



THE SAINT FRANCIS WALK SCIENCE AND FAITH

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RIETI – FONTE COLOMBO

Leaving the city of Rieti from via Roma and crossing Porta Romana, you find yourself on the Velino River along the so-called "Giorlandina". After about one kilometre, at the intersection, continue southward on a path that crosses a field until you reach the Tancia provincial road. This road leads to Case San Benedetto and continues west along the road that links the Tancia to the Salaria. Continue until Macelletto located a short distance before the intersection for Fonte Cottorella.

This first part traces a stretch of the Reatina Plain that from a lithological point of view is made up of fluvial overflows and fluvial lakes formed by sand, gravel and mud and where the water-bearing stratum revives a few metres from the level of farmland.

There are no geologically significant findings along this tract. After leaving the Tancia Road, the road towards the Fonte Colombo Sanctuary begins after a semi-level stretch that then turns uphill until the Sanctuary.

Throughout the vegetation-rich route, you can observe the lithological composition of the terrain; it is formed by conglomerates often cemented in large banks or interpolated by loam rock and sandy clays of brackish and lake facies.

The conglomerates are formed by heterogeneous pebbles and varied vegetation joined by calcareous cement that can be dated to the Pliocene-Pleistocene period.

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FONTE COLOMBO – GRECCIO

Leaving the Fonte Colombo Sanctuary heading south through narrow internal roads, you reach the town of Saint Elia. From here the route continues north on a downhill slope until it crosses the Tancia road again.

Still surrounded by conglomerate, you can see the variations that co-exist in the same lithological formation. There are rather potent layers of sand and clay but the conglomerate itself isn't always well cemented. In fact, in the parts where cementation is scarce, you can often see significant erosion phenomenon.

Reaching the crossroads for Poggio Fidoni, you can glimpse a new lithological formation to the left, the so-called "Scaglia rossa" (Red Scale) made up of reddish marly limestone that contains neat layers of maroon-coloured flint that often look like ocean waves. A fine example of stratification with a few folds can be seen at the crossroads for Canera where the reddish marly limestone appears in all its beauty.

This formation can be dated to the Low Miocene-High Cretaceous period.

If you are feeling curious, you can search for a poorly visible fault line approximately 800 metres past this crossroads. Further on you enter a cone that leads to the town of Contigliano.

Moving on towards Greccio, you cross through an area made up of stratum detritus that contain an abundance of water and that are often the cause of small landslides and building damage. The uphill walk is made on flint-rich limestone that is often heavily fractured due to tectonic dislocations (faults) present in the area and although it renders the morphology quite harsh, it is quite beautiful to observe as a whole.



GRECCIO – POGGIO BUSTONE

Leaving Greccio along the road that leads downhill from the Sanctuary, you reach the provincial road that runs northeast for about 250 metres until Sellecchia. Go past the railroad station and after 200 metres turn south along the Rieti Plain until Terra. From here you can cross the Velino River over the Terrine Bridge. Pass Colle Bluffi and turn north in order to enter the Rieti Lakes Natural Reserve. You can choose between two paths to follow. One goes west then north around Lake Ripasottile while the other path goes east-northeast crossing the lake to the southeast.

Both itineraries lead to Ponte Crispolti from where you continue northeast towards Poggio Bustone.

Take the road that passes under Campigliano and by lengthening the walk a few kilometres you can admire the Santa Susanna Springs near the Peppe alle Noci Restaurant. These springs are very important and among the largest in Europe producing up to 10,000 litres of water per second.

In the last stretch after Santa Susanna going uphill north-eastwardly, you reach a detritus conglomerate layered by flint enriched limestone and marly limestone from the ocean's depths that can be dated to the Medium Lias–High Miocene period.

This sequence is typical of pelagic environments that were deposited on a substratum of the Low Lias nephritic environment disarticulated by a Medium Lias tectonic phase. The conglomerate has a variable thickness that ranges from 500 to 1500 metres.

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RIETI - LA FORESTA

If you wish to begin the Walk counter clockwise, the first stop, leaving from Rieti, is the La Foresta Sanctuary.

Leaving Rieti and passing the monumental cemetery, continue north on the Rieti Plain along the stretch made up of superficially porous and earthy travertine that the locals call "sponga". The travertine is not visible because it is situated under a blanket of flood detritus that ranges in thickness from 50 centimetres to about 3 metres.

You can find rather large blocks left over from digs on the surface especially in the cultivated fields.

After a couple of kilometres, the uphill climb towards the sanctuary begins and the lithology changes. You can see large breccia that are loosely cemented together with elements of various origin that derive from erosions generated from exogenous agents and their successive transportation by meteoric water. These are the so-called Polygenic Masses of Rieti that surface only in the hills that surround the city and that can be dated to the Pliocene-Pleistocene period.

Sometimes they are well cemented, in banks, under layers of yellowish sand that often have thin levels of diatomite and greyish sandy clay.

In the early sixties near the beginning of the climb in the area marked by a circle, a couple of geology students unearthed a tusk from an "elephas antiquus" that is now buried in the storage area of the Faculty of Geology at the Sapienza University of Rome.

This is first-hand information because when I was enrolled in my first year of Geology I helped the assistant and storage clerk to cover the tusk with plaster of Paris in order to transport it to Rome.

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LA FORESTA – POGGIO BUSTONE

Leaving La Foresta Sanctuary, the Walk continues northeastwardly towards Poggio Bustone through the town of Cantalice. It proceeds upon the polygenic mass but the roads on slopes and along the ditches present the stratigraphy of the lithology underneath. In fact, you can often see level banks of yellowish sand that contain white layers of diatomite over layers of greyish sandy clay.

A short distance from Cantalice, continuing uphill, the surface changes once more and presents limestone and marly limestone, both containing flint that can be dated to the Medium Lias-High Miocene Period.

As already mentioned for the Greccio-Poggio Bustone tract, this sequence is typical of pelagic environments and was deposited on a substratum of the Low Lias Period nephritic environment disarticulated by a Medium Lias tectonic phase.

After a short pause to observe a porcupine, you arrive at the Sanctuary which you can visit and where you can stop for meditation. If it is not late you can climb up to the "Sacro Speco" (Sacred Cavern) on the Saint Francis Rock where a church was built out of the stone.

The stretch is short yet steep and runs along a well-marked road that winds upon lithological formations belonging to the carbonate shelf domain made up of a limestone and dolomitic-limestone sequence that can also be dated to the Low Lias-High Miocene Period.

These carbonate rocks have undergone various successive tectonic phases so they appear very fractured and are often affected by frequent but not particularly spectacular karstic processes.

POGGIO BUSTONE – PIAN DE VALLI (Terminillo)

Continuing uphill past the Saint Francis Rock you reach the Saint James meadow just below the Monte Polino peak. The meadow is made up of stratum detritus resulting from exogenous agents and tectonic phase phenomenon in the area that cause the rocks to break up as well as from karstic phenomenon from the surrounding hills that are covered by thin layers of red earth deposits.

This sediment can be attributed to the Quaternary period. Further on you reach the Petrinara Spring and after one kilometre you find an impressive tectonic dislocation to then arrive at Mount Versanello. Between this hill and Cantalice you can observe an extraordinary phenomenon of nature: a large overthrust tectonic dislocation.

Lithologically, this entire area covers sediments pertaining to the deep-sea pelagic sedimentation dominion that include marly and carbonate formations typical of the Umbria-Sabine area made up of cornelian, limestone detritus, diaspore, red ammonium, majolica, loam rock, and white and red scales as well as sediments pertaining to the carbonate shelf dominion with a limestone and dolomite limestone subsidence shelf.