the guidance and support of GCF, have resulted in increasing numbers of both subspecies, and as a result have been downlisted to 'Vulnerable' and 'Near Threatened', respectively.

"This is a conservation success story and highlights the value of making proactive giraffe conservation and management efforts in critical populations across the continent. Working collaboratively with governments and other partners, we feel that our proactive measures are saving giraffe in some areas before it is too late. It is now timely to increase our efforts, especially for those listed as 'Critically Endangered' and 'Endangered'." – says Arthur Muneza, East-Africa Coordinator of the Giraffe Conservation Foundation and member of the IUCN SSC GOSG.

While IUCN still recognises giraffe as one species with nine subspecies, detailed collaborative genetic-based research carried out by GCF and its partners and Senckenberg BiK highlights that there are four distinct species of giraffe – elevating some of the newly assessed subspecies to species level. While this might appear an academic exercise, the conservation implications are immense and they need to be reviewed as a matter of urgency. The Northern giraffe (*Giraffa camelopardalis*), which includes the 'Critically Endangered' Kordofan and Nubian giraffe and the 'Vulnerable' West African giraffe, and Reticulated giraffe (*Giraffa reticulata*) can be considered some of the most threatened large mammals in the wild, showing less than 5,200 and 15,785 individuals remaining in the wild, respectively.



COMMON NAME	PREVIOUS RED LIST	UPDATED RED LIST STATUS
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Kordofan giraffe	Not assessed	Critically Endangered
Nubian giraffe	Not assessed	Critically Endangered
Masai giraffe	Not assessed	Endangered
Reticulated giraffe	Not assessed	Endangered
Thornicroft's giraffe	Not assessed	Vulnerable
West African giraffe	Endangered (2008)	Vulnerable
Rothschild's giraffe	Endangered (2010)	Near Threatened
Angolan giraffe	Not assessed	Least Concern
South African giraffe	Not assessed	Not assessed

World Giraffe Day 2018:

Operation Twiga III Kidepo Valley National Park

Human population growth poses the largest threat to giraffe in Africa today. Habitat loss and changes through expanding agriculture and mining, illegal hunting, increasing human-wildlife conflict, and civil unrest are all factors that are pushing giraffe towards extinction. However, with GCF giraffe have a strong advocate.

Steph Fennessy, Director of GCF and member of the IUCN SSC GOSG, points out that “the updated IUCN Red List assessment highlights what we have been saying for years: giraffe are in trouble and there is no one solution to giraffe conservation in Africa. Different scenarios require different approaches. As a small but impactful organisation, GCF works with partners throughout Africa to enhance giraffe conservation on the ground and, at the same time, collaborates internationally to rally support and awareness for giraffe, which will ultimately help to save them in the wild.”

With highly successful Nubian giraffe translocations under the belt, the Uganda Wildlife Authority (UWA) and the Giraffe Conservation Foundation (GCF) joined forces again for Operation Twiga III in August 2018 ('twiga' is Swahili for giraffe). In its third consecutive year, the bar was raised to help secure a future for Nubian giraffe in the country with the most ambitious translocation to date for Uganda. While both Operation Twiga I (January 2016) and Operation Twiga II (August 2017) focused on moving a total of 37 Nubian giraffe from the north side of the Murchison Falls NP across the Nile River by ferry to the southern sector of the park – no small feat by any means! – Operation Twiga III involved the translocation of 14 Nubian giraffe from the Murchison Falls National Park to the Kidepo Valley NP, which was a journey of no less than 600 kilometres!

As with the previous operations, the translocation of these giraffe was driven by the imminent drilling for oil and placement of a pipeline within the Murchison Falls NP, which is anticipated to begin in 2020. The Nubian giraffe, a subspecies of the Northern giraffe, is listed as 'Critically Endangered' on the IUCN Red List with only an estimated 2,645 individuals in the wild. Murchison Falls NP is currently home to >50% of the wild population of Nubian giraffe. To aid their conservation and protection, additional founder populations of these giraffe continue to be established within other parts of the Murchison Falls NP as well as other parks in Uganda. As one of the first countries in Africa to develop a draft National Giraffe Conservation Strategy and Action Plan, Uganda is on the frontline of giraffe conservation and fully committed to the protection of Nubian giraffe.

Over the past two years and with the valuable support of GCF, UWA has gained great knowledge

and experience in giraffe capture and translocation. It was with this experience, after a year of extensive planning and more than a little bit of courage and great collaboration of partners, that the challenge of moving 14 giraffe a distance of 600km was accomplished without any losses. The decision to move giraffe north to the Kidepo Valley NP was taken not only to shift some giraffe away from the pressures of oil drilling, but also to augment the Nubian giraffe population in this park. In the late 1980s, the local giraffe population in the Kidepo Valley NP had dropped to three individuals due to poaching pressure. In 1997, three giraffe were flown from Kenya to the park to give the population a boost. While the two females fared well, the male was unfortunately predated soon after arrival by lion. In April 2018, the GCF survey estimated the giraffe population of the park at 36 individuals. This small giraffe population is expected to benefit from the new genetics that have arrived with the new additions from the Murchison Falls NP, which will result in a more stable and fortified population.

