

CEPF FINAL PROJECT COMPLETION REPORT

Organization Legal Name:	Society for Biological Research and Protection of Nature - BIO.LOG
Project Title:	Karst freshwater habitats: identification and participatory conservation planning of threatened invertebrate and fish species
Date of Report:	25.02.2015.
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CEPF Region: Mediterranean

Strategic Direction: 3. Improve the conservation and protection status of 44 priority key biodiversity areas

Grant Amount: \$ 19.850,00

Project Dates: 01.06.2013. – 30.11.2014.

Implementation Partners for this Project (please explain the level of involvement for each partner):

Slovene Odonatological Society (SOD) was a main partner in the project. SOD provided experts for dragonflies; SOD members participated in training, filed work, field research camps, joint work with Hutovo blato Nature Park personnel and the regional dragonfly meeting. Their experience in survey, monitoring, conservation and especially Natura 2000 process was valuable for building of capacities of local researchers and BIO.LOG members. Two experts from SOD participated throughout the project and several others participated in production of report and particularly in filed work.

Two experts for fish and molluscs from Croatia were involved throughout the project and several others were consulted or participated in field work.

Nature Park Hutovo blato was important partner that provided significant assistance in personnel, vehicles and equipment for field work in the Park.

Conservation Impacts

Please explain/describe how your project has contributed to the implementation of the CEPF ecosystem profile.

Under the strategic direction 3. (Improve the conservation and protection status of 44 priority key biodiversity areas) the project particularly addressed the priority 3.1. (Establish new protected areas and promote improved management of existing protected areas by developing and implementing sustainable management plans). Our work focused on the identification of key freshwater areas for threatened dragonflies, molluscs and fish species in three hot spots that are the most important for their conservation. The project gathered data on the distribution of species and habitats are essential for their better conservation and management. Gathered information's are important for improvement of their status in existing protected areas and also they give baseline for the establishment of new protected areas, especially designation of areas to the NATURA 2000 network that is being developed in the country.

The second important segment of the project addresses the investment priority 3.3. (Raise awareness of the importance of priority key biodiversity areas, including those that have irreplaceable plant and marine biodiversity). During the project we organized the network of local and foreign researchers, training for students, produced publications and established the website in order to increase public awareness and also establish a base for continuation of our work after the end of the project.

Please summarize the overall results/impact of your project.

- Field work covered more than 40 sampling sites in order to improve knowledge of the species distribution in the region;
- We identified one dragonfly species previously not included in the proposed national NATURA 2000 list. We also identified areas for three species that should be included in the network and prepared the report for the relevant nature conservation authorities;
- With the help of SOD we set up a base for the start of the dragonfly monitoring program in the study region;
- The project improved skills and capacities of local researchers and BIO.LOG members for the research, monitoring and the management of freshwater (especially dragonfly) habitats;
- We established cooperation with young scientists from B&H, Croatia and Slovenia;
- We conducted basic training for students and BIO.LOG members;
- Research equipment that will be valuable also for future research was acquired;
- The project was important for our capacity building and will help us for the future organization and realization of similar projects;
- Publications were prepared and printed and the web site developed in order to improve awareness on the significance of protection of species and habitats in the region.

Please provide the following information where relevant:

Hectares Protected: The produced report includes the sites that should be included in the proposition of the future NATURA 2000 network.

Species Conserved: The produced report includes the species that should be included in the proposition of the country list of NATURA 2000 species for which new sites should be designated.

Corridors Created: Not relevant

Describe the success or challenges of the project toward achieving its short-term and long-term impact objectives.

The main task, field research and gathering of distribution data were successfully achieved. However, the work on protection of identified most important areas just started within the project, it represents long term task that needs further work and it will continue after the official end of the project.

Were there any unexpected impacts (positive or negative)?

Delay due to complex cooperation with international experts for which we were not sufficiently prepared. Although the interest of partners and experts for cooperation was very good, the travel distance, available time of international experts to participate in activities at specific time was a problem, particularly for field work that was dependent on season and weather conditions. It was also a problem to collect the results and conduct data analyses on time.

