

Remarkable dry grassland type/site

In this section, particular grassland communities or grassland sites will be introduced which are from certain point of view interesting for other EDGG members. You are invited to present your favorite grassland associations or those that are attractive in other aspects (their diagnostic species, distribution area, management and conservation), or you can simply present the picture gallery. Remarkable localities of dry grassland habitats can be introduced representing e.g. important research areas, refuges of rare and endangered species or simply places requiring special conservational measures.

In this issue, we will introduce the locality Vrchná hora from south-western part of Slovak Republic. In spite of its high biological value this locality lacks the effective conservation and the maintenance of valuable xero-thermophilous communities is thus endangered by commercial activities. This is the reason why the local nature conservatoinist prepare a project to rescue this locality and search appropriate partners from Germany (see the call in the section Forum).

Vrchná hora

Close to Bratislava at the border of Malé Karpaty Mts. and Borská nížina lowland a remarkable dry grassland site is located with a unique communities of xero-thermophilous flora and fauna. It is called Vrchná hora. Surrounded by flat fields and orchards this hill is conspicuous from distance. On the foothills, old vineyards and orchards which gradually pass over into the mosaic of shrub and grassland stands. These communities covering the area of about 7 ha are the most interesting.

Vrchná hora is built by neogene sandstones and limestones. Since the 16th century, the south-facing slopes have been transformed into vineyards. The top parts and north-facing slopes have been used as common pastures. The specific geographical, geological and climatic conditions of the locality are reflected in its extraordinary rich flora and fauna. Numerous plants and animals occurring here belong to the rare and en-

dangered species. Altogether, 260 vascular plant species were recorded here (Škodová et al. 2005). Among them, 22 endangered plant species are listed in the Slovak Red List of Plants (Feráková et al. 2001). Critically endangered species *Himantoglossum adriaticum* and *Ophrys holoserica* occur here in a rich populations. Among other vulnerable species the following occur in the locality: *Dactylorhiza incarnata* subsp. *incarnata*, *Stipa pulcherrima*, *Dictamnus albus*, *Iris variegata*, *Orchis militaris*, *Orobanche alsatica*, *Orobanche gracilis*, *Phelipanche purpurea*, *Stipa joannis*, *Linum flavum*.

Grassland communities of Vrchná hora belong mostly to the association *Polygalo majoris-Brachypodium pinnati* within the alliance *Cirsio-Brachypodium pinnati*. In the well developed stands on deeper soil, tussock grasses come to dominance such as *Stipa joannis* and *Festuca rupicola*. During their flowering, *Linum flavum* and *Anthericum ramosum* are especially con-



Ophrys holoserica, *Himantoglossum adriaticum* and *Dictamnus albus* in the locality Vrchná hora, Slovakia
Photo: I. Škodová and K. Hegedúšová.

spicuous. On shallow soil, the stands are open dominated mostly by *Inula ensifolia* and common occurrence of *Tithymalus cyparissias*, *Anthyllis vulneraria*, *Chamaecytisus supinus*, *Asperula cynanchica*, *Campanula glomerata*, *Sanguisorba minor*, *Thymus pulegioides* and *Polygala major*. In places covered by bare sand numerous annual or biennial herbs occur, e.g. *Salsola kali* subsp. *ruthenica*, *Petrorhagia saxifraga*, *Petrorhagia prolifera*, *Erysimum diffusum*, *Camelina microcarpa*, *Alyssum montanum* and *Acinos arvensis*.

On the top plateau and in the margins of shrub stands the association *Geranio sanguinei-Peucedanetum cervariae* has developed belonging to the fringe communities of the alliance *Geranion sanguinei*. The shrub communities belong to the alliances *Prunion spinosae* and *Prunion fruticosae*, respectively.

The locality was declared as an Important Plant Area with code SK IPA 134 within the project Important Plant Areas (IPA) of the Central and Eastern Europe coordinated by the organization Plantlife International (United Kingdom). In spite of numerous attempts, in the locality no conservation measures have been adopted until recent days, which would exclude activities resulting in degradation of valuable habitats. The locality is endangered

by building of recreational objects and private houses. As the grassland communities are abandoned since longer time, gradual successional changes take place and woody species spread intensively in many places. To maintain the valuable steppe communities it is necessary to ensure the appropriate grassland management. However, the land has private owners, which would like to use it as building grounds.

References

Feráková V., Maglocký Š. & Marhold K. (2001): Červený zoznam papraďorastov a semenných rastlín Slovenska (december 2001). [Red list of ferns and vascular plants of Slovakia. In Slovak with English abstract.] In: Baláž D., Marhold K. & Urban P. (eds.), Červený zoznam rastlín a živočíchov Slovenska. Ochrana prírody, 20 (Suppl.): 44 – 77, Banská Bystrica.

Škodová I., Hegedúšová K. & Valachovič M. (2005): Rastlinné spoločenstvá Vrchnej hory pri Stupave [Plant communities of Vrchná hora near Stupava.. In Slovak with English abstract.] Ochrana prírody, 24: 72–86, Banská Bystrica.

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Several views to Vrchná hora, Slovakia, and its plant communities. Photo: I. Škodová.