LIVING WITH LIONS
ANNUAL REPORT 2008

LAIKIPIA PREDATOR PROJECT
KILIMANJARO LION CONSERVATION PROJECT
LION GUARDIANS
OLGLULUI PREDATOR PROJECT
MARA PREDATOR PROJECT

15 December 2008

Laurence Frank, PhD.[1, 2, 3] lgfrank@berkeley.edu
Alayne Cotterill, MSc.[3] alayne.cotterill@gmail.com
Steven Ekwanga[3] stevo@mpala.org
Seamus Maclennan[3,4] seamus@lion-research.org
Leela Hazzah, MSc.[5] leelahazzah@hotmail.com
Stephanie Dolrenry[5] sdolrenry@yahoo.com
Sara Blackburn[6] maralions@gmail.com
Amy Howard, MSc. amyellenhoward@gmail.com
Bill Eldridge billeld@hotmail.com

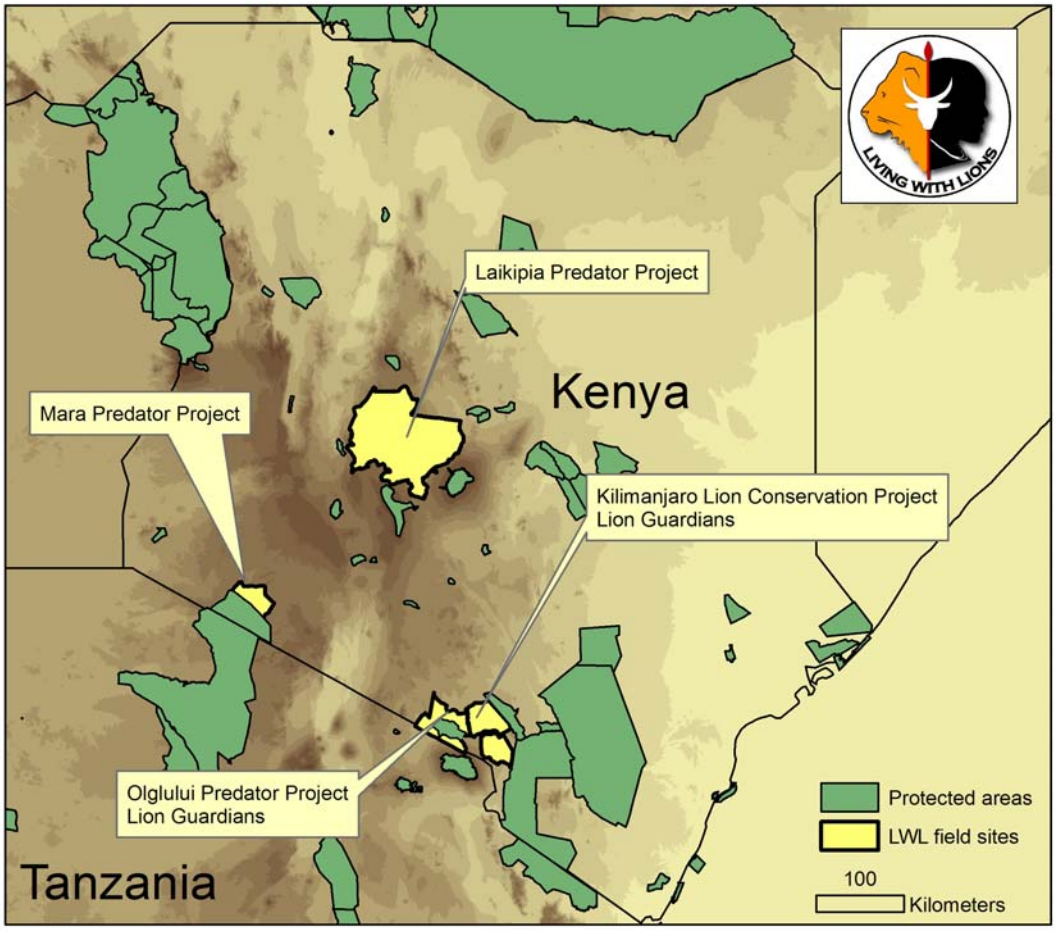
[1]Wildlife Conservation Society, 2300 Southern Boulevard, Bronx, New York 10460, USA. [2]Museum of Vertebrate Zoology, University of California, Berkeley, USA. [3]Mpala Research Centre, PO Box 555, Nanyuki, Kenya. [4]Wildlife Conservation Research Unit, Oxford University, UK. [5]Conservation Biology and Sustainable Development, Gaylord Nelson Institute of Environmental Studies, University of Wisconsin, Madison, USA. [6]Serian Camp, PO Box 40235, 00100 Nairobi, Kenya.

