

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

Thank you for your help.

**Josh Cole, Grants Director**

---

Grant Recipient Details	
Your name	Jayaditya Purkayastha
Project title	Attending to our neighbours beckon: An Initiative to create a better home for urban wildlife through multivariate study and management approach.
RSG reference	18457-D
Reporting period	December 2015- March, 2017
Amount of grant	£10000
Your email address	mail.jayaditya@gmail.com
Date of this report	30 March 2017

**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
Initiate programme for school students "What's in Backyard?"				<p>To popularise concept of urban biodiversity monitoring and conservation for students as well as masses, we came up with the concept, City's Animal. For City's Animal we have taken up three candidate animals with highest conservation concern.</p> <p>Black softshell turtle: In Assamese the turtle is known as "BorKaso". The turtle was thought to be extinct in the wild and are confined to temple ponds such as Kamakhya, Ugratara in Guwahati. Due to habitat destruction and trade of this animal for flesh and egg, the animal is on the brink of extinction. Fortunately, a recent survey has shown that small population exists in Brahmaputra River and its tributaries.</p> <p>Greater adjutant stork: Known as "Hargila" in Assamese, it is one of the biggest birds of Assam. The global population of this endangered bird is less than 1200 individuals. Due to degradation of habitat and lack of breeding space, the bird fights for existence. The species can be seen in Deeporbeel WLS, garbage dump of Borbori.</p> <p>Gangetic river dolphin: In Assamese, this mammal is known as "Xisu". Less than 2000 individuals of this species are known worldwide. They can be seen in the Brahmaputra River running along Guwahati. The animal is suffering because of habitat destruction and trade for oil and flesh and also being caught in gillnets and line hooks.</p> <p>Voting Process</p> <p>The voting process for the City's Animal was launched on 7th March, 2016. The voting was done online through the</p>

			<p>website <a href="http://www.myanimal.in">www.myanimal.in</a>. Seventy-six schools and colleges across Guwahati participated in the offline voting process. To boost the voting process, voting booths were installed in the premise of Office of District Commissioner, Kamrup (Metropolitan). Voting-related information was installed in different public places across Guwahati, including city buses, shopping malls, food courts, cinema hall, hoardings etc.</p> <p>On the midnight of 5th June 2016 the voting process ended. By then, the City's Animal Campaign received public support and participation beyond our expectation. In total, we received 60,003 votes. Black softshell turtle (Bormuria Kaso) received 17,302 votes and the greater adjutant stork (Hargila) 18,454 votes. But the Ganges river dolphin (Xixu) with 24,247 votes became the clear winner.</p> <p>Thus, after a journey of 3 months, we finally reached the proud moment for our city, Guwahati - the first city of India to have its city animal. From this date, Ganges river dolphin (Xixu) - the city animal of Guwahati shall carry forward the legacy of conservation and protection of urban biodiversity of Guwahati. For this initiative, we got support from all corners, even Governor of the state appreciated our effort. All leading newspapers of the country, covered the news and in fact this question "What is the first city in India to have a city's animal" was a part of many competitive exam in the country. In fact, the city's animal was used as mascot in the biggest river festival of India- Namami Brahmaputra (<a href="http://namamibrahmaputra.com">http://namamibrahmaputra.com</a>).</p> <p>We organised or were part of multiple workshops specific to urban biodiversity of Guwahati where we highlighted the concept of monitoring urban biodiversity by using students.</p> <p>We came up with the website <a href="http://www.wemap.in">www.wemap.in</a>, which is an initiative for</p>
--	--	--	---

