

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	Jyoti P Das
Project title	Strengthening conservation measures of swamp deer in Assam and feasibility of reintroduction in Manas National Park.
RSG reference	61.07.08
Reporting period	22 months
Amount of grant	£5210
Your email address	elephant.jyoti@gmail.com
Date of this report	15 th June 2010

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
To assess the present status of swamp deer and other habitat variable associated with swamp deer in the study area.			??	There exist only two herds of swamp deer in the Park. One herd was directly sighted by the team in the central range and the other herd was established with the presence of pellets and fresh kill in the eastern range. The sighted herd in the central range consisted of four females with no males while the eastern range herd sex ratio could not be established because of no direct sighting. Other variables like suitable habitats and habitat status (vegetation structure, preference) are assessed and will be documented in the report to be submitted to the government.
Formulate a quantitative strategy with risk assessment to prevent local extinction and achieve the objective of developing viable, self sustaining populations within the historic range in Manas.		???		Initially, the existing threats were identified and then prioritised with risk assessment. These threats were then discussed in detail with the locals and experts to reduce and threats were focussed during community outreach.
Identify critical areas where swamp deer existed in the past which habitat might be brought back to viability to serve as sites for re-introduction of the species.			?? ???	All past habitats of swamp deer were identified and GIS maps were developed based on satellite images of the past. Then the present habitat map is developed with the recent satellite image. Habitat changes and patterns were observed and documented. And eventually those sites that are favourable for restocking were identified.
Prepare a report on re-introduction feasibility of the species in Manas.		?? ???		Before the study initiated, all believed that the swamp deer has completely extirpated from Manas, hence we use the term 'reintroduction', but once the swamp deer existence is confirmed, the 'restocking' term is used. The final

				feasibility report preparation is ongoing, although in the mid of the study, we submitted a preliminary report of the swamp deer status to the government which helped UNESCO's World Heritage Site review team that visited Manas.
Community awareness on swamp deer conservation in the fringe areas.			?? ? ???	More outreach and education programmes should be needed as there are 61 fringe villages and we felt difficulties in reaching every villages.

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

No major difficulties were faced by the team during the project period. As the PI has worked there earlier also, he shares a healthy relation with the Forest staff as well as the villagers. Initially few organisations were working there and few people denied the idea of any feasibility study before restocking. But once my study generated interesting findings, they realised the importance of the study. Under the Indian Rhino Vision 2020, rhinos are being reintroduced in Manas in the recent years without any feasibility study and hence now the authorities as well as the villagers are facing serious problems of rhino straying out. So, my study results will properly evaluate the future restocking status.

Another personal problem arose when I had to submit my PhD thesis to my University in April 2010. I had to concentrate on my thesis writing (data analysis/compilation/writing) for 10 months and hence totally away from the project schedule. Hence I took 22 months to submit this final report, ten months more than the scheduled 12 months of project period.

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

Three major outcomes

a. Swamp deer present status in the Park

We identified two herds of swamp deer in the Park consisting of 14-17 individuals. The central range herd consisted of four adult females while the eastern range herd consisted of 10 -13 individuals. We assessed the areas that are used by the central range herd by following the fresh pellet encounters and with GPS. Two major wetlands named *Chorphuli* and *Kuribeel* are the identified places where their movements have been detected.

We recovered two freshly killed swamp deer skulls in the eastern range (presumably by tiger) and encountered fresh pellets around a wetland called *Makhibaha* , however, their sex ratio could not be established as we were not able to sight the herd. But based on information from the local forest staffs and hoof marks/pellet encounter, we could assess the herd size.

We could not find any evidence of whether these two herds inter-cross with each other and hence we believe that they are isolated from each other.

b. Education outreach/ political will

Community awareness and motivating the local stakeholders and politicians were major objectives. We could generate immense interest towards the swamp deer restocking among the locals and the politicians. The locals believed that not only swamp deer but other animals those were lost during the civil unrest in the area, is a loss to them also, and hence they are concerned now to bring back Manas in its old status. The team has organised several education programmes like interactions with locals, formal training and capacity building to local youths on general wildlife conservation, in support from the local forest staffs to minimize the ever increasing conflict with the villagers.

c. Feasibility report

The restocking feasibility report is a major outcome which will serve as the prime document to the government prior to restocking. The report emphasised on every aspect of restocking plan and present situations in Manas. The report is prepared with the actual field data and with consultation with experts from Zoological Society of London and local biologists.

d. Internship and film production

Although not among the top three major outcomes, but internship to an MSc student and a short documentary film production on swamp deer in the study area, were a worth mentioning activity.

