

ZSL

**LET'S WORK
FOR WILDLIFE**



**ZSL Kenya
Annual Report
2018**

“It is so rewarding to be able to train rangers from our partner organisations in SMART. The strength of SMART lies in collaboration and through this, rangers have gone from a single man in uniform to having the technical and law enforcement capacity of the whole protected area at their fingertips.”

Clarine Kigoli, ZSL Technical Capacity Builder



Letter from our Kenya Country Director

Starting at ZSL in August 2018 as the new Kenya Country Director was a milestone for me in engaging with an institution that carries nearly 200 years of zoological legacy. Yet, despite having been on the ground in Kenya for over 30 years, and instrumental in so many steps taken toward securing wildlife and important landscapes, ZSL has been a quiet and understated force for good. I found no loud flashy branding, no wild social media and no overpowering opinion overshadowing the core mission or the people standing for it. What I did come across was a long-standing, reassuring and respectful engagement from all our partners in Kenya as well as the desire to have more of our time and involvement. And that is what I plan to bring to the programme, supporting the diversification and broadening of ZSL's engagement in Kenya.

This year, together with KWS, we secured Tsavo West National Park as one of five sites to be selected for the Rhino Impact Investment (RII) Project's 'investment readiness' phase which runs from January 2019 to March 2020 in preparation for the launch of the financial instrument or bond in 2020. This is an opportunity that is set to revolutionise the way conservation funding is sourced and will be the world's first financial instrument dedicated to protecting a species. During this phase, we will be working closely with KWS to improve and maintain levels of security and monitoring of the black rhino population in the Park at the standard required under RII and hope to have another year free from poaching, as we did this year thanks to the tireless work of KWS rangers, local partners and ZSL staff.

As the Society nears its 200-year anniversary, development of a new strategy is underway – 'ZSL200' - with a vision to ensure a world where wildlife thrives. This strategy will work across the three directorates at ZSL: Conservation & Policy, Science, and Zoos & Engagement. We will focus on three key pillars: Wildlife Back from the Brink; Wildlife & People; and Wildlife Health, with all directorates contributing and collaborating across each one. 2019 will be an exciting year as the Kenya Programme develops its own strategy that will feed into ZSL200, working closely with all our partners on the ground to ensure a cohesive plan that aligns with other work in the region and that, as our purpose states, 'inspires, informs and empowers people to stop wild animals going extinct'.



