
GAME RANGERS

INTERNATIONAL



BUSH TELEGRAPH

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#WeAreAllRangers
www.gamerangersinternational.org



*Mataya's first walk out into the Lusaka National Park with the Nursery herd, at Giraffe Pool.
Photo credit: Linda Rorbye*

Table of
CONTENTS

MESSAGE FROM COMMUNITY OUTREACH DIRECTOR	04
MATAYA	06
HACK THE PLANET	09
HUMAN-WILDLIFE CONFLICT	10
A CO-EXISTENCE STORY	11
RANGER WELFARE	13
CONSERVATION TECHNOLOGY	13
NOTABLE OPERATIONS & PROSECUTIONS	14
SUPPORTERS PAGE	16

Front Cover: Mataya, at the start of his rehabilitation at the Elephant Nursery

Below: Camp Phoenix Volunteer Area

Page 4: Wild flowers of the Lusaka National Park



INTRODUCTORY MESSAGE

BY JENI VANHOUCKE

Human-Wildlife Conflicts rank among the major threats to the survival of many wildlife species in Zambia, as well as the security and well-being of local communities.

In February, we rescued a young elephant calf following a night of intensive crop raiding in a remote village on the banks of the Zambezi River. 'Mataya' had become separated from his herd as desperate farmers chased them from their maize fields and was then brutally attacked with a machete. Sadly, such incidents are not uncommon in areas where wildlife and community members compete for resources.

At GRI, we aim to reduce both incidences - and the impact - of Human-Wildlife Conflicts. We take a holistic, three-phased approach, supporting communities through prevention, response and repair.

This quarter at the Release Facility, we launched a trial of an innovative new audio and visual repeller, which if proven effective, will be installed in community areas to deter elephants from farmlands. Meanwhile, we have continued to raise awareness, equip farmers with wildlife-safe deterrents and crucially, support and empower community members affected by Human-Wildlife Conflicts, in order to prevent retaliation attacks.



Mrs Jeni Vanhoucke

EMPOWERING RANGERS AND LOCAL
COMMUNITIES TO CONSERVE NATURE

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WILDLIFE RESCUE PROGRAMME

RESCUE
REHABILITATE
RELEASE



Mataya - tiny, dehydrated and alone just after his rescue

MATAYA

ANOTHER YOUNG ELEPHANT BECOMES THE TRAGIC VICTIM OF HUMAN ELEPHANT CONFLICT

The small, remote village of Mataya Unga is located on the banks of the Zambezi River, north of Lake Kariba and south of Lower Zambezi National Park. As with so many rural communities, subsistence living and the growing of crops is vital for their existence. However, this way of life presents so many challenges, particularly those involving wildlife, who are usually competing for the same resources.

In February, a large herd of elephants crossed the river from Zimbabwe and moved into Mataya Unga where they began to crop raid, devastating the maize fields that are the life source of the community. In response, farmers and community members chased the elephants away, firing guns, throwing rocks and making noise to scare them off. In the commotion a tiny, young elephant became separated from his mother and in the aftermath of the conflict he was found alone. Enraged by the loss of so many crops someone tried to claim the young calf for meat and he was attacked with a machete. However, other members of the community were able to rescue the calf, tie and secure him in a safe location until the Department of National Parks and Wildlife's Rapid Response Unit (located over an hour away) arrived on the scene.

DNPW officers understood the trauma experienced by both people and elephants and acted quickly to transport the young calf to Lusaka, whilst alerting the GRI team. The calf was only around two months old, so very vulnerable, and had become exhausted from the incredible stress and lack of nutrients from his mother. At this young age he would be constantly by her side, and feed from her frequently, as with all new-borns. Within a few hours, the vehicle arrived to the Elephant Nursery in Lusaka National Park and the fragile young calf was carefully lifted into a stable.

Our team quickly administered electrolytes which he took in small sips, little by little, but he was too exhausted to stand. His glucose levels were very low and getting nutrients into him was essential for his survival. He had sustained two machete wounds on his ear and base of his tail which were treated, but were obviously causing him a lot of discomfort.

