

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	Kashmira Kakati
Project title	Camera-trapping survey of carnivores in the Jeypore-Upper Dehing forests, Assam
RSG reference	05.10.07
Reporting period	February 2008-April 2009
Amount of grant	£5000
Your email address	kashmirak@hotmail.com
Date of this report	14 th November 2009

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 species-richness of the carnivore community			√	In 3000+ days of camera-trapping, 17 species of carnivores were photographed, likely the highest of any site in South Asia, not including Myanmar. The total carnivore species recorded in this landscape is now 18 - Small Indian Mongoose being a direct sighting. This could also possibly be the first time that seven species of wild cats have been photographed within a single landscape anywhere in Asia. Only a couple of other sites have recent records that include direct observation (and not exclusively photo records) of seven cat species e.g. Cambodia's south-eastern Mondulkiri-Seima-Phnom Prich forests and Myanmar's Hukawng Valley.
To use photographic evidence of this elusive group of animals to argue for conservation of this threatened landscape			√	a. New information on the wildlife value of the landscape, made available by this project, has helped the government to: 1. Ask for realignment of a new highway cutting through part of the forest landscape to protect the endangered wildlife therein; 2. Effect the relocation of proposed oil industry infrastructure from a crucial elephant corridor connecting two disjunct parts of this landscape; 3. Avail commitments from the oil industry to clean up the forest habitat of drilling effluents and a garbage dumping site to prevent further endangering of the wildlife. b. The project findings have provided the impetus to consider Protected Area status for a part of the landscape (Jeypore Reserve Forest) that was not included in a previous PA demarcation. The PA proposal, supported by the Forest Department, is now in the process of being drawn up.
To print a poster with camera-		√		A draft design of the poster is ready and will be finalised within the month. It will

trapped animals to raise awareness on conservation importance of this habitat				be printed and distributed in January 2010.
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2. Please explain any unforeseen difficulties that arose during the project and how these were tackled (if relevant).

1. The fieldwork schedule had to be extended due to the loss of camera-traps to theft (8 units), elephant damage (6 units) and malfunction. We continued work but could cover fewer grids at a time with the reduced number of units. There were high rates of equipment malfunction (especially of the film cameras) during the monsoon months, and trapping rates were also much lower during this season. For both the above reasons, fieldwork was extended by a further 6 months during the second dry season to complete data collection.
2. Theft of camera-traps meant that we had to regularly employ extra workers to keep guard at most of the sites. This extra expense was not budgeted for.
3. Maintenance expenses on the field vehicle overshot the project budget, owing to especially rough road conditions at the last two surveyed sites. A final engine breakdown and overhaul was not anticipated in the costs.

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

1. Establishing by camera-trap photos the most diverse carnivore community in any single landscape in South Asia. Also, finding that this could be the first landscape in Asia where seven sympatric species of wild cats have been camera-trapped.
2. The use of these findings by government to effect modifications in proposed development projects in the landscape in the interest of the wildlife documented, i.e. a highway, an oil despatch terminal and a commitment from the oil industry to initiate clean-up measures in the forest habitat.
3. The initiation of the process of declaring Jeypore Reserve Forest as a protected area and critical wildlife habitat to secure it in the long-term.

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

Three local field assistants and a driver from three villages around the area worked on this project as full-time employees. At each site, two to four local villagers were employed for shorter durations as guides and camera guards. We benefited immensely by their knowledge of the forest, and we hope to have impressed upon them – by sharing the photos – that the rest of the world might also be interested in ‘their’ forests in a positive way. The assistants learned camera-trapping techniques well enough to do it independent of supervision, and helped in changing attitudes in their respective villages towards wild animals, especially carnivores, from fear to a thin understanding.

5. Are there any plans to continue this work?

Yes, I plan to continue monitoring the carnivores and prey species through camera-trapping. The work will be extended into direct conservation action by setting up mobile patrol units (at Jeypore

Reserve Forest to begin with), each unit with a forest-guard and three local villagers. This will augment forest department (FD) capacity, which is otherwise limited by adequate trained man power. This proposal that was developed in collaboration with the FD will be executed by the FD with external funding when it becomes available. If it works it can become a protection model that can be replicated at other sites. The monitoring using camera-traps will also test the efficacy of the patrol units in terms of whether there are increased photo-captures of wildlife, especially prey animals such as deer and wild pig, that are the main target of poachers now (thus also endangering the carnivores).

