

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	Tatiana lvkovich
Project title	The Matrilineal Killer Whale Society: The critical importance of females for population survival
RSG reference	9401-1
Reporting period	01.2012
Amount of grant	£5820
Your email address	Tatiana.ivkovich@gmail.com
Date of this report	09.02.2012



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

	Not	Partially	Fully	
Objective	achieved	achieved	achieved	Comments
To conserve killer		We		This project was an important start of
whale populations		achieved all		conservation work on a killer whale
of Eastern		the tasks		population and its key habitat. The
Kamchatka		planned for		specialty of this project was that It
		this 1-year		intensively involved local stakeholders
		project, but		and illuminated problems and scientific
		still killer		questions that should be dealt with for
		whale		effective conservation of the Avacha
		populations		Gulf marine habitat and killer whales.
		of Eastern		So, this objective can't be considered
		Kamchatka		to be fully achieved.
		cannot be		
		considered		
		to be fully		
		conserved.		
To promote public			We	We developed a good basis for the
awareness about			achieved	continuation and promotion of the
marine habitat			all the	work on public awareness regarding
degradation and			tasks	marine habitat degradation and
the importance of			planned	conservation problems. We got good
conservation			for this	feedback from publicity. In future we
planning			one-year	would like to engage more public
			project	groups and stakeholders.

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

The wooden kitchen built by scientists in our field camp was destroyed by local poachers for building materials for their temporary structures. We got an agreement with Kamchatka branch of Pacific Institute of Geography for free freight from Petropavlovsk-Kamchatsky to the field camp and back and we used this saved money mainly for ordering and transportation of a new field tent that will be also used in future for field studies instead of having to build new wooden houses each field season. We also had some small technical difficulties (for example, wheels for inflatable boat broke down during operation). But the experience and resourcefulness of our team members helped to cope with all the difficulties.

We also got an invitation from Kharkov State University in the Ukraine to hold a seminar on cetacean habitat conservation. But we didn't plan such travel expenses in the project budget and didn't have any other resources to go to Kharkov. So we have had to postpone holding the seminar in Kharkov State University.

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

(1) Our popularisation and communication activities attracted the attention of many people to the Avacha Gulf killer whale population and to the problems of marine habitat degradation. We received



feedback not only from the public but also from local scientists and representatives of local state institutes and non-governmental organisations. We gave an interview to the local radio station and published an article in the local paper and on-line (http://www.rybak.com.ru/40-11/index.htm) which also presented some of the results of our study. We created special pages in popular social media in Russian (http://vk.com/kamchatkaorca) and English (http://www.facebook.com/pages/Russian-Orcas/332791450080379?sk=wall) languages.

- (2) The scientific results showed that calf survival and birth rates varied between seasons. Female reproductive success also varied between individuals. We also found out that whale watching boats as well as scientific boats can influence the calf position in the group. While comparing the data from different seasons we discovered that killer whale behaviour has had significant changes following the depletion of an Atka mackerel spawning ground in Avacha Gulf. Our results were partly presented at the 12th International Scientific Conference "Conservation of Kamchatka's Biodiversity and Coastal Waters" that was held December 14-15, 2011 in the city of Petropavlovsk-Kamchatsky.
- (3) We presented educational seminars on cetacean habitat conservation problems for university students and for school students. These seminars included background information and training in conservation project planning and execution. We held three seminars at universities and one seminar at a school. Since then, we have received invitations from one school, one university and Moscow Zoological Museum to hold seminars in spring 2012.

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

We established contacts with the regional non-government organization "KamchatKAyaking Club" (http://kkclub.ru/company.phtml). The leaders of "KamchatKAyaking Club" organise kayaking expeditions to Avacha Gulf involving tourists from different Russian cities. During the expedition in July 2011 they visited our field camp and we told them about our work, killer whales and marine habitat of Avacha Gulf and its conservation problems. Tourists and expedition leaders were attracted to the information we gave them and enjoyed the multimedia we presented. Thus "KamchatKAyaking Club" benefitted including us in their expedition programme.

We also held a seminar at Kamchatka State University for students in the biology department. The head of the department was happy to invite us and organise the seminar. Unfortunately, there are few teachers presenting marine mammal biology and conservation in Kamchatka. Thus, the department of biology and local students benefitted from having new experiences and getting new information and practice in cetacean biology and conservation.

