

# PERSISTENCE: THE STORY OF 2022 "Emutai Epoki -Things Die While Others Thrive"

Dear Supporters –

The year 2022 was a challenging one for us as an organization working within pastoralist areas. The Maasai communities encountered huge losses due to the tough drought. We lost the majority of our treasured resources i.e. cattle, sheep, and goats due to lack of pasture and water. The wildlife, especially herbivores, were also hard hit by the lack of rain. We witnessed the deaths of hundreds of wildebeests, zebras, and giraffes within our areas of operation because of the effects of the drought. On the flipside, the lions thrived due to plenty of carcasses across the landscape. Our field teams worked tirelessly to help communities by searching for lost livestock and transporting weak livestock home. During this difficult time, our organization donated food to the most vulnerable groups including the elders and widows. Despite the challenges we still worked hard to ensure coexistence and peace between lions and communities.

The team is also excited that the We Empower Each Other - Lion Guardians (WEE-LG) system became fully operational in 2022. This institutional arrangement has enhanced equitable decision-making and everyone feels accommodated at the decision-making table. It has really uplifted the team spirit.

- Lion Guardians Senior Management Team (John Merishi, Eric Ole Kesoi, Maria Saruni, Luke Maamai, Jeremiah Purka, James Silankei, George Gituku, Pauline Kamua, Nadia de Souza, and Philip Briggs).

### 2022 HIGHLIGHTS

We operated within challenging times for communities and prosperous times for lions...

### **COMMUNITY METRIC**

WE DISTRIBUTED 31,747 LBS OF MAIZE AND 10,582 LBS OF BEANS TO 240 ELDERLY AND VULNERABLE FAMILIES.

LION METRICS

103

NEW YOUNG CUBS -43% of the entire LION POPULATION ARE CUBS UNDER THE AGE OF ONE.

#### WEE-LG METRICS

100%

RETENTION RATE OF SENIOR MANAGEMENT and Guardian TEAMS.

#### WEE-LG METRICS

20 NEW STAFF MEMBERS HIRED, PROMOTED, AND ONBOARDED.



## CLIMATE CHANGE: A TRUE TEST OF COMMUNITY RESILIENCE

In 2022, the nearly million-acre area where we conduct our core operations grappled with the profound repercussions of one of the most severe droughts ever experienced in East Africa. There was a complete loss of pasture, with an estimated 50-70% loss of grazing animals.

The drought put immense pressure on communities, forcing large numbers of Maasai pastoralists and families to migrate hundreds of kilometers in search of new pasture or investing all of their income on buying and shipping hay in order to save their livestock.

I drove my cattle to Magadi to find pasture for them. In the seven months that I was away, my entire herd died of starvation and disease. I returned empty-handed. I am dependent on donations from my friends to help me support my family. The acacia trees that we used to depend on to feed goats and cows during dry seasons have been cut down and the timber sold to build fences for privately-owned land. I do not know how future generations are going to survive tough seasons. - KIMITI OLE SARUNI, RESIDENT OF ESELENKEI

Kisii

Naivasha Nairobi . a. Arusha Mombasa 0 Map showing routes 200where communities migrated during the drought Kilometers

In the face of diminishing food and water supplies, life became increasingly challenging for the Maasai family members that remained behind. While visiting the community elders in 2022 (to receive guidance and learn from their wisdom - a core part of our work), we learned that the drought had tragically claimed the lives of numerous elders and vulnerable people.

# \$45,000 DONATED IN FOOD RELIEF TO THE ELDER AGE SET AND THEIR FAMILIES.

We saw the need to ramp up our efforts to support drought-stricken communities. Fortunately, thanks to support from our donors, we were able to guickly deliver much-needed food relief to the elderly and their families.

We pastoralists have lost hundreds of our livestock as a result of the drought. The burden of buying hay and other livestock feed has been very heavy. However, had it not been for the livestock feed, we would not have any livestock left. The income I earn as a Guardian has enabled me to feed my livestock and support my family.

