

Long live THE KING

It is barely half a century since the *Born Free* story caused the world to re-evaluate humanity's relationship with lions. A few brief decades later, are we on the verge of having to reassess once more, as lions slide towards extinction? Will the spirit of Elsa continue to blaze brightly, or will the flame fade and die as extinction becomes a genuine possibility? **Chris Fitch** reports



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ill Travers, President and CEO of the Born Free Foundation, looks down and

sighs deeply. 'How did we get here?' he finally asks with a weary resignation. 'How did we get here, without even knowing it? How did we get to 20,000 lions - less lions than rhinos - without even realising? We sleepwalked. The world has walked in its sleep into a situation where lions are in serious trouble, and it wasn't on the radar!'

In 1900, there were as many as one million lions across Africa. By the 1940s, this had fallen to 450,000 and, by the 1980s, to just 100,000. Against even the most pessimistic predictions, analysts can now say with confidence that there are less than 20,000 wild lions across the whole continent. How much lower might these numbers fall? Could the iconic lion even - whisper it - become extinct?

FORTRESS CONSERVATION

'If we don't do anything,' says Travers, 'lion range states - the countries with lions - could be reduced by 50 per cent between five and ten years. That's a likely prognosis, that we will lose lions entirely from a significant number of the countries in which they are still currently found.' Travers fears that eventually we may end up with just five stronghold countries - Kenya, Tanzania, Botswana, Namibia, and South Africa.

Africa has roughly 400,000 wild elephants, and 25,000 wild rhinos - both species widely recognised as being under threat. Yet it's the African wild lion whose numbers have fallen to a mere 20,000 individuals, the vast majority of which (roughly 17,000) are found in isolated pockets of protected land spread across east and southern Africa.

'In effect,' says Mark Jones, Associate Director of Wildlife Policy at Born Free, 'we're very rapidly moving towards a situation where instead of wild lions as people would traditionally think of them - within protected areas but being free to roam and follow their prey and so forth - the only stable populations of lions will be within fenced areas where every aspect of their lives is intensively managed.'

'Fortress conservation,' declares Travers.

Between 1,000 to 2,000 lions can now be found across all of central and west Africa, with as few as 40 in countries such as Nigeria. Such low numbers mean that even something along the lines of a disease outbreak could now be enough to entirely kill off these remote prides. 'Suddenly your tiny little population is hammered, and becomes biologically nonviable,' explains Travers. 'Africa's lion range states are a mosaic, a very unbalanced mosaic.'

A VIEW TO A KILL

It's a situation which would scarcely have been believed half a century ago, when audience-goers around the world fell in love with lions through the cub Elsa in the original motion picture *Born Free*, an adaptation of Joy Adamson's book of

Below: Born Free's Will Travers; Below right: Zimbabwean hunter Theo Bronkhorst was charged with arranging the hunt of Cecil the Lion



Low numbers mean that a disease outbreak could now be enough to entirely kill off remote lion prides in Africa



the same name. Even now, there is an uphill battle to make it understood quite how perilous the situation is for lions. 'The awareness factor just is not there,' emphasises Travers. 'If we don't raise awareness now, then instead of having a really big problem, but one that we can try and address, we're going to have a crisis.'

But how did we reach this state? What are the problems which are driving this world-famous species into the ground? For many, the obvious culprit is so-called 'trophy hunting'. Despite the perceived general lack of public awareness around falling population numbers, there was one lion in recent years who captured the public's imagination and drew a great deal of focus towards their plight. Cecil, a 13-year-old male, was allegedly lured from his home in Hwange National Park, Zimbabwe and illegally shot by an American trophy hunter, causing a near-global outpouring of emotion.

'Until very recently, everybody seemed to think that there were loads of lions in Africa,' recalls Jones. 'What the Cecil incident did was bring to people's consciousness the reality that these animals are actually being shot by rich Westerners paying lots of money. Why it took this long for that to happen I'm not quite sure.'

Nevertheless, Cecil's death hit worldwide headlines and created previously unknown levels of public anger,

condemnation from conservationists, commentators and even world leaders, as well as frenzied debate about the merits or otherwise of trophy hunting. Organisations such as Safari Club International in the United States tout these activities as an effective way of raising funds for conservation and local communities, arguing that 'hunting is the economic engine behind community-based conservation in Africa' and that 'by supporting community-based conservation, hunting benefits hundreds of thousands of people, hundreds of thousands of animals and millions of acres of land.'

