Final Evaluation Report

We ask all grant recipients to complete a project evaluation that helps us to gauge the success of your project. This must be sent in **MS Word and not PDF format**. We understand that projects often do not follow the predicted course but knowledge of your experiences is valuable to us and others who may be undertaking similar work – remember that negative experiences are just as valuable as positive ones if they help others to learn from them.

Please DO NOT fill in and submit this form until the project has been completed.

Complete the form in English. Note that the information may be edited before posting on our website.

Please email this report to jane@rufford.org.

Your Details	
Full Name	Emily Madsen
Project Title	Conflict in a changing world: linking changing carnivore communities to emerging human-wildlife conflict.
Application ID	40915-1
Date of this Report	08/12/2025

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
To quantitatively investigate how changes in carnivore community composition affect human–wildlife conflict (HWC) perceptions among local communities in East African savannah systems.		X		We successfully conducted a large interview survey with communities who live around wildlife areas exceeding our minimum target with 661 interviews completed. We are about to submit the first manuscript for publication. With analysis of the remaining data planned.

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

a) Successfully conducted 661 interviews collecting data on local knowledge on carnivores. We used these variables to test what shapes species-specific local ecological knowledge by assessing carnivore identification accuracy. We found strong support that knowledge is driven mainly by human-wildlife interactions, in this case via conflict. The remaining data on perceptions and future desires for carnivores is being analysed by a Kenyan masters student based at the University of Nairobi with results expected late 2026.

b) Deployed 120 camera traps collecting presence data on carnivores over a three-month period. The camera stations covered an effective area of 800km^2. Cameras were deployed between February and May 2025 and recorded for 5,027 camera trap nights. We detected 14 carnivore species: lion, cheetah, leopard, spotted hyaena, striped hyaena, African wild dog, black-backed jackal, side-striped jackal, bat-eared fox, aardwolf, caracal, serval, African wildcat, and honey badger. Detailed analysis of these data for occupancy and relative abundance is ongoing with results expected later in 2026.

c) Deepened local collaborations and interest in smaller carnivores with an additional results feedback trip. We have finalised a poster on small carnivores for distribution locally at the request from the local communities to learn more about these species and are in the process of writing a children's book about small carnivores as a sequel to our local collaborator's (Lion Landscapes) books on lion and spotted hyaena. We also now have a Kenyan masters student working on some of the interview data under the supervision of Dr. Titus Adhola

(another Rufford awardee) strengthening the collaboration with the University of Nairobi.

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

As previously discussed with Rufford, the main difficulty encountered in this project was the need to change the field site after the original proposal was submitted. This change was necessary because the original project partners began conducting similar research after securing their own funding. In consultation with the original lead collaborator at the initial field site and my wider network of collaborators in Kenya, the decision was made to move the field site to Laikipia to avoid overlap and repetition.

Although this transition caused some initial delays in data collection, it ultimately proved to be a positive shift. Laikipia's heterogeneous landscape — both ecologically and socially — has provided valuable additional depth to the research, enriching our findings while still meeting the original project objectives. This adjustment allowed us to explore new insights into carnivore communities in a different but complementary context, ultimately benefiting the overall goals of the study.

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

Local communities have played a central role in various aspects of this project. After holding meetings with community leaders to discuss the project's aims and objectives, I hired four enumerators from the target communities to conduct interviews. These enumerators received training in interview ethics and protocols, and they continue to contribute to the interpretation of results.

In September, I returned to Kenya to conduct follow-up discussions with both the enumerators and community leaders, ensuring that they agree with my interpretation of the findings. This was an extremely positive experience, and I received a lot of valuable feedback from both the additional time with my team and from the community leaders regarding the results so far. Additionally, I shared sharing carnivore distribution maps, which will be valuable for informing and targeting future conservation interventions in the area. This engagement helps ensure that the project's outcomes directly benefit the communities involved, fostering a sense of ownership and collaboration.

