

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	Gund Shrikant Machindra					
Project title	Assessment of bryodiversity and its conservation status in southern parts of North Western Ghats of India.					
RSG reference	15933-1					
Reporting period	Annual					
Amount of grant	£4749					
Your email address	gundshrikant@gmail.com					
Date of this report	08/03/2017					



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
Collection and identification of Bryophytes				Bryophytes were collected from major targeted region and identified with the help of flora and available literature. Few more species need to identify with the help of experts and the same process is going on.
Digital photography for field guide				Photographs were taken from frequent field visits and now working on compilation of field guide of bryophytes.
Assessment of conservation status of bryophytes				Status of some bryophytes species has been confirmed with the help of available literature. Still need to confirm status of few more bryophytes species because of inaccessibility of literature.
Development of distributional maps				Distribution maps were developed for identified specimens.
Collection of Traditional use of bryophytes from local communities				Questionnaires developed and filled out with the help of interns from local communities from North Western Ghats region. Collected some good results.
Conducting training and awareness program				Awareness programmes were conducted meanwhile during field work. Trained two young nature explorers for bryophyte survey.

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

No such difficulties were faced but encountered with reptiles several times while collection bryophytes specially pit vipers. Usually they camouflaged with their habitat and hard to recognise in nature easily. Else people were cooperative in field.

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

 Most significant outcome of present work is assessment of bryophytes and its documentation first time after decades from southern part of North Western Ghats. About 148 species of bryophytes were recorded from this region. Five new records were made for regional flora and for Western Ghats too.



- 2. Threat and conservation status of these tiny plants were assessed and associated flora and fauna of bryophytes were also documented for further study from said region.
- 3. Awareness programmes were held at different localities in study area and achieved goal for getting valuable information about traditional use of bryophytes. Questionnaires were developed and filled out with the help of interns from Local communities from North Western Ghats region.

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

Local communities have not that much knowledge about bryophytes only few communities uses bryophytes as traditional use. Most of people harvest mosses and sell to some venders, who use moss for grafting purposes.

5. Are there any plans to continue this work?

Yes, I wish to continue my work on same aspect. I wish to work on central part of north Western Ghats for bryophytes surveys, as central part is covered with very dense semi evergreen forest and protected as tiger reserve in Sahyadri ranges. Central part is still unexplored but forest fragmentation process is continuing gradually. So, it's necessary to compile data of same region for next step of conservation.

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

I am going to publish my result in open access journal so, everyone can access freely. I am going to publish small book or field guide of bryophytes, how to identify these tiny plants. I will develop flyers of common bryophytes from this region soon and distribute at colleges and schools with one full report of same project.

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

The said grant was used for 2 years of work. Because of low rainfall in 2014-15, I couldn't make to possible to collect bryophytes from this region, as bryophytes are mostly found during monsoon and post monsoon is best suitable season for collection. Second thing is that, for bryophytes studies I took huge region for one year and it was not possible to cover all targeted region in given time.

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
Fieldwork and Travel	2700	3095	-395	Most of fund has been utilized on field work within 18 months and this is excess than allotted.
Equipment's (Camera and GPS unit)	658	661	-3	Camera and GPS has been purchased and only 3£ extra paid by self.
Awareness program	972	721	251	Remaining 251£ has been again utilized for field work purpose to cover expenses
Filed assistant	720	720	00	Total amount has been used for field assistant
Contingency	243	240	03	Money spent on stationery and herbarium papers. Remaining 3£ used to cover extra expenses.
Reference books	97	115	-18	Books purchased and some of books photocopied.
Publications	146	141	05	Remaining amount used to cover excess expenses.
Total	5536	5693	-157	*Total 5536£ Quoted as total budget in proposal but on front page by mistake wrote 4972£ as total budget. So here, amount of 720£ and some other has been paid by self-savings.

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

As per my observation, government should imply some policies to protect the loss of habitat. As people are not that much aware about these tiny plants even about its habitat, the more awareness practices should be conducted at local level.

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?

I used Rufford Foundation logo in oral presentation and poster presentation at prestigious "Darwin Scholar Program 2016". At Field studies council, Preston Montford, Shrewsbury, UK. Same logo has been used on photographic plates of bryophytes and on awareness board as well. More people were attracted towards this project and inquired for small funds and related questions. I gave them detailed information about RSGF and might be some of them already sent application for same.



11. Please provide a full list of all the members of your team and briefly what was their role in the project.

I worked on this project independently but following my friends helped me for collection and other work.

Dr Sachin Patil Shivaji University, helped me with collection of bryophytes from Kolhapur region. Dr Rajendra Lavate, Jat, helped me with identification of liverworts.

Dr Mayur Nandikar, Goa University, helped me to explore bryophytes from Goa.

Anish Pardeshi, Pune helped me for collection at Amboli and adjoining area.

Miss Shruti Kulkarni, Usman Attar from Kolhapur and Appa Bagam from Amba forest helped for collection and vegetation mapping.

12. Any other comments?

Habitat disturbance is major issue for diversity loss of bryophytes in North Western Ghats. I have written one report on habitat disturbance in North Western Ghats from my last two years' observation during continuous field visit. I will submit same report soon to biodiversity journal which will be easily available for public.