2023 ANNUAL REPORT

Zambian
CARNIVORE PROGRAMME

Zambian Carnivore Programme
PO Box 80, Mfuwe, Eastern Province, Zambia
www.zambiacarnivores.org

Cover: Lion cubs in Western Zambia's Greater Liuwa Ecosystem. *Photo: Peter Lindsey*

This page: Field teams collecting data as part of Zambia's longest-running large carnivore conservation project in the Luangwa Valley.

Next page: ZCP Liuwa Team Leader and Conservation Biologist Training Programme Graduate Kamuti Likezo conducts work on carnivores and herbivores in the Greater Liuwa Ecosystem.

Next spread: Wild dogs and crowned cranes in the Greater Liuwa Ecosystem, Zambia. ZCP-DNPW conducted three long-term intensive studies of 479 dogs in 37 packs and dispersing groups in 2023.

Back cover: A male lion endures an early rain as he attends to his pride. ZCP-DNPW conducted three long-term intensive studies on 435 lions in 71 groups across Zambia in 2023. *Photo: Peter Lindsey*

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Year in Review

Dear Friends and Supporters,

Dr. Vincent R. Nyirenda
ZCP Board Chairman

It was another exciting and productive year for our organization and work in 2023, and we continued to make great progress across all facets of our organizational pillars of Conservation Science, Action, Coexistence and Leadership.

Particularly inspiring was the continued increase in our work supporting the development of conservation leaders. As the interest in field-based conservation work continues to grow amongst young people in Zambia it is an exciting time to be involved in providing opportunities for training, employment and education so critical to ensuring the long-term sustainability of our efforts. Given our emphasis on being field-based we are able to provide unique and valuable opportunities for young professionals to gain invaluable experience and skills working and training on some of the continent's longest-running projects.

In addition to supporting advanced education opportunities for members of our team and the Zambian Department of National Parks and Wildlife (DNPW), and to conducting management and leadership training across our projects, we continued to increase the impacts of our training programmes, proudly mentoring 55 women and men in 2023. We continued to draw heavily from the increasingly-popular wildlife programmes at the universities across Zambia and continue to work with the DNPW and partners to upscale the technical training we can offer in the future.

In addition the continued development of our Coexistence pillar and the focus on human-carnivore conflict mitigation is increasing in importance as communities and wildlife feel the pressure from changing landscapes and climates.

Collaborations continue to be at the heart of our work, as there is nothing we do alone. Together with the DNPW we worked with nearly 40 partners across the country to make this work possible and to continue it into the future. Thank you again for your support and I hope you enjoy reading.

Dear Friends and Supporters,

We are excited to share our Annual Report for 2023, reflecting on another year of significant challenges but significant achievements, and like a wild dog pack nothing is accomplished alone, and everyone plays a key role!

It is difficult to provide a succinct introduction to our collaborative work over the last year given the integrated, multi-disciplinary nature of all our initiatives, as there is a lot to highlight.

In our Conservation Science work we continued to conduct ground-breaking work on what is widely-recognized as one of the major threat to carnivores across the continent, but is virtually unstudied and poorly understood – the impacts of prey depletion from bushmeat poaching. In addition to the long-term studies already ongoing we expanded what to our knowledge is the only intensive study on this pervasive threat and are excited to share our findings, applications and recommendations.

This applied science was closely linked to our Conservation Action work on combatting the impacts of snaring and we rigorously evaluated all our long-term methods and their positive population impacts on lions and wild dogs. We also embarked on a new initiative with our partners to link two of our long-term project sites through work on the Kafue-Kabompo Corridor, an exciting new initiative on Zambia's largest unrecognized corridor.

Our coexistence work continued to improve and expand as the challenges posed by changing human and land-use dynamics required ever more resources and expertise to address, and we continued to expand collaborations and initiatives aimed at improving the benefits and reducing the costs of living with wildlife for communities.

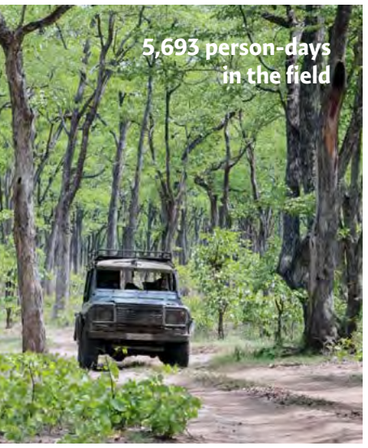
Conservation Leadership initiatives again expanded and increased with all our training and education programmes, and to keep step with this growth we again relied on outstanding management and leadership training as part of our Organizational Strengthening Plan designed by our long-term partner Maliasili. Going forward we will continue to implement our strategic plans and organizational strengthening continues to be a strong focus to ensure the volume of our conservation impact is matched by our resources and the efficiency of our systems and strength of our teams.

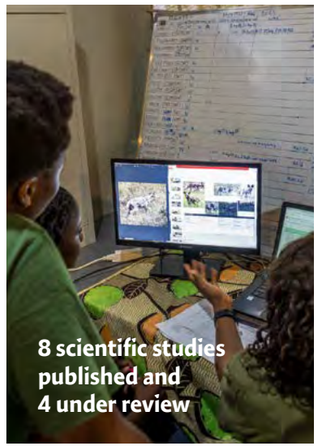
And our teams changed dramatically at the end of the year, as we bid farewell to Thandiwe Mweetwa, who has been integral to our organization for 15 years. From her beginnings as a student volunteer to her role as Project Manager, Thandiwe has been vital to our growth and an inspiration in conservation. Though her departure leaves a void, we look forward to her continued involvement as a ZCP Board Member and through our partnership with the Frankfurt Zoological Society. We are deeply grateful for her leadership, mentorship, and impact on conservation, and the diverse contributions and collaborations contained in this report are a tribute to what we have built together.

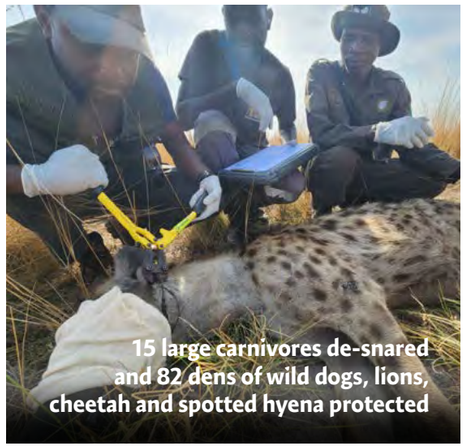
It is an exciting time and as always, we are grateful for your support and collaboration.

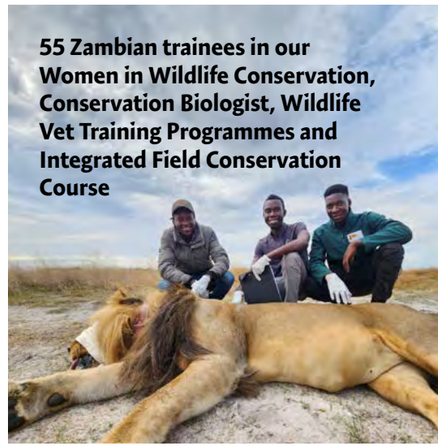
Dr. Matthew Becker
ZCP CEO

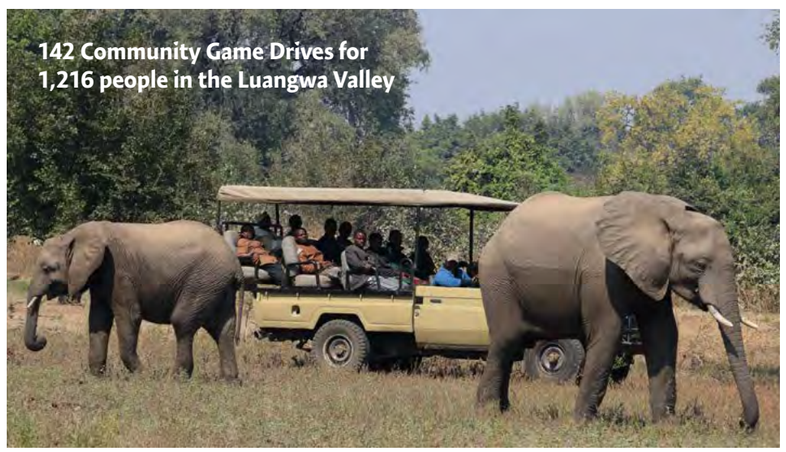
2023 Year at a Glance

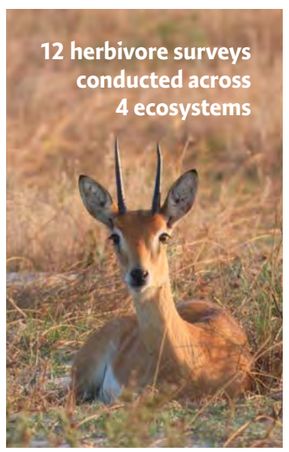


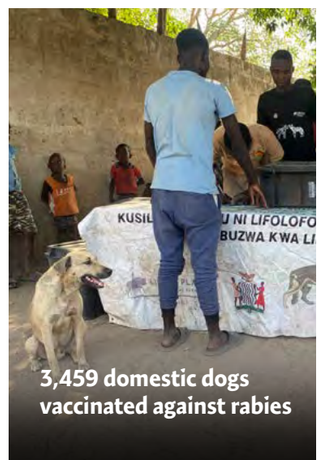












VISION

Restored and thriving ecosystems that are collaboratively conserved by local communities, scientists, and policy-makers through evidence-based approaches.

MISSION

We conserve Zambia's large carnivores and ecosystems through science, action, coexistence, and strengthening local leadership.

WHY CARNIVORES?

Umbrella Species

Carnivores require space, and lots of it; protecting their habitats protects a lot of other species.

Keystone Species

Carnivores have an ecological influence disproportionate to their numbers.

Indicator Species

Carnivores are very sensitive to human impacts, so are often the first to disappear from ecosystems.

Flagship Species

Carnivores are charismatic and readily attract public interest and support for conservation.

MARCUS WESTBURG

Our Approach

CONSERVATION SCIENCE

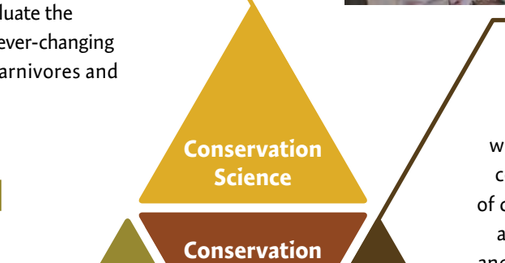
We conduct long-term research and monitoring to identify and evaluate the limiting factors and the myriad, ever-changing threats facing Zambia's large carnivores and ecosystems.

CONSERVATION ACTION

We address immediate threats, as identified by science, with programmes including combatting the bushmeat and illegal wildlife trade, large landscape conservation, and connectivity protection.

COEXISTENCE

We are committed to working with communities to reduce the costs, and increase the benefits of coexisting with wildlife, as well as to increasing, understanding and appreciation of conservation.



CONSERVATION LEADERSHIP

We are helping Zambia become a model for locally-led conservation through supporting well-trained, passionate, and committed conservation leaders.

THE GREATER KAFUE ECOSYSTEM

(2011-PRESENT)

The Greater Kafue includes Kafue National Park, the largest protected area in Zambia and Africa's second largest national park, as well as surrounding Game Management Areas. It supports Zambia's largest cheetah population and second-largest populations of wild dog, lion, and leopard, as well as the highest antelope diversity of any national park in Africa. The Greater Kafue constitutes the northern end of the Kavango-Zambezi Transfrontier Conservation Area, also providing important connectivity to other wildlife areas beyond.

THE GREATER KABOMPO ECOSYSTEM

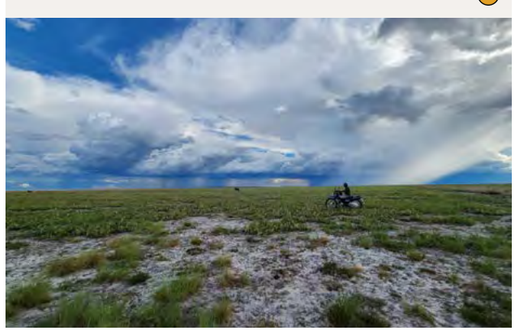
(2018-PRESENT)

The Kabompo Ecosystem, centered around West Lunga National Park in northwestern Zambia, is a recovering ecosystem with a diversity of unique habitats. It retains connectivity to the Greater Kafue Ecosystem through one of Zambia's largest remaining corridors, the Kafue-Kabompo Corridor. Our research and monitoring work focuses on providing science-based guidance and evaluations as the ecosystem changes rapidly with restoration efforts.

