East Africa Programme

QUARTERLY UPDATE REPORT September – November 2018









Background

The Giraffe Conservation Foundation (GCF) East African office, based in Nairobi, was established to increase collaborative efforts with government institutions, private stakeholders, along with local and international NGOs with respect to giraffe conservation and management. The East African region is critical for the long-term survival of wild populations of giraffe as it is home to three distinct species: Masai giraffe (*Giraffa tippelskirchi*), reticulated giraffe (*G. reticulata*) and Nubian giraffe (*G. camelopardalis camelopardalis*). This report highlights the steps and programmes that GCF has initiated towards conserving the three species in the region between September and November 2018.

Broad-ranging programmes

In November 2018, the International Union for the Conservation of Nature (IUCN) officially published the conservation status of seven of the nine currently recognised subspecies of giraffe. The updated IUCN Red List shows that conservation efforts are helping some giraffe populations recover while others need immediate attention – with two of the subspecies listed as 'Critically Endangered' (Kordofan and Nubian giraffe). For detailed overview of the а assessments please qo online to: https://www.iucnredlist.org/species/9194/136266699. In East Africa specifically, reticulated giraffe have declined by 56% in the last 30 years (only ~15,785 individuals remain in the wild) and were listed as 'Endangered' whereas Rothschild's giraffe were downgraded from 'Endangered' (2010) to 'Near Threatened' following a 26% recovery (~2,098 individuals). An assessment of Masai giraffe is ongoing but data from conservation stakeholders show that the population has a declining trend and will likely be listed in a threatened category in 2019. GCF continues to work with conservation partners to provide the most up to date data to the Red List committee and to inform conservation and management of giraffe populations in the region. Importantly for us at GCF, we feel that our efforts and partnerships with the relevant conservation authorities have made a difference, in particular for the Rothschild's and West African giraffe, as we provided support for detailed surveys, field resources, capacity building, assessments, drafting and implementation of strategies and action plans, and conservation translocations.

With input and support from GCF and other conservation partners, the Kenya Wildlife Service (KWS) launched its *National Recovery and Action Plan for Giraffe in Kenya 2018-2022* on 21 November 2018. This milestone made Kenya only the second African country to officially launch a national giraffe conservation strategy after Niger. Giraffe numbers in Kenya have declined by 67% from approx. 73,000 individuals in 1977 to a current estimate of 24,000. Various extrinsic and intrinsic threats to giraffe in Kenya were identified in the recovery plan including poaching, habitat loss, infrastructural developments, disease and dietary complications. To address these threats, stakeholders involved in drafting the *National Recovery and Action Plan for Giraffe in Kenya 2018-2022* identified one goal (*"To mitigate the threats and reverse the declining trends in giraffe numbers while ensuring benefits accrue to local communities."*) and seven strategic objectives:

- i. Enhance protection of giraffe to ensure recovery and maintenance of free-ranging populations;
- ii. Arrest and reverse the current decline in giraffe habitats through appropriate conservation

and management;

- iii. Ensure effective management of enclosed populations to secure their long-term conservation;
- iv. Ensure coordinated research on and monitoring of giraffe populations;
- v. Enhance community involvement in giraffe conservation to facilitate information exchange, education and public awareness; and
- vi. Ensure infrastructural developments in giraffe ranges are compatible with their conservation.

GCF continues to work with KWS and partners to implement the priority activities identified in the *National Recovery and Action Plan for Giraffe in Kenya 2018-2022* to secure a sustainable future for giraffe in Kenya. Specifically, KWS with support from GCF is finalising plans to hold the Nubian and reticulated Giraffe Range Committee meetings in January 2019 to bring together giraffe conservation stakeholders in their ranges and plan next steps.



Fig. 1. Dr John Waithaka (Chairman of KWS Board of Directors) and Dr Charles Musyoki (Acting Director General of KWS, centre) present the *National Recovery and Action Plan for Giraffe in Kenya 2018-2022* to the Cabinet Secretary of Tourism and Wildlife Hon. Najib Balala, E.G.H. (third from left). Far right is Arthur Muneza, GCF East Africa Coordinator.



