

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	Nabajit Das
Project title	Behavior and feeding ecology in relation to habitat quality of Bengal slow loris (<i>Nycticebus bengalensis</i>) in Gibbon Wildlife Sanctuary, Assam, India
RSG reference	7836 – 2
Reporting period	June 2010 – May 2011
Amount of grant	£ 5830
Your email address	nabajit_das1@rediffmail.com , nabajit_das@sify.com
Date of this report	05.08.2011

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
Survey the present population status and demography of Bengal slow loris in Gibbon Wildlife Sanctuary Assam.			Fully achieved	
Obtain data on its behavioral ecology including feeding, home range and habitat preference.		Partially achieved		This is the first behavioural data from field about the Bengal slow loris in India and we got many interesting results. Being the nocturnal primate, Bengal slow loris is practically impossible to follow it in night without radio collaring, but this time we achieved almost 80 % of our objectives except the home range of this nocturnal animal. Although we collect a good data on loris home range without using radio collar. We have utilises our previous project experience and have grown up our expertise to follow a non-radio collaring Bengal slow loris.
Survey the habitat status of Bengal slow loris in the study site.			Fully achieved	We completed the habitat survey where there is direct sightings of lorises are occurs it was done according to the plan. Habitat survey also done where there is sign or any indirect evidence of Bengal slow loris.
Initiate conservation education and awareness campaign highlighting primates.			Fully achieved	We conducted several local village level workshops and educational activities with the local people and school children. Attendance and questioning by the audience in these educational activities itself self-explanatory about the impact of this awareness campaign.

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

Rain and elephant were the main hindrances during our study period. As most parts of this project was completely nocturnal works, so we always alerts about the elephant movement in the study site. Principal investigator of this project has a good working experience in night condition in wild, which he acquired from his last 4 years works in night. Similarly other staff of this project are now acclimatised with night working condition. We stopped our works during rainy nights as rain sound in night cannot permit to hear the other sound, like movement of elephant and wild buffalo. Snakes are also more active during rainy nights in search of their easy food (i.e. frogs).

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

- a) The studies reveal that Bengal slow loris (*Nycticebus bengalensis*) consumed a variety of food types including both plant material (exudates, nectar, bark and fruit) and animal prey (invertebrates and avian eggs). Although Bengal slow loris use as food almost exclusively on exudates in winter, while in summer relatively more time was expended on invertebrates, but plant exudates still dominated the diet.

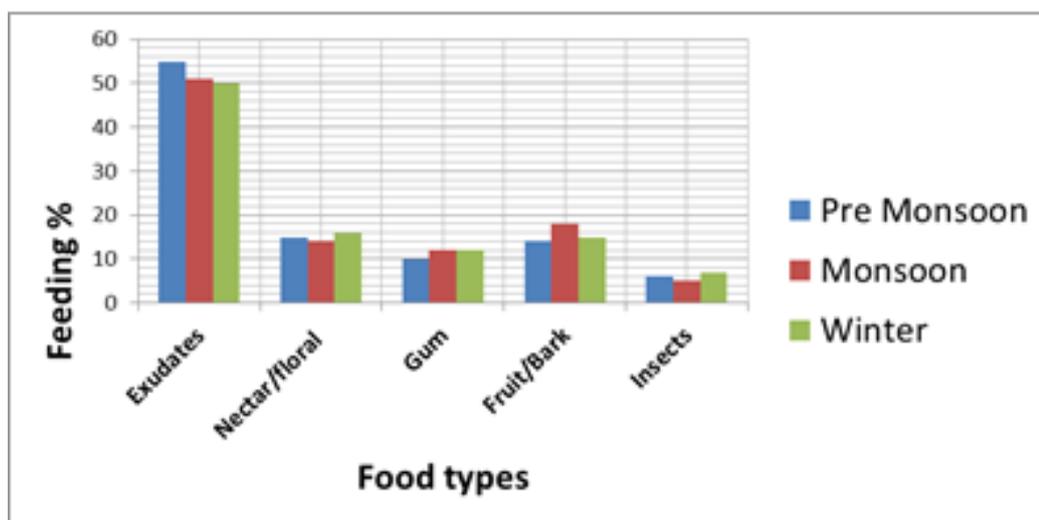


Fig-1: Seasonal feeding preference of Bengal slow loris in GWLS.

