

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	Arsen Gasparyan
Project title	Assessment of the Epiphytic Lichen Biota and its Conservation Needs in the "Dilijan" National Park, Armenia
RSG reference	11329-1
Reporting period	01/09/2013 – 16/12/2013
Amount of grant	£5988
Your email address	gasparyan.arsen@yahoo.com
Date of this report	16/12/2013

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
Preparation of the checklist of epiphytic lichen species			√	The first list of epiphytic lichen species distributed in the "Dilijan" National Park has been prepared and will be published.
The evaluation of threats, development of the measures for epiphytic lichens' conservation		√		The suggestion for outlined epiphytic lichen species and key habitats conservation in the "Dilijan" National Park has been prepared and will be suggested to include to the new conservation management plan of the park. In case of inclusion, this will be the first step for lichen conservation in Nature Specially Protected Areas of Armenia.
Creation of the lichenological online resources			√	The first website about lichen diversity and lichenology of Armenia has been created (www.lichenology.am). The several online resources have been translated to Armenian. The list of Armenian lichens' common names in Armenian language has been prepared and will be published soon.
Implementation of the environmental education programme for local communities of "Dilijan" National Park			√	The educational seminars for locals, especially for youth were organized in the Dilijan. The 1000 booklets and 500 calendars about the lichens distributed among the stakeholders.

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

The website "Armenian Lichens – Online Lichenology of Armenia" was crashed by the hackers. It took time and expenses to reconstruct the website and to add the content. The security measures have been increased to avoid such a problem later.

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

The comprehensive data on epiphytic lichen diversity of the "Dilijan" National Park has been obtained. As a result of our studies 81 species of epiphytic lichens has been described for the National Park. We have prepared the list of epiphytic lichens of the Park. The 12 epiphytic lichen species found on the territory of the Park are new lichen records for Republic of Armenia. 12 plots

50 x 50 m experimental plots have been established and lichen species from the all plots have been collected and identified. The required data has been obtained for further long-term monitoring of epiphytic lichen diversity and impact of the management in various zones of protection. The overall data will be published in the peer reviewed scientific journal. The training of two students involved as assistants in the field trips and other activities of the project is also important achievement of the project.

Together with the list of species, we identified and evaluated the threats of the key habitats for epiphytic lichens as well as developing the draft recommendations for conservation in the park. The recommendations will be submitted to the Ministry of the Nature Protection. The recommendations are aimed to share the knowledge with the authorities and to set lichen species conservation priorities in the national park's management plan.

The first online lichenological resources have been created. The bilingual website (Armenian and English) "Armenian Lichens – Online Lichenology of Armenia" shares educational and research information about lichens for specialists, amateurs and general public. The list of Armenian vernacular names for lichens occurring in Armenia has been created and will be published soon. The volunteers from Young Biologists Association NGO have been involved in the various activities of the project (e.g. translation lichenological internet resources to Armenian). Environmental education program raised awareness of local people as well as students, etc. The educational seminars for youth about lichens were organized in the Dilijan. The educational materials were distributed.

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

We think that the assessment of social-economic problems and the role of forest products for the local communities are important for planning and implementation of successful conservation action. The communication with local people has been organised via seminars as well as personal contacts during the field trips. During the meetings the importance of lichen conservation for the forest ecosystems was presented and some issues (illegal logging etc.) were discussed.

5. Are there any plans to continue this work?

Currently, I study the collected specimens to finalise my research data for publication. I plan to continue the research on epiphytic lichens not only in the "Dilijan" National Park but also other forests with emphasis to the Nature Specially Protected Areas of the country. The "Dilijan" National Park has necessary pre-conditions for ecotourism. I am going to promote development and application of obtained research data for ecotourism activities in the park. It is also important to continue monitoring of epiphytic lichen diversity to understand influence of the anthropogenic factor and effectiveness of current zoning of protection in the park as well as environmental management.

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

The two manuscripts on epiphytic lichen diversity of the "Dilijan" National Park and about vernacular names of Armenian lichens will be submitted for publication in peer-reviewed journal (ongoing). The data will also be available on the website "Online lichenology of Armenia" – www.lichenology.am.

The data provided to the Ministry of Nature Protection could also be used in National Report for Convention of Biological Diversity.

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

The project duration was 1 year. The RSG mainly used during first stage of the project for the field work, equipping, printing materials etc. The period was enough for fieldwork, educational and awareness raising activities etc. The few additional months were necessary to complete evaluation of the data with colleagues from abroad.

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.

Local exchange rate: £1 = 650 Armenian Dram (AMD)

Item	Budgeted Amount	Actual Amount	Difference	Comments
Local Travel	2576	2430	+146	
Equipment	2000	1980	+20	
Per Diem (food)	672	550	+122	
Environmental education program	240	320	-80	
Chemicals for identification	100	80	+20	
Website design	400	600	-200	The website has been attacked by hackers. I saved some money from travel expenses and per diem sections for recovering.
Total	5988	5960	28 (bank charges)	

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

The initiation of new studies of lichen diversity and creation of the various lichenological has been considerable effort to expand the knowledge and the awareness on conservation issues of the epiphytic lichens in Armenia. The following concepts are prioritised for me as next steps: the continuation of the research, and its practical application such as development of red list of threatened species and undertaken of direct conservation activities as well as application of interdisciplinary approaches for involving the lichens in the priorities of on-site biodiversity conservation strategies (e.g. ecotourism development etc.).

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 in the printing materials such as 1000 educational booklets and 500 calendars, which are also available here (http://lichenology.am/?page_id=31). The logo is posted on the first page of the website “Armenian Lichens - Online Lichenology of Armenia” (www.lichenology.am).

11. Any other comments?

This project was valuable contribution to the understanding of the lichen diversity of Armenia. I am very grateful to the Rufford Small Grants Foundation for supporting the studies of lichen flora in the “Dilijan” National Park.