

LION RANGERS

Supporting Communities • Conserving Lions



2020 Annual Report

Summary

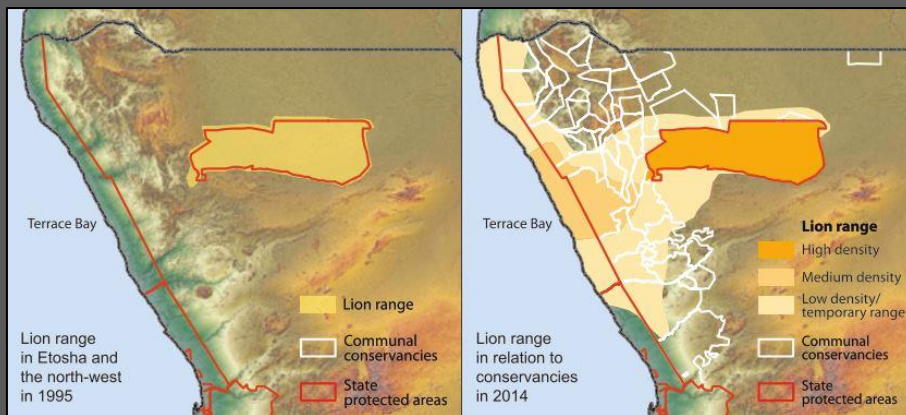


Greetings from Lion Ranger Training! 2020 was a challenging year worldwide. Though COVID-19 has not dramatically affected human health in northwest Namibia, global lockdowns have dramatically reduced tourism, constraining local livelihoods. **WE ARE ADAPTING!** At the beginning of 2021 the Lion Ranger program is making great progress ensuring conservancy farmers and desert-adapted lions can coexist. With support from the IUCN, the National Geographic Society, and government via the Community Conservation Fund of Namibia, Lion Rangers are working across the northwest. This support is matched by growing enthusiasm from local communities.

Covering ten communal conservancies, encompassing ~22,000 km², the program continues expanding. This is due to local requests for Lion Rangers, the trust of government, and is made possible by having secured new resources. In 2021 we are looking forward to our first subpopulation monitoring study, further developing Lion Ranger skills through field-based training, and moving towards a landscape level lion management plan. All while continuing to respond to human-lion conflict and assisting conservancy farmers and communities. More information about the program is available at lionrangers.org. Check out the Lion Ranger Instagram (@lionrangers) for updates.

Background

The Kunene Region of northwest Namibia supports a population of desert-adapted lions inhabiting unfenced landscapes shared with rural communities. It is among the few places where human land-use and positive lion conservation outcomes align. Namibia has received international recognition for successful conservation leading to significant wildlife increases, especially in arid areas. However, new challenges have arisen: the success of community-based natural resource management (CBNRM) has led to intensified human-lion conflict across northwest Namibia.



Historically lions occurred throughout northern Namibia, but autocratic apartheid politics, land reform, and the growth of agriculture since the 1970s, caused a population crash. From a low of approximately 20 individuals in 1997, to an estimated 112-139 lions in the northwest today, desert-adapted lions have made a remarkable recovery. This effort has been spearheaded by conservationists, government officials, and local communities working together.

Corresponding to their population's recovery, lion range has grown: from roughly 7,000 km² to roughly 40,000 km². This expanded range falls primarily within communal conservancies. Increased overlap between lion home range and communal farmers is generating a high frequency of human-lion conflict. When conservancy residents lose livestock to lions, so-called 'problem lions' are often destroyed, as is a Namibian's right under law. Retaliatory killings are the single biggest threat to the desert-adapted lion population. Since 2000, 89% of recorded desert-adapted lion (non-cub) mortalities have followed human-lion conflict incidents.

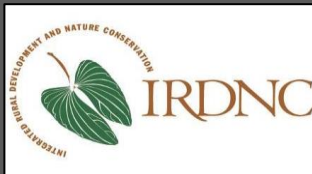
Organization



The **Lion Ranger program** unifies community, government, and non-governmental stakeholders around the shared goal of communities sustainably managing human-lion conflict in northwest Namibia. The program unifies the efforts of the Namibia Ministry of Environment, Forestry and Tourism (MEFT), Integrated Rural Development and Nature Conservation (IRDNC), Desert Lion Conservation, the Namibian Lion Trust, Tourism Supporting Conservation (TOSCO), and the University of Minnesota Lion Center and incorporates staff from core lion-range communal conservancies. The Lion Rangers are conservancy employees receiving specialized training and equipment to lead efforts in combating conflict between humans and lions on communal land.



