

## 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](mailto:jane@rufford.org).

Thank you for your help.

**Josh Cole, Grants Director**

Grant Recipient Details	
<b>Your name</b>	Jayaditya Purkayastha
<b>Project title</b>	Herpetofauna- Urban and beyond: A conservational effort through organized study and community participation
<b>RSG reference</b>	12672-2
<b>Reporting period</b>	December 2012 to November 2013
<b>Amount of grant</b>	£5100
<b>Your email address</b>	mail.jayaditya@gmail.com
<b>Date of this report</b>	December 15, 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
Herpetofaunal study of Amchang Wildlife Sanctuary and Garbhanga Reserve Forest.			√	During this survey we found 52 species and 46 species of herpetofauna from Amchang WLS and Garbhanga RF respectively.
Comparison of Guwahati with Amchang WLS and Garbhanga RF			√	<p>On comparison with urban Guwahati, we found that Guwahati has higher species diversity amounting to 63 species of herbs. The approximate abundance of <i>Duttaphrynus melanostictus</i> is much higher in Guwahati.</p> <p><i>Leptobrachium smithi</i>, <i>Philautus garo</i>, <i>Clinotarsus alticola</i>, <i>Amolops assamensis</i> are restricted to forest and its fringes.</p> <p>The four species members of <i>Fejervarya</i> are more or less evenly distributed.</p> <p><i>D. melanostictus</i> and <i>Euphlyctis cyanophlyctis</i> were found in the most disturbed and polluted environment( in areas concentrated with paper mill effluent)</p> <p><i>Hemidactylus flaviviridis</i> is only present in Guwahati.</p> <p>All <i>Hemidactylus</i> species members were found to be human commensal with exception of <i>H. platyurus</i>. It is found on the trees in the forest fringes. Interestingly, <i>H. platyurus</i> is a house gecko in Shillong.</p> <p><i>Lycodon aulicus</i> was found to be human commensal with high sighting rates in urban area.</p> <p>Diversity of turtles is high in Guwahati only due to the temple ponds which harbours them and are restricted to these ponds.</p>
Creation of snake bite database and		√		We have gone through the database of three government hospitals and five

designing a booklet in Assamese and English with information on snake bite management.				private clinics of Assam. Private hospitals of Guwahati that we visited do not admit snake bite cases and refer them to Guwahati Medical College hospital. In Guwahati Medical College Records, the snake bite cases are simply registered as animal bites and are referred to emergency. All the records are manually kept. Thus, we do not have any system at present to record snake bite cases. But as a part of the project we are trying to convince authorities to use record sheet provided by us in case of snake bite. The booklet is distributed to the health giving centres, forest departments and educational institutes.
Awareness and management programmes			√	We have carried out workshops and seminars for school and college students, fishermen communities, and temple management bodies with turtles in temple ponds. We have also identified 12 temple ponds from the state of Assam along with their turtle diversity. We have also provided breeding and basking grounds to six of these ponds.
Formulating a book on Reptiles of Assam			√	A book titled "An amateur's guide to the reptiles of Assam" was compiled. It contains photographs, description, distribution, conservation status and a map showing distribution of each of the 115 species of reptiles reported from Assam.

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

When this project started (November, 2012); 1 GBP=88.17 INR and now (November, 2013) 1 GBP=101.3 INR, with the greatest dip of INR seen in August, 2013 with 1 GBP=105.82 INR. This created monetary constraints.

When we conceived the book it was a simplified version, with a tentative title "common reptiles of Assam". But as we moved forward with the book it kept expanding and now in its present form it

contains all the species details reported from Assam. Thus, the book took more time and effort than expected but I guess it is more productive and informative now.

Record maintenance and uncooperative attitude of officials of government hospitals made our data gathering task on snake bite problematic.

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

- a) A comprehensive book on the reptiles of Assam.
- b) Checklist of herpetofauna of Amchang WLS and Garbhanga RF.
- c) Providing better living standards (creation of breeding and basking spots) for the turtles living in the temple ponds.

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

Students:

Workshop and seminars organised for the students gave them insight into the local herpetofauna of the region. They were shown endemic herpetofauna beyond the anacondas and mambas which are perhaps the only snakes known to most not occurring in our region.

Fishermen Community:

Interactive session was organised for fishermen operating on the river Brahmaputra. They were given knowledge on turtles, their status, and the role they can play in conserving them and the legal penalty they may face on dealing with turtle trade.

Temple community:

Knowledge was imparted for the management body of the temple ponds with turtles in them for proper management of these ponds and for gathering data on turtles residing in these ponds

Forest fringe community:

Awareness programmes were conducted for the forest fringes residents of Garbganga RF and Amchang WLS for identification of common snakes around them and to point out venomous snakes around them. Knowledge on snake bite management was imparted.

Press:

Regular updates of our work were passed on to press for general awareness of masses regarding herpetofauna.

**5. Are there any plans to continue this work?**

Yes and now we would like go beyond herpetofauna.

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

- a) Press reporting in newspaper and magazines.
- b) Technical articles in scientific journals.
- c) Through report of this project.

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

December 2012 to December 2013. Actual length: December 2012 to November 2013

**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
Subsistence of Principal Investigator	1200	1200	0	
Field Assistant	600	600	0	
Travel expense and lodging charges	400	700	-300	Lodging, it was not included in the budget was needed for night survey
Assamese and English booklet (printing cost)	250	200	50	Got discount as the same press printed the book
Awareness materials (Mugs, T-shirts)	400	100	300	The t-shirts printed during the last project were used
Equipment rent for presentation (projector, sound system etc)	400	600	-200	Charges for commodities gone up for dip in INR status
Stationeries/Materials/Venue Charge for organising events	350	300		
Book on Reptiles of Assam (printing cost)	1000	1200	-200	Dip in INR status
Postage	100	250	-150	Main postage cost included the postage of books to the contributors, experts in the field and other stake holders. The postage of book outside India was around \$20/book
Field equipment and chemicals	200	250	-50	We needed to pay concerned lab for water analysis done in the temple ponds
Contingencies	200	200	0	
<b>Total</b>	<b>5100</b>	<b>5600</b>	<b>-500</b>	

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

Through this project we learned that the stress in the forests around the growing city is much higher than initially expected by us. A city that we live in, is seen and monitored regularly by us but the forests around them is rarely visited by the locals. Thus, they have almost no hint of what is going on inside these forests. When construction work in is going on in the city, there is a destruction going on within these forest for procurement of raw materials for construction.

When we started our project, we categorised a group for the study which were thought to be most affected by the urbanisation, the herpetofauna.

Now, the next step should be

1. To study and catalogue more groups of fauna (birds, mammals, insects etc) in the light of urbanised city, Guwahati.
2. To extend the study of herpetofauna to other forested areas near the study city Guwahati
3. To bring to light for common people, the condition of the forest in and around the city Guwahati
4. Carry out more city dwellers (student) tours within the forests to show the condition of these forests and to create pressure on the administrative bodies to protect them.

## **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:
  - Within the book "An amateur's guide to reptiles of Assam".
  - Within pamphlet on snakebite management.
  - On the banners of the seminars.
  - On hoardings showing turtle diversity in temple ponds.
  - On t-shirts.