

### The Rufford Foundation Final Report

Congratulations on the completion of your project that was supported by The Rufford 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 <a href="mailto:jane@rufford.org">jane@rufford.org</a>.

Thank you for your help.

#### Josh Cole, Grants Director

Grant Recipient Details	
Your name	Jayaditya Purkayastha
Project title	Urban Wildlife, Herpetofauna and beyond: A conservation effort for our fast vanishing neighbours.
RSG reference	15033-В
Reporting period	May, 2014 to July, 2015
Amount of grant	£11,200
Your email address	mail.jayaditya@gmail.com
Date of this report	21 July, 2015



# 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 checklist of herpetofauna residing in urban Shillong			<b>√</b>	Our checklist contains 15 amphibian and 51 reptilian species from Shillong. We know that with more survey we can surely add to this list.
Support turtles (provide basking spots, breeding facilities, cleaning up of ponds, providing fish spawns, awareness programme for temple authorities) in the already identified 12 temple ponds and carry on survey for identification of more such temple ponds from northeast India			✓	During the project period we have identified two more temple ponds with turtles in them, namely 1. Kachakanti mandir, Udharband, Assam and 2. Baneshwar temple, Cooch Behar, West Bengal. We have conducted a 1-day workshop for temple authorities and had discussion involving them, official from forest department, biodiversity board, district administration and media. Based on the meeting we came up with recommendations for protecting such ponds and making them more habitable for turtles. Based on the recommendation of meeting we assisted four temple ponds, Haigrib Madhab Temple, Gorokhiya Gosair Than, Nagshankar, Ugratara by creating breeding and basking site for turtles, releasing fish spawn, installation of hoardings with information pertaining to turtles and on do's and don'ts in these ponds. We have carried out awareness programme on this issue for school students. We also have observed world turtle day.
A Checklist of birds of Guwahati and Deeporbeel Bird Sanctuary			<b>✓</b>	During this study we have recorded 210 species of birds representing 62 families from Guwahati and 91 species of bird representing 29 species from the Deeporbeel wetland. We also realised that the checklist of birds in the work of recent past records much more species of birds from the wetland which we believe may be due to citation of old records. The wetland is in a deplorable state and overstating species diversity may give us misleading information on the state of this dying wetland which needs immediate attention.



Publish book Pictorial guide "Urban Birds of Assam" (English)	~	We have gone beyond this objective and made to include birds of Assam as a whole, Still we kept the focus on the birds found in urban landscape of Assam. We have published the 141 paged multicoloured royal sized books "An amateur's guide to birds of Assam". The book contains symbolic description, photographs, distribution maps, identification tricks for 200 species of birds that I photographed. The book also contains a checklist of 810 species of birds of Assam
Publish book "Fresh Water Turtles and Tortoises of South Asia" (English)	✓	We have published the 148 paged multi-coloured double crown sized book "Freshwater turtles and tortoises of South Asia". The book contains detailed description, photographs, distribution map, for all 31 species of freshwater turtles and tortoises known to occur in South Asia (Afghanistan, Pakistan, India, Maldives, Sri Lanka, Bhutan, Nepal and Bangladesh). The book also has country wise checklist. This book was collectively authored by Jayaditya Purkayastha, Indraneil Das and Saibal Sengupta.
Publish a booklet on turtles and temple ponds which can be used as a preliminary guideline for turtle management in temple ponds (English and Assamese)	✓	We have currently published the booklet in English language only. The booklet contains photographs and basic data such Assamese name, English name, Scientific name, habitat, breeding biology, conservative and protection statues of all 19 species of turtles found in Assam.
Outreach programmes for temple authorities and students.		Save the frogs Day (April 2014): The event was organised in Auditorium of Assam State Zoo. In the event student of 12 schools of Guwahati, forest officials, professors, official from state administrative body and press participated. The event had presentation emphasising importance of amphibians, interactive session of students and experts. In this event we felicitated Dr Saibal Sengupta for his contribution for amphibian research and conservation. He was felicitated by Dr Anwaruddin Choudhury an eminent naturalist of the region.  Work shop of Ex-situ Conservation of turtles in community ponds of Assam (March 2015): In this event we invited members of administrative bodies of temples across the State of Assam. These temples have ponds with turtles in them. The workshop was participated by eight members of temple ponds across Assam. We have also



invited turtle experts, higher officials of state forest department, and member-secretary of state biodiversity board. In the workshop we discussed on how the ponds can be utilised for turtle research, conservation and breeding, improvements needed in the ponds to make it better suited for turtle needs, legislative changes needed to keep these ponds pollution free. We unveiled the pamphlet "Turtles of Assam" in the meeting and distributed it to all those present in the meeting. Based on the input of the meeting we provided assistance to some of the temple ponds.

**Urban Biodiversity Conservation and Re-greening** of Guwahati City through School Participation (May 2015): This meeting was conducted in association with District Administration (Kamrup Metro) and Assam Forest Department in Assam State Zoo. In this meeting, principals/headmasters of 25 school of Guwahati and higher forest officials participated. The meeting was presided over by Dr M. Angamuthu, IAS (Deputy Commissioner of Kamrup Metro). The dignitaries present in the meeting were Etwa Munda (Forest minister of Assam), SC Das (Chairman, Assam Biodiversity Board). In this meeting we discussed how school students can be involved in conservation of biodiversity. Based on the meeting we are starting an initiative "What is in my backyard?" Here we shall map biodiversity involving school students. The design of the initiative is: a student needs to register in our website, he/ she shall be assigned unique id and his/her school shall also be assigned id. Then they shall photograph whatever interest him with camera in mobile phone or such other device, upload in our website along with pincode and date. We shall have a panel of experts who would identify the organism and send back the information on the identity of the organism back to the student. The student shall know about the identity of the organism and on the other hand we shall get data which shall help us map urban biodiversity of Guwahati. We have also taken up plantation initiative involving school students.