EXECUTIVE SUMMARY

We are working to restore, conserve and manage viable populations of large carnivores by developing management techniques that foster coexistence of people, livestock and predators in areas bordering parks and other regions without formal protection.

Large predators have been eliminated from most of the world because they prey on livestock, and populations in Africa are plummeting. Few parks are large enough to ensure lions' long term survival, and because conflict with livestock is by far the most serious threat to large carnivores, Living with Lions (LWL) focuses on finding methods to integrate predator conservation with realistic livestock management. We work with communities to reduce livestock losses to predators, and on the behavior and ecology of predators that are under pressure from humans.

Five LWL projects now include over 8000 square kilometers (3125 square miles) of lion habitat outside protected areas in the rangelands of Kenya. Two new projects (the Olglului Predator Project and the Mara Predator Project) were started in 2008, while the Laikipia Predator Project, the Kilimanjaro Lion Conservation Project, and Lion Guardians have all been significantly expanded.



Map of Living with Lions project sites

INTRODUCTION

Lions and other large predators are the most difficult of all animals to conserve. As ever-increasing human pressures reduce wild prey, carnivores turn to domestic animals and are then killed in retaliation by angry livestock owners. This pattern has lead to near-extinction of large carnivores on every continent and is now playing out for a final time in Africa: lions, hyenas and other large predators are disappearing under the onslaught of spears, guns and poison. In all of Africa, there are only six parks and managed areas large enough to provide long term protection to lions, as their wide-ranging movements take them beyond the boundaries of smaller parks, bringing them into contact and conflict with humans. Only by maintaining corridors and connectivity in the human-dominated rangelands between parks can the survival of these most iconic animals be ensured.

Living with Lions is a group of dedicated young biologist/conservationists working to overcome the age-old conflict between humans and predators while there is still time to preserve viable populations of lions and hyenas. Our work is a combination of the most ancient and most modern technologies: we help herding tribes live with predators by emphasizing ancient livestock husbandry methods, culturally acceptable and economically affordable to traditional African pastoralists. To better manage carnivores and ensure their survival, we use modern technology in the form of GPS collars and satellite communications to understand how predators adapt to living with humans.

This has been a very productive year for Living with Lions. In collaboration with ranchers and conservation authorities, the Laikipia Predator Project is actively managing Kenya's only viable non-protected lion population and refocusing research on this critically important role. In southern Kenya, we are now monitoring the lion population and working with local people on over five thousand square kilometers of Maasailand. The Kilimanjaro Lion Conservation Project has nearly doubled in area. It is joined by a new sister project on Olglului Group Ranch, surrounding Amboseli National Park, along with expansion of our very successful community conservation program Lion Guardians. We have also launched the Mara Predator Project north of the Masai Mara National Reserve, bringing the LWL conservation approach to this critically important region.

Kenya Lion and Spotted Hyena Conservation Strategy

Kenya made major progress towards protecting large carnivores in 2008, becoming the first country to develop and adopt a national strategy for conservation of lions and hyenas, as well as another for cheetahs and wild dogs. The lion/hyena plan came out of a meeting called by the Kenya Wildlife Service (KWS) in March and is based broadly on the Regional Conservation Strategy for the Lion in Eastern and Southern Africa (IUCN, 2006) developed at an international meeting of lion conservationists in January 2006. LWL had major input into both the regional and national strategies and Laurence Frank gave keynote talks at both meetings.

NORTHERN KENYA

Laikipia Predator Project

Started in 1997, the Laikipia Predator Project is the first integrated investigation into the ecology, management and conservation of large predators in human-dominated African landscapes. Laikipia is the only part of the world where ranchers enthusiastically tolerate a healthy population of large carnivores, making it an ideal laboratory in which to develop realistic and progressive predator and livestock management practices. Current research focuses on the factors which cause some lions to become chronic livestock killers, and on adaptive management of the Laikipia lion population.

