

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. 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 | Urban Šilc |
| Project title | Conservation of halophytic vegetation in coastal lagoons in Albania |
| RSG reference | 12377-1 |
| Reporting period | 02/2013-02/2014 |
| Amount of grant | £4600 |
| Your email address | urban@zrc-sazu.si |
| Date of this report | |



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 |
|-------------------------------------------------------------------------------------------|-----------------|-----------------------|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Review of present state investigations and selection of site for further studies | | | X | According to gathered literature data and recommendations of local scientists' target Osmani lagoon was selected, as poorly examined and pristine, still preserved site. We expanded our research also onto sand dunes stretching nearby the lagoon. |
| Field research | | | X | Flora and vegetation were sampled according to Braun-Blanquet method. In total we found 180 species and between them 11 important from conservational aspect (<i>Pancratium maritimum, Juniperus oxycedrus</i> subsp. macrocarpa, Juniperus phoenicea, Aster albanicus subsp. paparisti, Sambucus nigra, Ammophila arenaria, Elymus farctus, Hypericum perforatum, Stachys maritima, Origanum vulgare, Colchicum autumnale), nine out of them are endangered and two vulnerable. We also mapped and sampled 14 habitats: estuaries, coastal lagoon, annual vegetation of drift lines, embryonic shifting dunes, shifting dunes with Ammophila arenaria, retro-dunes and depressions, coastal dunes with Juniperus spp., wooded dunes with Pinus pinea and Pinus halepensis, Salicornia colonising mud and sand, halophilous scrubs (Arthrocnemum fruticosum), salt meadows (Juncus maritimus), water fringe vegetation (Phragmites australis, Typha angustifolia, Scirpus lacustris), riparian forest dominated by Salix species, Tamarix and chaste tree galleries and thickets. Three habitat types are of Community interest (Habitats with priority status, included in Annex I to Directive 92/43/EEC): •* Coastal lagoons •* Wooded dunes with Pinus pinea and/or Pinus pinaster •* Coastal dunes with Juniperus oxycedrus subsp. macrocarpa. |
| Database of vegetation relevés | | | X | In Turboveg database we collected 676 vegetation relevés of saline habitats from eastern Adriatic. In Gosa area there were 235 vegetation samples made (also in three long transects). We expect that additional relevés (published and unpublished) will be added into the database in the future. |



| | | | Database is also located in Albania (Agricultural University, Tirana) and will enable further studies of saline vegetation. |
|--------------------------|----|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dissemination results | of | X | For local inhabitants two lectures were prepared by local NGO Per nje Zhvillim Rural te Qendrueshem and carried out by Alban Ibraliu and Alfred Mullaj. Information table with results of the project was installed at the entrance into the protected area where many tourists visit the neighbouring beach. Results of the project are also presented on a web page (http://bijh.zrc- sazu.si/sl/strani/biodiversity-of-gossa-area#v) where also slides of lecture and information table can be downloaded. |

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

During the project activities the only unforeseen difficulties were related to the installation of the information table. This prolonged the project for some days and also the reporting.

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

Outcome 1. Detailed and complete assessment of biodiversity of flora and vegetation of the Gosa area. In total we found 180 species and between them 11 important from conservational aspect (*Pancratium maritimum, Juniperus oxycedrus* subsp. *macrocarpa, Juniperus phoenicea, Aster albanicus* subsp. *paparisti, Sambucus nigra, Ammophila arenaria, Elymus farctus, Hypericum perforatum, Stachys maritima, Origanum vulgare, Colchicum autumnale*), nine out of them are endangered and two vulnerable.

We also mapped and sampled 14 habitats: estuaries, coastal lagoon, annual vegetation of drift lines, embryonic shifting dunes, shifting dunes with *Ammophila arenaria*, Retrodunes and depressions, coastal dunes with *Juniperus* spp., wooded dunes with *Pinus pinea* and *Pinus halepensis*, *Salicornia* colonising mud and sand, halophilous scrubs (*Arthrocnemum fruticosum*), salt meadows (*Juncus maritimus*, *Juncus acuta*, *Bolboschoenus maritimus*), water fringe vegetation (*Phragmites australis*, *Typha angustifolia*, *Scirpus lacustris*), riparian forest dominated by *Salix* species, *Tamarix* and chaste tree galleries and thickets.