Project Components

Project Components: Please report on results by project component. Reporting should reference specific products/deliverables from the approved project design and other relevant information.

Component 1 Planned: Improved knowledge of distribution of threatened species in key areas

Component 1 Actual at Completion:

Component completed.

This database will be a baseline for future research and conservation studies. The database is still being filled and we plan to continue this work with new data becoming available and with our new research. After the end of the project we plan to further develop the database and continue field work, particularly on molluscs. Analyses of some material still conducted and final results will be distributed as soon as completed.

We reviewed all the available distribution data from scientific studies and literature and establish a database. Based on the existing knowledge and distribution data we conducted field work in Hutovo blato, Trebižat and Neretva rivers. In total we collected data from 40 sampling sites, 12 sites inspected several times. The dragonflies were more closely monitored at 10 sites that were visited 3 to 5 times.

We identified four potential NATURA 2000 sites for three dragonfly species and one species for the countries NATURA 2000 list. The habitat and the geographical information are recorded and the maps produced with ArcGIS software. As a result of investigations we recommend continuous monitoring of the Deransko lake and surrounding habitats as this is main area of distribution of threatened *Lindenia tetraphylla*. The complete area is under protection and the habitat of the species is found to be in good conservation state. Unfortunately, the plans for the development of hydro power plants in the Upper horizons project represent significant threat for the entire area and the decrease of the water level could mean extinction of the species from the area.

For dragonflies we will continue to develop and conduct monitoring on selected locations of Natura 2000 species.

We will continue started collaboration with NP Hutovo blato in order to ensure the best protection of identified habitat of *Lindenia tetraphylla* in the park and the continuous monitoring of the species population.

We purchased a microscope that was used for the analyses of the collected specimens.

As a result of scientific analyses several reports and papers are in preparation and will be published in future period.

Component 2 Planned: Development of conservation plan and protection of key areas

Component 2 Actual at Completion:

Component completed.

We reviewed the protection status of target groups and the existing protected areas system. We concluded that current protected area system of the hotspots, as well as wider Mediterranean region of Herzegovina is insufficient to ensure sufficient protection of identified habitats of threatened and endemic species in the area, as well as identified areas of highest diversity of target groups. Only positive status is the area of Hutovo Blato, as it is included in Nature park, but for this region the threat is represented by the developing large hydro project "Upper Horizons"

Further, we analyzed the results of the NATURA 2000 project that was realized in 2013/2014 and concluded that it insufficiently includes habitats of several NATURA 2000 species and that one species (*Cordulegaster heros*) is not included at all.

The report with our conclusion for relevant nature conservation institutions of both entities and the country is prodeced. Key areas for dragonflies were identified and the proposition for their protection and inclusion in future NATURA 2000 network is included in the report.

We started the work on the conservation of *Lindenia tetraphylla* at Hutovo blato that will continue. The monitoring of the population of *Lindenia tetraphylla* at Deransko lake needs further research in order to establish the best practice for its protection and inclusion in monitoring plan. In collaboration with SOD we will continue development of monitoring and try to ensure further funding for this action.

Component 3 Planned: Public awareness campaign

Component 3 Actual at Completion:

Component completed.

For the project we established collaboration with several young scientists from Bosnia and Herzegovina, Croatia and Slovenia that jointly realized the project.

The establishment of the network of young scientists and students from the country, region and wider: Several students from BiH participated in field and training activities and the meetings, The Balkan Odonatological meeting gathered 22 participants, mainly students, from Europe that participated in field work, several students from Slovenia also joined the field research for several days.

We gathered a group of students and members of local organizations and stakeholders interested in data collection and monitoring – students from Mostar, Banja Luka participated in activities and field work. This work will continue and probably result with several diploma theses planned on dragonflies.

