

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.

Thank you for your help.

Josh Cole, Grants Director

Grant Recipient Details	
Your name	Robin Suyesh
Project title	Conservation Assessment and Biogeographical Distribution of the Poorly Known Bush Frogs of the Western Ghats
RSG reference	11810-1
Reporting period	2012-2013
Amount of grant	£5554
Your email address	robin211985@gmail.com
Date of this report	28 February 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
Conservation status assessment of all the known species of bush frogs in the Western Ghats			Yes	The conservation status has been assessed for 40 out of 44 (2 species were published by researchers after the start of project) known species of bush frogs. Four species were not located in its published type locality. The results show the need to redefine the IUCN status for many of species.
Biogeographic range of all the known species of bush frogs from the Western Ghats			Yes	New distribution localities have been found for 22 known species of bush frogs. More than five new localities have been found for five known species of bush frogs. Information will be shared with relevant stakeholders and scientific community.
Major threats faced by bush frogs in their habitat			Yes	In total 26 localities was surveyed, as the part of project and information about the threats faced by the bush frogs has been prepared. The information will be shared with stakeholders and will be published as scientific publication.
Public awareness for amphibian conservation			Yes	Presentations were done in eight village schools in different localities to create awareness among the young students. Photographs of the bush frogs have been shared with the locals and Forest Department to increase awareness about these small and neglected creatures. Informal talks/presentations with the help of local field assistants were conducted at public meeting points all surveyed locality to create awareness among the local residents. Locals (mostly young students) were taken to field to show them frogs. Results of study will be published in scientific journals for sharing with scientific community. Reports will we send to state Forest Departments.
Detailed field information about the habitat and ecological niche preferences			Yes	Detailed field noted were taken for all the surveyed species and results will be published as scientific publication.

of bush frogs in the Western Ghats				
Identification of the cryptic diversity of bush frogs			Yes	Based on the bioacoustics information two new species of the bush frogs is suspected. Molecular work is in progress for confirming the results.
Comprehensive information about the bio-acoustic call structure of bush frogs		Yes		Call recordings has been completed for 34 known species of the bush frogs while data analysis is almost completed. Results will be presented in scientific publication. 20 species has also been videoed.
Molecular phylogeny of the bush frogs from the Western Ghats		Yes		Molecular work is in progress. Sequences have been generated for collected tissue samples from different localities for all known and unknown species that was surveyed. Results will be shared with scientific community.

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

Climate unpredictability: The Western Ghats received more than its average amount of monsoon in year 2012-2013. This hampered my fieldwork in few areas and it mainly affected the sound recording of the bush frogs. On many occasions the lens of my digital SLR was fogged because of humidity/rain so I was unable to click pictures. I also had to revisit three localities because I was not able complete my survey in first visit because of above reason.

Logistic constraints: Few surveyed localities (national parks and wildlife sanctuaries) are not connected by proper roads so lot of time and manpower (for carrying equipment and food) was spent for reaching the field site. This was also an extra burden on the budget. One of my surveyed localities lacked proper place to stay and I had a tough time protecting all my electronic equipment (recording units and camera).

I had planned to hire two field assistants for complete 4 months of my fieldwork. The field assistants were mostly not ready for travel to different localities for my field study, so I had to hire new field assistants at many localities with the help of forest department and locals.

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

The first most important outcome of the project is new distribution records for 22 species of bush frogs. This result is very important because many of them were known from a single locality and also are listed as Data Deficient in IUCN category.

The second most important outcome of the project is the training of 29 local field assistants combined from the entire surveyed locality. They are able to identify and locate bush frogs from their area. This is important because they can be very useful for any future research on monitoring of those bush frogs.

The third most important outcome of the project is the sound recording of 34 species of bush frogs. This is very important because each species has its own unique vocal repertoire and so the recording can be useful for identification of species. This can now be effectively used for monitoring the species in a given locality.

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

Bush frogs have relatively small body size. In almost all the surveyed locality locals were unaware of their presence. The locals heard the bush frogs calling but considered the sound to be coming from an “insect”. The people in surveyed areas now are aware about the bush frogs and many local residents especially school children are fascinated by them because they are “colourful, small and have very powerful sound”.

The field assistants were from the local community, so the project not only gave them temporary employment but also gave them opportunity to understand about importance of amphibians and need for conservation of biodiversity.

