

# NEWS!

COLLAR A LION PROJECT UPDATE: AUGUST 2023

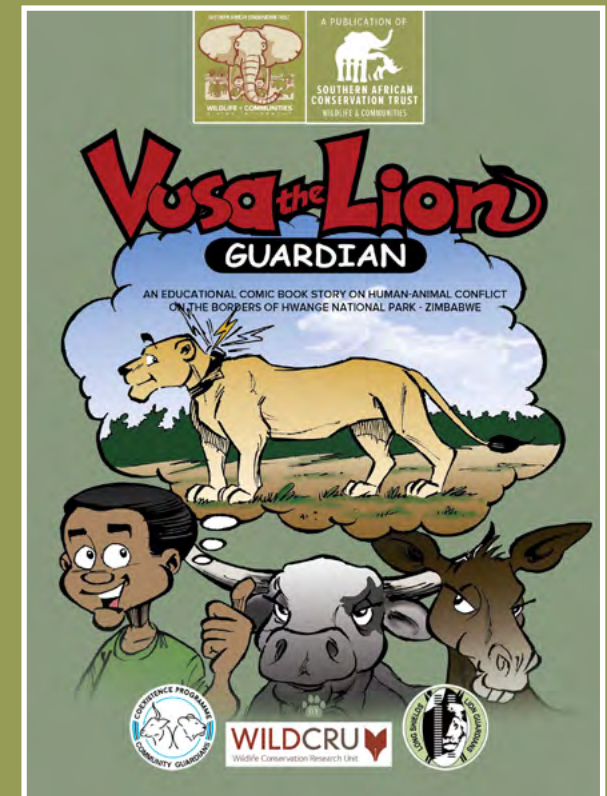
## These eight Lion Warriors are leading the way...

In a very positive start, we already have eight sponsors as partners in our Collar A Lion initiative - outlined in the attached brochure. It's extremely encouraging to welcome these Lion Warriors aboard:

- Gavin Courtenay, CEO of African Risk Transfer (Mauritius).
- Simon Espley, CEO of Travel & Conservation Company Africa Geographic.
- Southern African Conservation Trust.
- Kobie van der Westhuizen and Tertius Boshoff of Stellenrust Wine Estate, both also SACT Trustees, have each personally sponsored a collar.
- David Rosen, a United States-based SACT Trustee, has made a personal donation in memory of his late father Leo Rosen.
- Our Cecil The Lion promotion has to date sponsored two collars with proceeds from the sale of the commemorative wine bottled and donated by Stellenrust.

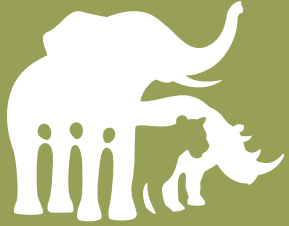


*Our thanks to all these sponsors for their extremely valued support. We'd be delighted if you joined them as a Lion Warrior too! Please read more about our Collar A Lion project in the following pages. Thank you.*



## ORIGINAL EDUCATIONAL LION COMIC TO BE UPDATED AND RE-RELEASED

Our earliest educational comic, first distributed in 2012, is undergoing a complete update. Distributed to rural schools situated on the periphery of protected areas, it shares valuable information with families who need to coexist with wild lions.



**SOUTHERN AFRICAN  
CONSERVATION TRUST**

WILDLIFE & COMMUNITIES

# Getting behind the science that's managing human-lion conflict



# Let it perish, or save it to cherish?

We invite you to join us as a key **conservation partner** in a project that combines research and technology to help future wild lion populations coexist and thrive in harmony with humans and livestock



**A**frican lions have suffered a population decrease of around 43% over the past two decades and now only occupy about 10% of their historic range. With the continent's human population expected to increase from 1.4 billion currently to approximately 2.5 billion by 2050, pressure on natural habitats will increase and human-lion conflict is likely to intensify.

We can't control human population growth, but we can equip wildlife managers with the technology to mitigate conflict. So science and research are key to our focus on preserving future lion populations throughout southern Africa.

