

Final Project Evaluation Report

Your Details	
Full Name	Marko Nikolić
Project Title	Fighting Negative Impacts of Tradition on Biodiversity by Education II – building a network
Application ID	26448-B
Grant Amount	£9,976
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1. 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 the new questionnaire and surveying respondents form Southern and Eastern Serbia				We created a new questionnaire that will allow us to precisely process statistical data. The interviewing of the local inhabitants was conducted in eastern and southern Serbia. The project team members and volunteers conducted a survey of the local inhabitants in the vicinity of four planned cities in the east and south of Serbia: Donji Milanovac, Kladovo, Leskovac and Niš. After completion of the survey, respondents were given an educational brochure. The talk after interviews aroused additional interest in the subjects.
Online survey creation and distribution through partner organization social media				The online survey is available on the home page of the website, or at these links: https://forms.gle/9DtbzwysaVxrE3tS8 http://wildbalkans.com
Android App creation and involvement of volunteers through our projects' "micro grant" system				The number of assigned micro-grants was lower than expected. We assume that the method of inviting the volunteers online might not be the most effective one. This is supported by the fact that many more volunteers applied after our live presentations at the universities in Serbia.
Continuation of the monitoring program on 4 populations of Hermanns' tortoises in Serbia				The project team, together with master and bachelor students and volunteers, conducted population parameter collection on four tortoise populations in eastern and southern Serbia. The surveys were conducted in May and July for 7 days per locality. A total of 29 students participated in the project activities. In addition, 19 other volunteers (BSDSP members) and 10 master students joined. Monitoring of the Hermanns' tortoises in Kunovica was established in 2009 and is one of the longest monitoring

			programmes in our country. In the other three sites, the monitoring programme was initiated in 2016 with my first Rufford small grant (18761-1).
Visit to primary, secondary schools and universities and education on the threatening factors and protection of the wildlife			We established very successful cooperation with the schools in which we informed the students of primary and secondary schools about our activities and encouraged them to inform themselves more about local beliefs and the influence of local folklore and myths on wildlife. We established an important collaboration with the Youth Office of Babušnica and Municipality of Babušnica. We would like to take this opportunity to express our gratitude towards all the institutions for their collaboration and support. The educational activities took place at 16 primary and secondary schools in Niš, Leskovac, Grdelica, Kladovo, Babušnica, Pirot, Vranje and Belgrade.
Cooperation with institutions and co-financing of project activities			Collaboration with Wikimedia Serbia was established through a project „In touch with the nature “. This project is aiming at presenting endangered species and protected areas that suffer from negative anthropogenic influence, but additionally is intended as a promotion for protected areas and their values through publishing photographs at Wikimedia Commons platform and articles on Wikipedia. In the name of our newly established collaboration, our team members participated at WikiLive 2019 conference, where they presented our activities and the problems we encounter in working on nature protection (link). Considering that this is the 4th year of our field activities, we established a successful collaboration with the managers of the “Đerdap” National Park protected area, the territory of which is one of our selected research localities in eastern Serbia
Making and printing of promotional material			We printed an information brochure and an additional 100 copies of the book about local folklore beliefs concerning

			<p>wild animals, created during previous RF project</p> <p>http://wildbalkans.com/publikacije entitled "Folk beliefs and wildlife".</p>
Promotion			<p>In September 2018, at the 2nd congress of Serbian Biologists in Kladovo, we presented the results of our research which started with the help of the Rufford Foundation in 2016, with the first small grant (18761-1) and which is ongoing still due to the Rufford foundation support. The abstract of our oral presentation is available at: http://www.serbiosoc.org.rs/wp-content/uploads/2018/11/DRUGI-KONGRES-BIOLOGA-SRBIJE-knjiga-sazetaka.pdf (Page 294.)</p> <p>After our oral presentation at this conference, we had the honour to participate at the 3rd Rufford Small Grants Conference "Explore and protect the natural beauty of Balkans" where a plenary lecture named "Local beliefs as a factor of wild flora and fauna endangerment" was held, and a new project that we work on was presented.</p> <p>At the meeting in Zaječar, held with regard to future activities in the field of butterfly protection in cooperation with the project of Dr Miloš Popović (no. 24652 24652 B), we presented our project activities and discussed further collaborations.</p> <p>Our project activities were presented at the national television RTS through a documentary series „Biodiverzitet-mreža života “ (eng: "Biodiversity – the web of life").</p> <p>The preliminary results of our project were presented at the 13th symposium on the flora of southeastern Serbia and neighbouring regions (http://www.sfses.com/en/home), held from 20 to 23 June 2019. At Stara planina mountain. The abstract is available in the book of abstracts at: http://www.sfses.com/docs/Book-of-Abstracts.pdf (page 101)</p> <p>Our partner organization BID "Josif</p>

