Coexisting with predators

LEELA HAZZAH and STEPHANIE DOLRENRY

Long sinewy legs and red shukas (blankets) of Maasai warriors stride in front of us, leading the way through thornyAcacia bush. Concealed within this bush are the large golden eyes of Africa's top predator, the African Lion (Panthera leo). Time is irrelevant; we could be in an age that is long past, the only clue that occupies the present are the yellow Garmin GPS units around the necks of the warriors, contrasting against the dark skin and brightly coloured garments. We are tracking the lions of the Amboseli-Tsavo Ecosystem in southern Kenya; land that captures the borderless savannas as they evolve into the green rolling Chyulu Hills of East Africa stretching north to the 392 km² Amboseli National Park and south to the end of Kenyan Maasailand – an area that is approximately 39,470 sq km in total. This area is scarred with history, rich in scents and sights, hundreds of years of man enduring alongside wildlife.

FOR centuries, lions and Maasai have coexisted. However, due to a recent increase in lion killing by Maasai and a reduction of lion's habitat and prey availability, African lions are disappearing rapidly from one of their last strongholds in Kenyan Maasailand. This area has historically been a haven for wildlife, a land where herds of hooves thunder over golden plains and prides of tawny backs stalk silently.

In this un-bordered land, Maasai have lived in symbiotic relationship with the natural world around them.

While other tribes eradicated much of the wildlife that shared their lands, Maasai remained traditional. They do not kill wildlife for food, preferring to sustain on the sweet milk, blood and meat that is supplied by their beloved livestock. They have not succumbed to western ways due to the adoration of their pastoral lifestyles. This has been beneficial to the wildlife that shares their lands, since over 65% of all wildlife left in Kenya survives on the lands of these nomadic peoples.

However, times are changing. This idyllic scenario is transforming; the symbiosis of Maasai and the wild animals around them is slowly dying. With the fragmentation and subdivision of land and transitions within Maasai culture, the relationship has been altered. Since the majority of wildlife lives outside of protected areas and on communal lands, there is increasing conflict between Maasai and animal populations, in particular, lions.

Since 2001, Maasai have killed over 140 lions in the Amboseli-Tsavo ecosystem¹ (approximately 4,000 sq km), which is in the heart of Kenyan Maasailand and contains Kenya's highest density of lions. The killings specifically take place in communal areas where carnivores and peoples'

^{1.} L. Frank, S. Maclennan, L. Hazzah, T. Hill, and R. Bonham (unpublished data), Lion Killing in the Amboseli-Tsavo Ecosystem, 2001-2006, and its Implications for Kenya's Lion Population, p. 9. Living with Lions, Nairobi, Kenya.

22

interests overlap. There are two types of lion killings that have persisted as part of Maasai tradition into current times, *Olamayio* and *Olkiyioi*.

Olamayio is a type of manhood ritual which brings immense prestige to the warrior who throws the first spear into the lion. The killing is a cause for celebration in the community and a symbol of pride for the successful hunter, who is subsequently given a new name – said to be that of the lion he killed. He is adorned with gifts and fawned over by the women in his community. Additionally, *murrans* ritualistically remove the animal's paws, ears and mane which are placed on a stick and carried by the first warrior to spear the lion.

Olamayio is most common in the season of rains, since customary ceremonies (ie., circumcisions and weddings) often take place during this time of the year when the murrans have returned from months of herding their livestock far from their family and friends. Due to an abundance of grass, the murrans are freed from their duties of leading herds to pasture so that they have the time to prod and jeer each other into prestigious adventures such as spearing lions.

Olkiyioi is retaliatory killing, solely carried out in response of livestock depredation, particularly of cows by predators. This type of killing does not bring celebration and attainment of trophies since Olkiyioi killings are not intended to bring prestige but rather rid the community of a problem carnivore.