Specific programmes

Masai giraffe

Masai giraffe have declined by >50% over the last 30 years in their range in East Africa, and GCF is working with partners in the region to raise awareness on the causes of the decline and the conservation actions required to mitigate the threats to the survival of this species. Specifically, GCF acquired research permits to conduct broad-ranging conservation research in Tanzania. This was further supported by the finalisation of the MoU between GCF and the Tanzania Wildlife Research Institute (TAWIRI). The MoU, which cements the commitment of the two parties to support and implement efforts to conserve giraffe in Tanzania, now awaits the final signatures. This agreement, along with the draft MoU between GCF and KWS, and the revised MoU between GCF and the Uganda Wildlife Authority (UWA), showcases the long-term efforts that we are putting in place to work with government authorities to secure a future for giraffe in this critical region.

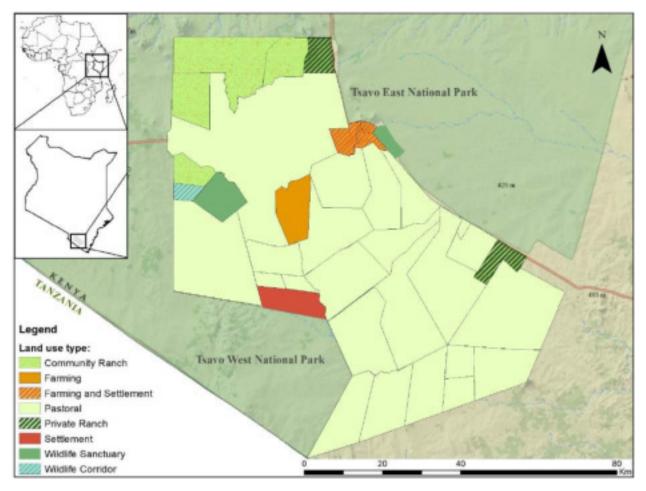


Fig. 2. Different land use types in the Wildlife Works region adjacent to Tsavo West and Tsavo East National Parks. GCF is partnering with Wildlife Works to better understand the cultural and socio-economic values of giraffe in the region.

In September 2018, we provided equipment support to Wildlife Works, our partners in southern Kenya, to pre-test our human dimensions questionnaires. We trained ten community scouts to administer the questionnaire that will examine the various covariates affecting human-wildlife conflict in relation to giraffe conservation. Additionally, our study will examine whether increased human-wildlife conflict affects the perception and attitudes that local communities have towards giraffe conservation. This is



particularly important given that Taita-Taveta county has one of the highest rates of human-wildlife conflict in Kenya. According to our partners working in the area, giraffe poaching for bushmeat and other forms of trade is on the rise. To further assist, GCF donated two motorcycles, five field cameras and five GPS unit that will be shared among the community scouts to assist in giraffe monitoring in the 2,025km² area that Wildlife Works patrols (Fig. 2). Human-dimensions surveys are on-going and will document the socio-economic and cultural values of giraffe in the transboundary area.

GCF continues to support the drafting of the Tanzania National Giraffe Conservation Strategy and Action Plan. Final edits have been submitted by our team and now await final input from TAWIRI and USAID PROTECT before the official launch of the strategy. The strategy and MoU in Tanzania will help guide conservation efforts and GCF remains a committed conservation partner to giraffe conservation stakeholders in the country.

Nubian giraffe

In September 2018, we partnered with the African Fund for Endangered Wildlife (AFEW) and KWS to assess the conservation status of Nubian giraffe in Lake Nakuru National Park (NP). As the only subspecies of giraffe (still named as Rothschild's giraffe) listed as 'Endangered' under the Wildlife Act of 2013 in Kenya, there is a critical need to update numbers and understand the status of populations in the country. To drive these efforts forward and build capacity in Central Rift Conservation Area, GCF trained thirteen KWS ecologists and rangers in mark-recapture techniques that we are using to update giraffe numbers in the country (Fig. 3). Additionally, GCF donated two Nikon CoolPix P900 cameras, two GPS units, two binoculars, one Dell Inspiron laptop, and two external hard drives to collect, store and analyse data from Lake Nakuru NP – and in future also from neighbouring Soysambu Conservancy.



