

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	Ichha Roka
Project title	Spatial distribution, threats assessment and popularization of conservation importance of Bumblebees in Shey Phoksundo National Park, Nepal
RSG reference	24403-1
Reporting period	
Amount of grant	£5,000
Your email address	ichha.roka@gmail.com
Date of this report	

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
To understand the spatial distribution of <i>Bombus</i> species				<p>During the field survey, April – October 2019, a total of six bumblebee species belonging to five subgenera (<i>Bombus</i>, <i>Melanobombus</i>, <i>Psithyrus</i>, <i>Pyrobombus</i> and <i>Subterraneobombus</i>) were recorded. <i>Bombus tunicatus</i> was recorded as highest species from eight host plant (one host plant unidentified) from the study sites (Table 1). In addition, nest of these species was recorded beneath the rock at an elevation of 2136 m asl.</p> <p>Some important parts of difficult torsion of mountain were left and it was difficult to cover important area due to topographic difficulties. But recorded numbers of species were well identified.</p>
To conduct popularization programs regarding the bumblebee conservation in the study site.				<p>The objective was fully achieved by interaction between VDC members, army officer, local stakeholders, and community forest user groups. Bumblebee drawing competitions as well as conservation programmes were done in two local schools. Distributions of outreach materials as well as conservation programmes were successfully completed.</p>
To involve the citizen scientist				<p>The objective was fully achieved. Six citizen scientists from different VDCs were prepared. They can identify bumblebee morphology. They are familiar to importance of bumblebee and can monitor bumblebee in local areas. They can communicate their information with the researchers and conservationists.</p>

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

Yes, because of the geographical feature of the study site, it took more time than expected time. Besides this, there were not any unforeseen difficulties during the project period. However, observation of bumblebee was difficult from rocky sites especially between 3500 – 4000 m.

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

1. Total of six species of bumblebees (*Bombus rotundiceps* Friese, 1916; *Bombus tunicatus* Smith, 1852; *Bombus cornutus* Frison, 1933; *Bombus melanurus* Lepeleitier, 1836; *Bombus lepidus* Skorikov, 1912; *Bombus rufofaciatus* Smith, 1852) were recorded, which is one of the great achievements of this project.

2. Successfully conducted conservation and popularisation programme. Many people were interested in the field of the bumblebee conservation in this high-altitude area. Local people were convinced with our program and showed the positive attitude towards the bumblebee conservation in this Himalayan landscape.

3. Six citizen scientists were prepared for the further works regarding the bumblebee conservation in the study site.

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

Local people involved in this project were found very supportive. They helped during the conservation outreach programmes, participating in the field sampling, extended their knowledge regarding conservation status of the bumblebee in the field site. In this regarded, the local people were very supportive. This project describes to the local people that how bumblebees are important to the local community. Regarding this, we conducted village group discussion, interaction with the local people, describing the role bumblebee in the nature, etc. that was helpful to the local community.

5. Are there any plans to continue this work?

Yes, I am going to apply second Rufford project specially focusing in upper Himalayan region.

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

I have planned to share this research with local media, such as local and national newspaper, radio, television, etc. Also, I have plan to write a scientific paper in Nepalese journals such as Journal of Science and Technology, Our Nature or Journal of Natural History Museum, etc.

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

In proposed time frame field completed but time was consumed for species identification.

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
Stationary	20	20		
Breakfast and tea	240	300	+60	
Grant to local community	1000	500	-500	
T-shirts	600	620	+20	
Caps	200	200		
Poster	200	200		
Notebooks	100	100		
Travel	480	500	+50	
Food and accommodation	2160	2160		
Training and workshop		400	+400	This course was for grad. Students and local people
Total	5000	5000		

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

Yes, I am looking for the further work. To my understanding, and based on field work, the molecular and genetic approach (molecular identification) of the bumblebee is need. I wish to work on that.

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

Yes, I used the logo of Rufford Foundation in my all activities, banner and t-Shirt.

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

Dr Daya Ram Bhusal (Supervisor): Assist in species identification and field site selection.

Ms Ichha Roka – MSc (Project leader): Implementation and overall conduction of the project activities including research and conservation awareness programmes.

Mr Kishor Ghimire – (Research Assistant): Assist Project Leader in planning and carrying out research activities in the field.

Ms Angeela Pandey – MSc (Field Assistant): Assist Project leader in organising awareness raising activities including the distribution of promotional materials.

12. Any other comments?

I would like to acknowledge The Rufford Foundation for the support to successfully implement this project on Bumblebee in Nepal and also expect for continued support in the future as well.