After about 12 hours he regained the energy to stand by himself and surprised and rewarded us all by seeking comfort and nutrition from Keeper Sunday. He was still weak and would only drink very small quantities of fluid, initially preferring electrolytes over milk, clearly still intensely dehydrated. He has been named 'Mataya' after the village where he was found. The name means 'to throw Mealie Meal' which is the staple food source from maize, and a stark reminder of the incredible challenges being faced in Human-Wildlife Coexistence and the tragic reality for his abandonment.

The first few days after Mataya's rescue were the most critical as he was so vulnerable and at this very young age, unable to be left alone. He needed consistent comfort through physical contact that his mother would have provided. By supporting his emotional needs, we knew that his appetite would increase which was vital for his survival.



Mataya just 2 weeks after his rescue shows huge improvement in his physical and emotional health

MATAYA

A FEW WEEKS LATER

On arrival to the Nursery, Mataya was so weak that he was unable to stand and was fed laying down. The Keeper team devoted themselves to comforting him and giving him the high level of care that he so desperately needed. In the first few days, he was offered rehydration fluids and milk frequently, in small volumes. However, it was critical that he adapted to the new, nutritious milk formula in order to regain condition. Over the next few days, Mataya showed a steady increase in appetite for his milk. He started sleeping deeply and for longer periods, which was a great sign that he was comfortable and relaxed in his new environment, with a Keeper always at his side. He also started to consume increasing volumes of milk and gained the weight he lost through his separation and trauma. When he was strong enough, he was let out of the stable to stretch his legs. Each day, he enjoyed some time in a little mud hole and wandered around the paddock whilst the Nursery Herd were out on the walk.

The injury that Mataya sustained received veterinary attention and was cleaned and treated twice a day. It was a deep, infected wound but thankfully Mataya's vitals and behaviour were consistently normal, indicating that the infection was being kept at bay. It is heart-wrenching to think that someone intentionally attacked Mataya, but this act demonstrates the incredibly challenging realities being faced where humans and wildlife interface and compete for resources. The community in Mataya Unga village lost significant food resources when Mataya's herd raided, and for these people living on the poverty line, this compromises the health and survival of their own families. It is almost impossible for most, to really understand the gravity of a conflict situation, which frequently results in a loss of both human and animal life. GRI's Community Outreach Ranger Crispine is working closely with our partners at Conservation Lower Zambezi, to provide follow up support to this community, with human-wildlife coexistence strategies and awareness, as well as acknowledging their role in Mataya's rescue. In our mission to "conserve nature" it is absolutely essential that we first engage and support the people whose lives are so intricately linked to its environmental health.

Whilst Mataya has shown all the right signs of recovery, we remained cautious with his care regime and ensured he was strong before he met the rest of the Nursery Herd. When he started to communicate through the stable walls with the other orphans, we knew he was ready for the next step. Chikumbi was the first to greet him. She showed signs of submission even though she is older than him. Wamwayi was next but reached out to the Keeper for the attention to be on himself rather than on the newcomer. All the while, Mataya stayed near to Keeper Audience, as if he would his Mother. Shezongo, the eldest male, reached out to smell him, but feeding was more important at that moment. Matriarch Mbila was over-enthusiastic to meet little Mataya and the Keepers had to intervene, while Daliso nervously played with water before curiously reaching his trunk out to sniff Mataya. He then too found a keeper to comfort suckle. Mataya has since been joining the herd on their afternoon walks in the Lusaka National Park.

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COMMUNITY OUTREACH PROGRAMME

ENGAGE
EDUCATE
EMPOWER



The GRI – Hack the Planet Team, ready to install the elephant repeller system

HACK THE PLANET

ELEPHANT REPELLERS

In March, Tim van Deursen and Thijs Suijten of Hack the Planet spent three days at the Kafue Release Facility, installing two smart (AI) camera-trap systems and two repeller systems. The combined system is intended to deter elephants from farmland and community areas, therefore, mitigating human-wildlife conflict.

