

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.

Thank you for your help.

Josh Cole, Grants Director

Grant Recipient Details	
Your name	Michelle Thorn
Project title	Quantifying patterns, determinants and consequences of human-carnivore conflict in the farmlands of South Africa
RSG reference	9149-1
Reporting period	Feb 2011 – Jan 2012
Amount of grant	£6000
Your email address	Thorn_Green@Hotmail.com
Date of this report	10 th February 2012

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
Document spatial and temporal patterns in predation levels and the number of carnivores exterminated			√	
Identifying the main natural and anthropogenic variables influencing conflict			√	
Measuring the cost of predation in relation to land use, stock levels, cash flow and profit			√	
Comparing predation costs with other economic losses commonly affecting farmers		√		Data for this analysis have been collected and are currently being processed.
Analysing faecal samples to assess the dietary niches and proportions of livestock consumed by different carnivore species		√		21 kg of samples were collected and are currently being processed.
Collecting corroborating evidence of species culpability for reported predation incidents			√	

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

Finding the required number of participants required more initial interviews and thus, higher fuel and communication costs than originally anticipated. I was able to absorb those increases because the EWT provided a free vehicle.

I achieved low sample sizes for cheetah and African wild dog scat and plan to use a tracking dog to locate more samples in May 2012.

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

- The project achieved its main aim, which was to reveal the current scale and drivers of human-carnivore conflict in the Waterberg.
- Communicating the aims and results of the project to a wide audience and directly involving local farmers in the research has increased public awareness of predator management options and carnivore conservation issues.
- The results are already being used to provide responses to some of the more pressing problems highlighted by the project and the EWT is now developing further conflict-mitigation strategies for the area.

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

Initial questionnaire interviews were conducted with 92 private land owners, responsible for 95 farms. The land area of the farms surveyed equates to 21% of the total study area. I am now monitoring losses at 42 of those farms. More widely, the Provincial authority, the Biosphere Reserve, several local community groups and Wildlife Ranching South Africa have cooperated with the project and have helped to disseminate the results.

Many of the farms that were experiencing predation losses have received practical help (e.g. free livestock guarding dogs). All have received advice regarding possible solutions to predation problems (e.g. guidance on appropriate fencing specifications). They have also been provided with accurate information regarding carnivore ecology, spoor and feeding patterns.

5. Are there any plans to continue this work?

I am currently monitoring losses at 42 farms to evaluate the relative efficacy of non-lethal anti-predation methods. This work will continue throughout the year. I will be collecting more faecal samples to monitor carnivore diet. I am also planning a 'citizen science' pilot project to quantify distribution and population size for the most persecuted of the carnivore species. This will commence with a photographic contest in May.

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

The results of the project have already been widely communicated to people living in the area, the Provincial authorities, the managers of the UNESCO Biosphere Reserve and other local conservation areas, the South African scientific community and national Wildlife Ranching and Red Meat Producers interest groups. I plan to submit two articles to scientific journals in the near future with more to follow when the results of dietary analysis are available. I also plan to write articles for several popular magazines in South Africa.

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 from February 2011 to January 2012, which was the anticipated length of the original 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
Vehicle hire or purchase	£2609	£1622.75	-£986	The EWT/Land Rover funded a vehicle. RSG used for insurance, maintenance and unexpected overspend on other budget lines
Fuel	£1043	£2811.25	£1768.25	Number of initial interviews higher than anticipated

Subsistence	£2087	£2087	£0	
Camping equipment	£174	£ 413.75	£239.75	Budget used for research accommodation at a local reserve (subsidised) rather than camping
Storage and preservation of faecal samples	£150	£62.74	-£87.26	Able to source cost efficient materials
Telephone charges	£174	£891	£717.39	Higher than expected internet usage and telephone calls to communicate with land owners, especially when scheduling initial interviews
Stationery	£100	£71.82	-£28.18	Overestimated in original budget
GPS	£170	£170	£0	
Production of publications, web site and display materials	£261	£283.58	£22.58	Costs slightly under-estimated in original budget
Research Assistant	£3391	£0	-£3391	Volunteer RA = no cost
Production and postage of newsletters	£261	£0	-£261	Electronic rather than paper distribution
Farmers meeting	£435	£0	-£435	Spend deferred - meeting to be held April/May 2012
Total	£10855	£8414	-£2440	

Exchange rates were calculated at £ 1 = ZAR 12

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

More research is needed to evaluate the effectiveness of non-lethal anti-predation measures. Those that are successful will be publicised locally and trialled in other areas of South Africa. More research is also required to ascertain what effect human persecution has on the area's threatened carnivore populations. African wild dog extermination rates are of serious conservation concern and solutions to reduce human-wild dog conflict are urgently needed. This is under discussion.

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 used on project reports that were widely circulated (see question 6), on five presentations to local community groups and on a poster presented at the South African Wildlife Management Association annual symposium in September 2011. The RSGF was also mentioned in all monthly EWT newsletters.

11. Any other comments?

I would like to sincerely thank the RGF for funding this project, which would not have been possible without your help.