			<p>school students, wherein they have to register in the site and upload pictures clicked by them with pin code of the place where photo was clicked and the date of the photograph. With these details we shall know what occurred, where and when in Guwahati, helping us to map urban biodiversity of the city. In return, we would provide the identification of the organism back to the student. Till date we have implemented it in three schools in Guwahati and wish to expand it.</p>
Involving school students in direct conservation and study of urban birds			<p>We have, throughout the project carried out urban tours for bird watching. This involved students of schools, colleges and universities. We also conducted the great backyard bird count in 2016 and 2017. In 2016 we did it in association with Tezpur University and Assam State Zoo. In 2017 we assisted Cotton College State University in the event. For general awareness on birds, we have installed two hoardings "Wetland birds of Deeporbeel", one in Deeporbeel watch tower and other at Parijat School. We have also made and freely distributed brochures on Wetland birds of Deeporbeel and 50 common birds of Guwahati. We have freely distributed 310 bird boxes and have created a Facebook page "my bird box" as a data exchange platform for all the bird box owners. In fact through this page, we got interesting insight on bird species that are using this boxes as nest. Oriental magpie robin was found to be the top bird using these bird boxes as nests. Other birds include house sparrow, great tit and common myna.</p> <p>We extensively carried out survey in Deeporbeel. During the survey 104 species of birds representing 34 families were encountered in the study site of which 44 species were resident and 60 species were winter visitors. The study was conducted with emphasis on water birds which constituted of 67 species representing 16 families. Anatidae was</p>

			<p>found to be most species rich consisting of 16 member species and a population size of 62% of the total bird population encountered during study period. The study site is also home to greater adjutant stork, an endangered species with an estimated global population of matured individuals ranging between 800-1200. Here in the study site we spotted 116 individuals. Of the three sites we surveyed "c" site was the most populated site constituting of 48% of total population followed by site a (34%) and site b (18%). January was seen to have the most diversity (67%) and population (30%) with a single day highest count of 11329 birds on 17th January 2016.</p> <p>There was a case of sudden death of greater adjutant stork in Deeporbeel and we were one of the first organisations reporting and monitoring the case. A meeting was convened to counter the crisis of Deeporbeel in Association with WWF India chaired by Deputy Commissioner of Kamrup Metro on world wetland day.</p> <p>To get attention of masses on need of home for urban birds of Guwahati, we installed bird boxes in prime location of the city on world sparrow day. Deputy commissioner of Kamrup metro inaugurated the programme.</p>
Initiate programme to study and mitigate man animal conflict in urban landscape of Guwahati.			<p>We conducted workshop on animal rescue protocol development for Assam Forest Department. We are working with district administration, police department and forest department for setting up stray wild animal rescue mechanism. We have already involved zoology departments of colleges across Guwahati as a nodal and data exchange point for animal rescue programme. As a next step, we are now in process of identifying volunteers from each ward of Guwahati, who shall be the contact person for that ward in case of sighting of stray animal. These volunteers shall be recognised by Assam Forest Department.</p>

Continue with our effort of supporting turtles in temple ponds.				<p>We have identified three new temple ponds with turtles adding to the already identified 14 ponds. We have now extended the survey beyond northeast India and have included and identified ponds from West Bengal as well. In this phase we supported four ponds, one of which is newly identified Horogawri temple pond at Hajo. In this pond we have created breeding and basking site along with organising public meeting to identify ways to conserve turtles in this pond. One of most important ponds in terms of species diversity and public involvement is the Ugratara temple pond at the centre of the Guwahati city with 10 species of turtle recorded from the pond. Massive construction work is in progress where the whole pond is remodelled keeping the need of turtles in mind. We have installed public awareness hoarding now in four ponds across Assam. We have successfully hatched eggs of <i>Nilssonia nigricans</i> (31), <i>Lissemys punctata</i> (8) and <i>Geoclemys hamiltonii</i> (5) from the temple pond of Ugratara, Guwahati. We designed and assisted, students of NPS International School for their project on turtle in temple pond of Ugratara, which fetched them national award (<a href="http://www.assamtribune.com/scripts/detailsnew.asp?id=dec1116/city052">http://www.assamtribune.com/scripts/detailsnew.asp?id=dec1116/city052</a>).</p>
Create a checklist of mammals of Urban Guwahati.				<p>We found a total of 36 species representing 21 families of mammal from the geographic limits of Guwahati city. See table 1. for details</p>
Produce a book "An Amateur's Guide to Amphibians of Assam".				<p>The drafting of the book is done and is with publisher where review is taking time as they are working on multiple books under their publication</p>

