



Community-Involved Reticulated Giraffe Conservation Program

End of Year Report
December 2016



OVERVIEW

The past year has been a big one for our giraffe conservation program. The highlight was the official start of the on the ground monitoring and research at two sites in northern Kenya in May 2016.

Our team of *Twiga Walinzi* (giraffe guards) are up to six community members working full time. The team are in the field every day monitoring giraffe, gathering research data, removing snares, and engaging the communities in giraffe conservation.

2016 was also a big year for giraffe generally. In September 2016 Giraffe Conservation Foundation released research findings that there are actually four separate species of giraffe not just one! In December, the IUCN Red List of Species classified giraffe as “**Vulnerable**” to extinction in recognition of the drastic decline of giraffe in the wild. We are hoping this announcement will help bring greater support for giraffe conservation efforts.

In addition, thanks to your support, we have been able to purchase a giraffe research and monitoring vehicle, greatly benefitting our work. Additionally, we have 100 camera traps running gathering data around the clock taking photos of giraffe, and all other wildlife. This is critical to our monitoring efforts. On the community-side, we have been able to support educational scholarships and healthcare for these remote communities that we work in.

It hasn't been without challenges, but even after just 7 months, the positive impacts that the *Twiga Walinzi* are having for conservation and the communities co-existing with wildlife in these areas have been huge, and the research data we are getting is giving us greater insights into giraffe and leopards than we ever had before.

We hope to build on this success, and we have big plans for 2017. Including live satellite tracking of up to 18 giraffe, so we can better understand their movements. Satellite tracking of livestock, and a more robust leopard research program.

We hope you are happy with our progress over the past 12 months, and continue to work with us on our 2017 initiatives.



CONSERVATION PROGRAM OBJECTIVES

- Engage community members in conservation research, provide jobs and community benefits under the umbrella of giraffe conservation
- Gather baseline information on giraffe and leopard population levels and localized movements and occupancy using geolocated photos and camera trap images.
- Gather baseline human dimensions of conservation information through a quantitative survey of pastoralist knowledge, attitudes, poaching, consumption and conflict regarding wildlife, especially giraffe, leopards and lions.
- Gather information on livestock movements, by tracking camel, shoat and cattle herds in Loisaba and Namunyak to understand how they interact with wildlife
- Satellite tracking of giraffe in northern Kenya to identify critical giraffe habitat and connecting corridors.
- Support wild giraffe (and other wildlife) orphan rescues, care and re-release.
- Further community engagement and outreach in Kenya.
- Further build our **Giraffe Trackers** conservation educational program for middle-schools in San Diego.



HIGHLIGHTS & MAJOR ACHIEVEMENTS IN 2016

- **Kick-off.** Full conservation program launch at two sites: the 56,000-acre Loisaba Conservancy and the nearly 1 million-acre Namunyak Conservancy.
- **Team.** Hired and trained a team of six Kenyans to coordinate and implement the project and conduct all fieldwork and monitoring routes, the *Twiga Walinzi*. The team are also involved in de-snaring and anti-poaching activities. We are exploring supporting some of the team in getting degrees/Master's based on this work. See Section II for more information on the team.
- **Team.** We also warmly welcomed the brilliant Kirstie Ruppert (an SDZG conservationist who is able to spend part of her work time on this project). Kirstie leads the human dimensions aspects as well as team training and coordination.
- **Community Engagement.** The *Twiga Walinzi* team are becoming more respected in the communities, promoting conservation, and showing how conservation can be beneficial through provision of jobs and marketable skill sets, not just dependent on tourism.
- **Research.** Utilizing a grid of 50 camera traps to gather wildlife data at each site (total 100 camera traps). Round 1 of sampling complete (June-Sept 2016). We are currently going through all the camera trap images.
- **Research.** Developing photo ID database for giraffe and leopard, by taking photographs of both sides of individual animals. Over 100 individual giraffe have been identified at both sites.
- **Research.** Track localized movements of individuals, using photo ID software and geolocated photographs and camera trap images – using the Wildbook/IBEIS software (<http://ibeis.org/wordpress/>).
- **Impact.** We are also providing relevant camera trap images to other conservationists working on Grevy's zebra, lions and elephants. In addition, we are assisting ZSL and Google develop animal recognition software by providing them with our data too.
- **Research.** Completed nearly 500 quantitative social science interviews of community members about giraffe and leopards, poaching and consumption of giraffe meat. We are using cutting edge techniques of *Randomized Response* and *Unmatched Count Techniques* that promote more truthful responses about illegal or sensitive behaviors. See Section II for more details.
- **Impact.** Supported the care and rearing of three wild giraffe orphans rescued in Namunyak. All three were successfully re-released back to the wild and joined a wild herd in mid-2016. One of the orphans (Twiglet) we think is now pregnant!
- **Impact.** In November we were also able to respond to the drought emergency in Ishaqbini and supported a rescue of 22 reticulated giraffe, and supplemental feeding through the end of the dry season. Please see links section for more information.
- **Impact & Leverage.** We are delighted to announce that we have received pledges of funding for the construction of a purpose-built enclosure that will house future rescued wild orphan giraffe. And we have secured a generous pledge from the GAZEL Group to fund a community and anti-poaching vehicle for Namunyak Conservancy, which is badly needed.

