

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	Richard Hillard
Project title	Non-breeding habitat requirements and conservation threats to the Bengal florican
RSG reference	11534-1
Reporting period	26/03/12 – 26/03/13
Amount of grant	£2625
Your email address	r.hillard@wcs.org.uk
Date of this report	26 th March 2013

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
Understanding the habitat preferences of Bengal floricans during the non-breeding season			✓	New and significant habitat preferences were found as well as some already known preferences being confirmed. The large number of birds from which the data was drawn meant that a whole new area of habitat could be much better analysed.
An evaluation of the extent of suitable habitat that meets the floricans' habitat requirements			✓	A broad scale map was produced highlighting areas of suitable habitat, which are currently being investigated by WCS.
Determine florican home ranges in relation to Bengal Florican Conservation Areas (BFCAs)			✓	The BFCAs were found to have a differing number of florican home ranges present within their boundaries. One of the protected areas had a high level of overlap whereas another had very little. However, this is just a sample of the population and the suitable habitat map showed both areas have good amounts of habitat preferred by the floricans.
An assessment of whether used and potential non-breeding habitat, outside of the BFCAs, is under threat from proposed development plans.			✓	Maps were created showing the confirmed and proposed concessions plotted alongside the suitable habitat and florican home ranges. This allowed evaluation of key unprotected areas where the highest levels of floricans and suitable habitat coincided with the highest threat of land conversion.
An assessment of the level and rate of land use change in the region.			✓	Land use change was assessed from 2000 – 2012. It showed a loss of suitable habitat across both areas.
Capacity building of local conservationist			✓	Two Cambodian students were employed as field assistants and taught skill in using handheld GPS units, map reading, basic GIS, vegetation surveying. Both students are currently employed by WCS to carry out further Bengal florican surveys.
Plan to publish the results of this study in a peer-reviewed scientific journal.		✓		The paper has been written and will be submitted to a scientific journal shortly. It is hoped that it will be published in the near future.

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

Halfway through the data collection stage I was ill and unable to work for over a week. I was able to train one of the field assistants to lead the research for this period, which went very well and was a great learning experience for him. There were also some minor communication issues where the assistants did not want to say if they did not understand something. Once this became apparent, we spent more time training together and building trust between the team so that we could speak freely about any problems or queries.

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

1. Improved understanding of Bengal florican habitat requirements. So little is known about the Bengal florican that any findings are very important in understanding the species' ecology and how the rapidly changing landscape is affecting the species.

2. Recommendations for improvement of protected areas for florican conservation. Protected areas are key in a landscape where economic land concessions are appearing at an incredibly fast rate. Expansion of protected areas and creation of community forests with secure land rights for local people is important to maintain habitat. This research was very important in guiding this future work.

3. Influencing future development plans in the area. The findings have been used in WCS workshops to shape the future action plans to stabilise the population. Previously it was thought that the degradation of the breeding season habitat was the only major factor driving the population decline. This study shows the importance of non-breeding season habitat and future plans are being focussed more on these areas.

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

Local community members were involved in the fieldwork as guides creating some additional income for these families. The information gained from this study will help protect areas from being converted to large-scale private and government concessions. This not only benefits the species but will also secure land rights for local communities who will be able to use the land for sustainable woodcutting and grazing.

5. Are there any plans to continue this work?

WCS Cambodia has an on-going Bengal florican conservation project, which I am now directly involved in. A conference specifically based around the future management of florican habitat was carried out in late 2012 where numerous targets were set to ensure florican conservation, including habitat protection, creation and development of florican protection schemes within the community forests.

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

The results were combined with previous results from Dr Charlotte Packman's work and have been written up in a scientific paper, which has been submitted to a peer reviewed scientific journal for

publication. WCS Cambodia has already received the results and is using them to focus their current and future work.

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

The bulk of the RSG was used in the initial 4 months of the project during the data collection stage and this was to be expected.

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
Equipment	£45	£170	+ £125	Hammocks also purchased which meant savings were made on accommodation. A new GPS had to be bought for the extra field assistant.
International transport (incl. visas)	£700	£818	+ £118	More expensive than anticipated
Food & water	£924	£905	- £19	
Insurance	£324	£222	- £102	Cheaper than anticipated
Accommodation	£731	£480	- £251	We were able to save a lot by using the WCS field site or staying in villages
Field assistant salaries	£650	£650	0	
Local transport (Incl. purchasing/selling of bikes, fuel)	£1296	£1320	+ £24	
Contingency	£467	£517	+ £50	A lot was spent on bike repairs and some on replacing / repairing other broken equipment, medicine etc.
TOTAL	£5,137	£5,082	- £55	

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

Now that the florican habitat preferences are better understood the next important steps are to improve protection of the remaining habitat and think of how to create better habitat in the very degraded areas. Finding ways of including the local communities will be imperative to the success of this work. WCS should help communities to secure land tenure and work with them to manage the florican habitat and expand the ecotourism in the area, which mutually benefits florican and local livelihoods.

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 in presentations at the University of East Anglia and in Wildlife Conservation Society Cambodia. Rufford will also be acknowledged in all scientific publications.

11. Any other comments?

I would like to thank Rufford very much for providing this funding. This contribution was key in enabling a maximum amount of data to be collected, which produced some very interesting relationships regarding florican habitat preferences that would likely have not been found otherwise. Future projects will be much better informed as a result and florican protection more successful.