

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. 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. 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	NGUYEN Quang Huy
Project title	Building a botanic specimen collection and a coloured guidebook for educating high school students in conservation at Tam Dao National park, Vietnam
RSG reference	15334-2
Reporting period	July 2014 – July 2015
Amount of grant	£3500
Your email address	huynq@hus.edu.vn
Date of this report	August 30 th , 2015

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
Field survey in Tam Dao National Park (TDNP).			✓	Collection of plants and recording of environmental data: plants were imaged, computer database records made, and concise descriptions written. Together with videos of collection and processing, data was used in preparation of the guidebook and for presentations.
Building a botanic collection			✓	The collections were prepared and housed in the Botanical Museum, Faculty of Biology, VNU University of Science, specimens dried in an herbarium oven for 3 – 5 days before identification to species level. Storage was in transparent plastic bags with documentation that allowed robust handling for teaching purposes.
Making a guidebook and PowerPoint presentations for a conservation class.			✓	The guidebook consisted of 52 species and designed in the form of an atlas to the plants of TDNP, easily used by students in the field. The guidebook will be of long-term value in a wide range of teaching applications within and beyond the scope of this project. The presentations provide a long-term resource for high school education.
Holding a conservation class for Hanoi high school students in TDNP.			✓	We held a conservation class in Tam Dao National Park for 2 days. The students were taught about biodiversity and about the importance of plant conservation in classes and in the field as well. Students were encouraged to use the project resources to engage in a process of personal discovery and enable them to make identifications, interpreting plant communities and gaining an appreciation of the natural world.

Objective	Not achieved	Partially achieved	Fully achieved	Comments
Publishing a paper		✓		It could be said that this objective is partly achieved since a manuscript is being composed.

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

Because of well-preparing, we found no big problems during the project implementation. However, publishing a paper is not an easy task. It might take more time than we expected. At this time, a manuscript is being composed. We plan to ask some experts in education and conservation who could review the manuscript for us.

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

- The material outputs of this project will be: a) A permanent botanical reference collection for TDNP; b) A coloured atlas guide to the plants of TDNP for long-term use and for future updating; c) PowerPoint presentations can be tailored for different audiences; d) A published case study of the results of the project, which can be used to inform future education conservation projects aimed at engaging the youth in a developing country context, where society is typically unaware of this issue.
- The project will be extended to include a wider audience such as local communities in and around TDNP and for student's extracurricular activities.
- It is widely considered that an individual's worldview is largely developed and often fixed when young and it is of paramount importance that high school students have an appreciation of the natural world and their personal responsibility for safeguarding its future. Our current system of education in Vietnam currently fails to do this but it is possible for individuals to address this shortcoming. My aim is to instil a sense of wonder and appreciation of natural environments in students that they can pass on to their friends and relatives. Some will be particularly receptive and possibly become lifelong advocates of nature conservation and contribute to a more enlightened culture in Vietnam. Central to this objective is my responsibility to convey the urgency of this message and the need to balance economic development and the harnessing of natural resources with the safeguarding of nature.

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

The local communities are not our target audience in this project. Nevertheless, based on the outputs of the project, future conservation activities could be extended to include local communities in and around national parks.

5. Are there any plans to continue this work?

We plan to build a conservation program for high school students and local communities. It could be an outdoor education in summertime or a training course. The program will be designed by two parts, lecturing in classes and practising in the field. The success of this and previous projects

promote us to combine the conservation activities of insects and plants into that program, encouraging the students/locals to explore the ecological relationships in natural ecosystems.

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

Firstly, the material outputs of the projects, including the botanical collection, the lectures and the guidebook were transferred to Nguyen Hue High School for Gifted students and used as permanent teaching source in Biological classes and outdoor activities. Another copy of these outputs was deposited in Botanical Museum, VNU university of Science, undergraduate students could use the collection and the guidebook as reference in classes and fieldtrip practising as well.

Moreover, we hope that by publishing a paper is a good way of sharing our experience of how to engage urban high school students to conservation activities in developing countries where natural protection is usually not concerned enough.

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

I used a bank account in Vietcombank (Vietnam Foreign Trade Bank) for money transferring. When the money came, we had to wait for 1 month to withdraw the money without paying fees. It is a regular of Vietcombank for foreign currency. However, it did not affect much on the quality and timeline of the project. We followed the main activities written in the proposal accordingly.

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.

Exchange rate: 1 £sterling = 34,700 VND

Item	Budgeted Amount	Actual Amount	Difference	Comments
Transportation for a 5-day field trip of survey in Tam Dao National Park	450	450		
Transportation for the class of plant conservation in 2 days in Tam Dao National Park	240	240		
National Park fees	40	40		
Accommodation for the 5-day field trip of survey	160	160		
Accommodation for the 2-day class of plant conservation	360	360		
Meals for the 5-day field trip of survey	80	80		
Meals for the 2-day class of plant conservation	480	480		
Laptop	350	350		
Protective clothes and field trip equipment (long socks, forest shoes, insect repellent, flashlight...)	250	250		
GPS	180	180		

Item	Budgeted Amount	Actual Amount	Difference	Comments
Collecting equipment (Plant scissors, field press, newsprint, press straps, string tags, fixation solutions etc.)	200	200		
Sorting, identifying, displaying and storing equipment (forceps, pins, pointed needles, Hand magnifier glasses, transparent plastic bags, plastic herbarium containers etc.)	150	150		
Rent an herbarium drying oven	60	60		
Rent a lab freezer	50	50		
Identifying books and documents	40	40		
Colour printer and ink	260	260		
Office equipment (colour quality printing paper, plain A4 papers, colour pens, rulers...)	50	50		
Chemicals (alcohol, fixation solution, Naphthalene granules etc.)	100	100		
Total	3500	3500		

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

Our plan for the next steps including:

- Building a conservation programme for high school students, consisting of lecturing in classes and practising in the field with a focus on plant and insect conservation.
- Create a strong professional team providing education and training in natural conservation. The impact pathways include formal seminars, conservation classes, workshops and preparing field-guides, handbooks, and the media.
- Cooperate with high schools to organise conservation classes as an extra-curricular activity. Working with other national parks to provide conservation activities for locals in suffer zones and surrounding areas of the parks.

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, we used the logo of The Rufford Foundation in all our products, including the guidebook, lectures, project information sheets etc. (shown in attached files with this report)
- In fact, we plan to public a paper in a journal after the project. The manuscript is being composed.

11. Any other comments?

First of all, our thanks to the Rufford Small Grants foundation to support us to conduct this interesting and meaningful project. We believe that we did contribute our effort, even very small, to the natural conservation in Vietnam. Through this project, we would like to share our experience of

how engaging urban school students into conservation activities in developing countries where natural ecosystems are seriously affected by ambitious goals of economic growth.

Ms Raymond, the best project coordinator we have ever met. Thank you so much for your support and management. We hope to have chance to make contact you in our future projects.

Many people contributed to success of the project. It is very happy for us to have you in the team, Ms Pham Thi Hong, Ms Dinh Thi Hai Yen, Mr Dinh Chung Kien, Ms Clemensy Harris and Mr Alexander Benecke. We hope to see you in next cooperation. We already received great support from the staff of Tam Dao National Park and some others during the project. We also were supported by teachers and students' parents in Biology Class grade 11, Nguyen Hue High School for Gifted Students, Ha Noi. Their attendance made the project running smoothly and effectively. The students, our main audience, who joined the project enthusiastically and many of them might become great natural explorers in the future. We would like to express our thanks for all of the great support.

Finally, we were happy to receive equipment help from IDEAWILD foundation, a good digital camera.