

HEY PRESTO! WE MADE THE LIONS DISAPPEAR!

BY LAURENCE FRANK

Magical Thinking:
irrational belief that
one can bring about
a circumstance or
event by thinking
about it or wishing
for it; normal in
pre-school children
and also occurs
in schizophrenia
(medilexicon.com)

hat would you say about a person who set fire to his farm, then watched it burn? What might you say about a country that destroys its single most valuable resource, upon which its most important industry depends?

How would you react if such chaos was further dealt with by casting spells, muttering incantations and spending large sums of money that accomplish nothing?

Having watched the collapse of wildlife in Kenya, I long ago concluded that magical thinking rules conservation here. Tourism has long been Kenya's most important source of foreign currency, yet for decades we have watched our

wildlife decline precipitously due to habitat destruction, bushmeat snaring and eradication of large predators. This occurs because rural people earn little or nothing from wildlife, although they pay high costs in terms of livestock killed by predators, grazing lost to wild herbivores, and crops trampled by elephants. Getting rid of wildlife is the only rational, economic response to a costly nuisance. As Craig Packer points out in this issue (pg 25 - 27), we will continue to lose wildlife until people who pay the price of co-existing with it begin to earn serious money from it.

Lions and other large predators are the most difficult animals to conserve. Growing human populations reduce



CONSERVATION



Lion Guardian Mokoi tracks for collared lions using telemetry equipment. .

wild prey so carnivores turn to domestic animals and are then killed in retaliation by angry livestock owners. This pattern has led to the near-extinction of large carnivores on every other continent and is now playing out in Africa: lions, hyenas and other predators are disappearing under the onslaught of spears and poison. Our best estimate is that fewer than 30,000 lions remain - perhaps half of them in Tanzania and fewer than 2,000 in Kenya. The number of lions 50 or 100 years ago is pure guesswork, but it must have numbered in the hundreds of thousands. In all of Africa, there are only six parks or hunting areas large enough to provide long-term security for lions, as their wide-ranging movement takes them beyond the boundaries of smaller parks and into conflict with humans.

Ask a tourist what they most want to see in our game parks and the answer is, usually, "lions." What will happen to our tourism industry if we kill all the lions? We have already lost much of the tourist market to Tanzania, South Africa, Botswana and Namibia, all of which have far better conservation records than Kenya. One would expect Kenya's leadership to demand immediate, effective action to reverse such a threat to our most important industry, but we hear silence. And worse: carbofuran, an agricultural pesticide banned in

the United States and Europe because of its toxicity, has been widely used to exterminate Kenya's lions, leopards, hvenas and vultures.

Although alternatives are available for use in agriculture, efforts to ban the manufacture or importation of carbofuran have gone nowhere – the financial clout of the agrochemical industry apparently trumps the nation's economic dependence on wildlife. On the rare occasions when people are arrested for killing lions, little happens - evidence disappears, charges are dropped, or trivial fines are imposed. As in politics, impunity reigns.

Kenya has three viable populations of lions:

- Maasai Mara, contiguous with the Serengeti population of over 3,000
- Tsavo, which suffers from severe bushmeat poaching and cattle encroachment on its boundaries, but is probably large enough that lions in the interior may be safe.
- 3) Laikipia, where outstanding conservation practices on most commercial ranches ensure plentiful grazing, abundant wildlife, and a healthy population of predators.

All other lion populations are in parks too small to provide long-term security. Outside of parks, lions are being decimated by spears and poison at a rate which ensures extinction within a few years. The Amboseli region is a prime example: decades of overgrazing by unsustainable numbers of cattle, sheep and goats had so badly damaged the grasslands that when drought struck in 2009, most of the wildebeest and zebra died. Deprived of their normal prey, starving lions attacked cattle inside Maasai bomas, and over 20 were speared or poisoned in the first months of 2010 – one third of a population already badly depleted by years of persecution. It will take years for the prey to recover - what will the predators eat in the meantime? When the Maasai eliminated lions from Amboseli National Park in the early 1990s, individuals from surrounding communal lands established a new population. This time, the entire regional population will be gone, people will abandon their traditional livestock protection measures, and there will be no chance of a recovery.

