

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 | Olivera Stamenković |
| Project title | Establishing conservation management of salt marshes in Serbia based on monitoring of macroinvertebrate community |
| RSG reference | 18197-1 |
| Reporting period | October 2015-January 2017 |
| Amount of grant | £4533 |
| Your email address | olivera.stamenkovic89@gmail.com |
| Date of this report | February 27, 2017 |

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 |
|---|--------------|--------------------|----------------|--|
| Taxonomic list | | | | Most of the sampled individuals were not determined to the species level. Some groups of organisms due to the complexity of their determination and life stages in which they were sampled are determined only to the family or order level. In the next period we will work on further determination of the groups, to the species level. |
| Detecting rare and endangered species of macroinvertebrates | | | | We expect to form a list after we complete determination. |
| Characterisation of ecological conditions at salt marshes | | | | In addition to sampling macroinvertebrates, we measured the levels of selected physical and chemical parameters of water, at all sites: temperature, turbidity, pH value, concentration of dissolved oxygen, concentration of sulphate and chlorides and total hardness. By combining these values with data about diversity and abundance of macroinvertebrates we could obtain picture about state of the art of these ecosystems. |
| Education of public about the importance of salt marshes | | | | An information leaflet and calendar with our own photographs of studied sites and accompanying text on each site have been prepared with the aim to inform and educate public. For this purpose we created website |

| | | | |
|---|--|--|---|
| | | | with photo gallery of the investigated localities and Facebook page. Lectures were held at primary and secondary schools in the city of Niš and its vicinity, as well as to local community's members. Also we failed to include media, as we wanted to, the internet campaign (our promotional website) and lectures provided to be very successful. People positively received suggestions for conservation of salt marshes and children and teenagers showed great interest in this topic. |
| Involving students and researchers in investigation | | | Since the beginning of investigation, volunteers from our Department and Biological Society "Dr Sava Petrović" were helping us in the field and laboratory work as well as in the promotional activities. As a part of project activities we organised a course for identifying the most common groups of macroinvertebrates. During the project implementation four colleagues joined us in the field work (master and PhD students from the same Department) and two of them officially became members of the team. |

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

Due to moving to another city in January, 2016, one of the team members, Aleksandar Rakić, had to leave the team, but the remaining members of the team were successfully continued field work. After few months the team was joined by Aca Đurđević and Dimitrija Savić who has assumed his duties.

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

a) Taxonomic list: 10 groups of macroinvertebrates were recorded at the studied sites: Gastropoda, Crustacea (Amphipoda, Branchiopoda), Oligochaeta, Coleoptera, Diptera, Heteroptera, Odonata, Ephemeroptera, Plecoptera, Trichoptera. Insects from orders Coleoptera and Diptera (Chironomidae and Ceratopogonidae) were the most represented (found at all localities) as well as order Heteroptera which was not found only at Slano kopovo. Greater diversity of groups was recorded at salt marshes at southern part of the country. Lower diversity at salt marshes in Vojvodina Province is probably a result of extreme conditions in these habitats (higher concentration of sulphates and chlorides was measured at these localities).

b) Education of public: We managed to draw attention of public about the importance of these habitats, especially at south-eastern part of the country (the city of Niš and nearby villages) where these types of habitats are scarce.

c) Building a team that will continue hydrobiological investigation of salt marshes: We involved colleagues from Department of Biology in the realization of the project and manage to arouse interest of students in Hydrobiology.

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

Local villagers mostly were helping us in the field to find water bodies, and in the end of the research they were involved through educational lectures in four local communities. The largest response of the locals was in the village Bresničić, where people were encouraged to remove a small dump near the investigated salt marsh and to turn to rural or ecotourism. People proposed their own ideas for the improvement of the locality, such as the construction of the bridge that would lead to the salt marsh as well as the construction of informative board.

5. Are there any plans to continue this work?

We plan to finish identification of sampled material and to publish our results in scientific papers. Also, we plan to continue the promotion of these habitats, especially in the south-eastern part of the country.

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

Our website contains the achieved results of promotional activities, and we will add new promotional and scientific results that need to be achieved (all publications etc.). At the end of the last year we sent our preliminary results to managers of protected areas, Institute for nature conservation of Serbia and to Ministry of agriculture and environmental protection of Serbia.

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

The largest part of the budget was spent for field work (travel cost, chemical regents) and other equipment during one year, and the rest part for calendars and promotion after the completion of the study. This fits with the planned duration of the project from 12 to 15 months.

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 |
|--------------------------------|-----------------|---------------|------------|---|
| Travelling cost for field work | 600 | 1075 | -475 | Because of changes of fuel price and £ exchange rate we spent more money for travel than we planned to. |
| Food cost | 576 | 403 | +173 | We could not precisely predict cost of food for a whole year, and we manage to save some money here for more expensive and better camera. |
| Kick net | 22 | 22 | 0 | |
| Neoprene suits | 340 | 340 | 0 | |
| GPS device | 141 | 141 | 0 | |
| Camera | 280 | 406 | -126 | We decided to buy more expensive camera from money that we saved from some other activities |

| | | | | |
|--|------|-------------|------|--|
| Chemical reagents | 1704 | 715 | +989 | We took a smaller number of samples than we firstly planned to, because most of the water bodies were small and without water during the summer. All extra money we spent on fuel and printing of calendars. |
| Data processing and project report preparation | 500 | 500 | 0 | |
| Printing of leaflets | 110 | 130 | -20 | We printed 2000 instead of 1000 units. Preparation of leaflets is also included in this price. |
| Printing of posters | 40 | 0 | +40 | We decided that printing of calendars would be more effective for education of public and more attractive for people than printing of posters. |
| Costs of website creation | 220 | 220 | 0 | |
| Printing of calendars | 0 | 464 | -464 | We add a difference from some other activities where we had extra money. |
| Boots | 0 | 34 | -34 | We add a difference from some other activities where we had extra money. |
| Travelling cost for promotion | 0 | 83 | -83 | The same as above mentioned: we add a difference from other items. |
| TOTAL | 4533 | 4533 | 0 | |

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

It is very important to continue promotion of salt marshes in cooperation with Institute for nature conservation of Serbia and local governments, as well as the other interested organisations. It would be good to set up some informative boards at investigated localities in the south-eastern part of the country and to visit few more salt marshes in southern Serbia.

Also it is important to finish identification of species, especially of Dipterian family Chironomidae and to publish results.

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?

We used The Rufford Foundation logo in every printed material during the project realisation (leaflets, calendars and certifications of attendance of summer course), our website, and every PowerPoint presentation prepared for lectures. Also, we always took a time at our presentations of project to public to say something about the Rufford Foundation.

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

12. Any other comments?

I just want to thank the Rufford Foundation for the trust. Funding of conservation activities in Serbia is much needed. This kind of support means a lot for the biologists in my country.