

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	Igor Popov
Project title	Fresh-water pearl mussels around Saint-Petersburg
RSG reference	
Reporting period	May, 2008 – August, 2009
Amount of grant	£4832
Your email address	igorioshapopov@mail.ru
Date of this report	September, 7. 2009

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. Discovery of the unknown pearl mussel populations			+	I have found all or almost all populations of pearl mussel of the Saint-Petersburg region (8). Most of them were not explored previously. General view of pearl mussel distribution and the condition of its populations was obtained.
2. Prevention of the disappearance of pearl mussel populations and activities on their restoration.		+		I succeeded in the measures on restoration of two mussel populations. These populations do not reproduce successfully over many years because of absence of salmon. I organized a release of salmon juveniles in the mussel congestions. Such a release was included in the activity of the Directorate of protected areas of Saint-Petersburg. Representatives of the Saint-Petersburg administration assisted the release. This event was translated by Russian TV (including my interview). Three other populations need conservation measures (restoration of river bed, removal of the obstacles for fish migration). Such activities are impossible in a framework of a small pilot project.
3. Receiving the important information about salmon and trout.		+		A list of salmon and trout rivers of the Saint-Petersburg region was made (about 150 rivers). The main part of them was not explored in respect to fishes and mussels. The base for further work on freshwater biodiversity was obtained.
				Since the looking for pearl mussels required the careful study of the river bottom in the rapids, the interesting observations on other water inhabitants were conducted: salmon fries in the redd; spawning of lampreys; colonies of the <i>Unio crassus</i> (the mollusk, which is considered as a protected species in Europe, while in Russia it was neither explored, nor protected).

				<p>The research on pearl mussels raised a problem of the protection of specific habitats – the rapids of pure rivers. This habitat demonstrates a concentration of the freshwater biodiversity. However any specific action on their protection was undertaken in Russia. In the Saint-Petersburg region only one small sanctuary exists, where these habitats are protected. The project fulfillment provided the base for the filling this gap in the nature protection activities.</p>
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2. Please explain any unforeseen difficulties that arose during the project and how these were tackled (if relevant).

The salmon and trout rivers (i.e. the rivers where the presence of pearl mussel was probable) turned out to be more numerous (about 150 instead of several tens), that is why I had to conduct more field work, than I have planned.

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

- In a vast territory the pearl mussel populations were described for the first time. Eight populations were found, only one of them was explored previously (about 20 years ago). It was established that four populations are very vulnerable and scanty, one is relatively numerous, but still vulnerable, and three populations exist steadily and probably could be used as donors for the re-acclimatization. A small “spot” with extremely high concentration of pear mussels was found (40,000 individuals, about 1000 per 1 m²). Since pearl mussel is one of the most vulnerable animal species, such information is very important.
- For the first time in the north-west Russia the problem of the protections of pearl mussel and its habitat was raised. Publications, presentations, and appearances in television on this topic were performed.
- For the first time in Russia the special actions, devoted directly to the pearl mussel protection and restoration, were performed. The measures on the restoration of two populations were introduced into practice of the Directorate of the protected area of Saint-Petersburg.

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

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5. Are there any plans to continue this work?

The plan for further activities is following:

- A detailed description of the discovered pearl mussel populations.
- Elaboration and realization of the plans on restoration of the vulnerable pearl mussel populations.
- The similar work in the neighbor Russian territories - mainly to the east to Saint-Petersburg. According to the archive sources there are some rivers, where freshwater pearl was excavated more than 100 years ago. They were never explored by scientists.

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

Some results were already presented to others:

- Presentation in the international workshop “Methods of restoration of pearl mussel population” (Vienna, September 29-30, 2008)
- Presentation in the international conference “Conservation of freshwater pearl mussel *Margaritifera margaritifera* populations in Northern Europe”, Petrozavodsk, April, 28-30. Publication of the collection of papers in Russian and in English is planned in 2009 based on conference presentations.
- TV broadcast on mussel restoration, August, 2009.
- A program for pearl mussel restoration in one sanctuary was prepared for the Directorate of protected areas of Saint-Petersburg.

I plan to continue such activities.

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

The RSG funding was used from summer, 2008, to autumn, 2009, i.e. during two field seasons. Anticipated length of the project was shorter (one field season), but the rivers turned out to be more numerous, and the period of field work was prolonged.

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
Fuel for car	320		700	Since the rivers, which had to be explored, turned out to be more numerous, than it was expected, the number of trips was increased. The costs for transportation and fieldwork were increased. The poor quality of roads increased the costs for transportation and car service. The expenditure for motels was reduced. The motels were replaced for the lodging in tents. In addition to Dr. A. Ostrowsky some other scientists and volunteers were involved (Dmitry
Car service	200		1683	
Payments for motels	1120		-	
A food and other essential costs during expeditions	1680		2000	
Equipment	1512		400	

				Kovaliov, Alexey Plazovsky, and Maria Noskova). Expenditure for equipment was reduced. Wet suits were not bought. Rubber boots and overalls were used (the main part of the pearl mussel rivers turned out to be shallow, and there were no strong necessity in wet suits for the general description of mussel populations)
Bank fees for the money transfer	-	49	49	The requirement of the Russian bank ("Sberbank").
TOTAL	4832		4832	

Money was converted into Euro by Russian bank that is why I received 5948 Euro instead of 4832 pounds sterling. Local exchange rate was 44 rubles per 1 Euro. So, I have got 261712 rubles.

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

- Detailed research of the first discovered pearl mussel populations.
- Study of other rare freshwater species.
- Research of the river rapids as a specific habitat, which demonstrates a concentration of the freshwater biodiversity.

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?

All publications and conferences presentations were made with indication of RSGF support. RSGF logo will be indicated in the article "I. Popov, A. Ostrowsky, D. Kovaliov. Pearl mussel in the rivers flowing into Russian part of Gulf of Finland of Baltic Sea", which will be published in the collection of papers, based on the presentations of conference "Conservation of freshwater pearl mussel *Margaritifera margaritifera* populations in Northern Europe" (Petrozavodsk, 2009).

11. Any other comments?

Thank you!