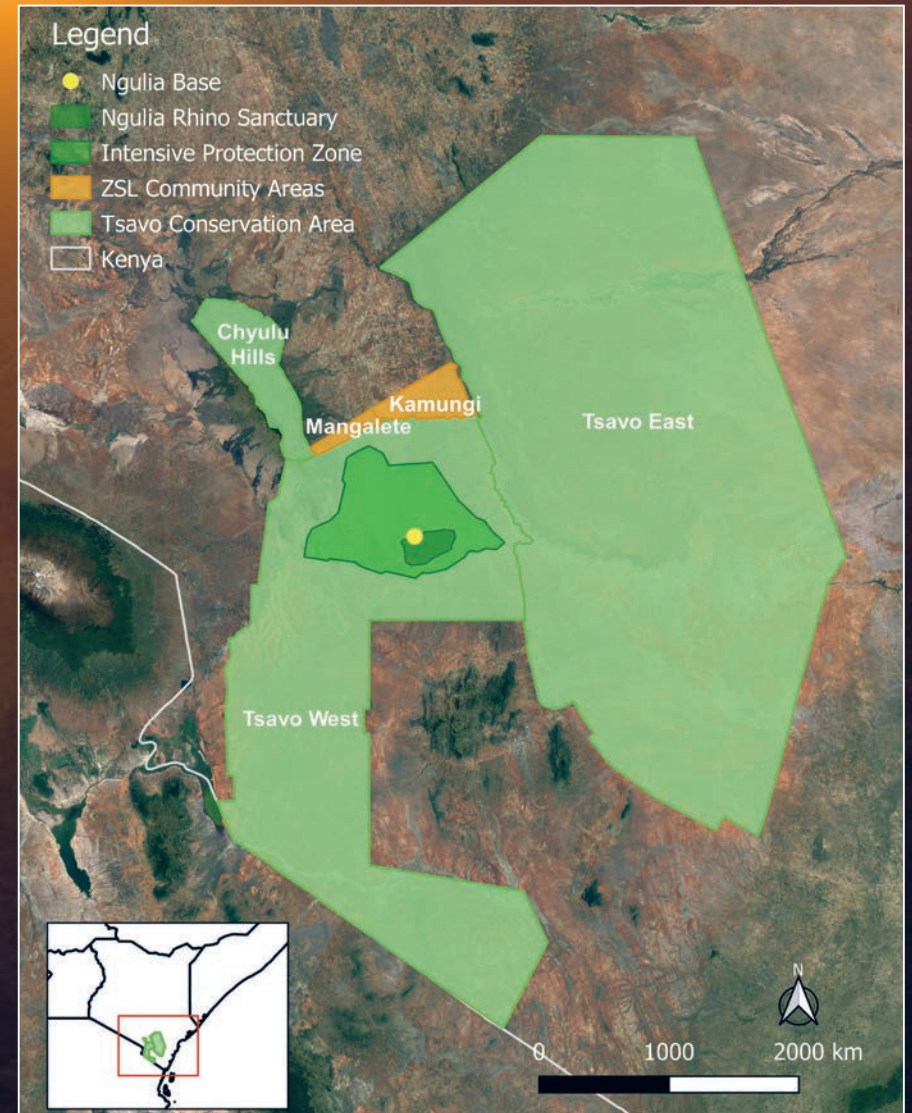
Zeke Davidson
Kenya Country Director

ZSL Kenya Programme

ZSL continues its now 30-year partnership with the Kenya Wildlife Service (KWS), providing technical advice at a national level, and stewardship, training, equipment and logistical support for the daily operations of running Tsavo West National Park (TWNP), our main project site.

We are also the leading Spatial Monitoring and Reporting Tool (SMART) implementer in Kenya, and across the continent we are growing as a provider of SMART training and support. As part of this training, we equip rangers with the data collection skills and managers with the analytical and data management skills, to accurately monitor their conservation impact and produce detailed metrics for adaptive management of multiple conservation landscapes.

Having provided technical support since 1989, ZSL established a country office in 2014 to allow us to both increase support for KWS and engage more meaningfully with other NGO partners. Our efforts are closely focused on the Tsavo Conservation Area (TCA) in southern Kenya, which covers 48,000km² and includes Tsavo East, Tsavo West and Chyulu Hills National Parks (NPs). We also engage in national strategic conservation issues and management plans and are increasing our impact through the development of wildlife health courses, education opportunities and public engagement with our partners.



2018 Highlights



18% of Kenya's black rhino population protected, the largest in the country



0 black rhinos poached in Tsavo West for the past two years



12 black rhinos born in Tsavo West



ZSL is now operating in **2,200km²** of Tsavo West and Chyulu Hills National Parks



Monitoring Rhinos

ZSL have provided significant support during 2018 to Kenya's National Rhino Strategy. In Ngulia Rhino Sanctuary and the Intensive Protection Zone (IPZ), ZSL has continued to support the development of dedicated rhino monitoring teams, through continued mentoring of personnel to collect, analyse and report on monitoring and security efforts, as well as equipping the teams with vehicles (including running costs) and monitoring equipment. Through providing performance incentives to rangers and supporting aerial surveys, we have secured a sustained patrol effort, detecting rhino in remote areas of the park using transmitters.

Data collected by KWS ranger teams is fed into the Rhino Sightings Database or "KIFARU" (meaning rhino in Swahili) which was originally developed by ZSL and has been used by KWS to collate the sensitive information generated on the Kenyan black rhino populations for the past 16 years. Recent developments in cloud-based data storage, and digital recording devices and applications mean that KIFARU is set to evolve with NEXTGEN technological advances, giving it access to real time reporting and incident management capabilities.

KIFARU will draw on any available data source, from Domain Awareness Systems (DAS) to SMART conservation landscapes, in a seamless integration of ground patrol, aerial monitoring and remote sensor-derived information feeds. It will pull data from partner applications and push data to specific analytical platforms, which will deliver fine scale analyses for management and protection of this species. ZSL is still at the forefront of this development and over the next few years, will work alongside stakeholders and partners to develop innovative solutions to black rhino conservation that can be applied broadly across the conservation sector.



