

**ZSL**

**LET'S WORK  
FOR WILDLIFE**

A photograph of two rhinos in a savanna landscape. The rhino in the foreground is larger and has a prominent horn, looking towards the right. The rhino in the background is smaller and looking towards the camera. The background is a blurred savanna with dry grass and trees.

**ZSL Kenya  
Annual Report  
2017**



***“I feel proud to be working with the Kenya Wildlife Service to protect one of the country’s flagship species, the Critically Endangered black rhino. The Tsavo Conservation Area provides hope for this highly vulnerable animal and many other threatened species. We are providing technical support on wildlife monitoring, security and protected area management to ensure this vast landscape is conserved for generations to come.”***

**Moses Wekesa, ZSL Tsavo Field Manager**



## Letter from our Kenya Country Manager

ZSL has such a rich history in Kenya, and the Tsavo ecosystem in particular. I was sent a photo recently of Rob Brett, ZSL's first employee in Kenya, standing at a waterhole in the Ngulia Rhino Sanctuary in the late 1980s with the then-Senior Warden of Tsavo West National Park, Bill Woodley. And 30 years later, ZSL is still supporting rhino conservation in Tsavo. Even since I first worked in Tsavo West in 2002, the place is unrecognisable. With the continued and generous funding from all our donors, ZSL has been able to expand its efforts during 2017, providing greater support for the Kenya Wildlife Service (KWS) and our other partners in Kenya.

Many people don't realise the significant work that goes on behind the scenes to run a National Park smoothly. ZSL's strong partnership in Tsavo West with KWS is critical, allowing the park to operate seamlessly thanks to the hard work of the teams keeping vehicles running, building and maintaining infrastructure, and providing support where needed. Sometimes this is something as simple as fixing a borehole pump, but without these interventions, waterholes run dry and wildlife struggle.

The Rhino Impact Investment Project offers an opportunity to raise the necessary funding for Tsavo West to realise its wildlife potential. KWS and ZSL are very proud that Tsavo West has been chosen as one of seven rhino areas in Africa for this new, innovative financing mechanism, a recognition of the achievements and hard work of the past three years. We can also be proud of zero rhino poaching during 2017. However, we know that this is just the start; there's a long way to go to recover the wildlife densities that Tsavo used to hold.

