# **Dear Visitor:** Please Observe the Following Rules:

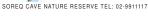
- Walk in the cave and throughout the reserve only on the trail. The stalactites and stalagmites are natural treasures protected by law
- Smoking and eating in the cave are prohibited.
- Pets are prohibited in the cave.
- · Photography and filming are permitted only at specific times
- Tours of the caves are by group. Please do not stray from your group.
- Please keep vour voices down.
- Please observe the instructions of the rangers and the guides.

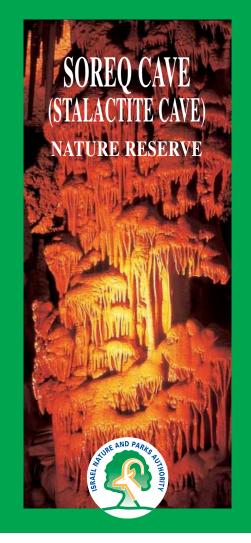




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# Welcome to the Soreg Cave Stalactite Cave Nature Reserve

0 ne day in May 1968, the sound of blasting echoed across the western slopes of the Judean mountains. On the face of things, just another blast at the H artuv quarry that supplies stone for construction, no different than the hundreds that preceded it But this blast was entirely different it revealed a small opening into a wondrous world that had been hidden deep within the earth, concealed from the eyes of all living creatures With that blast, the current chapter in the life of the Stalactite Cave began.

#### General Information

Location: The cave is located on the western slopes of the Judean mountains, on the southern face of MountYaela. It is south of the Soreq Stream, which gave the cave its other name, the Soreq C ave.

The cave was declared a nature reserve on March 16, 1975.

A rea of the cave: 180 dunams

Height above sea level of the cave entrance: 385 m.

# **Measurements of the Cave**

The maximum length of the cave is 91 m (its average length is 80 m), its maximum width is 80 m (its average width is 60 m), and its maximum height is 15 m (about 5.5 m high on the average). The area of the cave is some 4800 square meters and its volume is 25,000 cubic meters. The air temperature in the cave is constant year-round at 22 ° C. H umidity ranges from 92% to 100%

## How is a Stalactite Cave Created?

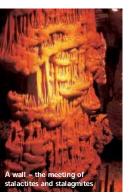
A stalactite cave is the result of the dissolution and sedimentation of rock But can rock dissolve? It sounds amazing. But the stalactite cave is located in the midst of layers of dolomite rock. Rainwater that comes into contact with carbon dioxide (CO <sub>2</sub>) creates a weak acid capable of dissolving dolomite. Most of the CO  $_2$  gets to the water through the soil in which it is found in large concentrations. This process takes thousands of years H ere is another way of looking at the dissolution process

→ dissolved rock (by water)

The rock dissolves along fissures through which water seeps. Slowly but surely, the water expands the fissures and creates caves. At this point, the process reverses itself: when a drop of water reaching the cave releases the CO  $_{\rm 2}$  with which it is saturated, the limestone crystallizes, forming the stalactites, the stalagmites, and the other sedimentary forms in the cave. In the former Yugoslavia - Slovenia of today the processes of dissolution and sedimentation created the landscapes of an entire region. This region is called Karst, and has given its name to all processes of dissolution and sedimentation of lime rocks on land.

# Tips for Visitors:

The visit to the cave is in itself an extraordinary experience. But the surrounding landscape and the flora on the way to the cave and back are also noteworthy. The vegetation in the reserve is made up of natural Mediterranean woodland species and planted pines. The blossoming of flowers in the reserve begins in N ovember and continues until M ay  $\,0\,\,n$ days when the visibility is good, large areas of the Judean lowlands can





be seen, as far away as A shdod.

Visiting the cave in winter is an opportunity to enjoy its warmth, to see and hear the dripping of water, and to enjoy the flowers along the cave's access trail. Additional information about the visit to the cave and the area may be obtained at the reserve information center.