- Kikanai Likampa, Guardian

Due to the many challenges that arose with herding weak livestock long distances in extreme drought, we hired more Master Herders and promoted many to become Guardians. During this challenging period, the Guardians and Master Herders massively stepped up, working around-the-clock monitoring lions and mitigating conflicts.

> HIRED 10 NEW MASTER HERDERS.

Promoted

MASTER HERDERS TO GUARDIANS, EXTENDING OUR COVERAGE AREA

an area approximately two and a half times the size of London, or three times the size of Los Angeles.

GUARDIANS PATROLLED 910.336 ACRES\*.

#### 19

GUARDIANS & MASTER HERDERS RECEIVED TRAINING & REFRESHERS.





"Menyanyukie siligi pala -Hope is better than hopelessness"

66

## NATURE'S PARADOX: LIONS THRIVE IN DROUGHT

While communities severely suffered throughout the drought, the lion population thrived. The scarcity of resources weakened wild prey, creating an abundance of easily-accessible food for the lions. As a result, the availability of abundant food sources played a pivotal role in mating among the lions, contributing to a notable growth in their population.

Typically, about 30% of the lions we monitor use the Amboseli National Park during the dry seasons. But due to the longevity of the drought, the lions that normally disperse out of the Park during the wet season remained until the end of 2022. This was an unusual occurrence. We took this opportunity to spend ten days in the Park tracking the lions, as it was easier to locate them compared to when they are in the bushier community lands. **We were delighted that the Guardians and monitoring teams were able to detect approximately 70 lions including new cubs.** 

Our efforts show that the lion population continues to grow across the ecosystem.

Lion density (number of individual lions, all ages, detected per 100 sq km)

Proportional increase in percentage of old lions in the population

2004

We also were able to find and spend time monitoring a few of the oldest lions in our ecosystem, including the legendary Loonkiito. In the wild, lions rarely live past 10 years old. However, increased tolerance from communities and the unique circumstances of the drought had a profound impact on increasing the longevity of lions, most notably of Loonkiito and lioness Asama.

By our estimates, Loonkiito was at least 18 years old in 2022, certainly the oldest male lion in our ecosystem and possibly the oldest free-roaming male lion in Africa. He was strong considering his old age and, to our amusement, still mating, but definitely losing his ability to hunt anything beyond fish. Drought and community tolerance extends the lives of these lions, but when the rains come, we know times will be tough for the old and weak lions.

11% OF THE OVERALL LION POPULATION ARE OVER AGE EIGHT.

2016.



7.0

6.0

5.0

240

## CONSERVATION IMPACTS

Lion Guardians is committed to evidence-based conservation. Having engaged in lion research and community-carnivore conservation for close to 20 years, to our knowledge we are Africa's longest-running lion project outside of protected areas. In that time, we have gathered detailed data about individual lions in our operating area: identifying them, tracking their movements, and seeking to understand their patterns and behavior. Our data allows us to measure our impact and make conservation decisions based on the characteristics of individual lions.

Knowing individual lions and population trends is difficult. We collect data in a variety of ways, including continuous lion censusing and periodic (every 3 years) systematic surveys. The most recent survey concluded in early 2022.

### IN 100 DAYS SURVEY PERIOD:





As well as collecting data on the lion population, one of our primary objectives is to gather crucial data on community tolerance. Our findings from the past 15 years show that communities are choosing to be more tolerant as opposed to engaging in retaliatory hunts.

We are pleased that despite the extreme drought conditions and hardship felt in 2022, the lion population continued to grow and communities continued to choose tolerance; achieving the long-term mission of co-existence.

### WHAT LIES AHEAD

Predictions in 2022 were that the drought could come to an end in 2023. Therefore, we recognized the urgency to intensify our efforts in conflict mitigation throughout 2022.