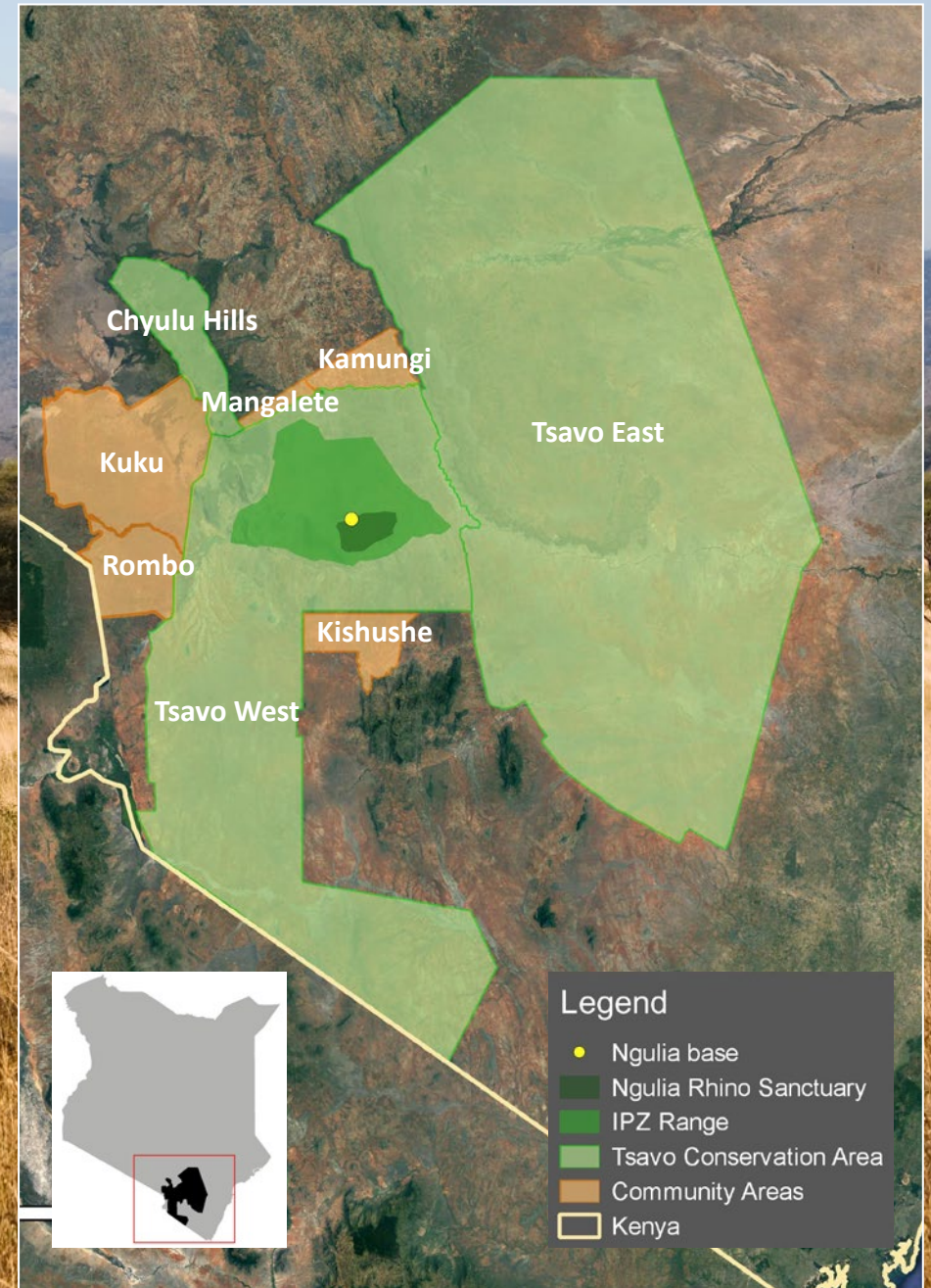


**Chris Gordon**  
Kenya Country Manager

## ZSL Kenya Programme

ZSL has been collaborating with the Kenya Wildlife Service (KWS) since 1989 to build capacity of its staff through provision of technical advice, equipment and specialist training. Our goal is to ensure effective conservation of Kenya's wildlife, through assisting KWS in protected area management, wildlife monitoring and law enforcement. In 2016, a ZSL Kenya Country Office was registered to increase support for both KWS and other partner NGOs, and to focus efforts on the Tsavo Conservation Area (TCA) in southern Kenya, which covers 48,000km<sup>2</sup> and includes Tsavo East, Tsavo West and Chyulu Hills National Parks (NPs).

This vast area is home to Kenya's largest elephant population and many other threatened species including African wild dogs and hirola. Tsavo West NP in particular holds one of the key remaining black rhino populations in the country, with approximately 17% of Kenya's rhinos inhabiting the fenced Ngulia Rhino Sanctuary (92km<sup>2</sup>) and the unfenced Intensive Protection Zone (IPZ)(2,000km<sup>2</sup>)(see map of ZSL project area).



# 2017 Highlights



**17%** of Kenya's black rhino population protected



**0 black rhinos** poached in Tsavo West



**12 black rhinos** born in Tsavo West



**24 black rhinos** ear notched for identification



**9 black rhinos** fitted with **radio transmitters** to improve monitoring



**12 seizures** of over **280kg** of **ivory, firearms and animal skins**



ZSL is now operating in **2,200km<sup>2</sup>** of Tsavo West and Chyulu Hills National Parks



## Monitoring Rhinos

In 2003, ZSL's Raj Amin supported KWS to enhance its rhino monitoring programme, and ever since, ZSL has continued to provide expertise, training and logistical support to strengthen rhino monitoring and security in the Tsavo Conservation Area (TCA).