- b) Female Bengal slow loris distribution is determined by the food resource and predation risk and distribution of males is directly related to their access to fertile females. Results from the current study shows that there are no differences in male and female use of habitats at night but they differ in sleeping sites.
- c) Microhabitat analysis reveals that there are no inter- or intra-sexual differences in heights used by the animals within the trees or in the use of canopy continuity. The results from this study suggest that even though males and females differ in overall habitat use, they choose similar microhabitats for activity sites and sleeping sites.

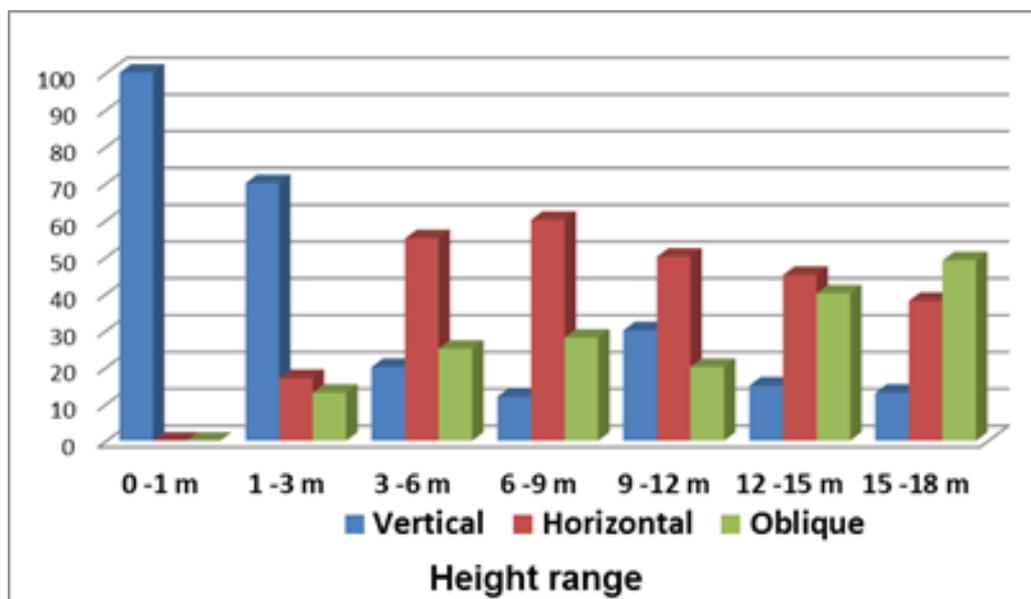


Fig -2: Percentage orientation of substrate types in the different heights used by Bengal slow loris of the vertical axis at GWLS.

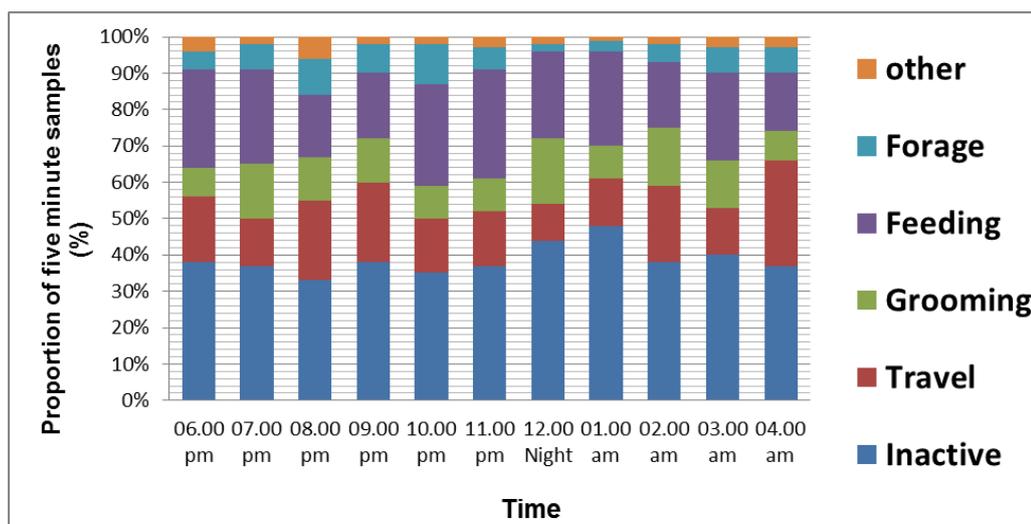


Fig -3: Activity of Bengal slow loris throughout the night shown through comparison of proportion of instantaneous sample points.

