SORALO

South Rift Association of Land Owners

Annual Report **2018**

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SORALO

South Rift Association of Land Owners

We want to see a healthy and intact landscape that sustains pastoralist communities and wildlife.

From the Director,

John Kamanga

'The year 2018 was a year of new horizons. Not only did we forge new relationships and initiatives across our landscape, but we also worked for the first time in the National arena, assisting the Kenyan Government define a conservation strategy for lions and spotted hyenas. Personally, this was a highlight for me, proving that SORALO, a community land owners association has both the technical expertise and local credibility to take on such an important National conservation issue was immensely gratifying.

It was also a good year for the rangelands of Southern Kenya.

Heavy rains in May paved the way for plenty of grass and water for the rest of the year, giving rest and refreshment to the land, wildlife and livestock alike. In terms of our work, we were more focused than ever before, drawing on our first year of our strategic plan to guide us in efforts to secure resources for communities though land use planning and improving our overall communications through re-branding and sharing our story widely.

It is with great expectations that we look ahead to 2019, where our expanded horizons will take more resources to reach. However, with our goals clear and course set, we believe we will be successful in our landscape conservation journey'.

OUR PURPOSE AND APPROACH

Much of SORALO's approach can be summed up by the two Maasai words, each with deep cultural meanings:

Enkop'ang – which roughly translates as 'our good land, our common identity, our common pride'

Eramatare – which roughly translates as 'stewardship over common resources'

Combining these two concepts provides the basis for SORALO's purpose within the South Rift landscape. This landscape is a place where, for centuries, the Maasai people have lived and kept intact, benefiting themselves, their livestock and wildlife. The area is still home to the majority of Kenya's Maasai but today it is a threatened landscape, confronting a growing population, a culture in transition and land use changes that threaten critical habitats.

Our Vision
A healthy and intact landscape that sustains pastoralist communities and wildlife.

Our Mission
To maintain a healthy and connected landscape for people and wildlife in Kenya's South Rift.

ACHIEVEMENTS OF 2018

Protecting Open Rangelands

At the core of SORALO's mission and work is ensuring that the communal rangelands of Kenya's Rift Valley are kept intact and open, ensuring the continued seasonal movements of livestock and wildlife. Across much of Kenya's Maasai lands, formerly communal rangelands have been subdivided into individual plots, which leads to fencing and other barriers that blocks the migration routes and corridors of cattle and wildlife alike. It also feeds a process of individualisation of property that erodes the traditional customary systems- based on communal rangelands- that have been core to Maasai identity for centuries. All of SORALO's work operates at this intersection of preserving culture, protecting landscapes, and conserving wildlife and their habitats.

> *"We have historically and traditionally been doing this planning at our own level, our forefathers did it and we also took it from them and perpetuated it. However, due to changes that have been brought about by population growth, influx of other communities, disrespect for local governance structures and changes in land tenure have made it difficult for communities to do the planning".*
>
> — Former Chief Ole Mepukori, Morijo.'

Loita Forest

One of the key testing sites for SORALO's new emphasis on land use planning is around the Loita Forest. The Loita is an extraordinary area, long a sacred site for resident Maasai communities as well as home for an estimated 400 elephants and many other species. But today pressures on land is leading to clearing parts of the forest for farm plots and settlements, as land holding patterns and management systems change across all of Kenya. This not only threatens the Loita Forest itself, but other areas where SORALO works below the forest in the Rift Valley, which receive water from the forest above.

For the past several years SORALO has been working with several communities in the Loita area to develop land use plans that can be used to resolve land use conflicts and secure communal land areas. During 2018, this work continued, with a focus on translating traditional land uses into digitised maps and training community members on data collection using GPS software and tablets or smartphones. (see Figure 1).

Using a nine-step participatory process which SORALO has developed through previous successes and challenges, we worked with the leaders and community members of the Morijo region to develop a land use plan for this area. SORALO's approach is to plan for the area as a whole rather than focusing on the forest. This, coupled with the fact that the SORALO team on the ground are all Maasai themselves, gained the trust of the community who have a historical resentment of outsiders who in the past have tried to encourage forest protection in isolation of the larger landscape and indeed of the local people themselves. SORALO's slow and steady approach to a holistic model of land use planning has resulted in a wider community consensus and buy-in to the entire process of deciding how best to plan and zone their land in the face of change. The plan aims to assist the community to not only secure the forest and other critical natural resources, but also strengthen the land management systems and ultimately maintain open landscapes.