The cave is a gateway to a region that is home to numerous landscape and heritage sites The Soreq Stream Nature Reserve and the Judean Mountains National Park are adjacent to it Further away, toward Jerusalem, is En H emed N ational Park, one of the region's most beautiful sites, with recreation areas, a flowing stream, impressive oriental plane trees and a fortified Crusader farmhouse. A nother possibility is to enjoy a "cave day" including a visit to the Stalactite Cave Reserve as well as to the Teomim caves (the latter is permitted during the summer months only) and Beit Guyrin National Park.

# Avshalom Shoham

The Stalactite Cave is dedicated to the memory of Avshalom Shoham. Shoham was very severely injured during his army service in the elite Sayeret Shaked unit H e fought for three years to recover, but on February 4, 1974, he passed away. A vshalom was part of a family with a deep bond to the history of the rebirth of the Jewish community in the land of Israel. The family's roots lead back to the early Zionist organization known as Billu, among whose members were the founders of the cities of Rishon Lezion, G adera, and H adera. O ne of Avshalom's forebears, after whom he was named, was Avshalom Feinberg, a hero of the Nilli underground movement. Avshalom Shoham loved the land of Israel. He traveled its length and breadth, and may have even visited the Stalactite C ave before it was officially opened to the public. As a meaningful way of perpetuating his memory, his family and friends assisted the Israel N ature and Parks Authority in preparing the cave for opening to the public.

## ACCESS MAP TO THE STALICTITE CAVE NATURE RESERVE



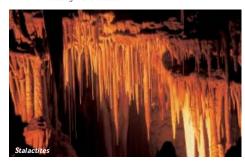
#### Types of Stalactites and Stalagmites

Sedimentation begins with drops of water hanging from the ceiling of the cave, when delicate rings of calcite form around the base of the drop. The rings join other rings to create a kind of long hollow pipe, the diameter of which is identical to the diameter of the drop. This is called a "macaroni" stalactite, and it can reach as much as a meter in length.

If for any reason the thin pipe becomes clogged, the passage of water will be blocked. Water will then flow on the outside surface of the stalactite, which will change shape from a pipe-type stalactite to a conic one, thick at the base and narrowing toward the top. We call this a "carrot" stalactite. Carrot stalactites can be as much as a few meters long but most are much shorter.

When the flow of water on the ceiling is not uniform, and is limited to a narrow channel, "curtain" or "elephant ear" stalactites are formed. These stalactites are found mainly along walls and columns in the cave, and reach 1.5 meters in length.

If the drip rate is faster than the sedimentation rate, the drop will fall, and only after it lands will sedimentation of the dissolved material take place. This is how a stalagmite is created.



If you are quiet, you can hear the sound of the water dripping in the various parts of the cave. If you look around carefully, you will notice that stalactites and stalagmitts have a "preferred arrangement". This is particularly conspicuous with regard to stalactites whose arrangement follows the fissures in the cave's ceiling almost perfectly. Water drips through the fissures, creating stalactites and stalagmittes along their length.

Sometimes a stalagmite touches a stalactite, and the two become a column. Sometimes we can see the meeting point, but at other times the fusion is so perfect that we cannot know which is which. In some locations, columns become joined to each other, forming a curtain or a screen that divides the interior of the cave into subsections.

While the stalactites are mostly slender and smooth, the stalagmites display a rich array of shapes If we use our imagination, we can find everything from "Mexican hats" to a "pagoda city" to "towers" and a variety of other "sculptures"

