

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. 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. 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	Anna Songhurst
Project title	Human-Elephant Conflict in the Okavango Panhandle, an HEC Hotspot in Africa
RSG reference	63.04.08
Reporting period	August 2008 – August 2009
Amount of grant	£6,000
Your email address	anna.songhurst@hotmail.com
Date of this report	August 2009

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
Two training workshops will be held to train enumerators chosen from the main villages in the study area, following the IUCN enumerator training manual (Hoare, 1999b) guidelines.			Yes	Two training workshops were held, one for the northern villages and one for the eastern villages. We also held a debrief workshop in August to gain feedback from enumerators and initiated discussions to compare experiences between villages.
Through Kgotla meetings, farmers from selected villages will be encouraged to report elephant crop-raiding incidents to their local enumerator.		Yes		Project personnel did not attend kgotla meetings to inform farmers about the project and encourage them to report raiding incidents. Instead, all village chiefs were consulted and asked to inform the community. This procedure was advised by village chiefs. We decided that it was better to encourage farmers to report incidents in the usual manner i.e. to the chief or police in their village, rather than directly to enumerators to avoid confusion over compensation administration.
Enumerators will be deployed throughout the year to visit crop raiding incident sites to independently assess damage and record information on standardised data collection forms (Hoare 1999b).			Yes	12 enumerators were deployed in January 2009. We had a couple of problems with enumerators leaving, one left to work for someone else and another left to go to university. This meant that we had to recruit new enumerators in these villages mid season and train them separately. It did not affect data collection too much, because the two enumerators left during the quieter raiding period (February) and new enumerators were trained and deployed within two weeks of them leaving.
Primary data on HEC incidents will be used to compare HEC incidents (No./frequency/intensity) between villages, months, seasons, years, rainfall			Yes	The data analysis has begun and will be completed in the next two months. Data input and analysis took longer than anticipated.

The PI will visit enumerators regularly throughout the year to encourage efficient data collection and collect additional data at damage sites.			Yes	All raiding incidents were visited by the PI and enumerator assessments monitored. A total of 208 fields were raided in 2009 crop-raiding season, compared to 413 fields in 2008.
A comparative survey of raided and non-raided farms in the eastern Okavango Panhandle area will be conducted, following methods from Sitati et al, 2005. Multivariate logistic and linear regression analyses will be used to explore a range of factors affecting (i) the susceptibility of farms to elephant crop raiding and (ii) the amount of crop damage once elephants had entered a field.		Yes		The multivariate analysis is taking longer than anticipated. With 30 different environmental variables to test, it takes a long time to find the minimum adequate model. Analysis should be completed over the next two months.

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

Two of our enumerators stopped working for us during February. One went to work for someone else and the other went to university. This meant that time had to be spent on recruiting and training new enumerators mid raiding season. The chief's selected new recruits within two weeks of the others leaving. We trained and deployed the new enumerators as soon as possible. The new enumerators were hard working and performed the tasks efficiently, so data collection wasn't interrupted too much. We organised a debrief session in August so that enumerators from the different villages could meet and discuss experiences. This allowed the new recruits to meet, who were trained on their own, to meet others.

Our original research assistant, Jocasta Bobeng, left the project for a permanent position as a primary school teacher in eastern Botswana. We therefore recruited and trained an assistant/translator from the village of Gunotsoga, Tlholego Setshwantsho (Nature), who has become a great assistant.

The flood from Angola into the Okavango Delta this year was the largest in 60 years. This meant that we could not drive to our research camp! This problem was overcome by us borrowing a boat and using a car for half the journey and a boat for the second half.

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

- a) Twelve community members have been trained as enumerators of elephant damage. This has equipped these 12 people with proficiency in data collection, report filing, GPS and navigation skills, interview techniques, and knowledge about elephants and mitigation measures to prevent elephants entering fields. Not only have the enumerators learnt new skills, but by working with farmers they have learnt more about the crop-raiding and elephants in their villages and are now in an ideal position to facilitate mitigation programmes.
The enumerators in each village also promote information exchange between the farmers and project personnel, providing essential feedback and enabling advice to be administered about mitigation techniques. Information exchange is also facilitated by the enumerators between farmers and Government, with regards to policy regulations.
- b) Our research assistant and translator, Tlholego Setshwantsho (Nature) was recruited and trained from the local village of Gunotsoga. Nature had had one previous job as a relief teacher in the local primary school but with high unemployment hadn't worked since. He is fluent in four languages and completed his Cambridge qualifications at school. Nature has great potential and through working on this project he has gained skills and confidence needed to undertake a supervisory role. Nature has been trained as an enumerator of elephant damage and also to monitor the work carried out by other enumerators. He has gained knowledge on how to co-ordinate a research project and learnt basic computer skills. We plan to employ Nature next year to co-ordinate the chilli mitigation training workshops and continue his role as a research assistant.
- c) We have gathered numerous data on raided and non-raided fields in the study area which, once the data have been analysed, will provide information on what makes a farm more susceptible to being raided by elephants and which environmental factors affect the amount of elephant damage in a field. Such information will be important for wildlife managers and farmers in the area to plan and implement mitigation strategies to reduce the conflict between people and elephants.