THE GREATER LIUWA ECOSYSTEM

(2010-PRESENT)

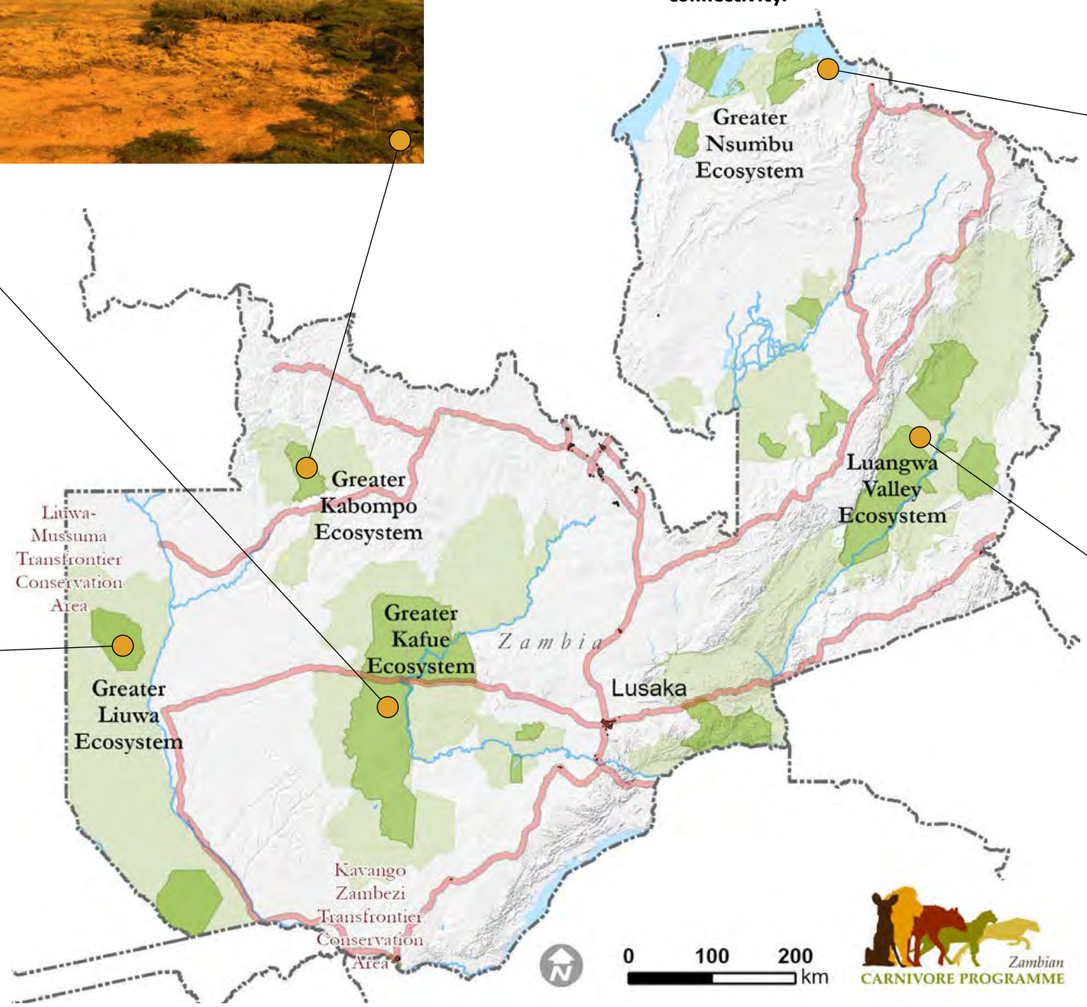
Liuwa Plain National Park, located in Western Province, is a vast, seasonally flooded ecosystem. Work here focuses on research and monitoring to help guide, inform and evaluate conservation management as the ecosystem changes rapidly. Liuwa currently hosts important populations of spotted hyena and cheetah, recovering populations of wild dog and lion, as well as Africa's second largest wildebeest migration. It also forms part of the proposed Liuwa-Mussuma Transfrontier Conservation Area with Angola.



Where We Work

Zambia: The Crossroads of Connectivity

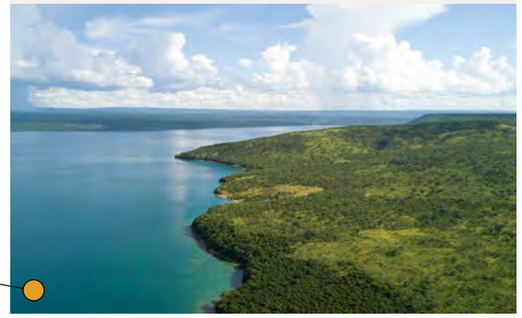
Located in the geographic heart of Sub-Saharan Africa, Zambia's 50 million hectares of forests and abundant freshwater systems host some of the region's most important wildlife habitats for wildlife, including large carnivores. Bordered by eight countries, Zambia also occupies a crucial position in connecting Eastern and Southern African wildlife populations and in supporting large-scale ecological processes that depend upon this connectivity.



THE GREATER NSUMBU ECOSYSTEM

(2017-PRESENT)

The Greater Nsumbu forms the southern edge of Lake Tanganyika and Zambia's northernmost landmass, centered around Nsumbu National Park and Tondwa Game Management Area. With a diversity of unique habitats that provide connectivity with other wildlife areas, Nsumbu is a recovering ecosystem, and our collaborative work aims to assist with research, monitoring, and restoration of carnivores.



THE LUANGWA VALLEY ECOSYSTEM

(2005-PRESENT)

The Greater Luangwa and Mid-Zambezi Valley ecosystems stretch over 70,000 km^2, an unfenced and relatively intact wilderness which hosts Zambia's largest populations of lion, wild dog and leopard. Here, ZCP has its longest-running field site and organization headquarters in South Luangwa, with intensive field projects focused on wild dog, lion, leopard, hyena and giraffe.

Conservation Science

Reliable Conservation Science is at the core of what ZCP does, delivering the robust evidence needed for fact-based carnivore conservation with all its different facets.

As in previous years, our work encompassed some of Africa's most comprehensive studies – spanning nearly 40,000 km^2 across 5 ecosystems, 7 national parks, and 8 Game Management Areas as well as multiple corridors and Transfrontier Conservation Areas. We continued and indeed intensified our long-term monitoring of 15 different populations, with over 1,150 mostly known-age carnivores.

Collectively, this work comprises some of Africa's longest and most comprehensive ecological studies to guide science-based conservation into the challenges, uncertainties, and opportunities of the future.

We now live in an era known as the Anthropocene, or the Age of Humans, when for the first time we are the primary agent of ecological change on the planet. Understanding the rates and consequences of these rapid changes and challenges – and being able to effectively address them – is of critical importance for conservation.

Our intensive, long-term studies that encompass the complexities of human and ecological drivers in ecosystems are therefore of critical importance in providing current and accurate science-based conservation in a rapidly changing world.

MARCUS WESTBURG

High-Quality Evidence for Science-Based Conservation

The quality of evidence is extremely important in science-based decision-making; therefore, anonymous peer-reviewed scientific papers are the gold standard for the value of our scientific approach, and form the foundation of all our conservation management and policy recommendations.

We frequently share findings and recommendations from this technical work with our partners and stakeholders through an assortment of reports, meetings, and media. These are based on the evidence produced in our scientific papers, which also provide the justification and validation of policies and management actions. In 2023 alone, we published 8 studies in top quality peer-reviewed conservation journals, while another 4 were still under review.

Our evidence foundation is built on more than 60 peer-reviewed studies completed by ZCP-DNPW and other partners from work in Zambia since 2012, making Zambia one of the most well-equipped countries in the region for science-based conservation.

Conservation and Management Topics for Which We Provide Science-Based Guidance:

- Demography of Carnivores & Herbivores
- Movement, Spatial Dynamics & Dispersal
- Connectivity & Corridors
- Predator-Prey Dynamics
- Competition between Carnivore Species
- Genetics
- Disease
- Bushmeat Poaching/Prey Depletion
- Trends, Patterns & Impacts of Snaring
- Trophy Hunting Management
- Human-Carnivore Conflict Mitigation
- Illegal Wildlife Trafficking
- Human Encroachment/Land-Use Change & Planning
- Survey Techniques & Scientific Methods
- Species Restoration/Translocation Protocols
- Climate Change
- GMA Community Conservation Models
- Land-Use Planning

Visit our website for a complete list of peer-reviewed Scientific Publications for Management and Policy: www.zambiacarnivores.org/publications

Highlights from Studies Completed and Published in 2023

Hot or Hungry? A tipping point in the effect of prey depletion on African wild dogs.
In most natural systems, wild dogs are primarily limited by dominant competitors like lions, not limited by prey availability. But with increasing human impacts on the landscape, there is increasing evidence that prey depletion now poses one of the most urgent and serious threats to wild dog persistence.

Effects of de-snaring on the demography and population dynamics of African lions.
De-snaring obviously helps the individual lion, but does it have positive population impacts? Find out on page 20.

Wire-snare bushmeat poaching and the large African carnivore guild: Impacts, knowledge gaps, and field-based mitigation.
A comprehensive synopsis of wire-snare poaching impacts on large African carnivores, identification of knowledge gaps needed to help mitigate these impacts, and a description of field-based protection or the halo approach, a method implemented across our study sites to merge conservation science with resource protection work.

Socio-political and ecological fragility of threatened, free-ranging African lion populations.
Compiling information on 62 lion populations in 25 countries, this pan-African study argues that socio-political conditions are just as important as ecological ones in determining the fragility of Africa's remaining free-ranging lions. Zambia's lions are some of the safest and most resilient populations on the continent, demonstrating that the entirety of dedicated measures adopted to conserve this species is bearing fruits.

AFRICAN LIONS

In 2023 we continued our long-term intensive work across Zambia's lion strongholds in the Luangwa Valley and Greater Kafue Ecosystems, as well as in recovering populations such as the Greater Liuwa Ecosystem, and helped population restoration planning for the Greater Nsumbu Ecosystem.

We intensively **monitored 435 lions from 71 prides** and coalitions and utilized data from an additional **31 individuals** through Citizen Science.

HIGHLIGHTS

We completed and published an evaluation of the demographic impacts of our lion de-snaring work in the Luangwa Valley Ecosystem (page 20), demonstrating that the population grew with the benefits of de-snaring, but was expected to decline without de-snaring efforts.

We completed a study on the positive impacts of increased law enforcement efforts and resource protection on lion population growth and demography in the Greater Kafue Ecosystem.

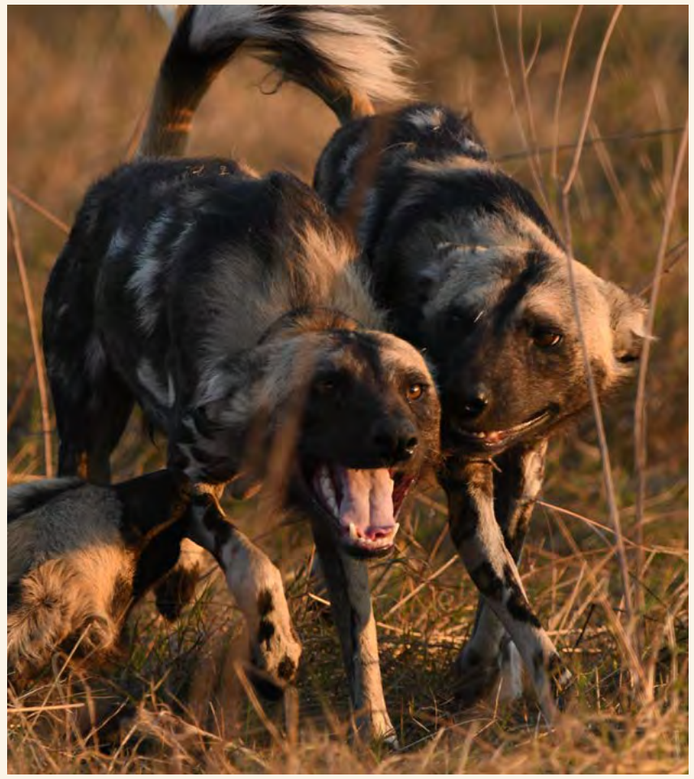
We made considerable progress on analyses of lion space use and movement across gradients of protection within and across ecosystems, and continued studies of lion dispersal by males in the Greater Kafue Ecosystem.

We contributed to a published pan-African study examining the socio-political and ecological factors that determine the fragility of the last remaining free-ranging lion populations. The study demonstrated that our collaborative work contributes to maintaining some of the strongest and safest populations on the continent.

We contributed to a large-scale published study demonstrating lions adopt different responses to balance the risks arising from limited resources and impacts by humans, yet their combined effects increasingly deteriorate the lion's ecological role as a top-predator and increase conflict likelihood, leading to a higher extinction risk.

We continued to refine and utilize the Lion SNP Chip for assessing connectivity and combatting illegal skin trafficking (page 21).

We completed and published a review of snaring impacts and knowledge gaps on lions.



AFRICAN WILD DOGS

In 2023, we continued our long-term wild dog conservation work across three ecosystems in Zambia, one of only 6 countries considered to have viable populations of this highly endangered species. Our core focus remained on monitoring population dynamics in the context of prey availability, interactions with competing predators, changing environmental conditions, and man-made threats.