98% of rhinos in Ngulia and IPZ were sighted by camera trap, aerial or foot patrol during 2018



42 camera traps deployed in Ngulia and IPZ



290 hours of aerial surveys over Ngulia and IPZ



48 days reduction in the average sightings interval (days since last seen) for rhinos in the IPZ

Monitoring Highlights

- In Ngulia Rhino Sanctuary, on average 92% of the population was confirmed each month through camera traps and physical sightings. This is a 12% increase from 2017.
- In Chyulu, 100% of the rhino population was sighted by camera traps.
- In the IPZ, 64% of rhinos were confirmed during 2018.
- The average sightings interval (no. of days since each individual rhino was last seen) in Ngulia has decreased from 28 days by end of 2017 to 15 days by the end of the year. In the IPZ, the average decreased from 68 days by end of December 2017 to 20 days in December 2018.
- ZSL supported the Annual Night Census at Ngulia Rhino Sanctuary from August-October 2018, a critical rhino monitoring survey that enables KWS and ZSL to estimate total population numbers. 96% of the Ngulia population was observed during the night census. A health issue was also detected in one of the rhinos during the exercise and was followed up by a veterinary intervention to full recovery.





Overt Rhino Security

The TCA holds over 18% of the black rhino in Kenya, and ZSL is committed to working with KWS and partners to protect this species. ZSL supports KWS to monitor and report on daily ranger patrols, which are organised in strategic patrol blocks across the three key black rhino sites we work in. With the implementation of GPS tracking in weekly reports for platoon commanders, rangers are able to receive feedback and adapt patrol effort, ensuring effective patrol coverage. Targets are set for rangers to perform against and achievements are scored monthly, with those who have performed the best receiving field equipment as a reward for their work. In May this year, 56% of patrol targets were achieved, and by November this had increased to 71%. These regular patrols improve detection of rhinos, deter poachers and increase the likelihood of discovering carcasses.



55,633km of foot patrols by Tsavo West rhino platoons



37% increase in average ranger score compared to 2017

Security Highlights

- During the last quarter of 2018, the KWS and Big Life Foundation rangers patrolled a total of **16,546km** by foot across the three rhino areas that ZSL supports, compared to **13,685km** in the corresponding period of 2017. This was an improvement of 21%.
- There were zero known rhino mortalities during 2018.
- KWS patrol coverage in Ngulia improved by 83% by the end of 2018. Figure 1 shows Ngulia patrol coverage in 2017 compared to 2018.
- The average performance score of rangers improved by 125 points over the year in Tsavo West National Park.