2017 PLANS

- Ongoing data collection with camera traps and on-the-ground monitoring.
- Launch a *Zooniverse* project to engage people across the world to help us sort through and identify wildlife in our camera trap images. *Zooniverse* is an online website that engages people to assist with field research. Our site is modeled after WildCam Gorongosa (<https://www.wildcamgorongosa.org/#/>). We hope to engage people and schools not just in the USA and Kenya, but world-wide
- Satellite tracking of up to 18 giraffe across 3-4 sites. These will be the only tracked giraffe in Kenya/Tanzania. The information we will get from these tracked giraffe are vital in understanding what habitats giraffe use and when, and their corridors of movement. This will allow us to better protect these areas. In addition, the giraffe movements will be available in real-time to anti-poaching rangers, so they can more efficiently offer protection.
- In response to the feedback we've been getting from the communities, in 2017 we will be increasing our efforts on leopard conservation research, especially trying to better understand leopard and human/livestock conflict to promote better coexistence, and develop deterrents to stop leopards killing livestock.
- We hope to launch a third site for the giraffe conservation program at the Lewa-Borana Conservancy in collaboration with the Lewa team.



OPPORTUNITIES FOR SUPPORT IN 2017

- **Camera Traps:** Unfortunately we do lose camera traps to elephants, hyena and the weather, thus we always need more. The cost of one Camera Trap, including a year of power, memory card and security box: US\$350
- **Vehicle Running Costs for two months:** US\$500
- **Giraffe Satellite tracker and one year of downloads:** US\$2,500
- **Twiga Walinzi Salary:** The annual salary for one of our giraffe team in Kenya is US\$3,650 (inc. food and accommodation) or about US\$300 a month.
- **Creating the Giraffe WildBook photo ID system:** US\$5,000.
- **Lewa Site Seed Funding:** US\$10,000.

LINKS TO PROJECT BLOGS AND MEDIA FEATURES

- <http://zoonooz.sandiegozoo.org/zoonooz/looming-large/>
- <http://www.nrt-kenya.org/news-list/2016/11/21/san-diego-zoo-to-the-rescue-in-ishaqbini>
- <http://zoonooz.sandiegozoo.org/2016/09/24/defending-the-towers-giraffe-conservation-update/>
- <http://www.nrt-kenya.org/news-list/2016/11/1/tumbling-towers-saving-north-kenyas-giraffes>
- <http://www.nature.org/ourinitiatives/regions/africa/explore/giraffes-in-peril.xml>
- <http://www.nature.org/media/africa/Africa-Year-in-Review-2016-Singles.pdf> (pages 4-5)
- <http://institute.sandiegozoo.org/science-blog/elephant-room>
- <http://zoonooz.sandiegozoo.org/2016/06/19/defending-the-towers/>
- <http://zoonooz.sandiegozoo.org/2016/01/27/giraffes-in-jeopardy/>

THANK YOU FOR YOUR SUPPORT

- You make this possible -



SECTION II:

DETAILED UPDATE ON THE TWIGA WALINZI TEAM & HUMAN DIMENSIONS RESEARCH

by Kirstie Ruppert



TWIGA WALINZI

The *Twiga Walinzi* (Swahili for Giraffe Guards) are the field research team of six men from the Loisaba and Namunyak Conservancies. During the project launch in May 2016, they received extensive training on project plans, methods, and equipment. A secondary objective of this project is increasing capacity for conservation in these communities by building skills for wildlife researchers. The Twiga Walinzi have become proficient in using camera traps, DSLR cameras, and computers for data collection and storage. To complement the photo monitoring and camera trap data, they are fully trained to conduct face-to-face interviews for human dimensions surveys and use iPads to collect and store the survey data.

Not only have they improved in their research skills, but the *Twiga Walinzi* have been invaluable in shaping the project through their traditional knowledge and localized expertise of the landscape and contextual knowledge of the communities where they have grown up. Their contributions have made the research plans robust, realistic, and well received by the community.

We are delighted that our program can support the development of this research team alongside our project partners. And that we support the salaries of the Twiga Walinzi, thanks to our generous funders. We know that one of the best ways to protect wildlife in this region is to offer opportunities for employment in the conservation field, so continuing this work with the Twiga Walinzi

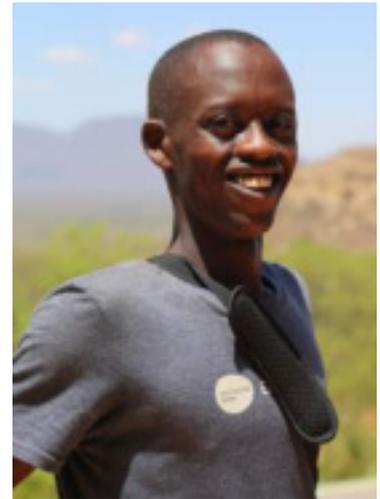
will help save giraffe in northern Kenya. It is vital to directly link conservation benefits to the people living alongside the wildlife we hope to protect.

