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	Valery Dombrovski
Project title	Study and Conservation of rare and endangered forest-dwelling species in natural forest-mire complexes of Southern Belarus
RSG reference	16953-1
Reporting period	April 2015 – March 2016
Amount of grant	£4977
Your email address	valdombr@rambler.ru
Date of this report	25.03.2016

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
Identification of all territorial GSE, short-toed eagle and black stork pairs on "Stary Zhaden" Ramsar site and surrounding areas.			X	Surveys and mapping of the nesting sites of birds of prey and black storks was carried out in April and May 2015 on the territory of Ramsar Site "Stary Zhaden". In total, 10 pairs of the greater spotted eagle, nine pairs of the short-toed eagle, six pairs of the hen harrier, five pairs of the hobby, two pairs of the common kestrel, two pairs of the white-tailed eagle and five pairs of the black stork were identified.
Survey of rare bat species.			X	Bats were surveyed in two stages: during May – by detector counts, during June-July – by mist-netting in the places of concentration of bats. During this research, we mist-netted 200 bats in total belonging to 12 species, of them 10 species with indication of breeding. Five species are listed in the Red Data Book of the Republic of Belarus: the barbastelle, the Brandt's bat, the Leisler's bat, the Natterer's bat, and the northern bat. We also caught four specimens of the greater noctule *Nyctalus lasiopterus* (two lactating females and two sub-adults), which is the largest and the least studied bat species in Europe. This magnificent bat was once recorded in Belarus 85 years ago. Unfortunately, due to the prolonged absence of any records, it was excluded from a new edition of the National Red Data Book (2004, 2015).
Search and mapping of nests of rare birds		X		During April-November 2015 search and mapping of nests of rare birds were carried out. In total, 36 nests belonging to seven rare bird species were found: 15 great grey owl, five greater spotted eagle, two short-toed eagle, one hobby, three black stork, four Eurasian three-toed woodpecker and six white-backed woodpecker nests. Some nests of greater spotted eagle, short-toed eagle and black stork were not found because of hard accessibility.
Search and mapping of colonial settlements of rare bat species			X	Two nursery colonies of the greater noctule were found by radio-tracking of sub-adults. It was the first breeding record of the species in

				Belarus. Using mist netting and detection we also found four breeding sites of the barbastelle, two breeding sites of the Brandt's bat and two breeding sites of the Natterer's bat.
Identification of GSE's breeding success and its possible negative limiting factors. Examination of the nests using climbing equipment			X	Breeding success was determined for the six greater spotted eagle pairs. Of them, only three pairs had grown the chicks (50%). The main cause of breeding failure probably was extremely dry weather in 2015, which led to a sharp decrease in the groundwater level. The majority of lakes were drying and a sharp decline in the number of wetland animals – preys of the greater spotted eagle were observed. In August-October 2015, the drought has led to the emergence of large-scale fires, which affected about 1/3 of the Ramsar Site. Fortunately, none of the known nests of protected animals was affected.
Preparation of documentation for the protection of forest areas where rare species were found			X	We prepare the documentation for the protection of 46 nesting sites belonging to 11 rare species, including 15 great grey owl, five greater spotted eagle, two short-toed eagle, one hobby, three black stork, four Eurasian three-toed woodpecker, six white-backed woodpecker, four barbastelle, two Brandt's bat, two Natterer's bat and one edible dormouse nesting sites. Documentation for each area consists of 2 parts: 1) a description of the nesting site (breeding species, geographic coordinates, plantation forestry plan, photo of nesting sites) and 2) a list of activities that are prohibited in the area (this list must be signed by the administration of the state forest company). After the approval by the local authorities, these documents are binding forestry's to create a special reserve zones around the nests.
The transfer of protective documents for approval by local inspection of natural resources and the environment.			X	In March 2016 the documentation for the protection of 46 nesting sites were transferred to the Regional Committee of Natural Resources and Environment.
Raised awareness of forest workers, local people and the general public about the value			X	The result of our study confirm that the Stary Zhaden Ramsar Site is a unique natural area with a very unique set of rare and protected species. We published an article on this topic on