We establish a webpage of the Project that promote biodiversity values of the hotspots and need for conservation. We intend to update regularly the webpage with our further activities, as well as other important information's from the region. Web site is available at www.karsthabitats.ba

Printing of leaflets and posters about the significance of these areas and their biodiversity value. They are being distributed to NGOs, student associations, national and regional conservation authorities and protected areas.

Meetings were conducted with stakeholders and local organizations (Ministry, Nature Park management, NGO's) in order to introduce them with our work, biodiversity importance of the area and start collaboration in order to protect endangered species and habitats.

The main collaboration was successfully achieved with Nature Park Hutovo blato where the main activities were concentrated (meetings, joint field work activities, educational path, participation in the celebration of the Day of the Park)

Were any components unrealized? If so, how has this affected the overall impact of the project?

Database is developed, but still needs work. Molluscs of the region were never seriously investigated in the past and particularly gastropods are highly diverse, including many endemics, and collected samples need further detailed analyses. It is possible that some samples belong to still undescribed species.

Final report with the proposition for several NATURA 2000 sites and new NATURA 2000 species to be included in the country list was produced with delay.

Although delayed, all the important segments of the project have been implemented. We believe that the impact of these changes on the overall project was very limited.

Please describe and submit (electronically if possible) any tools, products, or methodologies that resulted from this project or contributed to the results.

All the produced materials will be available soon at our web site: <http://karsthabitats.ba/publikacije>

Lessons Learned

Describe any lessons learned during the design and implementation of the project, as well as any related to organizational development and capacity building. Consider lessons that would inform projects designed or implemented by your organization or others, as well as lessons that might be considered by the global conservation community.

The 15 month period for the project realization was found to be too short period for full realization of some activities. Particularly it was insufficient to finish comprehensive study and development of conservation plan for the area.

In the future, in order to ensure better results it is important to involve more stakeholders and also to try to coordinate work with other organization working on the protection of the species and habitats in the area. This would ensure better possibilities for the acceptance of the initiative and strengthen the initiative and its impact. This will also ensure that there will be no unnecessary duplication of work and better usage of the funding.

Project Design Process: (aspects of the project design that contributed to its success/shortcomings)

The result of the involvement of foreign experts was successful in knowledge exchange. Their experience was very important, especially their knowledge of some aspect of field research and NATURA 2000 process. It was also a base for future cooperation. The negative side was that it increased project costs, particularly travel and also their participation in field research complicated the field work planning that was dependent on seasons of the year and the weather conditions.

As we are small NGO with small number of people dealing with several projects that all include field work and the desk work we had some problems in delivering result on time. In the future project of similar complexity will require better organization and probably the assignment of one person for coordination and desk work on single project.

Some of the planned activities were too optimistic for the duration of project. Complex conservation plans need additional work, both, the field work and the cooperation with stakeholders. Especially for molluscs additional field work and analyses of the collected material need more time.

Project Implementation: (aspects of the project execution that contributed to its success/shortcomings)

Filed work, particularly on dragonflies was successfully completed and many data collected and analyzed, but the work with foreign experts on fish and molluscs needed more time to cover all the project area. Some material, especially gastropods, need longer time for examination and determination in the laboratory and this significantly affects the time needed for all the results to become available. This should be taken into account in the future that some scientific results will be available after the complement of most activities and probably after the project deadline.

Due to long time for data analyses and delay in some activities that needed more work the reports to nature conservation institutions were not delivered on time.

During the project duration we collaborated and participated in activities of other grantees, but the communication and collaboration was not perfect and information on most activities was not sufficiently shared between us. The solution for this in future, especially when many organizations are working in the same region at the same time would be to establish an official way of information exchange on planned activities that should be done by one coordinating organization.

Other lessons learned relevant to conservation community:

Additional Funding

Provide details of any additional donors who supported this project and any funding secured for the project as a result of the CEPF grant or success of the project.