We intensively **monitored 479 individual dogs in 37 packs and dispersing groups** across the Greater Luangwa, Kafue and Liuwa Ecosystems as part of our long-term work. Through Citizen Science work, we **monitored an additional 48 animals from 6 groups**.

PRIMARY IMPLEMENTING PARTNERS

HIGHLIGHTS

We published a scientific study demonstrating the increasingly severe impacts of prey depletion on wild dogs, exhibited by a 'tipping point,' above which dogs are increasingly limited by competition with lions, while below which dogs are increasingly limited by prey. Such a situation with prey limitation is likely to be common across the human-impacted landscapes characterizing much of the remaining wild dog range and should be recognized as one of the biggest threats facing the species. In addition, climate change has been identified as a serious threat to wild dogs, but prey depletion provides a mechanistic explanation for dynamics attributed to increases in temperature.

Using cutting-edge analytical techniques (integrated population models) we completed a study on wild dog source-sink dynamics in the Luangwa Valley and submitted for publication.

Using long-term data we evaluated the impacts of prey depletion and competition on wild dog demography and submitted for publication.

We began intensive studies of the impacts of prey depletion on wild dog hunting success and progressed on analyses of space use across gradients of protection and prey depletion.

We continued to progress on studies of dispersal and connectivity across large landscapes in KAZA and the Luangwa Valley.

We completed and published a review of snaring impacts and knowledge gaps on wild dogs.

CHEETAH

The fastest land mammal on Earth but also the lowest density and widest-ranging of all African carnivores, cheetahs are a subordinate competitor, and consequently often occur outside strictly protected areas, exposing them to ever-increasing human impacts.

In 2023, we maintained last year's high level of work intensity in Zambia's two cheetah strongholds, the GKE and GLE ecosystem. We intensively **followed 26 cheetahs in 17 social groups**, and **monitored an additional 14 individuals** through Kafue's collaborative citizen science programme. Considering the cheetah's elusive and far-ranging nature, such high intensity work is imperative to understanding the species' ecology and conservation needs.

HIGHLIGHTS

We completed a camera trap study for cheetah in the Greater Liuwa as part of the proposed Liuwa-Mussuma Transfrontier Conservation Area with Angola.

We continued studies of dispersal and connectivity of cheetah across stronghold populations in the Greater Kafue and Greater Liuwa Ecosystems.

We conducted a range of analyses focusing on cheetah demography and sociality, population dynamics, space-use and dispersal dynamics, interaction with their competitors, prey availability and human impacts was refined and informed with long-term data in 2023, greatly improving our understanding of cheetah ecology and conservation needs.

We continued to gather critical data on bushmeat poaching – and resulting prey depletion – which may exacerbate competition between cheetahs and lions, the cheetah's most dominant and dangerous competitor.

We continued analyses of long-term demographic data for cheetah across Zambian KAZA's largest population in the Kafue and with Greater Liuwa's transboundary population.

We increased the number of cheetah under study in 2023 by 50% in the Greater Kafue Ecosystem.

We completed and published a review of snaring impacts and knowledge gaps on cheetahs.

PRIMARY IMPLEMENTING PARTNERS

SPOTTED HYENA

Spotted hyenas are perhaps the most widespread and successful African large carnivore, yet they are subject to the same array of human threats that big cats and wild dogs face, in addition to being intensely persecuted and vilified for witchcraft.

In 2023, we further increased monitoring efforts of Africa's most-maligned, data-deficient, and least-supported large carnivore throughout all ecosystems, intensively **monitoring 236 hyenas from 23 clans**. While all other large carnivores are IUCN-listed as Vulnerable or Endangered, the spotted hyena remains listed as Least Concern, in no small part due to a lack of sufficient information on this species.

HIGHLIGHTS

We added another 3 intensively-monitored clans in 2023, continuing to expand one of the continent's longest-running and most comprehensive hyena studies in the Greater Liuwa Ecosystem, as well as upscaling our work in the Luangwa Valley and Greater Kafue Ecosystems to enable evaluations of hyena threats and dynamics within and across ecosystems and protection gradients.

We contributed long-term hyena presence and absence data from across Zambia to the range-wide revision of their distributions and population status that is currently underway by the Hyena Distribution Mapping Project in collaboration with IUCN Hyena Specialist Group. The last comprehensive revision of hyena distributions (all 4 species) was in 1998.

We continued to assist with the development and application of a Spotted Hyena SNP Chip, enabling high-quality genetics from scat in order to study connectivity and populations in human-impacted systems. Field teams collected 61 genetic samples from hyenas, a 42% increase from last year.

We completed and published a review of snaring impacts and knowledge gaps on hyenas.

PRIMARY IMPLEMENTING PARTNERS

LEOPARDS

As the most elusive member of Africa's large carnivore guild, leopards are notoriously difficult to study. Accordingly, we continued with camera trap surveys in Zambia's two leopard strongholds, the Luangwa Valley and the Greater Kafue Ecosystem, while continuing camera trap surveys with partners in the Greater Kabompo, Greater Nsumbu, and Greater Liuwa, where leopard have yet to recover.

We focus **long-term studies** across protection gradients on those ecosystems with well-described populations of both competitors and prey to understand leopard population dynamics, from drivers including prey depletion, to the impacts of bushmeat and legal and illegal hunting.

HIGHLIGHTS

With 659 camera trap deployments and nearly 20,000 camera recording days throughout 2023 (up 38% from 2022), we intensified our support of on-going camera trap surveys in the Greater Kabompo, Greater Liuwa, and Greater Nsumbu Ecosystems to assess leopard presence and numbers, but also connectivity between key habitats and across protected areas.

We completed an analysis of Luangwa leopard demography and occupancy data, finalizing in 2024.

We continue to assist in the development and application of a leopard SNP Chip, allowing high quality genetics from scat and other low-quality samples, which can be used for anti-trafficking, assessing connectivity and population monitoring.

We completed and published a review of snaring impacts and knowledge gaps on leopards.

Through our increasing Human-Wildlife Conflict (HWC) mitigation efforts in the Greater Luangwa Valley (see also Coexistence), we began to investigate which role leopards play in local livestock conflicts and how their impact on livelihoods can be alleviated, thus reducing the risk of persecution.

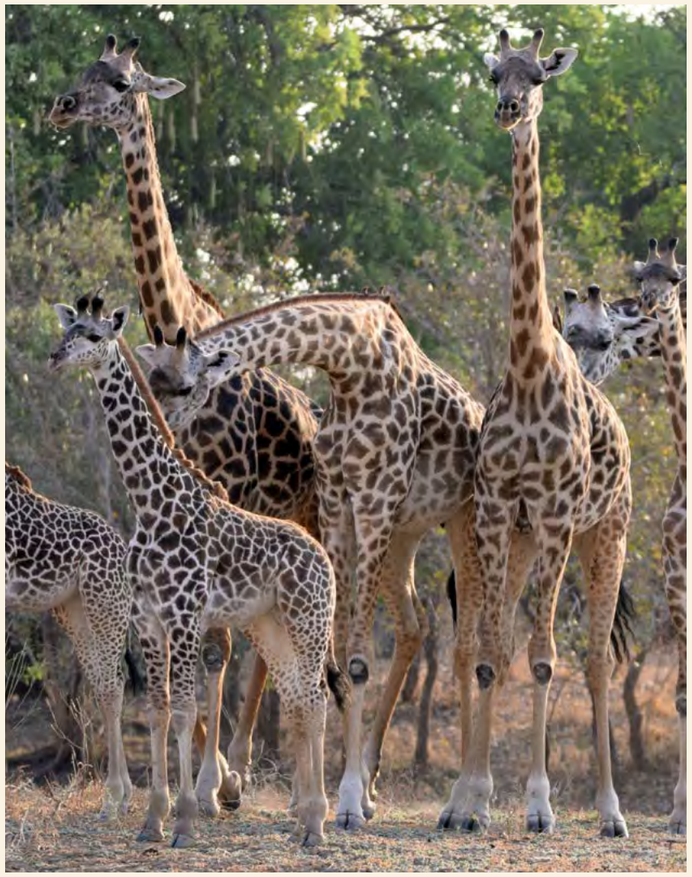
PRIMARY IMPLEMENTING PARTNERS

HERBIVORES

In addition to being of critical importance to large carnivores as prey, large herbivores are of key ecological importance as major structural agents of vegetation and nutrient cycling, and are similarly imperiled across their ranges by human impacts.

Consequently, ZCP and DNPW have always emphasized conservation science work on herbivores, both by conducting surveys across our focal ecosystems and by conducting long-term intensive studies of particular species and populations.

In 2023 we conducted 12 ground-based surveys for herbivores across the Luangwa Valley, Greater Kafue, Greater Liuwa, and Greater Kabompo Ecosystems, utilizing distance sampling methods to estimate density, distribution, and the human and ecological factors affecting them for various species. In addition, we continued long-term intensive studies of wildebeest in the Greater Liuwa Ecosystem, and of giraffe in the Luangwa Valley, while continuing a new study on buffalo in the Greater Kafue Ecosystem. We also began herbivore surveys and biodiversity monitoring in the southern portion of the Kafue-Kabompo Corridor as part of an exciting new initiative (page 25).



HIGHLIGHTS

Our collaborative long-term study of giraffe in the Luangwa Valley (since 2008) with Giraffe Conservation Foundation and a variety of local partners saw the first ever individual-based population survey conducted across nearly 3,000 km throughout the Luangwa Valley.

We documented the first transboundary movements of wildebeest into Angola in recent history as part of our long-term intensive studies of the largest remaining wildebeest population in Southern Africa.

We maintained the high monitoring effort of wildebeest in the Greater Liuwa Ecosystem with 41 collared individuals and 837 herd counts in 2023, continuing our intensive study on population dynamics in relation to human and ecological factors.

We continued our studies of bushmeat poaching and its cascading ecological impacts on herbivores across all ecosystems, led by DNPW-ZCP Ph.D. student Howard Maimbo.

We completed and published a study of herbivore habitat shifts in response to predation risk by carnivores and competitive interactions between species, finding that responses of grazers with different body masses vary strongly in relation to predation risk and that competitively subordinate grazers experience higher predation rates as their ability to avoid risk is constrained by competition with larger herbivores.

PRIMARY IMPLEMENTING PARTNERS

Conservation Action

Effectively addressing threats to carnivores and ecosystems requires close alignment between science and conservation management, but many conservation organizations lack the necessary in-house capacity to bridge these gaps.

Working closely with over three dozen partners and having multiple long-term field-based projects on the ground, ZCP has the foundation, resources, and relationships to enable a rapid and appropriate response to an array of dynamic and novel threats as they arise, and change, across our focal landscapes.

In 2023, ZCP continued its substantial efforts on conservation actions such as:

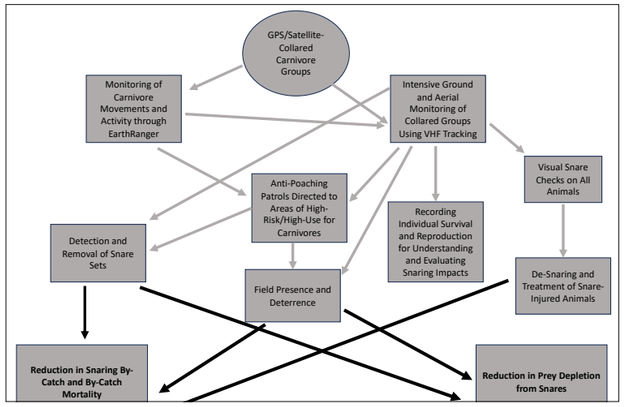
- Combatting the illegal bushmeat trade and anti-snaring
- Developing and applying genetic tools to assist intelligence and forensics efforts in combatting illegal trafficking of big cat skins and parts
- Assisting with restoration efforts of wild dog and lion populations where they were locally extirpated
- Identifying, evaluating and helping to conserve corridors and connectivity within and between ecosystems using a combination of human land-use change data, movements of dispersing carnivores, and genetics.

Conservation actions are not static – human impacts are rapidly changing ecosystems, threats are changing in intensity, and new ones often arise unexpectedly. To effectively combat these impacts we need to be able to quickly pivot, adapt to, and address, emerging challenges. Fortunately, with long-term projects and relationships in place, we are well-situated to employ a wide spectrum of conservation actions to deal with the diversity of issues facing large carnivores.