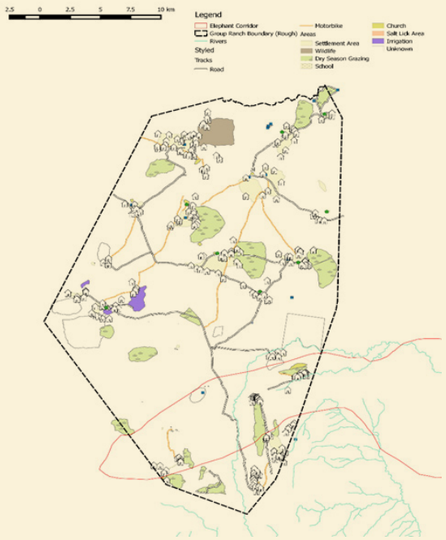
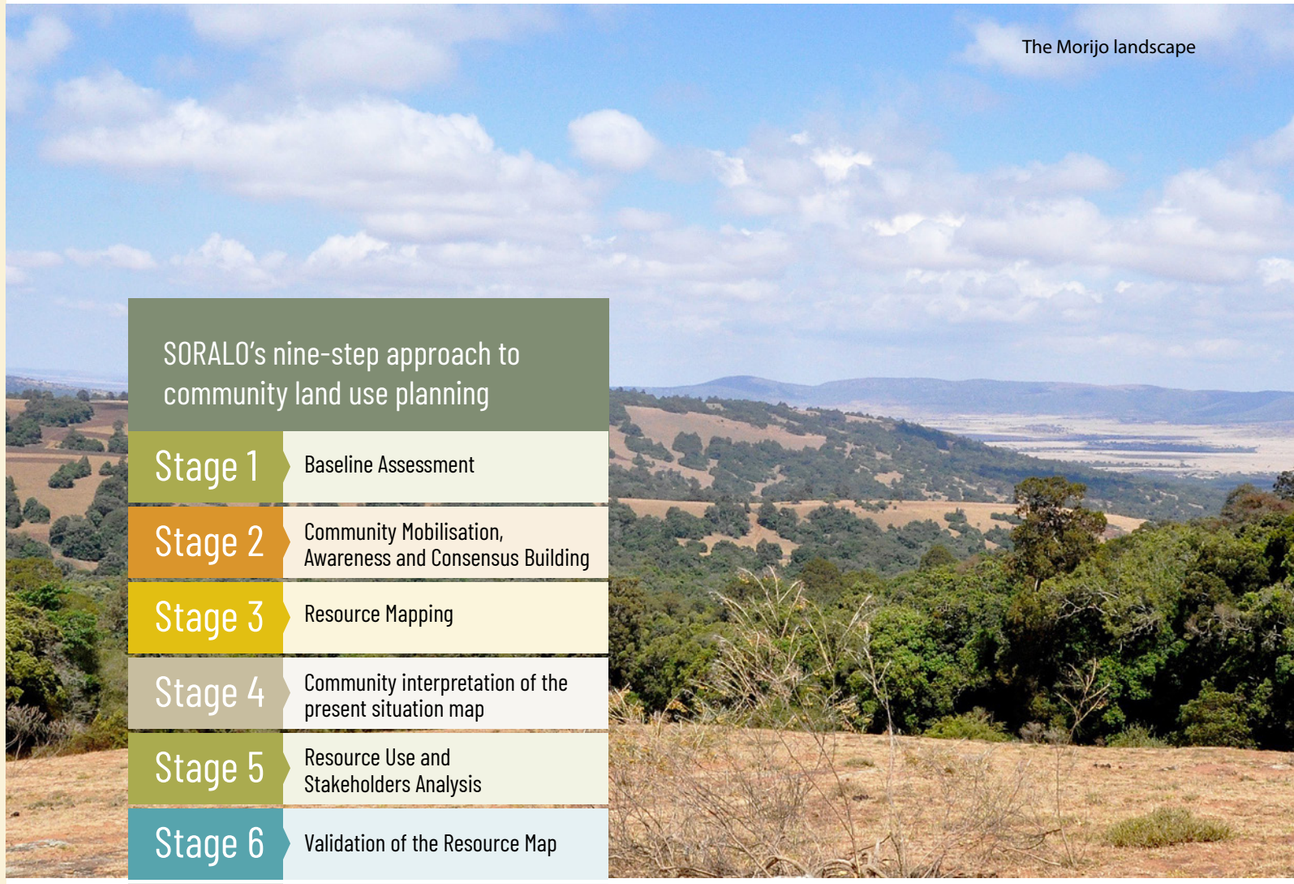


Figure 1: Completed digitised Naroosura Land Use map.



The Morijo landscape

SORALO's nine-step approach to community land use planning

Stage 1	Baseline Assessment
Stage 2	Community Mobilisation, Awareness and Consensus Building
Stage 3	Resource Mapping
Stage 4	Community interpretation of the present situation map
Stage 5	Resource Use and Stakeholders Analysis
Stage 6	Validation of the Resource Map
Stage 7	Developing of a Resource Management Action Plan
Stage 8	Community driven participatory Implementation of the Plan
Stage 9	Monitoring and Evaluation

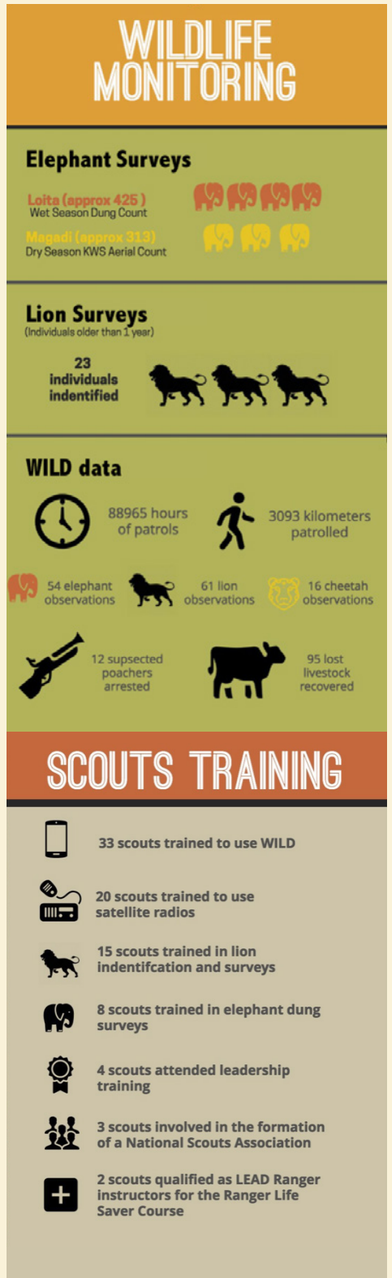
This plan is now complete, and the next steps will include helping the communities implement the plan, formalising the plan within the local County Government framework, and scaling up the planning process to neighbouring regions within the Loita Hills.

Community map of the Morijo landscape

> *"I see this map is as a shield. It is a tool for us to defend ourselves and our land. We wish SORALO has enough resources for the whole Loita Division. If the government comes, it will see that we have this plan in regard to our land and resources".*
>
> — Community member, Morijo.

Conserving Coexistence

Wildlife Monitoring and Protection



Understanding what wildlife exists within the SORALO landscape is vital for designing appropriate conservation interventions. Monitoring of wildlife is conducted both by the resource assessors and game scouts on a regular basis, interspersed with specific studies where appropriate.

In order to understand more about the elephants in the Loita Forest, SORALO collaborated with Wildlife Conservation Society (WCS), Kenya Wildlife Service (KWS), World Wildlife Fund (WWF), and Mara Elephant Project (MEP) to conduct two elephant dung surveys (wet and dry season) within the Loita Forest. The wet season survey estimated the elephant population in the forest to be roughly 435 (CV 20%) individuals indicating the area is a critical refuge for elephants.

A camera trap survey of the Loita forest conducted by SORALO and the Mara Lion Project and published in African Journal of Ecology in December 2018 recorded over 20 species of small to large vertebrates of hippo, lion, leopard, and serval.

Across the SORALO region 33 community games scouts help to protect approximately 321, 000 hectares of rangeland for the benefit of people and wildlife. Employed and trained by SORALO, community games scouts are managed jointly with local community institutions, such as the Olkiramatian and Shompole conservation committees. Over the last year we have tried to ensure we build the skills sets of all our scouts through a range of training interventions. We are especially proud to announce also announce that two of our rangers have qualified as in instructors for the LEAD ranger life saver course and have been tasked with training the rest our team in 2019.

