



Cover photograph: Fabio Liverani
 Illustrations: Luca Dell'Uomo
 Graphic design: Immedia

Interpretative arrangements: Alessandra di Girolamo
 Texts: Nevio Agostini, Carla Lamego, Andrea Serra e Davide Alberti
 Editoria: Servizio Promozione, Conservazione, Ricerca e Divulgazione della Natura - Ente Parco
 Created by: Nevio Agostini e Giovanni Quilighini

Full distance (loop trail): about 2 kilometers.
 Gradient uphill: 100 m.
 Walking time (including stops and return): 2 hours.
 Best period: May to November.

The heart of the National Park consists of the Foreste Demaniali Casentinesi: over 50sq km of Biogenetic Nature Reserve plus two Integral Reserves of extraordinary naturalistic value between Romagna and Tuscany. It is often the case that in Italy some important natural environments have survived thanks to the marginal role they have played in recent human activities. This is not our case! The forests which today one admires are the result of a centuries old history during which culture has evolved ways of protecting and managing a territory in full harmony with natural balances. This Nature Trail goes up the small enchanting valley of the torrent Archiano d'Isola, a tributary of the greater Archiano coated with a spectacular beech wood forest. - This is the "Archiano rubesto" (the Strong Archiano), mentioned by Dante in the 5th Chant of the Purgatory, when telling the episode of Bonconte da Montefeltro who, wounded in the battle of Campaldino between Guelfs and Ghibellines, near Poppi, in 1289, was carried away and was lost in the waters of the swollen Archiano. Badia a Prataglia is the most important town inside the Park; its name derives from the Abbey (Badia) of Prataglia of which only the church remains standing today, the church preserves a beautiful crypt dating back to the early 11th century. The residents of Badia have always had a special relationship with the forest and for centuries have been skillful craftsmen in woodworking. But, to cut a long story short; let us now move along the trail and carefully look at nature all around us.

Welcome to Badia Prataglia

NATURE TRAIL

NATURE TRAIL

Badia Prataglia

The beech wood



Parco Nazionale
 Foreste Casentinesi
 Monte Falterona
 e Campigna



Plane-tree maple
obtusatum.
 subsp. *opalus* and the Neapolitan maple *Acer opalus subsp. norway* maple *Acer platanoides*, the Italian maple *Acer opalus* *Acer monspessulanum*, the hedge maple *Acer campestre*, the native maples present in the Park are the Montpellier maple and everywhere it is found in mountains. The other species of species, spread from the Pyrenees to the Caucasus, to Persia, and in many parts of Europe; it is, in fact, a wide distribution beech woods, not only in the Apennines but also in the Alps to the similarity of the leaves). We often find this species in adjective of the species "pseudoplatanus", with reference shapes, similarly as a plane tree (from which derives the Latin that of the mountain maple is smooth at a young age, whereas in the adult tree it flakes off in irregular Park there are as many as 6 different species of maples. One of the distinguishing characters is the bark: meters. Recognizing this tree is not complicated, it should not be forgotten, however, that within the *pedunculatum* it is a rather long-lived species and is free to develop to reach a height of over 35 space, without constriction or suffocation by the proximity of other trees. The **Plane-tree maple Acer** although locked within the luxuriance of the forest it has been able to grow freely within an open The great tree that stands in front of you is a Mountain Maple, and its majestic bearing tells us that,

