

### **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	Anna Zavadskaya				
Project title	Designing a framework of ecotourism development in Kamchatka: detecting social and environmental conditions and limitations				
RSG reference	Application ID 8372-1				
Reporting period	September 2011				
Amount of grant	£6000				
Your email address	Anya.zavadskaya@gmail.com				
Date of this report	May 2012				



**1.** Please indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.

Objective	Not	Partially	Fully	Comments
	achieved	achieved	achieved	
To develop the			+	A series of detailed physico-geographical
framework of				and sociological surveys has been conducted
recreation monitoring,				in 2010 and 2011. As a result, the
based upon detailed				framework of integrated recreation
environmental				monitoring for a model protected area
assessment of the most				(Kronotsky State Natural Biosphere
fragile and impacted				Preserve) has been developed. The
ecosystems and				framework contains three main blocks (see
studying social				fig.4 below) and now only two of them are
limitations of				fully implemented into the practice of
ecotourism				decision making in the model area. The
development in some				block, concerning assessment of local values
unique ecosystems of				of the protected area and the benefits from
Kamchatka				ecotourism development for local
				communities is now only partly
				implemented into practise.
To conduct sociological		+		A large social survey has been conducted in
survey of local				summer 2011, but the number of filled out
communities, giving				questionnaires was less than we had
understanding of				expected. In spite of this fact we have
relationships between				received the picture of local inhabitants'
people and PAs and				attitude towards PAs of Kamchatka and the
ways of inhabitants'				information necessary for providing
involvement into				recommendations for future sustainable
nature conservation				ecotourism development in Kamchatka.

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

In general we have to conclude that we haven't met any difficulty, which could **seriously** influence the project running. But have to notice two of them.

First difficulty which we faced with was low response rates during the social survey of local communities. That was connected mainly with quite long questionnaire, developed by our team for the survey. As a result we had to cut several questions in order to shorten the questionnaire and to change the methods of the survey (instead of poll we used direct interviews in some settlements).

Another difficulty influenced the spatial distribution of filled out questionnaires was the transport cost. Because of very expensive flights to remote parts of Kamchatka (Koryakiya and Komandor Islands) we had to reduce the number of sites of sociological surveys of local communities. But that didn't prevent us to get the picture of local inhabitants' attitude towards PAs and ecotourism development and to achieve the second objective of the project.



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

**1.** Our research showed, that the values of natural recreational resources of Kamchatka are inextricably linked to their naturalness (**fig. 1**), but the most popular tourist objects have extremely fragile (geothermal, tundra and alpine) ecosystems.



Fig. 1. Main features of Kamchatka, attracting tourists (results of Kamchatka visitors' survey and survey of local guides)



Therefore nowadays park managers are faced with the problem of recreational impacts (**fig. 2**) displaying in the loss of vegetation, soil erosion, associated aesthetic degradation, and, finally, destruction of Red-listed species' habitats and unique geothermal and alpine ecosystems. The classification of recreational impacts upon ecosystems of Kamchatka's PAs, developed by us as a result of our ground studies, literature review and interviews with tourist guides, tourists and local communities, is presented on **fig. 3**.

The key outcome of the project is developing the science-based framework (**fig. 4**) and series of maps for sustainable tourism development in PAs of Kamchatka, which can provide both unique ecosystems' conservation and benefits for local communities.

Fig. 2. Number of PAs of Kamchatka, impacted by recreation



The model is implemented in Kronotsky State Natural Biosphere reserve for conservation of its internationally significant ecosystems while using them for ecotourism.

Fig. 3. Classification of recreational impacts upon ecosystems of Kamchatka's Pas (solid line – types of impact; dashed line – ecosystem's reaction on impact; red blocks - specific for thermal ecosystems of Kamchatka types of impact)





Fig. 4. Framework for ecotourism management in PAs, based on the principles of sustainable tourism (recreation management strategies: LAC – Limits of Acceptable Changes; ROS – Recreation Opportunity Spectrum; VERP – Visitor Experience and Resource Protection; VIM – Visitor Impact Management)

**2.** The most important part of the developed model is the methodology and spatial structure of resource monitoring block (see **fig. 4**) for unique geothermal ecosystems. This work is undertaken on example of the Valley of Geysers (Kronotsky State Natural Biosphere Reserve).

