

# LION GUARDIANS

*Annual Report*  
*2016*





# A WORLD WITH NO LIONS



*Mebikoyu tenkop nemetii ilowuarak*

*A world without lions is not worth living in*

The Anthropocene Epoch is here – an age dominated by humans and, like many species, the majestic lion is at risk of being wiped out as a direct result of human behavior.

With an estimated 20,000 lions left roaming the wilds of Africa, it is a reality that lions may not survive for our future generations to marvel at as we have for centuries. In the last two decades alone the African lion population across the continent is estimated to have decreased by over 40% and now occupies approximately 17% of its historical range.

However, there are pockets of hope, such as the areas in which Lion Guardians operate, where lions are rebounding. By working closely with communities and empowering traditional warriors who once killed lions, Lion Guardians proactively minimizes conflict and enables coexistence for future generations.



# LETTER FROM THE DIRECTORS

From the reflections of 2015, we segued into an effective, action-packed, and challenging 2016.

Despite high levels of lion-livestock conflicts due to a burgeoning and young lion population at our core site, our operational and field activities continued to reap results. We documented a landmark fifth generation of lions in community lands of the Amboseli-Tsavo ecosystem; a far cry from anything we imagined more than a decade ago when the lion population was teetering on the edge.

We spent 2016 transitioning towards our future vision aimed at maximizing conservation impact in a sustainable manner. We met the challenge of improved change head-on and set ourselves three years to effect this transition. At the end of the first year, we are pleased to report that we have achieved 53% of our targeted change. In particular, we developed an exciting research agenda that will inform conservation best practice and will be readily implementable to achieve immediate impact. We also moved away from the day-to-day administrative functions of the Lion Guardians-based projects in Tanzania. This allowed us to concentrate on effectively sharing our specialized knowledge and tools with projects across broader landscapes.

In 2016, we diversified our funding portfolio, collaborated with top universities around the world, became a Finalist in the Rolex Awards For Enterprise, and recruited additional senior managers and Guardians. This enabled us to continue to positively effect conservation in our changing world.

As we move into our decade anniversary year, our goal as an organization is to extend our impacts in the conservation space. We aim to further develop and progress our innovative actions; always working to increase wildlife populations and improved community livelihoods.

None of this would be possible without your support. We are grateful that you continue to share our journey with us as we collectively achieve significant impacts together, conserving lions and preserving cultures.

Ashe Oleng  
(“Thank you” in Maasai)



*Leela*  
Dr. Leela Hazzah  
Executive Director

*S. Dolrenry*  
Dr. Stephanie Dolrenry  
Director of Science



# CORE IMPACTS IN AMBOSELI

Over the last ten years, we have documented and been an integral part of conservation success in the Amboseli-Tsavo ecosystem. And 2016 was no different ...

4.2

Lion density (per 100/  
km<sup>2</sup> on community  
land) more than  
tripled since 2006

37

Hunts stopped  
\*67% in collaboration  
with Big Life & KWS

189

Bomas  
(livestock corrals)  
reinforced

11,262

Lost livestock recovered  
- helping communities  
avoid \$2 million  
in potential loss

20

Lost children found in  
the bush

89,479

Number of  
kilometres walked  
in nine months

Our participatory approach to conservation has helped to transform what was once a sink for lions (an area where lions come and disappear; 99% killed by people) into a source population (an area in which lions successfully breed and disperse out from) helping to revive lion populations across southern Kenya and northern Tanzania.

With an increase in the lion population, mainly due to a sustained cub boom and high survival rates of these cubs into sub-adulthood, we have had to contend with a rising level of depredations. To respond to this, Lion Guardians has developed innovative and culturally appropriate conflict mitigation tools including mock hunts. As a result of these tools and the work of other stakeholders, we have documented an 80% reduction in community hunts post boma raids.

## MOCK HUNTS

This is a unique technique that was pioneered by the Guardians themselves and involves enacting the entire hunt sequence after a lion has raided a boma, but without spears. The idea is to teach lions that boma raiding is unacceptable. We have prioritized analyzing the effectiveness of this technique in 2017.

## ELEPHANT GUARDIANS

Going above and beyond the call of duty, in 2016 Lion Guardians continued to extend its helping hand beyond matters of carnivore conservation. In addition to transporting many sick people in urgent need of medical care, treating and saving numerous injured livestock, the Guardians were also extremely active at mitigating human-elephant conflict. Some community members started to refer to the Lion Guardians as 'Elephant Guardians' since they specifically helped scare away elephants from areas with high human density, warned community members of nearby elephants, and led the tracking of problem elephants after they killed nine people in 2016.