of this area and the presence of rare species in need of protection and careful handling. A workshop in nearby settlements, the publication in internet-resources, scientific publication.				one of the most popular websites on the nature of Belarus: http://wildlife.by/node/38453 The sensational news about breeding of the rarest bat species - greater noctule in Stary Zhaden Ramsar Site was widely covered in the media: http://www.ptushki.org/info/press/item/15526.html http://news.tut.by/kaleidoscope/454384.html http://charter97.org/ru/news/2015/7/2/158028/ http://euroradio.fm/ru/v-belarusi-nashli-krupneyshiy-v-evrope-vid-letuchey-myshi http://sputnik.by/nature/20150701/1015992759.html We also prepare 3 scientific articles: 1. Dombrovski V., Fenchuk V., Zhurauliou D. New occurrence and the first breeding record of the Greater Noctule *Nyctalus lasiopterus* in Belarus // Vespertilio (accepted in February 2016) 2. Dombrovski V., Fenchuk V., Zhurauliou D. The bat fauna (Mammalia, Chiroptera) of the Stary Zhaden Ramsar Site, Belarus // Plecotus et al (in prep). 3. Dombrovski V.C., Zhurauliou D.V., Fenchuk V.A. On the status of Greater Noctule *Nyctalus lasiopterus* in Belarus (in Russian, in press). Special attention was paid to raise awareness in forest workers. We made a presentation for local foresters about high international significance of the Stary Zhaden Ramsar Site and reported about high importance of protection of breeding sites of rare animal species. The visitors received booklets about some rare birds and bats breeding in Stary Zhaden Ramsar Site" and adjacent territories.
Monitor the implementation of the Requirements of forestry protection obligations	X			(see below)

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

2.1. The State Forest Company, which uses the forest in the territory of Ramsar Site, was reorganised in February 2016. As a result, a new forestry with a new name and a new address was created. After completion of the reorganisation process, we had to redo all the documents, in accordance with a new requirement. Because of this, the documents were handed over to the local authority of nature protection with a long delay (in March 2016 instead of the planned December 2015-January 2016). The approval process and transfer to the forestry's takes at least a month. In this regard, we have not been able to verify the completion of the last stage before the expiry of the project.

2.2. The greater noctule is the rarest and least studied bat in Europe. Nursery colonies of this species were located in the old-growth forests. Such forests require protection, and loss of old trees has been identified as a likely cause of population decline by IUCN (Hutson et al. 2008). However, since greater moctule is not formally included in the list of protected species of the Republic of Belarus, it is not currently possible to enforce any special conservation measures for the identified breeding area. At the same time, taking into account its extreme rarity in the region and in whole Europe, greater noctule deserves being listed into the 1st category (critical endangered) of Belarus National Red list, and this process needs to be initiated. Thus the research on distribution, density and ecology of this species in Belarus should continue.

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

1. The 46 breeding sites belonging to 11 rare animal species are protected.
2. The project contributed to increase awareness about high international significance of Stary Zhaden Ramsar Site which represent a very unique set of rare and endangered animal species needed protection.
3. The finding of a rarest European bat species – the greater noctule as breeding in Stary Zhaden Ramsar Site, attracted attention of the scientific community and the general public to the need to continue the study of this species in the region and to protect their habitat.

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

The information about unique set of rare and endangered animal species in Stary Zhaden Ramsar Site was published through local mass media and got a public nature in the locality were the project was implemented.

5. Are there any plans to continue this work?

First, we will finish the last stage of the current project – Monitor the implementation of the Requirements of forestry protection obligations.

In 2016 we are going to continue the search for a new breeding sites of the greater noctule, the barbastelle and others endangered bat species in the Polesie region (southern Belarus), to take a measure to protect their breeding habitat. We will continue our work with the general public, local authorities and forestry enterprises to protect the species. The next season we will extend international cooperation to provide this work.

We plan to initiate the process of including of the greater noctule in the list of protected species for a new edition of the National Red Data Book.

In addition to the above, we will continue the monitoring of a rare bird's species such as greater spotted eagle and great grey owl in the region.

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

The results of the project was reported at two international conferences. They are: 1) XXII Theriological School, Annual Workshop of the Ukrainian Theriological Society, 5-9 October 2015, National Park "Podilski Tovtry", Ukraine; 2) III International Research-to-Practice Conference "Problems of biodiversity conservation and use of biological resources", 7-9 October 2015, Minsk, Belarus.

The results of the project will be published in two international scientific journals: "Vespertilio" and "Plecotus et al" in English.

The results of the project formed the basis for a new international project to study bats in Polesie region financed by EUROBATS Projects Initiative.

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

Start of the project – April 2015. Finish of the project – March 2016. The project was implemented in accordance with the schedule.

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
Tent	150	150		
Batteries and recharger	65	65		
Car rent	1200	1200		
Petrol for car	945	945		
Accommodation and subsistence	2020	1970	-50	Cost savings by living in cheaper hostel.
Overhead expenses	597	647	+50	Overhead expenses accounted for 13% instead of the planned 12% (caused by change in tax rate in 2015).
TOTAL	4977	4977	0	

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

1) To expand the list of rare animal breeding sites under the state control through the creation of special reserve zones.
2) To organise the construction and installation of nest boxes and nest platforms for rare bat and bird species to compensate the lack of natural hollows and old tree.
3) To continue the monitoring of a rare bat and bird species with the aim to discover the key factors influencing their population dynamic.

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 for presentations made in two international conferences and in forestry house in Stary Zhaden Ramsar Site. References to the RSGF, as sponsor of the project, have been made in all online publications and scientific articles.