

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	Georgiy Shakula
Project title	Menzbir marmot (<i>Marmota menzbieri</i>) survival in Kazakhstan
RSG reference	
Reporting period	June 2015-June 2016
Amount of grant	£5000
Your email address	georgiy.shakula@mail.ru
Date of this report	07/08/2016

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
The scientific data collection			Yes	I have collected the scientific data during two field seasons in 2015-2016. I enlarged my knowledge on the vertical and geographical distribution of the Menzbir marmot and was able to compare my data with previously published information.
The collected data proceeding and scientific article writing			Yes	Altogether with my colleagues and supervisor we wrote a scientific article for publishing in Russian Zoological Journal. The file is attached (in Russian).
The new data on behaviour collection via 10 camera traps			Yes	The camera trap images did show the interaction of Menzbir marmot with the predators as red fox and birds of prey.
The south border of Menzbir marmot distribution outlining		Yes		The main areas planned to visit along the southern edge of the area of the species were visited and colonies of Menzbir marmots were mapped.
The practical efforts to prevent illegal hunting together with the park rangers		Yes		In general, the situation of this year of my research looks much better than we have seen before. I believe that this is not so much the result of my and rangers efforts, but a reflection of the general improvement of the living standards of the people in Kazakhstan. Improvement of living conditions and increasing prosperity negate the demand for fur of marmots, from which caps were sewed previously in large quantities. Hunting marmots for meat has also become uneconomical: the cost of weapons and ammunition is high and not commensurate with the expended costs and efforts.

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

a. Because of the difficult and crossed terrain, access to certain areas of Karzhantau and Ugam ridges was hard and took more time than I had planned. The situation was complicated by the new regulation of the Government of Kazakhstan on the allocation of the border frontier zone with Uzbekistan, access to which is carried out only with special permits, and only allowed for military. Nevertheless, the main areas planned to visit along the southern edge of the distribution of the Menzbir marmot were visited and colonies of them were mapped.

b. I have used 10 camera-traps for my research in the beginning, but one of them was stolen.

c. The paradox lies in the fact that the local community is sparse and does not need the natural resources of the national park. The local population is self-satisfied with the resources outside the national park, in particular the pastures next to settlements. Natural resources of Sairam-Ugam National Park are of interest for the rich officials - owners of large herds of cows, horses and sheep. Hired staff acting as shepherds. Thus, permission to grazing in the park does not support the local community, and supports the top of the corrupt society. The people I meet in the mountains are just hired workers, not local residents, often uneducated and not interested in nature conservation. In addition, wage workers are changed every year. Having some understanding in the protection of marmots once, I have to start all the propaganda from the beginning on the next year - already with new people. In such circumstances, for me it is very important to have a support of the population of the village of Kaskasu and the joint programme with the staff of Sairam-Ugam National Park. Not being an employee of the park, I do not have the authority to draw up reports, to impose fines or confiscate poaching weapons.

Only as part of a patrol group of mountain rangers I have the authority. It should be noted that the protection of the park is sparse and is concentrated along the boundaries of the territory, where the maintenance of order in the recreational area need to be done. Raids in marmot habitats in the alpine zone are carried out 1-2 times a year. Knowing the schedule of these raids I coordinate my fieldwork with the ranger's departures to be involved in outreach work, seizure of guns, traps and even dogs. That is what I had in mind in my field visits planning.

d. I have planned to do design, verifying and defence of PhD dissertation in Kharkov State University / Ukraine. PhD Victor Tokarskiy is my supervisor. But due to political reasons, for security and because of strengthening of nationalism, I had to abandon the idea. In addition, new rules for the theses defence in Ukraine presuppose the existence of publications and public defence in Ukrainian, which I do not know. Since the main body of my thesis is practically written - it will be included as a chapter in the general monograph Marmots of Central Asia.

e). I was dreaming to share my results with colleagues on the 12th International Mammalogical Congress, Australia, 9th-14th July 2017, but was forced to abandon the idea because of the difficulties in obtaining a visa to Australia (I already have a negative experience) and with time constraints (so I lose my field season here), my

level of knowledge of spoken English, and financing. But I'm looking for opportunities to report on my findings on the other conferences, possible, at the local level.

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

a). I've got to attract attention to the Menzbir marmot in Kazakhstan, making the new information available. Conservation of species has improved in the Sairam-Ugam National Park.

b). Altogether with my supervisor and colleagues we wrote down a full article about the current status of Menzbir Marmot population in Kazakhstan. The article is attached (in Russian). The chapter "Menzbir Marmot" is generally written for the join book "Marmots of Central Asia" to be published in 2017.

c). Thanks to the project, I increased my knowledge and credibility in the field of marmots and became a leading Marmot expert in Kazakhstan.

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

On the second stage (2015-2015) of my Menzbir marmot project I have decided to concentrate my efforts on research programme. The outreach component was less than on the first stage (2013-2014). Nevertheless, two local volunteers assisted me during my field work for three seasons already, and I did hire two horses from them. They are happy to get extra money for that, they knew I am working with Rufford Small Grants funding.

5. Are there any plans to continue this work?

For sure I had to continue this work as a leading specialist in marmots in Kazakhstan

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

a. Publications. We have wrote a scientific article on the base of all the scientific data known about Menzbier marmot at the moment and published this one in the Russian Zoological Magazine. The article is in Russian. The title of the article is "Menzbir Marmot (Marmota menzbieri) Population Investigation History and Current Status in Karjantau range". It consists of 17 pages.

b. Conference. I am thinking about to be an organiser and host agency for the next (XII) International Conference on Marmots of experts of the former Soviet Union. The previous one held in Moscow in 2015. Next one is planned to take place in 2020.