The setup works as follows:

1. The camera-trap is triggered by movement.
2. A waterproof box nearby (the Bridge) wakes up and wirelessly retrieves the image from the camera
3. The Bridge analyses the photo taken by the camera using a Machine Learning model (Image 1)
4. Results of this analysis are sent to Earth Ranger.
5. When the analysis results in the detection of an Elephant, a Lora radio signal is transmitted
6. The repeller is installed at a distance from the camera, picks up the Lora signal and in turn, produces sounds and flashes of light. (Image 2)

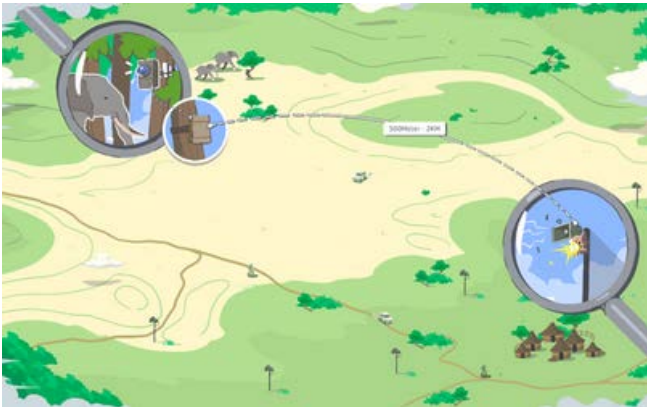


Image 1

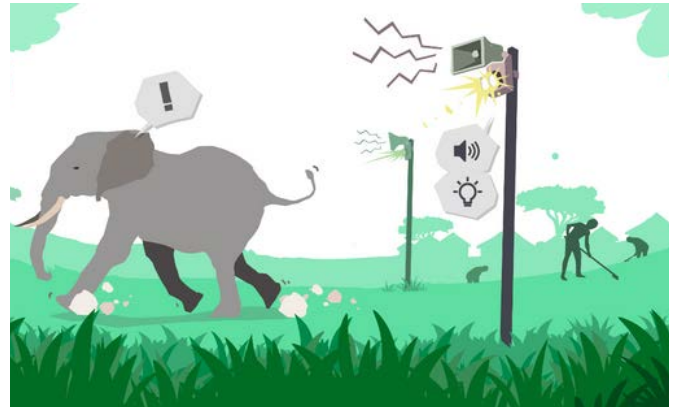


Image 2



EarthRanger image shows a collared herd trigger the repeller and move away

The team perform daily checks on the two smart camera traps. All camera traps and bridges are functioning properly, and all bridges are getting enough charge from the solar panels. Temperatures are currently within an acceptable range but will need to be monitored carefully – if they rise too high, a simple roof will be mounted above the bridge.



Billy Banda distributes firecrackers to an officer responding to crop raiding in Mwaaanje Village

HUMAN-WILDLIFE CONFLICT MITIGATION

AWARENESS AND DETERRENTS

This quarter, our Nkala GMA based Human-Wildlife Coexistence Team received 39 reports of Human-Wildlife Conflict, including 4 human mortalities and 2 wildlife mortalities.

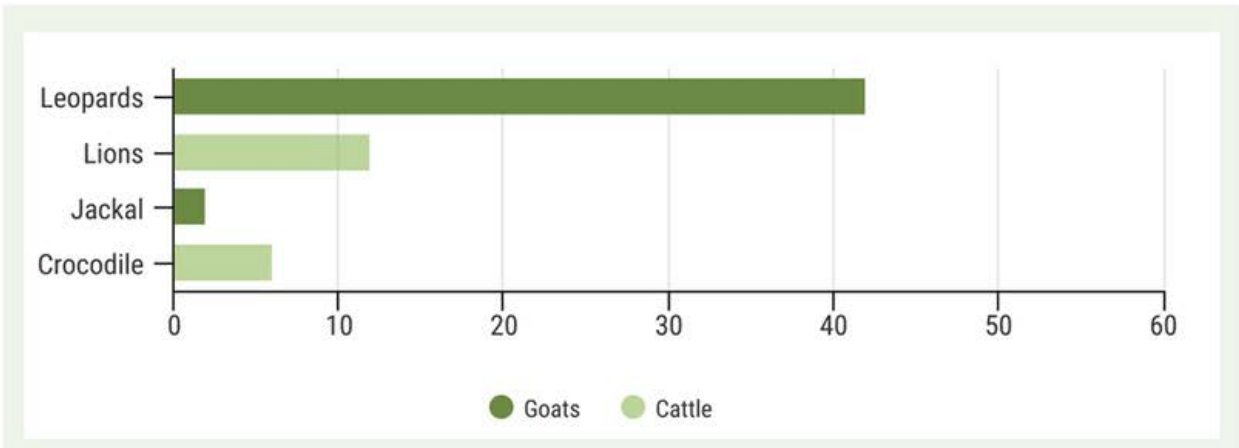
The majority of reports were of elephants raiding maize crops. Farmers encountered herds of between 2-30 elephants. Many attempted self-mitigation and found that shouting and banging pots and pans were effective, but have since been equipped with firecrackers to for use during any further encounters.