World turtle Day (May 2015): Two events were organised on the day. First event was organised in association with Aaranyak and Prerana at Haigrib



Madhab temple at Hajo, Assam. We had organised awareness workshop for children and youth of Hajo. We also conducted signature campaign "Save Turtles" On that day we donated Hajo temple authority with an awareness hoarding and a breeding tank for turtles. The second event was organised in association of Turtle Surveillance Alliance in Assam State Zoo. We donated a turtle breeding and quarantine tank to Assam State Zoo.

World Environment Day (June 2015): We in association with Assam forest department organised a workshop for forest officials and school students on World Environment Day in Assam State Zoo. The event was participated by students and teachers of eight schools of Guwahati. In this meeting we motivated the students on how important they are for studying and conserving urban biodiversity. We also designed and discussed plans with students on ways to map urban biodiversity.

Save the frogs day (April: 2015): We in Association with State Biodiversity Board and BigBazar (Shopping Mall) celebrated the event in the compound of BigBazar. In the event we distributed to masses visiting the shopping mall with information brochure on frogs. We had a huge banner on display showing frog diversity and stating needs to conserve frogs. We had frog mask for distribution. We also had a signature campaign "Save Deeporbeel Save Frog. Deeporbeel is one of the biggest wetland of State of Assam and the lone Ramsar site of the state. This wetland is very important not only with respect to frog but biodiversity as a whole. The wetland is fast because vanishing degrading and anthropogenic stress. We also had slogan writing contest in the event. Apart for the above major outreach programmes we conducted workshops for six schools during the study period emphasizing on need and the art to study and conserve urban biodiversity. We continued with our children bird watching initiative on Sunday's. We had a photographic competition "Shoot to Save" with urban wilderness as the theme. Suraj S. Chauhan won the competition and was awarded with a trip to Kaziranga National Park.



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

Of the three projects I have worked on, supported by Rufford Small Grants, this was the most tiring one. Now when I look back, I feel that though tiring, this project gave me a lot of satisfaction. Only difficulty was with time management and unfortunately I could not submit the report on scheduled time. Rufford Small Grants was generous enough to give me a 3-month extension.

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

- **1**. Workshop with temple authorities for management and conservation of turtles in temple ponds of Assam.
- **2.** Completing two books
  - a. An Amateur's Guide to Birds of Assam.
  - b. Freshwater Turtles and Tortoises of South Asia.
- **3.** Designing plan to monitor and conserve unban biodiversity involving school student and synchronising three departments of Government of Assam: District Administration, Assam Forest Department and State Biodiversity Board.

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

Local community of all the eight temple ponds we studied during this project period were involved. The benefit of this involvement was two dimensional.

- a. We learned a lot about the history and behaviour of the turtles in these ponds from the local community.
- b. Local community through interaction with us and workshop learned about biological need of turtles such as construction of boundary wall in the pond is not good for turtles, feeding of non-natural food to turtles is not good for their health, etc. and local community are now better equipped to deal with situation rising in these ponds in most cases individually. In general they are now more interested on turtle related issues in their temple pond.

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

Yes, it is just the beginning and I am convinced that there are more to look for into unban wilderness than we can think of. There is more to learn and even more to save.

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

Sharing reports and other publications relevant to this work.



## 7. Timescale: Over what period was The Rufford Foundation grant used? How does this compare to the anticipated or actual length of the project?

May 2014 to April 2015. Actual length: May 2014 to July 2015

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	1500	1500	0	
Investigator				
Remuneration for Field Assistants	800	800	0	
Travel	800	1050	-250	Initially I thought that I shall use some of bird photographed by others in the book "Amateur's guide of Birds of Assam". In course of study I realised that it would be better if I can collect as much photo myself and perhaps publish the book with all of birds photographed by me. I did this hoping to inspire people as when I started the first project sponsored by RSG (2012) I hardly knew birds. I wanted to make a point that if I could know about birds anybody can even in a short span of time. We just need the intention.
Food and Accommodation	400	500	-100	Same as above
Turtle pond management	1400	1600	-200	Increase in manual labour charge.
Book and booklet writing/compiling/editing/p ublishing charge	2500	2200	300	We got corporate sponsorship to print pamphlets.
Medical Support	200	200	0	
Outreach programme	1500	1300	200	We organised more outreach programme that included in the initial budget.
Equipment	800	800	0	
Chemicals	400	300	100	We were supported by Organisational Biotech Hub of Arya Vidyapeeth College with some biochemical study mainly



				of water quality.
Postage	300	200	100	We need not post as much as we expected. As our publisher of the book was kind enough to post some of the books of his own.
Stationary	200	200	0	
Administrative charges	200	200	0	
Contingencies	200	200	0	
Total	11200	11050	150	

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

- a. Involvement of school students for studying and conserving urban biodiversity.
- b. Study animal human conflict in urban landscape and finding ways to mitigate them through organised awareness campaigns and legislations. We also need to carry out research to monitor movement of animals in urban landscape.
- c. Carry on with turtle conservation programme in community ponds and hopefully develop a rescue and conservation unit exclusively for within Assam State Zoo.

### 10. Did you use The Rufford Foundation logo in any materials produced in relation to this project? Did the RSGF receive any publicity during the course of your work?

The logo was used in banners, hoardings and pamphlets. Yes, in local electronic media during press briefings.