#### The "Lifecycle" of the Cave

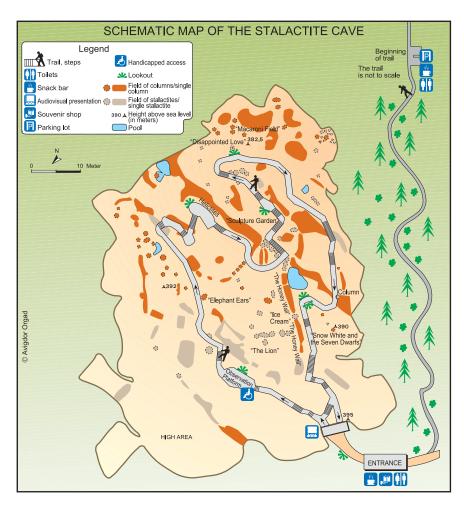
Although the cave is made of stone, it develops and changes shape and, like a living creature, it even shows signs of "aging"



A mong these signs are the large blocks of stone that have fallen from the ceiling. Beneath some of them, a "soup" of stalactites can be seen. A number of large stalagmites have also fallen over. The great age of this type of destruction is shown by the stalagmites that have begun to form on top of the piles of fallen rock. This later sedimentation appears to have "welded" the broken pieces to the cave floor.

In several places, stalactites and stalagmites can be seen that have crumbled, and their surfaces seem to be covered with a layer of flour This is known as "dusting" and is one characteristic of the process of destruction and regeneration in the cave. D usting occurs as a result of a drying outprocess that has taken place in various parts of the cave.

D estruction is not the only process visible in the cave. In some places where dusting has occurred, we see signs of renewed sedimentation. These areas have been "resurrected" as part of the lifecycle of the cave. These processes are natural and usually occur in all stalactite caves In our cave, the influence of human presence must be added to the other processes.



#### Nature Conservation in the Cave

0 nly a few days after the discovery of the cave, the N ational Parks Authority - now the Israel N ature and Parks Authority - began to safeguard it W ork at the nearby quarry was stopped, and the area above and



around the cave was declared a nature reserve. A tfirst g ance it seemed that the conflict between conservation – prevention of damage to the stalactites and the stalagmites – could not go hand in hand with public visits. And in fact about a decade went by from the time of its discovery until it was opened to the public, while the issues were carefully studied.

D uring that period a great deal of love and expertise were invested in the cave, caring for it and preparing it for visits. These activities were implemented with the greatest possible care in order to protect the cave and its rare natural treasures so as to ensure its continued existence. A spart of these activities, the atmosphere in the cave – its levels of carbon monoxide, temperature, and humidity – are continuously monitored.

The task of protecting the cave is an unending one, in which visitors also have a significant part to play. First, it is important to note that by their very entrance to the cave, visitors influence the processes taking place within it Remember - events taking place in the area above the cave also influence what happens within. The cave's "source of life" - rain - seeps down to it from the areas where visitors park and walk.

We have invested great effort in protecting the conditions in the cave and its beauty. However this is not enough! Every single visitor can and should help protect the cave. You can do this by minding the rules on the back of this pamphilet (which are enforced by law).

### The Information Center

An information center operates in the Stalactite Cave Reserve that is responsible for guiding the general public at regular intervals as well as guiding school groups trips in the area around the cave, and special activities such as sunset and moonlight tours, among others

G roups should reserve their visit ahead of time by calling 02-9911117. On Saturdays and holidays a recording provides information about fees and hours The fax number at the reserve is 02-9990215.

## Additional Services

A snack bar and souvenir store operate in the reserve

H andicapped access By prior reservation, vehicles may reach the area near the visitor reception center adjacent to the cave. With assistance, mobility-challenged visitors can reach the central observation platform in the cave. Movement after that point is limited because of numerous flights of steps and the width of the walkway.

#### Hours

0 ctober-March (inclusive) 08:00-16:00 A pril-September (inclusive): 08:00-17:00

#### The cashier closes one hour before the closing of the site!

On Fridays and the eves of holidays, the reserve closes one hour earlier.
On the eve of the Jewish New Year (Rosh Hashana), the Day of Atonement (Yom Kippur), and Passover (Pesach), the reserve closes at noon. The reserve is closed on the Day of Atonement.

