

Final Evaluation Report

Your Details	
Full Name	Christen Robynne Kotze
Project Title	Camera Trapping, Capacity Building and Lion Monitoring in KAZA
Application ID	33864-1
Date of this Report	30 June 2022

1. Indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.

Objective	Not achieved	Partially achieved	Fully achieved	Comments
Camera Trap Surveys Chobe National Park and Linyanti Region				Camera surveys were conducted successfully in the Chobe National Park and in the Linyanti Region of Botswana.
Camera trap workshop Department of Wildlife and National Parks				In May 2021, the DWNP participated in our online training course for camera trapping to explain the science behind the surveys. In mid-May 20 research officers from DWNP from all five districts across Botswana took part in field-based practical training as part of the Chobe National Park setup. We also spent a day training Chobe Game Lodge guides and the Chobe community guardians from our conflict mitigation programme on camera trap setup and management in the field. During the Linyanti survey we trained Botilo Tshimologo from CLAWS (Communities Living Alongside Wildlife), with whom we will be collaborating on surveys in late 2022.
Capacity Building in Lion Monitoring				In March 2022, a SMART training workshop was held, co-funded by Lion Recovery Fund, with participants from Angola, Botswana, Zambia and Zimbabwe to use SMART to improve lion monitoring in their project areas. Partners included Panthera (Angola), CLAWS (Botswana), WildCRU (Botswana and Zimbabwe), Great Plains Conservation (Botswana and Zimbabwe), a member from the Ministry of Environment and Tourism in Namibia and Kwando Carnivore Project (Namibia).

2. Describe the three most important outcomes of your project.

a). Large scale camera trap surveys of the Chobe and Linyanti Region

The large scale camera trap surveys of Chobe National Park and the Linyanti region will provide up to date information on wildlife, in particular, numbers of large predators, in an area that has not been surveyed for large carnivores for almost 20 years. This will provide valuable information to the Government of Botswana, Department of Wildlife and National Parks and the Kavango-Zambezi Transfrontier Conservation Area's Carnivore Coalition. These estimates will serve as baseline estimates for future monitoring efforts.

b). Capacity building in Camera Trap Surveys and Lion Monitoring

The training conducted with the Department of Wildlife and National Parks provided valuable insight into the scientific background of camera trap surveys, as well as practical guidance on the setup, running and management of camera trap surveys over large areas of wilderness. This has contributed to the skillset of the Department of Wildlife and National Parks, who in 2022 will be initiating their own national leopard survey using camera traps. The SMART (Spatial Monitoring and Reporting Tool) training course in March 2022, which was conducted with co-funding from the Lion Recovery Fund, enabled both government and private sector participants from Botswana, Namibia, Zimbabwe and Angola to be trained in ecological monitoring, including monitoring of lions, based on the system developed by Panthera in Zambia. These partners operate in the target region for the project within KAZA, and improved lion monitoring will help measure the success of conflict mitigation efforts on lion populations in both Botswana and Namibia.

c). Transboundary Cooperation and Multi-Stakeholder Engagement

The camera trap surveys, and lion monitoring efforts have generated interest from multiple sectors in government and private sector. The Chobe Lion Group, which was formed by tourism operators in the Chobe Region, facilitated the camera surveys and has encouraged broader participation in lion monitoring on the Chobe River. The guides that frequent the park have also participated in keeping the team up to date, and this process has also started dialogue between guides in the area and the WildCRU community guardians that operate in the Chobe Enclave adjacent to the park. The SMART training has also moved multiple organisations towards standardising their lion monitoring efforts, which will facilitate data sharing across boundaries and between different conservation projects.

The most significant achievement in this work has been garnering larger interest in lion monitoring from multiple sectors. This will ultimately encourage citizen science efforts and information sharing from tourism operators, NGOs and government on lion populations in this region of KAZA. Standardisation of data collection on lions through SMART will also contribute to the KAZA Carnivore Coalition's efforts to monitor lions at the KAZA scale.

3. Explain any unforeseen difficulties that arose during the project and how these were tackled.

The Covid-19 pandemic continued to present challenges to the project throughout 2021. Travel restrictions between Zimbabwe and Botswana meant that the Zimbabwe team could not assist with surveys as planned and were only available for the initial setup of the Chobe National Park surveys. To overcome this, we teamed

up with a local NGO Rhino Conservation Botswana who provided manpower to the project in exchange for training of their team members, and acknowledgement in project outputs. Budgets intended for travel were thus redirected towards mandatory Covid-19 testing which had to be conducted when travelling within Botswana to the various study areas.

For the Linyanti Region survey, the size of the survey had to be reduced due to security concerns around our field teams walking in the bush unescorted. As a result, some cameras to the south and west of the survey were removed but the survey was nevertheless successful. The Botswana Defence Force played an integral role in support of the survey and accompanied our field teams for placement of cameras where walking was involved, and we are grateful for their support.

4. Describe the involvement of local communities and how they have benefitted from the project.

As the project was research-based and in designated wildlife areas with little community presence, there was limited scope for community engagement at a large scale. However, WildCRU's community guardians, who work in communities adjacent to the park, had the opportunity to be involved in the surveys and receive training in camera trap setup, which will contribute to WildCRU's Community Camera Trapping Project that will be implemented in the Chobe Enclave, a community concession adjacent to the park. This training will assist the community guardians in teaching local community members how to use camera traps to monitor wildlife in community areas. The presence of wildlife in community areas will then be tied to financial benefits for the community to ensure that tangible benefits for communities are directly linked to wildlife presence.