In our nearly two decades of working in pastoralist areas, we have witnessed a recurring pattern of conflict that is linked to the changing global climate. We have seen increased drought that lasts longer than previously, and when the rains do come, they are more intense (meaning we may get fewer rains but the amount of rainfall in one day or one event is much greater than seen previously). As a consequence, we have observed that during rain periods, carnivore-livestock conflicts intensify.

Alongside strengthening our conflict mitigation toolkit throughout 2022, we also prepared for an uptick in conflict in 2023 by:

> Training and hiring more Guardians and Master Herders. patrols and mock hunts.  $\bigcirc$ Monitoring the movements of known problem lions closely.

Retaliatory hunt per depredation graph demonstrates an increase in community tolerance.

Increasing the personnel, training, and equipment necessary for conducting night

Working closely with the communities, alerting herders on the presence of lions, and helping to transport any livestock injured by lions back to their owners.

Helping move bomas (livestock enclosures) from high-risk zones to less risky regions.







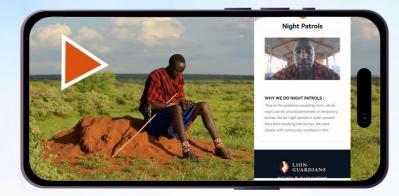




## **INCREASING OUR EFFICIENCY &** WIDENING OUR REACH

We also took proactive measures in 2022 by designing tools to enhance our work and broader conservation efficiency.

- Going Digital with LoraWAN & EarthRanger: In partnership with Technology for Conservation (T4C), we are testing and implementing new tracking and alerting technology (LoraWAN collars plus mobile gateways around erupting conflict hotspots) to facilitate in detecting problem lions faster as they approach homesteads, to proactively mitigate conflict, and understand individual lion behaviors. We are also getting all field personnel and vehicles on to digital devices and synced with the LoraWAN collars for more efficient data connectivity and uploads.
- Knowledge Sharing app: In 2022, we created a smartphone application that will act as a platform for sharing knowledge and lessons learned from almost 20 years in conservation.



WATCH THE VIDEO TO LEARN MORE

Lion Identification Network of Collaborators (LiNC): LiNC is an open-source database accessible to conservationists and researchers across Africa and beyond. Read more on open-source conservation

# EQUITY & LONG-TERM SUSTAINABILITY

It has always been the objective of the Lion Guardians' founders that the organization be fully-owned and entirely run by the community. This is why we created a Senior Management Team (SMT) to run Lion Guardians operations, composed primarily of Maasai people from the region. In 2022, to strengthen the SMT, the founders and directors created an organizational arrangement with an embedded performance management system that the team christened "We Empower Each Other - Lion Guardians" (WEE-LG). Read more about WEE-LG.

#### EQUITY:

- 50/50 gender balance on SMT
- In 2022, we conducted an equity and annual raise analysis to provide annual and equitable salary raises for each member of the SMT

#### LONG-TERM SUSTAINABILITY:

- Organizational budgets 100% managed by the SMT
- SMT budget 3% under overall budget. Less than 5% variance on annual expenditure vs budget
- 100% SMT participation in organizational decision-making

EMPOWER EACH OTHER



### REFLECTIONS FROM OUR CO-FOUNDERS

Due to the changing climate and severity of the ongoing drought, 2022 was an incredibly difficult time for pastoralist communities. It is hard to stay positive and focused when your livelihood is dying day after day with no rain in sight. But, the communities and our teams showed incredible strength and resilience despite the hardships - the definition of persistence. And the lions that were once nearly gone from this landscape thrived. Again, persistence in its truest sense. During tough times, keep hope, and keep persisting.

- Dr. Stephanie Dolrenry and Dr. Leela Hazzah

IT TAKES A COMMUNITY TO CONSERVE LIONS & PRESERVE CULTURES - WE ARE GRATEFUL YOU ARE PART OF OURS.

