

The Rufford Foundation

Final Report

Congratulations on the completion of your project that was supported by The Rufford 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	Maxim Tarantovich
Project title	Research and Conservation of European Roller (<i>Coracias garrulus</i>) in Belarus.
RSG reference	14971-2
Reporting period	May 2014 – October 2015
Amount of grant	5988
Your email address	tarantovich@gmail.com
Date of this report	27/10/2015

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
Reducing lack of hollows for nesting roller by installing nest boxes			+	Constructed and installed 40 nest boxes for roller in the breeding site "Gronovo" (Mogilev district). We are satisfied that two of 40 nest boxes were occupied by roller at the first year after installing. Moreover, 54% of the installed nest boxes were used by various bird species.
Increasing of roller breeding success in revealed breeding sites		+		Unfortunately, breeding success was only 47.8% in the last two breeding seasons. This figure is due to the significantly higher proportion of unhatched eggs, as well as the loss of chicks from malnutrition. Carrying out the project studies using camera traps and evaluation of fledging by ptilochronology shown that malnutrition is one of the main limiting factors. Nonetheless all the trees with roller nest hollows have been protected from marten (<i>Martes martes</i>) by plastic rings. The nest hollows were mechanically cleaned to reduce negative impact of ectoparasites on development of nestlings. As a result, we didn't register death cases caused by predation in the protected hollows.
Revealing of post-breeding dispersion, migration and biological features of the species via individual color ringing of the Roller nestlings.		+		We have ringed by metal and colour rings 32 nestlings of roller since start of the Rufford project. We have not any recovery yet.
Accessing of supplementary data about feeding of the species during breeding season.			+	We collected data on feeding process and revealed diet of the roller nestlings in Belarus. We obtained the number of feeding visits of the roller to a nest box using the camera trap. The lack of food sources is one of the main limiting factors for rollers identified during the project.
To determine the effectiveness of			+	Low effectiveness of fledging of roller was determined via ptilochronology method.

fledging of roller via ptilochronology method.				
Organising seminars to educate people who live near the main habitat roller in Belarus - "Borovoe."			+	A meeting with students and teachers of State educational institutions "Lelchitsa Gymnasium", located near to the Rollers' nesting area - "Borovoe", was held in February 2015. During the meeting was screening a PowerPoint presentation, which tells about the roller's ecology, dramatic decline of it number in Europe and Belarus and ways of stabilising roller numbers. In addition was a report about our work for the Rufford Small Grant Foundation project "Research and Conservation of European Roller (<i>Coracias garrulus</i>) in Belarus". During the meeting were attended about 100 people. In addition to the presentations, the participants received booklets about roller and brochures "National Plan of Action for the Conservation Roller (<i>Coracias garrulus</i>) in Belarus". Journalists of the regional newspaper "Light Life" ("Svetlae Zhicce") were invited to the presentation. As a result, information about the meeting and the roller was publication in the newspaper and on the official newspapers website - http://www.lelchitsy.by/2015/03/sinyaya-ptica-schastya-v-okrestnostyax-lelchic/
Publication of information about roller in the popular science magazine "Wild Life Belarus", also in the media and on Internet sites.			+	Publication of information about roller in the popular science magazine "Wild Life Belarus" - http://wildlife.by/node/27680 We have taken part in International European Roller Best Practice Workshop – a meeting of roller conservation practitioners from across Europe – in April 2014. The event was organised and financed by OTOP, the Polish BirdLife partner, as part of their EU funded "Active forms of protection of the European Roller" project. Fifty experts from 14 countries attended in the seminar. I have presented information about status of the roller in Belarus during this meeting, also study and conservation activities which are carried out with financial support of Rufford Small

