

## The Rufford Small Grants Foundation

### Final Report

Congratulations on the completion of your project that was supported by The Rufford Small Grants 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](mailto:jane@rufford.org).

Thank you for your help.

**Josh Cole, Grants Director**

Grant Recipient Details	
<b>Your name</b>	Katya Abrantes
<b>Project title</b>	Factors regulating the input of terrestrial material and patterns in food web structure in aquatic communities - the case of Zambezi River
<b>RSG reference</b>	9238-1
<b>Reporting period</b>	December 2010 – December 2012
<b>Amount of grant</b>	£5,850
<b>Your email address</b>	<a href="mailto:Katyabrantes@yahoo.com">Katyabrantes@yahoo.com</a>
<b>Date of this report</b>	03 December 2011

**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
Sample collection before and after the wet season			✓	Fish, invertebrate and primary producer samples were successfully collected from four areas along the Zambezi River: Chinde, Marromeu, Sena and Cahora Bassa.
Sample preparation and analysis			✓	All samples have been prepared and biochemically analysed.
Data analysis		✓		Data analysis is currently underway
Publication writing	✓			Publication writing has started, but will only be finalised around mid 2012.

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

1. The inclusion of university students to work on this project, as part of a Masters degree, was not possible as no students were willing to do so, and preferred working in other areas such as fisheries or coral reefs. Hence, the project had to be completed only by me and one research assistant, which unfortunately limited the training and knowledge transfer it could provide.
2. In some areas, the presence of only one motorised boat meant that the owners could charge as much as they wanted for it, and this resulted on a very high price for boat hire and on a feeling we were being "ripped off". Nothing could be done to tackle this problem.
3. The exchange rate changed from British Pounds and Euros to Meticaís changed significantly from the time of the project proposal to the time of field work, meaning that I ended up with less available funds to complete the project. However, since less people were involved in the field trips, the grant was sufficient to complete the project.

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

At the present moment, data are still being analysed and prepared to be published in international peer-reviewed journals, so the results of the project are not fully available. However, I can foresee three of the main outcomes:

1. With this project, we have a significant stable isotope dataset that characterises the food web of four different areas of the Zambezi River. This data is of immensurable value, as once the planned destructive activities (barrage construction, etc.) are implemented in the system, it will be possible to use it as a baseline against future conditions.
2. It will be possible to quantify the importance of the wetland productivity for aquatic animals in the different areas.

3. It will be possible to link results to GIS-based information on land-use and vegetation type and cover, so that the effects of different environmental parameters on aquatic food web structure can be identified.

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

Not relevant.

**5. Are there any plans to continue this work?**

No.

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

Results will be shared through publication in international journals and conferences.

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

The RSG was used between December 2010 and December 2011. That was the anticipated length of the project. However, data has not yet been analysed and publications have not been written, but should be in the next few months.

**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.**

All figures are in £ Sterling. 1 MtN = 0.02

Item	Budgeted Amount	Actual Amount	Difference	Comments
Flights Maputo - Tete - Quelimane - Maputo	750	593	+157	Since only two people were part of this field trip, and not three as initially planned, the cost of flights was lower than expected.
Car hire	1600	3111	-1511	Car hire was more expensive as in the first field trip I could not find a car from Quelimane that came with unlimited kilometres, so given the number of kilometres driven, the price was pushed up significantly. For the second field trip, I decided to rent a cheaper 4x4 car with unlimited kilometres from Maputo, instead of flying, as it would be cheaper (even though it had to go to the mechanics three times over the field trip).

Accommodation and food for 3 people	2800	2084	+716	Accommodation and food were less expensive than expected, as only two people and not three, went in the field trip.
Boat hire	700	582	+118	Boat hire was less expensive than originally planned.
<b>Total</b>	5850	6370	-520	

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

An important step would be to conduct another field trip during the construction of the Mpanda Nkuwa barrage, and again after construction, so that impacts are effectively measured and that mistake can help avoid similar constructions in the future.

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

Not yet, but I will in forthcoming conferences.