Operation Twiga III was completed over the course of three weeks. The UWA team, together with GCF and staff from the Ugandan Wildlife Education Centre (UWEC) and multiple international members from various zoological institutions such as Cheyenne Mountain Zoo, Cleveland Metroparks Zoo and Colorado State University, spent the first two weeks individually capturing 10 female sub-adult giraffe and transporting them to a temporary holding pen (boma) that had been built in the Murchison Falls NP. Following this first groups' release, an additional 4 giraffe (three females and one male) were captured in the final week. The giraffe were kept in the boma to allow the time needed for them to calm down and to minimise stress prior to their long



Above: Human encroachment is greatly impacting giraffe habitat across Africa: Masai giraffe in Nairobi National Park, Kenya. Credit: © Wollwerth Imagery - stock.adobe.com



Above: Young Nubian giraffe ready to be loaded and transported to Kidepo Valley National Park - helping to secure a future for giraffe in north-east Uganda. Credit: © GCF

journey north. After a few days of acclimation, the giraffe (in batches of five) were loaded on to the transport truck and the ten-hour drive began. During capture, two of the females were also fitted with solar powered GPS satellite units in order to monitor their movements within the new park and to contribute to ongoing spatial ecology studies.

The giraffe were closely monitored throughout the journey and care was taken while navigating a slightly harrowing mountain pass, and to avoid low hanging electrical wires, tree branches and bumps in the road. The entire team was blown away by how calm the giraffe remained during this long trip. Nothing seemed to phase these amazing animals, even while traveling through busy city centres and while passing gales of laughter, singing and excited shouts from bystanders along the way. It was truly wonderful to see the reactions of the Ugandan people when they turned and saw giraffe heads poking out above a cluster of shrubbery on the truck. As if all of this was not enough, the first five giraffe were released into the Kidepo Valley NP under a brilliant rainbow – no better welcome could have been imagined. The trip was repeated twice more, with a total of 14 giraffe released into the Kidepo Valley NP. The team was excited not only about the successful release of their final load, but also because some of the female giraffe that had been introduced only a week earlier were seen in the company of a few of the old Kidepo giraffe bulls close to the release site.

In addition to this successful translocation (which Dr Robert Aruho, UWA's lead organising veterinarian, very aptly described as the highlight of his career), the team also attended to three giraffe that were spotted during the captures. These giraffe were ensnared with wire traps, which were successfully untangled and removed. Poaching is an increasing threat to wildlife within the Murchison Falls NP. While giraffe are not usually the target species, they are often inadvertent victims – getting their limbs caught in snare traps that are set for smaller mammals. If these snares are not removed and the lesions treated in a timely manner, the giraffe will suffer from debilitating wounds, as evidenced by scarring around the lower limbs (and sometimes even limb amputation) of numerous giraffe in the park. Locating and treating these three individuals during the operation only strengthened the enormous impact on giraffe conservation these three weeks brought, along with the broader GCF-UWA efforts in country.

Similar to Operation Twiga I & II, this translocation was made even more incredible through the effective collaboration of multiple international institutions. Once again, GCF supported Dr Pete Morkel in joining the team to share his extensive expertise in megaherbivore game capture and

transport with the Ugandan team. Additional veterinary staff from Cleveland Metroparks Zoo, Colorado State University College of Veterinary Medicine and Cheyenne Mountain Zoo continued the work set forth previously on monitoring anaesthesia and wild giraffe health in the field. Passionate individuals in giraffe conservation from Australia, Namibia and Sweden rounded out the team brought together by GCF to support UWA in all their efforts.

Operation Twiga III is a shining example of just how much can be accomplished when passionate people come together – and this does not only refer to the team that is in action. Operation Twiga III would not have been possible without the generous funding support from around the world, the majority of which was raised during World Giraffe Day 2018.

We would like to use this opportunity to thank all our supporters for their generous funding and for helping us to educate a wider audience on the plight of giraffe; and the entire team lead by UWA for their truly amazing conservation effort all round, especially veterinarians Dr Robert Aruho, Dr Margaret Driciru and Dr Patrick Atimnedi.



The Giraffe Action Fund allows GCF to increase field conservation and management actions for giraffe throughout Africa, and to direct support towards focused conservation actions that directly benefit giraffe in the wild NOW. In addition to financial support, the GCF team also provides technical and field support for some projects.

