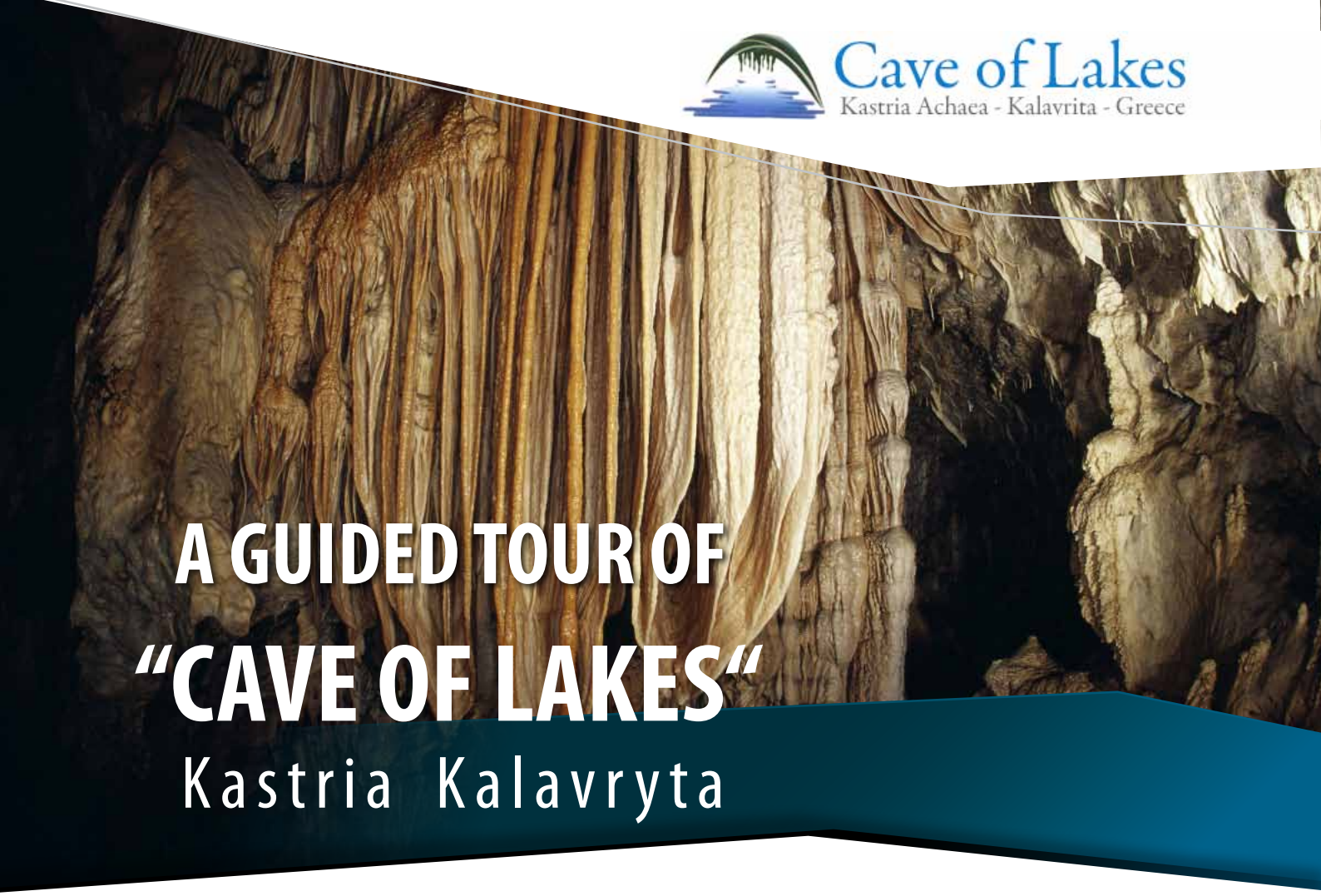


Cave of Lakes
Kastria Achaea - Kalavrita - Greece

A GUIDED TOUR OF "CAVE OF LAKES"

Kastria Kalavryta

Spot A – Stop

The first large hall of the cave, called the "**bat chamber**", is at the end of the artificial tunnel.

