

## The dry meadows habitat (*Festuco-Brometalia*)

The dry meadows are semi-natural areas of great naturalistic value. They are very rich in thermophile flora (those requiring mild temperatures) and because of their calcareous substratum sometimes dry out. Among the many species of plants growing in them are several orchids.

In addition to the diversity of flora, there is plenty of animal life, especially species of entomofauna (insects). Many butterflies find the dry meadows a perfect habitat. However, the conservation of the meadows demands careful management.

In Lombardy dry meadows are only found on calcareous hillsides with suitable exposure. Those in the Montevécchia and Curone Valley Park are among the most southerly and low lying. Similar environments are found in the foothills of the Alps (the Grigne, Corni di Calzo and Monte Barro).

At higher altitudes, where different species occur, these meadows are "primary grasslands": they are stable and do not tend to become woodland.

At lower altitudes, the meadows occupy land reclaimed long ago by man from thermophile woods, principally of downy oak, to provide pasture and agricultural land.

The demise of agriculture, which has become unprofitable in these areas because they are not very accessible, have unfavourable terrain and are subject to drought, left them open to encroachment by woodland.

Many species of great naturalistic importance disappeared as a result, for their presence was favoured by regular mowing of the meadows.

## The dry meadows habitat in the Park

Dry meadows are one of three habitats considered by the European Union to be of priority interest for nature conservation.

They are found on southerly facing slopes that are terraced in the higher areas of Mount Montevécchia and the Santa Croce Valley, but the most interesting meadows cover about 30 hectares in the municipalities of Perego and Rovagnate, where they create a truly charming landscape.

Here the terraces, called "ronchi" in the local dialect, were cultivated intensely (and with considerable fatigue!) until the 1950s, with vineyards, vegetables and also cereals. Profound economic changes led to their almost total abandonment, as also happened with the ancient farming settlements of Galbusera Bianca and Galbusera Nera.

The woods thus began encroaching on these abandoned lands, first with shrubs (dogwood, blackthorn, blackberry) and then with trees (hop hornbeam, flowering ash, downy oak and wild cherry).



A red-backed shrike  
on a branch of  
blackthorn

The mix of habitats, with the remaining meadows, uncultivated land, shrubland and woodland and the areas of transition between these, created ideal conditions for a number of rare bird species (red-backed shrike, whitethroat, cirl bunting, Sardinian warbler) that risked extinction in the region.

In the surviving meadows and on the slopes between vineyards the most important plants for "constructing" the habitat are species of graminacea.

But the most striking species are the orchids, with their delicate or gaudy colours.

The dry meadows are also a privileged and sometimes exclusive habitat for certain insect species.



Scented grass  
*Chrysopogon gryllus*



Erect brome (*Bromus erectus*)



Fragrant orchid  
(*Gymnadenia conopsea*)



Pyramidal orchid  
(*Anacamptis pyramidalis*)

The disappearance of the dry meadows would lead also to the disappearance of many species of flora and fauna in the territory.



Swallowtail butterfly  
(*Papilio machaon*)



Praying mantis  
(*Mantis religiosa*)

## Management challenges

In the second half of the 1990s, after three decades of neglect, there was renewed interest in agriculture and at the same time considerable demand for land for recreational use.

So the Park has to balance needs that are often contrasting:

- agricultural operators who want to reclaim land, especially for vineyards;
- bird species that need shrubland;
- visitors who want open countryside, rest areas and accessible paths;
- The need for correct management of the meadows that is indispensable for the conservation of this habitat.

