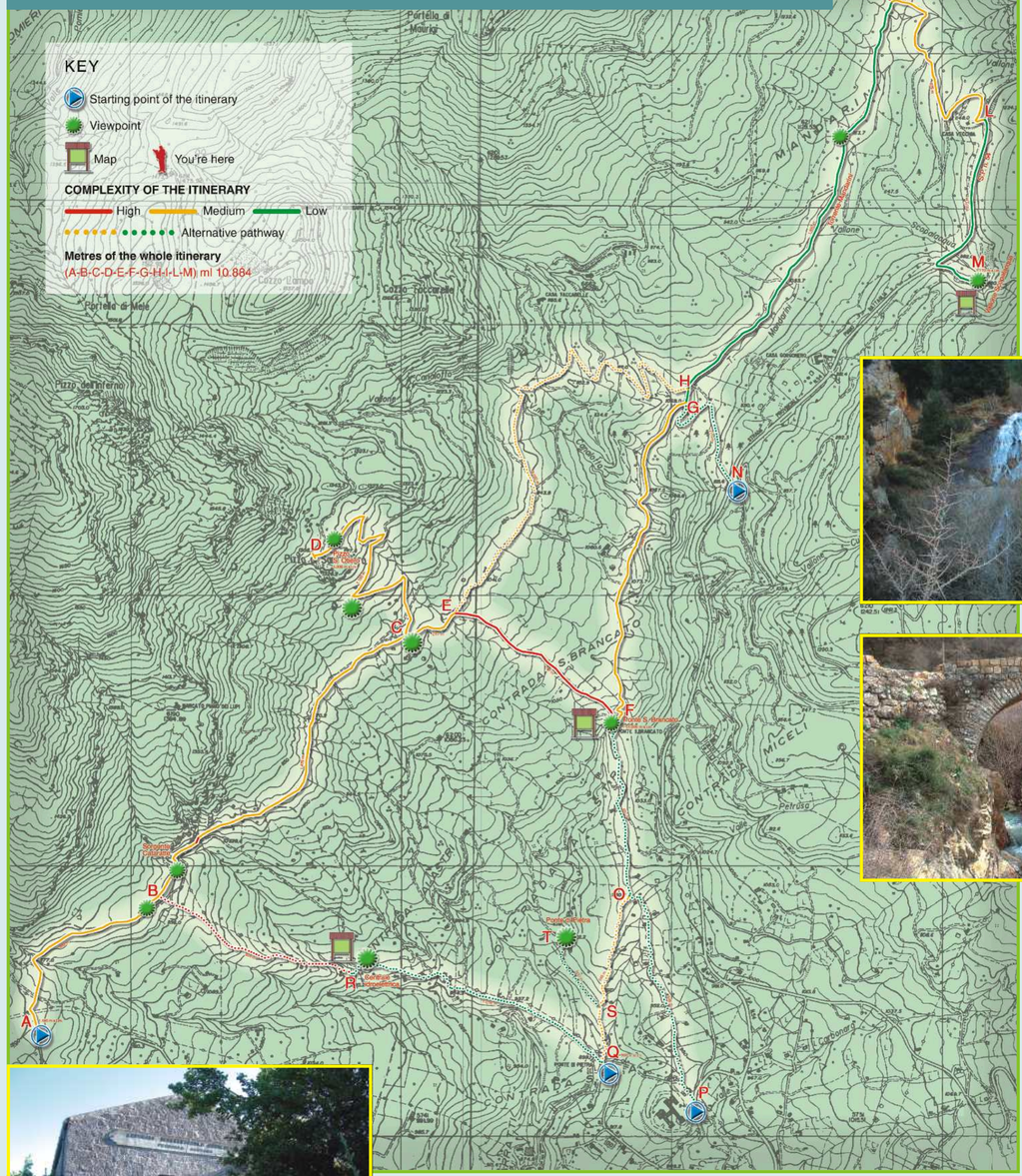
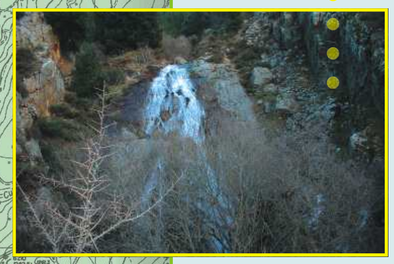
ITINERARY 3 • San Brancato - Sant'Otiero"




Cascata Scopalacqua


Ponte San Brancato


La centrale idroelettrica di Catarratti

3.1 • Hydroelectric power station of Catarratti

The hydroelectric power station of Cataratti represented, from its opening and during its seventy years in which it was regularly operative, an important phase in the development of Petralia Sottana.