Understanding the rhino population allows park management to better protect this species, improve speed of carcass detection, and make informed decisions to improve population growth. The IPZ in Tsavo West is critical to this growth as a key location for future inbound rhino translocations from other areas, due to its size and quality of rhino habitat. As other rhino habitats in Kenya reach carrying capacity, the future of the IPZ as free-roaming black rhino range will become more vital for the conservation of the species. Achieving effective monitoring and security of the current IPZ population is therefore essential to enable future rhino translocations, as well as protection of Tsavo West as a critical ecosystem for a multitude of species.

ZSL has provided significant support during 2017 to Kenya's National Rhino Strategy. In Ngulia Rhino Sanctuary and the IPZ, ZSL has supported the development of dedicated rhino monitoring teams through: 1) training personnel to collate, analyse and report on monitoring and security efforts; and 2) equipping the teams with vehicles (including running costs), camera traps, and monitoring equipment. In the Chyulu Hills, ZSL has supported the training and deployment of a dedicated rhino research and monitoring officer through the Big Life Foundation (BLF).

## Monitoring Highlights

- In Ngulia, on average 80% of the population was confirmed each month through camera traps and physical sightings.
- In Chyulu, 100% of the rhino population was sighted by camera traps.
- In the IPZ, 74% of rhinos were confirmed during 2017.
- The average sightings interval (no. of days since each individual rhino was last seen) in Ngulia has decreased from 55 days in January 2017 to 28 days by the end of the year. In the IPZ, the average decreased from 1,330 days in January 2017 to 68 days in December 2017.
- One rhino that had not been seen for six years and presumed dead, was spotted in the IPZ while the team were tracking another transmittered rhino.
- ZSL funded the Annual Night Census at Ngulia Rhino Sanctuary from July-September 2017, a critical rhino monitoring survey that enables KWS and ZSL to estimate total population numbers. 91.5% of the Ngulia population was observed during the night census.
- ZSL financed and coordinated a National Rhino Audit, evaluating the accuracy and quality of rhino monitoring, security and logistics of all of Kenya's rhino populations. The findings were instrumental in focusing attention on the poorly understood Kenyan rhino populations.
- Raj Amin facilitated the development and write up of the new five-year National Rhino Strategy (2018-2022) with our partners KWS and WWF-Kenya.



**97%** of rhinos were physically sighted during 2017



**65 camera traps** deployed



**325 hours** of aerial surveys



**141 days** reduction in the average sightings interval (days since last seen) for Tsavo rhinos



## Overt Rhino Security

The protection of endangered species at a time when poachers have access to increasingly sophisticated technology and financial resources is costly and challenging. With the TCA being home to almost 20% of Kenya's black rhino population, the security of this site is paramount and therefore we have a responsibility to remain at the forefront of antipoaching initiatives.

ZSL is providing technical and logistical support to KWS in these efforts, across the three key black rhino areas: Ngulia Rhino Sanctuary, the Intensive Protection Zone and Chyulu Hills National Park. We have established systems using SMART to enhance patrol coverage and effort through tracking and reporting on ranger performance, analysing individual rangers' efforts and providing equipment-based incentives for those who perform best. A scoring system has been implemented to track ranger scores over time, based on criteria agreed by the Platoon Commanders for each area.



