

#### 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	
Crant Recipient Betans	
Your name	Dejan Kulijer
Project title	Research and conservation of dragonfly species of European concern and their habitats in Bosnia and Herzegovina
RSG reference	9763-1
Reporting period	May 2011 – May 2012
Amount of grant	£4940
Your email address	dejan.kulijer@gmail.com
Date of this report	3 <sup>rd</sup> June 2012



# 1. Please indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.

	Not	Partially	Fully	
Objective	achieved	achieved	achieved	Comments
Field research / data collecting			+	Records of 57 species from 213 localities were collected. The most important results are 27 new localities of target species. In addition, for the first time <i>Gomphus flavipes</i> , NATURA 2000 species, is recorded for the country (at three localities).  All the data are included in the national odonatological database. The work also contributed the database of the Emerald network (future NATURA 2000) and the European dragonfly atlas.  The research also enabled gathering of material for the research of water mites' parasitising on dragonflies in Bosnia and Herzegovina.
Identification of important areas for conservation and the development of monitoring programme			+	Based on the presence of species of European concern and nationally rare species 12 areas important for dragonfly protection are identified.  Based on the work done under the support of the RSGF the Federal environmental fund decided to financially support the research and development of plans for the monitoring and protection of important areas for dragonflies in Federation of Bosnia and Herzegovina in 2012.  The plans for the monitoring were made and the monitoring started in 2012 at three locations.
Presentation of the results				All the data will be presented in scientific journals and congresses.  - A paper that includes results of this research is already submitted to odonatological journal, three papers are in preparation  - Abstracts of the presentations with the results of this work are submitted for the European Congress on Odonatology 2012  - The results will be also presented at the forthcoming Balkan odonatological



			meeting in Novi Sad, Serbia.
Collaboration with national and local authorities, NGO's		+	Cooperation is established with Federal Ministry for Environment and Tourism that is coordinating work on Emerald and NATURA 2000 network. Federal environmental found decided to support further research of endangered and rare dragonfly species and their habitats in Federation of Bosnia and Herzegovina in 2012. Established collaboration with national ornithological organisation and other NGOs resulted in involvement of the team members in biodiversity research and preparation of two biodiversity studies. Both studies included research of dragonflies and the protection of important dragonfly habitats at Modrac lake and Haljinići ponds.
Popularisation		+	During the realisation of the project, besides team members, a group of 20 people was involved in data gathering. This collaboration resulted with the establishment of small group of people interested in dragonflies. Some of them were participating in the Students research camp in 2011 where the dragonflies were included as one of main research groups. The results of this collaboration and the work of the group will be presented on the poster at European Congress on Odonatology. Posters and brochures were distributed to many local and national organisations, ministries and the educational institutions. A short story on dragonflies was broadcasted at national TV.  During 2012 an article on dragonflies will be published in one scientific-popular magazine.
Construction of information boards	+		Due to a long procedure the construction of information boards is not yet finished but the boards are prepared.



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

There was a slight delay in printing of the brochures and the construction of information board in Hutovo Blato Nature Park due to technical difficulties.

The project plan was to put two information boards at Hutovo Blato Nature Park. The Park management gave permission for one, but the good thing is that the location is near the main info centre of the Park and also part of the educational path that exists in the Park. For the second board a new plan is to be constructed at small, locally protected area, in Kakanj municipality where the part of the research was conducted. The area includes several large ponds and will serve for education of public and school children on the importance of nature conservation. That should be finished during summer 2012.

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

The most important result is that the work will not finish with this project. The effects are already present. The Environmental Fund of the Federation of Bosnia and Herzegovina acknowledged the work done during RSG project and financially supported the research work for the protection of dragonfly species and habitats for the second part of 2012. Several media are interested in preparation of TV programme and articles on dragonflies in the country. The Nature Park Hutovo Blato will support future activities for the monitoring and the protection of dragonflies and their habitats at one of the most important dragonfly areas in the country.

Large amount of scientific data on species and habitats from the country are collected, previously unexplored areas of the country were investigated. Many populations of several species of European concern are found, including one new species for the country. The results already contributed to the work on the European dragonfly atlas. Several scientific papers or congress presentations are submitted or in preparation.

