

Final Project Evaluation Report

Your Details	
Full Name	Janika Wendefeuer
Project Title	Camera trapping in Dzanga Sangha Protected Areas, Central African Republic
Application ID	24077-1
Grant Amount	£4,899
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Date of this Report	29.10.2018

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
Determining the conservational status of large mammal populations in parts of Dzanga Sangha protected areas by carrying out line transect surveys along 36 transects in a period of four months.				Mammal densities and distributions have been analysed and put in context, including ecological factors and human activity. I am still working on the final report.
Testing the feasibility of implementing a continuous monitoring system with camera traps by installing 72 camera traps along 36 transects in a period of six months.				The camera trap data has been compared to the line transect data and proven and adequate tool in biomonitoring. I am still working on the final report (my master thesis/publication).
Building local capacity for continuous monitoring with camera traps.				One field assistant was trained in planning field missions, forming and leading teams, installing camera traps and entering data within a period of 6 months.

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

Firstly, I originally did not calculate extra missions for the line transect survey. I thought that we could install cameras along two transects per day and simultaneously sample the transects. Arriving in the field, I saw it was only possible to walk one line transect per day. Thus, we split the line transect missions from the camera installation missions to not lose the time to put the cameras in the field. That increased the costs for field work.

Secondly, the terrain in some areas was more difficult than expected. Hence, I needed to extent missions, which were calculated for a shorter period.

Thirdly, the batteries of the camera traps did not last as long as predicted. Therefore, we had to invest in more batteries. These costs were covered by WWF Germany.

Finally, I lost 18% of our cameras during the 6 months to poachers. That was more than expected (I estimated a loss of 10%). Luckily, the back up of camera traps was big enough to cover for the ones we had lost.

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

- a) An accurate wildlife assessment for large mammals within an area of 750 km² of Dzanga Sangha Protected Areas with line transects, including a park sector (Dzanga) and the community hunting zone. A final report including the major influences and threats to the wildlife populations will be provided for the DSPA management.
- b) First time results comparing wildlife densities calculated by camera trap point transects and line transects distance data. The feasibility of this method was tested and can now contribute to conservation project all over Central Africa and tropical forests globally.
- c) A local was trained as assistant and due to his high qualifications was able to get a full time position in the DSPA project, working in the biomonitoring department. He is now working on a camera trap project independent from mine.

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

Over 7 months I hired between four and 11 locals simultaneously in addition to the local assistant. I mainly worked with indigenous Ba'Aka people as trackers (local pygmy population), thus there was a continuous income for four to 11 families over 6 months. One tracker now has a temporary position at the Primate Habituation Programme, due to his extraordinary performance. This means a continuous income for his family. The research assistant, as mentioned before, has a full-time position at the biomonitoring department of DSPA.

For the missions, all subsistence was purchased locally from the market or small shops (e.g. fish, cassava, vegetables).

5. Are there any plans to continue this work?

The project was carried out to test the feasibility of camera trapping as a cheaper, innovative and more efficient tool in biomonitoring.

Given the huge success of this feasibility phase, the Dzanga Sangha Protected Areas management has decided to extend the sampling to the whole reserve. In fact, a continuous monitoring using camera traps has been planned for the beginning of 2019 in DSPA.

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

The results will contribute to the WWF Central Africa Biomonitoring database. Additionally, all data concerning great apes will be made publicly accessible on the A.P.E.S. database.

The results will be of great importance for conservation projects in Central Africa and tropical forest worldwide. Until today, there is no direct comparison between the traditional method of line transects and camera trapping. Therefore, I want to make my observations and results public as quickly as possible. A publication is in progress that will be published in an open access journal in order to make the results accessible to everyone involved in biomonitoring.

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

The grant contributed mainly to the field work over a period of 6 months. This conforms within the time anticipated.

8. 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
Car (rent and fuel)	600	0	+600	I was able to fit my schedule with project cars, thus I did not have the necessity to hire an own car
Camera traps	23,165	23,165	0	-
Batteries	1,419	2,533	-1,114	The batteries did not last as long as predicted by the producer. So during the work we had to order new batteries. It was financed by WWF Germany
SD Cards	2,618	2,618	0	-
Thuraya airtime	34	34	0	-
Tents (Quickhiker 2, Quechua)	346	0	+346	I was able to borrow tents from the project.
GPS device (GPSMAP 64s Garmin)	300	0	+300	I was able to borrow a GPS device from the project.

Research deposit	355	355	0	-
Research permit	68	68	0	-
Research fee	226	226	0	-
Subsistence trackers	1,680	3,902	-2,222	Originally, a smaller number of field missions were planned.
Subsistence field assistant	840	1,780	-940	Originally, a smaller number of field missions were planned.
Subsistence porter	840	1,365	-525	Originally, a smaller number of field missions were planned.
Subsistence myself	224	550	-326	Originally, a smaller number of field missions were planned.
Kitchen set	31.06	31.06	0	-
International flight	1331	1331	0	-
Flight in the country	168	168	0	-
TOTAL	34,245	38,126	-3,881	

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

The methodology for the collection and analysis of camera trap data for long-term monitoring of wildlife should be harmonised over Central African conservation sites so that comparable data can be collected. This way, broader studies can be conducted to improve the assessment of wildlife status and threats.

10. 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?

Not yet. A publication is on the way in which the foundation will be thanked as donor.

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

Research Assistant	Aristid Mesac Ndotar
Tracker	Salvador Ahout, Matthieu Mbusa, Gilbert Mossakola & Mano Marcelin
Tracker/Porter	Gilbert Liwa, Gilbert Boanga, Anicet Wari & Rodrigue Bambala
Porter	Bertin Yele & Kevin Mendjoadiki