The town enjoyed the use of electricity, before lots of other nearby towns.

The works that brought the realisation of an electric generator system[1] started in july 1997, thanks to the municipal directors that probably took the lead from the success of the already operative system in Polizzi Generosa. The works were finished in 1908 by the Siemens-Shuckert of Rome that looked after the electrical part. In the following years the system was modified to improve the distribution system and to make it available for a larger number of consumers. Since the year 1960 the running of the company was entrusted to the municipal corporation, who inherited of the property and the machineries after 1976, when thepower station ceased working, after the ENEL's accession to the right to supply electricity on a nationwide scale.

The same outcome was reserved for the other stations in the Madonie area[2], that allowed the other little sourroundings town to have their own electricity, before the creation of the public body.

As we said Polizzi Generosa was the first plant opened.

Operative since 1901 and in 1925 another thermoelectric power plant was built next to it. Two others plants were set up near Petralia Sottana. The first one, in the paratore district,was used for Petralia Sottana and other small villages; the second one, near the present pasta factory, had the aim to increase the loading of electricity coming from Cataratti , to allow the working of this factory. Finally, in Portella Di Campo (near Calcarelli) another station was built, joined up to the waterworks that reached as far as Caltanissetta. The waterwork had a fundamental importance because it produced the electricity necessary to light up lots of municipalities.

1. From the water-tank running along the pipes, the water arrived in the generator central in Cataratti. After it was carried inyo the water turbine that supported a water drop of 155 metres and to which was connected an alternator. The energy generated, at a tension of 2000 volts in a three-phase alternating current, was after transported with a wooden piling to the town. Here a voltage transformer brought the tension to 220volts.

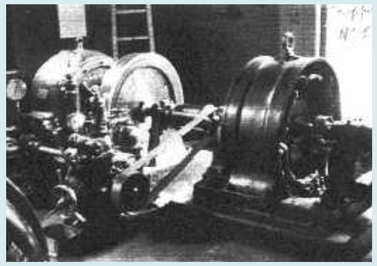
2. *The premises and the machineries of this station were conceded to enel(national-electricity-board) , between the 60'es and the 70'es, while the building of Cataratti remained the property of the town.*


Quadro elettrico

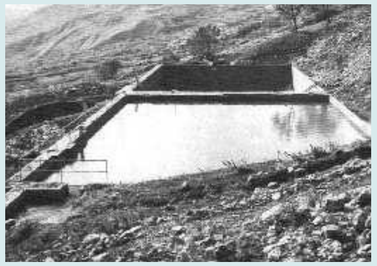

Inaugurazione della centrale (1932)


Tubature d'acqua

Macchine all'interno della centrale



Vasche di carico

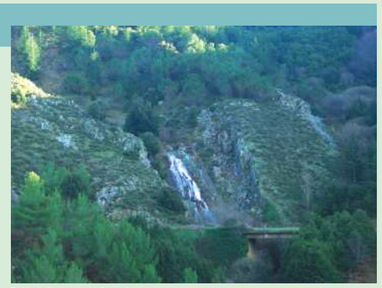


STONES and WATER

3. 3 • Scopalacqua waterfall

Around we see a lush vegetation amongst which also holly trees. On the top of the waterfall, among the quartzarenites rocks we can find the Osmunda Regalis, locally calleed "A filici francisi". This is a water fern that is considered a biogeografic peculiarity; the Scopalacqua valley (like another close itinerary of the madonie called "Gorgonero" and realized by the park authority of the Madonie), represents one of the few places in Sicily where this plant is found.

The waterfall of vallone Scopalacqua, part of the area of the Mandarini stream formation, offers a very suggestive show. It has a drop of about 40 metres eroding quartzarenites rocks strongly inclined which have the precise tectonic significance, this, in fact, represents a normal fault flat that we can follow for quite a distance.


Panoramica cascata Scopalacqua


Ponte di Pietra


Torrente Mandarini

Rocca di Sant'Otiero

Fossili della Rocca di Sant'Otiero

3. 2 • San Brancato bridge

San Brancato bridge

San Brancato bridge represents a very pictoresque place. Here the stone arch that straddles the Mandarini stream,by reflecting itself in the "Gorga" (the big sheet of water formed under the bridge), creates a "wonderful postcard landscape" that take us back to days gone by.