5. Are there any plans to continue this work?

With the recording of 34 species of bush frogs we have baseline data for monitoring the species of bush frogs. The field survey not only discovered new distribution localities but also identified some very critical habitats. So, I want to extend the work by selecting some critical habitats and monitor the species present and increase awareness for these amphibians amongst locals in those areas.

Also, Western Ghats is a vast area with many altitudinal gradients. So a lot more work is required to done and as this survey has yielded positive results so I plan to continue my work and cover more localities to identify and gather more information about the distribution and ecology of the bush frogs.

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

Numerous local awareness presentation/talks have already been done. Photographs have already been shared with locals and Forest Department. Additionally, the results will be shared with major stakeholders in the form of detailed final report. Scientific publications in peer-reviewed journal will be done for scientific community.

I have very recently stated a blog and made pages on online social media to share information about my field sites and awareness about some species surveyed. I plan to update them on a regular basis and share more information. Here is the link for my blog: <http://frogfiles.wordpress.com>

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

The sanctioned duration of my project was from July 2012 to July 2013. However, my project required 4 months of fieldwork during monsoon. The monsoon in Western Ghats is from June to September. But since my project was sanctioned on 23 June 2012, I got only 2 months of fieldwork

in the year 2012. In 2013 I conducted another 2 months fieldwork during July and August. The delay in fieldwork also affected lab work. So my actual project duration is from July 2012 to February 2014.

8. Budget: Please provide a breakdown of budgeted versus actual expenditure and reasons for any difference. All figures should be in £ sterling, indicating the local exchange rate used.

Items	Budgeted amount	Actual amount	Difference	Comments
Salary for two field assistants for four months @ (approx. £ 96 per month)	770	850	+80	Actual amount was higher because for remote areas (national parks and wildlife sanctuaries) the local field assistants charged heavily.
Food allowance for three people @ £ 4.5 per person per day for 4 months	1,642	1,550	-92	Money was saved on food because at some field sites provisions that were purchased were cheaper.
Train (2 nd AC) travel from Delhi to Trivandrum and back @ £ 41 per trip.	82	123	+41	Actual amount was higher because the three trips were made to Delhi as the fieldwork was divided in two years (2012 and 2013). Total distance travel was more, as number of field sites visited were more than that was initially planned.
Road Transport @ £ 0.2 per km for 7500 km (Approximate travel for 4 month)	1,443	1520	+77	
Local Transport (Bus, Train)	128	128	0	
Accommodation £ 7.7 per day for 110 days	847	847	0	
Small equipment Dry bags, head torches, raincoats, gum boots, batteries etc.	449	449	0	Dry bag for £ 165, head torches*2 for £ 55, raincoats*2 for £ 20, gum boots for £ 20, umbrellas*6 for £ 30, hand torch*2 for £ 10. Rest money was spent on batteries for headlights and head torches £ 149.
Miscellaneous	193	100	-93	Money was spent in meeting the local forest officials, other stake holders at the respective field sites for discussing my fieldwork plan. Rest of the money was utilized on other Budget heads
Total	5,554	5,567	+13	

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

The project has yielded positive results, but it is far from being complete. There are many more areas and locality that remains to be surveyed. The study also identified some very critical habitats and species. Such information is required to be shared with stakeholders in order to protect the habitat and the species. Long term monitoring those critically endangered species is also essential in

order to protect those species. Vocal repertoires have been recorded for 34 species but there is still 10 more known species left for recording to have complete knowledge about their bioacoustics call structure.

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 RSG logo at the beginning and end for all my public presentation during the course of my project. It is not possible to use RSG logo on scientific publication but RSGF will be acknowledged in all my scientific publication as funding organisation. RSG logo will be there in the final report that will be shared with the stakeholders. I am also currently using RSGF logo on my blog page. (<http://frogfiles.wordpress.com>).

11. Any other comments?

The primary data acquired during the course of this project will support any further research on bush frogs in years to come. Amphibians in general are often neglected when it comes for funding the research. Amphibians being the most threatened group of vertebrates require more attention for conservation. I would like to thank RSGF for their financial support on this project. I also like to thank various Forest Departments across the Western Ghats for giving permission to carry out the research and local residents for their support.