Due to magical thinking, we have seen many non-solutions to non-problems. It is as though people think that spending money and energy on doing anything, no matter how ineffective, is easier than confronting the hard realities of the root problems.

Disease is a favourite non-issue that has been blamed for lion decline. Feline Immunodeficiency Virus (FIV) is a close relative of the Human Immunodeficiency Virus (HIV) and is common in wild cats around the world. Unlike HIV, FIV causes no symptoms or mortality. Most adult lions in most populations, including in Kenya, carry FIV but suffer no ill effects. Although there is no evidence that FIV is a problem for lions, several "researchers" in other parts of Africa have collected large sums of money to solve the lion "FIV threat". In reality, the main scientific interest in FIV is discovering how wild cats' immune systems cope so successfully with a virus whose close relative is lethal in humans.

Similarly, there has been great publicity about bovine tuberculosis in South African lions. In this case, the disease does actually kill some lions (probably ones that have already been debilitated by age or hunger), but there is no evidence that it is responsible for a population decline.

As argued by Stephanie Dloniak in SWARA 2010: 02 another non-solution to a non-problem is keeping "orphan" animals in captivity. These animals can never be returned to the wild and thus can never make any contribution to wild populations. To my mind, a potentially long life spent entirely in a cage is a fate far worse than being eaten by a hyena as an infant, which is what happens in nature. But orphanages allow donors and other well-meaning folks to feel good about themselves. And, coincidentally, orphanages and sanctuaries earn good money.

In other cases, people have confronted real problems with solutions that either ignore biological realities or ignore results showing that ideas which look good on paper often do not work in reality, or have unexpected negative consequences.

Since the 1977 ban on trophy hunting in Kenya, our wildlife has declined by over 70%. Money from foreign animal rights organisations has maintained the ban while South Africa, Zimbabwe and Namibia saw huge increases in wildlife numbers as private ranches replaced cattle with wildlife for highly paid, properly managed hunting. As Packer points out, trophy hunting in Tanzania has neither been well-managed nor does it return significant money to the government or communities. However, communally owned conservancies in Namibia, supported by sport hunting,





Top: Two young lions speared by pastoralists for livestock killing. Their paws have been cut off as the claws and teeth are sold to tourists, who buy them illegally.

Below: Donkey killed and eaten by lions close to a boma on Eselenkei Group Ranch.

experienced a remarkable recovery of wildlife because people stopped snaring when they started making a very good income from wildlife.

Snaring an entire breeding herd of impala for bushmeat nets the poacher far less than a foreign hunter would pay the local community to kill one old male with big horns. Would millions of our animals have been strangled in snares if rural people earned real money from safari hunters? Would the Maasai spear and poison lions if wealthy hunters paid communities enormous sums to shoot an old male? As many have argued in the pages of SWARA, 'conservation' policy, written on the cheques of foreign animal rights groups, seems designed to ensure that rural Kenyans resent wildlife and eliminate it as quickly as they can. Unfortunately, sustainable hunting is probably no longer even an option in Kenya - after decades of decline, we no longer have enough wildlife to support a sustainable hunting industry. Our

wildlife has disappeared, except on the few private lands which still host abundant wildlife, but at least none were shot: we can feel good about ourselves.

