

NATURE TRAIL

Γ ΤΝΙΟΡ ΘΝΙΤΙΑΗ

With feet in the water

varies with age: in young plants it is smooth, brown and dotted with many lenticels lenticular in shape The foliage is tapered so as to allow all the leaves, including the lower ones, to receive light. The bark water during floods. The black alder is regarded as a third-magnitude tree, up to 20-25 meters tall. we are in the vicinity of an old river meander, reaching the final stage of silting, the area fills up with "near water". In the Park the alders are sporadic forests confined within the river banks. In our case a black alder Alnus glutinosa. The scientific name Alnus comes from "al han" of Celtic origin a black The path on which you are walking has taken you near the river; near the hoarding you can see a tree,

Other alders in the area of the Park are the Grey alder Alnus "sonos of the sed on these particular miniature "pine cones". siskin, which runs through the forests during migrations and maturity to look like small pine cones. There is a small bird, the recognition points. The female inflorescences, also, lignify in which the adjective glutinosa: these are important character and a keil base. The young leaves and buds are sticky, from are of the expanded leaf type and have an emarginated apex irregularly bounded by plaques generally vertical. The leaves (arranged horizontally); in the adult tree the bark is fissured and

incana and Italian alder Alnus cordata.

Different slopes



2 TNIOG POINT 2

to focus on activities and human settlements.

su swolle oippoqenent ni sope siope allows us (a sliding slope). The erosion in this side is usually due to less parallel to the slope itself and is called franapoggio layers that follow the morphology of the slope more or the natural forest cover. The place where we are has rock In these conditions the stability of the soil is favored by collapses and has an inclination that tends to be steep. slope. It is subjected to erosion characterized by

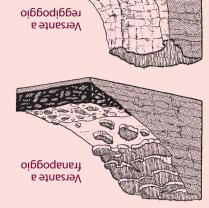
mountain: this is the reggipoggio (a holding slope)

our vantage point the layers of rock plunge into the

understand what we observe. In the slope in front of

su relat formed the Apennines. The 3D model helps us

are derived from sediments deposited in an ancient seabed, then raised and tilted by orogenic forces alternating layers of sandstone (yellow, hard and compact) and marl (gray and crumbly). The layers side of the Park, belong to the Marl-sandstone formation, which, as the name implies, consists of to the structure of the rocks. The rocky outcrops of the Acquacheta valley, as indeed in all the Romagna steep and wooded (right bank) and the other, where we walk, is gentler (left bank). This diversity is due If we look at the valley behind and in front of us, we realize that it is "asymmetric": one side is more







NATURE TRAIL

NATURE TRAIL

Welcome in the valley of Acquacheta

the chasm of the eighth circle of Hell. Benidictine monks. He admired the waterfall and compared it to the horrid jump of the Phlegethon in Dante, exiled from Firenze, was travelling to Forl), halted at Piana dei Romiti, a guest of the local founded in 986 by 5t. Romuald of Ravenna, also the founder of Camaldoli. It was the year 1302 when now reduced to scanty ruins. Here stood once the hermitage of the Abbey of San Benedetto in Alpe, aspect of this trail: we reach Piana dei Romiti, on a rocky outcrop is the village of the Hermits (Romiti), Acquacheta has become famous for its spectacular waterfall. However, this is not the only interesting

(S01-46 (IVX , onreful) τρατ νειγ soon it would have hurt our ears. אפ נסחחם גhמז כסוסיפל אמזפי ויסמיוחק so, even thus, as o'er a precipice it fell, hite tor a thous there should refuge be, والمالة be dbove San Benedetto of the Alp, booms loud, because of falling o'er a cliff and at Forli is of that name deprived, before it flows into its lowly bed, and which above is Acquacheta called, , səninnəqA ədt to əqolz the Aprinines, trom Monte Veso takes a separate course And as the stream, which is the first that eastward

Best period: April to June and from September to November Walking time (including stops and return): 4,30 hours. Gradient uphill: 250 m. Total distance (loop trail): about 9 Kilometers.

