

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	Astghik Ghazaryan
Project title	Survey on the distribution, systematics, and conservation status of bats of Ararat valley
RSG reference	12682-1
Reporting period	1 st January 2013 – 1 st January 2014
Amount of grant	£5995
Your email address	astbat@yahoo.com
Date of this report	19 th December 2013

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
Creation of database of distribution and conservation status of bats dwelling in Ararat-valley			+	We have created the database of bats of Ararat valley distribution and conservation status.
Based on morphological and DNA analysis data, it will be possible to understand systematic status of bats dwelling in Ararat- valley			+	We have collected bat samples for DNA analysing and have taken all needed morphological measurements. Last month we have received almost all answers from DNA analysis (DNA analysis was done in Berlin Nature Museum).
Creation of maps of current distribution with outlining the exact locations of habitat.			+	We are created the detailed map of current distribution of bats habitat (caves, mine, cervices), however we will not publish them to protect the sites from poachers.
Creation of database of records of bats, which is help to identify bats in flight			+	We have done all records of bats calls of Ararat valley. Part of records we have analysed manually. The other part was done with the help our colleagues from Germany by software. Now we have all records of bats calls of Ararat valley.
Involvement of the students in conservation activities and providing and opportunity for them to get the knowledge, skills and experience in field research and conservation of the rare species			+	There are four students working on bats in my team. Beside them local people and workers from Armavir Zoo participated in fieldwork and in analysing of results. They got knowledge and skills. One of the students will defend her Bachelor thesis on may of 2014, another will defend his PhD works in the end of 2014 (the part of our fieldwork helped him to collect and analyse some bats records for his PhD thesis). The zoo worker is thinking to enter our university for specialising in zoology, especially on conservation biology.
Raising public awareness and implementation of environmental education programme among local people on threatened species		+		The raising of public awareness is long term process. We have disseminated the calendars and posters among locals. We have done several seminars in schools of Ararat valley. But we want to share information by

				our web page which is under construction. It will help to disseminate all information on bats and their conservation
Publications in local and scientific citation Index peer-reviewed journals.		+		Now we are working on two articles, which will be published in 2014, one in local, the other in a peer-reviewed journal.

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

It was difficult to find some underground caves. We spent more time in a field for finding possible habitat and also to record more calls.

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

1. The maps, database records of bats as well as awareness programme started to promote the conservation actions and will serve as background for new projects in our country.
2. New data (maps, distribution, records of bat calls, DNA) about some species of bats.
3. We involved students in our works. Two of them will finish their thesis on 2014 but the others will continue. Beside this we will have more conservationists, because seminars in schools is affected to pupil's decision about their future specialisation.

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

The local people helped us to find new caves and places with bats. Some of locals knew about importance of guano and they protect some caves only for guano. After our seminars we acquired more cave keepers where they can find a lot of guano at the same time to protect bats. We also had an agreement with grape farmers (Ararat valley is an ideal place for grape growing.) to put bat boxes near the grapes (it is for future).

5. Are there any plans to continue this work?

We would like to continue our work by enlarging research area out of Ararat valley. After seminars we have gathered a group of enthusiastic pupils who will enter to biological faculty for learning zoology. They will include in our future next conservation projects. Beside this we are planning to do workshops/summer schools for enthusiastic pupils.

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

We are summarising the results with the suggestion to create the protected area in Ararat valley for presenting to Ministry of Nature protection. We have prepared articles for publishing in international and national peer reviewed journals the part of results we have presented in our presentations.

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

RSG grant was used for 12 months from January 2013 to December 2013. The field work started at the end of February 2013 (checking wintering places for hibernating colonies and individuals). Intensive field work and seminars was organised from May to December of 2013. From September to December 2013 we have done secondary visits to the same school where was organised the seminars for checking knowledge of pupils and for distributed the posters and calendars.

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
GPS Garmin Dakota 10	380	356	-24	We have found the cheap one.
Petterson D 240X	840	1125	+285	The taxes and shipping was higher price
Printing of 500 posters	225	225	0	
Data-Logging Thermo-Hygrometer	150	203	+53	The taxes and shipping was higher price
Mist Net (14mm Mesh)	150	150	0	
Pesola PPS200 Professional Digital Pocket Scale	80	108	+28	The taxes and shipping was higher price
Pesola Light-Line Spring Scale	35	47	+12	The taxes and shipping was higher price
Bat rings 2.4 mm (narrow) 4.0 x 0.38 mm per 1000 - 220	440	0	-440	We have purchased from the other sources.
Tents for students	70	66	-4	We have found the cheap one.
Trip inside of Armenia (driver+fuel+rent a car)	3090	3217.5	+127.5	Fuel £0.75/L * 15 L/100km *150 km/trip *20 trips = 337.5 Rent a car 35£ /day * 3 days* 20 trips = £ 2100 Rent a driver £13/day *3 days *20trips = £780
Print of 1000 calendars	400	400	0	
Tubes for piece of tissue for DNA 100*1.35	135	98	-37	We have found the cheap one.
TOTAL	5995	5995.5	0.5	

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

The following steps are important:

- Continue conservation programme.
- Monitoring of known site of distribution of bats.

- Ecological niche modelling in GIS and Maxent.
- Continue public awareness programme.
- Presenting full report to the ministry of nature protection for creation of protected area in Armavir marz.

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 in all printed materials (posters, calendars) and every Power Point presentation shown in schools and training courses.

11. Any other comments?

I would like to thank to RSGF for giving my team an opportunity to work on our project, and help us to obtain very important equipment for researching bats. With support of RSG we have done great work on education part, presenting the bats as a helpers and a very important animals. We are not finished with the conservation action of Ararat valley's bats. My team is continuing work on it and we hope that we can save the vulnerable and endangered bat species, who are one of the important chain in biodiversity of Armenia.