- A knowledge of lion behaviour is essential in achieving our goals, particularly in smaller, restricted protected areas, and the data from research to be conducted by **Nelson Mandela University** when compared with data collected from larger open systems will be vital for lion managers in the future.
- We also value the systematic monitoring and data collection being done by the **Trans-Kalahari Predator Programme, an Oxford University (UK)**

**project.** This includes the participation of local communities living with lions and so is fundamental to informing and supporting decisions made by the managers of protected areas.

*(See expanded reports on the work of these two organisations in the following pages.)*

Informed by research, guided by the right training and motivation, and backed by world-class technology, conservation managers are better equipped to protect lions, their prey species, and the people that depend on them. With the right level of sponsorship support, we can build out this strategy and take big steps towards an enduring coexistence between lions and their human neighbours.

Please join us as a partner in achieving this critical conservation goal. Your support in providing the vital science needed will be hugely valued.

*Thanking you in anticipation.*

**Brian Courtenay**

*Chairperson, Southern African Conservation Trust*

## “Combining our passions of nature and wine”

*It is the majestic rumbles and inner trembles of a wild African lion's call that have evoked our passion for the conservation of these Kings of Africa. It is their gentle affection towards siblings, their brotherhood, their motherhood, but above all their fearlessness that we respect and admire so much. The American writer Vera Nazarius posed the question: “What is blood but the wine of life?” So I ask: “What is a lion but the sound of nature?” The greatest honour was bestowed upon us the day we were invited by Brian Courtenay to join the Southern African Conservation Trust. That has enabled us to combine our two greatest passions – nature and wine – making our blood one with nature to conserve these majestic cats. Our heartfelt thanks go out to each and every individual who savours our wild heritage so that it's here for generations to come. ~ Tertius Boshoff*



*Kobie van der Westhuizen (left) and Tertius Boshoff, co-owners of Stellenrust and both trustees of SACT.*



SINCE 1928  
**Stellenrust**  
WINES FROM STELLENBOSCH



## How 'tech' serves to preserve

*Funding established conservation initiatives in the use of GPS tracking technology to minimise human-lion conflict*

Typically, the boundaries of protected wild areas adjoin tribal lands where rural communities of subsistence farmers live with their families and domestic animals.

Understandably, lions targeting livestock as prey in these areas are a potential danger to people and their children, and a constant source of conflict between these communities and the interests of conservation.

GPS collars fitted to selected lions have over the years been key tools in lion research. But they've also proved very useful in assisting Parks authorities to track potentially problem lions and intercept them before they stray into rural lands, then chasing them back into the wild areas of the reserve. Prevention is far better than cure, emphasised by occasions when authorities have no choice but to hunt down and destroy problem lions.

This is why the Southern African Conservation Trust now aims to source and fund an increased supply of lion tracking collars.

Due to the vast areas under review, conservation and research efforts increasingly need this technology to monitor dispersal lions that may move into community lands. Each collar provides roughly 18 months of SAT time, delivering the exact location of collared lions.

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# The Trans-Kalahari Predator Programme

*Developing management plans that take into account the vitally important natural movement of lions between protected areas.*

**Programme Director:**  
Prof Andrew Loveridge

**Project Coordinator:**  
Emma Stewart-Wood

**Project Partner:**  
Southern African Conservation Trust

**WILDCRU**  
Wildlife Conservation Research Unit

  
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Lions are wide-ranging predators. They need vast amounts of space to access adequate prey and to be able to disperse long distances to maintain healthy populations. With growing human and livestock numbers driving an increased demand for land, areas that have previously been suitable for wildlife are now being used by people.

Changes in land use is fragmenting natural habitat, isolating lion populations and increasing the likelihood of inbreeding, intensifying vulnerability to local extinctions. Research to understand the ecology and behaviour of lions in the landscape is critical to protecting them. Using computer simulations for scenario planning the Trans-Kalahari Predator Programme (TKPP) can predict the effect that further land use changes will have on lion populations. With our data, and working with policy makers, we aim to develop management plans that take into account the vitally important natural movement of lions between protected areas.

territory. These long-distance dispersal movements are vital for maintaining genetic diversity between core populations of lions.