**47,634km** of foot patrols by Tsavo West and Chyulu Hills rhino platoons



**24%** increase in average ranger score compared to 2016

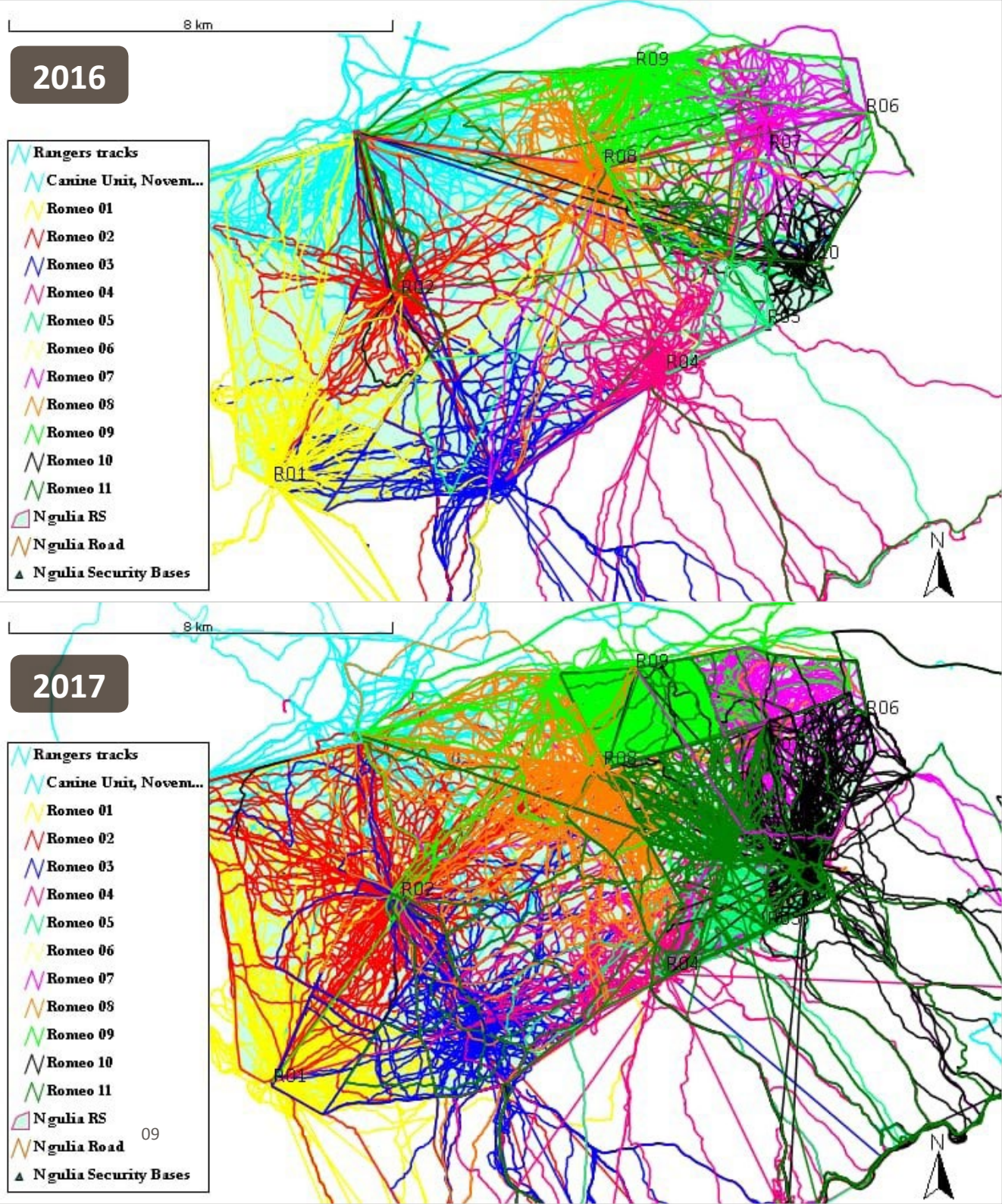


## Security Highlights

- During the second half of 2017, the KWS and BLF rangers patrolled a total of 28,323km by foot across the three rhino areas that ZSL supports, compared to 19,311km in the first six months of 2017.
- There were zero known rhino mortalities during 2017.
- KWS patrol coverage in both Ngulia and Chyulu Hills improved by 320% and 190% respectively since January 2017. Figure 1 shows Ngulia patrol coverage in 2017 compared to 2016.
- The average performance score of rangers improved by 200% and 235% over the year in Tsavo West and Chyulu Hills respectively.



