



LION GUARDIANS

ANNUAL REPORT 2009-2010

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Photo by S. Dolrenry

Executive Summary

Last year, Kenya experienced the worst drought ever recorded. The Lion Guardians project redoubled its efforts to give immediate benefits to communities during this difficult time. The Lion Guardians project on Mbirikani Group Ranch has just completed its third year; built upon this successful foundation, in 2009 the Lion Guardians nearly tripled its project area to include two neighboring group ranches in the Amboseli ecosystem: Olgulului Group Ranch and Eselenkei Group Ranch. There are now 23 Lion Guardians working over 3500 km², reducing human-lion conflict within their communities and monitoring lion population health. In June 2010, we further expanded the project to include southern Olgulului, between Amboseli National Park and the Tanzania border, an area where lion killing has been rampant and where communities and the Kenya Wildlife Service are requesting a Lion Guardian unit for the benefit of both lions and people.



Photo by: P. Briggs

1. Background

For centuries, Maasai warriors have both revered and hunted the lions which roam the rangelands of East Africa and stalk their beloved cattle. Where people and livestock live alongside wildlife, conflict is inevitable. Due to a multitude of human factors, lions are now nearing extinction in Kenya. Immediate action was needed to not only protect the remaining lions, but to also bring benefits to the people who share their land. The Lion Guardians project was initiated in late 2006 under the umbrella of the Living With Lions project, to give the Maasai people, particularly young warriors, benefits from sharing their land with lions. The Lion Guardians project works on three group ranches (large Masai communities) in the heart of the Amboseli ecosystem toward a shared goal of coexistence between lions and local communities.



Photos by S. Dolrenny

2. The Lion Guardians Mission

Mission: To promote and sustain coexistence between people & wildlife through ecological monitoring and local capacity building

Objective 1 - To conserve carnivores by using local people

<i>Aims</i>	<i>Methods (current and future)</i>	<i>Measures of Success</i>
<p>To stop lion killing, specifically targeting three types of killing:</p> <ul style="list-style-type: none"> • <i>Olkiyoi</i> - retaliatory killings • <i>Olamayio</i> – traditional rite of passage killings • Age-set protest killings 	<ul style="list-style-type: none"> • Lion Guardians attend all warrior meetings and ceremonies where lion killing may be discussed. They convince other warriors that lion killing is no longer a viable option • Lion Guardians are trained on community negotiations through role play • Lion Guardians are well known and respected in their communities so can easily dissuade other warriors from lion killing 	<ul style="list-style-type: none"> • Number of lions killed (our target is 0) • Number of lion hunts stopped
<p>To understand the movements and population change of carnivores in order to:</p> <ul style="list-style-type: none"> • predict and mitigate conflict • enhance ongoing research 	<ul style="list-style-type: none"> • Use of data forms, traditional tracking and telemetry of collared lions • Collection of GPS data, lion hair and scat for DNA analysis • Spoor counts twice a week using two different routes 	<ul style="list-style-type: none"> • Correlation between Lion Guardians' GPS points and GPS lion collar data in order to verify accuracy of data collected • Small margin of error during double blind spoor count tests of Lion Guardians

<p>Mitigate conflict and increase local tolerance (prevention strategies).</p>	<ul style="list-style-type: none"> • Reinforcing bad <i>bomas</i> to safeguard livestock, with the help of a <i>boma</i> member • Select hostile <i>bomas</i> – those with a higher propensity to kill carnivores or retaliate after an attack. • Lion Guardians find and return lost livestock to owners • Informing herders of nearby carnivores • Lion Guardians name local lions in their areas, which provides a sense of ownership and increased tolerance by the local communities 	<ul style="list-style-type: none"> • Depredation rates at <i>bomas</i> that were reinforced (our target is 0 hits) • High ratio of livestock found to livestock lost, high number <i>bomas</i> reinforced and herders informed. • Number of lions killed (our target is 0)
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Objective 2 - Build up capacity for future conservationists to conserve carnivores