Today a confluence of other factors (i.e., political tensions between ages, western influences, and conservation interventions) may alter the motivation for warriors to kill lions and thus it has become more difficult to differentiate between Olamayio and Olkiyioi. It is essential to under-

stand this difference in initial motivations for killing lions in order to accurately propose viable mitigation measures that might reduce conflict and increase local tolerance towards carnivores.

Our interests as conservationists working and living in Maasailand are to consider the motivations behind lion killings and offer possible formulas that may address the needs of the changing Maasai while enabling them to coexist with lions. The question we seek to explore in this paper is: How does one promote viable and sustainable conservation where livelihoods and culture intimately share living space with large carnivores? To do this we must further examine culturally appropriate conservation interventions that have been attempted worldwide.

Across the globe, many programmes are initiated with the hope of promoting coexistence between humans and wildlife. Examples of conservation initiatives range from protectionism where the wildlife and people are separated, generally by moving people off fertile land and fencing and protecting wildlife with laws and firearms, to community-based conservation where local communities participate (at various levels) in resource planning and management while gaining economically from wildlife utilization.

Conservation interventions often attempt to counterbalance the past by compensating for the present hardships endured by wildlife by literally 'paying fortolerance'. In today's world there is an assemblage of various development projects and conservation NGOs aiming to improve the conditions of impoverished communities. But, an important question to ask is: Do these modern conservation interventions beget local dependence and

leave communities worse off than prior to the intervention? Further, are we witnessing an erosion of traditional husbandry systems due to external aid? Are livestock more at risk to depredation by carnivores today than in the past? These questions are not exclusive to Maasai communities in Kenya, but are likely relevant to any area where pastoralism persists and where western influences have had a substantial impact. We discuss these questions in greater detail below.

oday Maasai culture and traditions in Kenya are fading; the outside world is seeping in through religious groups, in relief food packages, and possibly, in conservation interventions. As Maasai practice western religions at greater frequency and fervour, their attitude towards their cows and pastoral lifestyle is changing. The immense herds of livestock are now forgotten when a church crusade arrives in the nearest town or each week during Sunday service. Crusades can last up to one week and many of the attendees (especially the elders) do not return to their bomas (thorn-bush homestead) during this period.2

As a result of their absence, no one is present at the bomas to make key decisions about livestock; and they are often left out in the bush at the mercy of hungry carnivores. For example, during a crusade LH attended, two elders lost a total of 35 cows. When asked why he did not return home to take care of his livestock, one of them replied, 'There is no need to return home when I am in the house of God; he will protect my

^{2.} L. Hazzah, Living Among Lions (*Panthera leo*): Coexistence or Killing? Community attitudes towards conservation initiatives and the motivations behind lion killing in Kenyan Maasailand. Page 140. Conservation Biology and Sustainable Development. University of Wisconsin-Madison, Madison, 2006.

livestock from danger' (Anonymous elder, in Mbirikani Ranch, 2005). This attitude is ubiquitous in Maasailand, specifically in those Maasai who attend evangelical Christian churches.³

In addition to changing religious practices affecting dependence and husbandry, receiving relief food has altered Maasai livelihoods. Traditionally, the Maasai subsisted solely on their livestock for daily nourishment (in the form of meat, milk, and blood). Currently they receive food aid from international aid organizations. For example, World Vision (the largest distributor of food aid in Maasailand), 'gives priority to the utilization of food resources in food deficit regions and to low income areas.'4

Our experience in the communities shows that regardless of need, each individual will receive relief food, even those who own large herds. The importance of their livestock depreciates as now they do not only rely on their livestock to feed their family; instead livestock becomes a monetary asset. This lack of immediate need for their livestock, in turn leads to an attenuation of traditional husbandry practices which eventually results in increased conflict with carnivores.

