Final Project Evaluation Report

Your Details	
Full Name	Thomas Oliver Mérő
Project Title	Moustached Warbler (*Acrocephalus melanopogon*) in Serbia: Status, Habitat Requirements and Conservation in Declining Reed Habitats
Application ID	23273-1
Grant Amount	£4970
Email Address	thomas.oliver.mero@gmail.com
Date of this Report	July 17, 2019

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
New and precise estimate on the distribution range and on the size of the population of the Moustached Warbler in north-western Serbia. Providing more adequate estimates for Serbia.				In this project we have studied 10 reed beds (in 2019 we added one more) that may potentially contain moustached warblers, according to previous knowledge. The species was found only in two reed beds, which is far less than expected. At Ludas lake (N 46.1009°, E 19.8260°) we recorded up to 14 pairs and at an old abandoned fish pond near Ridjica (N 45.0017°, E 19.1134°) up to five pairs. Previous estimates for breeding pairs of this area (based on speculations, with very little field surveys) was estimated for much higher, resulting in that the Serbian population varies between 80 and 110 pairs (Puzovic et al. 2007). According to our results based on a detailed survey we suggest that the size for Serbia does not exceed the half of the previously estimated.
Creating artificial nesting sites in order to increase nesting population size of Moustached Warbler				During winter 2018/2019 we constructed 32 artificial nesting sites at eight marshes. At seven marshes these artificial nesting sites remained unattractive, because of the absence of water in the marsh as a result of winter and spring drought (2018/2019). At the fishpond near Ridjica from four artificial sites in one nesting of the moustached warbler was confirmed. Because the climatic conditions were restrictive in 2019 (drought) we plan to repeat this issue with artificial nesting site in 2020.
Conservation plans and strategy: getting status of protected habitats and area				Except for Lake Ludas, none of other 10 reed beds underlay any protection. Thanks to this project we found enough evidence that one reed bed

				the fishpond near Ridjica (five breeding paris of moustached warblers) have the chance soon to become a protected area. Furthermore, as additional results, we found bluethroat (*Luscinia svecica*), also a Natura 2000 priority species fishpond near Ridjica, at Bara Jezero near Stanisic (N 45.9880°, E 19.1704°), and at Ridjica Bara (N 45.9916°, E 19.1458°). The protection of Bara Jezero near Stanisic is already in governmental process. This reed bed will be protected within the PIO Sliv Severna Mostonga (Landscapes of Outstanding Features "Sliv Severna Mostonga). The fishpond near Ridjica is private, so after regulation of the property relationships, it can be added to PIO Sliv Severna Mostonga. This area is particularly interesting as it fulfils the criteria as Important Bird Area (IBA), because beside the five pairs of moustached warblers in this area there are nesting minimum five pairs of lesser grey shrike (*Lanius minor*). The procedure will soon start. Overall, we did not only important steps in protection of moustached warbler, but also other sensitive species, and endangered habitats.
Communication with community, media, and publications, in order to educate citizens about our project and in general why nature conservation is so important.				The citizens here are very poorly educated about nature conservation, therefore we had strong communications with community and colleagues that work in other domains. Colleagues in the water management company, are open for a common new project in the future which would result in a revitalisation of a 100 ha a marsh, and would create suitable habitats for the moustached warbler. Second, we held oral presentations and made flyers and posters that was given to pupils in all schools. In printed media we shared information why conservation of a species is relevant and how this is

				connected to other species and how this all reflects on habitat quality. We also regularly updated our blog (http://natura-sombor.com/blog/), where we informed citizens about our activities, and wrote about some basic conservation strategies known worldwide. Finally, we have examined data for a scientific article, and concluded that data is not powerful enough, to publish it in a quality journal. Therefore we decided to prepare the article after the nesting season 2020, when data will be more powerful.
Protection of the reed beds as Natura 2000 sites: how we contributed to this.				Actually I have described this issue above under "conservation plans and strategy". Here I would add that when these areas will be protected as Landscapes of Outstanding Features, the procedure to become a Natura 2000 site will perhaps be much easier, because we applied with our NGO organisation "Nature Protection and Study Society – NATURA", at the ministry to become the governor of this protected area. As governors we will have the chance to speed up the entire process.
*Unexpected results				In 2019, we included an 11th reed bed, the above mentioned Ridjica Bara, in our study. Unfortunately no moustached warbler was found there. However we found two confirmed breeding pairs of bluethroat and we recorded a high density of European pond turtle (*Emys obicularis*). These are valuable new findings as both species are considered as Natura 2000 species, similarly as the moustached warbler.

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

Reed burn and illegal saturation of building material in the reed bed. Only in one case we were able to see and take a picture of the registration number of the

vehicle. The data were given to police. No one ever was found. The police are bribed.

The extreme drought in winter 2018/2019 and spring 2019, resulted in that there was no water in five marshes.

