

Taking stock

LIONS OF LAIKIPIA



In northern Kenya's Laikipia District, lions have learnt that livestock on traditional pastoral lands makes for easy pickings. But becoming stock killers effectively seals their fate – impoverished pastoralists can ill afford the loss and will defend their livelihood by any means. Laurence Frank counts the costs.

We first met Diana in January 1999. Claus Mortensen, the manager of Mugie Ranch, had caught her in a large cage-trap set for lions that had been killing his cattle. She was the size of a caracal, perhaps three months old, but when we approached the trap she growled with the depth and ferocity of an adult. Her mother was pacing the surrounding bush in the darkness, growling with maternal anxiety. We darted the cub, then the mother, marking them as Lion Female (LF) 08 and LF09 in our new study of lions and livestock in the Laikipia District. Biologists usually give animals numbers, but Mortensen was embarking on a love affair and named 'his' lions Diana and Gina. Soon we had captured and collared Haley and Isabella (LF13 and LF16), the pride males Cecil and Brian, and many others. Mortensen got to

know his lions and their offspring better than he knew his livestock.

Early this week Mortensen phoned: Brian had just been killed by buffaloes, apparently weakened by septicaemia from a gangrenous bite on his leg. The following day the ranch manager found Diana, Claudia and their younger brother rotting in the sun a few kilometres from Mugie, poisoned by Samburu pastoralists. After becoming a persistent stock killer, Gina had been shot last year and Haley, Madeline, Zara, the Old Female and LF19 had all died after their predations on livestock had become intolerable. Brian's death – of natural causes – was a rare exception.

Unnatural death is the fate of many lions (and hyaenas) in modern Africa. Of course, just as farmers had eradicated the great predators from Europe, North America and Asia, so white colonialists in Africa, making their lands safe for cattle, were bent on doing the same. But

over millennia, traditional African pastoralists had developed methods of herding and corralling livestock that protected them from predators. (Our research has shown that the ancient methods are remarkable effective if diligently applied.) Herding tribes seemed resigned to occasionally losing stock to predators, but that forbearance now seems consigned to the past. Perhaps the former 'tolerance' was actually no more than the lack of technology: rifles and poison are far more effective than spears and arrows, and are readily available. Pastoralists in some areas have entered a market economy, so loss of stock now means loss of profit. Moreover, increasingly they seem to expect that government or NGOs should solve their problems – the politics of victimisation have arrived in the bush.

The commercial ranches of Laikipia are lightly stocked and their healthy rangelands support abundant wild herbivore prey for carnivores. Some lions, however, still learn that there are easy pickings from livestock. Avoiding people, they rarely take stock from the closely tended herds by day, but at night they approach a boma and panic the cattle, which become easy prey if they can stampede through the boma's thornbush walls. Some ranchers, like Mortensen, build strong acacia bomas and employ night guards, who can frighten off approaching lions with a bright torch or a shotgun blast into the air. In some cases, the occasional domestic animal taken by predators is a small cost when compared to the value of tourism.

On the ranges of traditional pastoralists predators find little wild prey. These degraded lands are so overgrazed that they no longer support cattle, and untold thousands of goats are completing the environmental destruction. Bomas are often flimsy, providing little protection from hungry lions and hyaenas, and impoverished pastoralists are seldom tolerant when their stock is taken. Lions usually return to a kill the

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next night, so stock killers are easily poisoned. We have lost at least seven lions to poison on pastoralist areas of Laikipia in the past few months. Nor is this pattern isolated: lions have almost disappeared from one small area of Kenya's Masailand after at least 48 were killed in the past two years, and there are similar reports from Nairobi National Park, the Masai Mara, and Tanzania's Ngorongoro Conservation Area. Elsewhere, no one is counting.

Why should we be concerned if predators outside national parks disappear? Predators do very well when protected from humans – do parks not protect all the lions tourists might ever wish to see? The reality is that most parks are too small to truly protect animals that roam as widely as lions do, and once they cross into livestock country, they are in serious trouble.

At least half of the estimated 23 000 [CHECK: 30 000 IN INTRO?] remaining lions persist in six protected or managed areas (Masai Mara Game Reserve and the Selous, Ruaha, Serengeti, Tsavo and Kruger national parks, plus the Okavango). Three of these are in one country – what would happen if political upheaval in Tanzania were to destroy their protected status? Over and over again in Africa, wildlife has been eliminated when hungry armies or refugees have overrun parks. Serengeti and Tsavo are already under intense human pressure, with snares set for antelope along their boundaries taking a constant toll on predators.

As we now know, small populations gradually become vulnerable to genetic

problems due to inbreeding. These may include reproductive failure or lower resistance to disease, such as the canine distemper epidemic that killed 30 per cent of Serengeti's lions a decade ago. That huge population recovered quickly, but a small isolated one could have been wiped out. A population must be large in order to retain its genetic robustness, which means that small parks must have viable populations outside their boundaries.

In Laikipia, we have been investigating both the ecology of lions where they are under intense human pressure, and ways for people and livestock to coexist with predators. Although up to 20 per cent of them are shot every year

predators and keep fires smouldering at night, but they see little point if there is nothing to gain from their work; poison is cheap, effortless and very effective.

Kenya banned sport-hunting in 1977 in an effort to control large-scale elephant and rhino poaching. The unintended consequence was that animals outside national parks lost all value. Since the hunting ban, wildlife has declined by 70 per cent, snared and sold for a few shillings as *nyama*, or bushmeat. Vast areas that were once rich in game are now empty, silent but for the calls of birds. Wealthy individuals are willing to pay more than US\$30 000 to shoot a male lion, enough to cover the value of 200 cattle killed by

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when they become livestock killers, the 200-plus lions on the commercial ranches seem to be holding their own; lions can breed rapidly when they have plenty to eat. But individuals or prides which venture off the commercial ranches do not last long. To pastoralists and farmers, wildlife in Kenya is nothing but an expensive nuisance, costing them crops, livestock and occasionally human lives. These people gain no benefit from tourism, yet are expected to bear the costs of living alongside the wild animals the tourists come to see. We can urge them to build better bomas, use dogs to warn of

predators. It requires a healthy population of hundreds of lions to produce a few old trophy males, to say nothing of the prey populations of antelope, zebra and buffalo to maintain the lions.

If they were to gain significant income from sport-hunting, would the pastoralist communities of Kenya begin to see wildlife as a valuable renewable resource instead of an expensive nuisance? Would the little guy on the ground get any of that income, or would it all remain in the hands of the chiefs and councillors? Could a lucrative industry be scientifically regulated so that wildlife increased, or would corruption and mismanagement destroy the resource? Could a sport-hunting industry in Kenya police itself so as to avoid the 'canned' killing of tame lions that has so badly damaged the reputation of South African hunting? There are many questions and the controversy is endless – and in the meantime the animals are still disappearing. ▶

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The myth of FIV

Recent hype notwithstanding, one thing that is not threatening lions is Feline Immunodeficiency Virus (FIV), a close relative of HIV. This virus has been in wild felines and hyaenas for millions of years, as witnessed by different strains in African lions, hyaenas and North American mountain lions.

Most adult lions have FIV, yet it produces no clinical symptoms – and is fascinating in the study of HIV/Aids precisely because it seems to have no effect on its wild hosts. An understanding of how lions' immune systems cope so successfully with FIV might prove critically important to improving the human response to HIV. The claim that FIV is behind the decline in Africa's lions is an irresponsible distraction from the real causes – bullets, spears and poison used to protect livestock.