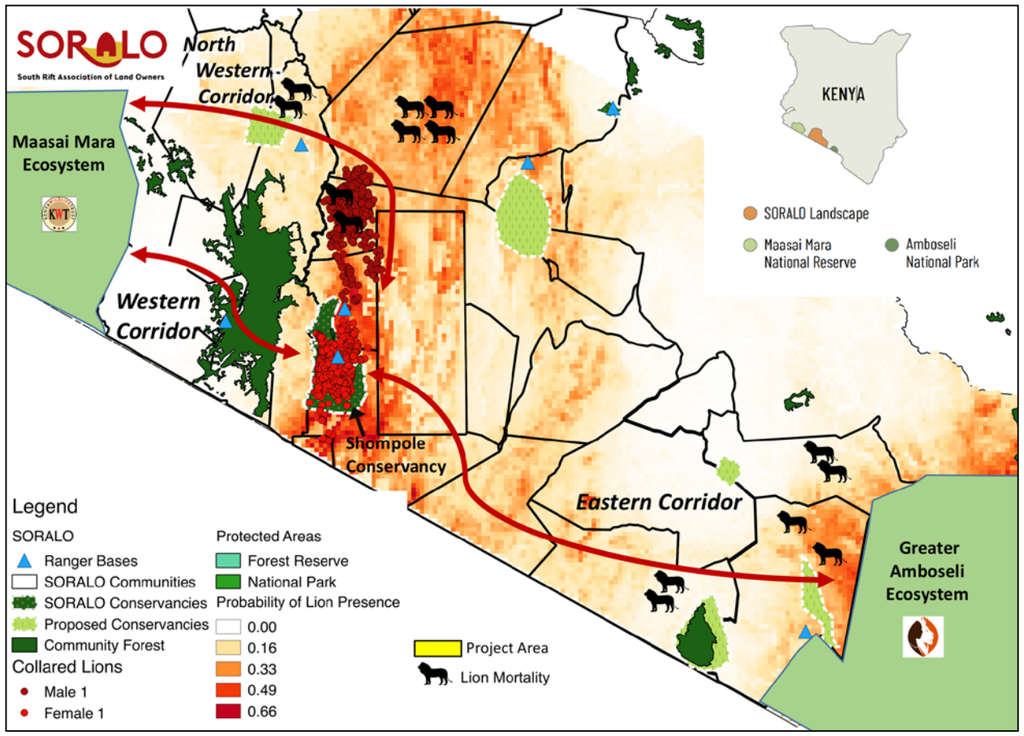
Over the last years 20 years Africa's lion populations have declined precipitously to less than 25,000 individuals. Kenya is home to approximately 2,000 lions who live alongside more than 4 million people and 21 million livestock. As a result, human-lion conflict is a daily occurrence as people and lions struggle to coexist.

Over the last 10 years SORALO's research has helped to demonstrate that Maasai pastoralists in the South Rift are willing and able to coexist with lions.

We continue to work with communities in the South Rift to help them monitor their lions and develop innovative ways to perpetuate human-lion coexistence. This includes combining local-knowledge and cutting-edge science to conduct the first comprehensive lion survey of the Olkiramatian and Shompole conservancy. This survey, commissioned by the Kenya Wildlife Survey and designed by a team of leading global carnivore scientists, was conducted by the local Rebuilding the Pride field assistants, and the data managed and analysed by SORALO's local community data manager. This collective experience allowed SORALO and WildCRU to pioneer a new collaborative and inclusive approach to species conservation planning which culminated in Kenya's new *"National Recovery and Action Plan for Lion and Spotted Hyaena 2019-2025".*

The majority of Africa's remaining lion range falls within or adjacent to human dominated landscapes. Coexistence with, and tolerance of lions, by communities living within the remaining lion range is therefore essential to their conservation.

SORALO is focused on growing our coexistence story in order to continue to create space for people and lions. Thanks to the support of the Lion Recovery Fund we will be working in collaboration with Lion Guardians assist the five communities that connect Shompole to Amboseli to continue to coexist with lions. SORALO is also supporting KWS to see how to launch and implement the new strategy to promote human-lion coexistence across the country (Map 1).

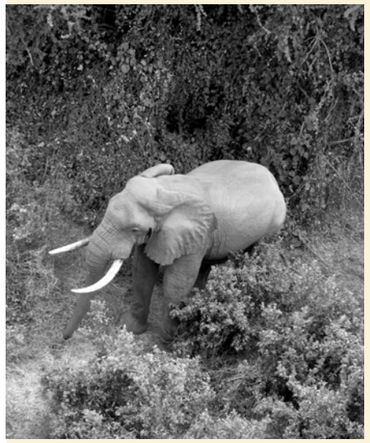


Map 1: The SORALO landscape illustrating the various potential linkages across the region

Elephants

The return of significant numbers of elephants to the Shompole and Olkiramatian community lands speaks to the success of the community-based conservation efforts ongoing in this area. This story is best told in the words of Albert Kuseyo, a community member, leader and former elephant research assistant:

> *"When I was growing up in this area we only ever heard about elephants and rhinos. Back then there were not many of these animals and they were not safe. Over time they disappeared from this area. Maybe they ran away and maybe they were also being poached. All we were left with were stories. Very few people could say they have seen them with their own eyes. But now, thirty years or so later, elephants are back.*
>
> *The first research work I was involved with was with Marissa Ahlering who came here to study elephants, but we rarely saw any elephants, just their tracks and signs. In fact, in the two years she was here we only saw elephants on two occasions and they were very afraid of us. This was in the year 2007, and now today we see elephants regularly and in every corner of our land.*
>
> *We are not sure why this is but it might be because they feel that this is now a safe space, protected by us, the local community and the area has connections that they can use across the landscape. It seems they feel free in this area since they are behaving more and more like they are less and less afraid. As a community we now get to see the elephants, and be proud to show our visitors these animals.*
>
> *It makes me feel proud that my children can now see these animals rather than just hearing about them and shows that as a community the decision we took to be actively engaged in conservation has had results. The only thing that worries me is that in general we are not sure about how to live with elephants, and especially how to handle situations when they come close to our homes or even raid our farms. We will welcome support and ideas for how to live with the consequences of our succes."*