Family	Common Name	Scientific Name	IUCN(RL)	IWPA(S)	Local Status
Cercopithecidae	Capped Langur	<i>Trachypithecus pileatus</i>	VU	I	Vary rare, only seen in forest fringe
	Gee's golden langur	<i>Trachypithecus geei</i>	EN	I	Introduced population of 5 at Umananda temple
	Assamese Macaque	<i>Macaca assamensis</i>	NT	II	Rare, found in forest fringes
	Rhesus Macaque	<i>Macaca mulatta</i>	LC	II	Common, found throughout Guwahati, more so in temples
Hylobatidae	Western Hoolock Gibbon	<i>Hoolock hoolock</i>	VU	I	Rare, found in forest fringes of Rani RF
Lorisidae	Bengal slow loris	<i>Nycticebus bengalensis</i>	EN	I	Rare, found throughout small forest patches within city
Elephantidae	Asiatic Elephant	<i>Elephas maximus</i>	EN	I	Common, found in forest fringes
Bovidae	Gaur	<i>Bos gaurus</i>	VU	I	Rare, found in forest fringes
Suidae	Wild Boar	<i>Sus scrofa</i>	LC	III	Rare, found in forest fringes
Cervidae	Barking Deer	<i>Muntiacus muntjak</i>	LC	III	Moderate, found throughout small forest patches within city
	Sambar	<i>Cervus unicolor</i>	VU	III	Rare, found in forest fringes
	Hog Deer	<i>Axis porcinus</i>	EN	III	Rare, found in forest fringes
Felidae	Leopard	<i>Panthera pardus</i>	VU	I	Rare, found in forest fringes and stray individuals within city centre
	Jungle Cat	<i>Felis chaus</i>	LC	II	Rare, found in forest fringes
	Leopard Cat	<i>Felis bengalensis</i>	LC	I	Rare, found in forest fringes and hill areas
Canidae	Golden Jackal	<i>Canis aureus</i>	LC	II	Rare, found in forest fringes
	Bengal Fox	<i>Vulpes bengalensis</i>	LC	II	Rare, found in forest fringes
	Dhole	<i>Cuon alpinus</i>	EN	II	Very rare, found in forest fringes
Herpestidae	Indian Mongoose	<i>Herpestes javanicus</i>	LC	II	Moderate, found throughout city associated with small wetlands



Viverridae	Large Indian Civet	<i>Viverra zibetha</i>	LC	II	Rare, found in forest fringes
	Small Indian Civet	<i>Viverricula indica</i>	LC	II	Rare, found in forest fringes
	Common Palm Civet	<i>Paradoxurus hermaphroditus</i>	LC	II	Moderate, found throughout small forest patches within city
Mustelidae	Smooth-coated Otter	<i>Lutrogale perspicillata</i>	VU	II	Rare, found in wetlands in forest fringes
Leporidae	Indian hare	<i>Lepus nigricollis</i>	LC	IV	Rare, found in forest fringes
Manidae	Chinese pangolin	<i>Manis pentadactyla</i>	CR	I	Very rare, found in forest fringes
Soricidae	Asian house shrew	<i>Suncus murinus</i>	LC		Common, found throughout the city
Hystriidae	Himalayan Crestless Porcupine	<i>Hystrix brachyura</i>	LC	II	Moderate, found throughout small forest patches within city
Sciuridae	Hoary-bellied Squirrel	<i>Callosciurus pygerythrus</i>	LC	II	Common, found throughout the city
	Particolored Flying Squirrel	<i>Hylopetes alboniger</i>	LC	II	Rare, found in forest fringes
Muridae	Black rat	<i>Rattus rattus</i>	LC	V	Common, found throughout the city
	House mouse	<i>Mus musculus</i>	LC	V	Common, found throughout the city
	Lesser bandicoot rat	<i>Bandicota bengalensis</i>	LC	V	Common, found throughout the city
Pteropodidae	Indian flying fox	<i>Pteropus giganteus</i>	LC	V	Common, found throughout the city
	Short-nosed fruit bat	<i>Cynopterus sphinx</i>	LC	V	Common, found throughout the city
Vespertilionidae	Indian pipistrelle	<i>Pipistrellus coromandra</i>	LC		Common, found throughout the city
Platanistidae	Ganges river dolphin	<i>Platanista gangetica</i>	EN	I	Moderate, found in river Brahmaputra adjacent to the city

Table 1: Checklist of mammals of Guwahat



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

The website wemap.in had some initial issues and had to be redesigned as it was not giving us the results we were looking for. We then got it done from one of the India's biggest web solution provider- [www.rediff.com](http://www.rediff.com)

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

**City's Animal:** It's the most important outcome of the project not only for the city but for the entire country. Guwahati became first city in India to have its own City's Animal and more importantly it was selected by the people.

