

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	Divya Vasudev
Project title	Identifying drivers of primate occupancy patterns in a fragmented forest landscape of Garo Hills, India, for efficient conservation planning
RSG reference	10812-1
Reporting period	December 5th 2011 to December 5th 2012
Amount of grant	£5950
Your email address	vasudev.divya@gmail.com
Date of this report	Dec 5th 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
(a) To investigate if fragment size, shape and distance from identified source populations influence primate occupancy patterns		✓		Data have been collected on primate occupancy patterns in a subset of community-owned forest fragments in Garo Hills. The fragments have been mapped using GIS software. Analysis is currently being carried out.
(b) To assess the influence of canopy connectivity within fragments on probability of primate occupancy		✓		Data have been collected on primate occupancy patterns in a subset of community-owned forest fragments in Garo Hills. Canopy connectivity indices have been recorded at points within the fragments. Concurrent studies have shown that canopy connectivity is important for the movement of gibbons (D. Vasudev, unpublished data). Analysis on the influence of canopy connectivity on occupancy patterns is underway.
(c) To evaluate the influence of surrounding land-use on primate occupancy patterns		✓		Data have been collected on primate occupancy patterns in a subset of community-owned forest fragments in Garo Hills. Ground-truthing has been carried out for the major land-uses in the area. GIS land-use land-cover classification is currently being carried out by the Wildlife Trust of India (WTI), with whom I am collaborating.
(d) To contribute to conservation education in Garo Hills through the dissemination of posters			✓	Posters were designed in collaboration with WTI, with the intention of spreading awareness of endangered species and their requirements in a fragmented forest landscape. The western hoolock gibbon <i>Hoolock hoolock</i> was used as the flagship species. 400 posters were printed in English, while 200 were printed in the vernacular language, Garo. The majority of these posters have been distributed through WTI to schools and institutions in villages of Garo Hills.

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

Detection of primates was poor, despite the propensity of the western hoolock gibbon to call frequently in the mornings. This was only noted post-collection of data and thus the recommendation is for future studies to explore the use of playback devices for the species.

Fragments were small, and potentially require restoration to enhance their conservation potential. This recommendation is being made to WTI, as part of their long-term conservation programme in the region.

Towards the end of the data collection period, there were some incidences of ethnic uprising in the area, with week-long curfews being imposed on citizens. Fortunately, most of the data had been collected by this time, allowing me to vacate the area before the problem got out of hand. There were also some unavoidable delays in the classification of GIS imagery.

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

a. Posters were distributed in collaboration with the Wildlife Institute of India to spread awareness of primates, in particular, the western hoolock gibbon, among students in the region.

b. A collaboration with WTI has been forged, an organisation that has been involved in long-term conservation in the region. As a result of this collaboration, I will be involved in a transparent prioritisation exercise in partnership with personnel from WTI, whereby an action plan for conservation interventions will be drafted. The analysis for the prioritisation exercise is currently being carried out.

c. I employed personnel from villages with known, or potential, presence of endangered primates, such as the hoolock gibbon. These personnel were trained in scientific methodologies, and now possess the capacity to be engaged in future ecological and conservation work in the area. Conservation organizations like WTI and Samrakshan Trust have currently employed these personnel in ongoing research projects. Importantly, the project helped educate these parabiologists about the ecological requirements of primate species, their conservation status and the role played by existing community forests in furthering the persistence of such species in the region.

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

I employed personnel from the local communities to carry out field surveys in the region. In addition, their help was entailed in translating posters into the vernacular language and in distributing the posters in villages throughout the region. As described, this process allowed members of different local communities to acquire the training and understanding necessary for employment in future conservation projects.

5. Are there any plans to continue this work?

Analysis is not yet complete. I will continue to work on this aspect of the project. Further, a project is currently underway to explore the use of playback devices in the survey of hoolock gibbons. The project had received funding from the United States Fish and Wildlife Service Great Apes Fund.

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

Posters have been distributed in Garo Hills and popular articles in English and the vernacular language have been published in local newspapers. In addition, I plan to disseminate results of the project in the following ways:

a. A final report will be submitted to the Rufford Small Grants Programme on completion of all analyses.

b. A report will be submitted to WTI, the Government of Meghalaya and other concerned organisations, highlighting relevant results.

c. An action plan will be formulated in partnership with WTI based on the results of this study.

d. Academic peer-reviewed articles will be submitted to scientific journals.

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

The time taken for completion of data collection was 6 months. The majority of funds were used during this stage. Analysis is not yet complete. I expect to complete all analyses and report writing within 4 months, that is, 16 months since the beginning of the 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
Financial remuneration for Garo community members	2192	2509	-317	Salaries were increased to compensate for the growing prices of commodities in the region.
Accommodation	493	548	-55	
Training programme	438	448	-10	
Equipment – GPS and batteries	266	116	150	GPS units were obtainable from a previously conducted project at a nominal price, and were therefore not purchased. This released funds for salaries, which were increased in the light of growing costs of commodities.
Vehicle rent	1096	1096	0	
Vehicle fuel and maintenance	1260	1104	156	
Communication: poster printing and distribution	205	210	-5	
Total	5950	6031	-81	

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

Conservation programmes such as those undertaken by WTI and Samrakshan Trust in the region to demarcate Community Conservation Reserves in partnership with the local communities are crucial

for the long-term persistence of wildlife in the region, as well as for the sustained ecological health of the landscape.

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 displayed on all posters distributed.