### A LEGACY FOR LIONS

Our work is undoubtedly a monumental task that no individual or organization could do alone. It takes an entire community to safeguard lions and protect cultures. We are deeply grateful to our invaluable donors, partners, and passionate supporters whose unwavering commitment has remained strong throughout. It is their support that has brought us to where we are today, and enables us to continue on into the future.

Special thanks to...

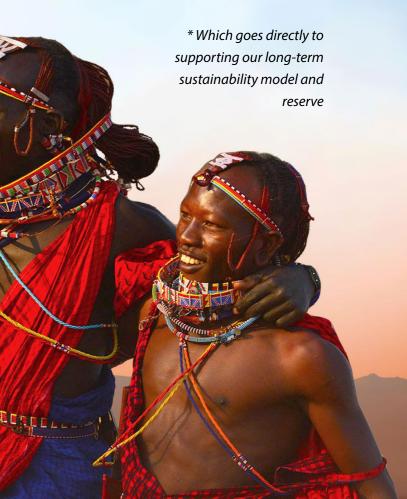
Alexander Family Foundation
BAND Foundation
Blue Foundation
Bromley Charitable Trust
Ganesh Ramani
One Voice Charitable Fund
Rosenthal Family Foundation
Seadream Family Foundation
Shared Earth Foundation
Woodtiger Fund

### 2022 FINANCIALS

#### **REVENUE & EXPENSES**

Our fiscal sponsor, Lion Guardians U.S., also known as Wildlife Guardians, accepts donations on behalf of Lion Guardians for our on-the-ground operations across East Africa. Below, we detail 2022 revenue earmarked for Lion Guardians and our expenditures, broken down by program area. Please note that these financials reflect what it takes to run our field operations. In addition, our fiscal sponsor Lion Guardians U.S. incurs costs that support wider communitybased conservation initiatives in Africa. In total, for both these entities, we need to raise \$1.2 million per year to operate effectively and sustainably. (Complete financial reports are available on request.)

| EXPENDITURE                                       |   | REVENUE                         |
|---|---|---------------------------------|
| Lion Guardians Amboseli \$488,295                 |   | \$328,500 Restricted            |
| Science & Research \$132,592                      | 5 | \$516,500 Unrestricted          |
| Impact Scaling \$22,159                           | 2 | \$49,948 Gain/Loss on Exchange  |
| Supporting Pillars & \$69,532<br>Special Projects | I | \$894,949 Total Revenue         |
| Total Expenditure \$712,578                       |   | \$182,371 Change in Net Assets* |



### ABOUT LION GUARDIANS

In the last 50 years, it is estimated that at least 50% of Africa's lions have disappeared, and retaliatory killing is one of the main drivers behind the significant decline. As human populations in Africa rise, lions routinely come into direct conflict with people over increasingly limited resources. Every year, conflicts intensify due to the continuing depletion of wild prey, habitat loss, and poor livestock management, further threatening lions' future survival.

Lion Guardians is a conservation organization that promotes the coexistence of people and lions by embracing cultural traditions and innovating novel, sciencebased solutions. Our innovative approach has helped to reduce lion killing by more than 90% at our core site in the Amboseli-Tsavo ecosystem, where we are proud to protect one of the continent's few free-roaming and growing lion populations. We continue to increase our impact globally and across wildlife species by answering critical scientific questions that drive innovative solutions and sharing our knowledge with others from across the globe. Since 2007, we have trained and supported hundreds of African conservationists at different sites to monitor and protect threatened wildlife populations and mitigate human-wildlife conflict.

### www.lionguardians.org

#### **ADMINISTRATION**



Wildlife Guardians (DBA: Lion Guardians U.S.) is a charitable non-profit organization based in the U.S.A. (EIN 36-4712624); and the fiscal sponsor for Lion Guardians Limited.



Lion Guardians Limited is a non-profit limited liability company registered in Kenya, running and managing field operations.