## The Mozaic Project

he main aim of the Mozaic Project is to contribute to the conservation of the cultural landscape in the two communes of Borşa and Dăbâca, situated in the Eastern Hills of Cluj.

Through basic ecological research as well as studies on the land use and the socio-economic situation of the communities, we provide an evidence base for the development of conservation measures and management recommendations.

The traditional extensive agriculture upon which high nature value grasslands are dependent is declining steadily. In response, we examine the role of agricultural subsidies within the Romanian Rural Development Programme, especially the agrienvironment payments, to see how the situation can be improved. Practical outcomes of our work include a pilot agrienvironment scheme for selected hay meadow sites, which was started in 2011.



### **Facts & Figures**

### **Project Period**

August 2009 - May 2012

### **Cooperation partners**

- Rheinische Friedrich-Wilhelms-University Bonn (Germany)
- \* Babes-Bolyai-University Cluj-Napoca

### Also involved

- Romanian Lepidopterological Society
- University of Agricultural Science and Veterinary Medicine Cluj-Napoca
- \* NGO "Green Echoes" Clui

### Sponsors

- The German Federal Foundation for Environment (DBU) one of Europe's largest foundations whose main aim is to foster innovative exemplary projects of environmental protection
- European Forum on Nature
   Conservation and Pastoralism (EFNCP) a
   Europe-wide network for the promotion of low-intensity farming

### **Mozaic Team**

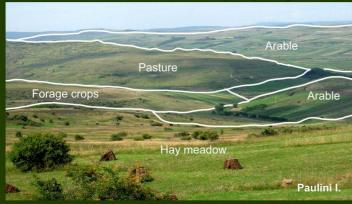
There are around fifteen people involved in the project, including professors, postgraduates, students and freelance researchers from Cluj and Bonn. An important feature of the team is its interdisciplinarity, providing expertise in botany, zoology, ecology, sociology agronomics and agricultural politics.

### **Ecological studies**

We are using vegetation ecology and population biology approaches to investigate questions such as: Which vegetation types are characteristic for the area and how are they distributed spatially? Which butterfly and plant species occur? How big are the populations of the rare *Maculinea* butterfly species and their host plants?

### Activities Mozaic Protect

### Studies about land use and property structure



Over the last few decades the agricultural land use has changed considerably in Borşa and Dăbâca. Our aim is to document this change as well as the current land use, which determines the available subsidies for the farmers and influences the nature value of the area. In this way we can contribute to the further development of the agri-environment programme in Romania.

### Studies of sociology and economy



In order to understand the socio-economic aspects of the project area and to carry out targeted activities we examine the demographic structure and employment situation of the communities. A study on the economic situation of farming households and commercial farms will help to develop strategies for a sustainable agronomic development.

### **Environmental education**



The best investment into a better future is the education of children – therefore we and the NGO "Ecouri Verzi Cluj" are carrying out environmental education activities for school classes in Borşa and Dăbâca.

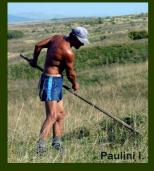
### **Meetings and conferences**



# he hay meadows are the jewel of the project area: not only are they an internationally important site for endangered Maculinea butterflies (see page 4), but also harbour numerous other protected plant and animal species. They are mown once or twice per year, not fertilized and grazed in autumn and spring. The mowing date can be late in the year (July, August and September) and is carried out in a mosaical way due to the division of the meadows into numerous parcels. The land has been farmed in this way for centuries but nowadays the meadows are threatened by abandonment as well as transformation into sheep pastures.

Most of the farmers who still mow their meadows are also carrying out high quality nature conservation, due to their low-impact land management methods. These practices are valuable for maintaining biodiversity and ecosystem services, and should be

rewarded.



Despite this, and the high species richness of the area, the project communes are not eligible for the national subsidies for High Nature Value grasslands (agrienvironment). This is where our pilot programme came into play: in 2011 it offered a

payment for the mowing of selected hay meadow sites (Fânațul Sătesc, Fânațul Domnesc și Sekeliște). Our requirements were modeled on the conditions of the national agricultural subsidy scheme, with two important exceptions:

- Payments were made only for mown hay meadows, not for pastures.
- The mowing date had to be after the 25th of August due to the life cycle of *Maculinea* spp. butterflies.

The reward was 200 Euros/ha for manual and 140 Euros/ha for mechanized (tractor) mowing.





### Results (for both communes)

Contracted surface:	33.5 ha
Mown surface:	
Manually mown:	7 ha (35%)
Mowing farmers with cont	ract:22
ALCON, A	
The second second	Paulini I.

### **Conclusions**

On the basis of our pilot subsidy programme, we are able to give recommendations for the project area but also draw some general conclusions for the agrienvironment programme in Romania. We found that:

- Farmers need greater access to resources and services, such as affordable small hand mowing machines and contractors for manual mowing.
- Summer grazing of hay meadows should be prevented.
- Timus N.



### Did you know...?

### The fivefold miracle

We chose the communes Borsa and Dabaca as the Mozaic Project area, because it is the only known site in Europe harbouring all 5 butterfly species belonging to the rare and threatened group of the Large Blues (Maculinea spp.). This is just one example of the thousands of marvels of traditional farming landscapes of Romania.

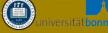
### The origin of the mosaic

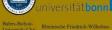
Our project name was inspired by the landscape of the area, which delights the viewer as a colorful mosaic of meadows, pastures, fields, fallows as well as small woods and villages.

In addition, we believe that successful nature conservation attempts are always a puzzle or mosaic including all important elements: people, nature,















www.mozaic-romania.org

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This publication does not necessarily reflect the views of the funders

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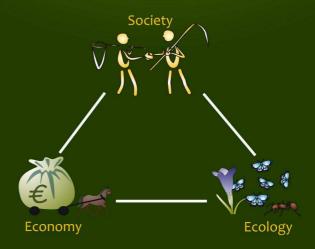
The Mozaic Project will come to an end in spring 2012 – but we, the Mozaic team, feel there is so much more to achieve on the basis of our work over the last two years. Equally, we appreciate very much the hospitality and openness of the people from Borşa and Dăbâca and the support we have received from the local authorities, which can be a great basis for successful activities in the future.



That's why we have founded a new NGO with its seat in Cluj-Napoca, the Mozaic Association, which will continue and develop further the work of the Mozaic Project.

### Everything is connected to everything else

The mission of the Mozaic Association is to contribute to the protection of the valuable natural and cultural heritage of traditional Romanian rural areas through research and applied activities. We will work in the three areas which are important for sustainable development: Ecology, Society and Economy.



Our concern is to have a close collaboration with the local communities because we believe that learning from each other we can find ways to achieve an equilibrium between economic and emotional well-being of man and prosperity of nature.