HALTING POINT 2

The Mountain Maple



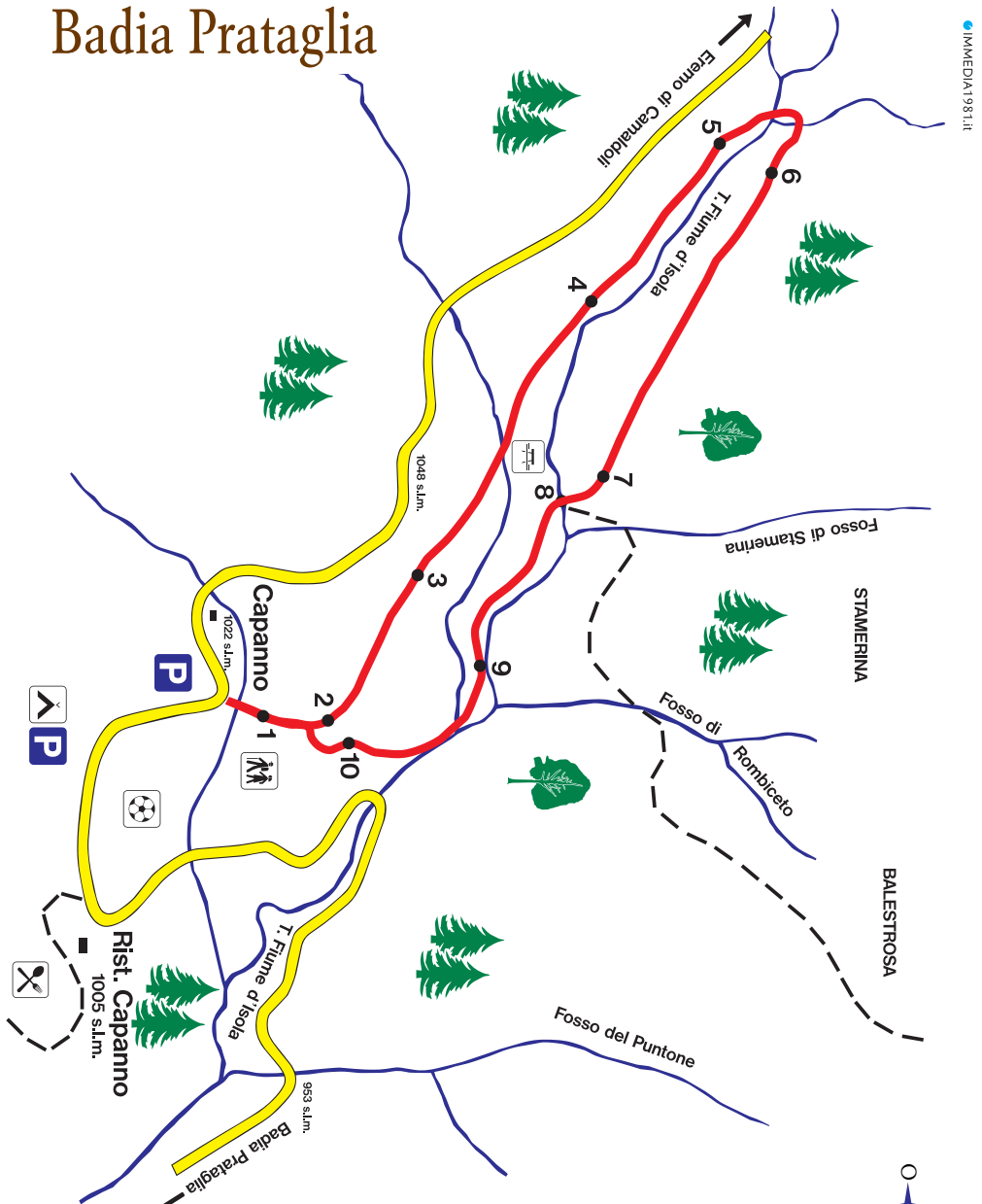
Here we are in the presence of numerous trees, among them some pine trees of considerable dimensions. They were planted about 150 years ago on ancient meadows as part of the interventions operated by Karl Siemon, a Bohemian forestry inspector. Karl Siemon, whose name was Italianized into **Carlo Siemoni**, was called upon in 1838 by Leopold the Grand Duke of Tuscany to manage the forests which during the first half of the 19th century, appeared severely rundown by centuries of intense and indiscriminate exploitation. Siemoni with great passion devoted his life to the restoration of both the forest and the drainage system of the territory, and in a few decades enriched the area with over 500 hectares of newly planted woodland. Also the great pines which we have observed belong to two foreign species: the **Scots Pine *Pinus sylvestris***, with its southern limit of natural distribution in the Bologna Apennines, and the **Lodgepole pine *Pinus contorta subsp. murrayana***, native north eastern America, a true curiosity of the forest, planted in the Park only in this experimental plot (it stands out for its characteristic cone provided with sharp points). Take a look now within the shade of the pines, you may notice the spontaneous growth of trees and bushes belonging to species that privilege shady and cool places: silver firs, black alders and willows. The reforestation with pines, like all plantations of an artificial nature, is destined to go through a slow but progressive naturalization, and in time will take on the structural and floral characteristics of the original woodland of this area of the Apennines.

HALTING POINT 1

Man and the Forest

NATURE TRAIL

Badia Prataglia



Getting there: from the Tuscany side Reach the "Umbro-Casentinese" road at Bibbiena and continue in the direction of Soci. From the Romagna side, take the the E45 highway to Bagno di Romagna and continue to Passo Mandrioli.