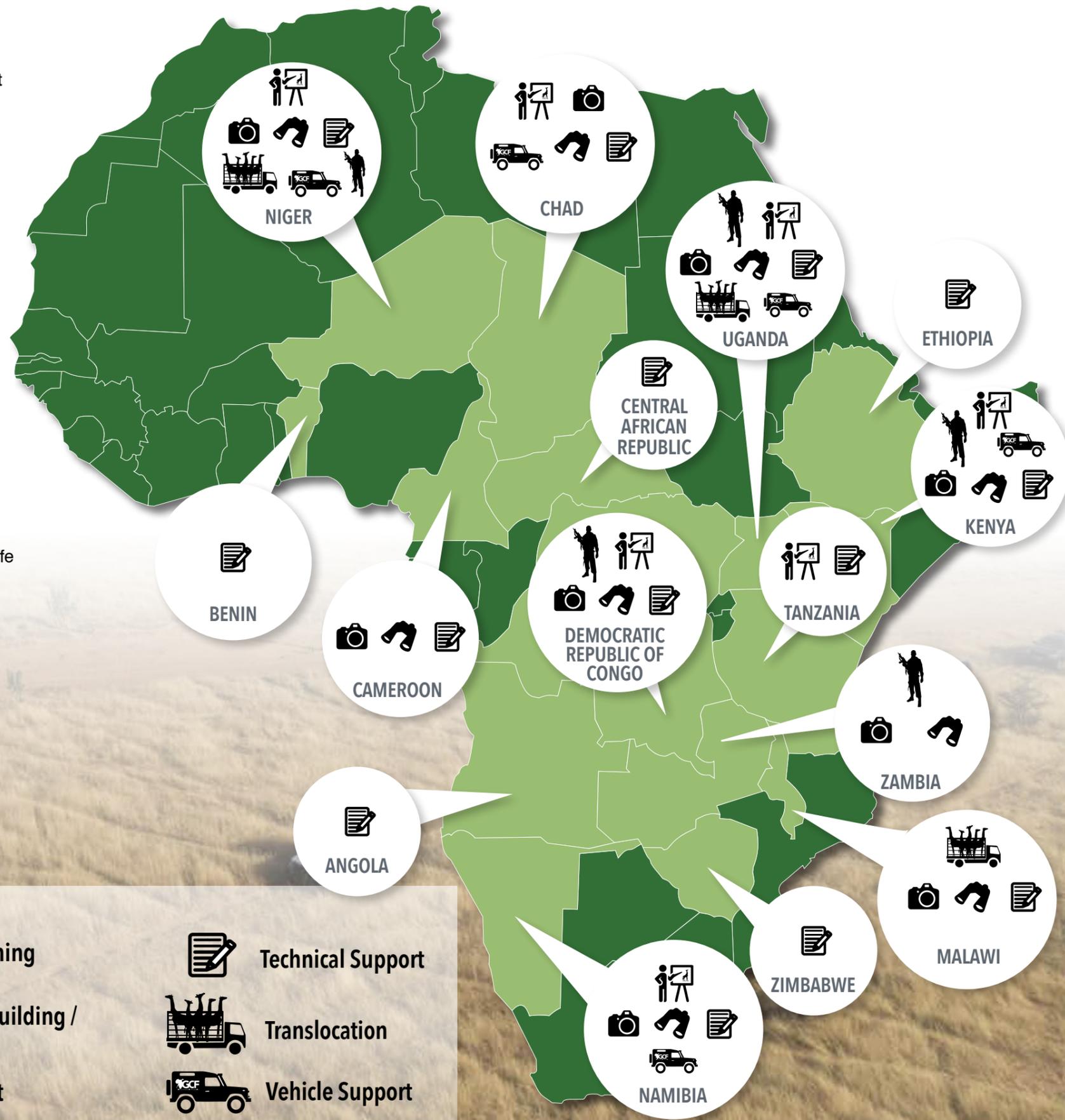
The Giraffe Action Fund identifies and supports the most innovative field conservation actions and campaigns that directly protect and promote conservation of these iconic species.

This support goes to:

- **Action** efforts to increase giraffe numbers, distribution and habitat;
- **Action** efforts for giraffe anti-poaching throughout the continent; and
- **Action** conservation education and awareness programmes to save giraffe and to minimise their biggest threats.

Each of these actions encourages new levels of collaboration, partnerships and networking among and between governments, local and international organisations, conservationists and donors. They can extend across different land management types that are suitable for giraffe conservation: protected areas, forestry lands, community lands and private lands.

Investments by the Giraffe Action Fund include efforts to increase giraffe range, reduce human-giraffe conflict, enhance law enforcement, and develop national/regional strategies and actions; campaigns to increase education or raise awareness; and strategies to secure habitat in which giraffe can roam freely.



Anti-poaching



Capacity Building / Education



Equipment



Survey Support



Technical Support



Translocation



Vehicle Support

Giraffe Conservation Policy & Strategies

National Giraffe Conservation Strategy & Action Plan Development

DRC

In 2018, with the technical support of GCF, DRC developed its first-ever National Giraffe Conservation Strategy and Action Plan. The African Parks Network and L'Institut Congolais pour la Conservation de la Nature (ICCN) drafted the plan before its subsequent endorsement. Despite the fact that DRC has a small giraffe population, this Strategy and Action Plan will help guide the recovery of this population.

KENYA

This financial year saw the first-ever Recovery and Action Plan for Giraffe (*Giraffa camelopardalis*) in Kenya (2018-2022) being launched. GCF played a valuable role in both the development and launch of this plan through the provision of technical and financial support. Furthermore, GCF supported the Kenya Wildlife Service in establishing species-specific Working Groups in the country in order to guide and monitor the conservation and management efforts of the three Kenyan giraffe species: Masai, Nubian and Reticulated giraffe. Long-term implementation of this plan is key to the conservation success of giraffe in Kenya. Each of these Working Groups have identified priority actions for giraffe conservation as well as areas where partner organisations can assist with their implementation.

NIGER

GCF continues to play a leading role in helping to implement and monitor Niger's second National Giraffe Conservation Strategy and Action Plan. As one of the poorest countries in the world, Niger was the first country in Africa to develop such a plan for giraffe. Niger's giraffe conservation success is evident through the steady increase in numbers and a second (satellite) population that has now been established in their former range. GCF recently supported the establishment of a National Giraffe Working Group in Niger to guide the implementation of the plan.

TANZANIA

In 2018, Tanzania embarked on its journey of developing the country's first National Giraffe Conservation Strategy and Action Plan. Technical and financial support from GCF and USAID Protect the Tanzania Wildlife Research Institute brought stakeholders together to collectively share knowledge on giraffe and their management. A draft plan is currently in circulation amongst all participants before final endorsement by all government parties. A National Working Group, supported by GCF, was established to initiate its implementation and monitoring.