			<p>Panic" from Belgrade, at this year's science festival, had a show called "Where the Serpent hid its legs". The setting was inspired by myths and legends present in the local folklore and are about wildlife. The main inspiration for this setting was the publication "Wild Animals and Folk Beliefs in Serbia", which was created under my previous RF grant (22238-2).</p>
Networking			<p>Presentations at the universities of Serbia were held in October and November 2019. The presentations were held in collaboration with other recipients of Rufford small grants, Miloš Popović, Aca Djurdjević and Dimitrija Savić Zdravković. Four mini conferences were organised at the Universities of Belgrade, Novi Sad, Kragujevac and Niš. We would like to thank the organizations that made these presentations possible: BID Josif Pančić and the Faculty of Biology in Belgrade, EID Mladen Karaman and the Faculty of Natural Sciences and Mathematics from Kragujevac, NIDSBE Josif Pančić and the Faculty of Sciences in Novi Sad and BS "Dr Sava Petrović" and Faculty of Natural Sciences and Mathematics from Niš.</p> <p>Also, mutual activities of the members of The Rufford small grant project nos 24565-1, 25824-1, 24652-B and our project by the members of the biological society „Dr Sava Petrović“, were noticed by the Institute for Nature Protection of Serbia, which led to deepening the collaboration with this main institution for nature protection in our country. Such collaboration is of main importance for working in the sphere of nature protection and endangered species conservation. At the ceremony of the celebration of the 70th birthday of the institute, as well as 20th birthday of the institute's office in Niš, there was a premiere of a documentary film "The Nature Awakens" which we created in cooperation with the Institute (link)</p> <p>We participated in a regular annual</p>

				gathering of protected natural areas' managers and organisations for nature protection called "Partnership towards Nature Conservation" held on 26 th December 2019 at the premises of the Institute for Nature Conservation of Serbia. At this event, we had the opportunity to highlight the importance of the role of civil society organisations in research and nature conservation and the projects we have implemented in recent years under the auspices of the Rufford Foundation (Link)
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2. Please explain any unforeseen difficulties that arose during the project and how these were tackled.

As well as during the implementation of the previous project, we again had problems when interviewing people. Some inhabitants, mostly in eastern Serbia, were firmly convinced of their beliefs. The negative attitudes were mostly related to killing of wild animals because they are considered pests and it is believed that their presence brings misfortune. Conversation with those residents, after completing the questionnaire, is usually long and without a visible and obvious progress. In most cases, these respondents were relatively young people. Talk and educational material in such cases would probably not give any results. Fortunately, such cases were few. These cases show that the beliefs transmitted from generation to generation are firmly embedded in local folklore and the education of the community educated in such way, must be a continuous process. It is particularly important to work on the education of young people and establish cooperation with primary and secondary schools for further action. Education of the community should be conducted in a significantly larger area than that covered by this project. People from rural parts of eastern Serbia are deeply involved in the local folk beliefs, and education in the future could be of great importance for the conservation of biodiversity and reduction of the negative human impact.

The number of assigned micro-grants was lower than expected. We assume that the online method of inviting the volunteers might not be the most effective one. This is supported by the fact that many more volunteers applied after our live presentations at the universities in Serbia.

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

- a) **Surveying** – Collecting data about the presence of wild animals in local folklore beliefs and setting the bigger foundation for further research and wildlife protection. People were interviewed in the southern and eastern Serbia and information was gathered about a) use of animals in traditional medicine and diet, and b) killing animals due to superstition and/or fear and other threatening factors. Surveying was conducted all over the country

through a programme of small financial grants and placement of online surveys through social networks of partner organisations.

- b) **Education of local community** - In all the places we visited during the survey campaign we talked to local people about wildlife and their attitude towards wildlife protection. We managed to partly change their perspective, helping them understand the vulnerability of Serbian wildlife and the laws considering many species. Attitude of the local community about importance and conservation of wildlife plays a major role in restricting direct and indirect human impact on habitats and populations of endangered species. The educational activities took place at 16 primary and secondary schools in Niš, Leskovac, Grdelica, Kladovo, Babušnica, Piroć, Vranje and Belgrade. Also, we held the lectures at four universities in Serbia in collaboration with our partner organisations. A vast number of students and professors attended our lectures.
- c) **Education of young researchers** - At the Kunovica research locality we were accompanied by the students of the Faculty of Science and Mathematics, University of Niš, undertaking the course "Conservation biology" (thanks to the Prof. Dr. Jelka Crnobrnja-Isailović), as well as members of the Biological Society "Dr. Sava Petrović" (BDDSP). A total of 29 bachelor and 10 master students took part in the field work, followed by 19 volunteers (members of BDDSP). Out of 10 master students who are conducting herpetology research at the Kunovica locality for their master thesis, three have successfully defended their master thesis this year: Milan Blagojević, Bojana Vidojković i Miloš Krstić. The number of participants considerably exceeded our expectations. Students will be included in further research activities and projects.