In the same way as religion and relief food can lead to less vigilance over livestock, so can conservation interventions. Conservationists come into an area with good intentions, ask the people what they want and need to coexist with wildlife. As might be expected, people request money as a type of retribution for the loss of their monetary assets. On Mbirikani Ranch, a 1,200 sq km Maasai-owned group ranch where we reside and conduct

our work, people are compensated at market value for the livestock they lose to carnivores. The slaughter is reduced; lions are not being killed as often in these particular areas where people are compensated.⁵ In essence, compensation could be seen as a means to increasing local tolerance. Yet, compensation schemes often cause livestock farmers to become less riskaverse in caring for their livestock as they know they will receive reparation for their loss, 6 and thus traditional husbandry techniques are abandoned. In addition, compensation programmes may increase stocking rates, thereby making more livestock available to be attacked by predators. Therefore, although initial intentions of conservationists' are usually benevolent, the long-term ramifications of specific conservation schemes could lead to a breakdown in traditional herding strategies and an unsustainable coexistence.

n sum, external influences (like religious interventions, relief food, and conservation) can lead to a decrease in livestock dependency as also a reduction in traditional livestock care – leaving livestock in a more vulnerable state. As carnivores continue to kill livestock, local attitudes toward carnivores are certain to change and retributive killing is likely to continue. Therefore, this cyclic cause and effect relationship between

aid, dependency and conflict is essential to consider prior to facilitating conservation in pastoral communities.

Additionally, to facilitate sound conservation programmes that are sustainable, culturally sensitive and appropriate, one must understand the historical relationship between the focus group (in this case, Maasai) and conservation, as the first conservation interventions could negatively impact current or future initiatives.

n Kenyan Maasailand, the history of the people and conservation is a tangled web of promises and misunderstandings. Maasai have long been viewed by historians as 'people of cattle'8 where life depends on vast stretches of pasture and access to water year-round for survival. Historians and anthropologists alike describe Maasai as one of the most prominent and powerful communities in East Africa up until the mid-19th century.9 Pastoralists in East Africa are often seen as a major threat to wildlife conservation because of their demands for land and water resources. 10 From the early 1900s, when the British arrived in Kenya, to the present, Maasai land has been carved up and reorganized, making it difficult for the Maasai to continue a truly pastoral lifestyle. 11

As wildlife became a politicized economic commodity for the Kenyan government, the Maasai were perceived as a hindrance to conservation progress.¹² Wildlife seemed to become more important to colonial

^{3.} Ibid.

^{4.} World Vision, 2007. http://www.world vision.org/worldvision/wvususfo.nsf/stable/globalissues_foodaid_position.

^{5.} L. Hazzah, op. cit., 2006.

^{6.} K. Wagner, R. Schmidt and M. Conover, 'Compensation Programmes for Wildlife Damage in North America', *Wildlife Society Bulletin* 25, 1997, 312-319; P. Nyhus, H. Fisher, F. Madden and S. Osofsky, 'Taking the Bite Out of Wildlife Damage: The Challenges of Wildlife Compensation Schemes', *Conservation in Practice* 4, 2003, 39-41.

^{7.} D. Rondeau and E. Bulte, Compensation for Wildlife Damage: Habitat Conversion, Species Preservation and Local Welfare. Economics and the Analysis of Biology and Biodiversity, Cambridge, UK, 2004.

^{8.} T. Spear and R. Waller, *Being Maasai*. James Currey Ltd, London, 1993.

^{9.} Ibid.

^{10.} I Sindiga, 'Land and Population Problems in Kajiado and Narok, Kenya', *African Studies Review* 27, 1984, 23-39.

^{11.} M. Goldman, Sharing Pastures, Building Dialogues: Maasai and Wide Conservation in Northern Tanzania. Page 570. Geography. University of Wisconsin-Madison, Madison, 2006.

and post-independent governments than the rights and well-being of the Masai. ¹³ It is perceived wisdom that the alienation of Masai pasture for exclusive wildlife use engendered a range of problems from land degradation to increased human-wildlife conflict and, eventually, to Masai resentment of wildlife conservation initiatives. ¹⁴ For over a century, the Masai have been politically marginalized and physically displaced by both the colonial power and their own countrymen in the name of *maendeleo* (development). ¹⁵

Beginning in 1904, Kenyan Maasai were removed from their historic range throughout the Rift Valley and sent to two designated reserves, one in the north and the other in the southern part of Kenya. ¹⁶ The Maasai were unable to live the lives they once did since these reserves were too arid for grazing, tsetse fly infested, and/or allotted to wildlife reserves.¹⁷ The proud people and cattle that once roamed throughout the fertile areas in Kenya were condensed into an area half the size of their historic range.¹⁸ Land degradation manifested, likely due to intensified pressure on the ecosystem from increased livestock and the restriction of human population in contained reserves.