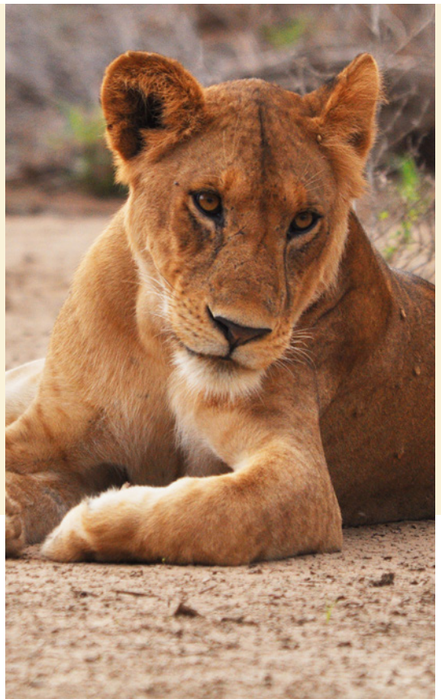


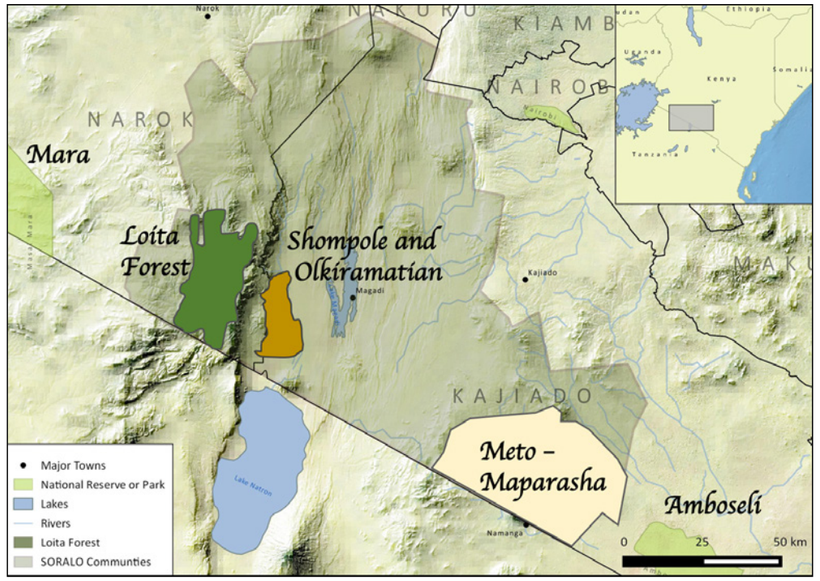
Connecting the South Rift and Amboseli: New Initiatives

SORALO's conservation work in the South Rift began over a decade ago with the pioneering communities of the Shompole and Olkiramatian Group Ranches. These two communities now stand as strong models of community-based conservation. But as SORALO's work develops, greater focus is now being put on linking this area to communities in the Meto- Maparasha in the eastern portion of the South Rift (see map 2). This area forms the connection between the Greater Amboseli Ecosystem and the wider South Rift Ecosystem. Covering a total area of 3,650 km2 it encompasses five communities (Meto, Lorngosua, Maliua, Osilalei, Oldonyo Orok). Over the last two decades the five Meto-Maparasha group ranches have undergone subdivision leading to a proliferation in land sales, fencing, and charcoal burning. This has increased grazing pressure and restricted wildlife and livestock from moving freely across the landscape.

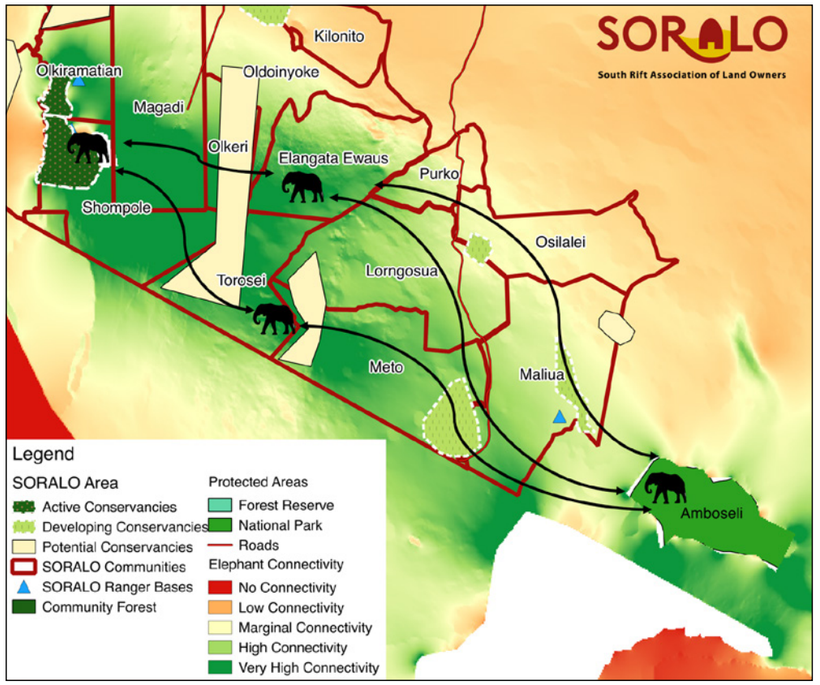
Addressing these threats requires communities to work together and prompted SORALO to initiate a series of stakeholder meetings in 2018, which brought together more than 500 community leaders from across the five communities to discuss wildlife and natural resource conservation. During the meetings communities identified the current threats, challenges and opportunities for wildlife conservation in the region and the governance institutions that needed to collaborate to enable conservation action. The process also identified possible conservation areas and wildlife corridors within the Illiangarunyori/Maparasha area (see maps 1, 2 and 3).

SORALO began to expand the scope of its work across the wider landscape under a grant from the EU **'Larger than elephants'** initiative. However, a key milestone for SORALO's growing work in this area was securing a new three-year grant in late 2018 from the **Lion Recovery Fund** to better understand lion movements in this eastern portion of the SORALO landscape, and to work to develop new conservation areas in this area. One exciting possibility that SORALO is exploring is the development of a new conservancy in the Maparasha area made up of large subdivided ranches, similar to the model that has expanded in recent years around the Maasai Mara. This has the potential to start creating larger management units for both wildlife and livestock that can ensure the enduring linkage between the South Rift and the Amobseli area, including the movement of lions and other wildlife.