HALTING POINT 3

The Abieti - faggeta

At last we are inside the forest and we can see that from the light which, coming through the leaves, it creates an atmosphere similar to that of the interior of a cathedral. Let us take advantage of a pause in order to better comprehend the character of this type of natural woodland. The beech-woods of the Apennines (faggete) are nearly pure forests where the beech tree rules over all other trees. Among the subject species, are the mountain maple and the silver fir, which alternate their presence according to altitude. The former is more numerous at a higher altitude, and it is one of the few trees that reach the watershed along with the beech-tree; the latter is instead present at lower altitudes (generally below 1300 m) where the climate is more continental. In view of this, botanists indicate beech-woods with maples (**Aceri-faggete**) as typical high altitude woodland species, whereas beech-woods with silver fir (**Abieti-faggete**) as lower altitude woodlands species of the deciduous mixed forests. Our halting site, as we can



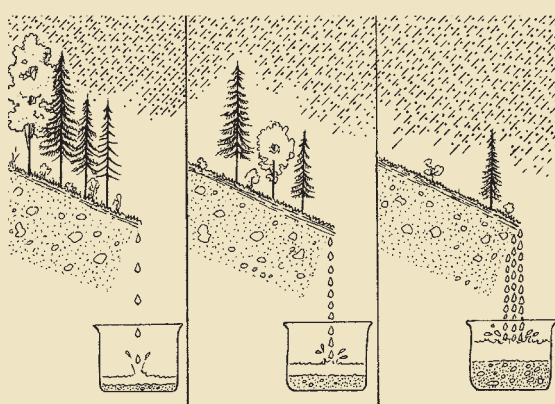
gather at first glance, lies within a beech-wood forest, where the beech-tree is accompanied by the silver fir and, to a lesser degree, by other species that love not excessively damp conditions. The Forests of Casentino, Campigna and Lama represent one of the rare complexes of forest vegetation, closest to a complete natural state, an emblematic environment, unique in the Northern Apennines.

HALTING POINT 4

Forest and soil protection

Let us look at the mountain slopes descending down to the torrent and imagine what they would be like without the woodland that clothes them. The great local naturalist Pietro Zangheri from Forlì, usually defined as "the linen of Romagna" (taking a definition from geologist Signorini) the obvious erosion at the beginning of the century carved the barren slopes of our Apennines. For a better understanding of the phenomenon let us try to consider a major factor that affects the balance of the territory: rain. The raindrop that falls on barren soil has an immediate impact on the surface; Soil and plants absorption is negligible, and so is the resistance exercised by the vegetation. Most of the water rapidly runs off, washing away the topsoil and swelling the torrents and rivers. Conversely, the raindrop that falls on a forest is caught

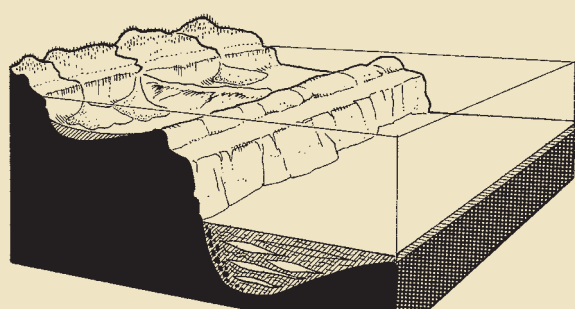
by the leaves which slow down the energy and raindrops reach the ground and are absorbed by litter and by moss carpets, which are true sponges, absorbing up to 20 mm of water per minute. The absorbed water percolates into the deep soil filling up the pores of the earth. In addition the vegetation cover creates a barrier for the water running off on the surface, greatly reducing, on one hand, surface erosion, on the other the chance of disastrous flash floods.



HALTING POINT 7

Between two boulders

Whereas in the Romagna side of the Park the characteristic formation Marl-sandstone is dominant, on Tuscan-Emilia Apennines we observe quite similar rock formations, commonly called Boulder. Indeed, they are essentially rock formations consisting of rhythmically and regularly alternating mighty sandstone layers, hard and compact thanks to a strong calcareous cement, and softer materials, and often much thinner, such as silt marl or clay. These types of rock would have formed much earlier: from 25 to 30 million years ago, in peculiar sea basins called "foredeeps" which were formed during the uplifting of the Apennines while they were completing their rotation towards NE. Only in recent decades geologists have understood the origin of these formations: the sediments transported to marine basins quickly loose speed and tend to accumulate in a short distance from the coastline, forming an escarpment. The slope of this escarpment becomes increasingly steep and unstable and, when it breaks its balance, there is a submarine landslide that manifests itself as a turbid current whose deposits may cover vast



areas. The materials carried by this current, settled on the sea bottom, above the normal sediments for those depths, such as clay and lime of organic origin. In this way, alternating with subsequent sedimentation of turbid and normal finer sludge, create the flysch, i.e. the alternation of layers.