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

Since the study of marmots like hibernating in winter animals is possible only in the warmer months I planned my project in the way to cover two field seasons: 2015-2016. This schedule was effective. Given the experience of the first two stages of the

project, I will plan activities of the Booster Grant in a similar manner. So I have to submit a grant proposal to the desired timing to start the field research when marmots are waking from hibernation. This is a good idea to plan activities and spends annually. I think one year is the best and proper length for such kind of the projects including field research, conservation actions and data processing.

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
Principal Investigator Salary: £240*12	1440	1440	0	As it was planned
Field Assistant Salary: £120*2 months*1 person	240	240	0	As it was planned
Horse hire: £5*60 days*1 horse	300	300	0	As it was planned
Per diem costs: £5*60 days*2 persons	600	600	0	As it was planned
Park entrance fees: £2*60 days*2 persons	240	240	0	As it was planned
Park research and filming license: £5*60 days*1 item	300	300	0	As it was planned
Spares and vehicle repair	14	14	0	As it was planned
Camera traps Bushnel with SD-cards: £280*5 items	1400	1400	0	As it was planned
Batteries for cameras:	156	200	+44	I bought the better quality batteries by the suggestion of my colleagues
Transportation/fuel: £0,4/ litre *0,12 litres/1 km*260 km*8 times	0	0	0	As it was planned
Office supplies	60	16	-44	I saved money from this item for batteries (more critical for project implementation)
Communications (Internet, mobile)	0	0	0	As it was planned
Bank transfer and exchange commission: 5%	250	250	0	As it was planned
Inflation rate: 10%	0	0	0	As it was planned
TOTAL	5000	5000	0	

The currency rate is 396,946 KZ tenge for £1 (to the date: 07/08/2016)

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

I have work out the Marmot survey and conservation programme. At least I have got a clear plan for 2017 field research, conservation efforts and publications. I am going to apply for RSGF for Booster Grant in late 2016. The next tasks are relevant for 2017:

- a. Behaviour survey via camera-traps as a field study innovation.
- b. With the mission to advance the conservation of animals through bioacoustics recording technology, every quarter www.wildlifeacoustics.com will be awarding up to \$5,000 of product-in-kind grants to biologists, researchers, conservationists who work for non-profit organisations. The Song Meter SM4 is now available through the grant programme and I am going to apply for it. The innovation will allow me to record the noise of two species of marmots as well as their hybrids for the species, subspecies and interspecies identification and prove the hybrids existence between Menzbir and red marmots.
- c. Monitoring and Menzbir marmot conservation in collaboration with Sayram-Ugam National Park rangers.
- d. Most of the time with the Booster Grant I plan to spend with post processing data accumulated by me and with the analysis of the available published literature. A large part of the planned work will be the analysis, editing and publication of manuscripts in the archives of the Aksu Zhabagly nature reserve and Sairam-Ugam National Park. I've already got permission for access to the archives of the Aksu-Zhabagly nature reserve and partly started this work. Work with manuscripts will be part of my volunteer contribution to the project to preserve the intellectual heritage of zoologists of Kazakhstan, initiated by the Institute of Zoology of the Academy of Sciences of Kazakhstan.
- e. My own results I plan to compile in a monograph "Marmots of Central Asia". This book will be written together with my co-workers - specialists in the three other species of marmots in the region and published in Germany in Lambert Academic Publishing, with whom I already have an agreement on cooperation.
- f. I am thinking about to visit the sites in neighbouring countries as Uzbekistan, Kyrgyzstan and Tajikistan where Menzbir marmot was reported from by Soviet researchers in the last century. This is a task for the next decade, maybe. We have more or less regular reports from the population in Uzbekistan: the Menzbir marmot population in Chatkal National Park is much bigger in number and area, it should be interesting for me to compare with my data, collected in Kazakhstan. There are many barriers to do this job soon. First of all, time limits – marmots are active a short time, the best time to watch them is from May (earlier the access is difficult because of snow) to July, in August the activity goes down. So doing my field work here in Kazakhstan I have not time to visit other populations at the same year. Additionally it is hard to obtain research permits in Uzbekistan for me as a foreigner. There are less rules and prohibitions for research in Kyrgyzstan and Tajikistan, but the distance from my home destination and hard accessibility of the territory does not allow me to do it at the time, while I am busy with the survey of the marmot's population in Kazakhstan. But I keep in my mind the names of the sites I should visit later:

- Sogdian Province of Tajikistan - high-elevated mountain pastures up to 2400-3000 m above sea level in the north-east spurs of Kuramin range in the upper of Aktash River in north Tajikistan. Menzbir marmot had not been seen here since 1980, where 30-40 individuals were observed in the area of 4600 ha;
 - Besh-Aral Nature Reserve in Kyrgyzstan – the alpine zone of the Western part of Chatkal range to complete the description of the modern distribution of the species in general.
- g. I am thinking about to be an organiser and host agency for the next (XII) International Conference on Marmots of experts of the former Soviet Union. The previous one held in Moscow in 2015. Next one is planned to take place in 2020. I am living in a place with two marmot species (*Marmota menzbieri* and *Marmota caudata*) – easy to show to the conference participants.

**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 have told the Sayram-Ugam Park administration, Park's rangers and local shepherds I am working with ideology and financial support of Rufford Small Grants for Nature Conservation Programme. Since the second year of the project does not involve the production of printed products the RSG logo was not used.

11. Any other comments?

I really enjoyed the work with RSGF funding and will be happy to continue next year. I am going to apply for Booster Grant in late 2016 for the field work in summer 2017. I am looking for other sources as well and have obtained co-funding from Wild Nature NGO, Kazakhstan. I am going to use my own savings and the equipment from 1st and 2nd Rufford Small Grants awarded to me.





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