

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.

Thank you for your help.

Josh Cole, Grants Director

Grant Recipient Details	
Your name	Subrat Debata
Project title	Adding knowledge and popularizing bat conservation in Similipal Biosphere Reserve and its adjoining areas, Odisha, India.
RSG reference	14229-1
Reporting period	12 months
Amount of grant	£5849
Your email address	subrat.debata007@gmail.com
Date of this report	14 th November 2014

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
Surveying diversity of bat fauna in Similipal Biosphere Reserve and its adjoining areas		√		We did not get permission to move and survey during night hours in some part of the reserve because of critical Tiger habitat and management issues. Thus, we could not cover the entire area.
Contributing and strengthening the data base of echo-call library of Indian Bats		√		Because of time scheduled conflicts we could not collaborate properly in time with other groups working on bat echo-location calls. Most of the time we could not use the call recorder due to hectic weather conditions. We could not access the echo-call analysis software because of high price.
Involving local community to disseminate firsthand knowledge on bat survey and monitoring			√	The local people were very much enthusiastic during the survey. They helped the survey team for identifying the roosting sites from their experience.
Popularize bat conservation through awareness among people, students and forest officials			√	The awareness programme was highly appreciated by various stakeholders as they had never experienced such kind of programmes on bats.

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

Just before implementation of the project, Similipal Biosphere Reserve experienced the havoc of Super Cyclone Philin for which most of the vehicular roads blocked or cut off. It took us longer time than projected to complete survey in those areas.

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

- a) Documentation of bat diversity: Similipal Biosphere Reserve being one of the biological representatives of Odisha state, no attempt was made earlier to document the bat fauna in this region. The survey was first of its kind reporting 15 species of bats from Similipal Biosphere Reserve and its adjoining areas along with the first record of lesser short-nosed fruit bat *Cynopterus brachyotis* and white bellied tube-nosed bat *Murina huttonii* from

Odisha, which were earlier reported from the southern and north regions of India respectively.

- b) Sensitised Stakeholders: The awareness and educational programmes were very much fruitful as expected. The educational manual “Let’s know about Bats” developed in local language was highly appreciated among the target group. The field level forest staffs are now at least able to identify the species up to different family level whereas earlier they had no idea about the diversity of bats. It has now become a part of their regular activities to monitor bat roosting sites in their locality.
- c) Bat conservation initiative: During various sensitising efforts it has been found that the concerned forest officials in different parts of the Biosphere Reserve became concerned for bat conservation. They are now protecting the roosting sites and determined to take legal action against killing bats for bushmeat. Some of the local youths are now concerned for protection of bat roosting sites in their localities and regularly in touch with the survey team whenever required.

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

Local people’s views and knowledge were taken under consideration for identifying bat roosting sites in their locality. Some unemployed youths were identified in different localities and hired as local guide as daily waged labour basis. Ultimately it provided them a temporary employment and made them inclined for bat conservation.

5. Are there any plans to continue this work?

Yes. The survey was carried out only in 4% of the total geographical area of Odisha state. We plan to survey the entire area covering all habitats and sensitise various stakeholders for bat conservation. During the present work we could not completely achieved establishing the echo-call database of bats thus we want to continue this work.

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

We have already communicated a popular article entitled “Bat Conservation in Odisha” to one of the renowned conservation magazine Sanctuary Asia and are preparing a manuscript on “Status of bats in Similipal Biosphere Reserve” to submit to Acta Chiropterologica. The photographs of the recorded bat species have been displaced in the forest department offices and Regional Museum of Natural History Museum of Odisha.

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

November 2013 – October 2014 as originally proposed.

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.

Total amount proposed £ 5849 @ £ 1= ₹ 90.88 - Total amount received £ 5849 @ £ 1= ₹ 98.09

Item	Budgeted Amount	Actual Amount	Difference	Comments
1-unit Echo Meter EM3+ Bat Detector and Recorder	876	1124	-248	We had to pay the import tax as the Echo Meter was not available in India which was not described in the proposed budget.
2 numbers of Mist nets of 716/7p, Denier 75/2, Mesh Size 16×16, polyester, length-7 meters, Height-2.5 meters, shelves-5 along with accessories	148	122	+26	We had to purchase slightly cheaper mistnets to adjust the expenses.
1 Petzl Tikka XP 2 Head lamp and accessories	45	16	+29	We got an used head lamp at cheaper price
1 pair of Hand gloves for handling bats	5	10	-5	Two pairs of hand gloves were felt necessary
1-unit Pesola light line spring scale	28	5	+23	We managed to found a spring balance at lower cost than proposed
1-unit Digital calliper	27	55	-28	We preferred to purchase Mitotoyo digital calliper for accurate measurements
Travelling and accommodation for 4 persons for 12 months	1740	1537	+203	Sometimes we could manage to move inside the forest by forest department vehicles which saved our fuel expenses. Sometimes they provided their accommodation to the entire team during survey.
Local guide cost for 12 months	480	480	0	
Printing of Educational materials	1300	1300	0	
Educational and Awareness activities in Schools, villages	1200	1200	0	
Total	5849	5849		

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

- a) Survey on diversity and distribution pattern of bats throughout Odisha.
- b) Strengthen the echo-call database of bats.

- c) Understand the ecological role of bats and disseminate the knowledge for their conservation in Odisha.
- d) Identify the immediate threats to bats and their roosting sites.
- e) Mobilise and involve the post graduate science students for conservation research on bats.
- f) Sensitise the concerned officials and seek local people's participation for bat conservation through awareness and educational programmes.

**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?**

Yes. We used the logo in prominent places in the educational book, posters, stickers and presentations. We were also asked by different individuals about The Rufford Foundation and its support for the project. We have highlighted the support of The Rufford Foundation's for the work in the popular article and research manuscript.

11. Any other comments?

We are very much thankful to The Rufford Foundation for providing financial support for adding knowledge and fostering conservation of bats, one of the highly neglected species with key ecological importance.