

Final Evaluation Report

Your Details	
Full Name	Katherine Adelle Meier
Project Title	Effect and Affect of the World's Largest Swamp-Forest on Congo's Great Apes
Application ID	31561-1
Grant Amount	£4,621
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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
Interviews				Interviews yielded interesting and valuable baseline information on human-ape relationships at Lac Tele.
Participant Mapping				Hunters accidentally erased the collected data on two of three smartphones near the end of the field mission. Until this point, the project was going well, and hunters easily learned how and were eager to use the smartphones during hunting trips. This accident was due to a flaw in the design of the Sapelli application and I've contacted the software developers to fix it. Overall, this method will serve as a useful participatory tool in mapping human-ape spatial overlap.
Faecal Sample Collection				I was able to spend 1 week in the forest searching for ape faecal samples. Though short, this period yielded 17 gorilla samples which were successfully stored and transported to the WCS lab in Brazzaville. They are in storage and await export permits to be shipped to a DNA metabarcoding lab in the USA. These samples should be sufficient to assess the efficacy of metabarcoding diet analysis for the larger dissertation project.
Camera Trapping				My own cameras could not be procured/shipped in time. WCS is in the process of initiating their own camera trapping project in the reserve and offered to let me use some of their cameras during my pilot study. Given time constraints, a small camera trapping project was begun at the end of my field period, and I continue to monitor it remotely with local assistants managing the cameras in-situ.

2. Please explain any unforeseen difficulties that arose during the project and how these were tackled.

The biggest problem that arose during this project was the incident of hunters accidentally erasing collected mapping data from the smartphones provided. This happened at the very end of the study period so there was not time to make up for the lost data. However, one phone retained its data and will be sufficient to assess the usefulness of this mapping technique. I've contacted the software developers who said they've encountered the same problem in their own studies and will re-work the app to make a repeat of this problem impossible.

3. Briefly describe the three most important outcomes of your project.

1. I have tested the methods I want to use for my final dissertation field project and ascertained that they are feasible and worthwhile.

2. Through my interviews and other ethnographic activities in the reserve villages, I've become familiar to local people and have a better sense of what interests/concerns them as well as how my research is/can be relevant to their lives and wellbeing.

3. I recorded local ecological knowledge concerning the behavioural and nutritional ecology of Lac Tele's great apes that is extremely exciting from a primatological perspective: notably, local hunters relayed information on chimpanzee tool-use behaviours, chimpanzee hunting/meat-eating behaviours, and the existence of a possible third ape species at Lac Tele.

4. What do you consider to be the most significant achievement of this work?

5. Briefly describe the involvement of local communities and how they have benefited from the project.

Local people were at the heart of this project which was almost entirely comprised of interviews and participant mapping. I was based in one of the reserve's largest villages and conducted, in total, 50 interviews with residents. People were very interested in speaking with me and eager to have someone interested in their village, culture, and livelihoods. Much of what they told me will be synthesised into a report for the Wildlife Conservation Society which will include direct suggestions on how to improve the management of the site to benefit local people. This project also directly employed a number of local people as translators, research assistants, and forest guides.

6. Are there any plans to continue this work?

Yes, the data collected for this project will inform a subsequent, longer, dissertation field period (estimated for August 2022- August 2023).

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

This work will be shared via the report to WCS and the Congolese Government, mentioned above. Further, aspects of this project will be shared at academic conferences throughout the following year. Finally, I will continue offering public lectures on my research and fieldwork at institutions across Connecticut.

8. Timescale: Over what period was the grant used? How does this compare to the anticipated or actual length of the project?

This grant was used for a field period lasting from February 14, 2021, to June 3, 2021, as well as for ongoing costs of running the camera trapping project. The grant was used throughout the length of my time in the Congo. Originally, the project was projected to take place from June to August 2021. Instead, I went earlier in the Spring semester so that I could spend longer in the field (and make up for the weeks lost due to Covid-19 quarantining requirements). However, some processes are ongoing and the remaining Rufford funds will continue to support them; Namely, costs associated with shipping and analysing the faecal samples collected over the field period (getting export permits from the Congolese government is a slow and challenging process as is then shipping the samples using DHL from Congo to the USA).