UGANDA

The Uganda Wildlife Authority (UWA) is committed to endorsing its first National Giraffe Conservation Strategy and Action Plan, and is presently working through an internal endorsement process of finalisation. GCF played a key role in the development of this plan through the provision of financial and technical support, and has subsequently initiated an annual review of the plan through the establishment of a National Working Group which is led by UWA.

CHAD

In 2018, with the support of several African governments, the government of the Republic of Chad submitted a proposal to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) to add giraffe to Appendix II at the Conference of Parties (CITES CoP18) in Geneva, Switzerland in August 2019. GCF was asked by several governments and conservation partners to provide independent scientific advice about the proposed listing to assist with their discussions.



Above: Large male Kordofan giraffe in Zakouma National Park, Chad - home to an estimated 60% of the world's Kordofan giraffe population.
Credit: © Fiona MacKay

Conservation Translocations

Conservation translocations have become an important part of GCF's work throughout Africa. Experience has shown that giraffe thrive when moved back into secure areas and their numbers steadily increase.

Working with local partners is important for laying the groundwork before their reintroduction. It is vital to have all partners on board and to prepare local communities for the arrival of giraffe in their areas as they may have never before seen giraffe in their lives.

Moving giraffe is not easy and it is often an expensive operation – it literally takes a village to move giraffe back into their former range. International partners and donors are vital for the success of these programmes. GCF is excited to be at the forefront of giraffe conservation and the expansion of their range in Africa.

This financial year, GCF supported three major giraffe translocations in Malawi, Niger and Uganda.



NIGER

In Niger GCF, in support of the Government of Niger and in partnership with the Sahara Conservation Fund (SCF), undertook the first-ever translocation of West African giraffe in the country. After an absence of almost 50 years, 8 West African giraffe travelled over 800 kilometres in 48 hours to be safely re-introduced to the Gadabedji Biosphere Reserve in Niger.

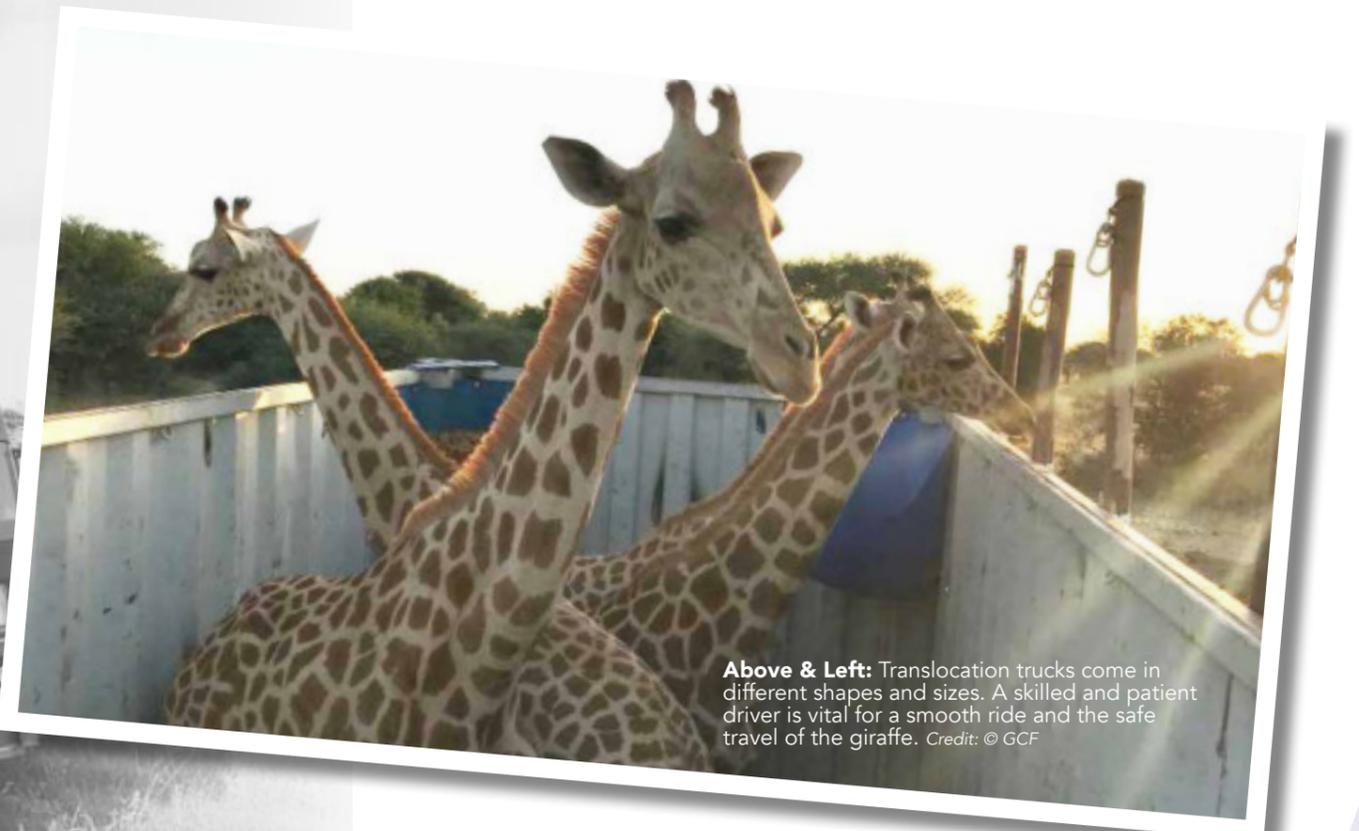
Operation Sahel Giraffe commenced in early November 2018, after a year of meticulous preparation. Eight giraffe were individually captured in the 'Giraffe Zone' and transferred to a boma, where they were kept for more than three weeks to prepare them for the long journey. The giraffe were then transported in two groups of four, an arduous journey for both the giraffe and the team, before their successful release in the Gadabedji Biosphere Reserve.