Figure 1: Patrol coverage by KWS rangers in Ngulia Rhino Sanctuary in 2016 (top) and 2017 (bottom)



## Infrastructure Development

Development and maintenance of park infrastructure is an essential component of effective park management in the TCA. ZSL has supported KWS in several construction projects during 2017, with the following highlights:

- Six Ngulia ranger outposts have been upgraded, providing better living conditions for field rangers. Upgrades include construction of a protected kitchen and living area, long-drop toilets, and rubbish pits.
- In 2016, ZSL constructed a new office for the Ngulia rhino base. KWS decided to amalgamate the Ngulia and IPZ bases for logistical and operational purposes, as the old IPZ base had no access to water. ZSL has constructed a new office block, which was nearing completion at the end of 2017. This office provides working space for security commanders, rhino monitoring teams and the ZSL Tsavo field manager, as well as a meeting space for briefing rangers. This has created a much more productive working environment for the teams.
- 45km of firebreaks have been cut in and around Ngulia Rhino Sanctuary to reduce the chance of wild fires (see image top right). These firebreaks would allow KWS to contain any fires within smaller habitat blocks.



- The construction of a 4.5km water pipeline in Ngulia has been completed. Water supply in the sanctuary had been an ongoing issue with the old pipeline continually destroyed by elephants, requiring daily maintenance. This caused significant stress on Ngulia's rhino population, with regular fighting observed. Permanent water in the sanctuary is essential for rhinos and other wildlife. The pipeline has been upgraded with high-quality PVC piping and buried deep underground to reduce the chance of damage by elephants.
- ZSL constructed a 100,000 litre ferrous cement water tank and refurbished an old tank to collect rainwater from the new IPZ office roof and at the Ndawe borehole, providing fresh drinking water for the staff housed at the rhino base.
- ZSL completed construction of a five-room accommodation block for ZSL staff at Ngulia base.
- Road repairs have been carried out by the ZSL tractor and a team of casuals on the Ndawe, Mugange and Tsavo River roads, reopening previously impassable vehicle tracks.
- ZSL has provided a container store at Ngulia base for building materials and has provided a container store to the Komboyo workshop for storing vehicle maintenance equipment.