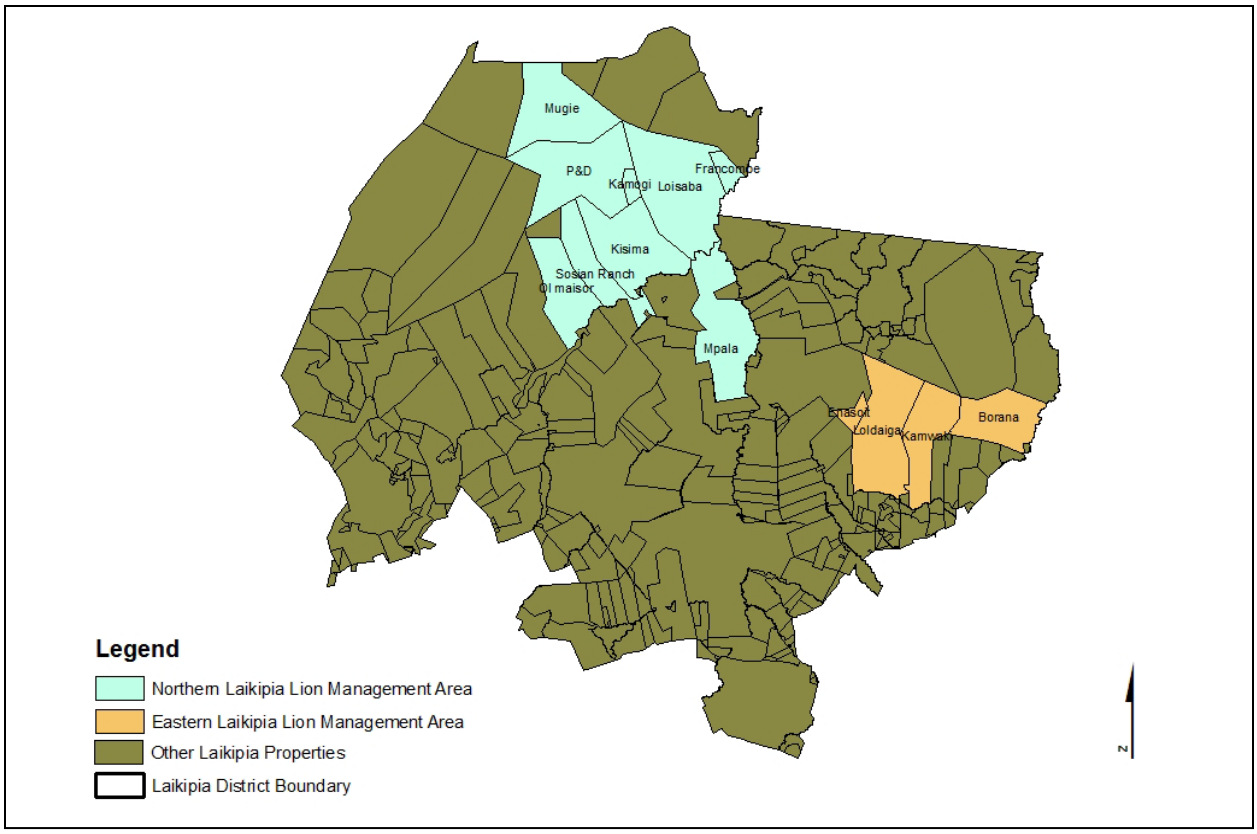
With a generous grant from the Arthur Blank Family Foundation and in collaboration with Laikipia ranches and the Kenya Wildlife Service, we have started the world's first lion management project, learning how to actively manage the lion population to reduce livestock losses, and to understand what causes some lions to become stock killers while others do not. Nowhere in Africa has anyone ever attempted biologically informed management of free ranging lions, in either livestock rangelands or wilderness areas. With ranches in northern and eastern Laikipia, we are attempting to minimize livestock conflict while maximizing the lion population. This work is seen as a model for similar efforts elsewhere in lion range.

As part of this effort, the Laikipia Predator Project has undergone restructuring over the last year. To improve our role in collaborative lion management and develop useful recommendations, we need more detailed information on the local lion population than we did in the past. Because this is only possible with full collaboration between ranches and research staff, we have decided to focus efforts on the two areas where cooperation from land owners and managers is consistently good.

The New Study Areas

The **Northern Laikipia Lion Management Area** includes Loisaba, Ol Malo, Kamogi, Mpala, Suyian, Sosian, Ol Maisor, and Mugie Ranches (1061 km^2) along with bordering communally-owned group ranches, while the **Eastern Laikipia Lion Management Area** (457 km^2) includes Enasoit, Lolldaiga, Ole Naishu and Borana Ranches.

The overall goal for both of these areas is to provide the scientific support to manage the lion population, in collaboration with the following stakeholders: landowners, land managers, ranch staff, KWS, other research bodies working in the same area, and LPP. This is starting with a standardised **predator incident reporting system** in both areas, and training and equipping two new **lion scouts**. As of early December, we have 39 lions collared in Laikipia, including five wearing GPS collars, two of which are a new locally made Kenyan version.