Important achievement of the research, conducted within the project, is finding indicative relationships between vegetation cover characteristics and soil temperature of thermal ecosystems (**fig. 5**). That allowed us to create the map of soil temperature distribution in the Valley of Geysers and then to demonstrate correlation between soil temperature of thermal ecosystems and their durability to recreational impacts (**fig. 6**). Based on results of detailed ground studies (two expeditions in July-August 2010-2011) the system of key sites for long-distance resource monitoring have been established in the area (**fig. 7**).

Our findings became the base for recommendation development and creating the system of long-term recreation monitoring in the area (**fig. 9**).







Fig. 6. Correlation between tolerance to recreational impacts and soil temperature in thermal ecosystems



Fig. 7. Spatial structure of resource recreational monitoring in the Valley of Geysers

**3**. Besides studying conditions and limitations of ecotourism, our project provided the designing of layout of the programme of recreation monitoring and a system of environmental and social indicators which can be easily adopted to specific PA, in compliance with its conditions, and preparing the book of monitoring for PAs staff with description of alternative methods of monitoring, eligible for the areas, lacking of scientific stuff.

The results of the project and developed recommendations (fig. 8) have been submitted to the appropriate authorities for inclusion into the plans of local and regional development.





Fig. 8. Prospects of sustainable ecotourism development in PAs of Kamchatka

Thus, the project provided both basic information for long-term conservation of unique landscapes and ecosystems in recreation sites (wilderness in particular) of Kamchatka and management tools, already implemented into practice in the model area.

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

Two groups of students from local universities have been trained in field environmental and sociological techniques and involved into the project running (16 persons in total).

The leader of the project also headed the research programme in the summer field camp for schoolchildren, organised by the Association of Protected Areas of Kamchatka in summer 2011. There we



had a chance to tell about the project and to give a series of lessons in natural ethics and behaviour during backcountry and any other travel to nature.

At the workshop for tourist guides of Kamchatka, organised by the Association of Protected Areas of Kamchatka, the head of the project gave presentation about it and had a talk devoted to recreation monitoring techniques, the necessity of such work and possibilities for tourists to be involved into this process.

We also had a chance to tell about the project to local authorities and communities during our interviews. Besides, based on results of sociological survey of local communities a series of recommendations for sustainable ecotourism development in PAs and adjacent areas have been developed to provide benefits for local communities and their involvement into conservation.

#### 5. Are there any plans to continue this work?

We are planning to continue the work, started during the project and this year together with specialist from Aldo Leopold Research Institute are going to conduct in-depth study of local values and attitudes of South-Kamchatka Sanctuary as a model PA for Kamchatka.

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

We have shared the results of the project in some of our scientific papers. The project has been presented in several conferences (fig. 9).



Fig. 9. Presenting the results of the project in IPY 2012 Montreal Conference

Besides, we gave 2 presentations for PAs staff and local authorities about the project. The main results of the project are represented in published book of monitoring for PAs staff.

It should be underlined that the results of the project go beyond the limits of Kamchatka region and can be adapted for other regions.

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

The RSG has been used for the period of June 2010 – September 2011 for the needs of the project. That coincides with actual length of the project.



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	Actual	Difference	Comments
	Amount	Amount		
Equipment	3900	3900	0	We didn't manage to buy Trimble GPS for collecting data and mapping as the prices for this equipment became higher than we expected. We rented the GPS and the released funds used for other necessary field equipment
Subsistence payments for local team	1500	1500	0	
Organisation of workshop	100	100	0	
Printing of book of monitoring	500	500	0	The printing of the book of monitoring cost £3200. Other sum has been paid from the funds of Conservation Leadership Project.
Organising research field camps	0	0	0	
Total	6000	6000	0	•

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

Besides, there is much work to do to make the results of the project really working for conservation of unique objects of Kamchatka and to implement the results into practice in different PAs of peninsula. The first steps in this direction could be a series of workshops for PAs stuff and local communities and authorities.

## 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?

Yes, we used the RSGF logo when produced the questionnaire and small calendars with children pictures of Kamchatka's nature. We distributed these calendars in PAs offices, among participants of sociological surveys, in schools. Besides, we put the RSGF logo to the book of monitoring and also used it our presentations and posters on the conferences and workshops.