Ms. Alolika Sinha, from North Orissa University has conducted her MSc dissertation work on the ungulates of Manas under my guideship during the project field work.

A short film of seven minutes was produced with support from *Aaranyak* film division on the swamp deer status and restocking possibilities.

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

Right from the project implementation, local communities were involved. Initially they were interviewed to identify the past areas where swamp deer existed and later they were targeted for education outreach. Informal discussions in schools and villages have substantially benefited them in knowing more about the species and its necessity to conserve. The training to the local youths has benefitted immensely to build their capacity in various aspects. The project bridged the gap between the locals and the forest department to a greater extent.

The two field assistants worked in our study were from the local villages. They are now experts in identifying ungulate pellets and will continue to work with other researchers.

5. Are there any plans to continue this work?

Yes. The continuation of this work is necessary to establish various other issues and supporting government in restocking plans. The continuation may push up the government to restock swamp deer soon. There is enough scope of generating more information on the existing herds and plan out accordingly which individuals to be restocked. We also plan to carry out a study on the source

population and their survivality in Manas. The minimum viable population needs to be established prior to restock.

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

Publishing reports and hard copies will be made available for interested individuals, communities and organizations. We are already in touch with experts, re-introduction specialists, managers, policy makers and other stakeholders to share out findings. A digital format will be uploaded to the website as well. Popular articles are in the press to be published in the local dailies that may create a huge intrest among the people. A PowerPoint show on objectives, methods, results and recommendation has been prepared for circulation and an illustrative project report publication is on progress. The film that has been prepared is already showing among the local villagers and will be distributed to the government and policymakers.

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

The RSG fund was used during the actual project period (October 2008 to October 2009) except printing material cost. The printing of education material is still on as I was away from project task due to unavoidable task as mentioned above.

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.

Local exchange rate used: £1=Rs.74.61 approx. (during receive of grant)

Item	Budgeted Amount	Actual Amount	Difference	Comments
Honorarium to field assistants	£ 1200	£ 1200	Nil	
Filed expense (Food in field and lodging)	£ 1440	£ 1400	(+) £ 40	The forest authority has helped us providing a government quarter (abandon) in rent to stay
Transportation (Vehicle hiring and fuel charge)	£ 1000	£ 1090	(-) £ 90	Fuel charge increased and also vehicle hiring
Equipment	£ 600	£ 550	(+) £ 50	The GPS cost took less than the budgeted cost.
Workshop attendance	£ 300	£ 300	Nil	The project outcome is presented by the team at the Young Ecologist Talk and Interact (YETI) at Bangalore from 27 th Sept to 30 th Sept, 2009.
Communication (telephone/internet/fax)	£ 100	£ 100	Nil	
Awareness programs (Meetings in villages/ schools/ publication material)	£ 400	£ 400	Nil	

Stationery (Pen/ notebook)	£ 50	£ 50	Nil	
Report preparation	£ 120	£ 100	(+) £ 20	
total	£ 5210	£ 5190	(+) £ 20	

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

- a. Regularly monitor the identified herds and their movement patterns.
- b. Push up the political will and experts plus the government to convince for restocking in near future.
- c. The source population needs to be researched before restocking.
- d. Prepare restocking plans (capture, loading, translocation, quarantine, disease risks, and release) in consultation with experts.

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?

Yes, I used the RSGF logo and name in all slides in PowerPoint presentation prepared for community awareness among villagers, forest staffs and students and stakeholders and at the YETI conference in Bangalore. The preliminary report submitted to the forest department, the RSGF logo was used. In the awareness stickers, we also used RSGF logo. Furthermore, in all communication regarding the project, we used the RSGF logo.

11. Any other comments?

Once the final report will be completed we will send along with the film produced. At last I thank you for supporting me to carry out the study which will serve as the main draft for recovering a species in Manas.

I acknowledge and thank to all of you for giving me time to work on my PhD thesis during the course of the project period and hence took sometime to update you with my final report.