**6 ranger outposts**  
upgraded



First aid training for  
**57 rangers**



**45km** of  
firebreaks cut



**6 vehicles**  
maintained and  
fuelled by ZSL



**4.5km** of  
water piping laid

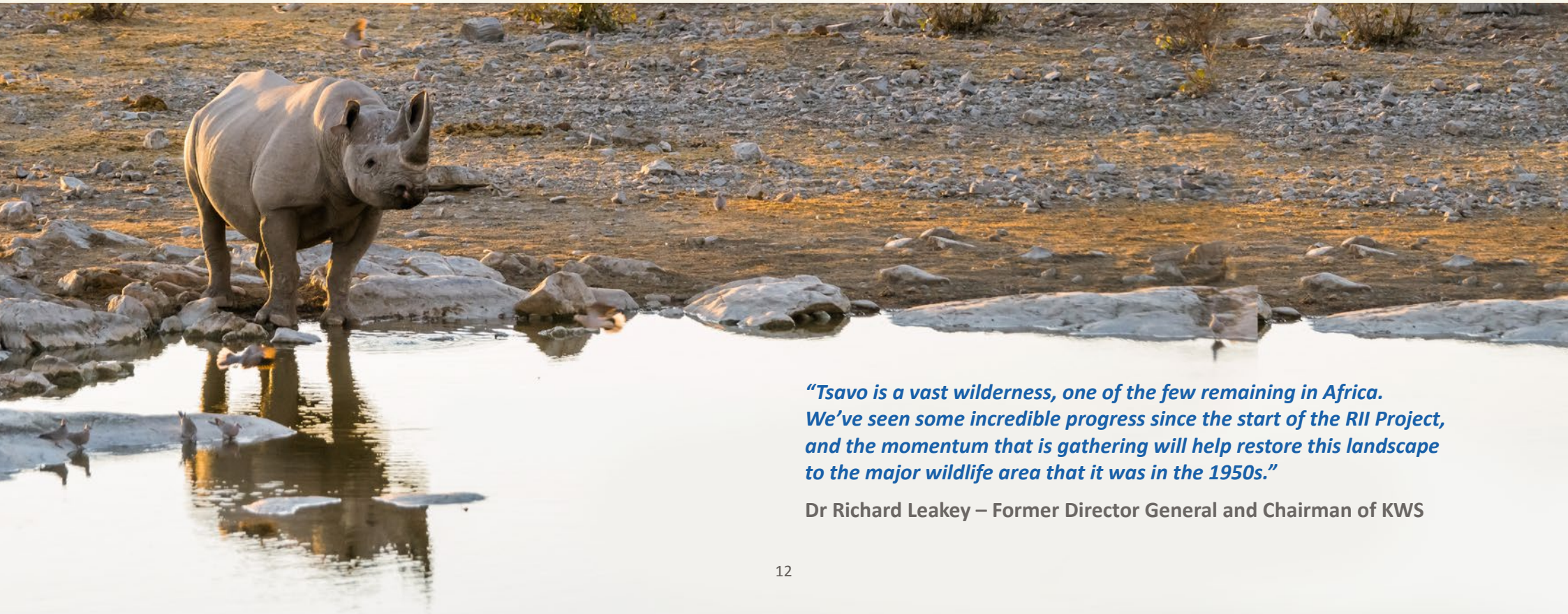
## Rhino Impact Investment (RII)

The costs of rhino conservation have increased dramatically in the last decade, with many protected areas facing funding gaps to effectively secure and grow priority African rhino populations. To address this, the Rhino Impact Investment (RII) Project is assessing the feasibility of using outcomes-based financing to ensure long-term funding for critical conservation areas, using rhinos as an initial focus.

A key component during the development of this project has been to test how performance metrics respond to interventions following a rhino-specific Theory of Change. Tsavo West National Park, under the management of KWS,

was chosen as the pilot site. During 2016 and 2017, ZSL, KWS and Tsavo Trust piloted conservation interventions in Tsavo West to understand the impact on law enforcement, monitoring and black rhino habitat (Key Performance Indicators), with demonstrable success. These activities are preparing Tsavo West to achieve rhino population growth in the coming years.

With the pilot phase of the RII project culminating in March 2018, and Tsavo West selected as a key rhino site for the next phase of the RII project, ZSL's support to KWS in this area will continue to be hugely important for the ongoing success of a globally-critical rhino area.



*“Tsavo is a vast wilderness, one of the few remaining in Africa. We’ve seen some incredible progress since the start of the RII Project, and the momentum that is gathering will help restore this landscape to the major wildlife area that it was in the 1950s.”*

Dr Richard Leakey – Former Director General and Chairman of KWS

## Capacity building & training

### Intelligence & law enforcement

Effective law enforcement requires more than just well-trained and motivated rangers. Supportive and engaged communities have an important role to play, particularly in providing intelligence on wildlife crime. Investigations and appropriate judicial procedures are also crucial as both proactive and reactive approaches to tackling the illegal wildlife trade (IWT). Intelligence-led law enforcement has had considerable success, particularly over vast ecosystems like Tsavo where it is difficult to have sufficient security presence. Training in basic investigative skills is an area in which ZSL has considerable expertise, and we are supporting KWS and other local partners in their efforts to combat wildlife crime using this approach.

