

Lago di Ponte The nature and shapes of the land

NATURE TRAIL

shadow lovers The northerners: a slope for

smooth, thin, silvery- gray, the leaves ovate-elliptic smooth margin. Hornbeam may be confused with hazel. Recognizing a Beech tree, symbol of Europe and of the Apennines, is relatively easy: the bark is the trees that spontaneously form these woods: **beech**, white hornbeam, cherry, Alpine maple, race to occupy sky space and light, which in this environment are always scarce. We should recognize this land often planted chestrut, but once abandoned the cultivation, abandonment has unleashed a Many are the forest plants that love these climatic conditions and seek deep soils rich in humus. Man in north-facing slope allows the mesoclimate not to allow jumps in temperature during the hottest hours. Although we may enjoy a hot summer day our first observation point will be cool: the creek near and

yellow dots. its male inflorescences, precociously cover the tree with branching out at the base, its bark is smooth and shiny, and horizontal stripes. Finally, the **Hazelnut** is a shrub. Generally cherry tree with the trunk with dark red bark, and obvious slightly marked and of a rounded appearance, and the maple is recognizable by its opposite leaves, 5-lobed, ovate-elliptic, also have a doubly serrated margin. Italian ridges, more pronounced with age. The leaves are always the beech, but the trunk has large grooves and longitudinal

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Welcome to Lago di Ponte

therefore, walk, observe, recognize and use ... our most important quality: our intelligence. or a tree and not understanding why it is in that environment may be of little gratification. Let us, appreciate the balance between the living and the physical state of the territory: recognizing a flower but a myriad of natural areas to be discovered during your excursions. Our hope is to make people them. You will not find here the ages old Forests of the upper reaches of Bidente or of the Casentino, is a "reversion": man lived and exploited these territories up to a few decades ago, then abandoned the Tramazzo torrent, and part of the scenic Lago di Ponte lake. The "wildness" of this valley, however, a limited area such as the undergrowth of a forest. The Nature Trail runs through the Upper Valley of of a region depending on exposure or gradient; microclimate means finally the climatic situation in and corresponds to the climate of large regions; with mesoclimate means the change in the climate to introduce the definitions of macroclimate, mesoclimate, microclimate. The first occurs in a wide area interpret this nature trail wants to help us understand certain interpretation. To this end it is necessary not others, and what conditions the natural vegetation? The territory is an open book full of stories to Why our mountains are so rich in forests, oak and beech trees because they love certain places and

Best period: March to November Walking time (including stops and return): 2 hours. Gradient uphill: 200 m. Total distance (loop trail): about 3,5 kilometers.

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Graphic design: Immedia

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.etun ynids bne dtoome llems abisni ditw "sped" 05-02 fo statsulo llems ni baratteg leaf is very similar to that of the hornbeam and the fruits are tends to go twisted with age and gets numerous cracks. The cut for coppicing. The bark is grayish brown and its trunk his outstanding ability to emit vigorous suckers after being in the forests of the sub-montane belt, favored by man for April-May. The hop hornbeam is the most frequent species white and erect, which develop along with the leaves in briefly petiolatae. Typical are the flowers in large panicles bark, opposite leaves, imparipinnatae formed by 7-9 leaflets flowering ash is recognizable by the smooth light gray can reach considerable size and a majestic bearing. The leaves. It is typically found on sub Mediterranean hills and the trunk straight and slender, deeply lobed leathery season and persist on the plant until spring. Quercus cerri is the oak with the domed acorn "curled", oak, instead branches out and twists, with broad and irregular foliage. Its leaves turn yellow late in the mountainous characters than pubescens, which is replaced above a certain altitude. The pubescens

conditions, among which the oak trees: Turkey oak and pubescens oak. Turkey oak has more turning to the South, and the previously dominant trees give way to others better suited to these Once at the stop, it will be evident that we are faced with another world. Suffices changing exposure,

The southerners: a slope for

sugar lovers



Benedetto in Alpe to Pass for Peschiera and then on the SP86 highway towards Tredozio.



HALTING POINT 3

A sandwich for those with good teeth

Those who frequent our mountain will have noticed the character of the rocks that we face, a sort of infinite sandwich alternating two types of rock: sandstone, harder and more tenacious, and marl, erodible and crumbly. The erosion of the rock walls as we can see, does not allow the vegetation to settle with



HALTING POINT 4

areas. It is a succession of ditches with steep

slopes that flow into other valleys increasingly

more steep and rugged. To understand the

genesis of this morphology we should look at

the dominant geological formation throughout

the Romagna Apennines: the "marl-sandstone",

of which we have already spoken at length.