Monitoring the movements of dispersing males has the potential to provide the best information on the most likely routes for corridors between protected areas in the landscape. Once the most suitable routes have been identified, steps can be taken to ensure the long-term viability of these corridors.

## **SACT AS PROJECT PARTNERS**

On a more local scale, using GPS satellite collars the TKPP team, with SACT as project partners, closely monitor lion prides situated on park boundaries. Often these lions are likely to cause conflict with communities by threatening their livelihoods and attacking and killing livestock.

By tracking the locations of these collared lions, the TKPP team are able to provide an early warning system to local people. They provide a live feed of information to the communities

*Long-distance dispersal movements are vital for maintaining genetic diversity between core populations of lions. Monitoring the movements of dispersing males has the potential to provide the best information on the most likely routes for corridors between protected areas in the landscape.*

## **SOUTHERN AFRICAN CONSERVATION TRUST (SACT)**

One key method used by the TKPP team, and supported by Southern African Conservation Trust (SACT), is fitting satellite GPS collars on dispersing lions. These tend to be male lions between the ages of 2 and 3 years that are expelled from their prides by adult males, and often cover long distances in search of new

about the whereabouts of lions and are able to react quickly to potential problems. When lions move out of protected areas into community lands the TKPP team are alerted and they in turn inform community members to move their livestock elsewhere to safety. In some cases the team physically deter the lions from community lands and chase them back into the protected area.

# A Game of Thrones: rivals, territories, and resources

## What are the intrinsic costs to African lions contained in small, fenced parks?

### Researchers

Miss Jade Harris, Wildlife Ecology Lab, Nelson Mandela University

Dr Lucie Thel, Wildlife Ecology Lab, Nelson Mandela University

Prof Jan A Venter, Wildlife Ecology Lab, Nelson Mandela University

There are about 20 000 lions in Africa and the general trend is that lions in unfenced parks have decreased, in contrast to southern Africa where fenced parks have contributed to an increase.

This charismatic species is important for ecosystem functioning, as well as society, and their protection is critical for the species persistence. Some argue that fenced parks are ideal tools for lion conservation because populations are less sensitive to human impacts from adjacent areas compared to unfenced populations. This is likely because fences reduce poaching and human-lion conflict and is a more cost-effective management option. Fencing has, however, significant costs, such as ecosystem fragmentation, loss of dispersal and migration routes, and genetic isolation.

Both these arguments have merit but the discussion about choosing one or the other focuses mostly on how external factors affect lions. There is a glaring information gap in considering

***We are grateful to have partnered with the Southern African Conservation Trust on this project and look forward to what this association will bring.***

this argument which is that we are not considering the very behaviour of lions when they are contained in fenced parks. How does fencing influence the lions spatial and social behavioural response to one another?

To answer this question, we need to establish a control reference in an open system to then compare to closed systems. Kruger National Park, with its 2 million hectares and almost pristine ecosystem, represents the ideal control site. Satellite tracking collars will provide us with precise estimates of the lion's home range size and structure.

Building on this information, we will then use playback experiments inside the core territory, as well the boundary of the home range, to test aggressive response to adjacent and non-adjacent prides. We expect this aggressive response to be lower with adjacent prides as related individuals, identified through

kinship genetics, tend to establish themselves within their natal pride's home range.

The same experiments conducted in Hluhluwe Imfolozi Park, Marakele National Park and Pilanesberg National Park will provide us with comparable data from closed systems and allow us to draw conclusions about the effect of fencing on the iconic species, the African lion. Dealing with how fencing will modify natural behaviours is important for the conservation of healthy lion populations.



# Collar a lion's future



Invest in the future of wild lions in southern Africa by sponsoring a satellite tracking collar. Sponsored collars will be fitted to lions selected for monitoring by the research teams of either Nelson Mandela University (SA) or Oxford University (UK) engaged in the respective projects detailed in this brochure.