Recent studies have shown that this hosts ten species of bats, that is almost all species that form cave colonies in Greece.

During opening hours, the lighting and human presence make the bats withdraw to the innermost darkest points of the cave.

During the night, the bats leave the cave

through the natural entrance to seek food. They return before dawn.

More than 1200 species of bats have been recorded worldwide, 45 of which in Europe and 34 in Greece. Bats do not make nests.

They spend their day in caves, underground galleries and other places away from natural light. They come out only during the night. Each bat eats at least half its body weight in insects.

Bats use ultrasound emissions to map space and can thus easily move around at night. National and international legislation on the protection of bats is quite rigorous, as their role in maintaining ecosystem balance has proved to be important.

Course from spot B

The Cave is visitable all year round, using elevated artificial bridges. The tour is divided

into two parts: The first part includes cavities with a diameter of a few centimetres to a few metres and a relatively small depth, called **gours**. In the second part, visitors can admire the first 3 of the 13 lakes.

This fantasyscape is dominated by unique stalactite and stalagmite formations, which play with the imagination, creating countless images and illusions. The main component of stalactites and stalagmites here is **calcium carbonate crystals**.

Spot C – Stop

The age of a stalactite or a stalactitic complex depends on a number of variables, such as the water flow rate at that point, the amount and density of the material (in this case calcium carbonate), temperature, and even the weather conditions outside the Cave.

The researchers who came here to start the systematic exploration, mapping and study of the Cave assigned code names to specific points in the cave. Over the years, these became established and are used until today.

The first characteristic example is high up on our right side: nicknamed the “foamy cataract”, it is a complex of many stalactites, with a height of more than 3 metres.

Determining the age of such formations is quite difficult.

To the left, and close to the ceiling walls, we can see the rock erosion by the descent of water. The Cave is permeable in many parts of its roof. Consequently, in winter, especially during the periods of long rainfall, it receives large quantities of water.

Water slides gently on the rocks in some places, creating small or bigger waterfalls in other places. In its downward path it carries calcium carbonate, which is crystallised, usually as calcite.

These small crystals are distributed cyclically at the base of the water drop.

The continuous flow increases its weight so the drops fall on the floor, dragging a portion of dissolved calcium carbonate along with them.

The remaining calcium is left on the roof. This creates stalactites and stalagmites and expands existing ones. (Course...)

Spot D – Stop

A large duct on the top left used to supply the cave with abundant water. On the right, there are two small waterfalls, created by calcium carbonate, as are the “snowy” walls next to them.

On the floor, we see the first lace-like gours. They were created by calcium carbonate deposits during seasonal interruptions of water flow.

The Cave, apart from its roof, is also perforated both at the bottom and at several points of its side walls. As mentioned, in winter it receives water from above, but at the same time also loses water.

However, as in winter the quantity and speed of inflowing water is larger than the outflow, the water level in the gours and lakes rises.

The final drainage of the basins starts when water supply to the Cave stops. This happens mainly from spring onwards. Precipitates in the water (mainly calcium carbonate) are either deposited at the bottom or pushed to the sides by the gentle water waves. Through this process, the walls delimiting the gours and lakes increase upwards.

A range of phenomena result in the continuous diversification of the cave's landscape. Firstly, the interchange of points and the rate of water inflow (mainly in the autumn and winter).

Secondly, the change in the water level in the gours and lakes throughout the year.

Finally, the amount and density of calcium carbonate. These changes happen not only from season to season, but in some cases, also from year to year, as external weather conditions alter and cause small displacements, which close or open several water pipes on the cave roof and floor.

These are the main tools by which nature creates a fantasyscape of pictures and sounds, with waterfalls, ponds, streams, natural grooves between boulders, and reflections everywhere.

Depending on the time of year, visitors enjoy a totally different landscape, so unique that in some cases may never appear again. This particularity has lent the Cave its other name - the **Cave of the Four Seasons**. (Course...)

Spot E – stop

On the left, there is a wonderful "**pulpit**" and **draperies**. They start from the towering top and cascade to the picturesque lakes on the floor. Their formation is attributed to the combination of surface flow and dripping.

