

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	Adi Vesnic
Project title	“Conservation of wood ants (<i>Formica</i> spp.) in Bosnia-Herzegovina”
RSG reference	15167-1
Reporting period	12 months
Amount of grant	5944£
Your email address	vesnic.adi@gmail.com
Date of this report	11. 06. 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 excursions on Mt. Trebevic and Ozren			✓	In 2014 there were many rainy days, and it made field research more difficult than anticipated.
Laboratory work, analysis of data.			✓	
Leaflet preparation and printing 2000 leaflets.			✓	Made 3000 leaflets.
Presentation of the project's results at Faculty of Science and Mathematics at the University of Sarajevo.			✓	Originally I had planned to finish presentation for all semesters in one month. But it took me three months due problems with reservations of lecture rooms.
Project presentation at elementary school.		✓		First presentation at elementary school was not quite adapted to the level of children attending it and some participants seemed to be bored and they were not interested in importance of protected areas for woodland conservation. Still they were impressed by large ant pictures and the fact that ants have hairs. Later presentations for elementary schools were more suited for the children and the participants fully engaged with them.
Project presentation at high school.			✓	I chose students from final high school years to present the project results to. I also visited high schools that have natural science orientation programme.
Project presentation to hikers.	✓	✓		Oral project presentation to mountaineering associations in Canton Sarajevo was not submitted. The main problem was that associations were not interested in oral presentation. I handed out leaflets and posters.
Social media campaign.			✓	Facebook group Ants of Bosnia and Herzegovina https://www.facebook.com/groups/1434904570100324/ has 156 members.

Sending data to the relevant governmental and non-governmental organizations.			✓	Scientific paper was submitted. Popular science paper at "Fondeko" journal was published. Contact between NGO BIO.LOG and GO Protected areas of Sarajevo Canton was established. Agency will support wood ant exploration in protected areas.
Sending data to IUCN.	✓			Due to lack of knowledge about procedures I could not get in touch with the IUCN.

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

Did not have any unforeseen difficulties, few minor problems with field equipment were solved; this did not have any effects on the Project realisation. Also we had many rainy days, it made field research more difficult.

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

- a) First statistical description of *Formica rufa* and *F. polyctena* local populations in Bosnia-Herzegovina. We obtained data on the distribution and the number of colonies in two mountains near Sarajevo. This data provides a baseline for further investigations, and data comparison with other localities.
- b) Public presentations of the Project were held at Faculty, high schools and elementary schools in Canton Sarajevo. We raised awareness about the importance of conifer woodlands as habitats in local communities. We also concluded that people are not educated enough about ecological importance of conifer woodlands and their threat in Bosnia-Herzegovina. People are not aware of spatial isolation of conifer woodlands in south-east Dinaric Alps and in Bosnia-Herzegovina.
- c) The most important achievement in this Project is linking the Government institutions "Protected areas of Sarajevo Canton" with NGO BIO.LOG association and the continuation of studies of the wood ants in the protected area of the Sarajevo Canton. We created the conditions for long-term monitoring of wood ants populations and other insects important for Natura 2000 areas.

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

We did not have involvement of local communities. Investigated sites with wood ants were not close to urban centre. Local rural community was not interested in ant investigation. During field investigations local people gave us some information about the existence of large wood ants colonies.

5. Are there any plans to continue this work?

Within the Protected areas of Sarajevo Canton monitoring and protection of wood ants will be investigated. Further research should be extended to the southeast Dinarides of Bosnia-Herzegovina in order to get broader view on variation and population density of wood ants. Further activities should also include advocating for the protection of coniferous forests due which are declining due

to bark beetle infestation, illegal and legal deforestation and climate change. In the future we should present all ecosystem services of conifer woodlands. For example in 2014 we had an incident that hunters shot *Lynx lynx* and put pictures on social networks while claiming that they were not aware of its protected status. This may be the extreme example of uneducated people's actions, but these and similar situations are very common in Bosnia.

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

Through this project I established a group on social media and I am planning to present further information through social media campaign. Also data gathered through the monitoring programme will be published in scientific journals and science popular magazines. It will also be possible to present natural values of wood ants and their habitats through posters set in the protected areas of Sarajevo Canton.

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

The Grant was used from May 2014, until June 2015. From May till end of August I spent 70% of budget for equipment and field trips. In October and December I spent additional part of budget on leaflet and posters. I finished activities with printing promotional material and outdoor posters (info tables) that should be placed in investigated area.

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
Travel expense				
I field excursion in April	48,67	48,67	0	
II field excursion in May	48,67	48,67	0	
III field excursion in June	48,67	48,67	0	
IV field excursion in July	48,67	48,67	0	
V field excursion in August	48,67	48,67	0	
VI field excursion in September	48,67	48,67	0	
TOTAL	292,02	292,02	0	
Field equipment expenses				
GPS receiver	545,44	540	5,44	
Digital camera with macro objective and additional flashlight	1594,35	1700	-105,65	*
Temperature relative humidity Data Logger	587,39	800	-212,61	*
Tubes	31,47	31,47	0	
Etil-alcohol absolute	220,27	120	100,27	
Logs and equipment for ant colony marking	52,45	52,45	0	

Measuring devices	83,91	83,91	0
Mountaineering equipment	419,57	419,57	0
TOTAL	3534,84	3747,4	-212,56
Promotional material	1258,7	1300	-41,3
Leaflet preparation	41,96	40	1,96
Leaflet print	419,57	300	119,57
Laptop	419,57	400	19,57
TOTAL	2139,79	2040	99,79
	0	0	0
TOTAL ALL	5966,65	6079,42	-112,77

** Electronic equipment was more expensive in Bosnia-Herzegovina then in Croatia. I was using Croatian sites for prices estimation.*

Additional costs not in the Project budget included for laboratory work			150,00
Entomological needles, cardboard triangles			
Bank costs			11,07

The rate of conversion to Pounds Sterling used in this project is taken from Raiffeisen Bank BiH (28th.02.2014: <https://www.raiffeisenbank.ba/> 1 BAM = 0,41956604284189 GBP

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

Further activities should go in two directions:

1. collecting scientific data in order to prove the vulnerability of conifer forests, that are primary habitats for wood ants,
2. large scale NGO action threw social media in order to inform and educate local communities about importance of conifer woodlands in their community for well-being.

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 RSGF logo on promotional material, leaflets and info tables. Reporter from the National TV show interest for interview, but this was not realised.

11. Any other comments?

I would like to thank to RSG Foundation and to the friendly and professional staff for help and understanding.

Annex 1 – Project Pictures



Searching for the wood ant larvae.



Formica rufa collecting caterpillar as food.



On the ant hill of *Formica rufa*.



A host species, workers of *Formica fusca*.



Formica polycтена workers.



Upper forest border on Mt. Ozren.



Anthills of *Formica rufa* on Mt. Trebevic.