Species	Total Reports	Livestock Injury	Livestock Mortality	Human Injury	Human Mortality	Crop Damage	Wildlife Mortality
Lion	3		12				
Leopard	6	1	41				1
Elephants	25				3	22	
Jackal	1		2				
Crocodile	1	2	4	1			1
Hippo	1				1		

Human-Wildlife Conflict Reports in Nkala GMA, Q123

Human-Carnivore conflict continues to be a huge challenge for the communities contiguous to Nkala GMA. This quarter, a leopard was shot dead by a farmer with a licensed firearm in retaliation for the predation of goats in the lyanda area.

We are committed to increasing awareness of Human-Leopard Conflict, continuing to support farmers to better protect their livestock, and ensuring that all reported incidences of Human-Wildlife Conflict are responded to in person.



Livestock predation by species, Nkala GMA, Q1 2023



Britius Munkombwe speaking at the DSWF Wildlife Ball

A COEXISTENCE STORY BY BRITIUS MUNKOMBWE

THE DAVID SHEPHERD WILDLIFE FOUNDATION WILDLIFE BALL

It was a great honour for Community Outreach Manager, Britius Munkombwe, to receive an invitation from David Shepherd Wildlife Foundation (DSWF) to speak during their annual Wildlife Ball, held at the prestigious Dorchester Hotel, London. Speaking with incredible passion, Britius told of how his interest in wildlife developed at a young age and how drawing on the characteristics of an elephant has given him strength and patience. He went on to explain how the Shepherd Family have enriched and inspired his career, and how the support of the Foundation has helped save lives and wildlife across Zambia.

During his extended visit to the UK, Britius participated in 14 speaking engagements across London, Surrey, Hampshire and Kent, meeting with GRI partners, addressing primary schools and giving thanks to the many teams and supporters who make our Community Outreach work possible.

With special thanks to the David Shepherd Wildlife Foundation for making this visit possible, and to Steffan and Alex Perkins, Amanda and Barry Butler and Andrew and Libby White for their warm hospitality.



Highlights of Britius' two-week tour of the UK

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RESOURCE PROTECTION PROGRAMME

PREVENT
PROTECT
PRESERVE



Rangers from the Nkala APU receive their new gumboots

RANGER WELFARE

MEDICAL CARE AND SUPPORT

Over the last few months GRI's Resource Protection Programme (RPP) supported multiple Rangers with medical assistance. Two Rangers, in separate units, were bitten by unidentified snakes. The first Ranger showed symptoms of a strong reaction to the bite and a decision was made to medivac the officer by helicopter from the local hospital to Lusaka. After spending many days in the ICU undergoing treatment, he has since made a full recovery. The second Ranger had a less severe reaction and was successfully treated at the local hospital. Both Rangers have since returned to active duty.

In addition to supporting Rangers, GRI provided support to Ranger families during the period. Funeral and bereavement support was provided to a long serving Ranger after his wife sadly passed away, and to a junior Ranger who lost his father.

RPP also continued to procure vital kit for Rangers, including new T-shirts for all Rangers and GRI staff, and new gumboots. During the rainy season gumboots are critical for Ranger welfare while on patrol, as many areas of operation are completely waterlogged.

FIRST AID TRAINING

In February and March, all GRI staff undertook first aid training with a few select individuals at each camp taking part in an advanced course. This training will ensure all staff have the knowledge required to be a first responder and the confidence to execute the learned skills during a real-life scenario. In turn, this will ensure that GRI supported Rangers are given the best possible care both in camp and the field during an initial response to a medical emergency.