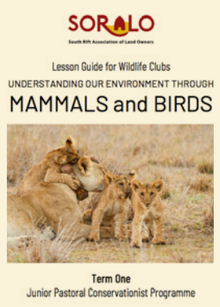


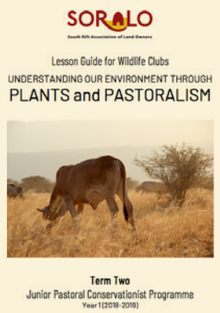


Map 2: The SORALO landscape, showing the landscape in relation to Mara and Amboseli and highlighting the Loita Forest and Meto-Maparasha regions.



Map 3: A map of elephant connectivity between Amboseli and Shompole created using data from a connectivity analysis done by Ospova et al., 2018.





Cultural Leadership

The unique landscapes of the South Rift, and the continued coexistence of people and wildlife, are largely based on the traditions and customs of the area's resident Maasai communities. A core part of SORALO's strategy is a recognition that for the continued protection of these landscapes and local tolerance of wildlife, the community values that underpin those must be maintained.

A key focus in this area of work in 2018 was development of the Junior Pastoral Conservationist Programme (JPCP) targeted at sharing SORALO's story of coexistence with local wildlife clubs in primary and secondary schools through a year-long curriculum (lesson guides). SORALO knows that all efforts towards ecological and cultural conservation will be fruitless if the youth within these communities are not engaged. Each lesson is designed to relate in some way to our three guiding principles: *eramatare, enkanyiet,* and *entaisere.* Since the crafting of our programme framework and the Term One lesson guide between October and December 2018, we will implement the curriculum in six schools (four primary-level, two secondary) as a pilot project between January and March 2019. We also ran a facilitation training for all wildlife club patrons and head teachers to discuss the programme and how we would support it through the year.

Alongside the lesson guides, we have been able to finalise complementary resources, such as our Maasai Cultural Connections book, which tells the story of Maasai clan totems, associations that Maasai people have with wildlife, and will be translated into Maa. We are excited to continue our work with the youth in the South Rift, and grow our vision for this programme and its reach in the years to come.

Lale'enok: A community conservation enterprise

The Lale'enok Resource Centre, located in Olkiramatian Group Ranch, was built a decade ago and serves as SORALO's field base. Owned by the Olkiramatian Reto Women's group, it also functions as a social enterprise, by earning revenue from visitors, such as a growing flow of overseas students who come to Lale'enok to learn about Maasai culture, land management, and conservation practices.

In 2018 alone, the Centre received 161 visitors, and earned significant revenues for the local conservation committee, local employees and for the owners of the centre.

LALE'ENOK 2018	
Visitors	161
Total accommodation revenue (to Reto Womens group)	$ 8,320
Conservation fees Olkiramatian	$ 4,813
Conservation fees Shompole	$ 4,813
Local employment	$ 39,439

Total income to Shompole and Olkiramatian from Lale'enok was **$ 57,385.**

SORALO's Development; re-strategise, re-structure and re-brand.

With support from our capacity development partner Maliasili, in 2018 we continued to redefine our strategy, clarify our internal organisational structure and re-brand ourselves.

Our refined strategy clarified our vision and mission, and helped us to establish goals to help us achieve our vision over the next five years. This allowed us to further refine the structure of our programmes and the people responsible for them.

With regards to our brand, we reached a consensus that our current logo wasn't capturing who we are - it showed scorched land and embodied an aged and heavy look. It was also a low resolution, pixelated JPEG file.

Through a branding workshop we identified key attributes that are core to SORALO's values and approach:

1. People and wildlife are interconnected and there is a strong desire and commitment to support coexistence.
2. The landscape is diverse; it supports livelihoods, livestock and wildlife.
3. The organisation is made up of community members.
4. SORALO brings together landowners.
5. The landscape is the last place owned by Maasai in Kenya and is rich in the Maasai culture.

As a team, we undertook a logo design process that brought all these elements together and were able to launch a new look in April 2018.

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Science for Action

SORALO prides itself on using good science to underpin its work. This year we continued to carry out long-term ecological and livelihood monitoring of the Shompole and Olkiramatian ecosystem, publish work on carnivore pastoralist coexistence, and support publications from across the landscape.

Publications from the South Rift landscape

We are pleased to announce that two of our recent papers have been accepted for publication in the conservation journals Oryx and Conservation and Society. The articles demonstrate that Maasai communities in southern Kenya are willing to coexist with lions and that multi-pronged conservation interventions which seek to reduce livestock depredation, provide benefit from conservation, and foster conservation education are the most effective way of promoting and maintaining human-lion coexistence.

Western, G et al (2018): Creating landscapes of coexistence: Do conservation interventions promote tolerance of lions in human- dominated landscapes? Conservation and Society.

Western, G et al (accepted): Understanding the dynamics of lion attacks on humans and livestock in southern Maasailand, Kenya, Oryx.

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CONFLICT OR COEXISTENCE: HUMAN-LION RELATIONSHIPS IN KENYA'S SOUTHERN MAASAILAND AND BEYOND

What was the aim of the research?

Understanding catalysts of conflict, differences in attitudes among local communities, and the effectiveness of conservation interventions is an integral part of promoting coexistence between carnivores and local communities. This study investigated the complexities of human-carnivore interactions within human-dominated landscapes and aimed to provide a critical review of whether coexistence is possible and mutually beneficial for carnivores and people. The study integrates history, ecology, anthropology, and livestock science.

What were the key findings?

1. Maasai communities in southern Kenya expressed a strong desire for lion populations to be maintained

2. Lions living within pastoral rangelands in Kenya's South Rift Valley maintained home ranges comparable in size to those found in protected areas, and range size was unaffected by seasonal changes in human settlement and livestock — this demonstrates that the community management systems of the South Rift landscape continue to provide high-quality lion habitat

3. Pastoralists living in Olkiramatian and Shompole areas willingly grazed in areas of known lion presents to access better pasture. Their use of traditional ecological knowledge and traditional livestock herding helping them to do so. When lion depredations did occur, guarding of livestock at pasture disrupted attacks resulting in reduced mortality of livestock.