9. Budget: Provide a breakdown of budgeted versus actual expenditure and the reasons for any differences. All figures should be in £ sterling, indicating the local exchange rate used. It is important that you retain the management accounts and all paid invoices relating to the project for at least 2 years as these may be required for inspection at our discretion.

Item	Budgeted Amount	Actual Amount	Difference	Comments
CAMERA TRAPS	2496	562		I did not end up buying my own camera traps but used WCS-owned ones instead. The camera trap project is ongoing and will keep incurring costs for data storage materials and manual labour over the next three months which will bring the actualized cost closer to the budgeted amount.
HOUSING	213	702	+489	I had to stay extra nights in Brazzaville due to quarantine requirements and WCS travel logistics
FOOD	492	337	-155	

FIELD LIVING/PERSONEL	796	657	-139	
Sub-Total	4621	2258	-2363	
RESEARCH PERMIT FEES		52	+52	Because WCS handled the logistics of processing my research permits with the Congolese government, these costs were charged to my Rufford grant account.
MEDICINE		73	+73	Extra in-field medications were bought mid-way through field work for PI and local collaborators
AIRFARE (ROUNDTRIP JFK TO BZ)				These were paid for using non-Rufford money
DNA METABARCODING SAMPLE LABWORK				Faecal samples were collected and stored in the WCS laboratory in Brazzaville, awaiting export permits to be shipped to the US. Shipping logistics will be handled by in-situ WCS staff and associated costs (storage materials, shipping/handling) will be charged to my Rufford grant account using some of the money left over from not buying camera traps.
REPUBLIC OF CONGO VISA FEES				These were paid for using non-Rufford money
FIELD SUPPLIES				These were paid for using non-Rufford money
TOTAL	4621	2604	-2017	

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

My immediate priority is to analyse and process the multiple data sets collected (interviews, faecal samples, mapping) so that I can finalise my dissertation proposal and begin re-applying to grants for the upcoming year-long field period. Additionally, I will be working closely with WCS and Congolese institutions to recruit Congolese collaborators for this longer field period. These will include local people from LTCR and PhD/MA students from Marien Ngouabi University in Brazzaville.

11. 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?

I have not yet publicised or shared any materials from my research but plan to do so in the near future. For example, I will present a flash talk at the SCCS-NY conference

in early October 2022 and my presentation will include the Rufford logo. All future publication of my work will feature the Rufford logo as well.

12. Please provide a full list of all the members of your team and briefly what was their role in the project.

Moise Molombe-Moke: Interview research assistant and translator.

Bola Madzoke: Ecologist and forest guide.

WCS Congo staff: Logistical support preparing for field work.

13. Any other comments?

I am so grateful for the support of The Rufford Foundation and could not have completed this project without it!

Please enjoy some pictures from the field season!



Field team display our first gorilla faecal samples!



Top: A local hunter showed me two dwarf crocodiles he had caught after an interview.
Bottom: Dzeke local displays wild meat he'd just bought.



Top: Women and children visit the river to wash and do laundry on a misty morning.
Bottom: A training for local hunters to use the Sapelli smartphones.



Top: Dzeke kids gather near my house to draw. Bottom: Some of my closest friends from Dzeke at a party I threw the day before I left the village.



Top: A typical evening camp set up after a long day in the swamp forest (note the still roots of the trees!). Bottom: One of the photos recovered from the first month of camera trapping showing a curious gorilla group! (These photos are property of WCS and have not yet been published so please do not circulate this photo).



Enis, who showed me the process of making traditional baskets and made the two pictured above for my twin and I (being a twin is celebrated by the Bomitaba people). She is epileptic and has had to spend her whole life inside to avoid stimuli that might trigger episodes. However, this confinement has allowed her to become an expert at this artisanal skill and she is known throughout the village for her basket-making prowess.