In 1945 the Kenyan government began gazetting a series of national parks and protected areas for wildlife purposes at the request of European hunters and conservationists, which only furthered the loss of Maasai land. ¹⁹ 'Maasai could not understand why, in some areas of their own land, white people could go out and kill lions with their guns while the *morani* were severely punished... if a lion attacked their cattle, it was surely only right that they should be able to protect their livestock. ²⁰

IV laasai resources were depleting at an exponential rate due to overgrazing and, as a result, they were forced to enter protected areas to acquire adequate water and forage for their livestock.²¹ In 1948, when the Amboseli National Reserve (ANR) was created. the Maasai were still permitted to use this area as the government policy at the time was 'not to interfere with indigenous peoples or stand in the way of legitimate human development.'22 However, ANR brought many problems for the Maasai; most notably from wildlife competition for water and fertile pasture, 23 disease transmission (i.e., malignant catarrhal fever), and depredation of livestock.²⁴

Historians and conservationists agree that up until this time period the Maasai rarely killed wildlife malevolently,²⁵but rather only in the interest of protecting their livestock (olkiyioi) or for traditional reasons (olamayio). Though in response to continued government restrictions, murrans began killing rhinoceroses and elephants as a form of political protest against lost dry season grazing,²⁶ and for fear that Amboseli would soon be designated a national park, which would only further limit their access to resources.

As was predicted by the Maasai, in 1974 Amboseli Game Reserve was gazetted as a National Park. In a nationwide programme of land adjudication, Maasai were to move into predetermined group ranches. Realizing that past conservation schemes had failed, the 1977 park agreement offered a number of benefits to the Maasai subsequent to agreeing to move. These benefits included: guaranteed access to water supplies, compensation for tolerating wildlife (cost equal to the market value of cattle that could have been reared instead of the equivalent density of wild herbivores), increased infrastructure (i.e. schools, clinics), and direct benefits from tourism.²⁷

In June 1977, the Maasai agreed to leave Amboseli in return for the benefits stated above. This time the Maasai did not sign an agreement, but instead insisted on a verbal agreement (which was culturally appropriate), since signed agreements were not honoured in the past (D. Western, 2006, personal communication). Fol-

24

^{12.} J. Adams and T.O. McShane, *The Myth of Wild Africa: Conservation Without Illusion*. University of California Press, Los Angeles, 1996

^{13.} D. Berger, Wildlife Extension: Participatory Conservation by the Maasai of Kenya. English Press Ltd., Nairobi, Kenya, 1993.

^{14.} Ibid.

^{15.} Ibid.; D. Lovatt Smith, *Amboseli: Nothing Short of a Miracle*. Kenway Publications, Nairobi, 1997.

^{16.} J. Halderman, Development and Famine-Risk in Kenya Maasailand, p. 544. Political Science. University of California-Berkeley, Berkeley, 1987.

^{17.} I. Sindiga, op. cit., 1984.

^{18.} L. Talbot, 'Demographic Factors in Resource Depletion and Environmental Degradation in East African Rangelands', *Population and Development Review* 12, 1986, 441-451.

^{19.} J. Halderman, op. cit., 1987.

^{20.} D. Lovatt Smith, op. cit., p. 42, 1997.

^{21.} W.K. Lindsay, 'Integrating Parks and Pastoralists: Some Lessons From Amboseli', in D. Anderson and R. Grove (eds), *Conservation in Africa: People, Policies, and Practice*, pp. 149-167. Cambridge University Press, Cambridge, U.K., 1987.