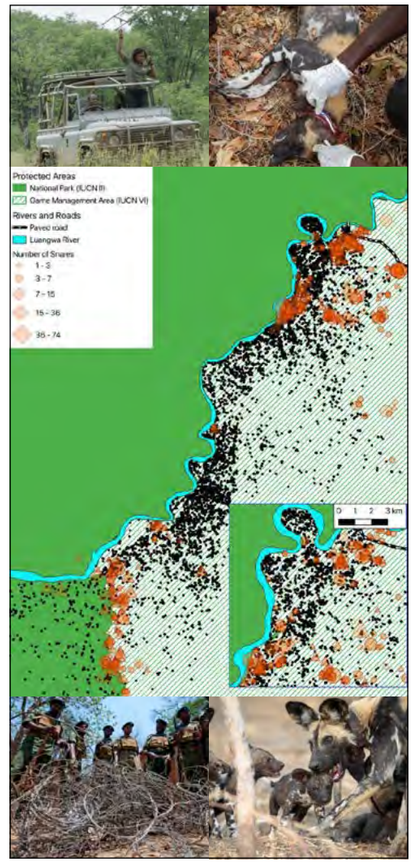
Combatting the Illegal Bushmeat Trade and Mitigating the Impacts of Snaring on Large Carnivores

Field-Based Protection The "Halo Approach":

- Illegal snaring for bushmeat poses one of the greatest threats to carnivores, as it depletes their prey, injures and kills animals snared as non-targeted 'by-catch,' and alters the strategies carnivores have evolved to successfully coexist and compete with each other.
- Merging long-term conservation science work with targeted anti-snaring actions has helped stabilize and increase populations of large carnivores (see Conservation Science on page 11).
- This field-based protection, or 'halo' approach was developed by ZCP in the Luangwa and collaboratively implemented across our long-term sites.



The conceptual diagram of Field-Based Protection and its mitigation of bushmeat poaching impacts on carnivores. Source: Wire-snare poaching and the large African carnivore guild: impacts, knowledge gaps, and field-based mitigation (page 11).



Wild dog locations (black) heavily overlap with snare locations (orange), and merging intensive monitoring of collared packs with de-snaring of affected individuals and targeted anti-snaring patrols has had positive population impacts for Zambian wild dogs.

How Much Is One Dog's Life Worth?

Wild Dog 73
Rescued from a lethal snare in 2014

At least 20 additional packs formed from dispersing offspring

At least 304 pups, grand-pups, great-grand pups and great-great grand pups

Packs have populated throughaout the Luangwa Valley

The oldest known dog in the wild was 12 years of age. The Hot Springs Pack's alpha male was born in 2006 at the latest, making him over 12 years old when he died in 2018. As alpha male his pack endured severe snaring impacts and he was dying from a snare himself but was rescued by the collaborative work of ZCP, CSL and DNPW. His legacy is found in all the dogs populating the Luangwa with ties to the Hot Springs pack, and his life is a testimony to the value of this work.

2023

- Over 9,500 snare checks on more than 1,150 carnivores
- Employed field-based Zambian vets across 3 ecosystems
- De-snared 15 large carnivores
- Worked with law enforcement partners to direct anti-snaring patrols to areas of high risk for carnivores and herbivores
- Supported 236 Community Clean Sweeps with partners CSL and DNPW, removing 412 wire snares
- Published 2 peer-reviewed scientific studies demonstrating the positive population impacts of this work on lions and wild dogs.
- Provided field-based protection to 82 dens of wild dogs, cheetah, lion and hyena across 3 ecosystems

SEBASTIAN KENNERKNECHT

ZCP Graduate student and lead author of the study, Dr. Kambwiri Banda, preparing to immobilize a lion as part of his work as a wildlife vet in the Greater Kafue Ecosystem.

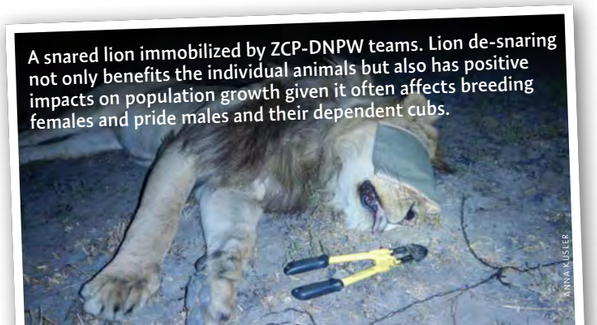
New Study Demonstrates that De-Snaring of Lions Promotes Long-Term Population Growth

De-snaring and intensive field-based protection, or the Halo approach, are obviously beneficial for the affected animal, but do they indeed benefit entire populations?

Using our long-term monitoring data of 386 lions in the Luangwa Valley Ecosystem, ZCP graduate student Dr. Kambwiri Banda and Dr. Scott Creel comprehensively evaluated this question by analyzing the effect of de-snaring operations on lion population demographics and dynamics.

The study revealed that continuous snare removal from Luangwa's lions resulted in a net-positive population growth rate and longer male pride tenure, with expected safety benefits for dependent cubs through prolonged protection from infanticide. Alongside the known detrimental impacts that snaring has on large carnivore prey, this highlights the profoundly negative effects that snaring has on Africa's top carnivores. Crucially, without continuous de-snaring efforts, we can expect the decline of one of the last 10 lion strongholds in Africa. De-snaring requires intensive effort and is expensive, but it demonstrably reduces the negative effect of bushmeat hunting on lion population dynamics.

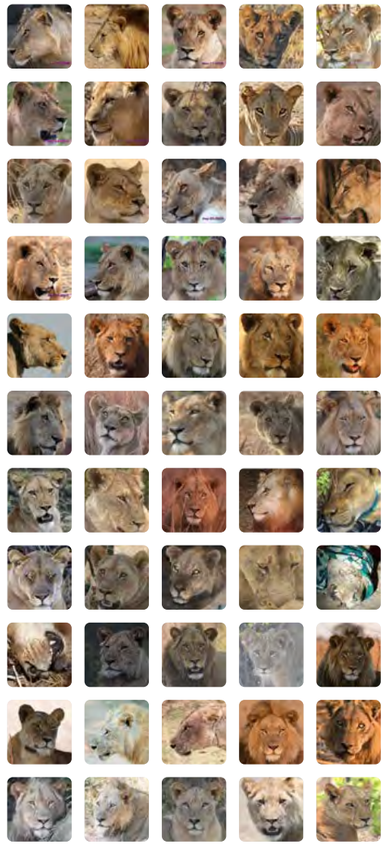
The findings from ZCP's study indicate that this work can provide a key conservation action to greatly reduce the effect of snaring on lion populations. In Zambia, these efforts have collaboratively expanded across the country's large carnivore strongholds, with work ongoing between ZCP, the government, and their conservation partners.



A snared lion immobilized by ZCP-DNPW teams. Lion de-snaring not only benefits the individual animals but also has positive impacts on population growth given it often affects breeding females and pride males and their dependent cubs.

ANNA KISLER

Population effects from snared lion rescues



57 lions de-snared

320 cubs born

PRIMARY IMPLEMENTING PARTNERS

Combatting Illegal Trafficking of Big Cat Skins and Parts

PRIMARY IMPLEMENTING PARTNERS

The Problem

- **Illegal trade in skins and parts of big cats increasing**
- **Unclear patterns and trends**
- **No genetic tools to assist in combatting**
- **No systematic sampling occurring with seized samples**
- **No genetic baselines comparing seizures with source populations**
- **No genetic tools to help in prosecutions**

Our Approach

1. **Developing Genetic Tools and Obtaining Baseline Genetics from Lion Populations Across Their Range**
   Cutting edge Single-Nucleotide Polymorphisms (SNP) chips created for lions and leopards and baseline genetics data compiled across lion range in Africa

2. **Expanding Collaborations**
   Working with dozens of collaborators across Africa and beyond to develop and implement these tools

3. **Building Anti-Trafficking Capacity**
   Developing in-country and regional capacity for forensics and intelligence work using genetics

ERIC NJOTU

ZCP Conservation Biologist Trainees Frazer Zulu (L) and Titus Banda prepare biological samples from carnivores as part of anti-trafficking work utilizing genetic tools.

As a long-term carnivore conservation project already conducting genetics work, we were well-placed to contribute to combatting illegal trafficking of big cats across Africa and beyond.

Working with an integrated team of collaborators this work has now ultimately transformed a situation of having no scientific means of obtaining information from big cat skin seizures, to where key tools have now been created for lions and leopards that can effectively trace seizures to their population of origin across the global ranges.

Species Restoration

While conserving existing free-ranging populations – and the connectivity between them – is the highest priority, restoration of species through reintroductions is sometimes necessary, particularly in ecosystems heavily depleted of wildlife from human impacts. Nevertheless, poorly conceived restoration efforts can have negative impacts and thus we strive to adhere to the best available scientific guidance.

PRIMARY IMPLEMENTING PARTNERS

DAAN SMIT

MATT BECKER

Helping Nsumbu Prepare for Lion Restoration

Restoring Africa's top carnivore has numerous ecological and economic benefits, but can also come with significant costs in human-lion conflict, and thus must be carefully considered and planned.

Nsumbu currently has no resident lion population; therefore, lion reintroduction is a core component of DNPW and Frankfurt Zoological Society's (FZS) ecosystem restoration efforts as part of the Nsumbu Tanganyika Conservation Programme.

Utilizing recent scientific guidance on lion translocations from ZCP and partners emphasizing suitable wild source populations and other reintroduction considerations, we worked closely to continue restoration plans slated for 2024.

Wild Dogs in the Greater Liuwa Ecosystem

Following the reintroduction of a founder pack and the rearing of a first litter in 2022, the Greater Liuwa wild dog pack was intensively monitored throughout 2023. Joint efforts with the DNPW and African Parks on associated community work, domestic dog vaccination programmes and anti-snaring efforts continued under Liuwa's Predator Management Plan. Monitoring revealed that the pack explored much of the Greater Liuwa Ecosystem, including the dry season wildebeest feeding grounds, but settled into a home range inside the park. The pack also appeared to adapt its space use to lion movement changes between seasons. Although the group lost its second litter soon after birth, likely due to alpha female dynamics, they successfully raised three female pups from 2022 and stabilized at 12 adults and yearlings. As part of the intensive monitoring, we included Liuwa wild dogs in studies of prey depletion, competition, and demography conducted across sites (see Conservation Science on page 13).

DAAN SMIT

Large Landscape Conservation

Zambia is characterized by large landscapes, and the viability of its ecosystems for wildlife and people is a result of their size and connectivity. Bordering eight countries and containing multiple Transfrontier Conservation Areas, with numerous unfenced, connected areas of over 50,000 km² each, Zambia is the "Crossroads of Connectivity." These landscapes are threatened by a multitude of human impacts. Utilizing an integrated, multi-disciplinary approach in 2023 we continued to work collaboratively to help conserve Zambia's large landscapes and connectivity.

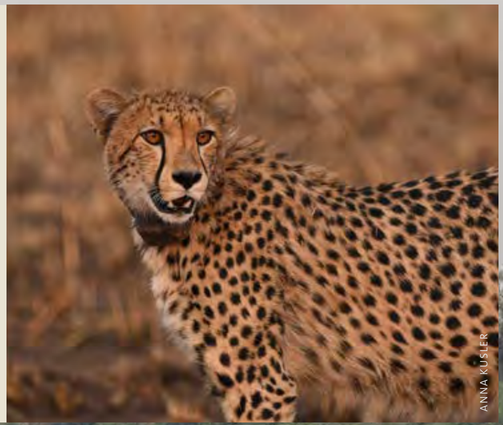
Protecting Transfrontier Populations

Together with our partners we helped complete a transboundary camera trap survey between Zambia's Greater Liuwa Ecosystem and Angola's Greater Mussuma Ecosystem, which together comprises a proposed Transfrontier Conservation Area. In addition in 2023 we documented the first transboundary movements of wildebeest since the initiation of intensive long-term studies of the Liuwa population (see Herbivores on page 17).

DAAN SMIT

Spatial and Movement Data from Carnivores

Human impacts ranging from prey depletion to habitat alteration, disease, and conflict, can prevent or impede connectivity and the viability of carnivore populations. We continued to utilize movement and spatial data from dispersing wild dog, cheetah, lion, and spotted hyena, as well as from resident groups, to identify and evaluate corridors and areas of connectivity, and assess the drivers of different carnivore movement patterns through human-impacted landscapes characterizing the remaining range in much of Africa and the globe.



Climate Change Impacts on Ecosystems and Species

Connectivity and mobility of wildlife and people are key to mitigating the impacts of climate change. We continued to assess the relative impacts of climate change and human encroachment, utilizing long-term environmental data to conduct assessments to identify feasible and climate-change-resilient opportunities for expansion of the protected area networks in Zambia and the region. In 2023 we focused on the Zambezian Dry Evergreen Forest, locally known as Mavunda woodland, an imperiled ecoregion across the Upper Zambezi Watershed. We also continued to assess the impacts of climate change on African wild dogs (See Conservation Science on page 11).

PRIMARY IMPLEMENTING PARTNERS

Trends and Patterns of Land-Use Change

Using cutting-edge methods we developed to address the accuracy challenges inherent in assessing land-use change, we have evaluated all of Zambia's protected area networks and provided accurate and current assessments of land conversion rates and impacts to help guide and evaluate land-use planning for community areas, corridors, and protected area networks.

In 2023 we worked closely with The Nature Conservancy to complete a 60-year analysis of land-use change in the Greater Kafue Ecosystem, demonstrating alarming recent increases in encroachment that strongly supported the adoption of Collaborative Management Partnerships (CMPs), which the Government of Zambia has since implemented in the Kafue. The CMPs are expected to greatly increase the viability of the GMAs for communities and wildlife.