The last issue of SWARA (2010:03) featured an article on the Predator Compensation Fund, a sophisticated privately run system that pays Amboseli Maasai for livestock killed by predators, in return for their agreement to stop all predator killing. The article failed to mention one critical fact: in spite of massive effort and expenditure of money since 2003, lion numbers continue to decline due to killing, and the regional population is likely to disappear entirely in a few years. (Maclennan, S.D. et al. Evaluation of a compensation scheme to bring about pastoralist tolerance of lions, Biol. Conserv. - 2009)

The compensation scheme was terrific in theory but in fact has not stopped lion killing and may have exacerbated the problem: where people are paid for livestock killed by predators, herding practices have deteriorated and most livestock kills occur because the animals

CONSERVATION

have been left in the bush at night. This is not surprising - why go to the trouble of herding all your animals into good, stout bomas if a foreigner will pay you for being sloppy? Further, given the long history of Amboseli Maasai killing wildlife to protest grievances and enforce demands, how can this programme ever be halted or modified without all the remaining lions being killed in protest? Earlier this year, leaders of one group ranch incited their constituents to kill lions until compensation payments for dead cattle were increased. In the end, two females were speared, their cubs starved, and payments were increased.

Because most people try to avoid killing a magnificent animal, another favourite practice in Kenya is to translocate problem carnivores to other areas. Rather than shoot a persistent livestock-killing lion or leopard, catch it in a cage trap and release it in a park a few hundred kilometers away. Of course, the process of being trapped and transported is cruelly stressful for a wild animal terrified of people. There are often long delays while decisions are made, during which the animal may be inadequately fed and watered, and displayed to hundreds of gawking people along the route. Worse, this practice totally ignores the basic fact that most carnivore species are intensely territorial, and a stranger dropped into the middle of an existing population will be chased and attacked relentlessly by residents.

Cats often destroy their teeth and claws attempting to escape a trap, so when they are dumped in a strange habitat, they no longer have the weapons with which to defend themselves or kill prey. The great majority of translocated carnivores die slowly and badly. But well-meaning animal lovers who pay the high costs of these translocations feel good about themselves – the animal was not shot. Bizarrely, the outcome of translocations is almost never monitored by radio-collaring the animal and following it after release. This failure to follow up is not accidental. Who would support translocation, knowing that it condemns an animal to terror and a slow

The ultimate cause of all conservation problems lies in growing numbers of people, particularly in drier parts of Africa which are being steadily destroyed by overgrazing. There is no room for wildlife when all resources are needed to

feed an ever-growing human population, or when culture dictates that everyone maximises the number of livestock he owns, regardless of the impact on grasslands. However, even in the face of growing human populations, there are effective solutions to the lion crisis.

In close collaboration with Maasai moran (warriors) and elders, my colleagues Leela Hazzah and Stephanie Dolrenry have developed the Lion Guardians project in the Amboseli region. Uneducated, unemployed young moran, most of them former lion killers, are hired and trained to work with their communities on better livestock practices, search for livestock lost in the bush, help improve bomas, and

(KWT) and enthusiastic support from the local community, a Guardians unit has now been established in that area. KWT and the Born Free Foundation are also building lion-proof bomas in the region. The Mara Conservancy and the Anne Kent Taylor Fund are doing the same in the Mara.

Our research in Laikipia and Maasailand has shown that traditional African methods of livestock husbandry are highly effective at preventing livestock loss to predators. Lions are a small threat, and hyaenas none at all, if cattle are closely herded by men rather than children while grazing, returned to stout bomas at night, and accompanied by healthy dogs to warn

GROWING HUMAN POPULATIONS REDUCE WILD PREY SO CARNIVORES TURN TO DOMESTIC ANIMALS AND ARE THEN KILLED IN RETALIATION BY ANGRY LIVESTOCK OWNERS. THIS PATTERN HAS LED TO THE NEAR-EXTINCTION OF LARGE CARNIVORES ON EVERY OTHER CONTINENT AND IS **NOW PLAYING OUT IN AFRICA.**

inform their communities when lions are nearby, so that people can graze their cattle elsewhere. Lions are given Maasai names and through the Guardians, the community comes to know them as individuals, greatly increasing their tolerance when livestock are killed. The Guardians are first rate field biologists, collecting rigorous data that have allowed us to identify and monitor essentially every lion left in the Amboseli region.