^{22.} G. o. Kenya, Second Interim Report of the Game Policy Committee. Page 6 in G. Printer, editor, Nairobi, 1946, in W.K. Lindsay, op. cit.

^{23.} D. Campbell, H. Gichohi, R. Reid, A. Mwangi, L. Chege, and T. Sawin, 'Interactions Between People and Wildlife in Southeast Kajiado District, Kenya. LUCID Working Paper Series Number 7, 2003, p. 18.

^{24.} W.K. Lindsay, op. cit., 1987; Lovatt Smith, op. cit., 1997.

^{25.} D. Berger, op. cit., 1993; D. Lovatt Smith, op. cit., 1997.

^{26.} W.K. Lindsay, op. cit., 1987.

^{27.} Ibid.

lowing the previously set precedent, the government failed to provide the Maasai the long-term benefits promised. For example, the pipeline worked for only a couple of years due to lack of maintenance, wildlife fees became sporadic and stopped after 1981, and direct benefits were almost non-existent.²⁸

On the other hand, studies do indicate that since Amboseli was gazetted into a national park, wildlife numbers have increased, poaching reduced, and agriculture has expanded while pastoralism has decreased – thus alleviating competition pressure between livestock and wild herbivores. ²⁹ In addition, it has been noted that tourism from Amboseli National Park benefits the national citizenry of Kenya, albeit imposing local costs on the surrounding Maasai communities. ³⁰

Another attempt was made by the Kenyan government in 1993 to provide additional benefits to the Maasai who were sharing their resources with wildlife from Amboseli in an effort to increase their tolerance towards wildlife. They were promised to be paid 25% of entrance fees charged to the tourists visiting Amboseli in order to curtail wildlife killings; however, once again, this promise was not honoured. 31 In response to the lack of benefits and loss of habitat and resources. the local Maasai communities decimated the lion population in the early 1990s around Amboseli National Park, leaving only two lions in the entire reserve.³²

Retaliation and persecution of wildlife in political protest has become a tool for the Maasai, especially those living in rural areas who cannot voice their objection and frustration in other ways. 33 Ongoing killing of wildlife, specifically those species targeted for tourism purposes, is not uncommon in Maasailand today, nor was it in the past. Spearing valued wildlife is a resounding way of 'being heard', using elegant metal spears to proclaim authority and demand justice after centuries of grievances.

In the past 30 years the Maasai have developed increasingly hard-ened feelings toward wildlife.³⁴ As a result, the majority of Maasai have little interest in conservation or wildlife on their land. Unlike other, more tolerant communities, this historical legacy has branded a sense of mistrust amongst Maasai and conservation groups, making conservation even more difficult to execute in these areas.

The blame of Maasai intolerance of wildlife conservation cannot be solely placed on specific policies and practices during and after colonialism. Instead, the purpose of exploring history is to understand the effect of displacement and political marginalization on current Maasai attitudes and behaviour regarding wildlife, conservation and conflict. Also, our historic exploration seeks to examine the root of this antagonism and how these feelings of mistrust alter attitudes

and overall resentment towards wildlife conservation in southern Kenya.

As a result, the history bleeds into the present era of negative attitudes, non-traditional spearing, and conservation interventions that attempt to increase local tolerance. We now venture back to the present question of this paper: How can viable and sustainable conservation be promoted where pastoralism and wildlife share living space, without leaving communities reliant on interventions? Thus far we have discussed the history of Maasai and conservation, examined reasons for livestock husbandry changes and possible roots of livestock-carnivore conflict, and now we put forward a promising solution.

During our time spent with communities on Mbirikani Ranch and through years of data collection focused on the examination of motivations for carnivore killing while also investigating potential community-based conservation solutions, it has become increasingly evident that the need for community participation in conservation programmes is essential to achieving long-term success. We conducted focus-groups where potential future programmes were discussed that would promote possibilities for coexistence. One elder in a focusgroup stated: 'We would like to urge all the conservationists to come forward and work hand in hand with us, because we've accepted living with wildlife and seeing them like our properties, and we want to see more benefits coming in, because we also suffer a lot of conflict from wildlife, and make sure that not just [a] few individual[s] enjoy the benefits but everyone since we all have to live with them' (Anonymous elder, in Mbirikani Ranch, 2006).

