

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	Vasylyna Stakh
Project title	Mortality of amphibians on the roads of Lviv province (Western Ukraine)
RSG reference	20622-1
Reporting period	7 Apr 2017 – 7 Apr 2018
Amount of grant	£3665
Your email address	vasulunastax@gmail.com
Date of this report	20 Apr 2018

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
Fieldwork				This part of project work is done completely. We have collected mortality data along all the seasons (spring, summer, autumn) on all the roads and as a result we checked all the possible seasonal migrations of amphibians. We have evaluated traffic intensity in every study site and compared with 2006 results. All the mortality data, habitat and road characteristics plus photo documentation are available as database both in paper and digital-format.
Estimation of population characteristics				The estimation of approximate amphibian population numbers and their status was done. 2017 results were compared to 2006 ones including the road mortality threshold for every population which was calculated basing on the obtained field data.
Scientific data analysis				The statistical analysis of amphibian road mortality has been done. We pointed out the most dangerous road sections for amphibians. A number of scientific publications on the project results have been published. We are preparing some scientific articles based on the project data.
Applied project results				First in Ukraine, amphibian fences were installed in spring 2017 to monitor the migration and save the amphibians.
Recommendations				We have started the preparations and negotiations with the road authorities to the implementation of our "Attention, frog is crossing!" road sign proposal into the practice in Ukraine.
Eco-education				A number of thematic lectures for school-children (Ivano-Frankove), students (Ivan Franko National

				University of Lviv, National University Lviv Polytechnics) and teachers (Lviv Regional Pedagogical Institute) were organised. More specified and advanced lectures were also made for Roztochia Nature Reserve staff and the scientific fellows of State Museum of Natural History. Field trip for schoolchildren to show the practical importance and bio-conservative value of frog fences has been organised this spring so far.
Brochure				The brochure was published and disseminated among the scientific and nature conservative community all over Ukraine. It is announced also on the project Facebook site. The brochure is rather popular among the target recipients as only 10% of the edition has left. We disseminated it not only by post but also during our meetings and lectures. Teachers, schoolchildren and students like it very much according to the feedback.
Maps				Digital maps of amphibian mortality on the roads of Lviv province have been made. The comparative 2006/17 maps on number and species dominance are made as well. Preparing of Android application for the facilitation and unification of the collecting and analysing mortality data on the base of NextGis has been started.
Informative tables, banners and video materials				Two informative tables (Roztochia NR and Ivano-Frankove secondary school) and two banners on the project topic (Ivan Franko National University of Lviv) were prepared, printed and hung up in the target institutions. Professional eco-educative video material on the project topic (full - 30 min and 2-3 min clips) was prepared and is going to be uploaded and distributed on the internet soon.

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

All the declared tasks were realised. Moreover, we did realise even more tasks than it was planned as some of the ideas appeared during the project realisation after the application was adopted. The main difficulties for us as for the project participants were concerned with the instability of national currency, unpredictable rise of prices for goods and services etc.

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

- We collected scientific field data, prepared the database and compared it with 2006 one.
- We published the informative brochure, disseminated it broadly, printed informative tables and banners about the amphibian road mortality, and produced video material on the topic to reach the eco-educative aim.
- For the first time in Ukraine the film frog fences were installed; we involved school children, students, nature reserve staff, volunteers, and media to this event to announce it as much as possible.

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

The lectures for local teachers, schoolchildren and nature reserve staff focused their attention on the problem. They got the project brochure. They used it as well as the topic for their own ecological afterschool classes and nature educative activities. Both school and nature reserve have got informative tables on the given problem. Nature reserve staff together with schoolchildren monitor frog fences every day. This kind of activity is very important for both of them. The project topic and the events are actively discussed in Facebook. Moreover, not only local community, but people from all over Ukraine join the discussion and share their opinion and information.

5. Are there any plans to continue this work?

If we would have further financing we were going to continue the work, in particular to realise the same research program in the neighbor provinces (Volyn to the north, and Transcarpathians to the south). Beside that we actively continue the research on the model road section near Lviv, where one PhD and two BSc studies have being held. In 2018, we plan to monitor amphibian mortality by the same research scheme as in 2017 and, of course, to support installed frog fences as long as possible. We also will update our project Facebook site and try to keep it active and alive.