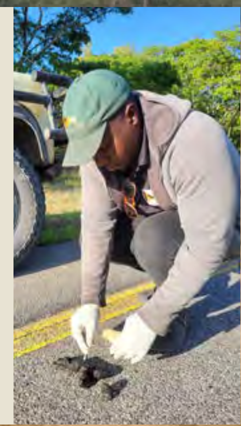
WEST LUNGA CONSERVATION PROJECT

Conserving the Kafue-Kabompo, Zambia's Largest Unrecognized Corridor

Between the Kafue National Park and West Lunga National Park to its north-west exists a large wilderness area consisting of a mix of Game Management Areas, Forest Reserves, private conservancy and customary land. Approximately 20,000 km², this area is perhaps the largest unrecognized corridor left in Zambia, and therefore is important for landscape level connectivity by acting as a conduit for movement of wildlife between these two ecosystems, and potential mitigation of climate change impacts. Both national parks, which are linked by the corridor, have secured long-term conservation and management support: since 2014, the West Lunga National Park and surrounding GMAs have been supported by the West Lunga Conservation Project and in 2022 African Parks has embarked on a long-term commitment to the Kafue National Park. This provides the enabling conditions for potential implementation of the conservation corridor between these two ecosystems. ZCP and partners work closely to assess the status of the corridor, status and trends of wildlife and habitat through a variety of surveys, monitoring, and analyses.

Genetic Connectivity Between Ecosystems

Together with partners we have developed tools to assess genetic connectivity within and between ecosystems, including pioneering new non-invasive methods utilizing scat, particularly useful for low density carnivore populations in human-impacted ecosystems.



Part of the Kafue team (left to right), led by Dr. Michelo Mungolo, and Kachama Banda train Women in Wildlife Conservation trainee Karitus Mwansa and Community Scout Clement Kauseni on lion immobilization techniques.

STEPHI MATSHUSHIMA

Conservation Leadership

Helping current and aspiring conservationists acquire the skills, training, education and employment to reach their potential is a core aspect of our work, and Conservation Leadership is intertwined throughout all aspects of our organizational pillars (page 7).

Opportunities for building technical and leadership skills in field-based conservation are rare, due to the scarcity of projects that both conduct such work and that are able to offer leadership training opportunities as part of their organizational objectives.

With some of Africa's longest-running and most comprehensive field-based projects across Zambia, we continued to expand and improve our leadership training opportunities in 2023.

Currently, we have the country's largest and most comprehensive capacity development programme for field-based conservation – supporting educational and training programmes beginning at the primary school level, up through the PhD level.

2023 highlights include:

- 20 trainees in the Women in Wildlife Conservation Training Programme
- 25 trainees in the Conservation Biologist Training Programme
- 10 trainees in the Wildlife Vet Training Programme
- Intensive Management and Leadership Training for 22 senior team members with Maliasili
- 41 ZCP team members and 5 participants from partner organizations attended 16 specialized Professional Development Trainings
- 16 trainees in the Integrated Field Conservation Course
- Field-based training for conservation partners from 5 organizations and agencies in Kenya, Tanzania, and Angola
- 13 university and graduate students supported for degrees
- Specialized training on wild dog conservation for 6 trainees

Leadership Training Programmes

PRIMARY IMPLEMENTING PARTNERS

Wildlife Vet Training

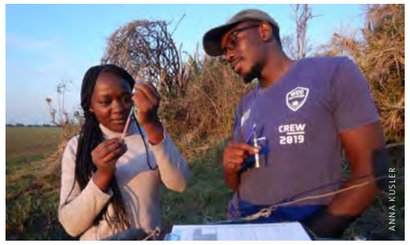
Wildlife conservation work is often a desired field for current Vet School students and graduates in Zambia; however, opportunities for gaining practical field experience and employment in this field are few, given the small number of field-based projects. Fortunately, with field-based vet work on carnivores and herbivores ongoing, and experienced wildlife vets and teams providing mentoring and training, we were able to continue and improve our Wildlife Vet Training Programme in 2023.

With the transition of two ZCP vets into positions with the DNPW and academia, we brought on two new vets—Dr. Denis Siantumbu and Dr. Michelo Mungolo—to Liuwa and Kafue respectively. Under the mentorship of veteran ZCP/CSL vet Dr. Mwamba Sichande and senior teams they rapidly developed into very experienced wildlife vets, leading dozens of darting operations for de-snaring and collaring.

In 2023 we supported 10 trainees in this programme across three projects, covering key aspects of wildlife immobilization, ecology and behavior of focal wildlife species, disease and conflict mitigation on the wildlife-livestock interface, and community outreach and sensitsation. Collectively this provided invaluable practical training and experience to the next cohort of wildlife vets in conservation.

ZCP Kafue Wildlife Vet Dr. Michelo Mungolo (R) works on an immobilized cheetah with DNPW-AP teams.

ZCP-AP Liuwa Vet Dr. Denis Siantumbu (R) conducts a lion immobilization with teams in Liuwa. Initially with no wildlife experience, both vets underwent extensive training and work experience to become seasoned professional wildlife veterinarians in conservation.



Wildlife vet trainee, current vet student, and WIWC graduate Mercy Njobvu (L) works with ZCP Kafue Vet Dr. Michelo Mungulo to load an immobilizing dart for lions.

Women in Wildlife Conservation Training

While often under-represented in field-based conservation work, women are increasingly leading conservation efforts in Zambia and beyond, and the majority of ZCP's senior team members are female.

Thus, in concert with our long-term projects, in 2023 we continued to expand opportunities for aspiring female conservationists through our Women in Wildlife Conservation Training Programme (WIWC), pairing 20 trainees with experienced female mentors from ZCP senior management to provide one-on-one training in all aspects of field-based conservation.

This comprehensive programme provides valuable one-on-one training, fosters a supportive environment for skill development and knowledge transfer, builds confidence, and nurtures talent, while serving to inspire future generations of women to pursue careers and become leaders in the field of conservation.

ZCP Luangwa Senior Ecologist Bridget Mayani Nkhoma (L) mentors WIWC trainee Tikambenji Mando on data collection as part of the country's longest-running lion research work.

WIWC trainee Karitus Mwansa (L) receives training from ZCP Kafue Project Mechanic Leckford Chipunami on checking and changing wheel bearings for field vehicles.

Conservation Biologist Training

While students interested in pursuing careers in conservation can increasingly pursue relevant degrees in Zambia and beyond, complementing academic training with the myriad practical skills and experience needed for field-based conservation work is extremely difficult, as opportunities are few and far between.

Our Conservation Biologist Training Programme bridges this gap by providing trainees exposure to all facets of conservation research and monitoring, ranging from practical field techniques such as radio telemetry, camera trapping and surveys, to 4x4 driving, service and repair, community outreach and human-wildlife conflict mitigation. We attached 25 trainees across four projects to this programme in 2023.

ZCP Liuwa Team Leader Peter Musenge (L) mentors CBTP trainee Samulapo Samulapo on data collection methods.

Integrated Field Conservation Course

With continuing support from the Wildlife Conservation Network (WCN) we held a second year of the Integrated Field Conservation Course (IFCC) in 2023, aimed at increasing conservation participation of Zambian university graduates from urban areas. ZCP's Senior Ecologist and WIWC mentor, Bridget Mayani Nkhoma and Ecologist Felidah Mwale oversaw the programme, exposing trainees to the full range of topics, challenges, and skills involved in field-based conservation careers.

Wild Dog Conservation Training Programme

Given their ecology and behavior, wild dogs are one of the species that perhaps requires some of the most specialized skillset in order to effectively study and conserve. In 2023 Luangwa Senior Ecologist Bridget Mayani Nkhoma initiated a programme designed to train wild dog conservation biologists; similar to our other leadership programmes but with a special focus on this species, and an overall objective to train 6 aspiring Zambian graduates.

ZCP Kafue Workshop Manager Vedy Siabalima trains teams on vehicle operations and repair.

Professional Development Training Programme

The intensity of work in the dry season typically necessitates a focus on programmatic initiatives, but with the onset of the rains work shifts more toward additional training and development of broader topics and skillsets.

The Professional Development Training Programme (PDT) focuses on providing these resources to ZCP teams and partners. In addition to an extensive and growing library of prior seasons' sessions recordings, we conducted 16 live sessions for 41 ZCP team members and five partners in 2023.

Conducted by professionals in the respective fields, the sessions included a diversity of relevant conservation topics and disciplines, as well as wellness, leadership, time management and organization, writing, mechanics, communication, and management fundamentals.

Aspiring Conservation Leaders' Programme

We continued to support our partner Chipembele Wildlife Education Trust's Aspiring Conservation Leaders' Programme in 2023, hosting 8 young conservationists and training them in various aspects of field work and activities.

CSL-ZCP Vet Dr. Mwamba Sichande (R) trains partners from Lion Landscapes, the Tanzania Wildlife Authority, and the Tanzania Wildlife Research Institute on wild dog immobilization work.

ZCP Kafue Assistant Manager Kachama Banda (L) works with Joseph Kyalo from Tsavo Trust on monitoring techniques for wild dogs and lions.

Collaboration with Partner Organizations and Agencies

Without the fortune of much peer guidance or mentoring when initiating many of our projects, ZCP strongly appreciates the importance of interactions between partners in the ever-changing conservation field.

Thus, in 2023 we continued to implement one of our primary Strategic Plan objectives for Conservation Leadership: leveraging our long-term projects to foster collaborative training and synergies with partner organizations and agencies across the continent.

In 2023 we welcomed colleagues from Angola, Kenya, and Tanzania onto our projects to learn about specific aspects of the work, receive training, and share insights and information from their projects with our teams and partners. We continued to host our Angolan partners from the Africa Rangewide Cheetah Conservation Initiative as part of our transboundary collaborations in Liuwa (see Large Landscape Conservation on page 24).

Our wild dog project in the Luangwa hosted a four-person team of conservation biologists from Lion Landscapes Tanzania, the Tanzania Wildlife Authority (TAWA) and the Tanzania Wildlife Research Institute (TAWIRI), all of whom are currently initiating wild dog work in and around the Selous ecosystem.

We also hosted fellow African Conservation Leadership Network (see Special Events on page 46) partner Joseph Kyalo and Tsavo Trust to the Kafue and Luangwa to receive training on wild dog and lion research and monitoring work as part of their new project initiatives in Kenya.

ZCP Data Manager Elke van Gils works with the Human-Carnivore Coexistence team to capture conflict mitigation metrics in SMART.

SMART Training

With some of the continent's longest-running projects and an ever-increasing amount of integrated and data-rich initiatives, ZCP made the switch to digital data collection in 2023. Under the guidance of newly-appointed Data Manager Elke van Gils, we conducted extensive training across all sites and began the transition to SMART for all studies and initiatives. This will enable much more rapid conversion of information into databases for analyses and reporting, and subsequently a more efficient response and impact.

Advanced Education and Training

Advanced education and training opportunities are very important for the career development of many conservation leaders. Through the support and collaboration of our donor and institutional partners, we were able to help support six Zambian graduate students and eight Zambian undergraduate students at eleven different national and international institutions in 2023. These opportunities were provided for ZCP and DNPW team members, as well as for partner organizations and graduates of our various training programmes.

Margret Mwale
WIWC graduate, ZCP Field Team Leader, Bachelor of Science in Wildlife Management, Copperbelt University, Zambia

"This year, I am particularly enjoying Wildlife Management and Conservation courses because it perfectly fits my academic interests and career goals and has further enriched my ability to thrive. I have also been involved in a number of extracurricular activities. For the 2023 academic year, I served the Copperbelt University Natural Resource and Environmental Society (CUNRES) as an Executive Committee Member and was given a certificate for my participation. In addition, I went around to secondary schools teaching pupils about wildlife, climate change, and the importance of planting trees. All of this has enhanced my learning outside of the classroom and given me invaluable practical experience."

Armstrong Chinga
Bachelor's Degree in Wildlife Conservation and Natural Resource Management, LIUTEBM, Zambia

Armstrong Chinga is a Regional Ranger with Zambia's Department of National Parks and Wildlife (DNPW). In 2023, Armstrong was supported by ZCP to obtain his bachelor's degree in Wildlife Conservation and Natural Resource Management at Livingstone International Environmental and Business Management (LIUTEBM) University in Lusaka, Zambia. Prior to moving up the ranks in DNPW, Armstrong was a core member of the ZCP Liuwa Project for many years, working as a DNPW-AP Research Scout.

"As an upcoming leader in conservation, it is imperative to never stop studying because in these uniquely challenging times, the demand for effective leadership in my organizations (African Parks Liuwa and the Department of National Parks and Wildlife – DNPW) and the society at large, has never been greater. We face problems that are complex and interconnected. Problems that can only be solved by leaders who see the bigger picture and adapt to an ever-changing context. My aim is to sharpen my skills and gain more knowledge on how best to protect, rehabilitate, maintain, restore, understanding the climate change and its complexity, enhance our natural resources and ecological processes."