Texts: Nevio Agostini e Davide Alberti Editorial: Servizio Promozione, Conservazione, Ricerca e Divulgazione della Natura - Ente Parco Created by: Nevio Agostini e Davide Alberti

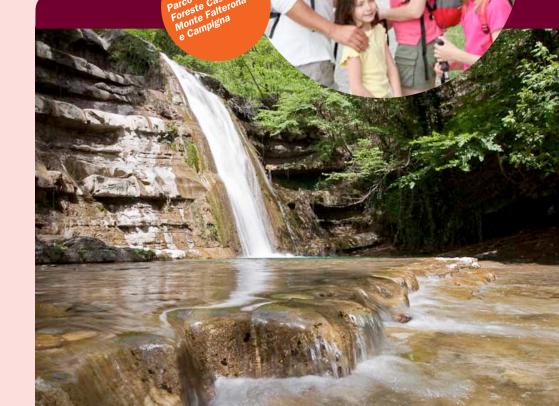
Graphic design: Inpedia Interpretative arrangements: Alessandra Di Girolamo

ςολές ρλοτοσγαρή: Roberto Sauli Illustrations: Luca Dell'Uomo



Getting there:

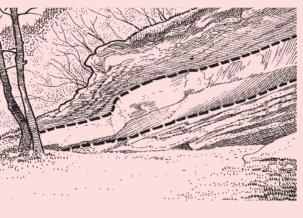
from the Romagna side take highway SS67 of Montone up to San Benedetto in Alpe. From the Tuscany side, follow the road to the Muraglione Pass up to San Benedetto in Alpe.



HALTING POINT 3

A proper geological formation

In the earlier halt you have seen how in this part of the Apennines a single rock formation is dominant: the marl-sandstone. Observe carefully the outcrop of rock in front of the hoarding. In actual facts, the rock types are two: at the base, in the recess, you can observe a greyish layer, easily friable in small flakes; above, in projection, there is a more tenacious rock made of many tiny grains of sand. The first is called marl and the second sandstone. They are sedimentary rocks which alternate one upon the other in this, more than 5 km thick formation! This consists of sediments deposited in the sea over 25 million years ago. The ancient sea floor consisted of a slime of very fine material that over time turned into marl. Periodically, as a result of collapse and "submarine landslides," other sediments came from the coastal



sands. Each of these events has given rise to a layer of sandstone! When the current was very strong a compact sandstone was formed (plane-parallel layering), when it decelerated until extinguishing, gave rise to less compact sandstones (cross-layering). The phenomenon was so quick as to quickly fill up each groove, or track on the bottom slime. After tens of millions of years, when the marl becomes eroded, we can see on the sandstone the negative prints of those old tracks!

HALTING POINT 5

People of the mud

The valley of Acquacheta (the silent water) is very important for the reproduction of amphibians. The different species present there exploit, in fact the many pools, the wetlands and the meanders of the river side, where the current is more ideal to spawn. The **caudata**, the amphibians which keep the tail in the adult stage, are newts and salamanders. The Italian crested newt and the common newt spawn individually, fixing their eggs to the stems of submerged vegetation; the fire salamander has the same habit. It also belongs to the order of the caudata as do the spotted salamander and the Alpine newt, rare but present in other areas of the park, but unfortunately not present in these valleys. Among the **frogs**, which in the adult stage lose the tail, the Agile frog, the Italian stream frog and the Common frog create gelatinous clusters of eggs, of various shapes and sizes depending on the species. The common toad instead lays eggs in long strings, like strands of black pearls. The yellow-bellied toad, a small and important little toad by the peculiar cry, lays eggs singly in particularly sunny and warm puddles. In the hoarding on the trail you will find the models, in actual size, of some of the species that can be found in the Park, you can take stock of their incredible variety! All these species are protected by law, but not only. They are also important links in the ecological network: protecting them is a priority, not only a duty, to maintain the biodiversity of these areas.