However, the International Union for Conservation of Nature (IUCN) warns that while trophy hunting 'is considered an important management tool for conserving wild land, providing financial resources for lion conservation for both governments and local communities,' it is also 'potentially a threat... depending on how it is regulated and managed.'

'The actual data suggests that only a tiny, tiny fraction of the money generated by trophy hunting - three per cent, maybe a bit more - actually ends up at the community level for development,' counters Travers. 'The employment model is terribly weak because the number of people employed on a trophy hunting operation is tiny. Two hunters going off to shoot lions in Tanzania probably have 15 or 20 people employed in supporting that process. It's not an employment model that really stacks up as far as I can see. And it is one that is terribly open to corruption.'

Studies have put forward various necessary requirements by which trophy hunting could take place at a sustainable



level, such as removing only male lions over six-years-old (supposedly when they are past their breeding age) at one per 2,000 sq km, although the IUCN notes that 'offtake has been higher in many areas'.

Regardless, Mark Jones is adamant that 'we don't understand animal populations well enough to understand what the value of an individual to its population is regardless of its breeding age. Breeding isn't the only thing that an animal brings to its population, particularly very social animals like elephants and lions. Also, the inevitable consequence of giving individual animals a value to trophy hunting outfitters is that the land that they manage will then be so managed in order to provide trophies, rather than to benefit wider biodiversity.'

In some respects, this is already happening and is a scenario depicted in the acclaimed documentary film *Blood Lions* released last year, which revealed the practices behind

'canned' trophy hunting, where lions are bred in farms across South Africa for the sole purpose of being shot by hunters.

STATUS UPGRADE

In January this year, the US Fish and Wildlife Service made changes to the Endangered Species Act (ESA), requiring official permits to hunt lions, and banning trophies from being imported into the US by anyone who cannot show that they were 'legally obtained in range countries as part of a scientifically sound management program that benefits the subspecies in the wild.'

It was a significant step for the US to take - especially since the country is the end destination for around half of all lion 'trophies' transported annually - and yet is just a taste of what could be on the way on an international scale, when, between late September and early October the international Convention on International Trade in Endangered Species of

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Wild Fauna and Flora (CITES) meets in Johannesburg, South Africa, to rule on potential amendments to the international trade in specimens of wild animals and plants. Lions are - at the time of writing - on the agenda.

Nine countries - Chad, Côte d'Ivoire, Gabon, Guinea, Mali, Mauritania, Niger, Nigeria and Togo - have submitted a joint proposal, suggesting that *Panthera leo*, the African lion, follow in the padded footsteps of *Panthera leo persica*, the Indian lion subspecies, and be upgraded from CITES Appendix II to Appendix I, thereby recognising it as a 'species threatened with extinction' and making the trade of any specimens 'permitted only in exceptional circumstances'.

Will the proposal make it through? 'The key thing about CITES is that some will argue against it, saying there isn't enough evidence that international trade is the threat,' explains Travers. 'CITES is not interested in habitat fragmentation or conflict resolution or loss of prey base. It can only apply itself to the impacts of international trade.'

The key question therefore is whether such international trade is truly a major threat to the African lion. 'It is a significant and increasing threat,' assures Jones. 'As we see lion populations decline, so we're seeing trade in lion parts and derivatives, both legal and illegal, going up significantly from both wild and captive-bred lions.'

HABITAT LOSS

But is it genuinely the biggest problem lions face? Would an Appendix I listing have a direct impact on lion conservation? Despite around 600 lions being killed by trophy hunters annually, the evidence suggests that it isn't trophy hunters who are the principle cause behind the species' demise.

'For lion conservation, what's really important is protected area management,' explains Dr Hans Bauer, a Lion Conservation Coordinator for WildCRU, part of the



Right: Virginia McKenna and Will Travers of the Born Free Foundation

Department of Zoology at the University of Oxford, the team that was monitoring the aforementioned Cecil. Many of the familiar problems affecting wildlife around the world are those that are also hurting lions in a major way. Bauer's research, which forms the basis for much of the IUCN's categorisation of lions on its Red List, shows that their habitat has rapidly contracted and deteriorated as Africa has developed. Bauer and the IUCN recognise that the 'exploitation of trees and mineral resources, and the construction of dams and irrigation schemes' mean that the area in which wild lions are now known to cover has shrunk to 1,654,375 sq km, only eight per cent of their historical range.

