

Monitoring high-diversity semi-natural grasslands in Gyimes, Romania

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A significant proportion of high nature value, semi-natural grasslands in Europe is found in economically and socially disadvantaged mountain regions, like in Gyimes, where large, extensive grasslands are still under extensive management (low-input farming) by the local community.

The aim of our project was to obtain data in a large area on the natural values of threatened grasslands in the Gyimes region, and based on the spectral characteristics of the sample areas, make estimations on the location of such grasslands in the whole Gyimes region.

We used point sample mapping to document around 6000 ha of grassland. Data (GPS coordinates, land-use and habitat type, photo, locally rare vascular plant species etc.) were recorded in the sampling units.

The study was done by volunteer students of different Hungarian universities. An important aim was to involve also the local community in the assessment of vegetation. Nine knowledgeable inhabitants and two young persons, with great practical experience in farming were involved in the field studies.

During our study, we recorded 1036 sampling plots. 242 in woody vegetation, 620 in different grassland types and 174 in other habitats (gravel bars, alkaline fens etc.). The average number of protected species per plot was 2,4. We collected data on 41 rare species, 33 of them are red listed in Romania. Abandoned hay meadows count only for 1 %.

For the long-term sustainability of these species-rich grasslands, extensive, low-input farming activity is crucial. Development of economic motivation could create a solution both for economic and social problems, and also to preserve biodiversity.