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

a). Before this project there were only assumptions about the density and size of the moustached warbler population is, and also what factors may influence their presence or absence. First of all we found that that previous causal estimates are incorrect, and that population size for this species is far lower in north-western Serbia (and probably entire Serbia). This is mainly because if the very specific habitat preference of the species. We found that the moustached warbler is very sensitive to water depth, availability of old reeds and cattail, vegetation density and percent of rotten vegetation. In most of marshes (80%) some of these components is lacking, making it inappropriate for the moustached warbler.

b). Except for lake Ludas, none of other nine reed beds underlie any conservation. Thanks to this project we found enough evidence that two reed beds, fishpond near Ridjica and Bara Jezero near Stanisic have the chance soon to become protected areas. The protection of Bara Jezero near Stanisic is already in governmental process. This reed bed will be protected within the PIO Sliv Severna Mostonga (Landscapes of Outstanding Features "Sliv Severna Mostonga). The fishpond near Ridjica is private, so after regulation of the property relationships, it can be added to PIO Sliv Severna Mostonga. This area in particular further interesting as it fulfils the criteria as Important Bird Area (IBA), because beside the five pairs of moustached warblers in this area there are nesting minimum five pairs of lesser grey shrike. The procedure will soon start. Overall, we did not only important steps in protection of moustached warbler, but also other sensitive species, and endangered habitats.

c). The study areas that contain the moustached warbler, whch will be part of Landscapes of Outstanding Features, will have an easier procedure to become a Natura 2000. This is because we applied with our NGO organisation Nature Protection and Study Society – NATURA, at the ministry to become the governor of this protected area. This is important because in that case we can organise and do the necessary monitoring for Natura 2000 sites for all required species. We recorded other two breeding Natura 2000 species at Ridjica Bara. We confirmed the breeding of the bluethroat and we recorded a high density of European pond turtle.

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

During our project time we had strong communications with colleagues that work in other domains. Colleagues in the water management company, are open for a common new project in the future which would result in a revitalisation of a 100 ha marsh, and would create suitable habitats for the moustached warbler. Second, we held oral presentations and made flyers and posters that was given to pupils in

all schools. In printed media we shared information why conservation of a species is relevant and how it is connected to other species on a higher level. We also regularly updated our blog (http://natura-sombor.com/blog/), where we informed citizens about our activities, and wrote about some basic conservation strategies known worldwide. Finally, we have examined data for a scientific article, and concluded that data is not powerful enough, to publish it in a quality journal. Therefore we decided to prepare the article after the nesting season 2020, when data will be more powerful.

5. Are there any plans to continue this work?

Yes, we plan to continue study this species, and we want to have a deeper scientific insight into the breeding biology of this species. Furthermore, we plan to study if there is a way of management that may increase the population size of moustached warbler.

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

We already shared our project steps, plan and some results via our blog, presentation in schools, printed media. We also plan to present our specific results via scientific journal and we plan poster presentation at the Ornithological Congress.

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

We used the grant during the 16 month length project period. Most intensively we used the grand during the field surevey. Technical equipment was bought at the start of the project in spring 2018.

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
Food costs during fieldwork	550	480	-70	Because it was arranged in advance, we received a discount
Cost of guides in protected areas	180		-180	We made an agreemant with the nature park, that they will receive results from our work. So guide were helping us without any costs

Print costs of brochures and posters	900	930	+30	
Costs of blog site construction	500	750	+250	The entire web site had to be applied to a new host server, so the programmer had to include these additional costs.
Two Pesola scales	90	90		
One binocular	500	515	+15	
Garmin GPS device	280	290	+10	
Ornithological ruler	20	15	-5	
Digital callipers	70	70		
Eight mist net poles	280	248	-32	
Four mist nets	260	232	-28	
Fishing waders	240	310	+70	An additional pairs of waders was bought, because one was seriously damaged during work in dense and strong reed
Fuel costs for fieldwork	1100	1040	-60	
TOTAL	**4970**	**4970**	**0**	

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

We plan to do further field surveys in order to get a precise insight about habitat and reproduction requirements of this species.

We will intensively communicate with water management companies in order to establish water supply to marshes that may be attractive later to the species.

Similarly as previously, we educate citizenship on our web site and blog, about this species and similar species. Moreover we do general education in nature conservation. Because basic knowledge in citizens is completely lacking.

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 logo of the foundation has been used on presentations, flyers, posters, blog. During presentations, educations, texts in blog the foundation has been acknowledged. We will also thank the foundation in the scientific paper later.

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

Thomas Oliver Mérő, PhD, - The leader of this project, I have done the plan of the monitoring, all reports were written by me, as well as the final too.

Antun Žuljević – One of the most expirienced ornithologist in Serbia, supplied us with much advice, and took part in most field work.

Dejan Đapić – A field expert, he has taken part in most field sessions and bird ringing.

Nenad Spremo - Actively took part in bird ringing.

Dora Malbaša – Helped out in fieldork, and in some governmental issues.

Ivana Šećerov – Helped in fieldwork.

12. Any other comments?

Thank you very much for helping conservation efforts in this important species.

References:
Puzović S, Simić D, Saveljić D, Gergelj J, Tucakov M, Stojnić N, Hulo I, Ham I, Vizi O, Šćiban M, et al. (2003). Ptice Srbije i Crne Gore-veličine gnezdilišnih populacija i trendovi: 1990-2002. Ciconia 12: 35–119 (in Serbian).