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

Local communities were involved in the project in many ways. The project team has collected data and the local community and has had the opportunity to hear information that is not readily available. A total of 800 people were surveyed in southern and eastern Serbia. Interviewees were open for cooperation in most cases and helped us gain the perspective of animal presence in local folklore. The people provided us with a lot of interesting stories and anecdotes about superstitions and harvesting animals in the few last decades, stated their remarks and informed us about myths that they have heard from ancestors. A total of 39 bachelor and master students and 19 members of BSDSP took part in the field work.

The lectures that we held in collaboration with other recipients of Rufford small grants, namely: Miloš Popović, Aca Djurdjević and Dimitrija Savić Zdravković at universities (University of Niš, Belgrade, Novi Sad and Kragujevac) had large attendance, and a large auditorium (approximately 250 students and professors in total) had the chance to hear what we do and to get acquainted with both the conservation status of wild animals and with the nature conservation law obligations and regulations.

We established very successful cooperation with the schools in which we informed all students of primary and secondary schools about our activities and encouraged them to inform themselves more about local beliefs and the influence of local folklore and myths on wildlife. We established an important collaboration with the Youth Office of Babušnica and Municipality of Babušnica. We would like to take this opportunity to express our gratitude towards all the institutions for their collaboration and support. We held lectures at 16 primary and secondary schools in Niš, Leskovac, Grdelica, Kladovo, Babušnica, Pirot, Vranje and Belgrade. In the future we will continue with the education of students in collaboration with teachers of biology.

A total of 67 “small grants” for surveying were awarded to recipients, who have gathered new knowledge throughout Serbia. Online survey was distributed via the website and Facebook pages of partner organisations, and that enabled us to interview people around the country. This survey has not shown statistically useful data yet, but it will be active on the web site and will serve for data collection in the future.

Previous cooperation with the residents in our research areas is a huge stimulus for continuation of our education programme. In this way, we can gain much bigger success and influence on raising the awareness about preservation of biological diversity.

5. Are there any plans to continue this work?

Yes, our team is the first in Serbia that began a systematic research of influence of local beliefs on biodiversity and one of the few teams who are actively working to educate and raise the level of awareness of local population.

My opinion is we did a good job because we collected a lot of information about the impact of presence of myths and legends in the local population, moreover we have gained new insight and formed a good foundation of knowledge about the beliefs and attitudes in the local population. All gathered data are of great importance for upgrading the information about illegal poaching and conservation of the species whose numbers in Europe are declining. In the future, we will work on proceeding with the investigation of this topic, because the dataset needs to be updated with new information from all over the country.

During this project we established good collaboration with many stakeholders, NGOs, schools, government institutions, protected area managers and the Institute for Nature Protection of Serbia. It is necessary to increase the network of people who will contribute to research. The great potential is in the partner organisations and their human resources, so we will continue to work on that in the future. We want to maintain good relationships with partner institutions, and we will work more intensively on education of students and individuals from the local community. Local community education should become one of the priorities in the sphere of nature conservation, so we will endeavour, with help of foundations such The Rufford Foundation is, to enable further research, as well as continued education of the locals, aiming to preserve biodiversity.

Also, it's of prime importance to continue the work on collecting information about local folk belief, myths and legends and to examine whether our educational campaign was successful enough. We plan to continue with promotion and education, to work with stakeholders in solving conservation issues and to undertake active conservation measures if needed.

Additionally, in cooperation with Biological Society "Dr. Sava Petrović", Faculty of Sciences and Mathematics and Institute for Biological Research "Siniša Stanković" we plan to continue monitoring programs on the populations of Hermann's tortoise in eastern and southern Serbia.

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

- The results of conducted surveys will be consigned to different institutions in Serbia, such as libraries, government institutions for conservation of nature, NGOs of biologists, nature lovers, elementary and high schools.
- Regarding the general public, we are happy to appear several times on TV and in newspapers. There was also a Facebook promotion and several interesting texts about the project appeared on WildBalkans website.
- Website, <http://wildbalkans.com> established during my 2nd Rufford Small Grant project, now already represents a place where young researchers present their research result, share news and experiences. In the forthcoming period we will work on the promotion on the website itself and invite new authors to write texts and share their stories. Additionally, the website will contain a gallery of nature photographs. The website contains primarily texts in Serbian language, but in the future, an English version of the website will be established expecting to receive great attention in the future.
- The plan is to statistically analyse collected data and publish the results in the form of original scientific papers.
- Results of the project will be presented at national and international conferences.
- Publication and brochures are freely available online, too, and can be found on the website <http://bddsp.org.rs> and <http://wildbalkans.com> as well as on the websites of partner NGO's.