At another focus group, a murran stated, 'Let us murrans help conserva-

^{28.} Ibid.

^{29.} D. Western, 'Amboseli National Park: Enlisting Landowners to Conserve Migratory Wildlife', *Ambio* 11, 1982, 302-308.

^{30.} D., Western, K. Benirschke, J. Berger, D. Janzen, W. Hallwachs, G. Meffe, M. Myers, D. Newmark, D. Woodruff, J. Bradbury, P. Raven and C. Norman, 'Wildlife Conservation in Kenya', *Science* 280, 1998, 1507-1511.

31. W.K. Lindsay, op. cit., 1987.

^{32.} P. Chardonnet, Conservation of the African Lion: Contributions to a Status Survey. International Foundation for the Conservation of Wildlife, Paris, France, 2002.

^{33.} P. Standring, 'Revenge Killings: African Farmers Massacre Lions', *National Geographic*, 2004.

^{34.} D. Berger, op. cit., 1993.

26

tionist[s] monitor lions. Our tradition and culture makes us the best and most experienced people to save lions. We can track lions in the dark, with our eyes closed, and we will never fail at it' (Anonymous murran, in Mbirikani Ranch, 2006).

Through such discussions with local communities and collaboration with on-going conservation projects in the area, a community-based programme called 'Lion Guardians' has materialized. In its nascent stage, now almost one year since the first murrans were hired and began the transition from lion killers to lion protectors, it has been hugely successful – no lions have been killed on Mbirikani Ranch while over 12 lions have been killed on an adjacent group ranch.

he key to the Lion Guardian programme is that it encourages largescale local community participation at all levels of the project, from design through implementation. We predicted that 'ownership' of conservation will, and does, result in increased levels of tolerance towards carnivores by local people, thus promoting a viable path towards coexistence. Lion Guardians is a novel approach to conservation, incorporating the traditional role of warriors with proven solutions for reducing lion depredation on livestock and bringing financial benefits of conservation to those individuals that incur the costs of living with carnivores. This programme addresses chronic unemployment among young Maasai men, and incorporates the key aspects of Maasai tradition and culture within a conservation-based structure. Components like transparency, honesty and participation have allowed Maasai communities to fully engage in conservation, instilling a sense of trust between all stakeholders.

Initial employment of guardians is based on two criteria: (i) having sub-

stantial lion numbers in an area so as to require a guardian to monitor them and (ii) a guardian must have volunteered a minimum of three months and exhibited the skills and passion to carry out the expected duties. We found that one of the key components of successful conservation is communication; monthly meetings are held with all of the hired and volunteer Lion Guardians. Reports are given, questions asked, training carried out, and many stories relayed about monthly events in each area.

These meetings follow traditional Maasai meetings (enkiguena), in that all begin and end with Maasai prayers. Not only is open communication encouraged amongst the Lion Guardians, but also in the larger Mbirikani community. Meetings are held biannually in all of the areas where guardians are employed to explain the project and to get feedback and suggestions directly from community members. Further, we are finding that simple measures such as waving, smiling, greeting, providing rides, and sharing information in a transparent manner in the community is essential to the project's success.

n addition, one of the most important aspects of this project is that at the beginning stages of the programme most guardians were illiterate, but now each murran is able to read basic numbers on telemetry receivers and GPS units, and fill out data forms. The opportunity to learn how to read and write is something that goes beyond a salary raise or even a job promotion – the result is long-term and provides a sense of prestige within a community where these skills cannot be obtained in other ways. We continue to provide training on reading and writing to each Lion Guardian and volunteer as needed.