The mountain road and the bridge had a big importance in the past because they formed part of the ancient "trazzere regge".

The fact that the flow of water is continuous all year,meant that the "gorga" of San Brancato became an alternative way to refresh oneself in summer, specially on very hot days.

Rock of Sant'Otiero

This rock locally known as "U vazu di S. Otiero" rises out in the centre of a charming landscape, it is exclusive in its kind, due to its particular morphology and for the types of rocks that it is composed of. In fact the central body of the Cozzo is constituted of dolomitic-limestones lithologies in tectonic contact with the upper "fossiliferous" limestones-marls of the Triassic age(beds of Lamellibranchi to Halobia species),that produces his cap and also with the "Numidian deposits" below.

The resulting morphology is unique too.Cozzo S.Otiero seems like a whitish tooth coming out from an argillaceous numidian substratum slightly mottled by a multitude of colour which go from a shade of brown to a yellowish shade,going through red or purplish-blue tones.

The" Cataratte" springs

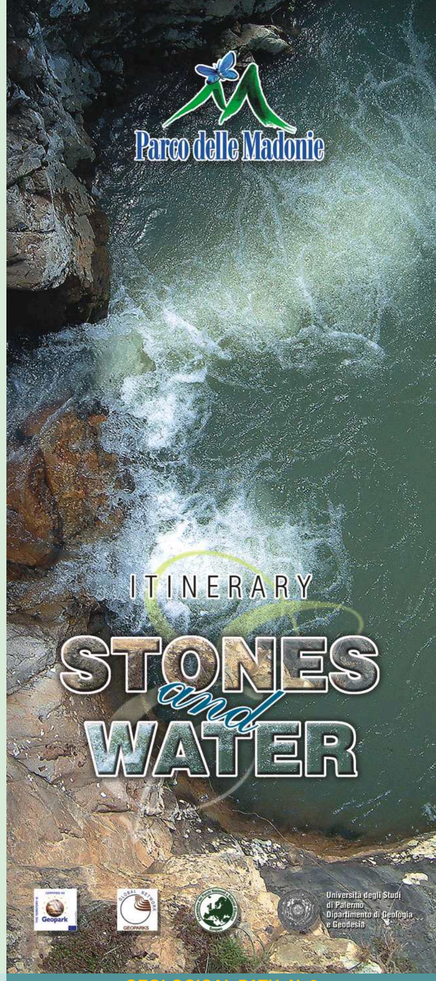
They are one of the most importants water sources of central-northern Sicily. Even though the waters were channelled through "artificial picking-up of the waters"into the municipal pipes of Petralia, they still have a particular charm due to the typology of rocks which are found in areas fulls of fossils and for their particular tectonic aspect.


Colonna "incompleta" destinata alla Chiesa Madre di Petralia Sottana


Giglio di roccia

Sorgente Catarratte

Calcari fossiliferi a "rudista" sorgente Catarratte



GEOLOGICAL PATH N. 2
"Stones and water"

INTRODUCTION

"Stones and water" is one of the itineraries created to offer the visitors to the Geopark a quality service. A Geopark is a site with hily geological interesting features in a territory environnment supported by a E.U. programme favouring its development.

The geological paths set into the borders of the Madonie Park, have a fundamental importance which gives the opportunity of either a general or a detailed knowledge of the madonie area in which the Geopark rises.

The whole itinerary is divided into three routes or walks.Two of these walks are situated in the municipal town area of Castellana Sicula and the third one is inside the area of Petralia Sottana.

The particuliarity of these routes, realized also in anthropic zones, is that they bind in a natural way naturalistic and geological aspects together with the testimony of man.

The itinerary "Stones and water " has also another originality ;it results from an idea shared with students and teachers of the Comprehensive Institute of Petralia Sottana in collaboration with the GEA association.

In fact, the model base of the itinerary is outlined during the teaching labs of the environmental education project "Water that flows, water for life",performed in the centre of environmental education "The land of our forefathers" in the school year 2003-2004.

HOW TO GET THERE

PA-CT A19 Highway (Tremonzelli exit), direction Castellana Sicula. Reached Castellana Sicula, you can find the "Tufo Gipsi - Area Archeologica" footpath starting point at the Environment Education Centre (adjacent to the communal palestra).

"Mulino Petrolito - Cozzo Morto" footpath is reachable passing through Nociazzi inhabited, direction "Cava di Cozzo Morto".