Spot F – Stop

Then another "**foamy stone cataract**" and just below a "**kiosk**". To the left, a **manger-like** small white cave enhances the magical feeling of this section. A little further, there is an opening with an internal light, drawing -attention to the fact that the formation on our left is hollow.

Spot G – Stop

Hailed by many speleologists as unique, the Cave of the Lakes is one-of-a-kind, not only for its 13 lakes, spread over different levels, but also for the height of its **ceiling**,

which reaches up to 30 metres. We are at one of these points, where the towering ceiling is awe-inspiring.

In an attempt to find a way out, rushing waters ate into the limestone in every direction. Only a **stone figure**, suspended on the left wall, was left standing. (Course...)

Spot H – Stop

The waters here have sculpted the ceiling on three levels, creating mysterious galleries and strange **jellyfish**-shaped stalactites - yet another "magical image" of the many that the Cave generously offers.

Spot J – Stop

We are approaching the section that lent the Cave of the Lakes its name and which makes it unique among the known caves of Greece. This is where its large gours, spread over many levels, begin.

Here Nature worked elaborately for thousands of years. Its marvellous creation is the "**baptismal font**" on the right (spot K), a cluster of small gours.

These rimstone dams, also called gours, are lace-like vertical walls formed at the edges of stagnant water pools. This is home to a rare optical illusion.

At first glance, visitors think they see the top gour filled with water, when in fact it is empty. From the point where we stand, the illumination and Nature's workings give the impression that the upper side of the wall is reflected on the imaginary water surface, when in fact the gour is completely empty.

A small source, with crystal-clear waters, springs from a higher level. Even higher up, there is an "**alabaster cataract**".

In winter, when the snow melts, all gours are flooded with water, turning the Cave into an underground river with natural water-

falls. The spectacle is fantastic, with running waters everywhere and countless reflections of the roof on the water surface.

During the summer months, this section becomes dry, revealing an array of successive dams, up to three metres high.

The “castle” on the left (spot L), with its impressing battlements, is an excellent example. It is built in one of the large lakes, which do not hold water for long.

On the ceiling, a marvellous chandelier reveals and bears testimony to the grandeur and sanctity of Nature. (Course continued...)

Spot M – Stop

The Cave of the Lakes has a unique feature, not found in other known caves. That is its **successive lakes, spread over three levels**. Here, we are at the **first large lake**.

This is where the inhabitants of Kastria arrived in 1964, when the Cave was discovered. They followed the same course with us until here, in complete darkness, in a cave filled with water.

They only supplies were some old-fashioned lenses and lanterns, which did not throw much light. The whole venture - their entrance to the first level, the climb to the second, the course to the first lake and back - lasted 9 hours.

Sometime afterwards, the villagers waiting outside considered them dead, as from time to time the Cave would churn large amounts of water on the road.

And this at a place where contemporary beliefs and superstitions had already cultivated a fear of the natural entrance of the cave.

This was why, according to oral sources, the first level served as a hiding place for

the Christian Greek militia during the 1821 Revolution, and later for Greek warriors in the 1940s German occupation.

The Cave was discovered by people who occasionally saw small animals (goats and lambs) entering the natural entrance and not coming back (apparently drowned by the rushing waters). So they decided to enter and investigate what was happening, leading to its discovery.

The **First Lake** is 40 metres long and 10 metres wide, with a maximum depth of 5.5 metres. Opposite us on the right, we see a distinct mark on the side wall, left by the water at its highest level, mainly during the winter months. When this happens, the lake overflows and the water starts flowing gently from the wall in front of us on the left, filling the lower gour.

There is no life in the bottom of the lakes, except from some bacteria. The water of the lakes is naturally very cold, as it comes from

melted snow, but also from rainwater. The First and Second Lakes are among the few cave sections that retain their water throughout the year.

That happens because they do not have openings at the bottom but only at some points on their side walls. Thus, the water level only lowers during the spring and summer months, yet the lakes hold large amounts of water throughout year. As you can see, the water is crystal-clear.