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

We permanently show and share any type of results of our work on Facebook. We prepare publications and scientific articles on the project data, present it on different conferences, workshops, public lectures, also give interviews on the topic for various media.

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

The project was planned and lasted for one year. It was enough time to ascertain the key reactions and the course of main phases of amphibian season cycle, especially when this works starts in spring.

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.

During the realisation of project tasks the exchange rate of GBP and EURO to the national currency changed, so we can't put the exact value here. The calculations are made taking into account the rate for the day of purchase.

Item	Budgeted Amount	Actual Amount	Difference	Comments
Transport	949	1335	-386	We spent more, because we made more field and lecture trips than planned. The unexpected car reparation is included here too (alternator breakage).
Food/Bed	661	701	-40	As far we took part in several conferences that weren't planned in the application the actual amount is higher due to conference fee and living costs.
Brochure	489	518	-29	Real prices for the brochure (550 copies) designing (€ 250 = £ 218, 07) and publishing (€ 343, 85 = £ 299, 93) raised a bit, so that we've got the difference.
Communication costs	25	25	0	The amount was completely used for the communication between working groups and project participants during the field work and coordination.

GPS device	587	623	-36	We bought two GPS-devices Garmin GPSMAP 64s (price for one is € 357, 11 = £ 311, 5).
Dip net	125	101	24	Buying four dip nets Dragon 230 (price for one is £25, 25), we got a reduction.
Rubber boots	94	84	10	Buying 4 pairs of rubber boots via internet (price for one is £21) let us save some money.
Flashlight	31	31	0	Four flashlights Police 12V6822 (price for one is £7, 75).
Bucket	19	18	1	24 plastic buckets (price for one is £0, 75).
Woodwork stapler	56	45	11	Four staplers Mastertool 4-14 (price for one is £11, 25).
Spade, axe, sledge-hammer	66	30	36	We didn't buy half of the spades as we used the nature reserve ones during the installation of frog fences.
Cutter knife	2	2	0	Bought two knives.
Safety vest	81	79	2	Bought 35 vests (price for one is £2, 26) for the road activities safety (school children, volunteers etc.). Five more vests used during the field work were private.
Wooden stick	35	34	1	110 wooden sticks were ordered and paid for the installation of frog fences.
Fence film	36	53	-17	We had to buy more expensive fence film as the planned type of it wasn't available at that moment.
10% contingency	409	409	0	The reserved amount was fully used to cover extra costs of transportation, conferences participation, publishing, GPS-devices and fence film. So in total we overuse £14.
TOTAL:	3665	3679	-14	
Office equipment (notebook, printer)	454	454	0	These costs were provided by Ivan Franko National University of Lviv and by Institute of Ecology of the Carpathians of NAS of Ukraine.
Office expenditures	376	376	0	
TOTAL:	4495	4509	-14	

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

Monitoring of the model road section, expansion of research territory, practical realisation of our project recommendations, the continuation of implementation process on the new road sign "Attention, frog is crossing!" in Ukraine, further eco-educative activity.

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

Yes the logo was used in the brochure, on the informative tables and banners, and during the public lectures and conference presentations as well.

11. Please provide a full list of all the members of your team and briefly what was their role in the project.

Vasylyna Stakh – coordination, field work, maps processing, brochure, banner and informative table preparation and primary design, managing of lecture trips, elaboration of Android NextGis application for the mapping of road mortality data, Facebook site support.

Ostap Reshetylo – coordination, field work, brochure preparation, data processing and analysis, lecture, media and eco-educative activities, scientific articles preparation, conferences participation.

Ihor Dykyy – field work, managing and communicative activity on the lecture trips.

Bohdan Andriyishyn – field work, lecture and eco-educative activity.

Two more students not indicated in the application were involved into active project work:

Angelina-Anastasia Osiyeva – field work, database preparation, conferences participation and publications.

Maria Panchuk – field work.

12. Any other comments?

We are grateful for the support of our nature conservative attempts and the great possibility to realise our scientific and eco-educative ideas.