5. Are there any plans to continue this work?

The work conducted through camera trapping and capacity building will form the foundation for longer term lion monitoring in the area. Estimates from the surveys, and IDs developed for individuals encountered on the survey, will form a baseline for long-term monitoring. Information collected on lions in these regions by guides and monitors will help supplement information collected by research organisations and improve transboundary monitoring of lions that may fall prey to conflict with people across international boundaries at different times of the year. This will ultimately assist in measuring impact of conservation programmes on both sides of the border, particularly those by WildCRU and the Kwando Carnivore Project.

6. How do you plan to share the results of your work with others?

The results of this work will be shared firstly with the Department of Wildlife and National Parks in the form of survey reports. Survey reports will also be provided to tourism stakeholders that participated in and supported the surveys that ran in the field. The survey results will also be written up as scientific publications and published in conservation or wildlife focused journals. Lastly, results will also be shared on social media once published in the public domain.

7. Looking ahead, what do you feel are the important next steps?

The most important steps ahead will be to continue to encourage lion monitoring by multiple stakeholders across the project sites on the Chobe River and in the Linyanti. The camera trap surveys have generated a broader interest and awareness around the value of monitoring lions at the individual level, and that momentum needs to be capitalised on. Once survey reports have been disseminated to stakeholders, we will create protocols for continued lion monitoring in the area by monitoring teams and through citizen science. We will then also provide quarterly updates to stakeholders on data collected through the SMART platform. Funds will be raised for further training in SMART for the partners involved in the initial training, and the training expanded to include other partners where possible.

8. Did you use The Rufford Foundation logo in any materials produced in relation to this project? Did the Foundation receive any publicity during the course of your work?

All posters and information pamphlets regarding the camera trap survey that were used during the project had the Rufford Foundation logo. These posters and pamphlets were displayed in Chobe National Park at the park gates, visible to all national and international travellers, and pamphlets which could be taken home by visitors were also provided at park gates. Pamphlets were also made available at four different camps across the Linyanti region for the local guides and made available on request to international guests.

9. Provide a full list of all the members of your team and their role in the project.

Robynne Kotze

Robynne was responsible for project implementation and management, as well as procuring equipment, budget management and reporting. Robynne liaised with all stakeholders involved in the surveys with regards to planning and feedback. She also organised and facilitated training with the DWNP both online and in the field and oversaw all field work on the surveys. She was also responsible for managing and sorting data post-survey, including individual identification of lions photographed during the survey. Robynne will continue to liaise with stakeholders regarding survey results and lion monitoring as a continuation of the project.

Simon Seyoka

Simon is the Trans-Kalahari Predator Programmes logistics coordinator, and was responsible for setting up the surveys, monitoring the cameras during the course of the surveys and for taking the surveys down. He coordinated with multiple partner stakeholders, and was in charge of the field team, which included officers from Rhino Conservation Botswana. He also facilitated the inclusion of the Community Guardian Team in monitoring part of the Chobe National Park survey. Post-surveys, Simon also assisted with data sorting and equipment stock take and management.

Andreas Lunyalalo

Andreas is the Zimbabwe Field Survey Coordinator, and at the beginning of the Chobe National Park Survey, came across to Botswana to assist with setup. As many

of the traps in the southern part of the park required walking for setup, Andreas provided the necessary experience in walking in Big 5 Areas to facilitate trap setup, and further the training of Simon Seyoka. Andreas also trained Rhino Conservation Botswana team members in the survey setup protocol, as they later took over his role as survey monitors due to Covid-19 travel restrictions.

Gaofengwe Solomon and Botswana Mmaba

Gaofengwe and Botswana, who were part of Rhino Conservation Botswana, assisted the TKPP team in setup monitoring and take down of surveys. Gaofengwe and Botswana are also well trained in walking in Big 5 Areas and so could ensure that camera traps that needed checking on foot could be monitored safely.

Justin Seymour-Smith

Justin, who is the Zimbabwe survey manager, was responsible for cleaning incoming data, and preparing files required for analysis including the camera trap operation files, which details when cameras were operational, sorting of the surveys to remove empty images and correcting any time and date issues with the data.

Lara Sousa

Lara is the TKPP analyst and assists with analysing incoming data to produce density estimates for the survey.

Jess Isden

Jess is the TKPP Project Manager and assisted with the DWNP Training as well as facilitating training for the community guardians during the Chobe survey. Jess also facilitated and organised the SMART Training course with co-funding from Lion Recovery Fund.

10. Any other comments?

Once survey reports have been generated, these will be shared with stakeholders from private sector and government, with further acknowledgement of The Rufford Foundation. One publication which includes the recording of a wild dog dispersal event from Hwange National Park to the Linyanti region, with evidence provided by pictures from the Linyanti survey, has been accepted by African Journal of Ecology, titled "Long distance African wild dog dispersal within the Kavango-Zambezi Transfrontier Conservation Area", and acknowledges The Rufford Foundation. Any scientific publications produced from surveys will also include The Rufford Foundation acknowledgements.