Almost 50 years ago giraffe became locally extinct in the Gadabedji area because of drought and illegal hunting. Since 2013 Niger's Wildlife Authority, with support from the Niger Fauna Corridor Project/UNDP, has worked diligently towards restoring the region's wildlife and their habitat. The re-introduction of giraffe will further enrich the reserve's biodiversity and contribute to increasing community development and support in the region.

In the mid-1990s there were only 49 West African giraffe left in the wild, and as a result the subspecies was listed as 'Endangered' on the IUCN Red List of Threatened Species in 2008. Comprehensive conservation efforts by the Government of Niger, in collaboration with local and international partners, have triggered an amazing recovery of the West African giraffe population to over 600 individuals today. This positive trend resulted in the downlisting of West African giraffe to 'Vulnerable' on the IUCN Red List in November 2018.



This re-introduction of West African giraffe to their former range in Niger aims to establish a second viable population of the subspecies in support of their conservation in a healthy and well-managed ecosystem. Once widespread throughout West Africa, including Senegal, Mauritania, Mali and Nigeria, West African giraffe now only occur in Niger. In the 'Giraffe Zone' West African giraffe share their habitat with local communities, where they compete for space and resources. Their threats include agricultural encroachment, climate change and variability, human population growth, and natural resource over-exploitation. As a result of a growing giraffe population and increasing human population pressure, giraffe have started to migrate out of the 'Giraffe Zone'. This movement out of the 'Giraffe Zone' finds the giraffe in conflict situations with human populations that are unaccustomed to their presence in Niger, and too close to the insecure border areas with Mali.



Above & Left: Translocation trucks come in different shapes and sizes. A skilled and patient driver is vital for a smooth ride and the safe travel of the giraffe. Credit: © GCF

Post-translocation monitoring is critical for the success of the giraffe in Gadabedji. GCF provided equipment for and supports the new community eco-guards in the Gadabedji Biosphere Reserve. Since their release, this new team has been instrumental in ensuring their safety and have at times helped to shepherd the giraffe safely back to the core conservation area. The 'village' network in the reserve is an amazing asset and we are proud to be part of it.

Operation Sahel Giraffe has been a partnership between the Giraffe Conservation Foundation, the Sahara Conservation Fund, Niger's Ministry of Environment, and the Niger Fauna Corridor Project/UNDP.



MALAWI

After an absence of more than 100 years, GCF partnered with African Parks (AP) and Malawi's Department of National Parks and Wildlife (DNPW) to establish a new giraffe population in Malawi.



In October 2018 and after a 2,500 km road journey from South Africa, 9 giraffe were safely released into the Majete Wildlife Reserve in southern Malawi. Of all the translocations to date, this journey covered the longest travelling distance.

An additional 4 giraffe from the nearby Nyala Park were introduced, totalling 13 giraffe that now make up the new giraffe population in the Majete Wildlife Reserve.

This reserve, which has been under the management of AP since 2003, has been hailed as a national success story with regard to the restoration of its wildlife and its provision of benefits to local communities. The introduction of giraffe will further enrich the reserve's biodiversity; it will increase tourism which will enhance the already emerging conservation-led economy; and it will support community development.

While southern Africa has a robust population of giraffe, very few are present in Malawi. This

translocation has brought Malawian national numbers to just over 30 animals. This project came at an urgent time when in mid-November the IUCN Red List of Threatened Species announced that several giraffe subspecies are now threatened. The translocation of South African giraffe to the Majete Wildlife Reserve hopes to establish a viable population of the species that will support their conservation throughout the region.

Creating safe wilderness areas for giraffe populations to grow is essential for securing their future in Africa. In Majete, the founding of a new giraffe population forms part of the reserve's development as a flagship wildlife sanctuary, benefitting local communities and affording people in Malawi the opportunity to see the world's tallest land mammal while supporting giraffe conservation efforts. Undertaken in partnership with AP, support for the translocation was provided by the Sundaram Family, Illovo Sugar, Nkhanga Essential Support Services, and Markus Jebesen.

UGANDA

GCF continues to provide significant conservation support for Nubian giraffe in Uganda. The number of giraffe populations in the country has doubled from two to four over the last few years. Giraffe numbers are steadily increasing in the country and their recovery can be considered a true conservation success story. World Giraffe Day 2018 was dedicated to raising support to augment the Nubian giraffe population in the Kidepo Valley National Park. Read more about it in the section on World Giraffe Day.



Above & Insert: It needs a village to capture and move a giraffe.
Credit: © GCF

GCF Internationally

GCF has recently launched its brand new and updated website, which now has a clean, fresh look with easily accessible information that showcases the wide range of programmes we are involved in. Hopefully it works – please take a look!



Publications

As a science-based organisation, we are only too aware how little we know about giraffe. While our focus is on giraffe conservation action, GCF and partners continue to work hard to get up-to-date information on giraffe out to a wider public. Here is a list of recent important publications.

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Muneza, A.B., Ortiz-Calo, W., Packer, C., Cusack, J.J., Jones, T., Palmer, M.S., Swanson, A., Kosmala, M., Dickman, A.J., Macdonald, D.W. and Montgomery, R.A. 2019. Quantifying the severity of Giraffe Skin Disease via photogrammetry analysis of camera trap data. *Journal of Wildlife Disease*, 55(4).