This topography has restricted the activities of

man and limited his settlements, allowing the

forest vegetation to maintain a good coverage, although in the past, when the mountains

were inhabited, grazing and excessive cuts had

stable and evolved communities, but some lone tree is able to anchor itself to the rock, using the more consistent sandy layer to anchor and sinking its roots into marl layers. The result may be one hundred year old trees with the appearance of low and twisted shrubs, with roots that run several meters along the more tender layers. In this case, to the climate factor adds to the geomorphological, or the shape of the terrain and geological features of the substrate. We observe these twisted and prostrate small trees, with roots that run in the layer of marl almost as if hold hands in a state of apparent instability. In the foreground we have the manna ash tree, able to colonize the most inaccessible slopes, and later we also see a black hornbeam in the same conditions. The flowering ash is a lover of the sun, and can tolerate periods of drought. Its fruits, samaras, are able to travel several kilometers transported by the wind, they penetrate into the crevices of the rock bringing shade and shelter for other new settlers.

HALTING POINT 5

From micro to meso-climate: the vegetation belts

the top of our mountains, a vegetation belt extends which

is generally indicated as mountain area. This area presents

climatic characters favorable to the beech tree and other

species, such as sycamore (maple-beech forests) that appears

in the highest belt; fir (abieti-beech forest) in the mid-range

and in places with greater naturalness; linden, Norway maple,

mountain elm and other hardwoods (tilia-beech forest) at the

bottom of the belt. Below the mountain belt we find a belt of

mixed deciduous forests, called sub-mountain, formed by oak

(cerris and pubescens) and other tree species such as maples

(Alpine maple and maple), flowering ash, hornbeam (black

hornbeam and white hornbeam) , laburnum, rowan (service

Depending on the season, we may see from this vantage point, looking in the direction of the Tramazzo pass, bands and areas of woodland which differ according both to the exposure and to altitude. The climate, as we know, varies continuously: for example, moving from downstream to upstream the temperature lowers by an average of 0.6 ° per 100 m in altitude. As a result, In terms of vegetation, we will find elements of discontinuity going uphill: we are talking of bioclimatic belts. The point is favorable to observe the transit between the two bioclimatic belts that characterize the park: the **mountain belt** or the beech woods and the **sub-montane belt** deciduous or mixed forests. Between 800-1000 m and



HALTING POINT 6

Crums of life

tree, wild service tree) etc.

In this observation point clues are infinite to appreciate the delicate balance between the forms of the soil and the plant population, since the scale in this case is reduced. The layer of marl mail to the top end of this outcrop is almost completely eroded and dismantled the layer of marl, emerges as consistent layer of sandstone, more stable but made of hard rock.

Here woody plants cannot take root and the population consists mainly of a fruticose lichen, *Cladonia* like (the same genus as *C. rangiferina* much liked by Reindeer in northern Europe) branched as a small shrub that looks like small cushions. In the interstices between the rocks are also some species of herbaceous flora, adapted to these conditions, such as the mouse-ear hawkweed *Hieracium pilosella*, the common globularia

Globularia punctata, wall germander *Teucrium chamaedrys*, the *Sanguisorba minor* and then the helianthemum, thyme and *Euphorbia cyparissias*. But the most spectacular species in this arid mead are orchids and in particular the Bertoloni ophrys *Ophrys bertolonii*: Instead of attracting insect pollinators with nectar, orchid attracts imitating the abdomen of the female ready to coupling. The unsuspecting male alights on hairy flower, attempts copulation and does not know that instead of his own reproduction he has only helped that of an orchid.

se-ear hawkweed *Hieracium pilosella*, the common globularia

HALTING POINT 7

forest up to and on the ridges!

Man a demanding species but not much

Man too has had to adapt to the conditions imposed by the nature of the territory. The name of this town "Piane" (Plains) indicates, however, the goodness of this place. Before World War II this farm was inhabited by the Bendoni family: wife, husband and nine children, who had 80 sheep and 16 cows and all around they grew wheat, maize and potatoes. Scattered farmhouses are the most common type of settlement in these mountains. Each hose was always provided with a threshing floor, a paved ground at the edge of which there are the various outbuildings and where they carried out some agricultural work. Farmyard there were often large shady trees planted or maintained because planted by father or grandfather. At Piane still two large trees a beech and a cherry dominate the scene. The peasant family was generally patriarchal and its components numbered from 5-6 units to a maximum of twenty. A the head of the

resulted into large areas of denuded slopes. Today the same areas have been largely reforested or naturally

recolonized by trees and shrubs. But the climate factor can naturally limit the extent of woods and in the

