

## 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>	Eric Moise Bakwo Fils
<b>Project title</b>	The role of the fruit bat <i>Eidolon helvum</i> in seed dispersal of <i>Azadirachta indica</i> a valuable multipurpose tree in the sahelian region of Northern Cameroon.
<b>RSG reference</b>	32.11.09
<b>Reporting period</b>	April 2010-May 2011
<b>Amount of grant</b>	£5844
<b>Your email address</b>	<a href="mailto:filsbkw27@gmail.com">filsbkw27@gmail.com</a>
<b>Date of this report</b>	June 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
Record diurnal and nocturnal rates of <i>Azadirachta indica</i>			x	Bats were the most frequent mammalian visitor and were observed taking fruit at all the focal trees.
Determine the habitat use of <i>Eidolon helvum</i> according to the food availability			x	Eidolon's colony is present from May to October; period of peak fruiting.
Evaluate how many seeds of <i>Azadirachta indica</i> do <i>Eidolon</i> disperse relative to other animals in the study site			X	During fruiting period, <i>Eidolon helvum</i> is responsible for 92% of seed dispersal of <i>Azadirachta indica</i> . <i>Eidolon</i> is replaced during the dry periods by <i>Epomophorus gambianus</i> .

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

None

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

- Three species of bats are responsible for dissemination of *Azadirachta indica* in the study site: *Eidolon helvum*, *Epomophorus gambianus*, *Micropteropus pusillus*.
- *Eidolon's* colony is present from May to October; period when climatic conditions are good. During this period, this species is responsible for 92% of seed dispersal of *A. indica*
- Seed dispersal by *Epomophorus gambianus* is low from May to September. This species is responsible of at least 94% of seed dispersal of *A. indica* from September to April. This species does not migrate during the dry season as *Eidolon helvum*.
- *-Micropteropus pusillus* seems to play a role in pollination of *Azadirachta indica* because it was not observed consuming the fruits of this plant

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

We have given presentations on the ecological importance of bats to students and local authorities' of Maroua. Three students of the Higher Teachers' Training College of Maroua (Tsala Badoadana Donatien, Bol Anong and Guieke Bernard) were trained in capture techniques and identification of bats of sahelian zone of Cameroon.

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

Examine adaptive responses of *Epomphorus gambianus* to solve problems of seasonal variation of food and water in the semi arid region of northern Cameroon.

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

Follow-up activities include the preparation of a report that will be distributed to all local and academic authorities and the publication of scientific findings in a peer-reviewed journal.

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

I used the RSG between April 2010 and May 2011. I used the grant in the same amount of time but I started one month later than planned because mist nets were not available in Cameroon.

**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
Mist net	1224	1224	0	
Headlamps+ batteries	81.6	81.6	0	
Lamps	68	108	+40	Lamps were more expensive than originally budgeted
Gloves	20.4	20.4	0	
Cloth bag	170	170	0	
Envelope	65	65	0	
Plastic sheets	164	134	-30	Plastics sheets were less expensive than originally budgeted
Petri dishes	95	95	0	
Travel	1100	950	-150	Travel were less expensive than originally budgeted because less fuel was used during this study
Accommodation + food	1200	1200	0	
Seed identification cost	400	500	+100	Seed identification cost were more than originally budgeted
Local guide cost	620	800	+180	Local guide cost were more expensive than originally budgeted
Photocopying , bibliography ,internet, phone ,fax	400	300	-100	Bibliography was less expensive than originally budgeted
Maps, repairs & first aid kit	236	236	0	

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

Parallel to the bat survey, local people were interviewed to assess the exploitation of bats as bushmeat, especially in their day roosts, as well as their cultural significance. This survey reveals a high exploitation rate *Eidolon helvum* as bushmeat in Maroua. Education projects are needed to ensure that the local people recognize the importance this species in forest regeneration in this critical ecosystem. This will help convince people to protect large *Eidolon* colonies in this sahelian ecosystem.

**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?**

Yes. I used the logo in a brochure of the project to explain the purpose of the project to the local communities in Maroua. I also used the logo in a school presentation in the University of Maroua.

**11. Any other comments?**

I wish to thank the Rufford Small Grant Foundation for providing funds for this project and for contributing to bat conservation in Cameroon.