MEET THE TWIGA WALINZI TEAM



Symon Masiaine Ole Ranah (*Chief Researcher*)– Symon is a member of the Maasai community in Laikipia County, where he and his family of five live close to Loisaba Conservancy. His passion for wildlife started when he was a boy herding cattle in the wild. His passion has grown during his work on wild dog and cheetah conservation projects and while pursuing degrees in Environmental Conservation. Although he is a skilled ecologist, he is especially good at community relations, and his strong character has underpinned his leadership of this team.

Lexson Larpei (*Loisaba Research Assistant*) – Lexson joined Symon at Loisaba in October and has immediately taken to the socio-ecological nature of this project. He earned his degree in Wildlife Management, and recently expressed how excited he has been to apply his knowledge in practice of giraffe conservation.



Daniel Lenaipa (*Namunyak Research Coordinator*) – Daniel has been a dedicated leader at Namunyak after getting promoted to Coordinator in September. He is a certified Safari Guide, which led him to previous research and tourism positions in Uganda and at Maasai Mara. Now, he is grateful to have a wildlife job in his home community after welcoming his first child in November. Daniel has an incredible work ethic and is very skilled in species identification and tracking.

Jonathan Lenyakopiro (*Namunyak Asst. Coordinator*) – Jonathan has been integral in building and maintaining relationships with the conservancy management and surrounding communities. His previous work as an interviewer for an NRT/TNC research project has helped him lead the NWCT team in their community surveys this fall. His wife is a school teacher in a nearby town of Archer's Post, where he lives and is well-connected, so his position on Twiga Walinzi helps influence that population away from use of giraffe parts and products.





Johnson Lekushan (*Namunyak Research Assistant*) – This is Johnson’s first job in wildlife, after his community selected him for this opportunity because of his work ethic and potential. All of the equipment and methods were novel to Johnson, but he is a natural field biologist and has worked hard to learn every aspect of the project. He is particularly adept at photo monitoring, balancing his strength to climb trees and patience to wait for giraffe to get close enough for a photo of their neck pattern.



Sebastian Lerapayo (*Namunyak Research Assistant*) – Sebastian is the newest addition to the team, and he was eager to begin his first job in wildlife conservation. He has been a fast learner, and used communication skills that he obtained from his study of Human Resources to conduct the community surveys. Like Jonathan, he lives in the town called Wamba, which will be an important connection for the community outreach programs early 2017.

HUMAN DIMENSIONS OF CONSERVATION RESEARCH

The major focus for the last quarter of 2016 were the human dimensions community surveys around Loisaba Conservancy and within Namunyak Conservancy. Understanding community members’ relationships and interactions with giraffe and other wildlife species is invaluable when designing conservation interventions. The objectives of the human dimensions component of this project are to gather baseline data of community attitudes towards wildlife, identify perceived benefits from wildlife, identify the sources of conflict with wildlife, and gather information about giraffe poaching and use of parts.

Examples of questions that elicit this information are:

For each of the following, please tell me whether or not you receive that benefit from having giraffe in this community: *Ask each one and get Yes, No, or Don’t Know responses*

	YES	NO	I Don’t Know
a. Money from tourists coming to see them			
b. Job in tourism/conservation			
c. I enjoy seeing them			
d. Meat or other parts of the giraffe			
e. Helps with crops			
f. Helps with livestock			
g. Helps with the working of the savanna			
h. Any other benefits from giraffe we have not said already? <i>Write in short answer below.</i>			

In the last 5 years, what has happened to the giraffe population in Loisaba area? *Tick one box*

- It has increased
- It has decreased
- It has stayed the same
- Don't know

When was the most recent time you used giraffe meat or other parts of giraffe? *Please tick one box*

- Never
- Within the last 12 month
- Between 1-5 years ago
- Between 6-10 years ago
- More than 10 years ago
- Don't know

How often have you consumed giraffe parts or products in your lifetime? *Please circle one below*

- Never 1-10 times 11-20 times 21-30 times more than 30 times

The Loisaba team has conducted 200 interviews, and the Namunyak team has conducted 223 of 300 total interviews, and at both sites, these were collected systematically so the responses would represent the broader population as closely as possible.

Data collection will be completed in January 2017. After which, we will analyze the responses and use the results to prioritize conservation efforts with Security and Management teams. The *Twiga Walinzi* showed great bravery, expertise and effort during these community surveys, while facing unexpected challenges brought by the drought, such as conflict over resources, and then through the rainy season, which caused poor road conditions. Overall, surmounting challenges has strengthened the *Twiga Walinzi's* dedication to the project and commitment to giraffe conservation. Lexson expressed this well in a recent report when he shared, *"The collection of baseline data on human dimensions has built my confidence in community approach and interaction. I was able to meet with people from different backgrounds and with different perceptions and attitudes towards wildlife."*



The *Community-Involved Reticulated Giraffe Conservation Program* is a collaborative effort between:



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