Map of Laikipia Lion Management Areas

Predator Incident Reporting in Laikipia
Collecting, collating and sharing predator incident report data is the first step in collaborative predator management between landowners, managers and the Kenya Wildlife Service. The reporting of incidents involving predators in Laikipia has historically been patchy and erratic. Inconsistencies have mainly been due to the lack of a standard recognised reporting system across the region and so this year LPP has stepped in to fill this gap by establishing a reporting system and training **scouts** dedicated to the task.

LPP has recently employed, trained and equipped two Lion 'Scouts'. These are local men responsible for the collection of all detailed predator incident data in the lion management areas. They visit all the ranches weekly, fully investigating every incident reported, and entering the standardised incident report data into the **Laikipia Predator Database**.

Laikipia Predator Database
The predator database will be used for research but will also be accessible to interested ranch owners and managers on a website. It will include all the predator incident, lion movement and livestock movement data, as well as GIS maps and reports on the results of data analysis. This information will ultimately be used by all the stakeholders and KWS to help make lion management decisions in the area, including targeted problem animal control.

Lion Capture, Collaring and Monitoring
Capture and collaring has been increased in the two management areas, and collars are being removed from surviving lions in central Laikipia. As funding becomes available, VHF collars are being replaced with GPS collars on lions of specific interest, recording detailed **GPS data** on lion movements that can be compared with livestock movements and livestock depredation incidents.

Steven Ekwanga is in charge of day to day running of the Northern Laikipia Lion Management project, liaising with ranchers, supervising field scouts, collaring and tracking lions. He does most of the lion capture in the northern area and has been instrumental in capturing and collaring lions for the Kilimanjaro Lion Conservation Project (KLCP) expansion onto Kuku Group Ranch (below).

GPS Data Analysis, Mapping and Reporting

Alayne has recently started a D.Phil. at the University of Oxford and she will be using past data and the new GPS data to identify adaptations in lion behavioral ecology developed in response to conflict with people. Although GPS technology is expensive, detailed GPS data collected at night when the lions are most active is already giving us new insight into lion behavior amongst people. A total of nine GPS collars have been deployed. Alayne also initiated a monthly report for all the ranches and other stakeholders, designed to give everyone a regular update on predator issues in their area at a glance, as well as keeping them updated with research findings.

A recent very worrisome development in northern Laikipia is the loss of at least five collared lions to what appears to be random shooting by cattle raiders. Clashes over grazing land between Pokot and Samburu warriors armed with automatic weapons have increased in the last year, and wildlife is increasingly being targeted. In a separate development, at least one entire pride has been shot in central Laikipia by a ranch which does not boma its cattle, and one other pride appears to have been reduced from eight to two individuals.

Samburu

LPP has been asked to assist the Northern Rangelands Trust (NRT) in Samburu District in setting up predator proof bomas and to train field scouts in predator monitoring techniques. NRT scouts have visited the Kilimanjaro Lion Conservation Project (below), and LPP personnel will be visiting Samburu in early 2009, funded by a grant to NRT from Panthera.