## The sponsorship of each collar includes:

- 1 Twelve to eighteen months of satellite tracking time (dependent on battery activity), after which it is replaced with a refurbished collar. In the event of the death of the lion or malfunctioning of the collar during the first six months of deployment, SACT will either credit the sponsor with a replacement collar until a new dispersal lion is identified for deployment, or replace the malfunctioning collar at no cost to the sponsor.
- 2 First refusal on sponsorship of a refurbished/recycled lion tracking collar on confirmation of 'dead battery'. From order, recycled tracking collars take six weeks to manufacture.
- 3 All costs associated with tracking the lion and fitment of the collar, including veterinary assistance, darts, and drugs. Any unforeseen additional costs incurred during the deployment of collars will be paid by SACT.
- 4 Comprehensive bi-monthly mini reports will be provided to sponsors, images of the darted lion and collar fitment, GPS printout showing movements of the sponsored lion during reporting period, general data and info on lion movements, naming rights on the collar, certificate and image of the sponsored lion.
- 5 Donor funds will be held in SACT's trust account until utilised for deployment of collars by the research team, during which time sponsors, on request, will be provided with an audit statement by independent accountants on the status of their funds, in credit or utilised.
- 6 Sponsors to receive comprehensive reports on the Longshields Lion Guardians' snare removal program, and on SACT's lion educational programmes in rural primary schools bordering national parks.



CORPORATE SOCIAL INVESTMENT PARTNERS



## How to set up your sponsorship

Your investment of SA R37 000 or US \$2 500 will allow SACT to supply one collar, manufactured by Africa Wildlife Tracking. To support this program, please choose one of the sponsorship payment options below:

### • **South African sponsors:**

**SA Rand account:** Southern African Conservation Trust, Absa Bank, Branch 631826, account number 4097119050.

As a South African sponsor, you will receive a section 18a tax certificate for submission to SARS as confirmation of your donation to a registered PBO for company or personal income tax concessions.

### • **International sponsors:**

**US Dollar account:** Southern African Conservation Trust, Swift Code ABSAZAJJ, account number 647875-USD-1057-01. PayPal account: donate@satibtrust.com (reference: collar a lion).

As an international sponsor, you will receive an invoice as confirmation of your sponsorship.

Please inform one of the following of your sponsorship – giving your name and preferred contact details - so that we can personally acknowledge your investment:

- **Brian Courtenay of SACT – elephant@satib.co.za**
- **Tertius Boshoff of Stellenrust – tertius@stellenrust.co.za**
- **Kobie van der Westhuizen of Stellenrust – kobie@stellenrust.co.za**
- **Gavin Courtenay of ART – gavin@africanrisktransfer.com**
- **Anthony Courtenay of SATIB – acourtenay@satib.co.za**

**THANK YOU!**

Southern African Conservation Trust would like to acknowledge the valuable contribution of Wilderness Safaris / African Bush Camps in support of our projects

**Board of Trustees:** J Boshoff, T Boshoff, BP Courtenay (Chair), A Courtenay, GP Courtenay, WD Forrester, Dr M Hofmeyr, D Llewelyn (AU) AR Pinfold, Dr D Rosen (USA) J Van Der Westhuizen. Scientific Advisor: Dr M. Hofmeyr, Veterinarian. Compliance and fiduciary officers: B Courtenay and J Boshoff.

SACT Postal Address, P.O.Box 427, Umhlanga Rocks 4320 South Africa. Email: [elephant@satib.co.za](mailto:elephant@satib.co.za) Website: [www.sactrust.org](http://www.sactrust.org)

**Registration numbers:** SACT Public Benefit Organization registered with SARS: PBO 930039588, and Registered Trust IT 18/2012PMB



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# If not for the King of Beasts, then for ourselves...

*A world without lions  
would be a failure  
on our part*



**A**lthough the lion is the most iconic of all the African mammals and is even more sought after by photographic tourists than elephants or gorillas, there remains some mystery as to just how many lions remain in Africa...