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

Planned activities started little later than expected, due to the fact that our project was approved in the beginning of September 2018. Fieldwork on Hermann's tortoise populations was conducted in September. In order to realise our field activities in accordance with the lifecycle activities of all planned populations of tortoises, and before the end of their activity period and hibernation in 2018, we decided to do the interviewing of local inhabitants on four localities in the east and south of Serbia in 2019. All other project activities were realised according to plan and in the predicted schedule. Project activities ended in December 2019.

8. Budget: 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. It is important that you retain the management accounts and all paid invoices relating to the project for at least 2 years as these may be required for inspection at our discretion.

Item	Budgeted Amount	Actual Amount	Difference	Comments
Team meeting - food and fuel costs	182	482	+300	Additional funding was obtained.
Making android application for surveying	203	203		
Field equipment	1300	1320	+20	Price of lens was higher. The lens was used, and we have no bill.
Supplies material	100	100		
Field survey grants	1500	670	-830	Unfortunately, not enough people have applied for the grants. Money was transferred to field research.
Printing surveys for research in the east and south of Serbia	50	95	+45	The survey contained more questions than expected, so the price was higher.
Field research 2018.	1170	1282	+112	Additional funding was obtained.
Field research 2019.	2340	3250	+910	Additional funding was obtained. Also, no bills could be obtained for accommodation.
Organizing and travelling expenses for lectures in schools	900	900		
Writing/updating articles on Serbian Wikipedia		90		Additional funding was obtained.
Writing a news, website update, website translation	216	216		
Promo material	1395	1395		
Presentation at four universities in Serbia	620	630	+10	
Total	9976	10633	+657	

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

Mainly, next steps are to continue the research and intensive education of population about negative impact on wildlife, harvesting and killing wild animals because of superstitions and because of traditional purposes. Since these beliefs exist for a long time, it will be necessary to invest great effort to raise awareness about vulnerability of wildlife.

Education of young people, students, and local inhabitants should become a priority in the sphere of nature conservation, so we will endeavour to enable further research, as well as continued education of the locals, aiming to preserve biodiversity. Carryout an aggressive conservation awareness campaign need to include townhall meetings, visits to primary and secondary schools, universities and media campaigns to educate local people. It is important to sustain the network of partner organisations, but to work on its widening and building a network.

The data gathered so far are a part of one large dataset, so it is a necessity to continue gathering the data throughout Serbia. Serbia is a country with variety of cultural influences; therefore, every part of the country has its' own specific beliefs, myths and legends in the cultural heritage.

Last but not at least, it is necessary to continue monitoring program on populations of Hermann's tortoise to calculate the intensity of human impact on these populations over a long period.

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

The RF logo was used on promotional material made for the project (t-shirts, brochures and calendars), it's available in the section 12. RF was also publicised on websites and pages of partner organisations and all promotional lectures in Serbia. Furthermore, it was acknowledged in publication prepared from results of the project.

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

Planning research, selection of sites, defining target groups for research and statistical analysis of data: **Marko Nikolić, Jelka Crnobrnja-Isailović.**

Design of T-shirt, project logo, brochures, calendars and other promo-material: **Dimitrija Savić-Zdravković.**

Analysis of literature data and preparing publications: **Marko Nikolić, Stefan Petković and Jelka Crnobrnja-Isailović.**

Population survey: **Anđela Vučković, Jovana Cvetković, Jelena Conić, Jelena Stanković, Dimitrija Savić, Dunja Ćirić, Katarina Matkić, Slobodan Marković, Milan Ilić.**

12. Any other comments?

I owe a great debt of gratitude to the RF for given opportunity to realise my second small grant project. Thanks to the RF financial support, my team and I discovered a lot of new findings that could be of great importance for protected and strictly protected species in Serbia. It was a great experience for us, and we are sure we will continue to research within this field, hopefully with the RF financial support.



Logo of the project.
Design by Dimitrija Savić-Zdravković



Design by: Dimitrija Savić-Zdravković



Plenary lecture at the 3rd Rufford Small Grants conference "Explore and protect the natural beauty of Balkans", Srebno jezero lake 2018.



We organized an education campaign for students of 16 primary and secondary schools in Nis, Leskovac, Grdelica, Kladovo, Babusnica, Pirot, Belgrade and Vranje.



Presentation at the 2nd congress of Serbian Biologists in Kladovo, 2018.



13th Symposium on the Flora of Southeastern Serbia and Neighboring Regions, Stara planina Mt., 2019.



MSc Bojana Vidojković



MSc Miloš Krstić

Our data were used for creating a master theses of Bojana Vidojković and Miloš Krstić



App screenshots



Educational Brochures



Members of the project team arrive at „NP Djerdap“ protected area



Master students in Kunovica – fieldwork in July