HALTING POINT 8

The torrent

At this stage it is possible to admire the torrent: its bed consisting chiefly of boulders and large stones upon which the water runs in jumps and small waterfalls, becoming impetuous especially with the thaw or heavy rainfalls. All mountain torrents possess a very selective habitat, where the turbulence of the current makes the life of all living organisms decidedly difficult. All plant life which one encounters is highly specialized



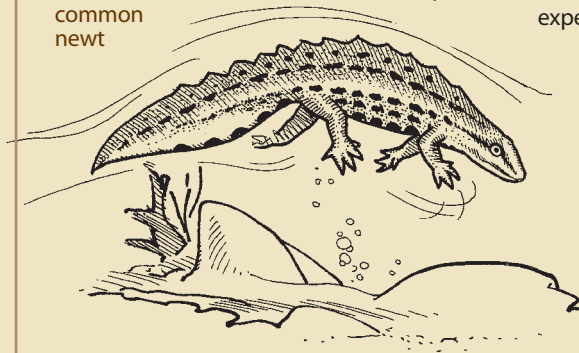
in order to offer a minimum resistance to the flow of water, forming flattened and slippery cushions stuck to the underwater stones, as in the case of algae, or are anchored to stones as do lichens, mosses marchantiophytae. Animals too develop curious strategies in order to contrast the current. Observing the most impetuous current tracts of the torrent, one will discover strange tubes made of sand grains or vegetable debris that slowly move sliding. They are cases that protect the larvae of **Caddis flies**, insects which as adults look like small moths. The larvae are exclusively aquatic, they build in fact a shelter collecting debris from the surrounds and cementing them together with a tenacious sticky silk thread. Not only they can protect themselves from predators in this way, but can also resist the current. The larva moves with its legs that stick out of the opening of the case and, as it grows, it adds and increases the length of the case. For many species the case is so peculiar as to identify a particular species.

HALTING POINT 5

Small puddles

In the spring, in small puddles like those we have just met, we may observe different species of amphibians intent in mating and spawning within the submerged vegetation, or their tadpoles that move lazily on the bottom and along the edges. Have you ever observed newts? They are small amphibians that retain the tail as adults. The smaller, the **common newts**, no more than 10 cm long, while the older ones are the **Italian crested newts**, reaching up to 18 cm. In the period between March and April, they move from land to water to mate, and the males of both species take on more pronounced shapes and colours and prominent, especially on the belly, that favor males in the activity of courtship. A close relation of newts is the **salamander Salamandra salamandra**, unmistakable for the loud bright yellow spots on black background and for their cylindrical body. This salamander is, in fact, poisonous, its skin produces a substance which irritates the inner mucous of predators. The bright coloration is interpreted by the experts as a "visual warning", or a reminder of an unpleasant experience. With some luck it is possible to observe

common newt

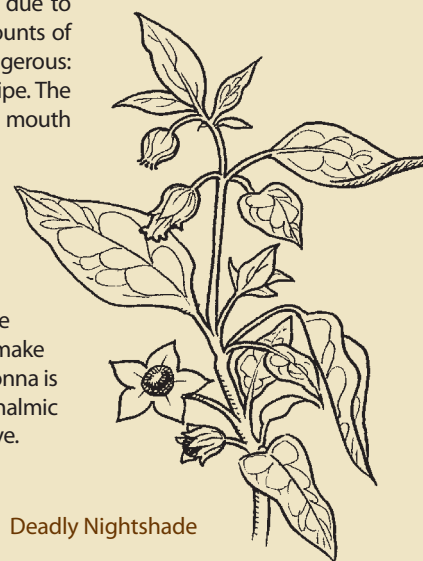


red frogs, well camouflaged in the litter of dead leaves. These frogs, in comparison to the common green ones, have less confidence with the aquatic environment and will dive the bare essentials to mate and lay eggs. Their eggs are gelatinous masses, as big as a fist, and stay anchored to the aquatic vegetation or floating.