NRT scouts learn to distinguish carnivore tracks

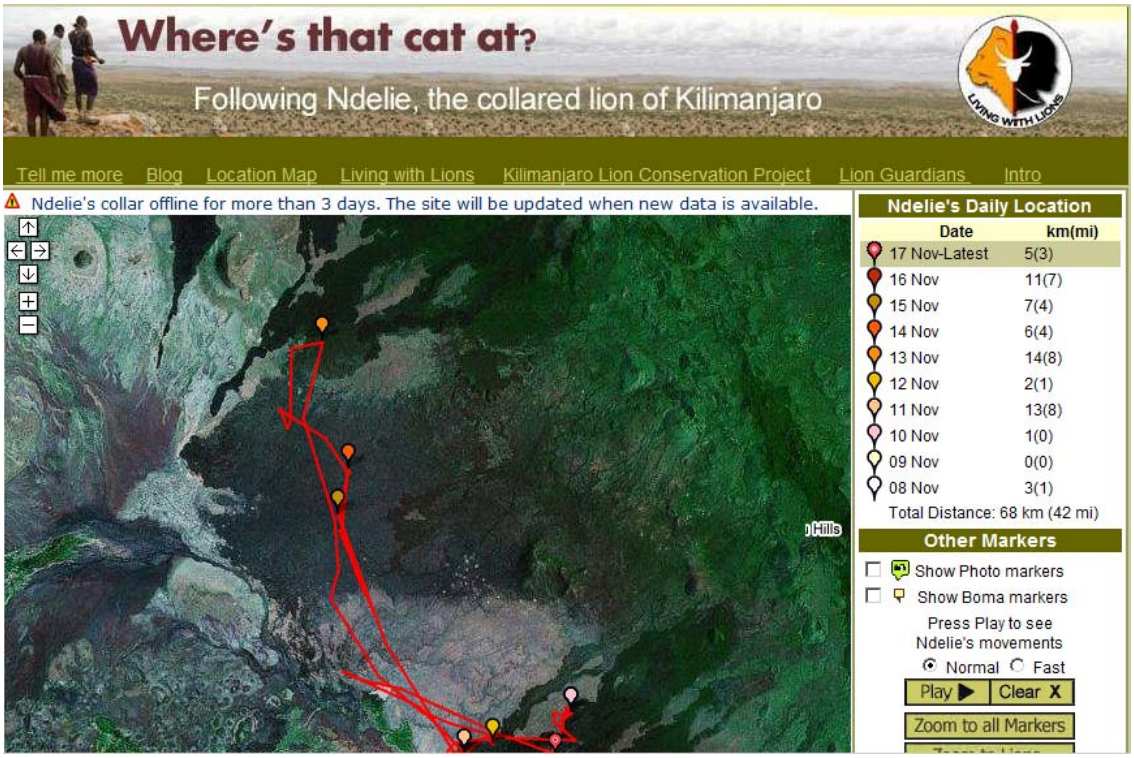
MAASAILAND

The Kilimanjaro Lion Conservation Project, Lion Guardians, and the Olglului and Mara Predator Projects are attempting to save one of the world's largest remaining contiguous lion populations. These combined projects now cover over 5000 km^2 (over 2000 sq. mi.) of Maasailand, the vast ocean of grass straddling the Kenya-Tanzania border and home to Serengeti, Ngorongoro, the Masai Mara, and Amboseli National Parks. On the Kenyan side, lions are under severe and increasing pressure, as people are spearing and poisoning lions at a rate which threatens population extinction within a few years.

Kilimanjaro Lion Conservation Project

Seamus Maclennan has been studying the lion population of the 1230 km^2 Mbirikani Group Ranch since 2004 and this year he and Steven Ekwanga expanded his study area to include the 980 km^2 of Kuku Group Ranch to the south. Four Simba Scouts, employed by the Maasai Wilderness Conservation Trust of Kuku, have been trained in the use of telemetry and GPS units, and are monitoring lions.

We now have four VHF-radio collared and two GPS-collared lions on Kuku, and six VHF-collared and one GPS-collared lion on Mbirikani. Michael Calvin has designed and built a website (see below) so as to make near real-time location data from the 3 GPS collars available for wildlife managers and the general public: **www.abycats.com/maps/catmap.html.**



The lion tracking website

KLCP has continued to monitor lions on Mbirikani. In the last year, the Lion Guardians have taken an active part in the day to day monitoring of collared lions on the ranch, significantly improving our contact with the population of lions in the study area. The Lion Guardians have named all known lions in the Maasai language, which personalizes these animals to the local people who occasionally suffer their depredations. The 10 collared animals on Mbirikani and Kuku are associated with an additional 19 uncollared individuals, meaning we are collecting data on 29 lions.

In 2009, Seamus plans to investigate the relationship between lion space use, human settlements and livestock, in addition to his on-going monitoring. He is also analyzing the livestock compensation program run on Mbirikani by the Maasailand Preservation Trust (below), and will evaluate the economic value of lions to tourism in the Amboseli ecosystem.

Sadly two of our study animals, Amber and Sangale were poisoned in January 2008. Because the Lion Guardians had made these animals very familiar to the local people, the Maasai community was incensed at the loss of these well-known individuals, and the man responsible for their poisoning was shamed by his neighbors. The Lion Guardians and various members of LWL participated in the lions' post-mortem and follow up investigation. Our work contributed to the perpetrator being found guilty of illegally killing these lions. This is one of the first incidents where a Kenyan court has handed out a guilty verdict on a poisoning case. Use of poison is currently the single greatest threat to Kenya's lions.

Seamus is spending several months at Oxford in 2008-9 writing up papers on the demography and recent history of lions in the Amboseli-Tsavo ecosystem. Wildlife biologist and pilot Bill Eldridge is continuing the lion monitoring while Seamus is away.

Education and Training

We have developed a curriculum for a two-day introduction to carnivore biology and monitoring. This is specifically aimed at non-literate conservation workers and introduces the participants to the carnivore monitoring and conflict resolution techniques that LWL employs. Two groups have undertaken the course at the KLCP research camp to date:

- 27th and 28th May 2008: 6 scouts of Melako Conservancy (Northern Rangelands Trust)
- 25th and 26th September 2008: 4 "Simba Scouts" from Kuku Group Ranch.