Fig. 3. GCF East Africa Coordinator Arthur Muneza handing over research equipment to Lake Nakuru NP Senior Warden, Catherine Wambani and Head of Rangers, Allan Maina. The equipment is valuable support towards monitoring the endangered Nubian giraffe in the park.

After training the ecologists and rangers, we mapped the road network of Lake Nakuru NP to determine the transects that will be used for the upcoming surveys covering approx. 300km over a two-day period. Lake Nakuru NP is one of the most popular parks in Kenya and it was important to update the road network maps as the lake has expanded significantly since 2013 (Fig. 4). So far the cause of the rising water levels has not been determined, but data from Google Earth shows that the lake has expanded by approximately 22km² since 2013, cutting off large sections that were once open and accessible to wildlife, including giraffe. From our survey, we determined that 148km of road network were accessible for wildlife surveys, which we divided into three transects: Lanet (50km), Naishi (49km) and Nderit (49km).

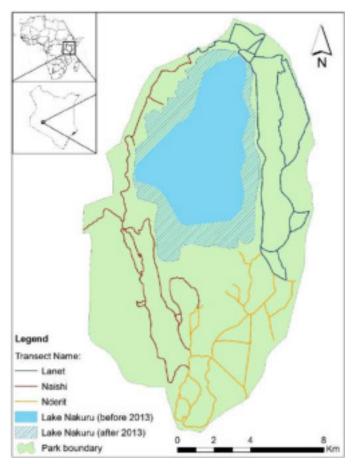


Fig. 4. Map highlighting the transects that will be used for giraffe surveys in Lake Nakuru National Park.

As part of the surveys, we will also monitor the health of the giraffe population and record signs of attempted predation and snare wounds. During our reconnaissance survey, we recorded one giraffe with a swollen eye (Fig. 5a). The giraffe is one of two known individuals with tumours on the head; the other individual has a swollen median ossicone and was previously recorded in the neighbouring Soysambu Conservancy (KWS pers. comm.). The same giraffe also had swellings on the body (Fig. 5b). KWS vets were informed of the condition and will determine the best course of action/treatment. Data from our study will also be crucial in determining the extent of movement of giraffe between Soysambu Conservancy and Lake Nakuru NP. This is important to track signs and manifestation of disease. Additionally, we recorded one individual with bite marks on the hind legs (Fig. 5c), highlighting a failed predator attack. Lions are the main predators of giraffe and are likely the main cause of giraffe calf mortality. Surrounded by human settlements, poaching has been identified

as one of the main threats to giraffe in the park and something we hope to monitor closely. Importantly, all data from the study will be used to provide recommendations for future conservation management of giraffe in Lake Nakuru NP, and more generally the Nubian giraffe population in Kenya. This project is a follow-up to the collaborative project conducted by GCF and AFEW, which provided new and crucial data on the Nubian giraffe populations in Ruma NP and Mwea National Reserve. This follow-up study enlarges the partnership network through direct involvement of KWS and evolved out of the *National Giraffe Recovery and Action Plan for Giraffe in Kenya 2018–2022*.



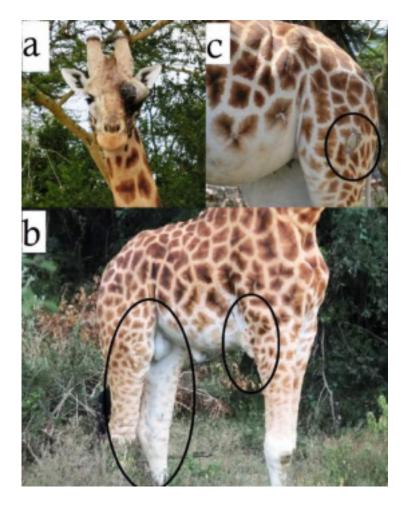


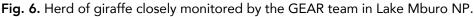
Fig. 5. Male giraffe with swollen eye (a) and other growths on limbs (b). The cause of this condition remains unknown and KWS vets are studying the development of the condition to determine best course of action. We also observed signs of attempted predation of a female giraffe by lions (c).