Northern Apennines, above 1700 m, are landscapes that resemble Alpine areas: blueberry heath, high

altitude grassland of fescues and nard. A frequent landscape in the Tosco-emiliano Apennines, where the

mountains are rising to and over 2000 m... but our mountains never exceeding 1700m are covered by the



ared from 5-6 units to a maximum of twenty. A the head of the family was a rector: he allotted tasks to his younger brothers, children and grandchildren, the tasks he considered necessary; he attended to fairs and maintained relations with the landlord. The manageress was usually the wife of the head of the family, she coordinated home activities directing all the women of the house. It was she who went to the market and also had the responsibility of the chicken coop, which in order of importance was immediately after the stable. The herdsman or plowman was usually a younger brother of the head of the family, in charge of the care of cattle. The other members of the family did not have specific tasks, but had to contribute, depending on the capacity and age, the number of necessary work.

HALTING POINT 9

A torrent of an impetuous nature

Here it is, in front of us, the agent modeler of the landscape par excellence: water. The mountain streams have significantly steep gradients and limited scope for the majority of the year, but are subject to strong and short-lived flash floods. They create rapids, gorges, waterfalls and incased meanders, thanks to the mechanical forces generated by the shock and rubbing debris that the current causes. Tangible evidence is found at the base of the rapids and waterfalls, which often form potholes **Marmitte dei Giganti**: more or less cylindrical cavities, which are formed at the base of a waterfall, caused by the erosion of boulders trapped and dragged wildly all around a shallow cavity. An example err in Premilcuore, in the Valley of the Rabbi, under "Pontenuovo", a humpback bridge that crosses a beautiful waterfall, punctuated by a series of large potholes that follow one another from downstream to upstream. The meanders are instead loops that



follow at regular distances along the course of a river: the meanders are dug in sediments in the river stretches on plains, while often occur carved into the rock in the mountain streams. The valley becomes sinuous and the stream gets stuck in the folds of large sandstone layers, tenacious with erosion, they impose a winding path to the torrent. A spectacular system of encased can be observed along path n.261 in the valley of Bidente of Celle.

The area of the park is covered for more than 80% by woodland and this value is close to 90% if we include some grasslands and shrub lands now left to their free evolution. But why so much forest? We observe our mountains and we note that the forms of relief are very articulate and steep, with missing or rare lowland

Why so much woodland?

HALTING POINT 8

Evolution of the valley, a million-years old story

While descending to the river we notice that the slope we have walked is not as steep as we would have expected, when compared with the opposite side. So much so that along this trail were the fields and pastures of the Plains and on the opposite side, there was a dense forest.

To understand all we have to go back 20 million years, when instead of the mountains there was a deep sea, the seabed slowly deposited sediments that today have become our rock layers. During the process of formation of the Apennines, the seabed and the layers on it deposits were raised by uplifting forces at play, and emerged. It was enough that a little pack of layers was tilting in one direction rather than another and today the different inclinations generate slopes completely different morphology, vegetation and human use. The slope reggipoggio (holding slope) undergoes erosion marked by sudden collapses of the layers of sandstone and has an inclination that tends to be steep. In these conditions the natural forest cover is necessary for the stability of the soil. The place where you are has rock layers that follow the morphology

of the slope more or less parallel to the slope of the same and is called franapoggio. The erosion in this slope is generally due to the slipping of rock layers. The lesser inclination allows on the slopes in franapoggio to concentrate the activities and human settlements: mule trails, cultivated fields, pastures, and houses.



HALTING POINT 10

Travertine, fusion between the mineral and vegetable worlds

The last point refers to a strange situation where vegetable and mineral life, not only influence each other but interpenetrate merging into a sponge-like block of rock: the **travertine**. Do observe the concretion below the small waterfall and if we could approach it we'll notice its spongy appearance and traces of leaves and plant life included the rock.

This is a limestone rock of chemical origin and is formed by a process caused by the presence of waterfalls and special mosses which, with biological and physical mechanisms, accelerate the loss of carbon dioxide by water, and then the limestone precipitation of calcium. The presence of numerous pores and cavities is due to the presence of plant debris incorporated during storage, which with time tend to decompose. The habitat was also recognized as "Community interest" by the European Union and takes its name from a community of Mosses: *Cratoneurion*, particularly important for the phenomenon of travertinization. These blocks can reach considerable size of tens of meters, at



Sorgente pietrificante

springs or waterfalls especially important such as the "Spring of Spungazza" along path n.211 in the Bidente of Pietrapazza valley. We continue our path past the stream and observing the meanders encased that creep into the rocks until they reach the peaceful Lago di Ponte.