That same habitat loss has led to a severe decline in prey, with numbers of wild herbivores having dropped by 52 per cent in East Africa, and 85 per cent in West Central Africa, between 1970 and 2005. As traditional prey, such as zebra, wildebeest and buffalo become harder and harder to find,

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some lions have instead turned to picking off livestock, a major penalty to small-scale African farmers for whom cattle can represent a life's savings. This creates direct human-lion conflict, leading to retaliatory killings and general persecution. The practice of subsequently going out to find and kill a lion in retaliation is widespread and agonisingly slow to wipe out.

'Conflict management, law enforcement, anti-poaching patrols, population management, prey management, habitat protection: those are the real issues for lion conservation efforts to deal with,' claims Bauer.

CONFLICT RESOLUTIONS

So, what can be done? 'There are no single solutions,' explains Born Free's Jones, 'because these species are affected by multiple threats and multiple challenges, so you need a set of solutions.' Interestingly, a mix of possible approaches have appeared in recent years, ideas varying in range and scope which could potentially, if scaled up, make a big difference.

Watching 13-year-old Richard Turere's 2013 TED talk, in which he describes how his 'lion lights' invention - a sophisticated system of solar panels and motorcycle indicator lights - has reduced human-lion conflict around his family's Maasai home at Nairobi National Park, underlines this point. 'I used to hate lions,' said Turere in his talk, 'but now, because my invention is saving my father's cows, we are able to stay with the lions without any conflict.'

Turere's idea has spread, one of a number of small steps to keep lion and human populations safely apart. Similarly, the installation of lion-proof bomas has become a priority for the Born Free Foundation and many other NGOs operating in East Africa, since these cost-effective structures are easy to install and help to protect cattle, sheep, goats, and, of course, people from lion attacks, further reducing conflict and the desire for retribution killings.



Richard Turere giving a 2013 TED Talk on his 'lion lights' invention

One model which could potentially lead the way, the Northern Rangelands Trust (NRT), is in operation in Kenya, and is flagged up by Will Travers as an example of somewhere in which these conservation ideas are coming together on a larger scale. 'That model is working with communities to come to agreement whereby very significant chunks of land are brought into conservation status on a voluntary basis,' he explains. 'These aren't national parks and reserves, they're not run by the Kenyan government or the Kenya Wildlife Service (KWS), but they work in complement with the statutory system. That creates a mosaic of protected areas in the north, and the more that come in, the more connected it becomes.' (For more on the NRT model, see our story about Lewa on the *Geographical* website: geog.gr/nrt-kenya.)

LION STRONGHOLDS

'This is where Elsa lived. This is where everything began for us,' reflects Victor Matuma, a programmes officer with the Born Free Foundation. We're sat enjoying the evening humidity of Elsa's Kopje, an Elewana safari lodge sculpted into Mughwango Hill, overlooking the 870sq km Meru National Park in Kenya. A lone hyena howl echoes in the distance. This is the place made famous as the setting for Joy Adamson's original tales of Elsa. 'That lioness really made a serious impact on many people's lives,' continues Matuma.

Meru, Born Free's Kenyan HQ, is the epicentre of what Travers hopes will become a 'lion stronghold', with the potential to expand into the surrounding 4,000sq km area in

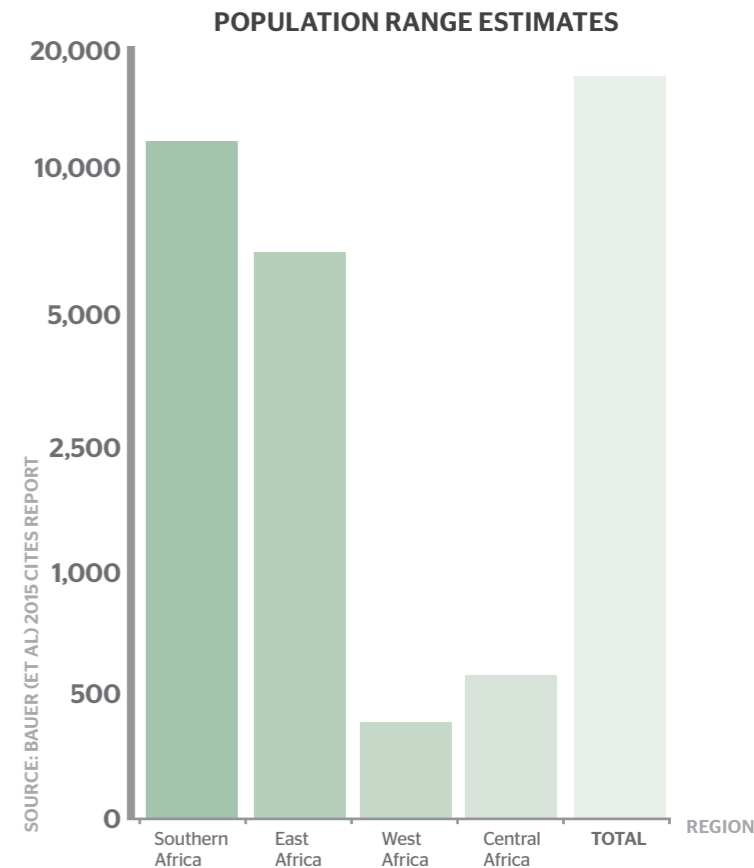
this part of Kenya, an area large enough for it to have what he describes as 'ecological significance'.