				<p>Grants. The main result of the workshop is the exchange experiences and establishes international contacts for best study and conservation of the roller in Europe. http://www.coracias-research.co.uk/european-roller-best-practice-workshop-warsaw-9-10-april-2014</p> <p>The results of the project were reported at International theoretical and practical conference “Zoological reading” (Grodno, 22nd-24th April 2015).</p>
Preparation of documentation for protection of roller breeding site – "Borovoe" and to expand the one under the State protection.		+		<p>Negotiations with the local authorities on the establishment of the reserve on the territory of roller's habitat in the Gomel region (Borovoe) have been conducted. The issue is under consideration by a state authority.</p>

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

We are faced with the complexities of the transfer under the protection of nesting sites roller "Borovoye". Local authorities believe that the territory of Lelchitsy district has enough protected areas. This view is supported by large companies who cut down the forest and recycled wood. However, all the necessary documentation has been prepared and submitted to the authorities. We will continue to lobby for the protection of this area, especially since there are reasons for this, supported by national and local legislation. But we need more research and actions to demonstrate the effectiveness of efforts and to enhance the effectiveness of the measures.

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

1. Reducing lack of hollows for nesting roller by installing nest-boxes. Two nest boxes were occupied by roller in the first year.
2. The main limiting factor during nesting roller was detected. It is the lack of food sources.
3. The project contributed to increasing awareness of general public and staff of forestry enterprises about the necessity to protect roller and avifauna and about possible measures which can be taken for this mission. Local authorities were involved in the protection of roller in Belarus.

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

Cherikov forestry workers have made nest boxes for roller. Additionally, there was a presentation for them. As a result, they learned about the status of roller in Belarus and the importance and uniqueness of their forests to preserve roller in Belarus. They also learned about the Rufford Small

Grants and its participation in solving of environmental problems in Belarus also in the conservation of local biodiversity. Participation of forestry in project allows them to receive additional bonuses for FSC™ certificate.

The information about problems with roller in Belarus and possibilities for preservation of the species was publicised through local mass media, thus the issues left the narrow borders of ornithological research and got a public nature in the locality where the project was implemented.

5. Are there any plans to continue this work?

Yes, we intend to proceed our research. We are going to continue the search for nesting sites of roller in Belarus, to take measures to protect the nests from predators and to implement preventive actions to improve the reproductive success of the species. The work will be carried out to manage roller nesting areas: the installation perches to increase the efficiency of capture of feed roller, fodder conservation land species and the creation of conditions for breeding larger beetles with use of waste of tree processing and cattle breeding complexes. Support for individual freestyle livestock grazing and hayfields. We will continue colour ringing of the birds and their individual tracking using camera traps.

In addition to the above, we will continue our work with general public, local authorities and forestry enterprises in Belarus to protect the species and to increase breeding success of roller.

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

An article in the journal "News of the Academy of Sciences of Belarus" will soon be published. Results obtained by performing the steps of the project will be represented.

The results will be reported to general public at meetings with local population in the frames of the project work; these achievements will be described in information materials designed for local authorities and forestry entities involved in the project; we are also looking for opportunities to place this information on the ornithological internet source.

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

Start of the project - May 2014. Finish of the project – October 2015. 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
Travel Expenses	1600	1600	0	Cost savings by living in cheaper hostels.
Accommodation and subsistence	2940	2920	-20	
Materials	730	750	+20	20£ - delivery of Camera-trap Reconyx HC600

Overhead expenses	718	718	0	
Total	5988		0	

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

- 1) The creation of conditions for breeding larger beetles – the main object of the roller feeding - with use of waste of tree processing and cattle-breeding complexes.
- 2) The installation perches to increase the efficiency of capture of feed roller.
- 3) Support for individual freestyle livestock grazing and hayfields.
- 4) Using the method of translocation to restore numbers and genetic diversity of roller on the territory of Belarus.

10. Did you use The Rufford Foundation logo in any materials produced in relation to this project? Did the RSGF receive any publicity during the course of your work?

The logo was included in documents provided to local authorities in the course of discussions on the creation of reserve zone for roller in Belarus; also the logo was used for presentations made in International European Roller Best Practice Workshop (Poland), State educational institutions "Lelchitsa Gymnasium" and International theoretical and practical conference "Zoological reading".