However, as it stays here for months or even years, its pH changes over time due to the rocks and sediments that exist and it becomes acidic.

All the above, in combination with the guano, make it unsuitable for drinking.

Looking closely to your left side, you will see that it is covered with a "**whitewashed waterfall**". At a lower level, we see a "**chapel**"

with white, but thin, stalactites. Further and up, on the impressive right-side walls, exotic images of spectacular “waterfalls” and colourful “chandeliers” are reflected in the waters of the lake.

Looking back on our route, we find that the dominant colours on our level are white, beige, cream, as the main material is calcium carbonate. You may have also noticed some points with green, yellow and red formations.

The green colour is due to small amounts of copper, the yellow to small amounts of sulphur and the red, as seen here, in the impressive “**Red Waterfall**”, to iron oxides contained in these rocks.

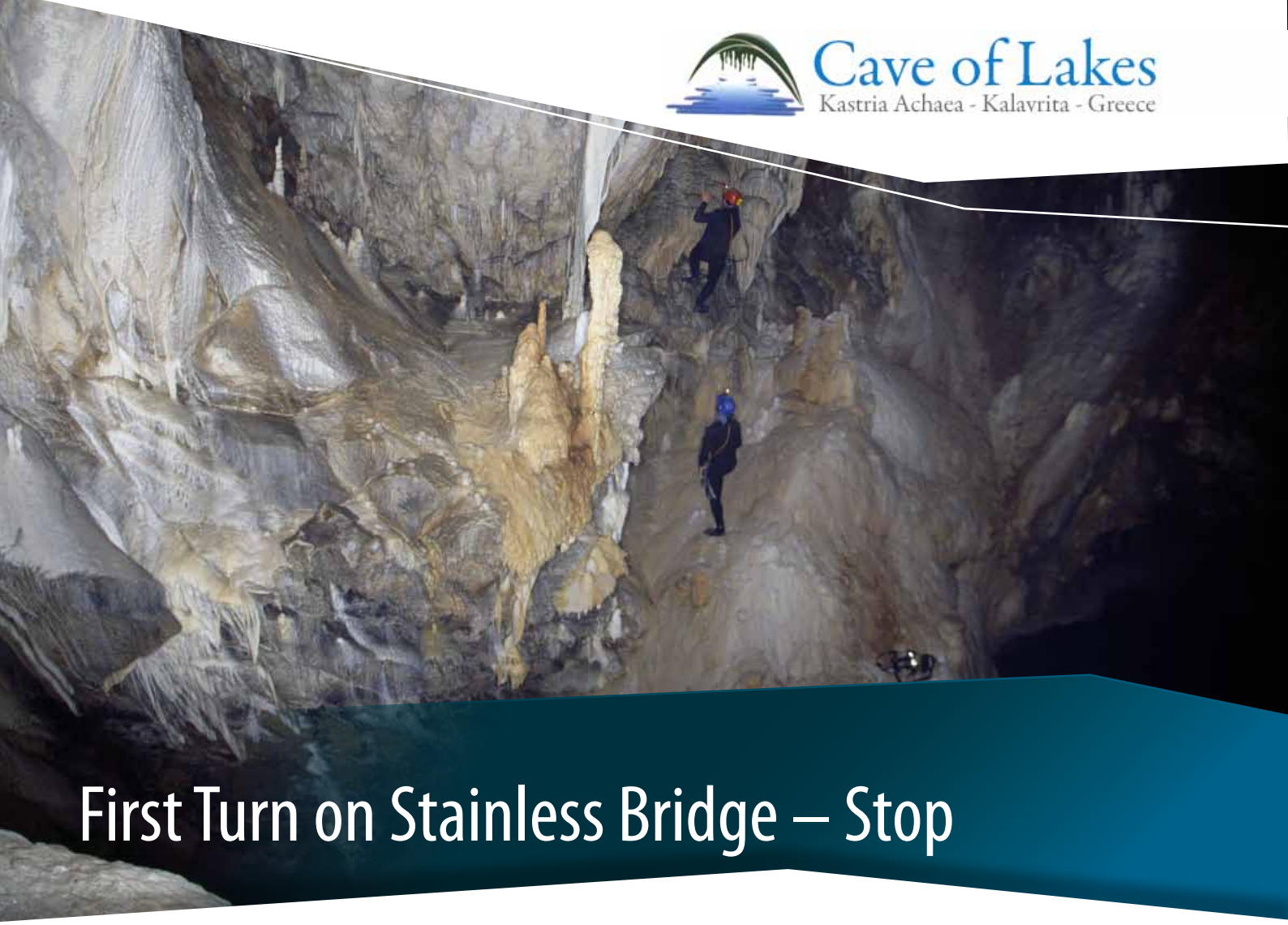
Spot 0 – Stop

We have passed the First and we now pass on to the Second Lake, which is the largest of

the Cave, with a length of 120 metres and a depth that reaches 6 metres. On our left (Point O) we see an opening, which indicates that the Cave has more bifurcations.

At the point where we stand, it has been observed that when the Cave receives large quantities of water, the water level slightly exceeds the mark on the side wall opposite us and covers the wall separating the two lakes.

Thus, the first two lakes become one. This happens especially during winters, when rainfall and snowfall last long.



First Turn on Stainless Bridge – Stop

Let your imagination run wild now to enjoy two rare and impressive calcium carbonate formations.

The first one, in front of us and above, at a height of about 3 metres, is reminiscent of a "**column of an ancient Greek temple**".

The **second** one in front of us and at our height, at a distance of 8 metres, looks like a dinosaur's head, a carnivorous plant or an extraterrestrial. (Course...)

Against it, on our left, another calcium carbonate formation, termed a "**column**" by speleologists: It is a huge stalagmite that has touched the ceiling above it.