Since relocating here in late 2014, Born Free has begun a series of projects in the wider area around Meru, purchasing and installing essential equipment such as tents, laptops, binoculars, cold weather clothing, cameras and GPS systems for the KWS anti-poaching and de-snaring team based here.

Other projects include the installation of lion-proof bomas, water catchment rehabilitation in nearby forests, and controlling invasive species, as well as Global Friends, where facilities such as classrooms are donated to local communities to encourage their involvement in conservation issues, thereby further reducing future human-lion conflicts.

Matuma explains how, together with the KWS, they are also undertaking the first ever carnivore count in the region, to gain detailed information on exactly how many lions are living in Meru. 'With reliable baseline data we can evaluate how effective our lion conservation efforts have been,' he says. 'In the future we will do another survey and this will allow us to refine our work, in terms of both lion conservation and community. We are also working on collaring key lions from different prides, which will give us a better understanding of their home ranges, and how these may come into direct contact with human community areas.'

This is the basic first step necessary for lion protection across all of Africa - a comprehensive census of how many lions there are in each area. Only then is it possible to begin formulating a proper conservation strategy.




The next day, taking off from Meru's hot and dusty runway in a Cessna Caravan 13-seater safari plane, we fly past the prominent Mughwango Hill and on to the edge of the park. A clear boundary marks the outer edge of the sanctuary; lush greenery on one side, red dirt roads and farmland on the other. It's a vivid reminder of the extent to which this environment is being protected from the rampant, disorganised urbanisation going on across the country, indeed, across the whole continent.

DEEP POCKETS

'There's now a lot of political interest that the situation is far worse than people had originally thought,' says Travers. 'The biggest challenge is to turn all that awareness into some kind of action plan that has the resources and the longevity to make a difference. While the £10million Challenge Fund [a series of grants from the UK's DEFRA to 'reduce demand, strengthen law enforcement, and develop sustainable livelihoods for communities affected by illegal wildlife trade'] is not, on its own, going to turn this situation around, it may contribute in small, discrete ways, and exemplify a new, more responsive, entrepreneurial model for the future. But we almost need a UN-style approach to conservation now, one that steps outside of national priorities and boundaries.'

Somewhat predictably, it all seems to come down to how deeply governments and other influential parties are willing to put their hands into their pockets. 'In global terms, it's been estimated that Africa's parks need about \$1billion per year to function,' explains Travers. 'Craig Packer [Director of the University of Minnesota's Lion Research Centre] has estimated \$1,200 to \$2,000 per sq km per year is what we should be investing. That would provide the necessary resources for long-term, life-changing conservation, whether it's lions, elephants, savannahs, or forests. I struggle to think of any park in Africa that is able to make that kind of investment.'

'The urgency of conserving lion populations justifies the special attention and the budgets that are involved,' says WildCRU's Bauer. 'If enough money is spent and enough political will is available, it's not rocket science to conserve lions. It's all to do with the prey availability, anti-poaching, water availability. But you don't have to do much specifically on lions to conserve them. Just conserve the habitat and the prey - the lions can then look after themselves.'

For now, the world waits to see whether 2016, as Born Free's Year of the Lion, is also when the necessary attention is finally paid to halting the decline of lion numbers, rescuing them from the possibility of extinction, and beginning a new era where lions can - one day - live truly free again. 

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Born Free wants Meru, in Kenya, to become a 'lion stronghold'