**wemap.in:** It is the website for mapping urban biodiversity of Guwahati through school students. The website is structured in such a way, where students can get wealth of information once they are signed in and interestingly the provider of the information is no expert but fellow students. We are in the process of clubbing the website to ecological clubs of schools in Guwahati.

**A comprehensive data on birds of Deeporbeel:** During the survey 104 species of birds representing 34 families were encountered in the study site of which 44 species were resident and 60 species were winter visitors. The wetland being in Guwahati is suffering from high stress due to anthropogenic activities. Being home to endangered species like greater adjutant stork, the wetland is a sensitive area in terms of avian biodiversity conservation and management. We have also identified important bird area within the wetland and carried out workshops to sensitise local community. We along with other stakeholding government departments, NGOs and local community are in the process of constructing a development authority fully devoted to Deeporbeel conservation.

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

Most of the students of schools and colleges and general masses of Guwahati as a whole participated in the initiative of choosing city's animal. They felt a bonding to the cause as they have played an active part in the process of selection. In the whole process, we organised workshops for letting people know about the initiative. Urban biodiversity conservation is a very new topic for Guwahati and it added to biodiversity conservation which is now beyond protected areas and illustrious animal. Masses have started taking interest in conserving biodiversity around them more so in case of birds. Our initiative "Home for Feathered Friends" was also a great success. After free distribution of 300 plus bird boxes, the demand now is on a rise with our publicity of bird boxes in world sparrow day. In facebook.com people are sharing the activities in their bird boxes which again are attracting others to the cause. In Deeporbeel, we are in process of creating alternative source of livelihood so as to reduce stress on the wetland and its fishes. We are happy, that already a self help group "Rongmon" is formed with local youth, who have taken to ecotourism.

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

We shall submit the project report to the stakeholders (Forest Department, Kamrup Metropolitan District Administration, Guwahati Metropolitan Development Authority). A copy of the report shall be uploaded to the Help Earth's website ([www.helpearth.co.in](http://www.helpearth.co.in)). A summary of the report shall also be sent to participating schools via inspector of schools and colleges who participated in our campaign on city's animal and backyard biodiversity mapping. We have already shared the findings of Deeporbeel to the community there in form of a brochure.

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

From December 2015 to March, 2017 for a period of 16 months. The project got extended by four months due to the city's animal campaign.

**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	2400	2400	0	
Remuneration for Field Assistant	900	900	0	
Travel	800	1200	400	This addition to the budget in travel is primarily due to the "City's Animal" campaign where we had to extensively travel within the city with hired pickup truck with our publicity materials to organise voting campaign in schools and colleges
Food and Accommodation	600	600	0	
Turtle pond management	600	400	-200	A part of the expenses was organised by the district administration
Book and booklet writing/compiling/editing/publishing charge	1200	1000	-200	A part of the expenses was organised by the district administration
Outreach	2200	2700	500	This addition to the budget is primarily due to the "City's

				Animal" campaign where we have printed publicity materials (hoardings, standees, banners, stickers, t-shirts, coffee mugs).
<b>Construction/procurement, installation of 300 bird boxes</b>	750	750	0	
<b>Stationery</b>	200	200	0	
<b>Communication/ postal charges</b>	200	50	-150	We are yet to send reports to stakeholders and as such we have fund left in this head.
<b>Contingency</b>	150	150	0	
<b>Total</b>	10000	10350	350	

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

Our mission of creating awareness regarding importance of urban biodiversity should now reach ever grater audience. We need to find more innovative ways to keep people involved in our initiative. Children shall be the base on which we are planning to build the next building block.

#### 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?

All our printed materials (banners, hoardings, brochures) contained logo of Rufford Foundation. In our publications concerning this project, we have duly acknowledged Rufford Foundation.