"San Brancato - Sant'Otiero" footpath is reachable taking the S.S. 120 direction Petralia Sottana, up to the detour to the S.P. road taking to Piano Battaglia, where you can find various footpath starting points.

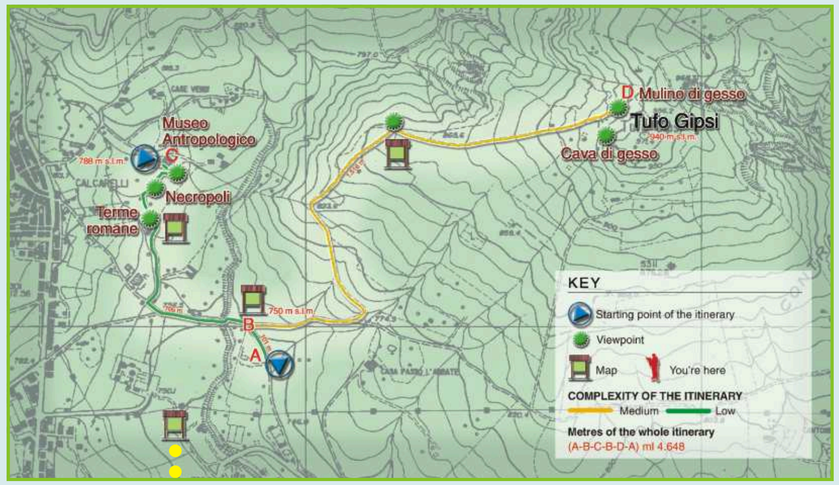
A cura di: *Alessandro Torre, Fabio Torre e Antonio Spinnato*
Ricerche storiche e stesura dei testi inerenti il percorso "San Brancato - Sant'Otiero": *Alessia Ferraro*
Traduzione dei testi dall'italiano all'inglese; *Chiara Grecomoro*
Grafica: *Sergio Mammina*

Per informazioni rivolgersi a:

Parco delle Madonie

ENTE PARCO DELLE MADONIE
Corso Paolo Agliata n.16 • 90027 Petralia Sottana
Tel. 0921 684011 • Fax 0921 680478
www.parcodellemadonie.it

ITINERARY 1 • "Archeological area Muratore and Tufo Gipsi"



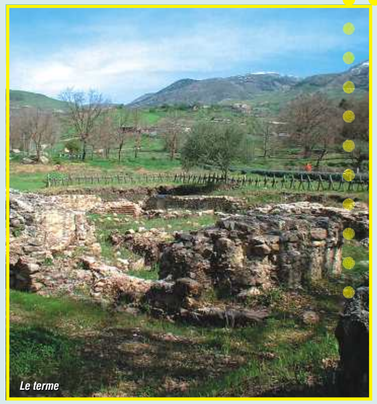

Centro di Educazione ambientale "La Terra dei nostri padri"


Panoramica Tufo Gipsi


Bivalvi gessificati

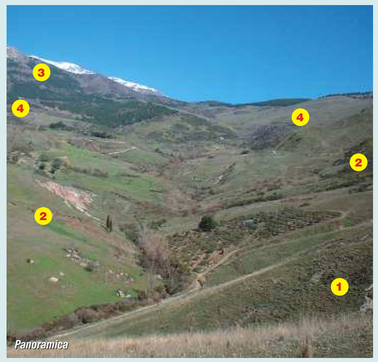

Ingresso cava


Gessorudite


Le terme


Esterno cava


Calanchi lato est



Panoramica

1. 2 • Tufo Gipsi

Tufo Gipsy is one of the naturalistic realities of the Madonie territory; that is suited to excursions of educational and environmental type.

An example of the geological aspects present is gypsum crystal combined with marine shell fossils, another example being the culture of "Carcare" , structures used in the artisan working of chalk.

Tufo Gipsy is reachable by a mountain road which goes from Passo L'Abate district to Margi district. After approximately two km the relief viewed from afar appears like an islet soaked in a yellow summer-sea, green in spring and occasionally white in winter.

All sourrounded by pastures of forage cereal and grazing land. Among the chalk rocks there is a predominance of lush vegetation typical of the Mediterranean Maquis. Part of the local fauna, in particular the wild rabbit and porcupine, find their ideal natural habitat.