During 2017, ZSL's Law Enforcement Advisor, a former Scotland Yard detective, trained 52 law enforcement officers in proactive investigative and intelligence gathering techniques (see image top right). Using bespoke training courses, designed around practical roleplay, the courses were intended to upskill intelligence and investigations officers through introducing skills across the law enforcement spectrum. In addition to training, ZSL has provided ongoing mentoring and technical support, which in 2017, led to 13 operations that culminated in 23 arrests and seizures of over 280kg of ivory, quantities of firearms and over a dozen animal skins.



**52 law enforcement officers** trained



**23 arrests** relating to wildlife crime



## SMART

The Spatial Monitoring and Reporting Tool (SMART) is designed to professionalise data collection and analysis on law enforcement and ecological monitoring, to empower managers to better understand the situation on the ground and to encourage improved performance through motivated rangers. ZSL is a founding partner of the SMART consortium and an expert in its application, supporting its implementation in many sites globally including Kenya. This approach allows ZSL to increase its reach both in terms of partner organisations and personnel actively using SMART, but also through the size of the conservation area benefitting from adaptive law enforcement via SMART patrols and reporting.

During 2017, Clarine Kigoli (ZSL's Capacity Trainer in Kenya) ran SMART training courses for a number of partner organisations. Importantly, ZSL's support to these partners does not stop after the initial training workshop, but ZSL offers follow-up support and site visits to help them navigate the difficulties of implementing such tools on the ground. Clarine conducted multiple visits over the past year to partners including Grevy's Zebra Trust, Mount Kenya Trust, Loisaba Conservancy, and Space for Giants. It has been very rewarding to see the progress made by Loisaba in particular, which now has 33 rangers using SMART, who themselves made over 200 arrests in the second half of 2017.



**20,036km<sup>2</sup>** of conservation area is utilising SMART in Kenya following our training



**16 partner organisations** have implemented the SMART approach



**444 rangers** on the ground are collecting law enforcement and ecological data through SMART

## Plans for 2018

- The new IPZ office will be completed in Q1 2018.
- The pilot phase of the RII project will come to end in March 2018. A finance manager and performance manager will be hired to take the RII project forward, with Tsavo West being one of the seven chosen sites for the next phase of the RII financing mechanism.
- KWS and ZSL will conduct the first fully evidenced audit of Tsavo West rhino numbers. This process will inform future audits and improve rhino monitoring processes in Kenya moving forward.
- We will continue to support and enhance rhino and law enforcement monitoring in Tsavo West, particularly in the IPZ so that it reaches the required standard for translocation of rhinos.
- ZSL will expand efforts in Tsavo to start supporting community conservation in areas bordering the National Park, with a focus on tackling wildlife crime.
- We will increase our SMART support to three new conservation partners.
- Training will be provided to existing partners on the recently launched SMART Connect (a cloud-based version) and Advanced Reporting.





## Thank You

ZSL is extremely grateful to all our funders and donors, without whom, none of this work would be possible. In addition to our major donors listed below, we also want to extend our sincere thanks to the Woodchester Trust, the Elephant Crisis Fund, the Wild Cat Foundation and Erdem Yurdanur for their generous support.



## Partners

Successful conservation requires collaboration; ZSL is very proud of the strong partnerships it has in Kenya, particularly the close working relationship with the Kenya Wildlife Service. Together, we are achieving significant results.

The Rhino Impact Investment (RII) Project is an initiative of United for Wildlife (UfW), an unprecedented partnership between seven of the world's leading wildlife charities and The Royal Foundation of The Duke and Duchess of Cambridge and Prince Harry. Implementation of the RII Project is led by ZSL and the Project is funded by the Global Environment Facility, the UK Government through the IWT Challenge Fund, UfW and ZSL. The United Nations Development Programme is the GEF Agency acting to implement and execute Project activities consistent with both the GEF mandate and national sustainable development plans.



BIG LIFE FOUNDATION



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