# RESEARCH IMPACT

A central premise of our refined vision is to utilize our strong scientific foundation to continue to develop innovative solutions to human-wildlife conflict issues. While our conservation work and that of our collaborators has been successful over the last decade, times are changing. Cultural practices are shifting and with more lions, people and livestock, levels of conflict have also escalated. In order to keep abreast with these changing times, we have developed a comprehensive research agenda centered on 11 focal topics, each with specific questions to be answered.

## L I N C (LION IDENTIFICATION NETWORK OF COLLABORATORS)

One of the key initiatives that is also a part of our Research Agenda is LINC. Having gone through several stages of prototype development, LINC now has a reliable user-friendly web portal and database back-end that can be used by any project to store and share photographs and data on lions from their areas. This unified and collaborative platform has already helped to make connections with lions that have dispersed to areas far beyond what we thought was possible such as linking a lion dispersing from Amboseli group ranches to the Nairobi National Park lion population. In 2017, in addition to continued refining of LINC's facial recognition software and database capabilities, we are also loading photographs from collaborating groups across southern Kenya and northern Tanzania. We are excited to be working closely with lion projects throughout Maasailand to allow LINC to help make connections between some of the most important remaining lion populations of East Africa. Furthermore, organizations in southern Africa also want to adapt and modify LINC for use across their rangelands.

## GUARDIANS AS CITIZEN SCIENTISTS

One of the key tenets of the Lion Guardians model is the specific use of traditional ecological knowledge blended with modern science to help better monitor and conserve lion populations. Every Guardian was once a herder, roaming the vast plains, implicitly gathering knowledge about terrain, vegetation, water points, and wildlife. Today, as a Guardian, he uses these decades-worth of observations to make calculated assumptions about where a lion would take water and seek shelter. The power of this knowledge is revealed in our most recently published paper ["Conservation and monitoring of a persecuted African lion population by Maasai warriors"](#); published in Conservation Biology.

350%

Mean number of  
lion sightings per  
month increased  
from 4 to 14

x9

Proportion of  
known uncollared  
lions increased  
nine fold

90%

able to predict  
lion's identity  
correctly approx.  
90% of the time





# BROADSCALE IMPACT

At Lion Guardians, we believe that sharing knowledge through partnerships and collaborations is key to achieving long-lasting and broad conservation and livelihood impacts. We worked closely with more than 10 organizations and institutions in eastern and southern Africa during 2016. Here are a few examples of these collaborations:

## KENYAN COLLABORATIONS

In 2016, we trained the Mara Predator Project and the Athi Kapiti Wildlife Conservancies Association on how to use LINC. We were key participants in the Borderlands Lion Conservation Initiative and the Amboseli Ecosystem Trust human-wildlife conflict committee. And day-to-day, we continued to work closely and effectively with Big Life Foundation and the Kenya Wildlife Service at our core site to mitigate the increasing levels of human-wildlife conflict.

## REGIONAL PARTNERSHIPS

The Lion Guardians-based projects through collaborations with Ruaha Carnivore Project (RCP) and KOPE Lion have seen great success. For instance, in Ngorongoro they have recorded a remarkable survival of lions in areas with previously high rates of mortality. In 2016, we continued to provide advice and support to KOPE and RCP on various aspects of conflict mitigation including ways to stop lion hunts and internal and external conflicts. We also attended two African Leadership Network workshops developed by Maliasili Initiatives and supported by the Nature Conservancy.

## INTERNATIONAL NETWORKS & AFFILIATIONS

### PRIDE

Our directors are proud to be founding members of PRIDE; an alliance of professional women from across Africa who lead carnivore conservation projects. The network is committed to using their collective knowledge and experience to increase the effectiveness of conservation efforts.

### COLORADO STATE UNIVERSITY (CSU)

Lion Guardians worked with thought leaders from CSU and Ohio State University to develop a framework to encourage and allow for social innovation to effectively deal with human wildlife conflict problems.

### UNIVERSITY OF CAPE TOWN

Our directors are now honorary research associates of the newly formed Conservation Conflict Research Institute (CCRI) at the University of Cape Town. This first-of-a-kind hub in Africa is dedicated to understanding and mitigating conservation conflicts and aims to guide the realignment between humans and the natural systems we all depend on.

### AFRICAN LION WORKING GROUP

Lion Guardians are an integral member of this international group of academics and conservation practitioners who promote scientifically-based conservation strategies for free-roaming lion populations. At the 2016 working committee meeting, our Director of Science chaired a session on human-lion coexistence that was attended by Botswana's Minister of Environment as well as other dignitaries.