Seamus and the Lion Guardians have also been assisting KWS and Masters students from the University of Leiden, Netherlands, who are studying lions in Amboseli National Park. Demonstrating the importance of the surrounding rangelands, GPS-collared lions follow herds of ungulates out of the Park during the wet season, seasonally increasing Mbirikani's lion population above dry season levels.

A major development in this region is the expansion of Mbirikani's Predator Compensation Fund, which pays people for livestock killed by predators in return for their promise to forgo predator killing. Funded by the National Geographic Society, PCF has been extended to Olglului Group Ranch; this follows the establishment two years ago of a similar project on Kuku Group Ranch by the Maasai Wilderness Conservation Trust. LWL works closely with the compensation projects, providing information on changes in lion numbers in response to these innovative measures.

Olglului Predator Project

Leela Hazzah and Stephanie Dolrenry are starting a new project on Olglului and Eselenkei Group Ranches (totaling 2344 km^2), which adjoin Mbirikani. With the addition of Olglului, Eselenkei, and Kuku to our Maasailand study areas, we are now covering over 5000 km^2 (over 2000 sq. mi.) of critically important wildlife habitat outside protected areas.

Over 90% of all lion killing in the Amboseli-Tsavo ecosystem in the past few years occurred on these ranches, and conservation action is urgently needed. Although it surrounds Amboseli National Park, the Maasai of Olglului receive few benefits from tourism; all land use is traditional pastoralism.

Although the Maasai in these areas are killing off lions and hyenas at an unprecedented rate, these are relatively intact ecosystems, with all the native wildlife. Currently we are collecting preliminary conflict data by recording numbers of livestock lost to predators, and investigating all carnivore deaths. In the upcoming months we will be launching the Lion Guardian program in conjunction with lion collaring in Maasai communal areas, as well as conducting baseline surveys to establish estimates of lion and hyena density and abundance. We cannot conserve these carnivores until we understand their behavior while living amongst humans.

Maasai and Lions
Leela's primary aims for the upcoming year are to:

- Investigate the details and causes of lion killings that have occurred in the Amboseli-Tsavo ecosystem since 2003. This will involve collecting spatial data on killings, in-depth interviews with those who have killed lions, and examination of how poisoning and the illegal trade in lion parts are contributing to the decline of lions in Kenyan Maasailand. Once we understand what is driving lion killing we can better target future conservation strategies.
- Study the effect of compensation initiatives on herding investment and livestock loss. This will be done by comparing livestock investment and husbandry on various ranches in southern Kenya, some of which have compensation, while others do not.
- Expand and improve the Lion Guardians program, and to analyze the accuracy of Lion Guardian data. This aspect of her research focuses mainly on how participatory and collaborative monitoring can contribute to effective carnivore conservation.

Predator monitoring and behavioral ecology
Stephanie will be in charge of overall predator monitoring on Olglului and Eselenkei Group Ranches. She will use track counts, GPS collars on both lions and spotted hyenas and camera traps at settlements, and will work very closely with the new Lion Guardians unit being formed on these ranches (below). She is also looking at the effects of poisoning on large carnivores, and the circumstances that motivate Maasai to use poison.

Hyena attacks on livestock particularly ignite people's hatred for carnivores, and may result in retributive killing of threatened predators such as lions.

Lion and hyena behaviors are thoroughly researched in national parks and other protected areas where wild prey is plentiful and persecution is minimal, but there is almost no information from areas where they are under pressure from humans.

The aims of Stephanie's research are threefold:

- To investigate the causes and impact of retaliatory poisoning on lions and other wildlife.
- To understand the behavioral ecology of lions and hyenas within human-dominated landscapes.
- To measure risk and vulnerability of Maasai homesteads to carnivore depredation.

Her methods combine zoological and social science approaches: GPS collars and remotely triggered cameras, and surveys of husbandry practices used at homesteads. The GPS collars allow us to calculate home range sizes, territories, den sites, average speed of travel, timing and location of rest and travel (i.e. activity budgets), as well as movement patterns in relation to homesteads and land cover/use. The collars also reveal how the animals move and forage in relation to homesteads and prey concentrations. By understanding carnivore behaviors and vulnerability around Maasai homesteads, we can begin to mitigate the conflicts which occur between livestock and predators.

