

The **Forest Botanical Garden** is located at an altitude of approximately 1,300 meters above sea level, in the uppermost part of the deep and cold valley of the Sestaione stream, and it covers an area of 14 hectares.

It houses plant species typical of the Pistoia Apennines and – due to a very cold and similar to Alpine microclimate – it also hosts many Alpine species which find their southernmost diffusion limit here at the European level: they include some of what are known as “glacial relics”, such as Norway spruce (*Picea abies*), alpenrose (*Rhododendron ferrugineum*), alpine sow thistle (*Cicerbita alpina*), and other species, especially those typical of peatland.

A place of considerable naturalistic value, the Garden opens up to the public as a quiet flowered corner.



*Alchemilla* sp. (*vulgaris* group)

The **Botanical Forest Garden in Abetone** was officially founded in 1987 and since 1994 it has been part of the Ecomuseum of the Pistoia Mountains.

It's a centre for the promotion of natural science and forestry studies on the Northern Apennine, as well as a site for the preservation of local flora. More in general, the Botanical Garden is a scientific institution established to safeguard the natural and cultural identity of the region.

Through guided tours, conferences, and workshops for children, it seeks to raise public awareness of environmental and sustainability issues.



*Lilium bulbiferum*



*Gentiana purpurea*



*Swertia perennis*



Scientific coordination



The Ecomuseum of the Pistoia Mountains, inaugurated in 1990, engages visitors in the knowledge of our territory and natural environment, through emotions and sensorial experiences; with its six open-air routes, teaching hubs and historical artifacts, including ironworks, ice houses and water mills, it allows you to directly experience the history of this mountain area and its population.

It is visited by more than 15,000 people every year; it offers handicraft classes and didactic workshops for schools.

You can also arrange a personalised tour, guided by Ecomuseum experts.

With the support of



*Your tailor-made Museum!*



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## THE NATURALISTIC TRAIL

### BOTANICAL FOREST GARDEN IN ABETONE



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## BEECH FOREST

This typical Apennine forest includes common beech (*Fagus sylvatica*), plus a few other tree species: silver fir (*Abies alba*), sycamore maple (*Acer pseudoplatanus*), rowan (*Sorbus aucuparia*), with reddish fruits palatable to birds, and Scotch laburnum (*Laburnum alpinum*). The grasses in the undergrowth include *Anemone nemorosa*, *Oxalis acetosella*, with its distinctive leaves in three segments, *Geranium nodosum*, with purple flowers, *Luzula nivea* and *Veronica urticifolia*.

## FIR FOREST

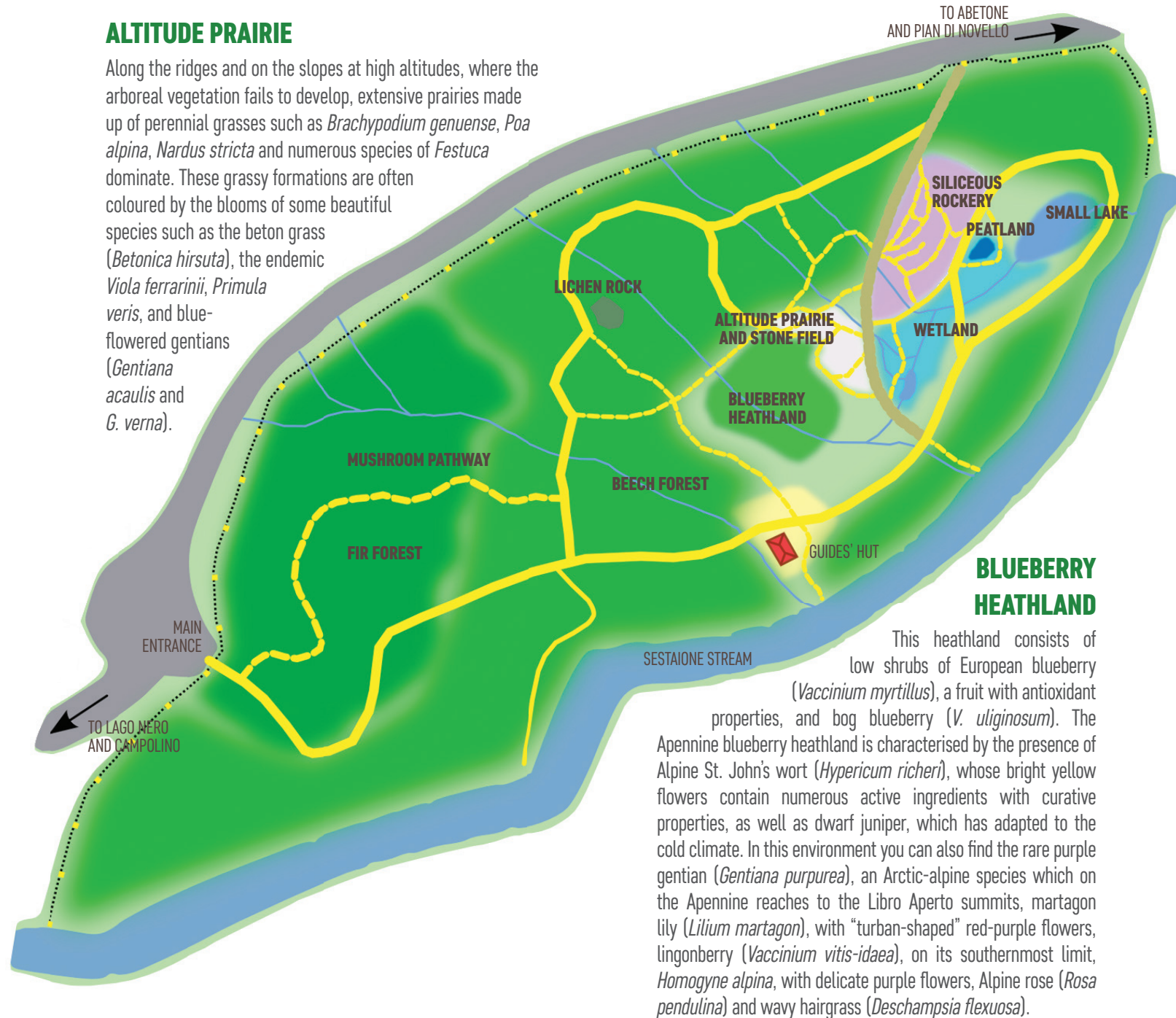
A silver fir (*Abies alba*) forest with some imported species, for example the Douglas fir (*Pseudotsuga menziesii*), which is used as timber. The grass species include *Prenanthes purpurea*, with purple flowers, *Senecio ovatus*, with bright yellow flowers, and goldenrod (*Solidago virgaurea*). The fir forest in the Botanical Garden includes some Norway spruce (*Picea abies*) trees, a species from central Europe which reaches its southernmost limit here. As a matter of fact, close to the Botanical Garden, there is the Campolino Oriented Nature Reserve, established in 1972 for the purpose of preserving some spontaneous Norway spruce populations, a species which was widespread across the Apennines during the post-glacial period.