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Winter, S., Coimbra, R.T.F., Bronec, A., Hay, C. Salb, A.L., Fennessy, J. & Janke, J. 2019. 230 Species assignment and conservation genetics of giraffe in the Republic of Malawi. 231 *Conservation Genetics* doi:10.1007/s10592-018-01142-4.

Wube, T., Doherty, J.B., Fennessy, J. & Marais, A. 2018. *Giraffa camelopardalis ssp. camelopardalis*. The IUCN Red List of Threatened Species 2018: e.T88420707A88420710.
<http://dx.doi.org/10.2305/IUCN.UK.2018-2.RLTS.T88420707A88420710.en>

GCF in the USA

The majority of GCF's financial support continues to be raised in the USA. GCF is key to raising valuable resources for giraffe conservation and management in the wild. During the year our team had the opportunity to give several talks at zoos and other events in the USA.

Most notably, GCF continues to be a key partner in the annual Cheyenne Mountain Zoo Giraffe Care Workshop. The opportunity to present our work and our giraffe conservation efforts throughout Africa to a wider audience is always a pleasure, and presenting to such a dedicated group of giraffe carers is a particular treat.

Another highlight of the year was our participation in a conservation panel and the presentation of a key address at the National Zoo alongside colleagues from the Smithsonian Conservation Biology Institute and San Diego Zoo Global.



GCF in Asia

During GCF's first foray into mainland Asia, Dr Julian Fennessy worked with Animals Asia and a key EAZA veterinarian to provide a week of giraffe conservation, management and captive experience and knowledge to more than 100 Chinese zoo staff members from all over the country. This was the first-ever dedicated workshop on giraffe in the country, which was supported by the Chinese Zoo Association and local universities. The opportunity to share experience and knowledge was unique.

A host of additional presentations were given in different cities throughout China, including Hong Kong.

All in all, this trip was an eye-opening experience and an amazing opportunity to share all things giraffe with a new and knowledge-absorbing people.



GCF in Europe

During the annual Association of British and Irish Wild Animal Keepers giraffe workshop, hosted at Chessington World of Adventures, Dr Julian and Steph Fennessy presented GCF's work and those of its partners throughout the continent to more than 100 keepers and curators from all over the United Kingdom. Additionally, during the workshop, giraffe ID training and impromptu practice 'capture' training was undertaken with some of the keepers – an exciting and random occurrence in the English summer.

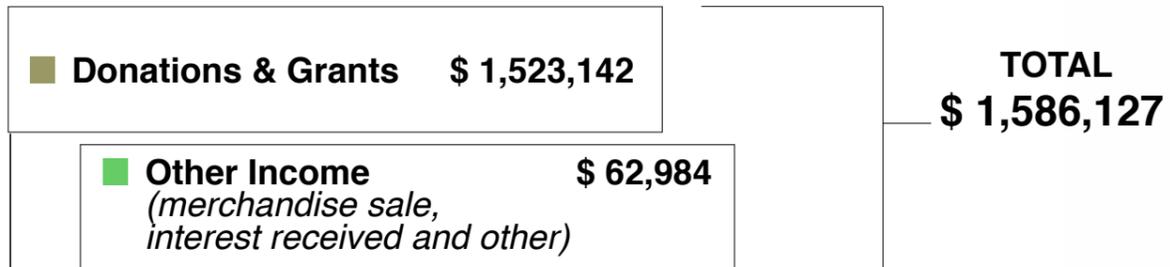
While in the UK, Dr Julian and Steph Fennessy used the opportunity to also give several presentations to staff members and the public at the Chester Zoo, one of GCF's key conservation partners.