<i>Aims</i>	<i>Methods (current and future)</i>	<i>Measures of Success</i>
<p>To ensure the sustainability of the Lion Guardians project and wildlife in conservation in Kenya in the long term</p>	<ul style="list-style-type: none"> • Proposal writing and blog writing by local coordinators to ensure financial sustainability • Workshops and training sessions run by coordinators for Lion Guardians on all aspects of their work and wildlife conservation • Lectures and film showings by coordinators on wildlife, conservation and ecology for communities • Exchange of Lion Guardians and coordinators between similar projects in East Africa • Providing training and support for higher educational opportunities for coordinators 	<ul style="list-style-type: none"> • Local staff are able to secure funds for the project through blog, grants and media opportunities • Increased capacity of Maasai to run conservation projects • Long term tolerance of wildlife by impacted Maasai communities • Increased educational opportunities and attendance of national and international meetings and workshops for Lion Guardians staff

3. Expansion to Eselenkei and Olgulului Group Ranches

In 2009, the Lion Guardians project expanded from Mbirikani group ranch (1,229 km²) to two additional group ranches in the Amboseli ecosystem – Eselenkei (748 km²) and Olgulului (1,471 km²), where human-lion conflict is high and where in the past, lion killing was rampant. Figure 1 illustrates the group ranches where Lion Guardians operate, and the neighboring national parks.

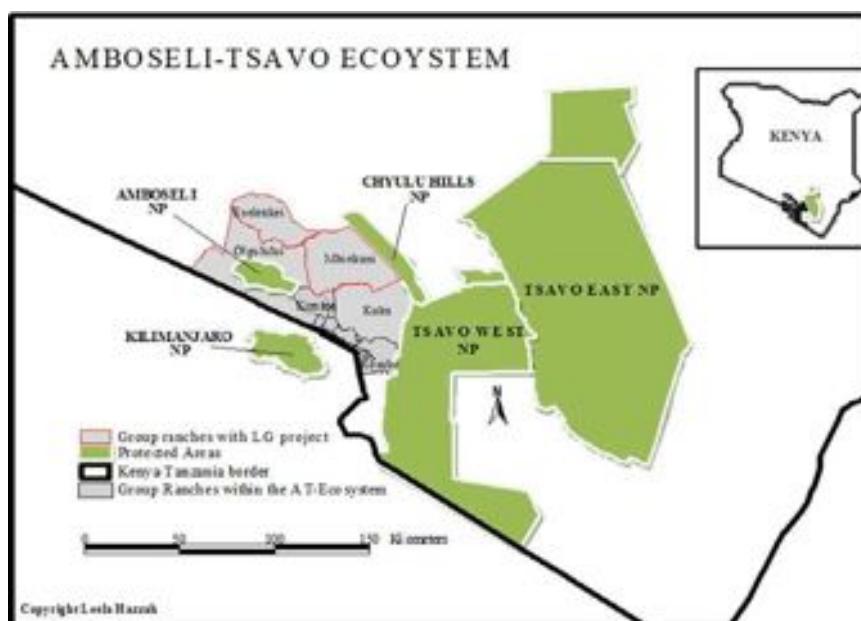


Figure 1. Map of the Amboseli-Tsavo ecosystem

Eric ole Kesoi was hired as the Lion Guardian Coordinator for both Eselenkei and Olgulului group ranches. Eric has a college diploma in conflict mitigation and development, and a great deal of leadership experience; he is highly respected by his community and is highly influential both within his group ranch and in the greater region. Eric's skills were essential during the interviewing, volunteering and training of the new Lion Guardians on Olgulului and Eselenkei.

The Lion Guardians project was introduced to the new communities through meetings, presentations and film showings. These forums were opportunities for the communities to learn about the project and provide feedback to help us better integrate the project into traditional societal structure. We have been warmly welcomed by the group ranch members and leaders in all the new communities.



Photo by: P. Briggs

Coordinator Eric ole Kesoi with the Eselenkei Lion Guardians

4. The Lion Guardians

With the expansion onto Olgulului and Eselenkei, we now have 25 Lion Guardians reducing conflict in their communities, protecting lions, and collecting key ecological data. Six more will soon be hired in southern Olgulului.