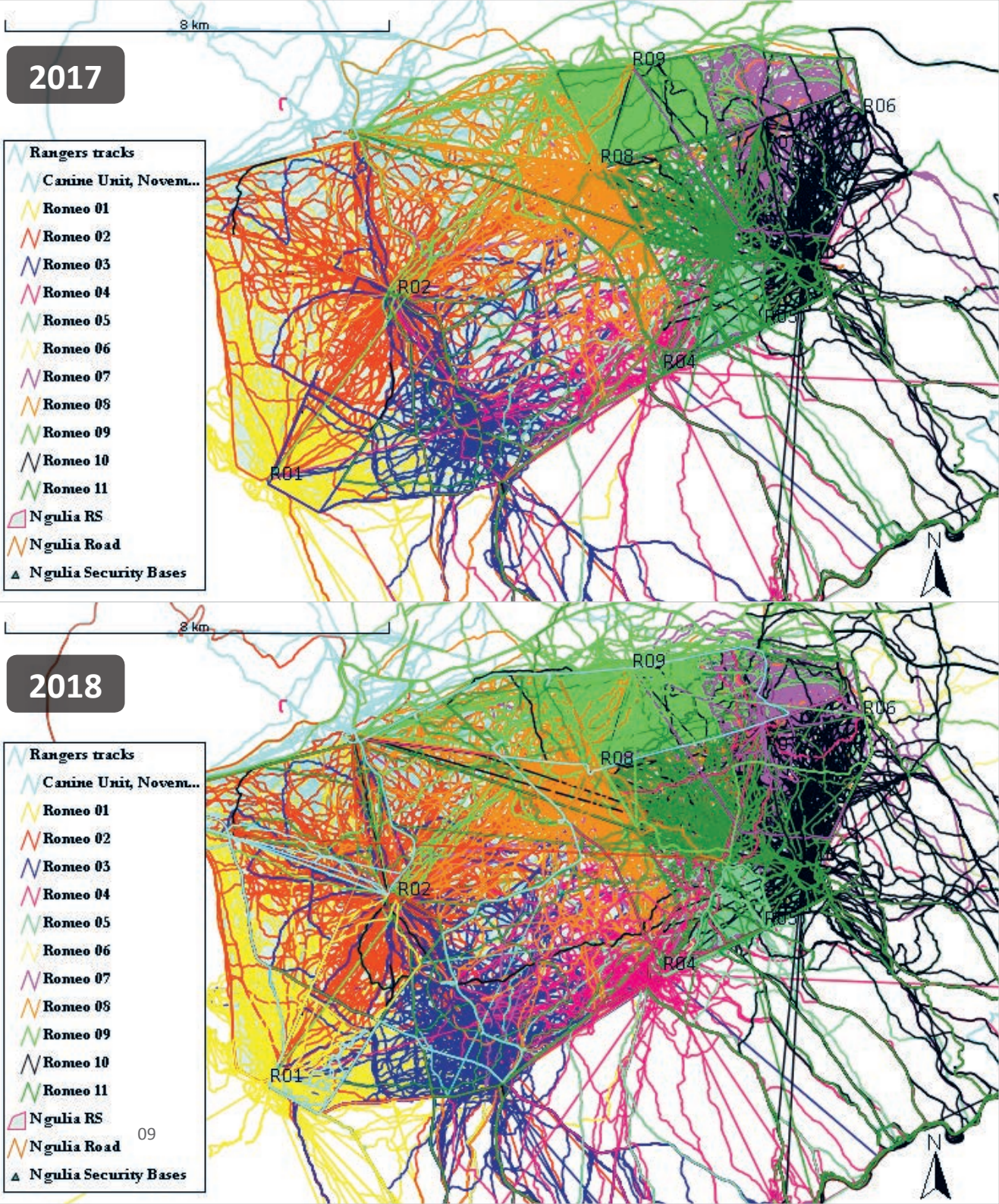


Figure 1: Patrol coverage by KWS rangers in Ngulia Rhino Sanctuary in 2017 (top) and 2018 (bottom).

Carnivore Workshop and Action Plan

KWS, supported by ZSL Kenya and the Range Wide Conservation Programme for Cheetah and African Wild Dogs (RWCP), met with stakeholders for several direct consultations, which culminated in the first Action Planning Workshop for Carnivores in March 2018 in Voi.

The workshop was held in order to address the fact that, of the two regional strongholds for large carnivores in Kenya: 'Serengeti / Mara' and 'Tsavo / Mkomazi', Tsavo/Mkomazi has had comparably little long-term research and carnivore conservation projects. The conservation area for these wide-ranging carnivores extends beyond the core TCA, into an area referred to as the Greater Tsavo Conservation Area (GTCA), which includes a further 20,000km²

of private and public land, both in Kenya and extending into Tanzania. Hence, maintaining habitat integrity and connectivity, as well as effective collaboration amongst stakeholders and partners, is integral to the survival of this stronghold.

The workshop led to the development of the TCA Large Carnivore Action Plan 2018-2022, which represents a strong platform from which collaborative conservation projects can be planned moving forwards. The action plan addresses many of the challenges facing carnivores in the TCA such as human-wildlife conflict, community engagement and incentives, enforcement, research and conservation and its coherent coordination in the GTCA.





Park 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 2018, with the following highlights:

- The new IPZ office has been built and furnished.
- The construction of additional 100,000 litre concrete water tank has provided extra capacity to hold rainwater collected from the office roof. This is used as drinking water by staff both in camp and outside of the camp.
- The fuel store was refurbished, as the previous store was insecure and regular leaks meant it was detrimental to the environment around it.
- An additional storage container has been constructed to house building materials and equipment securely.
- The upgrade of six ranger outposts was completed this year, which is helping to improve ranger living conditions.
- Broken water pipeline sections in the NRS and IPZ have been repaired. This pipeline is key to providing sources of permanent water for wildlife, particularly for rhinos who have been seen to fight due to stress during times of water scarcity.