## Protecting the habitat

With the 1998 LIFE Nature project “**Santa Croce and Curone Valleys: protection of habitats of priority interest**”, the Park:

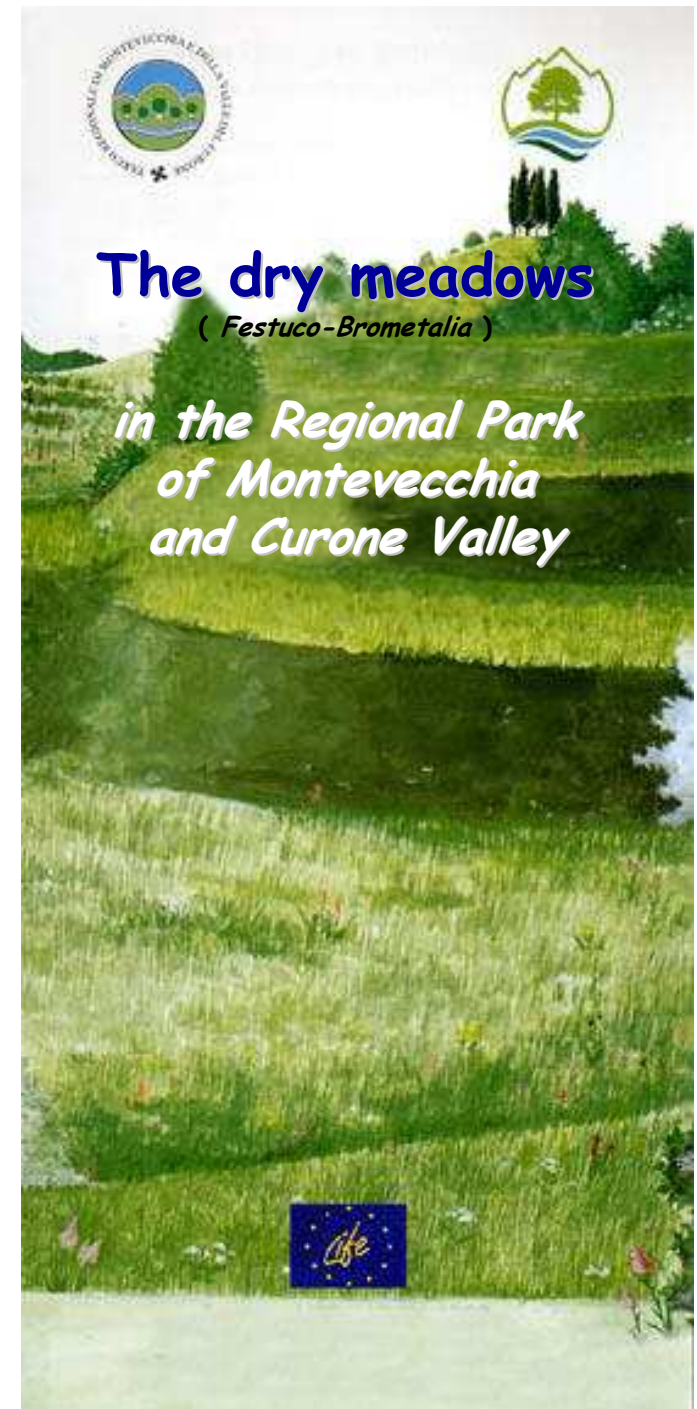
- is carrying out surveys to improve knowledge of these habitats;
- has proposed a management model for the dry meadows with mowing only very late in the season to allow plants to complete their annual cycles and clearance every two years of woodland margins;
- has reached agreements with landowners for the adoption of management models and agricultural methods that conserve areas of shrubland to permit the interconnection of ecosystems;
- Has reclaimed abandoned land, restarting mowing and clearing about 20 hectares. Donkey grazing has also been tried, since these animals also eat shrubs. Recovery of the meadows is thus being carried out at very low cost, and with completely natural methods.
- Is working to improve paths and control the transit of visitors in the more delicate areas.

## Advice for the visitor

To maintain the value of this habitat, please

- **do not stray off the paths to avoid damaging vegetation (and disturbing agricultural activity!);**
- do not pick flowers or plants: this is forbidden for many species and in any case the beauty of these simple plants is better appreciated in their natural environment.
- do not make unnecessary noise because it will disturb fauna and other visitors.

Translated by Martyn Drayton



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in the Regional Park  
of Montevicchia  
and Curone Valley