# RECOGNITION & FUNDRAISING

## AWARDS

### 2016 WILDLIFE WARRIOR AWARD

We are proud to announce that Luke Mamaai, the Lion Guardians Program Manager, was named a 2016 Wildlife Warrior by the Houston Zoo, as part of their conservation hero award program. The award is designed to increase the recipient's conservation community network and inspire empowerment by providing opportunities to gain further education through training or experiences.

### ROLEX FINALIST

The Rolex Awards for Enterprise is a highly prestigious award granted to innovators from around the world. Our Executive Director became a finalist at these awards in 2016.

## UNIQUE FUNDRAISING APPROACHES

As our organization grows so do our budgetary needs. And as always at Lion Guardians, thinking outside the box and taking a unique approach is something we love to do. Here are a few examples of how we diversified our fundraising in 2016:

### THE ANIMAL BALL

We participated in the revelry-filled Animal Ball, which was presented by Elephant Family and presided over by the Prince of Wales and the Duchess of Cornwall in London.

### CORPORATE SPONSORSHIP

We partnered with Chantecaille who developed a gorgeous line of cosmetics inspired by Lion Guardians and received 5% of the profits as a donation.

*“We chose to support the Lion Guardians because they embody everything we believe in - intelligence of the situation, true understanding of the local communities and a fierce determination. All that if I may add with grace and passion. We are very proud of being able to shed more light on their courageous work.”*

SYLVIE CHANTECAILLE,  
PRESIDENT AND CEO CHANTECAILLE





# OUR FINANCES

Information below is reflective of what it takes to run our field operations in Kenya. In addition, we have operating costs for our fiscal sponsor, Lion Guardians U.S. which supports community-based conservation initiatives in Africa. In total, for both these entities, we need to raise \$800,000 annually to operate effectively.

