

The Rufford Foundation

Final Report

Congratulations on the completion of your project that was supported by The Rufford Foundation.

We ask all grant recipients to complete a Final Report Form that helps us to gauge the success of our grant giving. The Final Report must be sent in **word format** and not PDF format or any other 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. Please be as honest as you can in answering the questions – remember that negative experiences are just as valuable as positive ones if they help others to learn from them.

Please complete the form in English and be as clear and concise as you can. Please note that the information may be edited for clarity. We will ask for further information if required. If you have any other materials produced by the project, particularly a few relevant photographs, please send these to us separately.

Please submit your final report to jane@rufford.org.

Thank you for your help.

Josh Cole, Grants Director

Grant Recipient Details	
Your name	Paulo Wilfred
Project title	Improving the Effectiveness of Conservation Enforcement in Western Tanzania
RSG reference	12930-1
Reporting period	June 2013 – April 2014
Amount of grant	£5,760
Your email address	paulo.wilfred@yahoo.co.uk , paulo.wilfred@out.ac.tz
Date of this report	16 April 2014

1. Please 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
Assessing the intensity and spatial distribution of poaching activities in Ugalla Game Reserve.			X	This is a very important task towards improving the conservation enforcement of Ugalla, and will form the mainstay of the second phase of this study geared towards adopting and making effective use of spatial monitoring and reporting tool (SMART) in promoting Ugalla anti-poaching efforts. Foot surveys of poaching signs were conducted for 5 months (from early June to late October 2013) on 180 1,500 m transects. Nine hundred and seventy four signs of different poaching activities were encountered. Research assistants (four Ugalla Game Reserve rangers) were trained on data collection and the use of field equipment such as compass, GPS and rangefinder.
Conservation enforcement survey: patrol follows to gather information on daily anti-poaching patrol activities in different seasons (wet and dry seasons)	X			This has not yet started because it was imperative to establish the pattern of poaching activities first before assessing anti-poaching efforts and identifying challenges involved in carrying out anti-poaching activities, and recommendations for addressing those challenges.

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

The main challenge in our fieldwork was to maintain the field vehicle. We used field vehicle from the Ugalla Game Reserve office. However, we experienced unexpected breakdowns and we were forced to make sure that the vehicle was in good condition before we could carry on with the work. For major breakdowns we had to take the vehicle to Tabora town (at least 150 km from Ugalla Game Reserve) to get them repaired. This had some financial implications. One of the research assistants was good at repairing minor breakdowns, thus before going to the field we bought all the necessary stuff for repairing such breakdowns. We often repaired flat tyres, but some cases were so serious such that we had to buy new ones. Our intention was to reach every part of the reserve where a foot transect initiation point was randomly located.

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

1. Game rangers (research assistants) gained knowledge on various aspects. For example, the use of different field equipment, collection of unbiased field information, distribution and extent of poaching activities in the reserve. This is very important in boosting their morale and efficiency.
2. We have established the spatial distribution pattern of poaching activities in Ugalla Game Reserve. This will help not only to inform anti-poaching efforts but also to form the basis for the second phase of this project, aimed to explore the effectiveness of conservation measures in Ugalla.
3. The assessment of the distribution and composition of poaching was consistent with three possible conclusions: that the abundance of different resources in the reserve is spatially heterogeneous; that natural resource use motives, needs and preferences vary across local communities around Ugalla Game Reserve; and that anti-poaching resources and efforts are overstretched such that they have focused on few relatively easy to patrol areas. This overview is crucial as it can inform management of other protected areas in western and central Tanzania.

4. Briefly describe the involvement of local communities and how they have benefitted from the project (if relevant).

The first phase of this project did not have significant tangible impacts on the local communities around Ugalla Game Reserve. However, the structure of the project is such that local communities will be actively involved in the coming phases.

5. Are there any plans to continue this work?

The second phase of this work is vital for the project to be meaningful. It involves patrol follows (accompanying patrol teams on their anti-poaching patrol trips, recording information on the trips while doing so) during dry and wet seasons. Studies indicate that poaching especially illegal bushmeat hunting in Ugalla is often conducted in wet season when anti-poaching patrols are largely inefficient. Patrol follows would realistically identify important anti-poaching challenges and provide useful recommendations. But more importantly, this work will culminate into the adoption and use of Spatial Monitoring and Reporting Tool (SMART). SMART is primarily a management and enforcement tool and designed to be used as part of a patrol-based monitoring approach. It has the distinct advantage of collecting standardised spatial data on illegal activities as part of any monitoring approach.