Most importantly, the Guardians have halted lion killing in their communities. When other moran set out to avenge the death of a cow, the Guardians talk them down, persuading them to let the lion live, and call in Kenya Wildlife Service rangers to help when necessary. Except for the two political killings, all of the lions killed in the aftermath of the drought were in the one small area between Amboseli Park and the Tanzanian border where there were as yet no Guardians, while the Guardians in the rest of the ecosystem stopped dozens of lion hunts. With funding from the Kenya Wildlife Trust

of predators. Living with Lions, a group of young biologists dedicated to lion conservation, has developed an excellent video and education programme that reminds pastoralists of the cultural value of predators, and the traditional, inexpensive methods for protecting livestock.

We have long known that a good thorn-bush boma is the key to protecting livestock. Giles Prettejohn, cattle manager of the Ol Pejeta Conservancy, has developed a mobile predator- proof boma made of steel bars and mesh that keeps livestock safe from predators and also serves as a terrific tool for restoring degraded rangeland. Dung from the cattle enriches the soil and the boma can be moved to a new site every few weeks. Although expensive to build, it does not require the cutting of trees and bush - another conservation benefit in a land that is rapidly losing its trees to charcoal burning. Most commercial ranchers of Laikipia have adopted the Ol Pejeta boma, and livestock losses have

declined markedly, rapidly repaying the investment.

Lions learn from parents and pride mates which grazers are suitable prey. In Laikipia, we have found that ranches with good livestock practices almost never lose cattle to lions, because their lions do not learn to take cattle. These ranches have stable populations of well-behaved lions, whereas the small minority of ranches with sloppy practices lose many cattle and shoot many lions, perpetuating the habit of cattle killing because they are essentially teaching lions that cattle are easy prey.

Although attentive livestock care is the key to predator conservation, some individual lions will always become serial livestock killers, especially old animals that are no longer part of a pride. There is no way to change this behaviour, and allowing a serial killer to continue taking livestock inflames the local community and may lead to retaliatory poisoning that indiscriminately kills all animals attracted to the bait. Because lions return to finish a kill, the practice of "sitting up" over last night's cow carcass ensures that the offending individual can be humanely shot. Wildlife authorities should have well-trained Problem Animal Control teams to investigate claims, educate communities on better livestock management and, where unavoidable, shoot chronic offenders expeditiously and humanely.

An alternative to compensation that may avoid most of its pitfalls might be to pay communities for living lions instead of dead cattle. Because persecuted lions are so nocturnal and shy, counting them by standard scientific methods is extremely difficult, but the combination of Lion Guardians working with a biologist has proven to be highly





Top: Lion Guardians Project Director Leela Hazzah with some of the Guardians. Below: Lion Guardian Kamunu carries out a spoor count on Eselenkei Group Ranch.

accurate. "Performance payments" would avoid the perverse incentives that encourage sloppy herding, false claims, and the secret killing of lions. The more lions on the land, the more people would earn, making them a valuable asset rather than an expensive nuisance. Similarly, communities could be rewarded for higher wildlife numbers, reduced livestock densities, better grazing practices and reduced charcoal burning. To avoid funds disappearing as they pass through leaders' hands, each community member could receive his or her monthly payout by M-Pesa (mobile phone banking) on market day. To avoid unsustainable dependence on foreign donors, funds for such a programme should come from the tourism industry and the government.

Although vast sums of money and incredible efforts have been wasted on feel-good magical thinking, it is not too late to save Kenya's lions. KWS has developed far-reaching action plans for the restoration of lions and other predators, focusing on human-carnivore conflict. Better livestock practices and effective community-based efforts such as the Lion Guardians project can have an enormous positive impact. However, these are just tools, available to rural people if they want more wildlife. But they will only want it if they see tourism and wildlife improving their lives rather than impoverishing them. Tourism

depends on wildlife, which in turn depends on the tolerance of humans whose lands are critical dispersal and migration areas. These communities need to see serious income from wildlife, either from tourism or from the government. As long as profits are denied to the people whose land supports wildlife, Kenya's most precious resource will continue to dwindle until, as if by magic, it is gone.

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www.livingwithlions.org