Livingstone International University of Tourism Excellence and Business Management

Dean Banda
ZCP CBTP graduate and ZCP Field Team Leader, Bachelor of Science in Wildlife Management, Copperbelt University, Zambia

"I want to make a bigger difference in conservation; I want to improve the protection of Zambia's wildlife through empowering young Zambians and teach them about the importance of protecting nature. To do this I am learning more about ecology, biology and wildlife at Copperbelt University (CBU), studying wildlife management. Once I have completed my degree, I think I will be ready for new challenges, opportunities, and responsibilities within ZCP, so that I can play a bigger role within ZCP."

Lackson Mbewe
Bachelor's Degree in Wildlife Conservation and Natural Resource Management, LIUTEBM, Zambia

Lackson Mbewe is a Wildlife Police Officer with Zambia's Department of National Parks and Wildlife (DNPW). He is being supported by ZCP for a bachelor's degree in wildlife Conservation and Natural Resource Management at Livingstone International Environmental and Business Management (LIUTEBM) University in Lusaka, Zambia.

"The final year of study was really challenging since the modules were quite difficult, but through hard work and good time management in terms of studying I managed to pass all the classes I sat for. I was really focused and determined to have good results. I had limited time to study related to my working hours since I am also playing a very important role at my workplace. I achieved my educational goals with a set timetable that guided me throughout my studies."

Livingstone International University of Tourism Excellence and Business Management

Nomsa Kamanga
WIWC Graduate, Undergraduate in Conservation, Catawba College, United States

CATAWBA COLLEGE EST. 1851

"In 2023 I was fortunate to be one of the five students selected to present a project at the International Congress for Conservation Biology in Rwanda. We presented a project on the effect of using Lion lights to help in the mitigation of Human Wildlife Conflict. Our case study was Kenya (Maasai Mara) where this initiative was developed. I met a lot of people! Big names in the Conservation industry who have done amazing work! I had a lot of moments of pride because every time I mentioned ZCP, someone knew Matt Becker or Thandiwe Mweetwa. Being present in that moment was heartwarming and made me realize how much work is being done through ZCP and I am glad that I am a part of it!"

Kings Chimungu
CBTP graduate, ZCP Field Team Leader, Bachelor's of Science in Natural Resource Management, Copperbelt University, Zambia

A ZCP-Chipembele Conservation Club Graduate, Kings Chimungu began his career with ZCP in 2016 as a Conservation Biologist Trainee, being mentored as a Wildlife Vet Trainee. He is now pursuing a bachelor's degree in Natural Resource Management at Copperbelt University.

"As a researcher I have been doing field work and I love it. I have built leadership skills in Zambian conservation, and I want to gain more knowledge and learn how I can make a difference in conservation in the future."

Dr Kambwiri Banda
Master's of Science in Wildlife Biology, Montana State University, USA

Dr. Kambwiri Banda successfully defended his thesis for his Master's of Science research at Montana State University's Department of Ecology. Dr. Banda worked with his advisor, ZCP's Dr. Scott Creel, to evaluate the effects of de-snaring on the demography and population dynamics of African lions (see Conservation Science on page 11, Action on opage 20). A long-standing team member of our ZCP-DNPW Kafue Project, Dr. Banda joined in 2014 under the mentorship of the late Dr. Wigganson Matandiko (also an MSU graduate) and played a key role as a Vet/Ecologist for the Project before beginning his graduate research in 2021.

MONTANA STATE UNIVERSITY

Passing ZCP's Leadership Torch: Thandiwe Mweetwa Transitions to a New Adventure

The year 2023 marked the end of an era, as we said farewell to a woman who has been at the core of our organization for the last 15 years. Thandiwe Mweetwa joined us as a student volunteer in 2009, on the very first day of our lion project in the Luangwa, where she assisted in collaring the first lion in the park. Despite a challenging and drama-filled start, Thandiwe continued to work with ZCP, rising through the ranks – from an intern, to Ecologist, to Education Coordinator, to Graduate Student, to Project Manager. She has become the voice and heart of our organization and has been instrumental in our growth from that early day to where we are now.

Through her work, Thandi has become an internationally recognized figure and an inspiration for Africa's new generation of conservationists. The impact she has had on this movement in Zambia and beyond is immeasurable. While we are saddened to see her leave, we are excited for the wonderful opportunities that lie ahead for her and her family. We are deeply grateful for her leadership, friendship, humor, and courage. We appreciate the person she is, the countless people she has mentored and inspired, the animals she has helped, and the positive changes she has brought to the world.

Thandiwe's departure leaves a significant void in our organization and in our hearts. It is the end of an era but also an opportunity for all the young people she has mentored to step up and carry the torch forward. We find comfort in knowing that Thandi will continue to work closely with us through our long-term partner, the Frankfurt Zoological Society, and will remain involved as a ZCP Board Member.

We love and miss you already, Thandi!

Your ZCP Family

A Message from Thandi

Dear Colleagues, Friends and Supporters,

When I first joined ZCP as a university intern, I had no idea it would be the beginning of an adventure that would span more than a decade. During this time, I got to work for an amazing organization with great mentors. Their unwavering support and belief in my abilities, enabled me to grow as a person and as a conservationist. I am grateful for the opportunity to have worked with the best team anyone could ask for. Over the years, we have cheered each other on through the most grueling field days, braving 40°+ temperatures, itchy Buffalo beans, thick Combretum bushes and occasionally, angry elephants. Through it all, the camaraderie, unity of purpose, and the ZCP guiding principles/core values of teamwork, passion and hard work kept us going.

Furthermore, my time at ZCP gave me the privilege to follow the lives of unforgettable animal characters. Studying these animals and watching them go about their daily business has taught me so much about life and the resilience of nature. Those experiences helped strengthen my commitment to conservation.

I am starting a new position with the Nsumbu Tanganyika Conservation Programme as the Integrated Landscape Custodianship Manager. Among other things, my role will involve working closely with colleagues and partners to promote coexistence between people and wildlife, increase knowledge about and appreciation for nature, and explore ways for communities to tangibly and meaningfully benefit from being stewards and custodians of the land.

It is a big move, and I will dearly miss my family, friends and colleagues in this place I have called home for over 20 years. I will miss South Luangwa National Park and its abundant wildlife, but I also look forward to exploring Zambia's northern circuit. As my family and I begin our new lives on the shores of Lake Tanganyika, we will carry with us the South Luangwa conservation community's spirit of collaboration.

Sincere thanks to the entire ZCP team for a life-changing run. I look back with pride and gratitude at everything we have achieved together under the visionary and transformational leadership of Dr. Matt Becker. Below are a few of my most memorable moments at ZCP.

Sincerely,
Thandi

First Day of Work

My first day of work as an intern was a baptism by fire. It was a long day in which anything that could go wrong did go wrong. But it was also the first time that I got to experience the full power of lions roaring at full volume just a few meters away. I had never heard anything like it before and on that day, I knew that I was in the right place contributing to something bigger. This grainy photo will not be winning any photography contests, but it reminds me of my very memorable introduction to field-based carnivore conservation.

First Trip as a Field Research Team Leader

I went on my first trip as an independent field research team leader in September 2013. I went to the Nsefu Sector in the Luangwa Valley Ecosystem and it was a textbook perfect trip complete with amazing lion and wild dog sightings. I conducted the 3-day research mission without a hitch - it was such a great confidence booster. I came back feeling more capable and excited to explore other parts of South Luangwa National Park.

Human Carnivore Conflict (HCC) Mitigation Program

This photo was taken in the early days of ZCP's HCC program. I had the opportunity to visit different villages in Mambwe district as we sought to understand the nature and extent of Human Carnivore Conflict in our area. During this time, it was a privilege to learn from veterans and experts in community engagement especially Mr. Billy Banda from Conservation South Luangwa. This work is now an important part of ZCP's mission in the Luangwa Valley Ecosystem with its own dedicated team.

National Geographic Emerging Explorer Award

In 2016, I was lucky to be selected as one of National Geographic's Emerging Explorers. It was a great honor that has opened up more learning and networking opportunities that have had such an important role in shaping the conservationist that I am today.

Training

It has been an honor to be part of the team providing training and mentorship to the next generation of Zambia's conservation leaders.

Members of DNPW, ZCP, CSL, and Chipembele meet with community members in one of six South Luangwa chiefdoms where intensive human-wildlife conflict mitigation work is ongoing.

ERIC NJOBVU

Coexistence

Our Coexistence pillar aims to reduce the costs for communities of living alongside wildlife while simultaneously increasing the benefits from, and appreciation of, wildlife and conservation. Central to this effort is human-carnivore conflict mitigation, as local communities often bear the costs of successful wildlife conservation but seldom enjoy the benefits.

A significant part of our work also focuses on raising awareness and understanding of the benefits of conservation.

This is achieved through various mediums, including community theatre, radio shows, football tournaments, community game drives, community clean sweeps, community carnivore experiences and conservation clubs in primary and secondary schools.

Through these activities, we strive to reduce the costs of coexistence, increase the benefits, and foster a deeper appreciation for wildlife and the importance of conservation among community members.

2023 highlights include:

- Carnivore conflict mitigation work conducted with 267 livestock owners across 4 chiefdoms
- 131 educational programmes to 273 students across 4 ecosystems
- 104 Community Game Drives conducted for 753 community members
- 236 Community Clean Sweeps conducted with 1,409 community members, and 412 snares removed
- 161 theatre, sports and radio shows for an estimated 70,000 community members
- 58 additional outreach events reached 2,165 community members
- Initiation of a collaborative land-use planning initiative for Lower Lupande GMA
- 3,459 domestic dogs vaccinated against rabies in two ecosystems

Students from Conservation Club learn about how to mitigate human-carnivore conflict with livestock in the chiefdoms surrounding South Luangwa. The vast majority of livestock depredation occurs due to insufficient husbandry techniques, necessitating collaborative conflict mitigation work to promote coexistence.

ERIC NJOBVU

Human-Wildlife Conflict Mitigation

ZCP Human-Carnivore Coexistence Officer Franklin Sakala conducts surveys evaluating the effectiveness of coexistence measures with people, livestock, and carnivores as part of Zambia's first carnivore conflict mitigation project in the Luangwa Valley.

Evaluating and Adapting to Successfully Mitigate Conflict: KAP Surveys

A key part of our science-based approach to conservation is ensuring we can accurately evaluate our impact and adjust our methods and strategy to continue to improve our effectiveness.

Although the effectiveness of coexistence work is challenging to measure, in 2023 we developed and implemented a new Knowledge, Attitude, and Practice (KAP) survey using SMART data collection systems (see Conservation Leadership on page 31). These surveys enabled us to evaluate the impact and efficacy of various coexistence initiatives and are still in progress across the study area.

Over 40 baseline questionnaires were administered towards the end of 2023 at four different levels of conflict zones, with follow up surveys to be conducted every 6 months.

Human-Carnivore Conflict Mitigation in the Greater Liuwa Ecosystem

In Liuwa, we continued to assist African Parks and DNPW conflict mitigation teams in 2023 to work across 10 chiefdoms, collaborating with 309 livestock owners. ZCP-AP veterinarian Dr. Denis Siantumbu played a key role in these efforts. The activities were guided by Liuwa's Predator Management Plan, developed by all partners to ensure a coordinated and effective approach to conflict mitigation.

Expanding Human-Carnivore Conflict Mitigation in the Luangwa Valley

Together with our partners we continued to expand the country's first carnivore conflict mitigation programme in the Luangwa Valley. We worked across seven chiefdoms and 231 livestock owners to reduce conflict, primarily driven by lions. While an array of variables contributed to conflict, the primary drivers were increasing human and livestock populations in what was formerly lion habitat, inadequate livestock husbandry practices for areas with predators, and the lack of land-use planning that protected and promoted beneficial community conservation models.

Our Human-Carnivore Conflict (HCC) Programme activities focused on improving livestock husbandry through boma construction and reinforcement, better herding practices, early warning systems, and development of aversive conditioning of lions near or in community areas.

Our actions continued to be guided through the Luangwa Human Wildlife Conflict Mitigation Plan, which was developed and approved by partners and stakeholders in the chiefdoms.

Meetings and collaborations with communities and traditional leaders are fundamental to effective coexistence with carnivores.

ZCP Human-Carnivore Coexistence Coordinator Dennis Zimba discusses mitigation measures for reducing lion predation as part of a meeting with partners and communities.

Management of Human-Wildlife Conflict in the Malawi-Zambia Transfrontier Conservation Area

Zambia borders 8 countries and thus has outstanding potential for connectivity and transboundary work (see Conservation Action on page 18), but also potential for significant human-wildlife conflict across borders.

In recognition of these challenges and opportunities, ZCP's HCC coordinator Dennis Zimba participated in the Human-Wildlife Coexistence Management Scheme (HWCMS) workshop in Malawi's Rumphi District – Vwaza Marsh Wildlife Reserve and Nyika National Park as part of work in the Malawi-Zambia Transfrontier Conservation Area (MAZA-TFCA).

The two-day workshop involved 40 participants from 17 stakeholder groups from Malawi and Zambia and was followed by a five-day study trip to South Luangwa, Zambia, and a visit to Kasungu National Park, Malawi.

The workshop identified the collaborative efforts necessary for developing long-term coexistence strategies and for integrating research-based conflict monitoring, database management, rapid response, and community engagement into a transboundary plan.