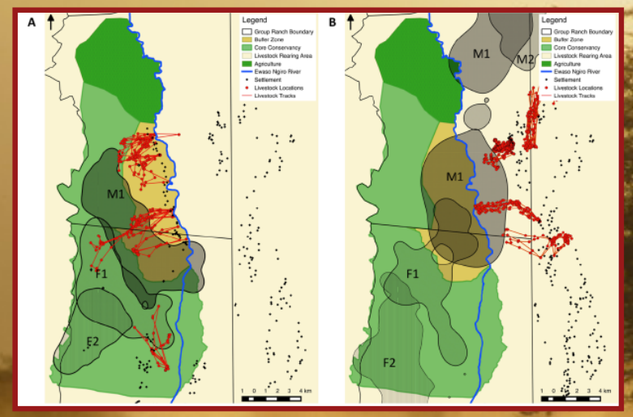

Figure S1. Maps depicting changes in lion monthly universal home range for individual lions (M1, M2, F1, F2) and livestock hanging patterns when settlement is present in the conservancies (A) and when it is absent (B).

Adapted from *Western, G. (2018) PhD Dissertation, Oxford University*

Background photo by Samantha Russell

Partners, collaborators and colleagues have also contributed to the body of knowledge within the landscape, including:

Godfrey, K. (2018). "Toward erematare, beyond conservation: Meaning, practice, and rethinking the conservation story in the Maasai communities of Olkiramatian and Shompole, Kajiado County, Kenya", Masters Thesis. McGill University.

TOWARD *ERAMATARE*, BEYOND CONSERVATION: MEANING, PRACTICE, AND RETHINKING THE CONSERVATION STORY IN OLKIRAMATIAN AND SHOMPOLE

Research questions

What do the words 'conservation' and *eramatare* mean to Maasai pastoralists?
How is land used and governed, and what ecological effects does this have?
How do Maasai pastoralists relate to wildlife, and feel about the costs and benefits associated with living in close proximity to wildlife ('doing conservation')?
What role has SORALO played in supporting both conservation and pastoralism in these communities?

What was learned?

1. 'Conservation' is defined as a place for wildlife and for tourists to visit, it is tied to the idea of a conservancy — *eramatare* on the other hand was a 'wide term' meaning care and management of people, land, livestock, *and* wildlife

2. The three zone land management system in place is working well for people, livestock, and wildlife species, and can be understood through *eramatare* as a healthy social-ecological system

3. For many people, the perceived 'costs' of living with wildlife (e.g. crop raiding, livestock predation, human injury) outweigh the 'benefits' from employment in tourism or conservation fees, but 'conservation' is still worth 'the little milk'

4. SORALO has played a pivotal role in supporting pastoralist needs and keeping landscapes intact for livestock and wildlife both, but the purpose and programming of the organization is not well understood by community members

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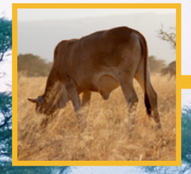
What methods were used?

With the help of Dan Sepis and SORALO colleagues, over 50 semi-structured interviews were conducted in English or Maa with Olkiramatian and Shompole community members (leaders, youth, women, elders), local leaders, and ecotourism operators between May and August 2017.



"Recognizing the compatibility of raising livestock and protecting wildlife within a single governance system means caring for livestock, advocating for ecosystem connectivity through communal or cooperative tenure, and supporting adaptive pastoral management of land to secure sustainable and productive futures" (p. 83)

Adapted from *Godfrey, K. (2018) Masters Thesis, McGill University*

Background photo by Christina Puzzolo

Osipova et al (2018). Using step-selection functions to model landscape connectivity for African elephants: accounting for variability across individuals and seasons, The Zoological Society of London, pp. 1-14.

LANDSCAPE CONNECTIVITY MODELLING FOR AFRICAN ELEPHANTS IN OLKIRAMATIAN AND SHOMPOLE

How important are the Olkiramatian and Shompole lands for elephant populations in Southern Kenya?

What is a landscape connectivity model?

It is a model of the landscape that either eases or hampers animals moving between important resources: water, food, protected lands. Connectivity models help to develop conservation policy that benefits both humans and wildlife.

How do we create them?

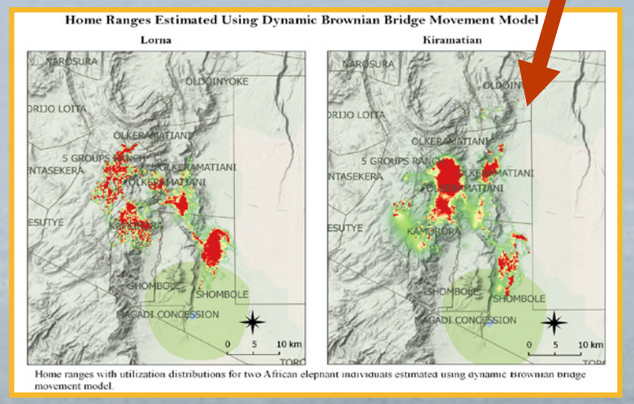
Using GPS collar data. Two elephants named Lorna and Kirimatian, were collared in Shompole. In our model, we 'connected' them with the elephants collared in the Amboseli area to the southwest.

What were our main findings?

1. Shompole is the most important conservancy for keeping elephant populations connected
2. Saving space for wildlife use and keeping culturally traditional lifestyles (i.e. pastoralism) in this area is essential to elephant wellbeing
3. Preserving connectivity between Amboseli and the South Rift is crucial for the future of elephants given rapid agricultural development around Amboseli

What did we learn about Lorna and Kirimatian?

They stay in Shompole swamp most of the time, while Amboseli elephants travel long distances. They spend a lot of their time in forested areas. The average home ranges size for Lorna and Kiramatian is 5 times smaller than the Amboseli elephants.



Home ranges with utilization distributions for two African elephant individuals estimated using dynamic Brownian bridge movement model.

Adapted from *Osipova et al., 2018. Animal Conservation Journal*

Femke Broekhuis et al (2018) An assessment of mammals in Naimina Enkiyio Forest, Kenya, African Journal of Ecology 2018;56:755–758.

Maynard, L., Jacobson, S., & Kamanga, J. (2018). Stakeholder collaboration: Evaluating community-based conservancies in Kenya. Oryx, 1-8. doi:10.1017/S0030605318000789

CASE STUDY:

Loita – Bringing Together the Science, Land Use Planning and Protection

Adapted and summarised from 'Elephant Survey, Loita Forest, February 2018, reported by H. Vanleeuwe, PhD. Forest Survey Project Lead Wildlife Conservation Society and M. U. Nyaligu African Elephant Programme Coordinator WWF Kenya'.

