

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	Erna Karalija
Project title	Evaluation and promotion of endemic plant life of Sarajevo region through research excursions
RSG reference	21246-B
Reporting period	March, 2017 - February, 2018
Amount of grant	£9750
Your email address	erna.karalija@gmail.com
Date of this report	February, 2018

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
Evaluation of biodiversity on 6 mountains				Only for Visočica Mt this was not possible, due to extremely high temperatures during July, vegetation was dried out.
Student enrolment in research excursions				All excursions included several students and pupils.
Enrolment of students in public awareness activities				Students actively participated in campaigns for raising public awareness through the public events regarding Forest Day (21st March 2017), Fascination of Plants Day (18th May 2017), The International Day for Biological Diversity (22nd May 2017), World Environment Day (5th May 2017), International Mountain Day (11th December 2017) and for European Researchers Night.
Enrolment of students and pupils in workshops				Workshop "Plant conservation through plant cloning - practical course" was a huge success.
Collaboration with BIO.LOG and other NGOs				Collaboration was present in every planned activity.

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

During the period of field excursions on several occasions we had to postpone trips due to very unstable weather with high temperatures during one week and extreme drop in temperatures the next week. Nevertheless, 100% of planned field excursions were completed. Regarding biodiversity analysis during field trips we had problems for Visočica, due to high temperatures in July 2017 (42 °C on average), all vegetation was dried out. As a compensation for unsuccessful field excursions students were included in public awareness campaign during European Researchers Night and in collaboration with BIO.LOG we shared a booth and organised a small contest for the visitors.

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

1. During our research excursions students collected plant material, and a herbarium was created which is deposited in laboratory for research and protection of plant resources. Beside the herbarium, students created also small brochure with basic information regarding collected plants including original pictures (from research excursions), data regarding their locality and level of endangerment.
2. For public awareness campaign one of the activities was a contest for best plant photo in collaboration with Faculty of Sciences. Large number of students participated and best three photos were rewarded. For the best 10 photos, the faculty gave permission to display them at the main entrance. We are proud to say that information about the contest was available in all parts of Bosnia, and one of the participants was from Bihać, while one of the winners was from Banja Luka. This was especially important for us since this contest was intended to bring people together independently of their ethnicity.
3. Workshop "Plant conservation through plant cloning - practical course" was a huge success. Students participated in the creation of educational materials for the workshop as well as the organisation of the workshop itself. Workshop was oriented toward high school students to give them basic knowledge regarding plants biodiversity and importance of plant conservation. One solution for endemic plant conservation being plant cloning. During the workshop two lectures regarding biodiversity were held, and a practical course for basic plant cloning steps were demonstrated. Practical work of high school students were overseen by biology students. After the workshop we received huge amount of positive feedback and interest for the next year. Beside the interest of high school students we were surprised by the interest of general public (guys who printed out the propaganda material were interested in participation) and gave us an idea of including general public next time.

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

Through education of students and pupils enrolled within this project we aim to raise awareness within young generation regarding the importance of plant protection and conservation. Through them we aim to influence also general public. Since mountain hiking is getting more and more popular we shared ours propaganda material with mountaineering societies (Such as VEDRO) for educational purposes.

5. Are there any plans to continue this work?

We would love to continue our work regarding education and raising awareness for plant conservation through practical courses/workshops and research excursion. This method showed us a great improvement of children's understanding the

importance of conservation through two step process: firstly field trip to establish anthropogenic pressures and second step practical course how to minimise the anthropogenic pressure and how to contribute to plant conservation. Our further project activities would include collaboration with mountaineering societies.

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

All our results are available in our Facebook page and will be available also on BIO.LOG web page. All propaganda material was distributed to mountaineering societies as well as several NGOs. Media coverage was ensured during all activities of the 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?

Proposed timescale was from March 2017 till February 2018 which fits to the actual length of the project. Individual activities were sometimes pushed to next month or finished earlier depending mainly upon field conditions. This was evident the most during Field trip excursions. Overall project was finished in planned time interval.

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
Car rental	1500	1800	-300	In several occasions due to weather condition field trips were repeated and rest of the money for car rental was covered personally and using unused money from other categories
Fuel expenses	2750	3300	-550	As planned part of the project expenses was covered by personal contribution (250 GBP) rest of the excess expenses was covered personally and using unused money from other categories
Accommodation and food for field research	2250	2500	-250	As planned part of the project expenses was covered by personal contribution
Botanical supplies (paper for plant herbarium, herbarium presses, and other	500	600	-100	As planned part of the project expenses was covered by personal contribution

supplies)				
Leaflet designing and printing	1250	1200	+50	Due to change in pricing there was a difference in the budget
Other propaganda material (brochures, posters)	1000	900	+100	Due to change in pricing there was a difference in the budget
Communication and postage costs	0	100	-100	As planned this part of the project expenses was covered by personal contribution
Silica gel for seed storage	0	200	-200	As planned this part of the project expenses was covered by personal contribution
Projector	500	500	0	This plant of the budget was as planned

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

Considering the feedback that we got during our project public awareness between young people is easily achieved through two step process. First: field trip to identify problems, to explore nature, to identify and collect plants, and to identify anthropogenic pressures. Second step was educational lectures incorporated into practical courses. The workshop regarding plant cloning for plant conservation was the most rewarding part of the project. Students were excited and after the workshop we gained a huge amount of positive feedback. All participants were asking is this a yearly workshop and can they participate again, due to such a positive feedback we would organize the workshop in different cities, in schools and Universities since in Bosnia plant culture in context of plant conservation is not something that they have access to. Laboratory for plant physiology in Sarajevo is one of few places where this kind of research is taking place. In collaboration with universities in other cities such as Zenica, Bihać, Mostar, Banja Luka etc. we would organize field trips and workshops to include more students and pupils. Through such two-step process we are sure that raising awareness regarding plant conservation would be most effective.

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?

During the project we used Rufford logo in all our materials. We emphasised in any media related materials/talks the importance of RF for us and their role in all our activities.

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

Erna Karalija, PhD. - Project Leader managing finances; team leading, field trip organisation, educational lectures, workshop organisation and supervision of all activities.

Lejla Smajlagic - student representative of DSB, third year student of Ecology, participated in all field excursions, educational lectures and workshop

Adis Delić - student representative, third year student of Ecology, social media updates, participated in field excursions.

12. Any other comments?

This project got great feedback from students, and since day one students were very interested in participating in every aspect of the project. For all activities we included several students, and we were very satisfied with their work. I must emphasise that their work during the workshop was incredible. They were supervising pupils during practical work and everything went so smooth. After the workshop pupils were allowed to take home endemic plants that they micropropagated during the course and we got their feedback that they are still growing. We will monitor the progress of their plants also in the next few months to see if they will succeed to acclimatise plants in spring. We also plan to publish the results in a journal published by Natural Museum in B&H, this has a special meaning for us, since a large number of plants collected during field trips were firstly described after Beck collected them in same area.