In Uganda, our partners Giraffe, Education and Research (GEAR) continue to undertake long-term monitoring of the Nubian giraffe introduced to Lake Mburo NP in mid-2015. As we seek to support the Uganda Wildlife Authority (UWA) in better understanding the distribution, movement, population calving and mortality of the giraffe in the park, the team have observed that *Acacia* is the favourite forage. However, they feed on a range of species and have a diverse food base.

The giraffe are monitored weekly throughout the park and identified using their unique coat patterns, sex and age. More recently, the giraffe have potentially started forming more regular herds with those with young ones most often found together with their calves and forming a crèche.

During the period, the GEAR team with UWA hosted four school conservation education groups in Lake Mburo NP and to learn about giraffe (undertaking individual identification of the animals observed), the importance of wildlife, conservation and community wildlife management on their land. During 2018, a total of 160 pupils and 8 teachers visited the park, transported provided by the project.





Ongoing monitoring of the fourteen translocated Nubian giraffe to Kidepo Valley NP from Murchison Falls NP continues, with the most recent reports that a new birth has occurred in the population. Our next annual survey of the population in Kidepo Valley NP is planned for early 2019 and we are all excited to see how the growing giraffe population is doing.

In Murchison Falls NP, our collaborator Dartmouth College is finalising efforts for the last survey of 2018, which is planned for December. With a change of guard as Michael Brown, PhD student, sets out to write up his findings, we are looking at new methods and opportunities to train a few people to continue this work and our regular monitoring of the population. There are changes afoot from a management side with fencing the northern section and planned oil development, and our long-term monitoring has never been more critical.

Reticulated giraffe

In partnership with San Diego Zoo Global (SDZG), we recently completed a conservation assessment report on reticulated giraffe in Kenya. The aim of the report was to provide a baseline for recent and current population numbers, trends and distribution of reticulated giraffe in Kenya. The report shows a decline in reticulated giraffe numbers, while livestock is increasing. However, we could not determine conclusively whether these two events are directly linked. To address this, the SDZG team is tracking the movement of cattle, camels and goats in Loisaba Wildlife Conservancy and Namunyak Community Conservancy in northern Kenya to determine their effect on the movement and distribution of giraffe. This study will provide crucial data for planning and management efforts as communities in northern Kenya become more sedentary following the increased infrastructural development from the Lamu Port-South Sudan-Ethiopia-Transport (LAPSSET) Corridor Project. Nonetheless, the work done in



collaboration with SDZG and the conservation assessment report will be key focus during the upcoming Reticulated Giraffe Range Committee meeting in January 2019 and will provide a framework for the committee to develop a conservation strategy and action plan to mitigate the threats that affect reticulated giraffe in Kenya.

While we had planned to deploy additional GPS satellite tagging units in northern Kenya in September 2018, this important activity was postponed due to a ban of all non-emergency immobilisation of wildlife in Kenya. KWS are working towards resuming wildlife collaring and we will collaborate with KWS to ensure that our giraffe tagging and tracking operation will be conducted smoothly.

Awareness raising and capacity enhancement

To enhance and raise awareness on giraffe conservation status in the region, we have continued to build partnerships across the globe and giving invited lectures. Our East Africa Coordinator Arthur Muneza participated in the Giraffe Hoof Care Workshop at Cheyenne Mountain Zoo, where he led the conservation part of the workshop. We also updated the Kenya Giraffe Conservation Poster and developed a Tanzania Giraffe Conservation Poster. These important education materials present the most up to date information on giraffe distribution and threats in the respective countries. GCF continues to work with stakeholders to produce tools that help raise awareness on giraffe conservation. These efforts will ensure that GCF is at the forefront of training conservation leaders within East Africa and increase awareness and education opportunities around giraffe conservation and management.



Fig. 6. GCF East Africa Coordinator Arthur Muneza training KWS rangers and ecologists from Lake Nakuru National Park in using pattern recognition software to create wildlife database for long-term monitoring.