Rhino Impact Investment (RII) Project

With the completion of the pilot phase of the RII project in March 2018, we were successfully able to demonstrate how different performance metrics responded to interventions following a rhino-specific Theory of Change. With significant increase in ranger patrol performance, patrol coverage and monitoring effort, KWS reduced the average sightings interval (no. of days since each individual rhino was last seen) by 144 days in 2017, with 97% of the rhino population being physically sighted by rangers and the monitoring team during the year. As a result, Tsavo West was selected as a key rhino site for the next phase of the RII project – ‘Investment Readiness’, launching at the start of 2019. Therefore, 2018 saw the team working to ensure we maintained and where possible, improved the level of security and monitoring effort of the black rhinos to make sure we were ready for the second phase. Once

again, there was a year free from poaching and the average sightings interval reduced in the IPZ by 48 days.

As one of five selected sites for Investment Readiness across Kenya and South Africa, Tsavo West will be considered for inclusion in a five-year ‘rhino bond’, which is the world’s first financial instrument dedicated to protecting a species. The bond will be marketed in the latter half of 2019 with plans for release in 2020. The “outcome payments” model could revolutionise conservation financing in the future as traditional donors such as governments and multilateral organisations will disburse money only on results. This is a very exciting opportunity for Kenya and its key black rhino population in Tsavo West – so watch this space!

Capacity Building & Training in SMART

ZSL continues to support the ongoing implementation of [SMART](#) in 17 sites across combined conservation areas in Kenya, covering 43,400km². This tool is fast becoming the M&E platform of choice for Kenyan conservation organisations and will form the backbone for implementation of the RII project in Tsavo West for the next five years, ensuring effective monitoring and protection of the critically endangered black rhino. Several partners are now advancing to SMART Connect and using cloud-based applications to manage their data. Many are requesting support from ZSL in making this transition, and during 2018 we completed the upgrade of one site to SMART Connect.

In February 2018, Clarine Kigoli (ZSL Technical Capacity Builder) assisted Dr. Tony Lynam (WCS) in delivering a SMART Advanced Training to instructors at the College of African Wildlife Management Mweka (CAWM). This collaborative project between WCS and CAWM aims to establish the college as a regional centre for SMART-focused protected area management training in East Africa, strengthening wildlife protection and anti-poaching effectiveness across the region.

Clarine also attended a SMART Adaptive Management training at the CAWM in November. The training provided a basic understanding of the management processes associated with site protection based on the SMART Approach. The 'SMART Approach' uses patrol monitoring data to inform park management and adapt patrol strategy. If applied properly, this approach can produce substantial improvements in protection.

We have plans to train other new conservation organisations in Kenya, as well as Ethiopia and further afield in Liberia in partnership with FFI, taking four sites to Smart Connect in 2019/20.



43,400km² of the Kenyan conservation area is utilising SMART in Kenya following our training



17 partner organisations have implemented the SMART approach



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

Plans for 2019

- Monitoring systems will be expanded in the IPZ under the RII Investment Readiness project, to be implemented by September 2019.
- KWS and ZSL will conduct an audit on the Tsavo rhino population through verifying all the evidence files on individual rhinos. This will prove the viability of the audit process and provide final validation for the population performance indicators, which will ultimately drive investment and outcome payments under the RII.
- New activities for community-based conservation in Kamungi and Mangaleta, which border Tsavo West and East National Parks, will be developed under our new Darwin Initiative project starting in June 2019:
 - We will be working to encourage human-wildlife co-existence by co-developing mitigation strategies with affected communities. This will ensure that they are the most appropriate and thus increase the likelihood of uptake and sustainability.
 - Additionally, a total of 13 Village Savings and Loan Associations (VSLA) will be established from 2019-2022. These are the first VSLAs that ZSL Kenya has implemented and will help to build financial resilience in our target communities, whilst providing a platform for conservation dialogue and awareness-raising on sustainable natural resource use.
 - Underpinning these VSLAs, will be training and support to establish innovative agricultural practices and livelihood opportunities, helping to decrease dependence on natural resources and deter engagement in illegal activities.
 - A new community liaison and community officer will be recruited to form the core of ZSL Kenya's new community team.
- The National Rhino Sightings Database – KIFARU – will be upgraded in-line with the national recovery and action plan for the species under the RII.
- Clarine Kigoli will represent ZSL on the Global SMART User Council.
- We will increase our SMART support to four 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 in 2018, 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, Erdem Yurdanur and Mick Wood 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.



Photos © Will Burrard-Lucas
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