Donor	Type of Funding*	Amount	Notes

****Additional funding should be reported using the following categories:***

A) Project co-financing (Other donors contribute to the direct costs of this CEPF project)

B) Grantee and Partner leveraging (Other donors contribute to your organization or a partner organization as a direct result of successes with this CEPF project.)

C) Regional/Portfolio leveraging (Other donors make large investments in a region because of CEPF investment or successes related to this project.)

Sustainability/Replicability

Summarize the success or challenge in achieving planned sustainability or replicability of project components or results.

The project was designed as a pilot project that will establish a baseline for further research (particularly molluscs) and monitoring and protection of other groups. Based on the results and gathered experience it will be possible to further develop and continue work that will be improved with the experience from this phase. We are committed to continue our work, particularly the field investigations of insufficiently known groups of freshwater biodiversity as we understand that this is the most significant for efficient protection of the most important species and habitats. The focus will also be to work on the promotion of biodiversity of the area, as well as public awareness, particularly with the established web page and production of electronic publications. We secured funding for the current year for the management of the web site and plan to continue developing and updating it. Established collaboration with local organizations, as well as foreign expert will help in continuation of the research and the implementation of monitoring of threatened species and habitats.

With the help of the project several students received training in field research that will help in their future research work and valuable equipment is acquired that is very important for the continuation of the research. As during the project several highly motivated students from Bosnia and Herzegovina, Slovenia and some other countries joined the research and we had very successful field camp we plan to organize a field research and training camp in 2015 that will have the goal to continue the work started during the CEPF project and possibly become a traditional yearly Meeting.

We are highly motivated to continue our work that will be modified based on the experience from this project and the activities additionally collaborated with local organization and community. The equipment, skills and lessons learned with this project will be valuable for our future work on the protection of threatened species and habitats in the region.

Summarize any unplanned sustainability or replicability achieved.

Safeguard Policy Assessment

Provide a summary of the implementation of any required action toward the environmental and social safeguard policies within the project.

Additional Comments/Recommendations

Information Sharing and CEPF Policy

CEPF is committed to transparent operations and to helping civil society groups share experiences, lessons learned, and results. Final project completion reports are made available on our Web site, www.cepf.net, and publicized in our newsletter and other communications.

Please include your full contact details below:

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Performance Tracking Report Addendum

CEPF Global Targets

(Enter Grant Term)

Provide a numerical amount and brief description of the results achieved by your grant.
Please respond to only those questions that are relevant to your project.

Project Results	Is this question relevant?	If yes, provide your numerical response for results achieved during the annual period.	Provide your numerical response for project from inception of CEPF support to date.	Describe the principal results achieved from July 1, 2013 to June 30, 2014. (Attach annexes if necessary)
1. Did your project strengthen management of a protected area guided by a sustainable management plan? Please indicate number of hectares improved.	YES	Process started	Process started	<p>Please also include name of the protected area(s). If more than one, please include the number of hectares strengthened for each one.</p> <p>Hutovo blato</p>
2. How many hectares of new and/or expanded protected areas did your project help establish through a legal declaration or community agreement?	YES	Process started, proposition made (1.080,43 ha)	Process started, proposition made (1.080,43 ha)	<p>Please also include name of the protected area. If more than one, please include the number of hectares strengthened for each one.</p> <p>Three proposed Natura 2000 sites for dragonflies:</p> <ol style="list-style-type: none"> 1. Ljubuško polje – 791,08 ha 2. Studenačko polje – 105,05 ha 3. Trebižat – 184,30 ha
3. Did your project strengthen biodiversity conservation and/or natural resources management inside a key biodiversity area identified in the CEPF ecosystem profile? If so, please indicate how many hectares.	YES	Process started	Process started	Process started
4. Did your project effectively introduce or strengthen biodiversity conservation in management practices outside protected areas? If so, please indicate how many hectares.	NO			
5. If your project promotes the sustainable use of natural resources, how many local communities accrued tangible socioeconomic benefits? Please complete Table 1 below.	NO			

If you answered yes to question 5, please complete the following table