A small group of volunteers that became interested in dragonflies formed one small research group that will continue with the work started during RSG founded project. The first results will be presented at European Congress on Odonatology in 2012. Also, first public awareness activities in the country (media, publications, posters, info boards) were started during the Project that resulted with the interest of several media and is planned to continue for future activities.

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

Although the work with the local community was not the prime goal of the Project, during the Project realisation, we tried to involve as much people from the local communities as possible and from areas were the research was done. As a result, a number of people become interested in dragonflies and their protection and they started to collect data and record the dragonflies in their area and send the data to the team.

Also, the dragonfly group was, for the first time, organised at the biology student's research camp and lead by the team members.



#### 5. Are there any plans to continue this work?

Depending on available resources the plan for the future period is to continue to work on the mapping of dragonfly distribution in the country and research and identification of important dragonfly areas for the protection.

The final goal is to protect important habitats and species, develop monitoring programme and also improve the public knowledge and awareness on the significance of these insects and freshwater habitats. The work on the education and public awareness will include brochures, lectures, exhibitions and documentaries.

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

Scientific data will be presented through scientific journals and congresses. One paper is submitted to *Odonatologica* journal, several papers are in preparation. Presentations involving data from this project will be presented at European Congress on Odonatology in Belgrade.

Results are or will be presented to relevant federal and national ministries and other stakeholders responsible for the nature conservation.

An exhibition about dragonflies is planned at the National Museum for future period. The results of the project will be presented at the exhibition. This exhibition will be important segment of the future work on public awareness and education on the importance of dragonflies and their habitats.

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

The Grant was used app. 12 months, from May 2011 to May 2012 as it was anticipated. Only delay was in the construction of info boards that should be finished during June 2012.

## 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	Actual	Difference	Comments
	Amount	Amount		
Hand nets	120	190	+90	Difference of the price and the
				additional net bought for the
				research group members
Field guides	90	220	+130	Difference of the price and the
				additional dragonfly books and field
				guides bought for the research group
				members
Entomological	150	150		
Supplies				
Fuel	1120	1150	+30	
Accommodation	1380	1180	-200	Lower costs of the accommodation
				in some areas



Design and printing of posters	1000	1000		The printing costs were lower than anticipated but the extra money was used for printing additional posters.
Design and printing of brochure	1000	1000		The printing costs were lower than anticipated but the extra money was used for printing additional brochures.
Two information Boards	300	350	+50	
Communication and postage costs	250	250		
Office supplies	150	150		
Other photo and field equipment	300	300		
TOTAL	5860	5960	+100	

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

In order to work on the protection of species and habitats the knowledge of their distribution is essential. The RSG supported important first step that significantly contributed the knowledge of the species and habitats in the country:

The focus of future work is:

- Continuation of field research based on gathered data and in areas that are still missing the data.
- Collaboration with national and local authorities and NGO's on the protection of dragonflies and their habitats and the preparation of Red List for the country.
- Further work on popularisation and public awareness.

## 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?

Yes, the RSGF logo was used on posters, brochures and flyers. The posters with the logo were also shown on national TV. Info boards with the logo will be permanently available in Nature Park Hutovo Blato and in the future at Haljinići ponds protected area. The materials with the logo are already or will be distributed to many educational and nature conservation institutions and NGOs. Also, materials with the logo will be available at European Congress on Odonatology and Balkan Odonatological meeting in 2012 in Serbia.

#### 11. Any other comments?

We would like to thank RSG Foundation for the support to the research and protection of dragonflies and their habitats in Bosnia and Herzegovina.

We think that the project was very successful and resulted with important scientific data. The project also helped in bringing people who are interested in dragonflies and who will continue this work in the future together.



Some of the planed tasks were not fulfilled completely, especially in regards to the monitoring of important species. Although a lot of time and effort of all team members was invested, some of the activities need more time and human resources then it was available during this project. We will continue our efforts on the development of monitoring at important sites and engage more people in this work.

The team is looking forward to continue this collaboration in the future for the benefit of nature and long-term preservation of species and habitats.