In addition to the discussions of the results, in response to requests from communities to learn more about small carnivores, we are working on two extra outputs to distribute locally. The first is a factoid poster about small carnivores and the second is a children's book. WE hope both will be ready in 2026.

5. Are there any plans to continue this work?

Yes, the analysis of the data collected is still ongoing, and we are beginning to uncover some exciting insights. In addition to this, I am actively in discussions with other members of the Kenya Wildlife Services Small Carnivore Technical Committee about how we can expand and further develop this work. The aim is to explore additional areas where similar methodologies could be applied, potentially broadening the scope of the study to include more regions. This would help build a more

comprehensive understanding of carnivore populations, particularly smaller species, and enhance the development of reliable monitoring techniques for their conservation.

6. How do you plan to share the results of your work with others?
The results of this project will be shared through multiple channels to ensure wide dissemination and accessibility. I have already presented preliminary findings to local communities and stakeholders in Kenya, including community leaders, wildlife managers, and local NGOs, through meetings and workshops. This ensured that the local communities feel directly involved in the continuation for this work. Additionally, have presented this work at the Oppenheimer Research Conference and will soon be presenting at the British Ecological Societies Annual meeting.

Longer-term, I will aim to publish additional papers from this research in peer-reviewed journals. The results will also be shared via various online platforms, including reports to relevant government agencies and conservation organisations. Finally, we will develop user-friendly materials such as maps and summaries to be shared with local communities and conservation practitioners to guide future conservation and conflict mitigation efforts.

Additionally, as a member of the Kenya Wildlife Services small carnivore technical committee my work will directly feed into the new strategic plan for small carnivore research and conservation in the country.

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

Looking ahead, the next important step is to get the first paper submitted for publication and to complete the data analysis of more of the data. I am currently in discussions with my advisor at the University of Nairobi to have a Kenyan based masters student use some of the remaining data in their thesis.

In the longer term, the focus will be on developing and refining reliable methods for studying carnivores, particularly smaller species, in their natural environments. The methods developed through this research could be applied more broadly across East Africa, where there is a significant lack of knowledge regarding smaller carnivores. We aim to improve field methodologies for monitoring these species and provide baseline data that can inform conservation practices.

Additionally, we will continue to engage with local wildlife area managers, conservation practitioners, and researchers to ensure that this work supports ongoing efforts to understand and protect carnivore communities in the region. This research also holds potential for influencing national policy around wildlife conservation, particularly with regard to mesopredators, which have been largely overlooked in research and conservation initiatives

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?
Yes, the Rufford Foundation logo has been prominently featured on a summary fieldwork report, which will be shared locally with community members and

stakeholders, and posters at both the Oppenheimer Research Conference and the British Ecological Society's annual meeting. The logo will also be included on future presentations of the project's results at conferences. Additionally, Rufford will be acknowledged in all academic outputs resulting from this work, ensuring that the Foundation's support is recognized in all public-facing materials and research dissemination.

9. Provide a full list of all the members of your team and their role in the project.
Emily Madsen – Lead researcher (DPhil student, University of Oxford)
David Kimirri – Enumerator (Member, Maiyanat Community)
Mohammed Abubakar – Enumerator (Research Assistant, Lion Landscapes)
John Jackson Seuri – Enumerator (Member, Mokogodo Forest Community)
Nickson Senchura – Enumerator (Member, Kimugandura Community)
Betty Rono – Enumerator trainer (PhD Student, Rhodes University)
Gabrial Ole Nyausi – Community Liaison (Community Manager, Lion Landscapes)
Steiner Sempter – Advisor (Member, Shompole Community)
Titus Adhola – Advisor (Lecturer, Nairobi University)
Ogeto Mwebi – Advisor (Senior Research Scientist, National Museums Kenya)
Amy Dickman – Supervisor (Professor, University of Oxford)
Lisanne Petracca – Supervisor (Assistant Professor, Texas A&M Kingsville)

10. Any other comments?

ANNEX – Financial Report

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