

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	Nana Gratiashvili
Project title	Investigation of an endemic, threatened ant species <i>Myrmoxenus tamarae</i> and education of local people for ant conservation in Borjomi district (Samtskhe-Javakheti region, Georgia).
RSG reference	9507-1
Reporting period	May 2012 - May-2013
Amount of grant	£4010
Your email address	nanagratiashvili@yahoo.com
Date of this report	14.06.2013

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
1. <i>M.tamarae</i> as an indicator for the assessment of forest conditions in burned and unburned sites in the Lesser Caucasus			+	<i>M.tamarae</i> was used as an indicator in the burned and unburned forests. We could assess conditions in the burned forests and can say that renovation has started. Main type of vegetation is present with herbaceous plants, though bushy plants also occur.
2. Seminars in the public schools of Borjomi region			+	During the seminars we educated school pupils about the biodiversity in general, interesting colony structure and life cycle of social parasitic, slave making ant <i>M.tamarae</i> , its importance as a bioindicator and about the protection of the ants from the influence of anthropogenic factors.
3. Excursions for local school pupils in Samtskhe-Javavakheti region			+	During the excursions local school pupils were included in the field investigations to study methodology of ant collection, sorting and mounting. Such excursions provoked interest in the biological disciplines and study principles for correct management and conservation of the threatened species and their habitats.
4. Habitat of <i>M.tamarae</i> and its distribution in the Lesser Caucasus			+	Habitat of <i>M.tamarae</i> was investigated. Main type of vegetation cover is <i>Pineta xeroherbosa</i> . Dominant tree species is Caucasian pine (<i>Pinus kochiana</i>) and subdominant is Caucasian spruce (<i>Picea orientalis</i>). Except in Daba, <i>M.tamarae</i> was not found in any other places.
5. Conservation status of <i>M.tamarae</i> by IUCN categories and criteria			+	As <i>M.tamarae</i> was not found any other places except Daba, which comprises only several hundred m ² of territory and a significant part of this village was burned during the war in 2008. Its current conservation status (VU D2) must be changed to Critically Endangered.
6. Publishing and distributing the booklets in local people			+	Booklets about ecology, interesting life history and conservation of the slave making ant <i>M.tamarae</i> were published and distributed in local schools of Borgomi region. The booklets contained also photos observing field investigations.

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

During the project no unforeseen difficulties arose.

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

1. Habitat and distribution of the social parasitic, slave making ant *Myrmoxenus tamarae* was investigated. Main type of vegetation cover is *Pineta xeroherbosa*. Dominant tree species is Caucasian pine (*Pinus kochiana*) and subdominant is Caucasian spruce (*Picea orientalis*). *M. tamarae* was searched for in similar habitats of the Lesser Caucasus, but its distribution is still considered only to be Daba in the Borgomi region.
2. Seminars and excursions which were held during the project in the local public schools and provoked pupils interest in the biological disciplines such as zoology, botany, conservation biology and ecology. This project can help them to choose the professions.
3. This project will help to decrease the level of the anthropogenic factor influence (pollution, logging and fire) on habitat. Based on the information from the seminars and field investigations, correct opinion will be formulated in the local people about the necessity of the endemic ant conservation and its role in the weakening of anthropogenic influence on the ant habitat in Borjomi region in the future. Besides, based on the data received from our investigations, it will be necessary to establish protected area close to Daba in Borjomi region in order to fulfill permanent monitoring of the local endemic ant.

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

Seminars and field trips have made good influence on the involvement of local school pupils. From the seminars they got more information about the biodiversity, importance and defence of the ants in general and especially social parasitic ants, which are often listed in the IUCN Red List and always need to be protected not to become extinct.

5. Are there any plans to continue this work?

This project manifested high level of interest and approval in school pupils and teachers, also in local people. They expressed activity during the field investigations, after the seminars asked a lot of questions. I'd like to write another project proposal which will continue this work but in another part of Georgia.

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

I plan to make a presentation about my work with my colleagues. Besides, we will prepare publications about ecology, colony structure and behaviour of the slave making ant *Myrmoxenus tamarae* and it will help to share information with the other colleagues.

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

RSG was used during 1 year, from 1st May of 2012 to 31st May of 2013. This period was corresponding with the actual length of project.

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
GPS	200	200		
One aspirator	20	15	5	It was £5 cheaper
Eppendorf tubes – 200 units	20	20		
Insect pins – 10 packs (1000 pins)	30	30		
Five entomological boxes	65	65		
Alcohol – 5 l	15	15		
Food for pupils during field excursions	360	360		
Travel expenses	200	210	10	Cost for travelling was increased a little
Minivan rent for field excursions	500	500		
Fuel for local travel	120	120		
Lodging	1500	1500		
Per diem	600	600		
One block of printing paper	8	8		
One block paper	5	5		
90 block-notes for pupils	90	90		
90 pens for pupils	27	22	5	Price for 90 pens was £5 less
Booklet publishing	250	250		
Total	4010	4010		

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

For the future investigation the following topics should be fulfilled:

1. To investigate ants of *Formica rufa* group, which are good bioindicators of the environmental changes and all of them are listed in IUCN Red List. They can be used in biological control as they are good bio-control agents and attack to pest insect larvae of coniferous trees.
2. To educate local school pupils and inhabitants of Abastumani (South part of Georgia) about the importance of the ants of *Formica rufa* group and to find the ways for their conservation.

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?

I used the RSGF logo for every seminar in each public school. This logo always was on the front slides of our presentations. Besides, it was used in the published booklets, which were distributed in the public schools of Borjomi region.

11. Any other comments?

I with my co-workers would like to say many thanks to RSGF, which gave us opportunity to accomplish our goals in Borgomi Region, to educate local population, stimulate school pupils to choose correct profession and to conduct various activities for threatened ant conservation.