Land-use protection and planning to secure habitats within Protected Areas and efforts to restore African elephant (Loxodonta africana africana) habitat connectivity are amongst the key objectives of Kenya's 10-year National Elephant Action Plan (NEAP 2012-2021 - Litoroh et al., 2012). Action and management plans are underpinned by data on elephant numbers, habitat use and movements. By 2016 all estimates of elephants in forests in Kenya were derived from sample surveys and most estimates were largely outdated. At a meeting held at KWS headquarters in June 2015, 16 forests were identified as being in need of updated information on elephants and the state of the environment and of these, 6 forests were prioritized, including, Mau, Mt. Kenya, Aberdares, Trans-Mara, Loita, and Loroghi/Kirisia. Surveys for the three top-priority ones were redone in 2016 and 2017, led by the Wildlife Conservation Society (WCS). The Loita forest survey had been earmarked for 2018. Unlike the forests surveyed in 2016 and 2017, the Loita forest (Entim Naimina Enkiyo) does not have a jurisdictional protected area status. The forest is used by Maasai of different sub-groups as their dry season grazing reserves. The Loita forest is an important elephant migratory corridor and a critical refuge for a number of other wildlife species including leopard (Panthera pardus) and African wilddog (Lycaon pictus). To account for seasonality and establish the importance of the forest in both wet and dry seasons, a systematic total ground survey was scheduled to be conducted in both the dry and wet seasons.

Although the forest cover is just over 3% of Kenya's land area it contains 50% of the nation's tree species, 40% of the larger mammals (including more than 20% of Kenya's total elephant population) and 30% of known bird species. Kenya's largest rivers originate in the Aberdares, Mt. Kenya and the Mau forest complex, but also smaller forests such as Loita are key to the provision of water all year round for wildlife, people and industry.

In January 2018, SORALO in a partnership with the Wildlife Conservation Society (WCS) commenced on the actual survey within the Loita forest. With expertise of WCS, financial support from Disney's Reverse The Decline (RTD) and financial and in-kind support from KWS and SORALO, the first total systematic line-transect foot survey was conducted in the Loita forest between 19th and 26th of January 2018. . This method does not only function for the purpose of data collection ,but also, allows cleaning of snares and illegal camps and the resulting threat maps allow follow-up patrol planning geared at curbing those threats more effectively. Distribution maps of threats were developed that should aid patrol planning and efficiency. Results will serve as a baseline to support traditional land-use planning by SORALO and the County Administration in Narok, and to look at changes over time through repeat surveys in the future.

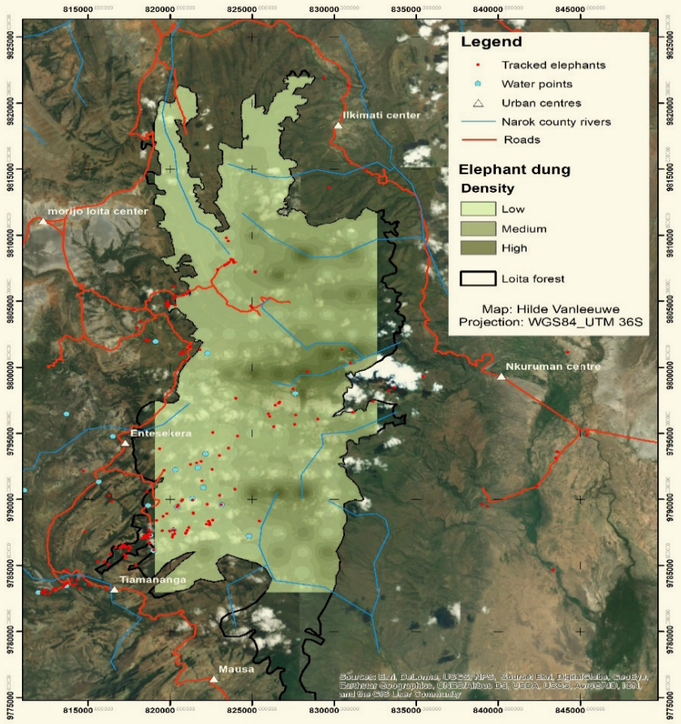


Fig 1 shows the distribution of elephants signs and the movements within the Loita forest. This also served to explain the critical role the forest plays as a wildlife habitat.

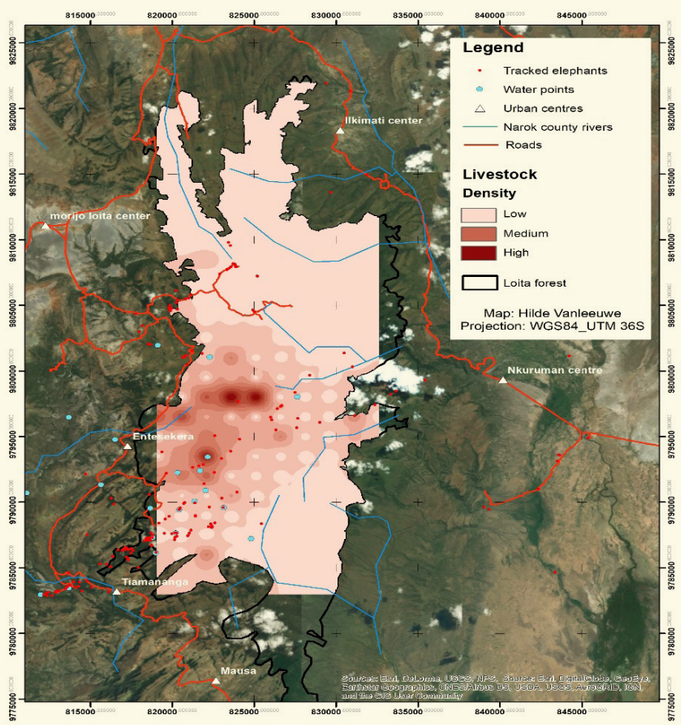
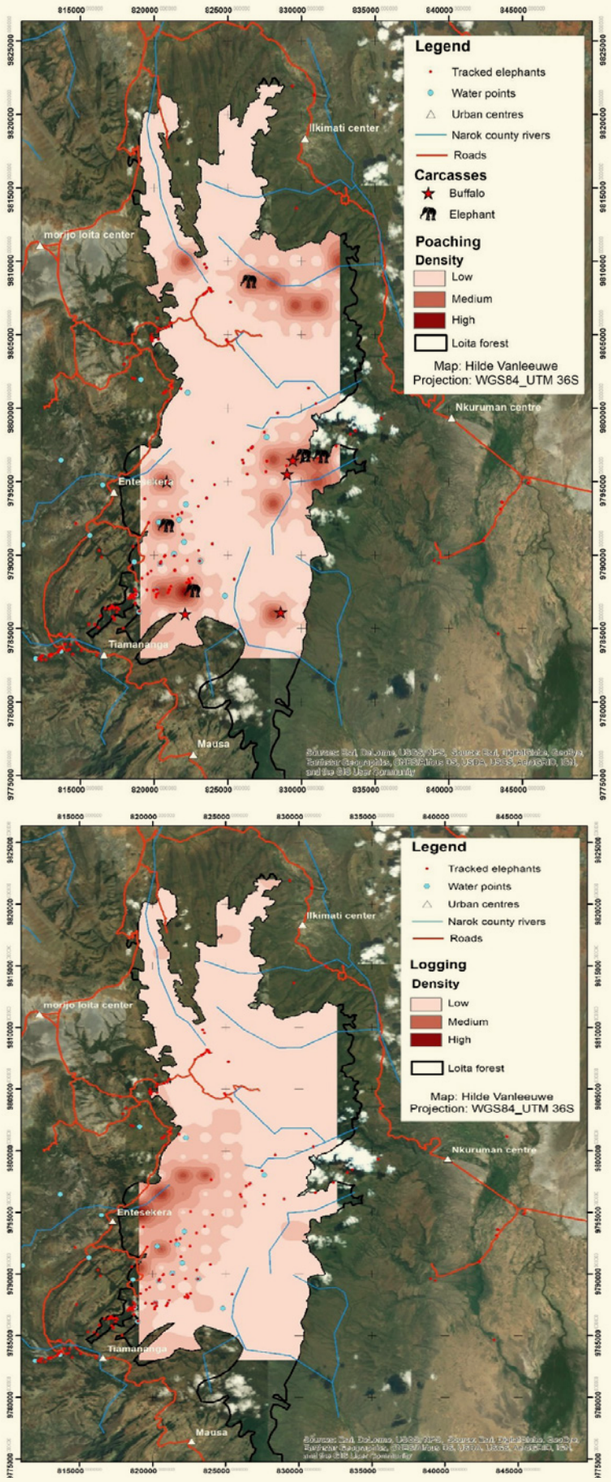


