

❖ Traditional Pastures Saved by Butterflies

Natural pastures, and especially the ones with high conservative value, have become scarcer and scarcer in the last 50 years. The traditional agriculture in Romania has favored the preservation of wide areas of natural pastures very rich in species, as compared to the western and central European countries.

Based on the “Birds” and “Habitats” Directives, the European Union has drafted an ample programme for the protection and conservation of the living environments and of certain endangered plants and animals, programme which includes the European network of protected natural areas, known under the generic name of “NATURA 2000” Network. These mechanisms for nature protection are supported by the national and regional measures applied in each Member State of the EU.

Even if it is less known, the biodiversity of the Romanian pastures is ranked first in Europe, and even in the world. Unfortunately, this important national, European, and world patrimony has been more and more drastically affected in the last 10 years. The main causes of the decline of the valuable pastures and species of plants and animals, some of them unique in the world, can be reduced to the following: the practice of intensive agriculture on large areas, the practice of grazing with too many animals during the entire year, the abandonment of the traditional activities (mowing, grazing with few animals), drainage of humid areas, etc.

The general tendency to intensify the agriculture and to use a single type of crop on wide areas cannot be stopped in the following two decades. Most of the times, the foreign and Romanian investors are looking to get the maximum production without taking into account the soil and nature degradation. In the hilly and mountain levels, where private properties are usually small, the traditional agriculture should be maintained.

In these very regions the nature has kept its structures unaffected, which



Steppe pasture with high biodiversity at “Fânețele Clujului”, Cluj County

Photo: László Rákossy

means that they are locations of maximum biodiversity. These ‘pieces of heaven’ (usually integrated in Natura 2000 sites) are being sought after more and more by Romanian and foreign tourists who believe that where there are several species of plants, butterflies, or birds, the people are healthier, and if they have what is takes for a decent living, the people are also happier.

The actions to be taken in these regions should be related to preserving the traditional agriculture and to combining it with the rural and ecological tourism. Numerous non-governmental organizations are taking actions to this respect. The Romanian Lepidopterological Society, together with the Adept Foundation and with WWF Romania have sent to the Government a measure for the salvation of the blue butterflies of the *Maculinea* type from two distinct regions in Transylvania and Bucovina. These butterflies are extinct or

are about to be extinct in numerous countries in Europe and are included in the list of species protected under EU regulations.

These butterflies live in special living environment and they depend on a certain plant (the wild burnet), and their larvae, after feeding from the interior of the wild burnet flowers descend to the ground where they are



The blue butterfly of the ants, *Maculinea teleius*

Photo: David Hirtzel

cared for and adopted by a certain species of ants which take them to their anthill where they are fed and cared for until they pupate.

The eggs and larvae can be found on flowers in the July-August period, when the larvae live in the anthills of the host ants until the spring, when they pupate. The butterfly leaves the pupa and the anthill at the beginning of July. The mowing and the grazing between June and August 20 is devastating for the “blue butterflies of the ants” (like the locals of the Natura 2000 site “Eastern Cluj Hills”, know the butterfly species *Maculinea teleius* and *M. nausithous*). Therefore, the measures for the protection of these butterflies were:

- prohibition of grazing or mowing until August 25;
- mowing of the vegetation manually or mechanically with small machines lighter than 400 kg (some of them specially created for the administration of pastures with high natural value);
- removal of the mowed vegetation within no more than 2 weeks after the mowing. The rest of the time, grazing is allowed with just few animals (maximum 0.3 LSU);
- the slight fertilization with natural fertilizers is allowed (maximum 30 kg of nitrogen active substance/ha);
- water accumulation and land drainage are prohibited.

The owners or the users of these lands, who accept the above conditions, may apply for Package 6, “Pastures important for butterflies (*Maculinea* sp.)” under Measure 10 – Agri-environment and climate of NRDP 2014-2020 and shall receive a compensation payment of 263 Euro/ha. This measure has several good aspects. There is a financial basis for saving these unique communities of butterflies and the environment they live in. The farmers and the rural population are made aware and sensitized about nature and its components.

These are the first steps towards agri-tourism based on the intact na-



Traditional agricultural activities at the Natura 2000 site “Eastern Cluj Hills”

Photo: Andrei Crișan

ture and on natural products prepared traditionally. These measures are supported by the numerous visits the volunteers make in the areas with *Maculinea* butterflies explaining to the students, the parents, the teachers, and the local authorities that the preservation and the use as agri-tourism of this richness is more profitable than cultivating maize or the excessive grazing of the fields where the *Maculinea* species have been identified in Romania.

Pursuant to the enforcement of the “Maculinea” measures and to obtaining compensations, numerous farmers in the two regions in question have changed their mentality towards nature and agriculture. They have become true trainers for oth-

er farmers who, in their turn, apply for the compensations related to the “Maculinea” measure. Some of them have become ecologists farmers, with interviews and tales that represent an excellent courses in ecology and nature protection. Thus, with only two species of butterflies, the natural state of the living environment can be preserved at excellent parameters, for the benefit of the entire community and of generations to come.

We still believe in the idea that Romania’s chance lies in the unaltered nature and in tourism, which should be revived and stimulated. In addition to these structures, seen as true sanctuaries of nature, there are still enough lands for intensive agriculture.

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