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

The local communities have benefited through employment and education. We are working in twelve villages in the eastern panhandle and have employed one person from each village as an enumerator of elephant damage. I also have a research assistant and translator employed from Gunotsoga village.

5. Are there any plans to continue this work?

Yes we plan to continue the work in 2010. Conservation International have awarded the project a grant to initiate a chilli pepper mitigation programme with farmers in the Panhandle and Chobe districts. We feel that our enumerators and research assistant should be trained in these mitigation techniques so that they can take the knowledge back to the elders in their village. We had some interesting comments in the end of project debrief with regards to education of farmers. One enumerator said:

"In our culture, the young teach the old new ideas, there is no point sending the older people back to school because they won't learn"

This statement emphasizes the need to train younger people in new techniques, who can then share the information to older farmers in their community. Our enumerators can provide an essential link between older farmers and new mitigation ideas. However, they will need to be employed for a further year to continue monitoring the crop-raiding incidents and to help educate farmers in the village about new mitigation techniques, and this will be dependent on funding.

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

I intend to publish the scientific results of the project in peer reviewed journals, once the data have been analysed.

In order to disseminate results and inform the general public in Botswana about the project, I have published two articles in popular magazines. The first article was in March 2009 in the Department of Environmental Affairs magazine *Conservation News*, and the second in June 2009 in the Air Botswana in-flight magazine *Peolwane*.

Our research team have conducted school talks in Botswana in five primary schools and intend to complete talks in the remaining five schools in the study area in the latter half of 2009. I also conducted two talks in an English school to share results and experiences with children in England.

We have a project website and endeavour to update this regularly with results and updates from the project.

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

The grant was used between August 2008 and August 2009. The length of the project was slightly longer than anticipated, due to the time needed to undertake the statistical analysis of the data. Two months were budgeted for (Jul/Aug), however analysis is still underway.

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.

Rate of Exchange used was UK£ 1 = BWP 13, at one point during the project the exchange rate did fall to UK£ 1 = BWP 11.

Item	Budgeted Amount	Actual Amount	Difference	Comments
Salary for 1 x field assistant/translator x 6 months @ £140/month	840	1,680	+840	We used the funds that were not spent on employing enumerators for Nov-Dec to fund the employment of our research assistant for a further 6 months.
Salary for 12 x Enumerators @ £40/month per person x 9 months	4,480	3,520	-960	We employed the enumerators for 7 months (Jan-Jul) rather than 9 months due to late rains and no raiding occurring in Nov-Dec.
Tape measures x 12	40	18.43	-21.57	The tape measures were less than budgeted for, because there was a special deal on.

Miscellaneous equipment for workshops	50	123.64	+73.64	We used the funds that were saved from not having to pay for the venue hire for the workshops to equip the enumerators with a uniform. All project staff were given project printed T-Shirts, which really helped with staff moral and identity.
Maps	50	45.45	-4.55	There was a minor difference in the price of maps.
Aerial photographs	50	50	0	
Consumables	240	33.41	+93.41	More funds were spent on batteries for GPS than anticipated. This could have been as a result of batteries being used for other things rather than just GPS units!
Workshop to train enumerators	250	169.71	-80.29	The cost of the enumerator training workshop was, because the venue (The Okavango Polers Trust Camp) agreed not to charge us for the use of the premises, as a donation to the project.
TOTAL	6,000	5,940.64	-59.36	

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

I feel that it is very important to continue capacity building and encouraging a community based PAC mitigation approach in Botswana. The work we undertook with the RSGF grant enabled a start to be made and contacts to be formed with the local communities in the Okavango Panhandle, however, it is important that the work we have started be continued for another year at least so that the community can take ownership of the work and carry it on in the future without our assistance.

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?

The RSGF logo was included in all correspondence with the Government, funding agencies and other project related activities. We had an RSGF logo sticker on the research vehicle and during the course of the grant a lot of local people and tourists enquired about the work of RSGF. The RSGF logo was also displayed on the website and at the end of school talks and presentations.

11. Any other comments?

On behalf of the project personnel I would like to thank Rufford Small Grants Foundation for our grant. It has facilitated the training and capacity building of 13 people in the Okavango Panhandle, and enabled data to be collected on an essential aspect of Human-Elephant Conflict which will help in the future to develop mitigation strategies and try to reduce HEC in this HEC "hotspot" in Africa.