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

The local guide and assistant of this project have earned a wide expertise from this loris project and our previous loris project. They underwent the necessary training on various techniques of population monitoring and behavioural data collection and have become valuable resource personnel. The study site i.e. Gibbon Wildlife Sanctuary is a primate hub having seven primate species within this area. Before starting this project the visitor has to visit the sanctuary to see only the diurnal primates especially the Hoolock gibbon. Now visitor want to see Bengal slow loris also in night and the local guide/assistant will be enable to show them the wild Bengal slow loris with due permission from the Department of Forest.

5. Are there any plans to continue this work?

Yes, success from this project hints to fulfil my vision on Bengal slow loris. There is a plan to study the impact of habitat loss on the ecology of Bengal slow loris and to generate local conservation of Bengal slow lorises in North-eastern States in near future.

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

I have presented the following conference paper in the International Primatology XXIII Congress, Kyoto University, Japan, during September 2010.

- **N. Das**, J.Biswas, J. Das, P. Ray, A. Sangma, K.A. I. Nekaris and P.C. Bhattacharjee. **Status & conservation of Bengal slow loris *Nycticebus bengalensis* in northeast India.**

A poster was also presented on the aspects of Bengal slow loris, where I was a co-author.

- Nekaris KAI, Starr CR, **Das N**, Moore RS, Rogers LD, 2010. **Coat colouration as a form of camouflage in a group of highly exudativorous primates (Lorisidae: *Nycticebus*).**

Already contribute 10 photos of wild Bengal slow loris (*Nycticebus bengalensis*) in the 'ARKive' photo project, a not-for-profit initiative of 'Wildscreen', the UK-based charity, whose mission is to promote conservation through wildlife imagery. (<http://www.arkive.org/bengal-slow-loris/nycticebus-bengalensis/image-G100141.html>)

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

The project was expected to commence for 12 months calendar, from June 2010 to the end of May 2011. Unfortunately, the fund from RSG was released on last part of June, hence, project implementation started on July 2010. Therefore, the project was implemented in 1 month later i.e. from 1st July 2010 and ended 30st June 2011, with the difference of 1 month from the anticipated time.

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
Per Diems /Honorarium	1700	1700	0	--
Local Salaries	800	800	0	---
Field Equipment	600	648	-48	Cost higher than the preparation of budget.
Accommodation & Others	1300	1280	+20	--
Travel and local transportation	120	144	-24	The fuel price changed abruptly in response to the world market.

Outreach/education activities	500	490	+10	--
Stationary	200	187	+13	--
Logistics/ Unseen cost	80	95	-15	--
Administrative	530	530	0	--
Grand Total	5830	5874	-44	The difference was contributed by Principal investigator.

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

Lack of ecological data on Bengal slow loris in wild still very scare and the data that I produced through this project will certainly help to prioritise strategies for conservation intervention and move one step forward to prepare a long-term species conservation programme in north-eastern India as well as whole South Asia, the distribution range of this species. The next step is to initiate a long-term ecological studies, population monitoring and community participatory programme strengthening the national commitment towards the long-term conservation of this species.

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 RSGF logo during my Bengal slow loris presentation in International Primatology XXIII Congress, Kyoto University, Japan, during September 2010. I also used the logo on project introduction letters, the awareness campaign and all project related materials.

11. Any other comments?

Platform on Nocturnal Primate Research in Northeastern India is established by Rufford Small Grants Foundation. The support provided to me has helped in establishing Nocturnal primate study in the region which was just a nightmare before supporting by Rufford Small Grants Foundation.