Lion Guardians  
Amboseli

\$137,327

Science and  
Research

\$58,104

Knowledge  
Sharing

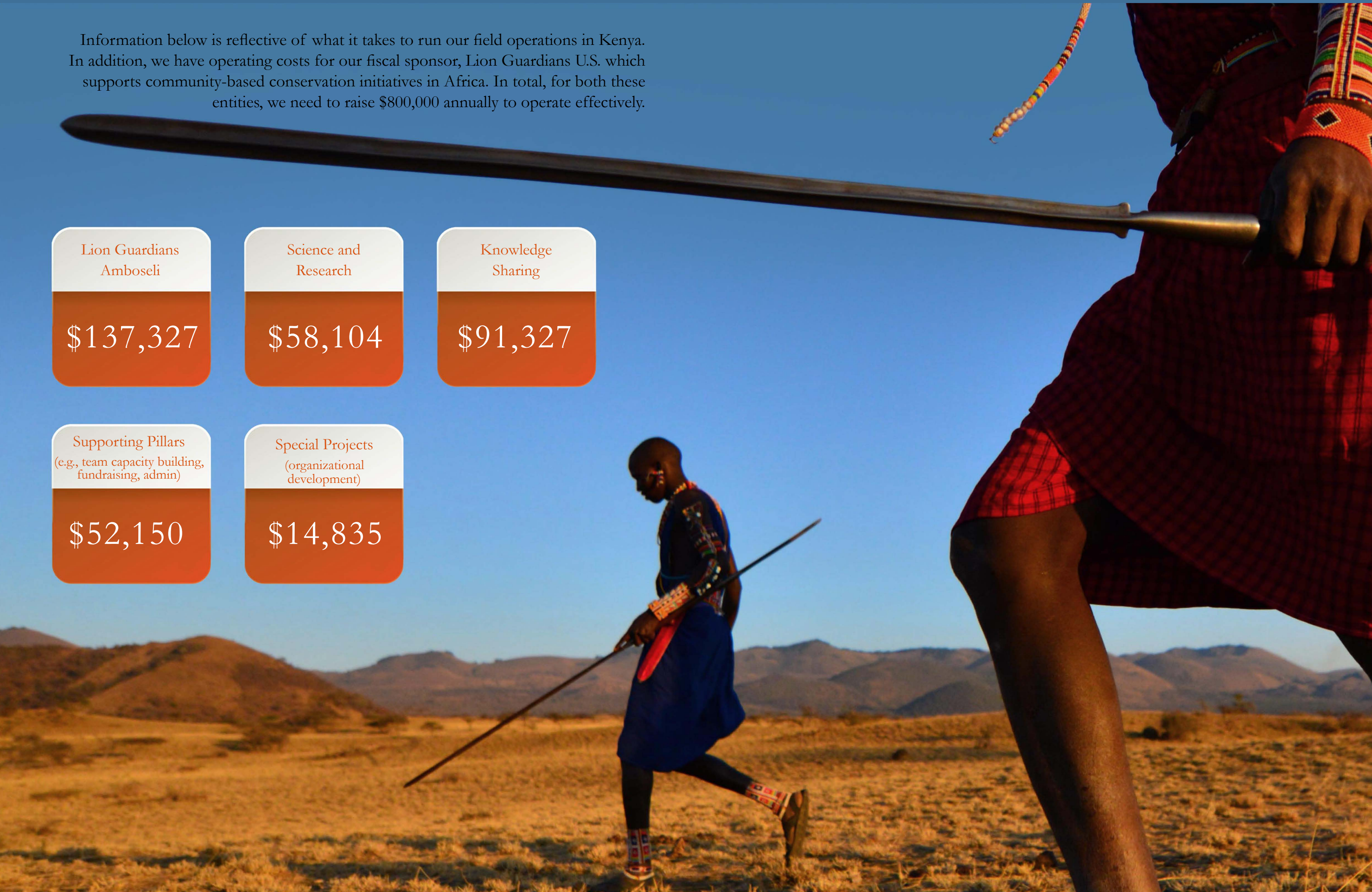
\$91,327

Supporting Pillars  
(e.g., team capacity building,  
fundraising, admin)

\$52,150

Special Projects  
(organizational  
development)

\$14,835





# LOOKING AHEAD

Ten years ago, Lion Guardians began with only five Guardians in a relatively small area on one group ranch in the Amboseli-Tsavo ecosystem. At our core site alone, our operations now span over a million acres with ten times the number of initial Guardians. We are proud to have worked with numerous groups to launch Lion Guardians-based projects across seven additional sites in three countries as well as conducting trainings for hundreds of people on all the various aspects of community-based carnivore conservation. In January of 2017, we are proud to mark our decade anniversary by dedicating the year to “Communities and Science”.

Over time, much has changed in the areas where we operate – including more lions and people. To keep on the cutting-edge of conservation, we plan to spend significant time in the field answering important questions to better inform conservation practice within the changing contexts. We believe that a science-based approach will allow us to continue pushing the boundaries with novel techniques and help to maintain sustainable impact.

In addition to transitioning to our refined vision and retaining strong impact in our core area of operations, some of our key milestones for 2017 include:

- 1 Conducting specialized conflict mitigation training and coaching for anti-poaching teams in Tanzania and Kenya dealing with heightened levels of human-wildlife-conflict.
- 2 Initiating our formalized research agenda with dedicated field time spent on research to inform conservation as well as hosting researchers to answer critical questions.
- 3 Partnering with other stakeholders in Amboseli to develop and pilot a Problem Animal Control (PAC) policy to reduce human-lion conflict in community lands. Post completion of a successful pilot, we will support the nationalization of this policy.
- 4 Pioneering a modeling approach for walked spoor count analysis to estimate lion densities in vast inaccessible areas.
- 5 Building on our fundraising base in Europe through our collaboration with Elephant Family.







THE WILDCAT FOUNDATION



# THANK YOU



Acacia  
Conservation  
Fund

ELEPHANT  
FAMILY   
Protecting Asian elephants and their habitat

We cannot say it enough - without you, we would not be able to effectively conserve lions and preserve cultures. All of us at Lion Guardians deeply appreciate your long-standing commitment to the Guardians and their lions and hope that you will continue to support us into the future. Together we can continue to impact the lives of lions and people across Africa. This year, we would also like to share a special message of thanks from Guardians to their sponsors as well as from the lions (via the lion monitoring team).

*“Emayiana enkaina naishooyo”*  
*Blessed is the hand that gives*

*Ashe Olenq from the Guardians*

“With the help of your generous donation, I have been able to pay school fees for my children, feed my family and buy coveted livestock. I hope you received my end of the year letter and I just wanted to say again - thank you for standing with us.”

LEKUTUK OLE KIMITI, GUARDIAN

*Asante Sana from the lions*

“Lions may not have words with which to thank the many people that have contributed to conserving them. But through their mighty roars that now regularly echo across the community lands where they were once vanishing from, they thank you. Through their roars, they share their hope for a better future, a hope that they will live to roam far and wide for generations to come.”

FROM ALL OF US ON BEHALF OF COMMUNITY LIONS







*Conserving Lions  
and  
Preserving Cultures*

[www.lionguardians.org](http://www.lionguardians.org)

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