GCF FINANCIAL SUMMARY

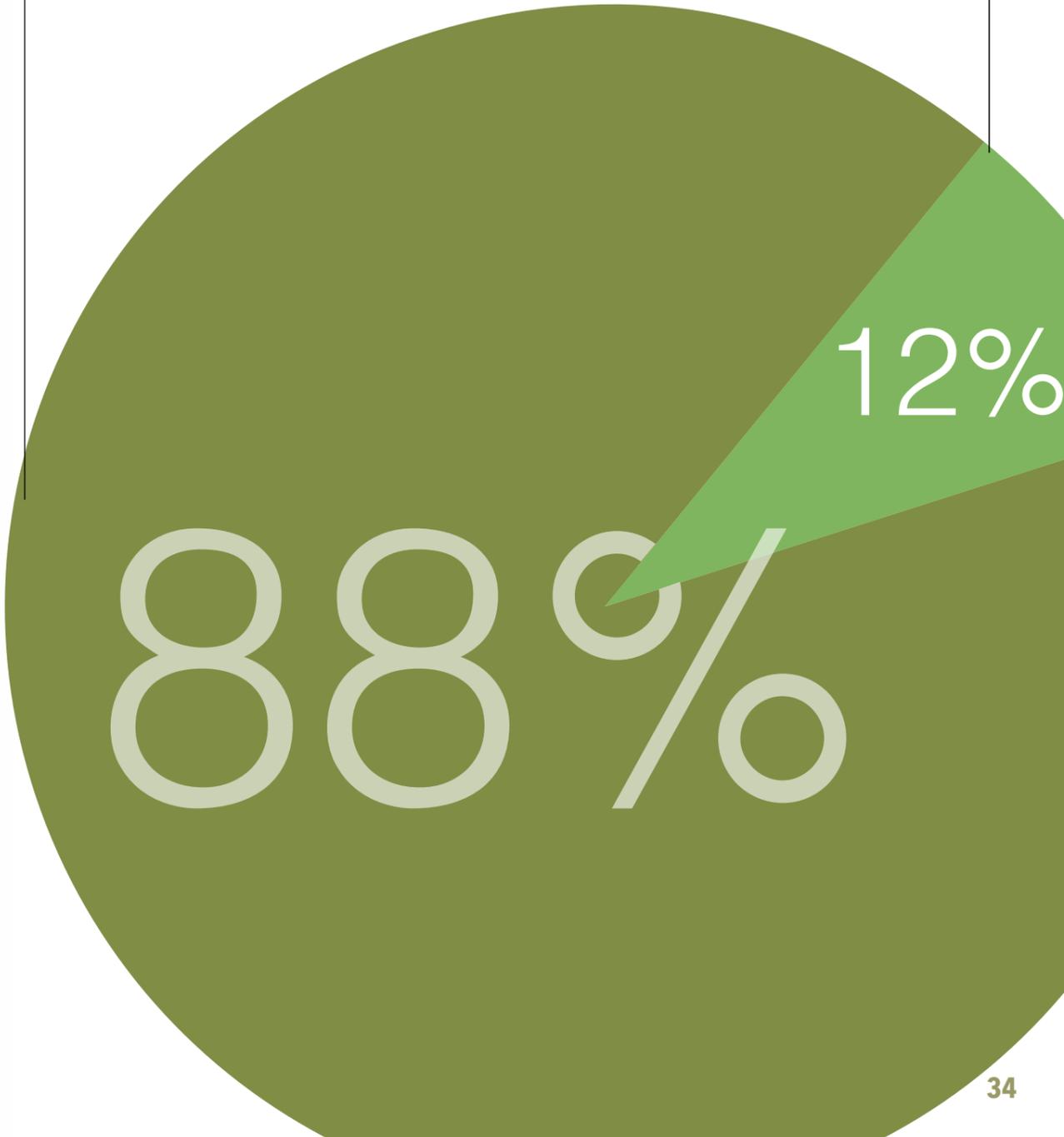
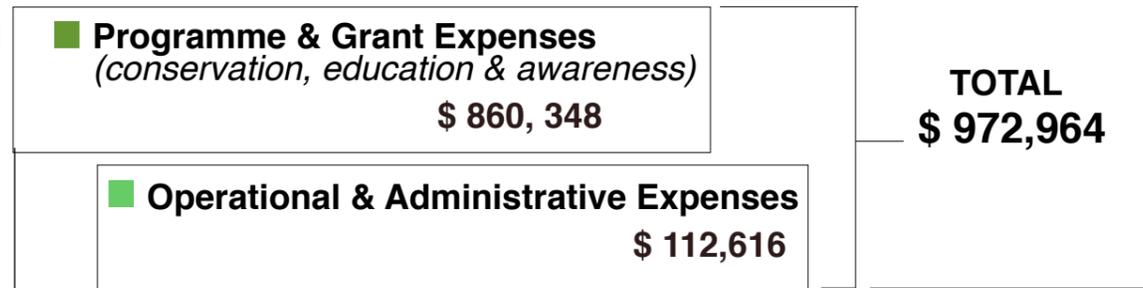
Our team continues to work hard to secure a future for giraffe in the wild and to bring them onto the international conservation agenda. Awareness for giraffe conservation is increasing, allowing us to maintain a steady funding stream for our important work throughout Africa. As we slowly enhance our reach, we have grown our team to further our mission in Africa. Importantly, however, GCF remains a small and efficiently run organisation with minimal administrative overheads. This means that we are still able to spend 88 cents of every dollar donated to GCF directly on giraffe conservation and management in Africa. Building new strategic partnerships and expanding our footprint throughout Africa continues to remain at the core of our conservation model. Your continued support allows us to do this more efficiently.

Funds Received



96%

Expenditure



All amounts are in USD.

DONORS

A testament to GCF's success is the increasing number of donors. Again this year, we received financial support from organisations and donors from over 40 countries. Without this support, we would not be able to do our work and save giraffe in Africa.

As our donor list continues to get longer and longer, we have decided to only include those who donated US\$500 and above in this report. However, this does not mean that we do not appreciate all the other support we have received and continue to receive. Every donation helps! We could not do our important work without you – thank you!

\$50,000 and above

Cleveland Zoological Society
DSC Foundation
Ivan Carter Wildlife Conservation Alliance
Markus Jebesen
Milton & Tamar Maltz Family Foundation
Lars Markgren
Peggy & Lewis Metzger
San Diego Zoo Global
The Woodtiger Fund

\$25,000 – \$49,999

Born Free Foundation
Cleveland Metroparks Zoo
Columbus Zoo and Aquarium
Kathy & Tom Leiden
Mey Share Foundation
Total Uganda
Wildlife Conservation Network

\$10,000 – \$24,999

Auckland Zoo
Beauval Zoo
Chester Zoo
Cheyenne Mountain Zoo
Detroit Zoo
Fort Wayne Children's Zoo
Galanthus Foundation
Glenn/Lamb Charitable Fund
Imgur
Indianapolis Zoological Society

Los Angeles AAZK Chapter
Mike's Hard Lemonade
Naples Zoo at Caribbean Gardens
Natural Selection Safari
NedBank GoGreen Fund
The Safari Collection
The Tapeats Fund
Utah's Hogle Zoo
The Waterloo Foundation