Three habitat types are of Community interest (Habitats with priority status, included in Annex I to Directive 92/43/EEC):

- •* Coastal lagoons
- •* Wooded dunes with Pinus pinea and/or Pinus pinaster
- •* Coastal dunes with Juniperus oxycedrus subsp. macrocarpa.

Outcome 2. Database of vegetation releves sampled in Gosa area.

Database of vegetation relevés from Gosa area was established with 235 relevés of various vegetation types. We also added vegetation relevés from neighboring areas from Albania for comparison. Collecting relevés from other similar areas will continue in the future. Database is located at the Institute of biology ZRC SAZU and also at the Agricultural University of Tirana.



Outcome 3. Information table, webpage and lectures where we represented results of the project but also importance of the biodiversity of the site. We tried to raise awareness and knowledge about the importance of this type habitat protection.

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

Local community was involved directly through lectures and information table and indirectly through the local conservation authorities that were informed on project results.

During the fieldwork we also had communication with local people who helped us in the field or with transportation or we met them in the countryside. Also important information was given by our one week stay in the Spille village. Through informal communication we informed local inhabitants about importance of saline habitats, their value as they are still very well preserved compared to others in vicinity and the importance of their conservation.

5. Are there any plans to continue this work?

We are planning to research some other ecologically similar areas in Albania and also neighbouring Montenegro. We also found out that sand dunes are even more impacted and endangered than lagoons and we would like to check the human impact on the sandy beaches.

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

The results of the project will be shared by website (website of the Gosa area and Rufford website) and by information table for visitors of Spille village. Website will be updated by adding results of vegetation analysis and by adding published papers.

Results will also be presented as scientific and popular lectures and 2-3 published papers (popular and scientific). First results will be presented at European Vegetation Survey in May 2014 in Ljubljana (abstract is already accepted).

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

Project funding was used for 1 year (February 2013-February 2014) and majority of activities were done during this period. Some problems arose by installing of information table; therefore reporting was prolonged for few weeks.

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 | | |
| Accommodation | 1550 | 1550 GBP | 0 | Costs of accommodation for 10 days of field |
| | | | | work. |
| Food | 775 | 775 GBP | 0 | Costs of food for 10 days of field work |
| Transportation | 370 | 370 GBP + | + 255 GBP | Additional sum was spent for boat transportation |
| | | 170 GBP | | (to the lagoon and for crossing the river) and a |
| | | boat + 85 | | guide who was accompanying us in the field. |
| | | GBP guide | | Two cars were provided for free by Institute of |



| | | | | biology ZRC SAZU and University of Tirana. |
|-------------------------------|------|---------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Data preparation | 500 | 500 GBP | | |
| Lectures | 350 | 350 GBP | 0 | |
| Brochure printing/web site | 520 | 295 GBP | -225 GBP | We spent 170 GBP for design of information table and brochure. Printing of brochure was 125 GBP. Web page is hosted for free on the server of Institute of biology ZRC SAZU. |
| Information table | 500 | 420 GBP | -80 GBP | Firm that gave us invoice for information table was closed and new was much more expensive so we could install only one information table for that amount. |
| Total | 4565 | 4515 | -50 | 1 GBP = 1.192 EUR; 1 GBP = 167,51 ALL |

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

It would be necessary to limit the impact of tourism onto Gosa area. While saline habitats in the lagoon are rather protected by their remoteness between two rivers and are difficult to reach the sand dunes are endangered by turning them into beach with touristic infrastructure. It would be important to limit this to the vicinity of the Spille village and to preserve the widest sand dunes intact.

It would be also important to research similar still not very impacted areas in Albania; because of the rapid development they are endangered.

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?

Logo of the RSGF was used in all materials produced in this project.

- 1. Website.
- 2. Lecture slides
- 3. Brochure
- 4. Poster at EVS in Ljubljana

11. Any other comments?

We would like to thank Rufford foundation for funding and all the cooperation during project preparation and reporting. It would be our pleasure to continue the cooperation with Rufford small grants foundation.