In Eselenkei, a smaller group ranch, there are four Lion Guardians. In one of the communities that borders Olgulului ranch that sustained high rates of lion killing in the past, we hired the most successful lion killer in that area, Kamunu or Meiterananga, (his lion name, meaning *"He who always spears first"*). This transition from lion killer to lion protector is the foundation of the Lion Guardians project, and Kamunu is a perfect example of how effective this strategy can be.

Olgulului group ranch previously had the highest number of lions killed in the ecosystem. We employ eight Lion Guardians throughout the northern part of the ranch and will add an additional 6 with the expansion onto southern OGR (between Amboseli National Park and the Tanzania border). This is the region where 19 lions have been killed in recent months, nearly as many as occur on all the rest of Olgulului .

A primary goal of the Lion Guardians project is to improve local conservation capacity. In 2010, Mbirikani Lion Guardian Coordinator Antony Kasanga completed an eight month Postgraduate Diploma course in International Wildlife Conservation Practice at the University of Oxford. This course equips local conservationists with the necessary professional and scientific skills to work in conservation in the developing world. Antony is now back at Mbirikani, bringing the invaluable skills he learned back to his community and the Lion Guardians project.

5. Conflict, Community and Coexistence

Eric always says that *"human-wildlife conflict in pastoral environments is as old as pastoralism itself"*.

One of the key objectives of the Lion Guardians is to reduce conflict with carnivores within their communities, and thereby save lions from being killed in retaliation. They help people primarily by reinforcing livestock enclosures (*bomas*), and finding lost livestock left out in the bush, which might otherwise be killed by carnivores. They also warn herders when lions are nearby. ***No lions have ever been killed where Lion Guardians are working, whereas scores have been killed in nearby areas.*** In the harsh conditions of the 2009 drought, it was very difficult for livestock to find food, so they tended to scatter and herders lost many in the bush while out grazing. These wayward cattle, goats and sheep are likely to be killed by hyena or lions, so a major part of the Lion Guardians' community work is to help find lost livestock. In the last eight months, they have found over 4,800 of the 5,600 head reported lost, a success rate of 85%. To further prevent livestock losses, they reinforced over 300 Maasai *bomas* to deter predators from entering homesteads at night. The Lion Guardian does not work alone; he teaches at least one person from each



Since Kamunu started work as a Lion Guardian on Eselenkei, he has stopped a number of lion spearings by explaining to the warriors the benefits of living lions. When Kamunu was hired he told us about his past; the thrill of lion killing, the time he was arrested for spearing a large male lion, and finally the last lion he killed:

"I was tracking my lost cows in the bush and I came across lion tracks. Immediately I knew the lions must have eaten my cows. I was very upset and wanted to kill the lion to prove to everyone that it ate my cow. Although I knew I shouldn't since I was released from jail only 3 months ago, I was angry. I followed the lion tracks until I saw a group of females...they looked fat! I hid behind a tree and once they went to sleep I speared one of them and watched it die. I took my blade and cut open the stomach to prove that my cow was indeed eaten. I was shocked. There was nothing in [her] stomach. I felt both angry and sad. From that moment on, I knew I could not kill another lion. It was a waste."

Kamunu was the first Guardian to find and assist in collaring a lion on the new project. He named her Nosieki, after the area she was found. He tracks her signal daily, ensuring that she and her two cubs are safe.

homestead the principals of better livestock protection. To evaluate the success of these efforts, we keep track of losses from both improved and unimproved bomas.

Of course, there are always occasions when livestock is left out at night, or *bomas* are just not strong enough to resist a determined carnivore; as a result of most of their wild prey having died during the drought, starving lions have penetrated even very strong bomas. In these cases, the Lion Guardians pacify the angry livestock owners and persuade them that retaliation is not the answer. A few examples:

- Recently, lioness Narika killed 21 sheep left outside a boma at night. Responding immediately, Guardians Olubi and Mokoi calmed the owner and prevented a lion hunt.
- One of the new Lion Guardians in Olgulului, Samanya, heard about a donkey being killed by hyenas outside the *boma* of an elder. When he arrived at the scene, the elder was heading for the bush with poison to kill the hyenas. Samanya calmed the old man and immediately started reinforced his *boma*. The elder was satisfied and returned to his home, and did not retaliate.
- In September, a hunting party on Eselenkei was stopped by the Lion Guardians, after four young male lions killed eight donkeys and four goats that were left in the bush. One of the males, Sikiria (meaning “*he of the donkey*”) was collared that night and is currently being monitored by the Lion Guardians; information from his GPS collar shows that he moves over an area of greater than 4,000 square kilometers (1,500 square miles). In the course of their wanderings, two of his companions have disappeared, probably speared or poisoned far outside the Guardians’ region.

In 2010 alone, the Guardians have already directly intervened and stopped 27 lion hunts. Meanwhile, at least 23 lions have been killed where Guardians do not yet operate.

The Lion Guardians also help their communities with other emergencies. Lion Guardians Melita, Mokoi and Masere, for example, have each found children who had become lost in the bush while out herding livestock. This is happening more frequently as older warriors are far away from home herding cattle, leaving boys as young as five years old to herd sheep and goats closer to home.

6. Monitoring Lions, Other Carnivores and Prey



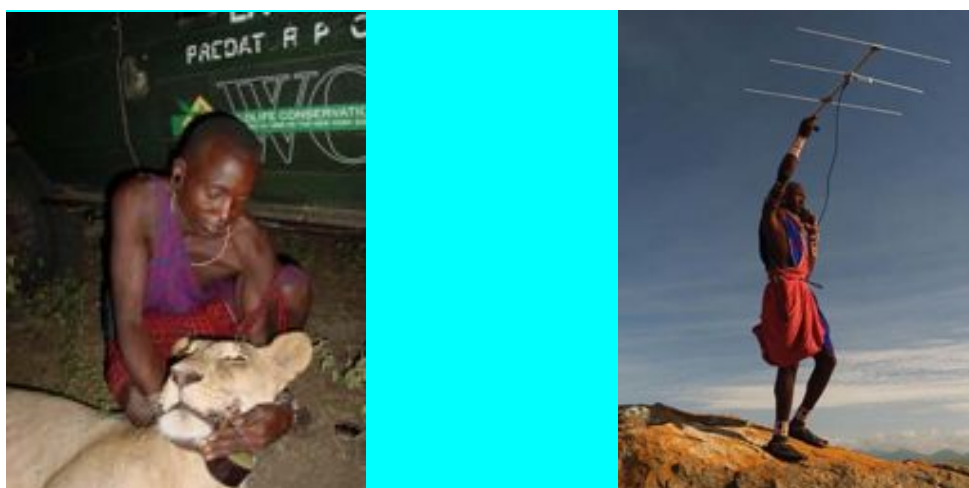
Lomunyak patrols his territory and protects his females, which include Nosieki, Selenkay, Narika, Elikan, and Nasieku (a Maasai name for ‘Fierce Mother’, because she once charged our vehicle), and their 5 cubs.

The work of the Lion Guardians comprises both working within their communities to minimize lion-human conflict and monitoring trends in carnivore populations, in order to evaluate the effects of different conservation efforts. They locate lions both by traditional tracking methods as well as radio telemetry, taking GPS points or GPS track logs, and reporting to project biologists by cell phone.

Lions in national parks are accustomed to vehicles and are therefore easy to find and count. However, in the unprotected rangelands where Living With Lions does all its work, they behave very differently: persecution by humans has made them elusive, nocturnal and rare. These conditions are extremely challenging to biologists, but the Lion Guardians’ combination of ancient and modern methods has proven to be a powerful tool for accurately monitoring monitor lions.

Once a week, each Lion Guardian systematically counts the tracks of all large carnivores and their primary prey on each of two designated 6-7 km routes. Steven Ekwanga and expert tracker Morani from Living With Lions' Laikipia Predator Project visited the Lion Guardians to fine-tune their skills in track identification and counting. Though counting tracks may seem like a relatively easy task, it requires great skill and care to tally up the number of animals in a herd that repeatedly cross a dusty path! These raw data are used by project biologists in statistical analysis and computer modeling that yield accurate estimates of carnivore numbers and seasonal prey population trends.