HALTING POINT 6

Attention, a Deadly Nightshade

Our halt is dedicated to a beautiful isolated herb, 0.5 to 1.5 m tall, with a straight stem and large leaves opposite in pairs. Be careful! You are looking at a **Deadly Nightshade Atropa belladonna**, both respected and feared, and the subject of numerous gruesome stories and recommendations by ancient and modern scholars and herbalists. Every part of this plant is in fact poisonous due to the presence of "tropane alkaloids" that make even the minimal amounts of ingestion very dangerous. Especially its typical fruit may be very dangerous: a juicy berry the size of a cherry, green at first and shiny black when ripe. The first symptoms of poisoning are dilated pupils, luster of the eyes, dry mouth and incoherent speaking. This then leads to real frenzy of attacks and hallucinations; it was in fact used in the past during magical practices. Should the poisoning not be stopped in time, respiratory paralysis leading to death, may occur, hence the name: Atropos, one of the three Fates in Greek mythology, she was the one that severed the thread of life of every man. The name derives from Belladonna, a typical custom of the courtesans of the Serenissima Republic of Venice in 1500, who used the juice of the berries to emphasize their eyes and make them brighter and more attractive. Deadly Nightshade *Atropa belladonna* is still considered an important medicinal plant and, it is still used in ophthalmic surgery for the dilation of the pupils during the analysis of the inner eye.



Deadly Nightshade

HALTING POINT 9

An ancient bridge

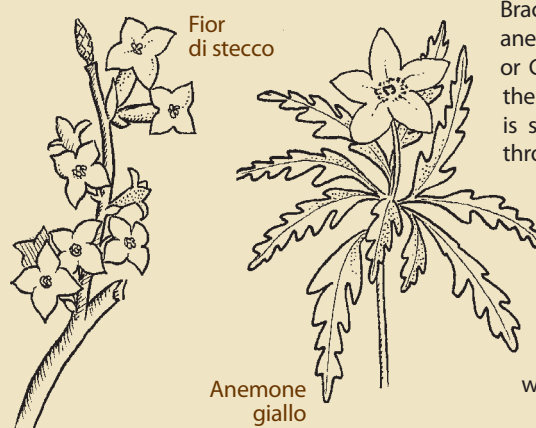
A dense network of trails and bridleways penetrated widely, since the Middle Ages, into the present area of the Park, and were used not only by local populations, but also served for civil and religious purposes. One of these is the "via Romea peregrinorum", or in other words, the ancient medieval route used by pilgrims of Germanic origin, as an alternative to the via Francigena, to go to Rome. The roads that reached the ridge of the Apennines from the Romagna and from Tuscany were also cultural routes. Suffice reminding the "disputaciones camaldulenses" which, in the 15th century, gathered in the hall of the Academies of nearby Camaldoli, figures such as Lorenzo de Medici, Marsilio Ficino, Leon Battista Alberti, Cristoforo Landino. Finally, among the artists who came to this mountain district needs mention the Della Robbia in Corniolo and La Verna, Vasari at Camaldoli, Ghirlandaio in Bagno di Romagna. There are numerous artifacts that bear witness to this important frequentation. Chapels, crosses than mark pilgrims ways, shrines in stone for reassuring and guiding the wayfarer at crossroads and by fountains, bridges or footbridges, marking obligatory passages across the main torrents. One of such ancient bridges we may still admire today! Their construction was a work of great skill, often in wood, more rarely in local stone, the local sandstone. Seeing such ancient works of men should stimulate respect and love for this territory and landscape although, alas! This is rarely the case.



HALTING POINT 10

Under the Beech tree

The beech tree is regarded as a tree by the "egotist" behaviour, and a "disagreeable" companion. With its ample and dense foliage tends to "steal" the sun from the underwood, inhibiting the growth of seedlings and the renewal of other species of trees. In addition, its extended roots are thirsty of water and nutrients which they detract from the roots of less vigorous neighbours. Shrubbery is sporadic and chiefly gathered in open spaces, in clearings or in marginal areas: raspberries, february *Daphne Mezereum*, are common. Less frequent are elder, hazel, and wild cherry. Nearer the ridges we may find blueberries, a typical high altitude shrub. The grasses are prevalently shadow and humidity lovers, shy of the sun.



Fior di stecco

Anemone giallo

Bracken is common (both male and female), The wood anemone, the wood sorrel, the balsamina, the bedstraw or *Gallium odoratum* or the rare *Lilium martagon*. At the end of Winter, beginning of Spring, when the beech is still bare and greater is the solar energy coming through, numerous precocious species flourish, such as the snowdrop, the *Corydalis*, the two leaf squill *Scylla bifolia*, Several species of *Cardaminae*, *Mercurialis*, *Allium*, they form small colourful carpets in the underwood. Among the most interesting species for their rarity or for their botanical interest we care mention the extremely rare *Tozzia alpine*, the only place in the Apennines where it is found are the Casentino Forests.