HALTING POINT 4

Petrified springs

We are facing a strange situation where vegetable and mineral life, not only influence each other but merge together into a block of rock looking like a sponge: the travertine. Observe the concretions beyond the fence, under the bridge, and also the samples in the hoarding. You will see many holes, traces of leaves and other plant included in this particular sedimentary rock. It has in fact a chemical nature, as it is formed by concretions

of calcium carbonate, but also has an organic origin, as it contains the plant remains on which carbonate is deposited. Calcium carbonate is a salt dissolved in the water which tends to deposit forming thin veils on rocks, logs and leaves in contact with water. This phenomenon occurs more easily in the presence of waterfalls and springs, richer in carbonate. It is formed in this case in a particular environment, in which the presence of moss favors the process of deposition of travertine. These blocks in considerable springs or waterfalls can reach considerable size of tens of meters as the "Source of Spungazza", along path n. 211 in the valley of Bidente di Pietrapazza. Since antiquity travertine has been used as an ornamental stone and is still used in construction: have you ever wondered about those little holes that sometimes we observe in the stone slabs that line the windowsills?!



HALTING POINT 6

Life in the torrent

The trail has again taken us closer to the water, but here the river bed is narrower and steep. The bed is made up mainly of rocks that cause the water to be considerably turbulent. These waters are the realm of some animals specialized to life in streams; two of the most representative are the brook trout and the dipper.

The brown trout Salmo trutta trutta, also known by the name of "brown trout", can reach 5O-6O cm and 4 kg in weight and has a distinctive livery. It is a species with territorial habits: each individual aggressively defends its section of the stream. Trout is a very demanding animal in terms of temperature and oxygen. Even more demanding are the eggs that, in order to hatch, need temperatures below 10 ° C. If while you are reading the board you realize that a bird, fast like a rocket, touches the surface of the water following the winding path of the river, then you have come across a White-throated dipper Cinclus cinclus. It is not really a blackbird, but a large wren about 18 cm long that, like its smaller cousin, keeps its tail strictly raised. It is a shy bird that is rarely observed and the only among European passerines to have the unique ability to "walk" underwater on the bottom of the river, looking for larvae of aquatic insects. And perhaps it is also the only animal that can move on land, water and air!

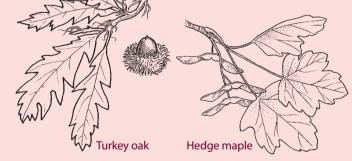


Agile frog

HALTING POINT 7

Discover trees

The Acquacheta valley is dominated by forest; it is hard to believe, but only twenty years ago at this halting point there was instead a clearing! For centuries these mountains have been inhabited and exploited by man, but then the houses have been abandoned and today the population is concentrated in the valley floor. The old clearings once cultivated or kept as pastures are disappearing and undergo a true process of renaturalization. The natural vegetation slowly resumed his place, since the shrubs: hawthorn, blackthorn, dog rose, juniper (species protected by the bite of the cattle from thorns and spiky leaves). Then, over the years, even the trees are back. In the Park, as indeed in every mountain, the climate changes with the altitude and this affects the plant landscape, which can be divided into two climatic bands: sub-mountain and mountain. This halting point is located within the first band, near the border with the second. The presence of the beech tree the main species of the mountain area, is in this case due

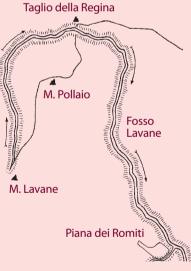


to the coolness of the place. Around us also grow Turkey oak, hawthorn, hedge maple, flowering ash, hop hornbeam, hazel and Italian maple. The picture in relief that you will find on the path shows us the leaves of some of these species. Look around, can you spot them? And now let us think ...with a little 'imagination: who knows what this stopping point it will look like twenty years from now?!