Rangers at KRF receive their First Aid Certificates



Rangers at WDC, KRF and MUSA receive 1st Aid training





Control Room Operatives

CONSERVATION TECHNOLOGY

SMART

SMART continues to be the primary application for capturing all RPP law enforcement activities and observations, and SMART data is essential for effective operational planning. GRI's SMART coverage involves 19 teams across 5 Game Management Areas (GMAs), (>23,000km² of protected area, excluding open areas and wide-ranging SAPU patrols). In Q1 2023, 42 individual Patrols were debriefed, and the team have worked to upgrade all Conservation Areas to SMART 7.5.

During the quarter, SMART Analysts continued to develop a Human Wildlife Coexistence (HWC) data model for SMART. This will allow all patrolling units to record HWC feedback in a uniform manner across all GMAs. By enabling uniform data entry, the data model will also enable greater analysis of HWC incidents which will in turn inform future response and community outreach projects. This will be particularly useful for the Nkala GMA where HWC is an ongoing issue.

EARTHANGER & THE GEOFENCE

EarthRanger is a real-time, internet-based dashboard that displays conservation assets including Ranger and Research teams, vehicles, and collared animals. To be able to visualise various assets, the platform is suited for integration with various technologies.

The Geofence created along the Nkala GMA boundary in EarthRanger continues to be monitored for real-time alerts whenever a collared elephant crosses. EarthRanger has also allowed for greater collaboration between partners and coordinated operations to occur.



LEFT: The figure displays Batoka's movement in protected areas and surrounding communities in real time and how the geofence works.

RIGHT: Batoka



The system is set up in a way if Batoka crosses the Geofence towards the community area. A WhatsApp alert is sent out to the Community Manager, Ranger team leader, Control Room, and other staff responsible for Human Elephant Conflict (HEC). The Alert System is triggered round the clock and shows the exact geolocation on the fence and the animal ID in real-time. During post-alert, there is close monitoring and team to avoid possible HEC by using approved management methods to lead the animals back to the protected area. This alert trigger system enables alleviation of possible HEC incidents in real time serving both wild animals and communities living side by side.



240kgs of Bush Meat confiscated by the MMZ APU

NOTABLE OPERATIONS

PROSECUTIONS

During the quarter there were multiple successful operations across GRI supported teams.

In January, Special Anti-Poaching Unit (SAPU) North conducted two separate intelligence led ambush operations which resulted in the apprehension of two suspects in possession of illegal firearms, and also conducted a successful anti-logging operation.

In Itezhi-Tezhi the Special Investigation Unit (SIU), supported by SAPU South, conducted a surveillance operation and identified a house being used for the storage and sale of bushmeat. A further operation was conducted, and the teams apprehended 3 suspects in possession of 47kg of Puku meat and 21 kg of Impala meat, along with 2 deep freezers.

In Lunga Luswishi, the Mujimanzovu (MMZ) Anti-Poaching Unit (APU) cleared 42 snares, and apprehended 3 suspects in possession of bushmeat across various operations.

In February, the MMZ APU undertook a major operation and successfully managed to apprehend one poacher in possession of 240kg of bush meat and 32 wire snares. The average weight of the dry meat from one bush pig is 35kg, which unfortunately means that this poacher would have killed at least 7 or 8 bush pigs in this one hunt. If poaching like this was not prevented, any targeted species would be wiped out in a very short period.

The poacher apprehended in February by the MMZ APU in possession of 240kgs of bush meat was sentenced to 1 year and 6 months imprisonment with hard labour, with GRI supporting the prosecution process throughout.

Unit	Firearms	Snares	Axes, knives, spears	Bush meat (kg)	
SAPU North	2	0	0	0	
SAPU South	4	0	0	68	
Nkala APU*	0	3	0	0	
Mweengwa APU	2	1	0	1,939 (fish)	
Mujimanzovu APU	4	129	15	295	
Rufunsa APU	0	0	3	0	

Recoveries and confiscations over the last three-months

THANK YOU

THANK YOU TO OUR PARTNERS WHO HAVE HELPED MAKE ALL OF THESE INITIATIVES POSSIBLE