Tufo Gipsi


Panoramica Tufo Gipsi (lato ovest)

1. 3 • The buried city

The buried city

Amongst the myths of Castellana the story has it that in the Muratore area in the olden days there was a city that the popular tradition calls Mora and the legend describes as destroyed by a cataclysm and after buried by a flood.

In fact, from the data collected through archaeological excavations, we know thath a town really existed and that it was destroied by a cataclism.

Then it was buried by some alluvional deyritus carried by the fluvial water which in this area appear to be periodical and significant.In some spots, where the archaeologists unearthed the remains of some buildings, we can mark that the warps covering the walls, are thick more than a metre.

The tombs in the stone.

In the archaeological area of Muratore three hypogean sites were uncovered. They were made-up of big stony blocks of calcareous composition. Hollowed within some inhumation tombs , the biggest of which is situated in the basement of the museum.

The Roman Baths

The Baths are made-up of a building that has the size of 19m per 20 m and represents one of the few up to now uncovered in Sicily of the roman period.

From the outside walls it is possible to find the frigidarium area, where there is also a kind of corridor delimited by thick walls perfectly aligned and the calidarium area. Here it is possible to distinguish the curved walls with a mass concrete floor.

1. 2 • Geological successions

Observation point

The following panoramic view can be compared with a book full of pictures in which is represented a summary of the madonita geology.

A visual riconstruction of details of the geological structural aspects of the Castellana Sicula zone is possible through a series of rocks constituded mainly of clay, with an evident tectonic contact create rocks geochronologically older at higher level as opposed to rocks of a more recent date.

You can see how the clays of the middle-upper Tortonian period, grey-blue in colour of the Terravecchia formation (1) have lowered in respects of the Eocenics clays of the Sicilid Unit (2) blue green in colour with reddish marks in which we see also limestones-marls outcrops of the Polizzi formation as well as layered sandstone.(2).

Particular attention should be payed to the "Calanchi", geomorphological structures produced by the erosion of the surface waters on the argillaceous lithologies.

Raising one's gaze towards the highest peaks it is possible to see that the numidian deposits from upper-oligocene to lower-miocene of Madonna dell' Alto and S. Salvatore (3), that has a classic tobacco colour with variations of brown are decisively higher than the evaporitics rocks wich are grey-white with yellowish streaks that make-up the substratum of Cozzo Morto, as well as Cozzo Prangi (4).

Crystals and chalk caves.

At Tufo Gipsy we find sediments belonging to the sicilian gessoso solfifera cycle, in which stand out various crystal forms from the gypsarenites-sharp gypsum up till the macrocrystal also called laminated gypsum at spear for his typical shape and dimensions of the crystals..

STONES and WATER


Il Museo


Cava Cozzo Morto


Il lavatoio di Nociazzi

2.1 • Nociazzi Wash-house

The fountain and the wash-house were buit in the twenties and until not many years ago they represented one of the most frequented places by the community of the town.

This was because not all the houses had water on tap and consequently they went to the fountain to take the water for a domestic use.

The wash-house has three washing tubs built in local calcareous stone (Cave Cozzo Morto) and was used regularly until the sixties to wash clothes.

Even today it's occasionally used by the housewives to wash raw wool.


Ipogeo piccolo


Ipogeo


Interno ipogeo


Ipogeo all'interno del Museo

ITINERARY 2 • "Mulino Petrolito - Cozzo morto"


Panoramica Nociazzi


Tombe

2. 2 • The geological formations

The area of Cozzo Morto and the immediate vicinity results particularly interesting in regard to the environmental didactics especially for the geological aspects. Actually we can identify ill-assorted rocks with regard to geological age and type. These rocks belong to the evaporitic cycle with the predominance of the base limestone which has the typical whitish grey colour with yellow streaks.

Upon these rest the fanglomerates sediments made-up of rounded stones of fluvial origin.

Upon the Fanglomerates rest in "disconformity " the "Trubi", limestones-marls belonging to the globigerina species (foraminifers species) of the typical milk-white colour.

Raising one's gaze towards the highest peaks, in north direction, we can recognise for their peculiar tobacco colour the quartzarenites deposites of the Numidian Flysch Upper-Oligocene to Lower-Miocene of Madonna dell'Alto and San Salvatore.

They are neatly separeted in the Cozzo Morto area by a fault going from the east to the west. This area attracts the visitor also for its morphological aspect. It has a wonderful panoramic view that is also shrouded in a aura of misticism due to the findings of a series of sunken tombs, which even today are still object of studies.


Trubi


Contatto tettonico


Faglia diretta