

FORMATION AND SCIENTIFIC DATA:

These caves develop within carbonate rocks of an age between 11 and 5.3 million years, formed during the upper Miocene period - when the Mediterranean Sea had a much warmer climate - by rests of coral reefs and shells from marine organisms accumulated on the seabed. Those fossils can be easily seen on the rocks and cliffs located next to the caves.

The rocks are of calcareous composition, formed by minerals such as Calcite or Aragonite (CaCO3) which can be easily dissolved by the action of rainwater leaking

through cracks or due to the porosity of the ground. These leaks are responsible for the formation of cavities in the ground and, as they increase in size, rooms and lakes form and subsequently they get covered with stalactites - which are formed on the roof as thin tubes and take the conical shape as they grow, and stalagmites -



which come out of the ground as a result of a stalactite dripping, sometimes coming together to form a column. The growth of these formations range from 0.2 to 1.6 mm. per year. Other formations visible during the visit are the paintings and tree-structure stalactites, formed due to the flow of water in the form of a film. The different colours on the walls or formations are due to minerals washed away by water while crossing the ground.

Cave temperature ranges between 17 and 21 degrees, and that of water between 18 and 19. Relative humidity is around 90% -95%, essential to sustain the growth of formations.

Inside the caves there are several lakes, the largest of them being Martel Lake, about 170 meters long and between 4 and 12 metres deep.

DISCOVERY AND EVOLUTION:

"Las Cuevas del Drach" were already known in the Middle Ages. There are documents confirming its existence dating from 1338 and started to be sporadically visited during the eighteenth and nineteenth centuries. They were explored by the German topographer and speleologist M.F. Will in 1880, who drew the first detailed plan, and by the French speleologist E.A. Martel who - in 1896, under the patronage of the Austrian Archduke Luis Salvador of Habsburg-Lorraine, discovering the cave currently visited, where Lake Martel is. Subsequently, in 1926, M. Faura i Sans - during the XIV International Geological Congress, published a new updated topography.

"Las Cuevas del Drach" have been - since the early phases of exploration - a reference at worldwide level in the study of the formation mechanisms of cavities and karstic precipitates. Currently, different research projects are being developed, including a record of paleoclimatic variations along different eras and the effect of thermal waters ascending through fractures on the ground and, at the same time, underwater topographic survey

is being completed, something that seemed impossible until a few years ago. Between 1922 and 1935 part of the cave was set up to receive visits and the electrical installation was carried out by the engineer Mr. Buigas.



INFORMATION ABOUT THE VISIT:

The tour takes about an hour, and the circuit is about 1,200 meters, with a slope of 25 meters. It includes a classical music concert of about 10 minutes and the possibility of a boat ride on Lake Martel after this concert. The concert is played by a quartet of musicians (two violins, cello and harmonium). It is important to remain silent during the concert, because the sound of the instruments is not amplified.

The entrance ticket has the time of the visit. Please be ready at the entrance of the cave - 200 meters from the ticket office - from 10 to 5 minutes before the visit time. Places are limited on each visit, and only authorized visitors will be allowed.

During the tour you can take pictures and film without using flash or tripods, without interrupting the passage of other visitors or falling behind the group. During the concert - in order not to disturb other visitors, taking pictures or filming is not allowed. Visitors must follow staff instructions at all times.

It is forbidden to touch the formations and you must always follow the path. Children must remain at all times with adults accompanying them.















TOUR:

The tour starts in the cave known as Luis Salvador, which was the last cave discovered, in 1896. Upon entering you immediately appreciate the high humidity, necessary for the growth of the formations 11 The descent starts, enjoying the view of multiple formations on both sides of the path and at the end of the stairs you can admire "Los Baños de Diana" (Diana Baths) 2, a small lake next to which will see the "La Bandera" (the flag) [3] , a formation with a canvas shape combining different colours due to leaks of different minerals, and on the ceiling you can see thousands of small stalactites in the initial growth stage.

Then we enter another hall, where you can see upon entering "El Castillo en Ruinas" (Ruined Castle) 4 on the right bottom part and then you will see "Monte Nevado" (Snowy Mount) 5, a formation which owes its white colour to calcium carbonate the rain filters through the rocks.

Following the ascendant route we arrive to "Canal Azul" (Blue Channel) 6. on the left, which is named after the color of the water and is an extension of Lake Martel. After a few steps up and down you will see on your right a group of stalactites of a pure white colour which look like candles.

Through an opening in the wall we arrive to the amphitheater facing Lake Martel 7, where you can sit, and then a short live classical music of about ten minutes will be performed. Once the concert finishes you will have the