Additionally, Lion Guardians collect hair and scat samples of lions for DNA analysis of their individual identities. These will be analyzed at the Sackler Institute of Comparative Genomics at the American Museum of Natural History, yielding an accurate count of individuals and their approximate home ranges.



Guardians ole Pencha and Mokoï, collaring and tracking lions Photo by: S. MacLennan



Photo by: P. Briggs

Lion Guardian Kamunu using the Spoor Guide to verify tracks

The Guardians also follow lion tracks across the landscape until they are able to identify each individual visually or through radio telemetry. This technique has been remarkably successful; in spite of intense effort, the Guardians have found no new lions on Olgulului/Eselenkei since last December, giving us great



Photo by: P. Briggs

Lion Guardians Mingati (from Olgulului) and Olubi (from Mbirikani)

8. Lion Guardians blog

The Lion Guardians blog has been successfully running for three years and has raised \$,000 through online donations. The “*Sponsor a Lion Guardian*” campaign has now been extended to Eselenkei and Olgulului group ranches and we currently have a total of eight Guardians sponsored. Through the blog we have also received donations of a computer, digital cameras and mobile phones. The new Lion Guardians Facebook page is now tapping into a new online community.

9. Media

In 2008, Living With Lions spearheaded the campaign against the American-manufactured insecticide Furadan, which has been widely used in rural Kenya to eliminate lions, hyenas and other carnivores. In November 2008, CBS 60 Minutes came to Kenya to document the use of Furadan and the work of Living With Lions and the Lion Guardians. This program aired in the US on March 29th, 2009 and on the following day the manufacturer of Furadan withdrew it from the Kenya market.

The Lion Guardians project has been featured in a number of articles and programs over the past year:

Print

- Marie Claire: September 2009
- Vogue: November 2009
- Ecoworldly.com: October 2009
- National Geographic: June 2010

Television

- European TV: One hour documentary “*THE TWILIGHT OF THE LIONS*” on Living With Lions and the Lion Guardians, November and December 2009. Shown in France, Belgium, Switzerland, and Germany
- Reuters News, aired worldwide, September 2009
- BBC: short piece aired in February 2010
- BBC: one hour documentary, filmed in early 2010, to air in late 2010.

Radio

- NPR: two-part piece on “Day to Day”, March 2009

Wings WorldQuest

In April 2009, Leela was honored by Wings WorldQuest (www.wingsworldquest.org), an organization that promotes and recognizes exceptional woman explorers.



Photo by: A. Howard

Kasanga, Olubi and Kapande filming and clowning on Mbirikani

10. Looking Ahead...

In the aftermath of the drought and the ensuing loss of livestock to lions, 19 lions have been killed in the one part of Olglului Group Ranch that has no Lion Guardians; most of these lions probably came out of Amboseli National Park in search of prey. At the request of the Masai communities, the Kenya Wildlife Service and other conservation groups, we have started an emergency Guardians program in the area in the last week. Warriors 'trying out' to be Guardians have already reported a minimum of 20 surviving adult lions in the area, all of which have been verified by our biologists. This is nearly equal to the number of lions on the rest of Olglului, so this is clearly a critical area for lion survival in the entire region.



Acknowledgements

We would like to thank all our donors and funders who have supported the Lion Guardians project. First and foremost, nothing would be possible without our primary sponsor, Panthera. The Rufford Small Grants supported the initial expansion, and a collaborative grant between WWF-Netherlands and Leiden University helped hire three Lion Guardians on Olgulului. In early June 2010, a number of donors answered an emergency appeal for funds to help start the new southern Olgulului expansion.

Many thanks to the Maasailand Preservation Trust and Porini Ecotourism for their collaboration and support, as well as Ol Donyo Wuas Lodge and Porini Amboseli Camp for their logistical assistance. We would also like to thank WildlifeDirect and all our blog readers who have donated online. Lastly, this project would not be possible without our umbrella organization, *Living With Lions*.

The Lion Guardians Team