Lion Guardians

Lion Guardians is a community conservation program, jointly administered by LWL and Richard Bonham's Maasailand Preservation Trust, which employs local Maasai warriors to carry out lion conservation work. No lions have been speared on Mbirikani Group Ranch since the program started two years ago, and the Guardians have stopped a number of lion hunts. We currently have nine Lion Guardians employed in nine different regions on the ranch where lion-livestock conflict is highest.

Lion Guardians Mokoi and Lenkina

We are in the process of expanding this successful program to two neighboring group ranches where lion killing continues unabated. Our aim is to employ at least 18 warriors from these two

ranches north of Amboseli National Park. The new programs will be similar to the current program on Mbirikani (in terms of duties and data collected) to allow for comparisons between sites.

Lion Guardian Coordinator Antony Kasanga maintains a fundraising blog detailing the Guardians' activities **http://lionguardians.wildlifedirect.org** and visited the Bronx Zoo last November as part of a fundraising effort for the Maasailand Preservation Trust.

Masai Mara Lion Project

With support from the Banovich Wildscapes Foundation, Serian Camp and Panthera, the Mara Predator Project (MPP), north of the Masai Mara National Reserve, was begun in July 2008, after several lodges in the Koiyaki area expressed concerns that lions may be declining due to spearing and poisoning, and that massive tourist disturbance may be influencing the lions.
Run by Sara Blackburn, the aims of the project are threefold:

- To assess the lion population in preparation for future conservation efforts.
- To set up a collaborative, effective and sustainable way for tourists and visitors to take part in lion conservation.
- To work with the local community and the Masai Mara North Conservancy (MMNC) in ways similar to those implemented by LWL in other areas.

This is a long term monitoring project, based at Serian Camp, in which Sara is photographically cataloging all resident lions in the region. The ID database of lions will be available online, allowing visitors at local camps and lodges to participate in the research by logging their lion sightings, and following the life history of 'their' lions over time. As the project develops, we are likely to start a locally-adapted version of Lion Guardians.

Sara identifies lions using whisker spot patterns

To allow clients to participate in lion research, a user-friendly system of identification has been developed based on whisker spots, distinguishing features and photographs, with the aim of

building interest in the project and assessing the reliability of identification of lions by tourists. Profiles have been created for 25 adult lions and published in an identification booklet. To assist in the analysis of lion movements, affiliations and home ranges, Serian Camp guides have all been trained in lion identification and report lion sightings on a standardized form. Neighboring camps have shown great interest in the project, and guides at these are also being trained. Participating lodges will have a dedicated computer for use by guests to report sightings.

A website has been developed for the project, containing the ID database with profiles of adult lions, information on how to identify and age lions, and a page encouraging participation through reporting sightings and submitting photographs.

It is yet too early to make conclusions about the local lion population, but some idea of numbers and movements within key areas has been established. Fifty-four lions have been identified over a period of four months. The known population local to Serian Camp comprises three prides consisting of 19 females, 17 of which are of breeding age, and 11 males, five of which are within breeding age. There are a total of 24 cubs, seven of which are aged one year or above.

Lions have been responsible for half of the six cases of livestock predation that have been recorded in the past three months. These were all within a small area and it is likely that the same lions carried out all the attacks. Bomas vary greatly in quality and in some cases poor construction has been the cause of depredation. A local education program based on successful LWL models will be initiated, utilizing a system similar to Lion Guardians. Sara is also working with the local school to educate children on wildlife and the importance of lions.

In terms of future goals, analyzing cattle numbers and movements, and the quantity and quality of bomas in the area will allow for livestock/carnivore relationships to be approached. The recent acquisition of a project vehicle allows a larger area of the district to be covered and the lion population thoroughly sampled. Publication of the ID database site and further development of the lion ID process, including production of booklets, will allow tourist participation to increase.

Academic Achievements

All project biologists have made major advances in their academic careers this year:

Leela Hazzah and **Stephanie Dolrenry** have each completed their first year of PhD. studies at the University of Wisconsin, Madison, and have returned to Kenya to commence their fieldwork. Both have earned highly prestigious fellowships: Stephanie has a National Science Foundation Doctoral Fellowship and Leela a Fullbright Hays Doctoral Fellowship. Both also have Kaplan Fellowships from Panthera. Leela has been awarded a Fellowship from Wings WorldQuest, a foundation that honors woman explorers and conservationists, and a Jordan Prize for African Studies.

Alayne Cotterill is commencing her PhD. studies at Oxford University's Wildlife Conservation Research Unit, where **Seamus Maclennan** also continues his affiliation. Alayne has been awarded a Kaplan fellowship.