Republic of Namibia
Ministry of Environment & Tourism



Mission

The **Lion Ranger program goal** is the long-term sustainable management of human-lion conflict by communities in Kunene to ensure continued desert-adapted lion survival and community benefit. The number one threat to Kunene lions is retaliation following human-lion conflict. The Lion Ranger program aims to reduce conflict and increase the flow of benefits to communities.

Conservation Strategy

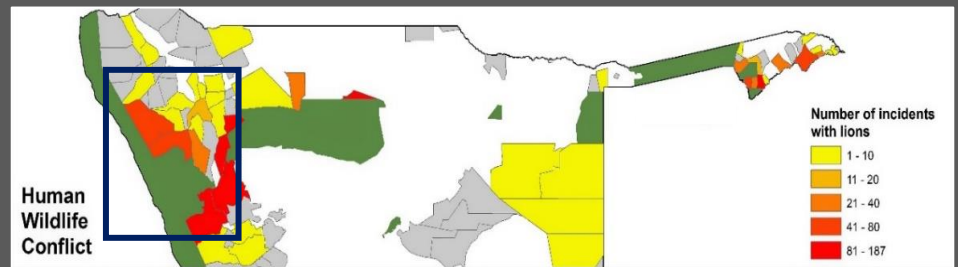


The program seeks to sustainably conserve desert-adapted lions by limiting conflict between lions and rural communities and building predator monitoring capacities. Sustainable conservation of desert-adapted lions must be founded upon the support and direction of local communities. The Lion Ranger program supports communal conservancies through collaboration and capacity-building projects based on community needs. Our approach brings together cutting-edge collaring technology, conflict response team deployment, and emphasizing active herding to provide multiple means for

limiting human-lion conflict. Capacity development emphasizes skills training and improved information-sharing among stakeholders. Ranger deployment emphasizes fostering strong relationships with farmers and collecting standardized and quantitatively robust data for minimizing human-lion conflict.

Geographic Focus

The Kunene Region is large (115,260 km²), sparsely populated (~1.3 people/km²), and arid to semi-arid (100-250 mm/yr.) with highly variable rainfall. In 2017, MEFT identified three focal lion range conservancies (Anabeb, Puros, and Sesfontein) where human-lion conflict most needed intervention. An additional five conservancies (Ehi-rovipuka, ≠Khoadi-//Hôas, Omatendeka, Sorris Sorris, and Tsiseb) joined the Lion Ranger program in early 2019, and a further two (Orupupa and Torra) were added in 2021.



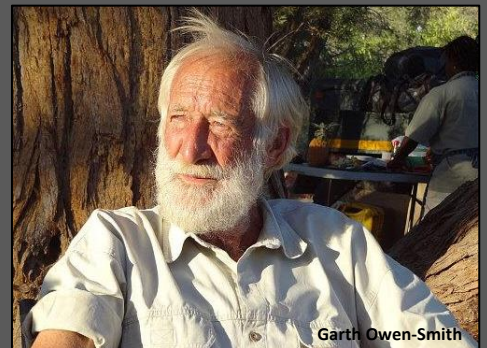
Because lion movement and human settlement is highly spatially-differentiated over this large area (~22,000 km²), human-lion conflict is unevenly distributed. Spatial analysis of lion movements and of existing farms highlights areas of greatest human-lion conflict risk. This analysis is reinforced by community surveys identifying areas of greatest lion problems. This multi-method approach identified three-to-four human-lion conflict ‘hotspots’ within each conservancy. Lion Rangers focus monitoring on these hotspots, while communicating with farmers across their conservancy. Additionally, the Lion Rangers assist with lion-focused research across the entire lion range.

SITE SELECTION CRITERIA

- ✿ **High frequency of lion presence** – is a site frequently visited by multiple groups of lions?
- ✿ **Critical density of farming** – are farmers and livestock present in relatively high numbers?
- ✿ **High need identified by multiple methods** – do scientific monitoring and community surveys both indicate certain areas?
- ✿ **Community demand** – is there demand and willingness from a conservancy to work in partnership?