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

1. I have made Powerpoint presentations of the project findings so far to:
 - a. The Forest Department of Assam, including the Principal Chief Conservator of Forests & Chief Wildlife Warden and the Chief Conservator of Forests (Wildlife) who are the highest ranked officers in the state on wildlife issues; and the Chief Conservator of Forests (Territorial) and the Divisional Forest Officers of two of the three divisions where surveys were carried out.
 - b. The Deputy Commissioner of Tinsukia District, one of the districts within which the forests are located, and later, at his office, to the National Highway Authority, Indian Oil Corporation and Oil India Ltd. – industries located in and around the forests.
 - c. Managers of 10 tea estates surrounding the forests and the Secretary, Zone 1 of the Assam Branch of the Indian Tea Association (ABITA) at their zonal meeting in the Naharkatia Club (March 2009).
 - d. Officers and staff of Oil India's Eastern Producing Area, the oldest section of which is located within the landscape, to sensitise them to the wildlife issues here (2009).
 - e. Students of 10 educational institutions of the local area (schools, a college and a university) (Apr 2008, Feb-Apr 2009).
 - f. The Elephant Task Force of the Government of Assam (June 2009).
2. I have submitted an interim and an annual report to the Forest Department. A report of the findings, and thus the conservation importance of this area, was sent to the Minister of Environment and Forests, Director of Project Elephant and Member-Secretary of the National Tiger Conservation Authority of the Ministry of Environment & Forests, Government of India; and the Chief Secretary of Assam as part of the appeal for securing the elephant corridor linking two disjunct parts of the landscape.
3. Project findings were covered in local and regional English language and vernacular newspapers as editorials, reports and a formal press release (*Amar Asom, Danik Janambhoomi, Assam Tribune and Telegraph*). A news story on the project was telecast on a local television channel (NE TV) (December 2007, May 2009).
4. The project was featured as Top Story of the Month in May 2008 on the CEPF (Critical Ecosystem Partnership Fund) website.
5. In preparation are scientific papers in peer-reviewed journals and a feature article on the project in a national magazine.

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 budgeted for the period November 2007 – October 2008. Funds were used from April 2008 until April 2009, the month till which field work was extended. An amount of £204 for report and poster preparation are to be spent by January 2010. The total length of the project was two years (April 2007 to April 2009).

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
Stipends and salaries	2692	2692		Amount used for researcher stipend, part salaries of assistants and driver, wages of temporary workers, and honoraria for accompanying forest guards.
Travel	858	858		Field vehicle fuel and part maintenance, local public transport for assistants, taxi and boat hire charges.
Accommodation	373	373		Amount used in part payment for main camp and temporary camp rent and utilities.
Consumables	1007	1007		Camera consumables including film, processing, batteries; and stationery; wooden protective boxes, chains, locks, bait etc.
Report and poster production	204	0		Full report not yet ready. Analysis in progress. Poster design in progress, printing by January 2010.
Total	5134	4930		Report and poster expenses pending. CEPF and WCS supported the camera equipment costs, and matching funds for several of the budget lines above.

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

- To bring Jeypore Reserve Forest within the Indian Protected Area network.
- To put in place the joint forest department-villager patrol units to deter poachers.
- To continue monitoring and use paired-cameras to identify individuals of rare, patterned cats like the clouded leopard and marbled cat to estimate their population sizes in this landscape for conservation action.
- To restore the degraded forest areas, ideally with the full involvement of the local communities (as an employment and guardianship scheme) and big industries located in the area (as part of their Corporate Social/Environmental Responsibility initiatives).

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 is on the project poster meant for distribution to the forest department and local communities for raising awareness, and to the tourism sector to raise the profile of these forests. The RSGF was acknowledged as donor in every media release, report and presentation listed above.

11. Any other comments?

The revelation of such high mammalian (especially, carnivore) diversity, from these hitherto incompletely documented forests, arm us with incontrovertible information that can help conserve this landscape. It has already succeeded in convincing government and industry to work together to modify development planning to safeguard the wildlife. I thank the RSG and my other donors (CEPF and WCS-India Program) for enabling this to happen.



Rainforest Poster