Publications

Maclennan, S.D., Macdonald, D.M. and Frank, L. In Press. Evaluation of a compensation scheme to bring about pastoralist tolerance of lions. *Biological Conservation*.

Didier, K.A., Wilkie, D., Douglas-Hamilton, I., Frank, L., Georgiadis, N., Grahame, M., Ihwagi, F., King, A., Cotterill, A., Rubenstein, D. and Woodroffe, R. In Press. Conservation Planning on a Budget: A "Resource Light" Method for Mapping Priorities at a Landscape Scale? *Biodiversity and Conservation*.

Antunes, A., Troyer, J.L., Roelke, M.E., Pecon-Slattery, J., Packer, C., Winterbach, C., Winterbach, H., Hemson, G., Frank, L., Stander, P., Siefert, L., Driciru, M., Funston, P., Alexander, K.A., Prager, K.C., Mills, G., Wildt, D., Bush, M., O'Brien, S.J. and Johnson, W.E. (2008). The Evolutionary Dynamics of the Lion *Panthera leo* Revealed by Host and Viral Population Genomics. PLoS Genet 4(11): e1000251. doi:10.1371/journal.pgen.1000251.

Hazzah, L., Borgerhoff Mulder, M. and Frank, L. In Review. Lions and Warriors: social factors underlying declining African lion populations and the effect of incentive-based management in Kenya. *Biological Conservation*.

Media

National Geographic/PBS: *Wild Chronicles* piece on Lion Guardians aired in the US on PBS in June.

Beyond/Discovery Channel: The Australian production company Beyond filmed a segment for *Nature's Deadliest* on human-wildlife conflict and Lion Guardians, to be aired on the Discovery Channel next year.

NPR: In June 2008 we had a ten day visit from Alex Chadwick of National Public Radio, who will be doing shows on both the Laikipia Predator Project and the Lion Guardians. Due to the US election and financial meltdown, these have not yet been aired but are planned for late 2008.

CBS: The American-made insecticide Furadan is a grave danger to predators, widely used by herding tribes across Kenya to eliminate lions, hyenas and other carnivores. CBS *60 Minutes* have spent a week with us in Laikipia and the Chyulu Hills, documenting the use of Furadan and show-casing our lion conservation efforts. This is likely to air in early 2009.

CBS film Leela and Antony tracking collared lions

BBC: The BBC TV series *Changing Planet* filmed a piece on Lion Guardians, to air on BBC2 in the UK and worldwide on satellite in early 2009.

CBC: The Canadian broadcasters CBC filmed a short news piece on the Lion Guardians, which was aired in July.

European TV: A Swiss film team will spend six weeks with us in December and January documenting our work in Laikipia and the Chyulus. This will air on the Arts and Culture channel in the French and German speaking countries of Europe.

***California Magazine*:** the monthly alumni magazine of the University of California system, is running a piece on Laurence Frank in January 2009.

Websites

The project's website is currently being redesigned and updated and will be finished in the New Year. The online ID database of lions in the Masai Mara will be added to this site. Both KLCP and the Lion Guardians continue to write fundraising blogs through the organization Wildlife Direct, and the online lion tracking site is to be expanded, to accommodate the newest GPS-collared lions.

http://livingwithlions.org
http://lionguardians.wildlifedirect.org
http://kilimanjarolion.wildlifedirect.org
http://www.abycats.com/maps/catmap.html

Sponsors

Living with Lions has been supported by numerous institutions and individuals over the last year. We are extremely grateful for their generous support, without which none of our work would be possible. Major sponsors this year, in alphabetical order:

- Arthur Blank Family Foundation
- Banovich Wildscapes Foundation: PRIDE Lion Conservation Initiative
- Bonham Safaris
- Calvin, Michael
- Cheryl Grunbock and Martin King Foundation
- Denver Zoological Foundation
- Flora Family Foundation
- Foreign Language Area Studies Fellowship (University of Wisconsin-Madison)
- Fullbright-Hays Program, US Dept. of Education
- Kaplan Awards Program
- Lawry-Leopold Distinguished Fellowship (University of Wisconsin-Madison)
- Maasai Wilderness Conservation Trust
- National Science Foundation
- Panthera
- Philadelphia Zoo
- Potrero Nuevo Fund/TIDES Foundation
- Rufford Small Grants Foundation
- Serian Camp/Alex Walker
- Vannini, Jonathan
- US National Cancer Institute
- Wettlaufer, Debby
- Wildlife Conservation Research Unit, Oxford University
- Wildlife Conservation Society
- Wildlife Direct – numerous individual donors