Developing an Effective and Inclusive Land-Use Planning to Benefit Communities and Wildlife

Zambian protected area networks are characterized by strictly protected national parks surrounded by community Game Management Areas (GMAs), intended to serve as buffer zones to the national parks, but also to allow settlements and consumptive use of wildlife and natural resources.

Such a system works effectively only with strong land-use planning, but recent increases in the rates and extent of human encroachment and land-use change in the GMAs have increasingly impacted the viability of these areas and the potential for coexistence between wildlife and people. In addition to providing technical expertise and analyses for community conservation models (see Conservation Action on page 25), in 2023 we helped develop and implement a comprehensive land-use planning effort in the Lupande GMA.

Housing Zambia's premiere wildlife tourism communities as the gateway to South Luangwa National Park, Lupande is threatened by rapid development, conflict with wildlife, and poaching, among other impacts, that threaten its viability as a strong wildlife-based economy. A strong land-use plan is intended to address the ultimate drivers of these patterns and serve as a model for future land-use planning efforts across Zambia's GMA network and beyond.

To address these challenges, ZCP focused much of 2023 on the development of a General Management Plan (GMP) for Lupande GMA. Through a highly inclusive and collaborative series of 10 meetings with 13 Village Action Groups across six chiefdoms we supported the DNPW planning team and partners to conduct this work with the communities and traditional leaders.

This three-phased process will entail additional technical meetings and stakeholder validation meetings before implementation, and is hoped to provide a key tool for promoting coexistence and benefits for both people and wildlife.

ZCP Human-Carnivore Coexistence Officer Mwango Mulenga (L) meets with livestock owners on conflict mitigation techniques. Rapid changes in the Game Management Areas surrounding South Luangwa threaten to undermine the economic and ecological viability of these areas without land-use planning.

Primary school students prepare for a safari with ZCP in the Kafue, wherein they learn about the wildlife and conservation issues in the ecosystem. courtesy of Mukambi Safaris and Green Safaris.

Primary and Secondary School Programmes

In 2023 we conducted 131 educational programmes to 273 students across 4 ecosystems.

ZCP Kabompo Project Senior Ecologist Salia Phiri leads one of 131 educational programmes collaboratively conducted across Zambia in 2023.

Luangwa Valley: We continued to strengthen our partnership with Chipembele Wildlife Education Trust, expanding our conservation education reach to include four schools – Mfuwe Day School, Nsefu Day School, Matula Day School and Yosefe. Conservation Club students at each of these schools participated in a variety of activities, including game drives, tree planting, field trips into the communities, human-carnivore conflict (HCC) mitigation and lessons focused on giraffe natural history culminating in final group presentations for our ZCP team. The HCC curriculum specifically focused on assessing the effectiveness of carnivore conflict mitigation tools in the Lupande Game Management Area. Conservation Club participants engaged in community-based carnivore conflict assessments and interacted with farmers and other community members working towards coexistence with wildlife.

PRIMARY IMPLEMENTING PARTNERS

Greater Kabompo: Teams facilitated lessons with Conservation Clubs at Jivundu Primary School, Kalende Secondary School, and Mufumbwe Boarding School, and hosted students from Kaula Day School at West Lunga Conservation Project's Jivundu Camp for a school trip. Students learned about wildlife and conservation, the type of wildlife monitoring work conducted in the park using cameras and surveys, as well as lessons focused on bushfires and pollution.

Liuwa: At our Greater Liuwa Ecosystem site, the ZCP team continued teaching participants in the Sibemi Primary School's Conservation Club and expanded their programming to include conservation clubs at Munde and Mishulundu Schools as well.

Kafue: Our Kafue team continued their work with conservation clubs at Chunga and Mukambi schools, conducting various conservation activities at the Treetops Educational Facility. With support from Mukambi and Ila Safari Lodges, they also hosted game drives for conservation club members, providing them with immersive experiences in the Greater Kafue Ecosystem. We rounded out the year hosting a Dynasties II watch party in honor of the spotted hyena outreach work ZCP Kafue team members did with these young conservationists.

Students learn radio-tracking as part of Liuwa Conservation Club activities.

ZCP Kabompo's Junior Ecologist Alison Simpanzye teaches Conservation Club students about conservation work in West Lunga National Park.

ZCP Kafue Junior Ecologist Moses Muwowo teaches students about spotted hyenas at their regular Conservation Club meeting.

ZCP Luangwa Outreach Coordinator Kabwe Chanda teaches Conservation Club students about human-wildlife conflict mitigation.

Protecting Communities and Wildlife from Disease Outbreaks

Virulent diseases such as rabies pose a significant threat to both communities and wildlife. Since most rabies outbreaks originate from populations of unvaccinated domestic dogs, ZCP and its partners have focused on vaccination campaigns in communities within and around protected area networks.

In 2023, we helped conduct rabies vaccinations for 3,459 domestic dogs across two ecosystems, contributing to the prevention of disease spread and safeguarding both human and wildlife health. In the Luangwa we assisted Conservation South Luangwa and ZCP/CSL veterinarian Dr. Mwamba Sichande and his team to vaccinate 588 dogs in the communities bordering South Luangwa National Park.

In Liuwa Plain we assisted African Parks and ZCP-AP veterinarian Dr. Denis Siantumbu and team to vaccinate 2,871 dogs within and around the national park as part of the Liuwa Predator Management Plan. In addition, rabies awareness campaigns were conducted in the local communities to complement this work.

PRIMARY IMPLEMENTING PARTNERS

ERIC NJOBVU

Community Carnivore Experience

In 2023, ZCP launched a new initiative in the Luangwa Valley Ecosystem called the "Community Carnivore Experience," an extension of our Community Game Drives Initiative. The main purpose of this programme was to provide community members from various Village Action Groups with an overview of how and why ZCP conducts its work. During these game drives, we shared information about the importance of monitoring carnivores and the methods we use to conserve them. Participants had the opportunity to engage in hands-on tracking of carnivores, gaining a deeper understanding of how science is used to protect these animals. Our ZCP team conducted **11 drives in 5 different chiefdoms with 132 participants in 2023**.

ERIC NJOBVU

MOSES JOZIE

Community Clean Sweeps

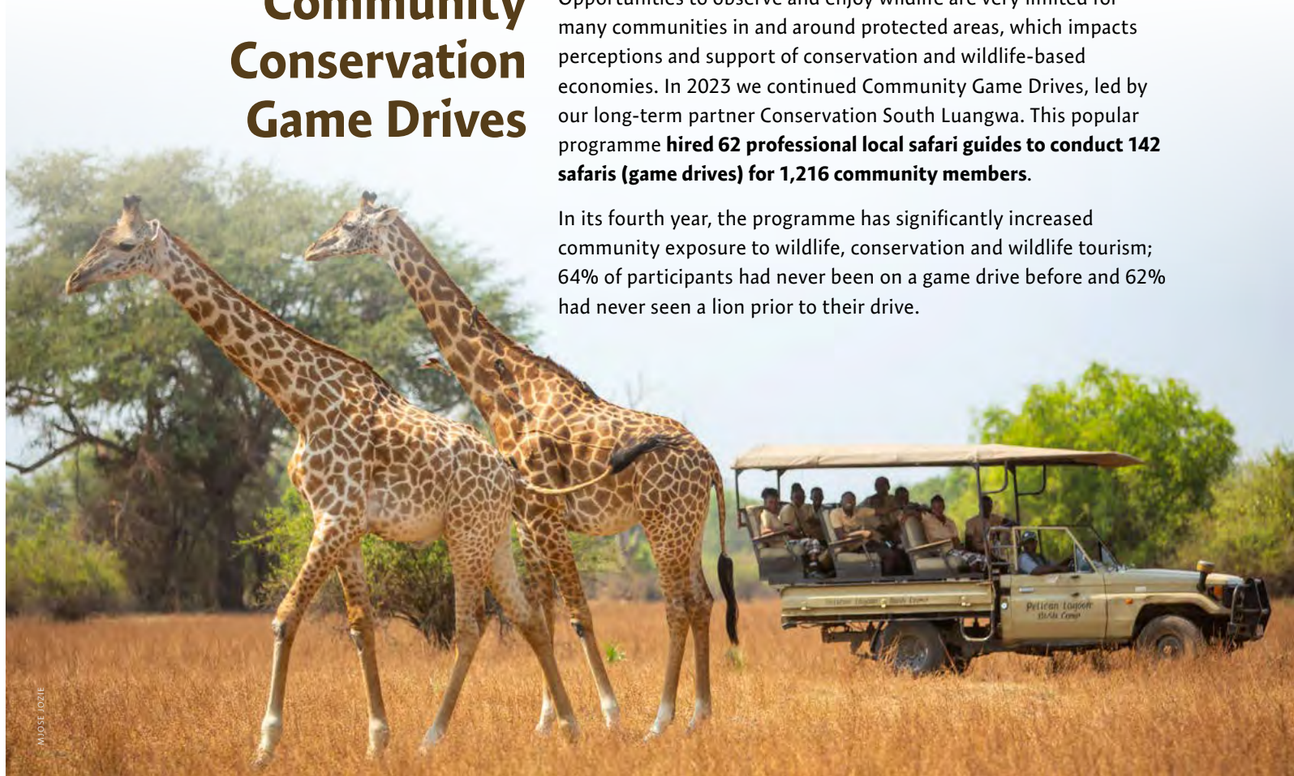
We continued collaborative community support work with Conservation South Luangwa in 2023 by extending our Community Clean Sweeps initiative. This work **provided financial support to 1,409 community members to conduct 236 Clean Sweeps** in the Game Management Areas adjacent to South Luangwa National Park. Teams removed litter and **412 snares** from the landscape, and both the number of sweeps and the number of snares detected were significant increases from prior years, and a substantial portion of the total snares recovered on the landscape in 2023.

LUANGWA GUIDES ASSOCIATION

Community Conservation Game Drives

Opportunities to observe and enjoy wildlife are very limited for many communities in and around protected areas, which impacts perceptions and support of conservation and wildlife-based economies. In 2023 we continued Community Game Drives, led by our long-term partner Conservation South Luangwa. This popular programme **hired 62 professional local safari guides to conduct 142 safaris (game drives) for 1,216 community members**.

In its fourth year, the programme has significantly increased community exposure to wildlife, conservation and wildlife tourism; 64% of participants had never been on a game drive before and 62% had never seen a lion prior to their drive.



MOSES JOZIE

Community theatre group SEKA performs for local communities in South Luangwa. A key outreach tool, plays cover a multitude of topics with a strong focus on mitigating human-wildlife conflict.

Community Outreach & Education

Community Radio: Expanding Conservation Outreach

We continued to leverage radio programming as an effective means of reaching a broad audience in the Luangwa Valley using conservation-themed shows to **broadcast 38 shows in local languages in 2023**.

Partnering with Conservation South Luangwa, Chipembele Wildlife Education Trust, and Wildlife Crime Prevention, these broadcasts included features on:

- coexistence and community capacity development,
- conservation employment opportunities for Zambian youth,
- ecology clubs,
- conservation history of South Luangwa,
- human-wildlife conflict mitigation,
- ecosystem services,
- sustainable use of natural resources,
- conservation technology,
- and African wild dog ecology.

Community Theatre: Empowering Conservation Through Performance Art

Theatre continues to be one of our key community outreach activities, with 2023 focused on improving coexistence between carnivores and people in the South Luangwa Valley.

SEKA (Sensitization and Education through the Kunda Arts) Community Theatre designs performance art to engage local communities in addressing conservation challenges, such as human-carnivore conflict. Through SEKA we have been able raise awareness on numerous topics such as safety, better herding practices, and improving livestock enclosures to prevent predation.

We partnered with SEKA to perform **70 conservation-related shows, reaching an estimated total audience of 15,608** individuals in the communities of the Luangwa Valley.

Fun-Run and Carnivore Cup

Following a three-year hiatus due to the COVID-19 pandemic, together with Conservation South Luangwa we resumed our annual Fun-Run and Carnivore Cup. After such a long break the event returned with a strong following – **over 6,000 attendees from the local communities** participating in the array of events ranging from the 10km run, to egg and spoon races, tug-of-war, volleyball, and the Carnivore Cup Final.

The day concluded with a speech from the District Commissioner and prizes for the event winners. Overall this was a successful revival of this annual celebration of conservation in the Luangwa.

The Mimbulu Academy Team, ambassadors for conservation in general and wild dogs in particular, poses at one of their many tournaments and outreach events throughout Eastern Zambia.

Mimbulu Soccer Academy: Using Sport for Conservation Outreach

Sporting events, particularly football, are an excellent venue for conservation outreach and education in Zambia.

Utilizing both his love of football and love of African wild dogs, Luangwa Project Assistant Manager Henry Mwape founded Mimbulu Soccer Academy in 2017. Mimbulu (meaning African wild dog in the local Nyanja language), participates in local football matches and uses the time after/before the matches to conduct outreach education on general conservation issues with a focus on wild dogs.