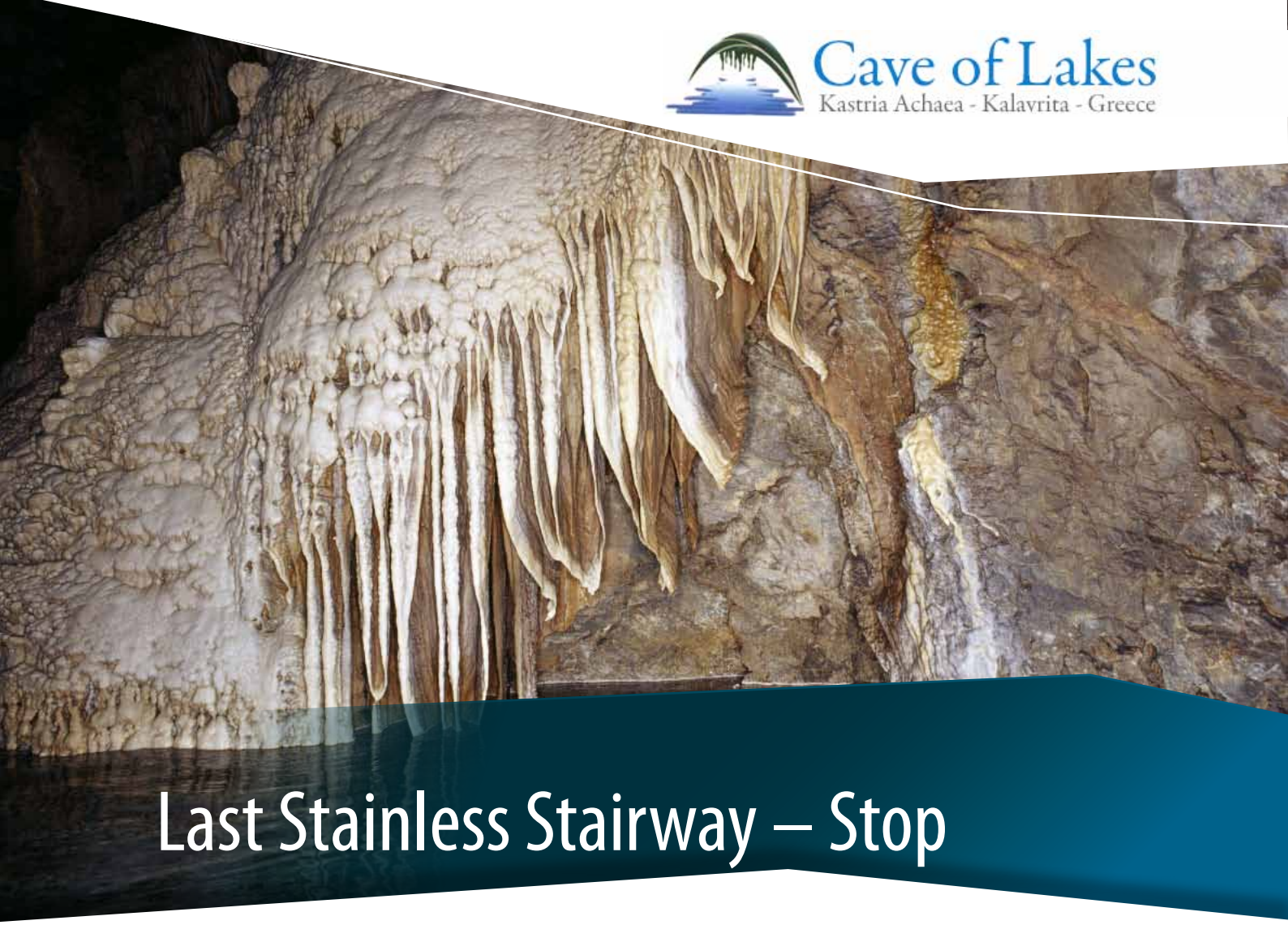
First Stainless Steel Stairway - Stop

This point, on the left and above the staircase, standing in front of us, hosts the largest and most beautiful **stalactite complex** in the entire Cave.

Its impressive upper end will be visible when we arrive at the top of the staircase. (Course to the plateau...)

We will be on a small plateau, where we will admire giant "**curtains**" or "**draperies**" hanging over us. These are the largest stalactite curtains in the Cave.

Some stalagmites here are worth noting: the first on our left at the end of the plateau, an even larger one in front and opposite us, reminiscent of an ancient "**totem**", as well as a few smaller ones higher up, on the left side walls, as we go down the next stainless steel stairway. (Course...)



Last Stainless Stairway – Stop

The last small stainless stairway we meet on our route coincides with the end of the Second Lake.

The waters here, crystal-clear and ever moving, create yet another spectacular optical illusion, making you believe for a moment that there is no water here, as the bottom is revealed in front of us in minute detail.

Great Plateau - End of Route

We stand above the Third Lake, one of the smallest of the Cave. Its length is 13 metres and its depth reaches 3 metres.

This is the **Great Hall**, the most spacious part of the Cave, offering a good perspective of the Cave's height.

Another "**column**" stands in front of us. It was created from a giant stalactite and a stalagmite, which met and united after thousands of years.

This is the end of the Second Level, the end of our route, but not the end of the Cave.

The Cave continues to our left and upwards, to the opening that you can see.

The 1500-metre long Third Level begins there. The first 300 metres host the remaining 10 Lakes of the Cave and similar stalactite and stalagmite formations.

The largest lake is 90 metres long (the second largest in the Cave). The deepest lake reaches a depth of 9 metres (the deepest in the Cave). In the remaining 1200 metres, landfalls have changed the shape of the cave.

On the third level, groups of speleologists discovered "openings" at several places on the side walls.

However, they are narrow so there is no way to pass through them. In a subsequent

mission and using specialised instruments, speleologists found that new “underground corridors” start beyond these openings.

This “discovery” indicated that the Cave branches out further in several directions.

During our return, following the same route, visitors will have the opportunity to admire the magnificence of nature from a different point of view.

Visitors can read more details and admire several impressive snapshots of the Third Level and of the entire Cave in the book available at the ticket office.

CAVE OPERATING HOURS

Weekdays: 09:00 – 16:30
Weekends & Holidays: 09:00 – 17:30

Information: 26920 - 31001, 31633, 31588
Website: http://www.kastriacave.gr

A GUIDED TOUR OF
"CAVE OF LAKES"
Kastria Kalavryta