\$5,000 – \$9,999

African Fund for Endangered Wildlife
Charlotte & Joe Bailey
Blank Park Zoo
Chessington World of Adventures
Cranaleith Foundation
Flaumenhaft Family
Sallyann Garner
Wendy & Hugh Kendrick
Lou & Bill Kilgore
Robert, Ely & Maya Klem
Paul Alfred Luedin
Malibu Wine Safari
Linda McIngvale
Out of Africa Wildlife Park
Punta Verde
Rufford Foundation
Saint Louis Zoo
Joan & Kent Sather
Stichting Wildlife
Gail Stockman
Peg & Robert Van Andel

\$2,500 – \$4,999

Bob Anderson
Antwerp Zoo
Blair Drummond Safari & Adventure Park
Brights Zoo
Liza Carter
Cascade Public Media
Georgine Casella
Columbus Zoo AAZK Chapter
GEF Small Grants Program
Gladys Porter Zoo
La Passerelle Conservation
Lion Country Safari
Kim Miller
New Zoo
North Carolina Zoo
Omaha's Henry Doorly Zoo & Aquarium
Oregon Zoo
Veronica Reyna
Seneca Park Zoo Society
Shop for Giraffe
Strada Education Network
Pamela Tate
Ami Vitale
Wags & Menace
Woburn Safari Park

\$1000 – \$2,499

Abilene Zoo
Animals Asia Foundation
John Basinger
Birmingham Zoo
Heather Biszak

The British Veterinary Nursing Association
Kevin Brown
Harriet Butts
Judith Caroselli
Ari Castro-Gross
The CCG Trust
Colleen Crowley
Manjul Dixit
Dudley Zoological Gardens
Erie Zoo
Evansville Zoological Society
Freunde Hauptstadtzoos Berlin
Susan Fromkes
Cathryn Gabor/Africa 360 Travel
Sarah Giles (in memory)
Global Wildlife Foundation
Victoria Gordon
Great Plains Zoo
Greater Cleveland AAZK Chapter
Gulf Breeze Zoo
Barbara Gural
Jeff Halter
JoAnn & Michael Hamm
Murray Haseler
Vaughn Hasslein & Linda Borders
Hochland 154 Round Table
Honolulu Zoological Society
Ivory Ella
Jacksonville Zoo and Gardens
Knuthenborg Safaripark
Ann Marie Kohlligian
Kolesky Philanthropic Fund
Jean Layton
Suavek Lehmann
Lion Habitat Ranch
The Living Desert
Barry Loncke & Lilly Spitz Foundation
Cindy Malchoff
Carl & Marilyn Malkmus Foundation
Eric McCallum
Niall McLaughlin
Mesker Park Zoo & Botanic Garden
Milwaukee County Zoo

Minot Zoo
Anne Morgan
Morgan Stanley
Linda & Bill Murray
Maureen O'Donovan
Orin & Vicky Oberlander
Oklahoma City Zoo
Kathryn Ozimek
PayPal Giving Fund
Peoria Zoo
Sandi Perlman
John & Nuri Pierce
Pupkewitz Foundation
Barbara Rosenblatt
Cheryl Rothman
Julie Rugg
Sacramento Zoo
Mary Sanford Hunt
Tanganyika Wildlife Park
Karen Tyner
Wildlife Conservation Global
Woodland Park Zoological Society
Zoo de la Boissière du Doré
Zoos South Australia

\$500 - \$999

James Anderson
Syd Arkowitz
Samira Askari
Association of British and Irish Wild Animal Keepers
Martin Baxter
Rachel Bhattacharyya
David Binkley
Terry Bradshaw
Gary Brueggeman
Janet Buell
Rachael Cairo
Caldwell Zoo
Canadian Mattress Recycling
Irene Cermak Schimanetz
Jennifer Chaikin
Christine Chulick
Dickerson Park Zoo
Faruk Yalcin Zoo
Tammy Flanders Hetrick
Frank Buck Zoo
Jonathan Franke
Colette Gandelot
Kimberly Good
Damon Ground
Dianne Hall
Lee Hall
Jane Haworth

Joy Helbing
Till Hollmann
Thomas Horton
Idea Wild
Louise Jakobsen
Sara Jantz
Mary Johnston
Diane Koscec
Tushar Kulkarni
Klara Kurowski
Lee Richardson Zoo
Donald Livingstone
Annette Manthey
Patrice Marinelli
William McAreavy
Bruce & Eleanor McLearn
Georgann Meadows
Katya Melliush
Dinah Miller
Miller Family Charitable Fund
Montgomery Zoo
Nancy Mulholand
Melaina Newcomer
Noah's Ark Zoo Farm
Elizabeth O'Neill
Philip Perry
Point Dediance AAZK Chapter
Porta Romana
David Posner
Irene Preysman
Ann Richardson
Ian CK Robertson
Rolling Hills Zoo
Brooke Rose
Sydney Rosen
Carol Smith
Spacebar Media Limited
Rick Steinmaier
John Sturtevant
Duchess Swift
Kit Tamkin
Kristen Tauber
Nicole Thomas
Luke Thornburg
Toronto Zoo AAZK Chapter
Myrna Torrie
Ashley Ullrich
Linda Vidosh Zempel
Susan Wahlgren
The Wilds
Wilhelma Stuttgart



CONTACT / SUPPORT

Giraffe Conservation Foundation

Reporting Period: 1 March 2018 to 28 February 2019

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