HALTING POINT 9

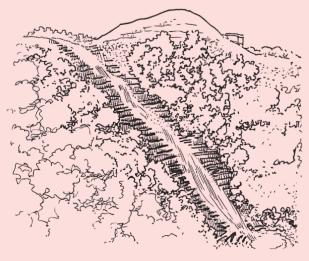
In summer you may be disappointed with the "fall" that you see for the low flow rate of the stream. Difficult, however, not to be amazed at any other time of year, this small waterfall with plenty of water, coming down from Mount Lavane. The torrent Lavane has something special to tell. Take a look at the strange course: born from the northern slopes of Mount Lavane, heads straight due north, then suddenly bends in a wide bend to continue on the opposite direction: due south. Take a better look: the stream passes from one river basin to another and the name "the Queens Cut" might suggest a human intervention to correct its course. The phenomenon is known by geographers as "river capture", and throug the centuries has given scope to stories and legends. It is assumed, in fact, that the "Cut" has been operated by the monks to direct the waters of Lavane in the course of the river Acquacheta, increasing the flow rate, which was reduced as a result of the creation of the lake. Along the creek there had already been mills, fundamental for the economy of the area. Now we know why the course of Lavane has a bizarre trend so we are left to figure out where the ancient stretch of the Acquacheta stream went, deviated as it was from the formation of the lake. Could it match the last stretch of the path? The one that leads to Romiti!

The secrets of the Lavane Waterfall



HALTING POINT 8 Acquacheta (the Silent Water)

It was in 1302 when Dante, exiled from Florence and directed to Forli, halted at Romiti, the Benedictine monks. The poet admired the waterfall and used it as a basis of comparison for the horrid Flegetonte jump into the abyss of the eighth circle of Hell. The waterfall issues from a large bank of sandstone, and then precipitated with a jump of about 70 meters into the bed of the Rio Lavane. If we look at the waterfall from our location we have the impression that the waters falls in "slow motion". This is because in reality the Acquacheta, rather than a real waterfall is a "slide". Let us try to look at some details with the eyes of a



geologist and historian, as did the late Antonio Veggiani the famous scholar who gave an singular interpretation of the waterfall. The Acquacheta which issues from the slopes of Mount Peschiena on the ridge of the Tuscan-Romagna Apennine within the province of Florence. The initial course, very twisty between ravines and meanders, reaches the Plain of Romiti. The plateau also incorporates the waters of another small torrent that originates just upstream. The Acquacheta, after a short and peaceful course, plunges into the "fall". Prior to unravel the mystery of how it originated the waterfall we advance in our path to observe another important clue: the Fosso del Lavane.

HALTING POINT 10 The Plain of the Hermits

After so many landscapes made of vertical waterfalls, gorges, rocky cliffs, now for a horizontal landscape, in stark contrast to everything else. The "Piana dei Romiti" is a prairie dotted with trees and shrubs with the torrent Acquacheta flowing placidly trough it in slow meanders. On a rocky outcrop, perched above the waterfall there is the village of Romiti, now in ruins. Here once stood the hermitage Abbey of S.Benedetto in Alpe, founded in 986 by St. Romualdo of Ravenna, the founder of several monasteries in Italy and Europe, including Camaldoli. But looking back at the landscape through the eyes of the geologist. The plain of Romiti derives from the interment of an ancient lake. Remember the franapoggio slope described in halt 2. A hypothesis that would, in times past, a large landslip may have obstructed the

course of Acquacheta at Romiti, resulting in the formation of the lake. Then the waters of the lake would have found a new course in the precipice of the present "fall". The interpretation of some geographers would place the event just before the year one thousand (Dante saw a landscape similar to the present) when the important Abbey of St. Benedict already existed. Hence the interesting hypothesis that the "the Queen's Cut" had been operated by the monks to increase the flow of Acquacheta strongly affected by the creation of the lake. Now the last stretch of the path, the one that leads to Romiti!