Lions are still distributed across a wide savanna geography from Senegal (Niokolo Koba National Park) to the Eastern and Western Cape in South Africa (Addo and Karoo National Parks). But many of the populations that still exist are isolated, incredibly small and actually not that well monitored or surveyed ...



For the last few decades, lion conservationists have debated where the numbers stand. There is indeed a database available collating estimates so that in theory one should be able to get a snapshot in time as to how many lions are still alive. However, this data is fraught with guesstimates, disparate approaches to surveying lions and areas where lions are just not counted, and even areas where biologists or conservationists just don't bother to report on how lions are doing.

**So, what do we know?**

Well, we know that already at least a century or two ago hundreds of thousands, if not millions, of lions that roamed Africa from the mountains of the Cape to North Africa and into Asia were pretty much wiped out in the pursuit of sport, clearing areas for native resettlement and the opening of commercial agriculture, amongst others.

Lions have been listed as vulnerable on the IUCN Red List of Threatened Species™ for about as long as modern scientists and conservationists have paid attention to them. Repeat classifications of 'Vulnerable...Vulnerable...Vulnerable' every ten years or so mask an insidious pattern. Lion numbers are continuing to decline, and we tend to think there are more lions than there really are. Lion survey methodologies and approaches are indeed a bit of a mess and only cover a small percentage of extant lion range.

**An emerging pattern**

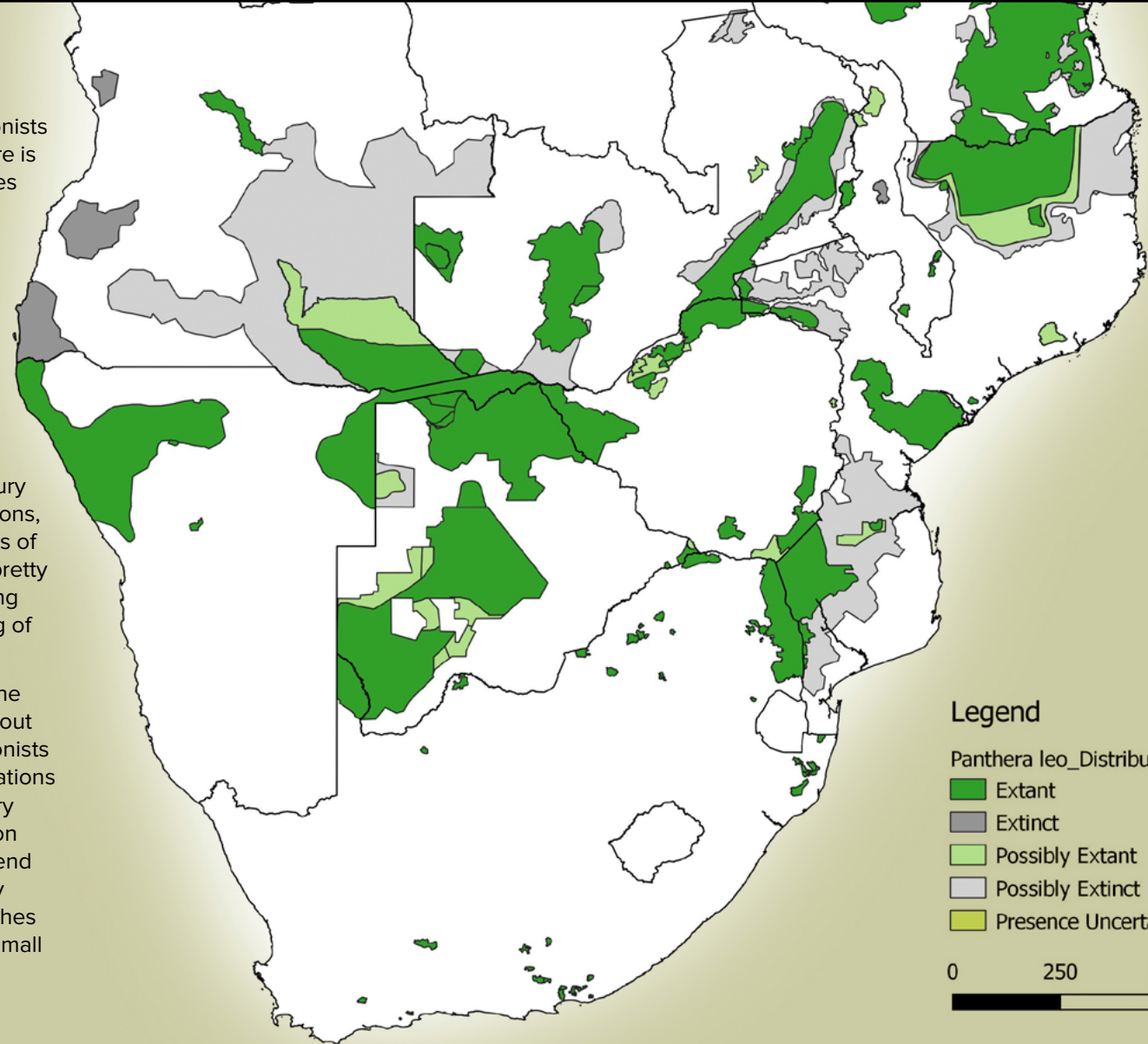
What pattern emerges suggests that lions are seemingly continuing this decline in most places, except where significant conservation management funding and capacity is available.