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

The results of this work will be shared with members of the Ugalla Game Reserve office. Presently I am finalising a manuscript out of this work, which will soon be submitted to one of the leading conservation journals. This work will also be submitted to the Tanzania Wildlife Research Institute for possible presentation in one of its conferences in 2014 or 2015.

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

The actual fieldwork for this project was carried out in the period from June – October, 2013. There were no delays except the ones caused by unexpected vehicle breakdowns. Initially we planned to

cover all two broad components of the project (spatial distribution of poaching and conservation enforcement surveys) in 12 months. Nonetheless, we only managed to effectively assess the spatial pattern of poaching activities in Ugalla Game Reserve (5,000 km²) in 11 months. This first phase is paramount to the success of the project.

8. Budget: Please 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.

Item	Budgeted Amount	Actual Amount	Difference	Comments
<i>Poaching intensity survey</i> : four surveyors (principle researcher and three research assistants) surveyed poaching signs for 5 months (with an average of 20 effective work days per month = 100 total days). Each surveyor was paid £12, per day.	£2,880	£4,800	-£1,920	It was important to finish this part of the project successfully. We thought we could use 60 days to get it done, but soon after starting the fieldwork we realised that 60 days were not enough because of the size of the reserve (5,000 km ²), vehicle condition, and the fact that we had to do foot surveys.
<i>Fuel</i> : 300 litres of diesel (each £1.5)	£450	£750	-£300	We added 200 litres of diesel because number of field days increase from 60 to 100.
<i>Equipment</i> : 2 range finders (each £100), 2 binoculars (each £45), Handheld GPS (Garmin GPS MAP 62 =£200), Silva Compass Expedition 4-360 (£20)	£510	£410	+£100	Only one range finder was bought.
<i>Supplies</i> : five note books (each £1); four writing boards (each £2); four reams of papers (each £4); eight writing pens (each £0.5); 20 Duracell AA GPS batteries (each £ 1); six Energizer CR2 3V Lithium Batteries for two range finders (each £ 1.5)	£62	£70.5	-£8.5	47 pairs of Duracell AA batteries were bought whereas initially we planned to buy 20 pairs. Each pair was £1.5.
<i>Conservation Enforcement Survey</i> : three researchers will follow three enforcement patrols for a period of 4 months (i.e. 2 months in dry season and 2 months in wet season). Since each patrol normally lasts for 20 days in a month, the total number of	£2,880	£0	+£2,880	This component of the project has not yet started as detailed in Table 1 above.

days for three researchers will be 240. Each researcher will be paid £12 per day (this is the government rate for field works in the game reserves).				
Total	£6,782	£6030.5	+£751.5	The support from the Rufford Foundation was £5,760. I only just managed to contribute additional £270.5, from my own account, to the actual amount spent during the project. The remaining £481 was actually not needed.

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

In order to ensure a tangible impact of the project on conservation in western Tanzania, two extensive activities must be carried out: first, conservation enforcement survey (patrol follows to assess anti-poaching efforts and training on the use of management and enforcement tool [SMART]) as described in the previous sections of this report; second, investigating the nature of poaching (motives, reasons, spatial distribution, poaching efforts, poachers' localities, species preferred by poachers, etc.) around Ugalla Game Reserve. This will involve stakeholders such as arrested poachers (poachers apprehended during patrol follows), ex-poachers, villagers around Ugalla Game Reserve, conservation professionals and institutions. Results from these activities will be integrated with the survey of poaching intensity within the reserve (done in phase one) to better understand the nature of poaching and provide pragmatic recommendations on the control of the problem.

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

I will use the Rufford Foundation logo when I present my work in various conferences including the one organised by the Tanzania Wildlife Research Institute. Meanwhile, I am finalising a paper titled "Composition and distribution of poaching signs in Ugalla Game Reserve, western Tanzania: implications for anti-poaching". This will soon be submitted to one of the popular conservation journals.