In 2023, **Mimbulu participated in 53 football events, attracting an estimated total of 53,292 people**. Through these events, the ZCP outreach team members shared conservation messages using music, SEKA community theatre, campaigns, and banners – culminating in a final match at the annual Carnivore Cup held during CSL's Fun Run.

The large turnout at these matches demonstrates how the beloved game of football serves as an excellent platform for engaging local communities on a wide range of conservation issues.

PRIMARY IMPLEMENTING PARTNERS

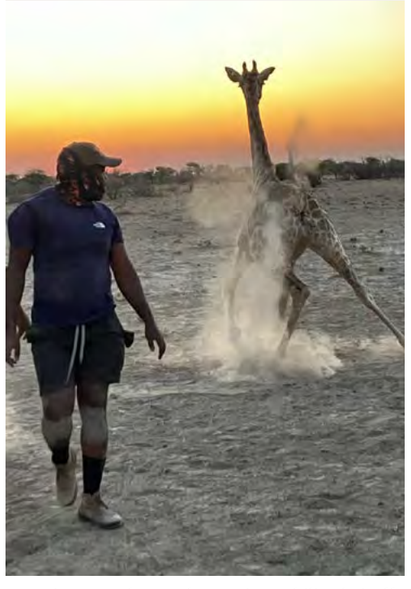
Special Events

Wildlife Chemical Immobilization Course

Former ZCP-African Parks Wildlife Vet, and now Department of National Parks and Wildlife Vet, Dr. Brian Musalo attended an intensive 9-day course on wildlife chemical immobilization techniques for large mammals.

The course, supported by our partner Giraffe Conservation Foundation (GCF), was held in Namibia and focused on providing African vets and wildlife professionals formal training and experience to assist in their conservation work.

"There isn't a better way of learning wildlife medicine than having field based hands-on experience," said Dr. Musalo. "GCF created such a platform where I learned a great deal from the industry's experts within and beyond. This platform not only helps to build capacity, but also competencies for practicing wildlife veterinarians."



Dr. Brian Musalo watches an immobilized giraffe recover as part of his intensive course on wildlife chemical immobilization in Namibia.

ZCP Luangwa Senior Ecologist Bridget Mayani Nkhoma (L) attended the WCN Expo in San Francisco, California in 2023 as part of the Early Career Program for aspiring conservation leaders

Wildlife Conservation Network Leadership Training

ZCP Luangwa Senior Ecologist Bridget Mayani Nkhoma participated in the Wildlife Conservation Network's (WCN) Early Career Program for conservationists, and also attended WCN Expo in San Francisco in 2023.

Through these programmes Bridget had the opportunity to participate in different workshops and develop her knowledge and skills in relationship building, donor engagement, fundraising, strategic planning, communications and marketing, corporate partnerships, finance/accounting and impact storytelling. The 2nd year of the career program provided Bridget with additional training through a Project Management and Monitoring and Evaluation workshop facilitated by Asset Africa Institute, Kenya.

ZCP's Kachama Banda (L) speaks as part of a special panel session at the Community Conservation Forum.

African Community Conservation Forum

ZCP's Greater Kafue Project Assistant Manager Kachama Banda and CEO Dr Matt Becker attended the African Community Conservation Forum in 2023, as part of ZCP's involvement in the African Conservation Leadership Network and their partnership with Maliasili.

The forum convened 175 people from more than 20 African countries and 90 organizations. Participants shared and exchanged perspectives, ideas, and experiences, aimed at harnessing the power of the collective to improve partnerships and power dynamics between local African CSOs, international NGOs, and donors. The end goal being the co-development of solutions that can improve our system and lead to greater conservation success.

ZCP Management and senior teams again benefited from intensive Management Training by long-term partner Maliasili in 2023.

Organizational Strengthening, Leadership Training, and Strategic Plan Implementation

We continued our long-term partnership with Maliasili in 2023, working closely on a variety of organizational strengthening initiatives and culminating in an intensive workshop on management and leadership training and strategic plan implementation. Senior team members from across all our projects attended the training and workshop as ZCP, partners, and our impacts continue to benefit greatly from the expertise, guidance, and support provided by the Maliasili team.

Luangwa Project Manager Thandiwe Mweetwa in Anchorage, Alaska.

International Mammalogical Congress

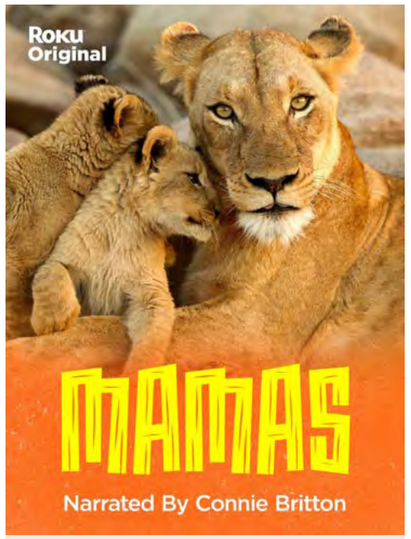
ZCP-Luangwa Project Manager Thandiwe Mweetwa attended and presented ZCP's collaborative conservation science and coexistence work at the 13th International Mammalogical Congress. The conference, held in Anchorage, Alaska, was attended by scientists from over 50 countries and 6 continents. While in Alaska, Thandiwe also caught up with long-term ZCP Research Partner Dr. Paul Schuette. Thandiwe's trip was supported by the American Society of Mammalogists through the African Research Fellowship Committee

Women for Environment Africa

Luangwa Project Manager Thandiwe Mweetwa completed her year-long intensive engagement as part of the Women for the Environment's (WE Africa) 2023 Leadership Programme cohort, culminating with a retreat in Namibia with female conservation leaders from across Africa.

The programme, aimed at putting women at the heart of transforming the environmental movement in Africa, provided a range of leadership building opportunities for 20 top level women leaders from Africa, and its 'pay it forward' approach will enable Thandiwe to continue to be engaged and mentor future cohorts.

On the Big Screen and in the News in 2023



"Mamas Season 2"

With some of Africa's longest-running studies of large carnivores we have witnessed and chronicled many amazing individuals, and none more impressive than the mothers who raise pups and cubs against so many odds. In 2023 we worked with the the Roku Channel and Plimsoll Productions for their Season 2 of 'Mamas,' highlighting wild dog and lion mothers raising their young in the wilderness of Kafue National Park.

Members of ZCP, CSL, and CWET attend the NEWF Summit in Johannesburg, South Africa.

Nature Environment & Wildlife Filmmakers (NEWF) Summit and Congress 2023, Johannesburg

Multiple members of ZCP and our partners Conservation South Luangwa and Chipembele Wildlife Education Trust attended the NEWF Summit and Congress in 2023.

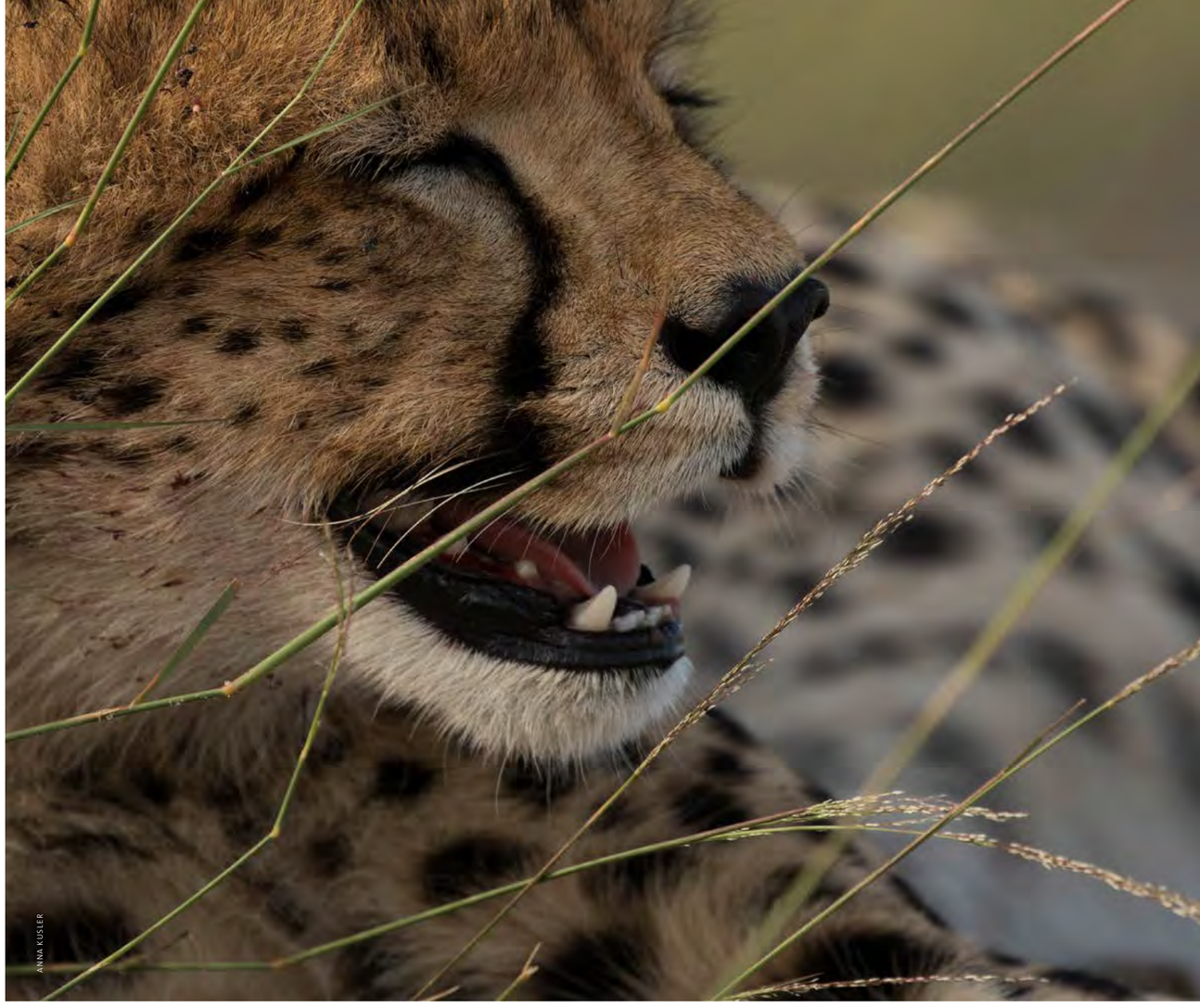
Mercy Njobvu, a National Geographic Young Explorer, graduate of our WIWC and Wildlife Vet Training Programme (see page 28, and currently in vet school) described the experience: "What a week we have had in the kingdom of Shaka the Zulu!! We were in Durban, KZN attending the Nature and Environment Wildlife Filmmakers Congress. We were invited as part of a delegation from (South Luangwa) comprising of two of our conservation partners (CSL and CWET) and young up and coming conservationists, photographers and wildlife filmmakers. We ran a high-level panel on the collaborative conservation work we are doing in and around South Luangwa National Park. Under the congress theme, Africa Refocused, we shared our hopes and dreams. Our wins and our challenges.

Throughout the week, we rubbed shoulders with some of the best and rising wildlife filmmakers, producers and storytellers. My village people made me proud – honored to be part of the vision and mission of NEWF."

Showcasing the Lives of Wild Dogs in Zambia

The trials and triumphs of three very different wild dog packs in the Luangwa Valley were again showcased in 2023 with the release of "Wild Dogs: Running with the Pack Season 2: Pack versus Pride."

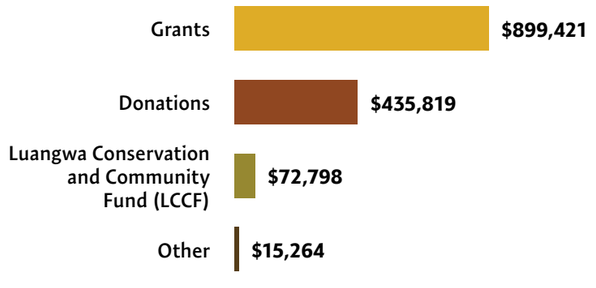
The 6-part series from Love Nature and wildlife cameraman Julz Braatvedt and team gave people around the world a glimpse into the life of wild dog packs, and the conservation threats facing them, as well as the natural threats dogs face from lions.



Financials

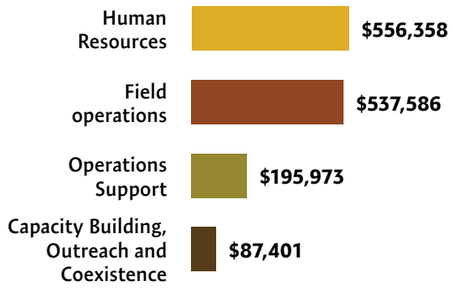
2023 Income Categories

(Total $1,423,302)



2023 Expenditures by Category

(Total $1,377,318)



2023 Supporters

Special Thanks to Our Individual Donors:

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2023 Partners

Wild dogs raising their pups in the Luangwa Valley, the site of one of the longest-running wild dog conservation projects in the region, and one of the continent's strongholds of this endangered species.

EDWARD SELFE

Zambian
CARNIVORE PROGRAMME

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