

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 | H.C Potgieter | |
| Project title | How do birds use rivers in arid areas? | |
| RSG reference | 12439-1 | |
| Reporting period | 25 th October 2012 – 20 th November 2013 | |
| Amount of grant | £6000 | |
| Your email address | hoenspotgieter@gmail.com | |
| Date of this report | 20th November 2013 | |



1. Please indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.

| | Not | Partially | Fully | |
|---------------------------------------------|----------|-----------|----------|---------------------------------------------------------------------------------|
| Objective | achieved | achieved | achieved | Comments |
| Field work: collect data | | | Achieved | All field work and data collection |
| in river lines | | | | completed, both a summer and a |
| | | | | winter survey with observations in |
| | | | | cool morning and hot midday of every |
| | | | | day. |
| Analyse data | | Partially | | Project is currently in this phase. Hip |
| | | | | operation in July 2013 caused delay: 4 |
| | | | | months of rehabilitation during which physical and computer work was not |
| | | | | possible. |
| Write MSc dissertation | | Partially | | In process: will be complete once |
| vviite ivise dissertation | | larciany | | analysis is finalised. |
| | | | | , |
| Understand which | | Partially | | Behaviours were recorded for each |
| behavioural traits increase a bird species' | | | | observation over time, as well as the position of the bird relative to riverine |
| survival chances in | | | | vegetation for each behaviour. |
| areas where water is | | | | Weather data (temperature, humidity, |
| scarce and | | | | wind) on the ground and 2 m high |
| unpredictable but | | | | were recorded every hour. Rainfall |
| water demands are | | | | records since 1929 were available and |
| high. | | | | copied. Measurable interpretation and |
| | | | | application possibilities of these |
| | | | | behavioural adaptations will be |
| | | | | finalised once data analysis is |
| | | | | complete. |

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

The site originally chosen for the study, Rooiklip Farm, on the most arid side of the rainfall gradient, turned out to be unsuitable because of a lack of observable bird species in winter. Low abundance made sustained observations unfeasible. Solved problem by choosing another farm from the BIOTA study, Caratal.

Hip operation in July 2013 played havoc with timeline for project. Pain before procedure and unexpectedly long rehabilitation period moved publishing date for dissertation on to 2014 instead of November 2013.

Not a difficulty, but a factor that affected logistics and budget allocation: no accommodation on Claratal so I drove from Windhoek and back every day. Accommodation costs decreased and vehicle costs increased.



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

Understanding the interaction of riverine features with avifauna to provide an academic basis from which to identify pertinent aspects for conservation and habitat management.

Insights into what may be expected with climate change with the aim of predicting how populations will react to desiccation in currently more mesic areas.

Identify future research needs for avian diversity and river lines in deserts and arid areas.

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

Not relevant in terms of direct benefits for impoverished rural communities. Results of the project will benefit conservation management in Namibia by providing evidence of the importance of conserving river lines and catchment areas for the maintenance of biodiversity in an arid country with low diversity.

5. Are there any plans to continue this work?

Yes. Future research needs might be identified during the writing of the dissertation. Comparison with other dry area studies might reveal aspects of practical application to be investigated. Best would be to form links with a conservation or environmental management organisation and study or work on those needs and aspects that are most relevant and practically applicable in conserving Namibia's scarce resources.

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

- Publication of dissertation for MSc degree.
- Namibia Environment and Wildlife Society (<u>www.NEWS-Namibia.org</u>) Chairman Peter Cunningham invited submission of an article for *Roan News*, their environmental magazine, as well as a paragraph for their monthly on-line newsletter.
- Namibia Bird Club: Neil Thomson, the editor of their quarterly journal *Lanioturdus*, asked that an article be submitted on completion of the study.
- Holger Kolberg, Principal Conservation Scientist of the Ministry of Environment and Tourism's Directorate of Scientific Services, will get a copy of any article written and it is planned to set up a meeting at the conclusion of the study to discuss conservation and habitat management implications in person.

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

Expenses were incurred from July 2012 – March 2013.

This was the length of time anticipated to complete the field work section of the project.

The entire project (MSc) has a longer duration – planned completion of November 2013 will not be achieved due to medical reasons but the university agreed to extend the duration of study to the 2014 academic year, which is from January to November in South Africa.



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 rent | 697 | 907.50 | 210.50 | Longer distances and higher rate for gravel roads than budgeted |
| Fuel | 410 | 1007.00 | 597.00 | Longer distances than budgeted. Offset by lower accommodation costs |
| Accommodation | 1278 | 132.49 | -1145.51 | No accommodation at site but close enough to Windhoek to drive |
| Subsistence | 604 | 738.34 | 134.34 | Overspent: bad budgeting |
| Binoculars | 774 | 599.52 | -174.48 | Exchange rate |
| Batteries & chargers | 233 | 189.38 | -43.62 | Exchange rate |
| GPS & software | 658 | 299.76 | -358.24 | Needed less software than anticipated |
| Dictaphone | 155 | 119.90 | -35.10 | Exchange rate |
| Notebook | 1085 | 839.33 | -245.67 | Exchange rate |
| Computer software | 106 | 0.00 | -106.00 | Supervisor in SA provided software under university agreement |
| Flight Windhoek - Jhb end of Feb 2013 | 0 | 115.17 | 115.17 | Meet supervisor to discuss data and train in software |
| TOTAL | 6000 | 4948.39 | -1051.61 | |

Notes to budget:

- Exchange rate at time of application: Nam\$ 12.913 to GBP 1 (12/7/2012).
- Exchange rate at time of final report: Nam\$ 16.68 to GBP 1 (29/11/2013).
- Costing, budgeting and spending were done in Namibian \$ only.

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

First priority is to finish data analysis as early in 2014 as possible and use the results to write up the dissertation and hand it in.

Depending on future research needs identified during the writing phase, those needs have to be explored for suitability to be investigated in more detail.

Consider subject for PhD – this would only be attempted if a burning question with direct, practical, conservation relevance presents itself. The isolation in which the current project was carried out is not ideal; it would be beneficial to associate with a company or conservation entity and find a project that fits into the bigger picture in more ways than academic worth.



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?

No to both questions but credit will be given to the RSGF in the published dissertation and all article submissions.

11. Any other comments?

I am grateful to the trustees of the RSGF that the grant enabled me to the finish field work for my dissertation. Without the grant it would have taken much longer.

I would like to congratulate the administrators of the grant and web site for their professional and efficient work.