The guardians have two major duties: their primary duty is to monitor lions and other carnivores to learn their movements and how they interact with communities, which is fundamental to conserving them. Second, guardians aid their communities in various ways; by finding livestock if it has been lost in the bush, which represents over 65% of depredation events on the ranch (S. Maclennan, in preparation), or if people are experiencing problems with carnivores at their bomas, the guardians will assist by reinforcing the walls and gates to protect against predators. Also, the Lion Guardians report the whereabouts of lions and other carnivores daily to a central point in the community so as to discourage herders from moving their livestock into predator 'hot spots'.

But most importantly, Lion Guardians work with other murrans in the community to prevent further lion killings (both tradition and retaliation killings). Since the inception of the project, guardians have actively prevented over six hunting parties from killing lions. Given that they come from the communities in which they work, and are older murrans (many have also killed lions in the past) they are respected by all community members and can openly assuage a tense situation of angry warriors wanting revenge for their dead cow.

Lion Guardians is a template that is adaptable in nature and involves existing local institutions working together towards the same goal. The situation on the ground is dynamic and ever-changing. Maasai are semi-dependent on their streaming herds of cattle, sheep and goats, so if lions and other carnivores are to persist in southern Kenya, conservationists need to devolve the responsibility of implementation to the communities

and assume a facilitating, rather than dictating role in the conservation process. Building on ancient knowledge and belief that local people have the motivation to tolerate rather than kill predators, Lion Guardians is designed to promote and remind Maasai that they already know how to live with lions.

To revisit the question of this paper: How does one promote viable conservation without inducing local dependence? We strongly believe that a template, such as Lion Guardians, allows communities to unreservedly participate in the process of conservation in a proactive manner. Lion Guardians does not 'pay for tolerance' as such, but rather through education and self-development by employing murrans to carry out their traditional duties, and by encouraging local capacity building at all levels, we now see a community which is driven to sustain conservation.

nlike other programmes that inadvertently induce poor husbandry and long-term dependence, the core of Lion Guardians is to provide guidelines and assistance to resolving the root of conflict by encouraging increased vigilance of herds and reinforcing bomas. The goal of this project is to provide the ingredients towards coexistence, chiefly by understanding and shifting attitudes and tolerance toward carnivores and conservation at the local level – because only they can decide if they want to coexist with carnivores. Lion Guardians is not a panacea for conservation, but is an innovative approach aimed at alleviating direct conflict between livestock and carnivores, providing incentives to conserve, educating Maasai to become conservation leaders in their community, and lastly, embracing traditional knowledge and culture as driving forces toward sustainability.

n conclusion, the history of wildlife conservation charts the eternal struggle between top predators; specifically documenting the battle of man versus the carnivores that they coexist with. Finding a livable solution to this age-old battle is a challenge that must be overcome if wildlife and man are to continue to live side by side. The past, present and the future of the Maasai are closely tied to their animal neighbours: Can they be conserved or has the time for wildlife tolerance and conservation elapsed, is a question only the Maasai can answer. As conservationists, we can only hope to provide some incentive and path toward coexistence – one that does not leave communities in a more desperate state then prior to our interventions.

All history of conservation and wildlife swirls its way back to the present, back to the thorny Acacia bush. As we walk behind the murrans, following their smoky smell deep into the bush, a hush falls over the group, the warriors' wise brown eyes widen, white teeth break into smiles, and excited fingers point ahead; one word is whispered 'ornga'tuny' A pride of lions pose tensely, ready to flee or fight; the red shukas (blankets) of the murran and the long metal spears triggering fear, remembrance of the recent years of killing.

We quietly and quickly take a GPS point and write notes on the number of lions, and the age and sex of each. After a moment of silent appreciation, we respectfully turn away, leaving the lions in peace. As we reach the manyatta (Maasai homestead) the murrans excitedly relate the adventure, young women's eyes shyly adore the brave warriors, and elders knowingly nod solemn heads; we see the past traditions becoming the future once again, but instead of tracking to kill, these warriors are fighting to conserve.