We also got the local community involved by publishing the popular article "When will killer whales leave Avacha Gulf" in the local paper *Kamchatka Fishermen*. The main target groups for this article were not only local fishermen but local tourism agencies that organize marine tours to Avacha Gulf. The local radio station benefitted by inviting us for an interview on the air. We spoke about killer whale biology and our studies in Avacha Gulf. We also pointed out the conservation problems related to killer whale habitat in Avacha Gulf and the anthropogenic influence on the local killer whale population. A lot of people were calling-in, asking questions and sharing their experiences of killer whale encounters.

Local marine biologists invited us to take part in a local conference devoted to the conservation of marine biodiversity. Besides participating in the conference, we discussed Avacha Gulf marine habitat conservation and poaching issues with marine biologists in the field. It appeared that some



of the scientists take a neutral position because of the high level of corruption in Russia and certain authorities' interest in poaching.

5. Are there any plans to continue this work?

We are planning to continue this work and broaden the objectives and methods.

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

Some of our results will be presented at the upcoming 26th European Cetacean Society (ECS) conference 2012. We are also preparing materials for the VII International Conference "Marine Mammals of the Holarctic" 2012 organized by the Russian Marine Mammal Council. We also plan to publish a paper in a peer-reviewed scientific journal. We will update the information on our webpages and website. We are also establishing contacts with local nature protection organizations for cooperating and sharing results with them.

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

The main part of RGS was used during the field season and the preceding organization period from May to September 2011. But some of the budget items were used from September to December to hold educational seminars. The project started in April 2011 and we are still working on data analysis and preparing the results for publishing. We are planning to finish by April 2012.

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.

£1 Sterling is approximately the equivalent of 48 Russian Rubles

Item	Budgeted Amount	Actual Amount	Difference	Comments
return tickets from Moscow to Petropavlovsk-Kamchatsky for 4 people	1832	1919	-87	
travel expenses from Petropavlovsk-Kamchatsky to field camp (Zeleny cape of Avacha Gulf) and back for 5 people	521	416	+105	
freight from Petropavlovsk- Kamchatsky to field camp (Zeleny cape of Avacha Gulf) and back	1458	0	+1458	We made an agreement with the Kamchatka branch of Pacific Institute of Geography for free freight from Petropavlovsk-Kamchatsky to the field camp and back on their research survey to Avacha Gulf
fuel (650 litres) and motor oil (5 litres)	438	438	0	



camp repair after winter storms	200	1610	-1410	The money saved was used for a new camp tent ordered and transported from St. Petersburg to Petropavlovsk-Kamchatsky instead of building a new wooden house. The previous house was destroyed by poachers.
camp supplies for 60 days for 5 people (food, gas, household stuff)	900	938	-38	
portable radio transmitter	198	178	+20	
float vests	57	105	-48	
printing materials for educational seminars	200	200	0	
5 mini DV tapes for video camera	16	16	0	
TOTAL	5820	5820	0	

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

Our results and those of our colleagues show that Avacha Gulf is an important feeding, resting and socialising area for the local resident killer whale population. It is important to conserve this habitat for killer whales and other marine species and to keep food resources healthy in the area. As we still don't know exactly which salmon species are hunted by killer whales in Kamchatka, we would like to study feeding habits and prey selection for the Avacha Gulf fish-eating resident killer whales. This information may also be important in terms of defining the role of different fish species in killer whale reproductive success. Thus, we need to study and better understand the dynamics of female reproductive success and birth and death rates in local killer whale community. For conserving habitat through zoning or other techniques of marine spatial planning, we need to study how killer whales and their prey use the area. We should also explore the development of ecological tourism in the region as a good alternative to intensive fishing and oil industry development.

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?

The RSGF logo was used mainly during educational seminars for university and school students. We also used the RSGF logo during presentations made for tourists at our study site.

11. Any other comments?

As one of the results of leading this project my plans for the future have developed comparing to those mentioned in the application. One long-term goal would be to create an effective marine protected area in Avacha Gulf to protect this unique habitat, which is situated very close to local administrative centre, city of Petropavlovsk-Kamchatsky. In future I hope this could be part of a larger network of marine protected areas in the Russian Far East which would include the critical habitat protection for killer whales.