

CAVE FORMATIONS



Stalactites and Stalagmites

Limestone caves, where most stalactites and stalagmites are found, are mainly composed of calcite, a common mineral found in sedimentary rocks. Calcite molecules are made of calcium and carbonate ions, and are referred to as CaCO_3 , or calcium carbonate. When rainwater falls over a cave and trickles through rocks, it picks up carbon dioxide and minerals from limestone. If we add water, carbon dioxide and calcium carbonate together, we get this equation: $\text{H}_2\text{O} + \text{CO}_2 + \text{CaCO}_3 = \text{Ca}(\text{HCO}_3)_2$. $\text{Ca}(\text{HCO}_3)_2$ is known as calcium bicarbonate, and the water carries the substance, basically dissolved calcite, through the cracks of the roof of a cave. Once water comes into contact with the air inside the cave, however, some of the calcium bicarbonate is transformed back into calcium carbonate, and calcite starts to form around the crack. As water continues to drip, the length and thickness of the calcite grows, and eventually a stalactite forms on the ceiling. It can take a very long time for most stalactites to form – they usually grow anywhere between a quarter-inch and an inch every century. It doesn't end there – we haven't talked about stalagmites yet. Of course, stalagmites don't just emerge from the ground. The water dripping from the end of a stalactite falls to the floor of a cave and deposits more calcite into a mound. Soon enough, a stalagmite will form in a cone like shape. This is why you usually find stalactites and stalagmites in pairs, and sometimes they'll even grow together to form one big column.



The touristic site of Jeita Grotto has been modernly restored under hard conditions by Dr. Nabil Haddad, Mapas Co., who made big efforts introducing environmental practices in the site to keep intact the nature and the karst environment.



Please follow the instructions of the employees to keep the site intact and clean.

- Opening hours: 9 A.M. – 5 P.M.
- On Mondays closed
- In Summer, the opening hours are subject to change.

The complete tour takes around 90 minutes. In wintertime, the lower grotto might be closed when the water level in the grotto is too high.

Photography is forbidden in the grotto.

 **JEITA GROTTTO**
the pearl of nature in lebanon



Mapas Co. - Lebanon



Millions of years were captured in drops of water

Nature has gifted Lebanon the wonder of Jeita grotto. This jewel of tourism is located in the valley of Nahr El Kalb at 18 km North of Beirut. A very frequent drop by drop water flow mold the stalactite on the ceiling and the stalagmite on the floor of the galleries and halls.


Jeita grotto is characterized by its unique dazzling beauty and the most varied shaped, sized and colored fantastic stone concretions. At every step an astonishing limestone formation will surprise you!


The grotto was discovered in 1836 by an American missionary who, venturing some 50 m into the cave, fired a shot from his gun and found a cavern of a major importance. Jeita Grotto is the superb work of Mother Nature. It's unimaginable how nature has sculpted such a masterpiece!

- The lower gallery (temp. 16°) opened to public in 1958 and where visitors will take a short dreamy cruise in a rowboat at a distance of some 400 m from the cave's total length of 7800 m.
- The upper gallery (temp. 20°) inaugurated in 1969 and where the visitor will have a walking tour and discover extraordinary stone forms of curtains, columns, draperies, mushrooms, etc. at a distance of some 700 m from the cave's total length of 2200 m. The cavern is so serene that it seems like an enormous cathedral.


One of the longest stalactites in the world measuring 8.2 m. is located in the upper grotto. The distance from the ceiling till the level of water reaches 108 m where a 32 story building can be fitted.


OUR AWARDS

 2012 - Winner of the "Sustainable Development in Tourism Prize" from the Summits of Tourism - France.

 11.11.2011 - International campaign award by "New 7 Wonders of nature" competition "For achieving the highest levels of international voting participation."

 15/6/2013 - Jeita Grotto winner of gold medal for best tourist site in the Arab world by Tatweej Academy, Dubai, and World Tourism Organization, U.N., and Dr. Nabil Haddad winner of gold medal for best management.

 7/5/2014 - Jeita Grotto was awarded "Pomme d'Or" prize at Jbeil, Lebanon, by FIJET (Federation Internationale des Journalistes et Ecrivains du Tourisme).

 2015+2014 - Winner - Certificate of Excellence by Tripadvisor/U.S.A.

Commodities and Touristic Facilities

- An efficient transport system for visitors in the site via ropeway and train.
- An hourly featuring of a slide show in "Sound and Image" theater in several languages.
- A family restaurant and snacks serving appetizing lunches & sandwiches.
- Souvenir shops with handmade oriental articles.
- An enormous statue called "Guardian of time", height 6.6 m, and a relaxing garden.
- Outdoor craftsmen with their skillful handcrafted art.

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