## SILICEOUS ROCKERY

It consists of a local stone formation, known as “Macigno”, which includes red elder (*Sambucus racemosa*), *Alchemilla saxatilis* and broad-leaved thyme (*Thymus pulegioides*), all of them plants which are also used as food. On sunny cliffs you can find *Silene saxifraga*, *Globularia incanescens*, *Draba aizoides*, *Asperula aristata* ssp. *oreophila* and various saxifrage species. In the most humid areas, there are also specimens of *Aquilegia dumeticola*, *A. lucensis* and several fern species.

## ALTITUDE PRAIRIE

Along the ridges and on the slopes at high altitudes, where the arboreal vegetation fails to develop, extensive prairies made up of perennial grasses such as *Brachypodium genuense*, *Poa alpina*, *Nardus stricta* and numerous species of *Festuca* dominate. These grassy formations are often coloured by the blooms of some beautiful species such as the beton grass (*Betonica hirsuta*), the endemic *Viola ferrarinii*, *Primula veris*, and blue-flowered gentians (*Gentiana acaulis* and *G. verna*).



This heathland consists of low shrubs of European blueberry (*Vaccinium myrtillus*), a fruit with antioxidant properties, and bog blueberry (*V. uliginosum*). The Apennine blueberry heathland is characterised by the presence of Alpine St. John's wort (*Hypericum richeri*), whose bright yellow flowers contain numerous active ingredients with curative properties, as well as dwarf juniper, which has adapted to the cold climate. In this environment you can also find the rare purple gentian (*Gentiana purpurea*), an Arctic-alpine species which on the Apennine reaches to the Libro Aperto summits, martagon lily (*Lilium martagon*), with “turban-shaped” red-purple flowers, lingonberry (*Vaccinium vitis-idaea*), on its southernmost limit, *Homogyne alpina*, with delicate purple flowers, Alpine rose (*Rosa pendulina*) and wavy hairgrass (*Deschampsia flexuosa*).

## WETLAND

In this environment, the white butterbur (*Petasites albus*) is the dominant species, but you also have raspberries (*Rubus idaeus*), *Cicerbita alpina*, also on its southernmost limit, and *Gentiana asclepiadea*. Other specific species here are goat's beard (*Aruncus dioicus*), *Heracleum sphondylium* and *Epilobium angustifolium* which produces fuchsia flowers in summer. Along the rivulets, there are several plant species, including *Caltha palustris*, *Saxifraga rotundifolia* and *Silene pusilla*. Near the streams, you can find grey alder (*Alnus incana*) and goat willow (*Salix caprea*), from whose bark salicylic acid is extracted, commonly used to produce aspirin.

## PEATLAND

This small area constitutes an Alpine environment which, on the Apennines between Tuscany and Emilia, reaches its southernmost distribution limit. The soil here is impregnated with water and without oxygen; plant residues accumulate forming what is known as peat, where *Sphagnum* mosses live, bryophytes which produce spongy carpets, star gentian (*Swertia perennis*), *Eriophorum latifolium*, with white plumes, *Parnassia palustris*, *Sanguisorba officinalis* and – last but not least – *Pinguicula christinae*, a carnivorous plant which digests the bugs trapped on its sticky leaves.

## THE SMALL LAKE

This is a small-scale replica of mountain lakes, for example, Nero Lake and Greppo Lake, with *Carex rostrata* on its shores, and various animal species including newts, common frogs, leeches, and insects such as Plecoptera and Gerridae, which skate on the water.