2020 Highlights

- ❖ January-March field work emphasized erecting Early-Warning and logger towers in western desert-adapted lion range. There are now 20 towers deployed at key conflict hotspots and along lion movement corridors. There are currently a total of 31 satellite GPS and data logger collars deployed across northwest Namibia.
- ❖ COVID-19 lockdowns greatly strained wildlife monitoring. Along with the IRDNC Rapid Response Teams, Lion Ranger field activities were deemed “essential” by the Namibian government. This enabled Rangers and program partners to continue working to prevent and mitigate human-lion conflict.
- ❖ In April we mourned the passing of Garth Owen-Smith (1944-2020). Considered by many the founding father of CBNRM in Namibia, Garth’s lessons remain central to the Lion Ranger program approach. We strive to embody his example in our community-centered efforts.
- ❖ In June Lion Ranger program Co-Founder John Heydinger completed his PhD. Portions of his dissertation, “Humans, Livestock, and Lions in Northwest Namibia,” have been published in African studies, conservation biology, and environmental history journals and are informing program activities.
- ❖ In July we welcomed MEFT Large Carnivore Coordinator Uakendisa Muzuma as Senior Advisor to the program. Muzuma’s expertise in carnivore research and monitoring as well as CBNRM are central to growing and strengthening the Lion Ranger mission.
- ❖ Throughout July-September the Lion Rangers assisted with COVID-19 food relief distribution across northwest Namibia. Food relief was made possible by generous assistance from IRDNC and the Environmental Investment Fund of Namibia.
- ❖ In November we began an intensive exploration of the Ombonde river catchment (Anabeb, Ehi-rovipuka, and Omatendeka). From November-January alone, the Lion Rangers completed more than 350 km of foot patrol there. These patrols are the foundation for a first-ever baseline population estimate of lions in the area, which will be achieved by deploying ~100 trail cameras around key waterholes and wildlife movement corridors.
- ❖ In December the Lion Rangers of Ehi-rovipuka, Omatendeka, and Orupupa, broke ground on our first Lion Ranger field camp, the Ombonde Research and Monitoring Camp (ORMC). Centrally located in the Ombonde catchment, the ORMC is already serving as our field base for a new subpopulation study of lions in the area. Thanks to CCFN for supporting ORMC construction.



2021 Priorities

- ❖ Follow-up social surveys of ~300 households in Lion Ranger conservancies to assess program efficacy
- ❖ Construction of 30 'lion-proof' livestock enclosures in newly identified lion range conservancies (Ehi-rovipuka, Omatendeka, and Orupupa)
- ❖ Deployment of ~100 trail cameras in Ombonde river catchment (Anabeb, Ehi-rovipuka, and Omatendeka) to assess lion population and demographics
- ❖ Deploying ~12 satellite GPS and Early-Warning system collars in eastern desert-adapted lion range
- ❖ In partnership with government, developing a new comprehensive Human Lion Conflict Management Plan for Northwest Namibia
- ❖ Emphasizing Ranger capacity-development through tailored field and life-skills training

Upcoming

In 2021 the Lion Ranger program will continue emphasizing training, deployment, and robust scientific data collection. While human-lion conflict continues to be a pressing issue, conflict numbers have been declining due to rapid responses. As we write this our first training of the year is taking place at our remote field base, World's End Environmental Centre. Small-group, field-based trainings are slated for mid-year. Partnering with MEFT we are working towards a landscape level approach to lion conservation encompassing the entire northwest. Beginning in March we will be deploying ~100 trail cameras in the Ombonde Research and Monitoring area, to develop a baseline estimate of lion numbers. We anticipate having updated lion population estimates by the end of the year. Program updates can be found online at lionrangers.org or at the Lion Ranger Instagram: @lionrangers.



Supporters

Our success is possible because of the support we receive. Thank you to our supporters!



Oliver Adolph & Family

Wild creatures will only thrive with humanity's care and aid. A world in which humans and lions coexist is desirable, possible, and necessary. Lion Rangers are securing a brighter future for humans and desert-adapted lions. Thank you for being an important part of our team!



Lion Rangers training, February 2021