The subspecies of lion that occurs in southern and eastern Africa (*Panthera leo melanochaita*) is doing reasonably well, with possibly about 23,000 remaining most of which are in South Africa,

Botswana, Zimbabwe, Zambia, Mozambique, Tanzania, and Kenya (all countries with more than 1,000 lions).

By comparison the Northern Lion (*Panthera leo leo*) in West and Central Africa has been continuously decreasing and is now critically

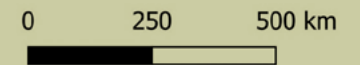
endangered in West Africa. Estimates here vary, but if there are 200 lions left in West Africa, we can count ourselves lucky. Central Africa has much more space for lions, but with large space typically comes a



**Legend**

*Panthera leo*\_Distribution\_2023

- Extant
- Extinct
- Possibly Extant
- Possibly Extinct
- Presence Uncertain



very diluted conservation effort resulting in there only being about 600 lions across the whole of Central Africa.

If there was a time to change the conservation paradigm for lions, it has already come and passed. While lions still occur in a handful of large well protected areas in reasonable numbers (populations containing more than 1,000 lions), such as the Greater Kruger, northern Botswana parks, the Serengeti-Maasai Mara, and a few others, in many protected areas there are so few lions left that they are not viable from a genetic perspective.

We need to protect the big healthy populations

vehemently, and for the smaller populations we need to recover them, connect them via corridors or simulate corridors by translocating lions and establishing managed meta-populations (populations of lions with genetic linkages). The sites at which we do this need to increase in numbers and we need to tackle the multitude of threats lions face at most sites holistically and comprehensively.

#### **A fair job in too few sites**

Thus far we are doing a fair to good job in too few sites. If we continue with this approach with current levels of funding and investment in lion conservation, we will lose lions in many more

localities throughout their range in Africa.

A future with only a handful of large parks left with lions is very possible. Many organisations are already aware of this and working valiantly to halt declines and recover lions. However, the scale of funding and the extent or scale of these initiatives is possibly five to ten times too little. We need to secure each population of lions one population at a time, but we also need to think with a bolder vision of connecting lion populations into a network of gene sharing populations. The challenges are truly enormous, and have to include real benefit streams to rural communities, but there is a desire to get there.

## **AFRICA IS NOT AFRICA WITHOUT LIONS!**

**Brian Courtenay** - Chairperson, Southern African Conservation Trust - [elephant@satib.co.za](mailto:elephant@satib.co.za)