Fig 2 shows the Livestock Density and distribution within the Loita Forest. This demonstrated the extent to which the community is utilizing the forest for livestock grazing and production.

Fig 3 and 4 shows the evidence of anthropogenic activities that were witnessed in the Loita forest that are detrimental to the forest. This presents the poaching and logging incidences as captured during the survey respectively.



The survey showed that the Loita forest is still in pristine condition compared to other forests in the country and very important for elephants and other migratory wildlife. However, poaching incidences are a lot higher than in other surveyed areas in Kenya. With the expansion of human impact i.e. agriculture, settlements and fencing, human-elephant/wildlife conflicts are expected to increase. Agriculture expansion and deforestation near rivers also affects water retention rates and reduces water flow. In addition, the lack of traditional land use planning further threatens overall coexistence in the Loita region.

Immediate Actions should include:

- Discussing solutions to unsustainable activities (especially cedar logging) with the local communities;
- An assessment of the conservation status of the entire Loita region which includes the Loita plains, Loita hills and Loita forest to inform possible conservation interventions in the immediate and long-term;
- Strengthening of existing law enforcement teams including KWS and SORALO rangers;
- Hold a land use planning workshop to review current uses of land and approaches towards addressing encroachment and unsustainable activities resulting from ongoing land subdivision processes.

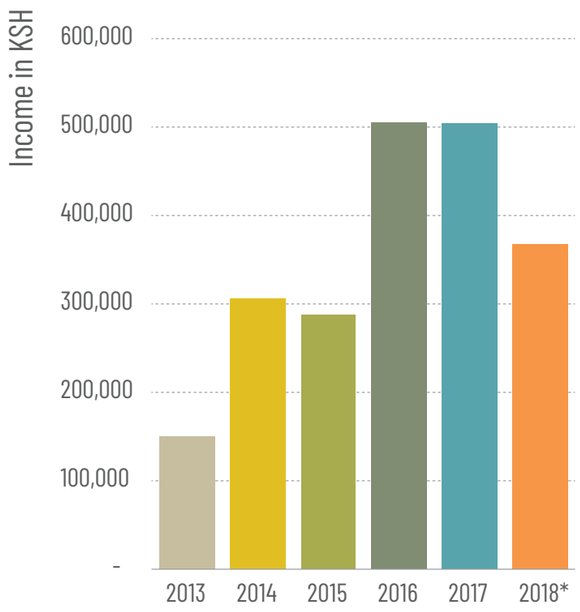
Recommendations:

- Send patrols to the most affected areas to investigate elephant poaching problem areas;
- Intensify surprise patrols in the most affected areas;
- Present back these survey results to all communities who depend on the Loita forest;
- Promote traditional land use plans to avoid conflict and mitigate growing land use and resource use problems;
- Facilitate the completion of the Spatial plan for Narok County to inform better management of resource areas and protection of critical wildlife migratory and dispersal areas in the Loita area and elsewhere in the County.

As a result of this study, actions have been taken as indicated in this report to both plan the resources with the community and to increase protection for these same resources, thus demonstrating the collaboration and interaction between science and action, and the interdisciplinary and inter-programmatic approach taken by SORALO.

FINANCES

DONOR	KSH	USD
CZBG	6,890,300	68,903
LCAOF	699,400	6,994
GAME SCOUT FUND/ LIVING DESERT	1,453,900	14,539
GENERAL SORALO FUND/ FRIENDS CONTRIBUTION	3,198,733	31,987
HOA CCP	4,681,450	46,815
IUCN _NL	5,771,605	57,716
LEOPARDESS FOUNDATION	2,000,000	20,000
IFAW	3,585,000	35,850
WCS	3,000,000	30,000
EU_LARGER THAN ELEPHANTS	624,910	6,249
WWF	1,425,000	14,250
HOA REN	1,813,350	18,134
WILDCRU	1,608,000	16,080
TOTAL	**36,751,648**	**367,516**



* In 2018, two of our large European grants came to an end concurrently, accounting for the drop in incoming funds.

Partners, supporters and our communities

THANK YOU!

First and foremost, we would like to acknowledge the **communities of the South Rift** who are dedicated to keeping their land healthy and intact, and to live alongside wildlife.

We would also like acknowledge and thank **Kenya Wildlife Service, Mara Elephant Project, Big Life, WCS**, and **IFAW** for their technical and on ground support that is invaluable during times of crisis.

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