





Camí de la cometa des Morts

Serra de Tramuntana Nature Area

Lluc indeed invites visitors to take a walk around. Among the area's main attractions are the striking calcareous rock formations, which have been shaped through time.

This itinerary will give you a glimpse of the spectacular world of karst erosion. Two excellent examples are the Es Camell formation and the Sa Cometa des Morts cave.

Difficulty: easy

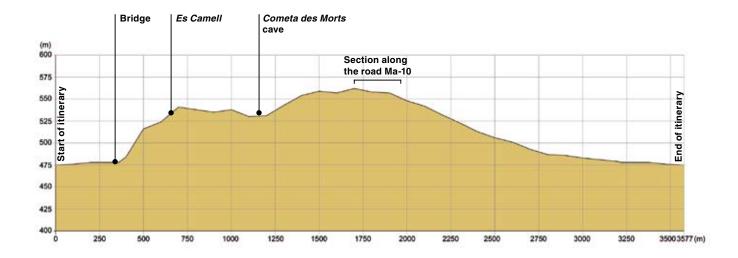
Distance: 3.6 kilometres (circuit trail)

Duration: A bit over an hour, not including stops. If you spend a little extra time

at Es Camell or the cave, you will easily be back within two hours.

The trail is signposted. One section of this trail runs along the highway.

Please remember to be very careful when going down to the cave. You will need a torch if you plan to go inside.

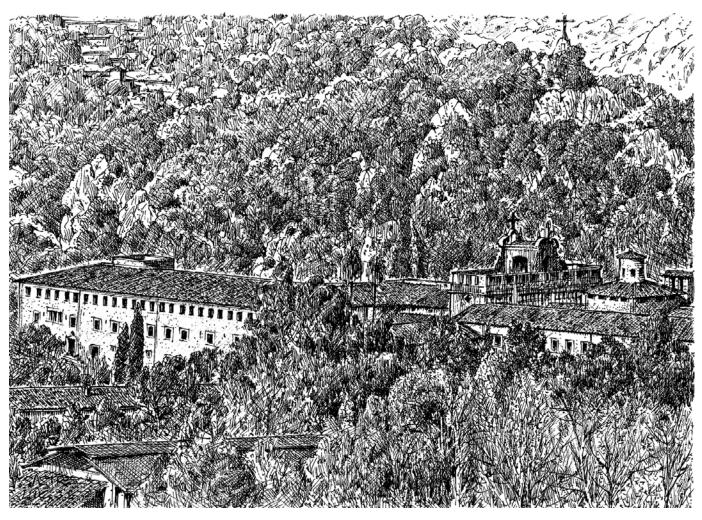




1. Lluc, from Lucus, or "Sacred Forest"

Your itinerary begins at the Lluc Monastery, the spiritual centre of the island of Mallorca. Located at an altitude of 470 m, in the municipal area of Escorca, which sits in the heart of the Serra de Tramuntana Nature Area, the monastery is sheltered by some of Mallorca's highest peaks: Puig de Massanella (1367 m), Puig Tomir (1102 m) and Puig Roig (1002 m), among others.

Lluc is the starting point for countless trails and mountain hikes. This valley, covered with a plush holm oak forest, is a magical place. Etymologically, the area of Lluc takes its name from the Latin term lucus, signifying "sacred forest". The meaning of the word suggests the primitive worship of a pagan god by Lluc's first settlers, who left behind countless prehistoric remains around the sanctuary, including the ones found in the Cometa des Morts area.



Lluc (Drawing: Vicenç Sastre)

2. On the way to the karst



Starting beneath the porxets (pilgrims' cells) of the Lluc Sanctuary, you will come to an arched doorway. Go through it and take the asphalted path alongside the stream. A few steps further ahead, you will veer off to the left until you come to the football field, which you will cross. From there, you will see a small wooden bridge that straddles the Lluc stream. Once past the bridge, be sure to stop and look up at the Puig de ses Monges, a hilltop that takes its name from the "nun-shaped" karst formations that preside over the forest below.

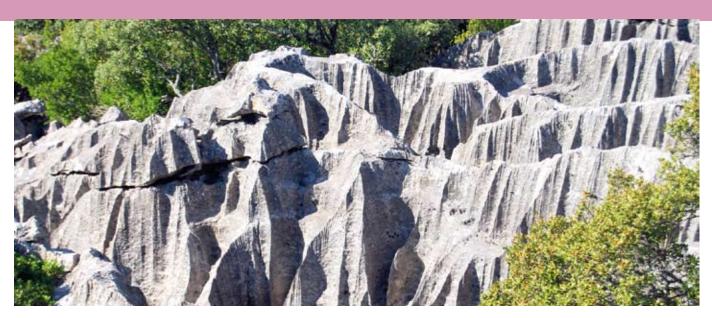
Mock privet (Foto: Gràcia Salas)

At this point, the straight trail will run uphill through a rocky maze amid a lush, shady holm oak (Quercus ilex) forest. These woods accommodate some extraordinary mock privet (Phillyrea latifolia) specimens, and the springtime is always accompanied by the reflecting twisted white-petal flowers of the Balearic sowbread (Cyclamen balearicum).



On the way to Cometa des Morts (Photo: Gràcia Salas)

3. Karst formations



Lapies (Photo: Gràcia Salas)

The term "karst" comes from *Kras*, or *Karst*, the German name of a region that extends from the southwest of Slovenia to the northeast of Italy. It was in this area where the calcareous stone formations sculpted by the rainwater were first defined and studied. By extension, the word "karst" or "karstic region" denotes an area of stone predominantly consisting of calcium carbonate that is slowly dissolved by the abrasions of water, generating a distinctive landscape both on the surface (exokarst formations) and underground (endokarst formations). Most of Mallorca's mountain ranges are formed by folded units in a sort of overlapping tiered arrangement consisting of calcareous and calcareous-loam materials, which makes them particularly prone to the processes of karstification.

The four exokarst shapes most widely found in the mountains of the Serra de Tramuntana are large karst depressions, small ones known as dolines, karst canyons (like those of the Torrent de Pareis and the Torrent de Gorg Blau streams) and the most abundant formations, the "lapies" (locally known as *rellars* and *esquetjars*), with stones bearing grooves (that look almost intentionally sculpted), striations, tubes, holes, basins and hollows, among others. The Serra de Tramuntana also has two very characteristic endokarst formations: chasms and caves. The chasms are found at the top of the calcareous massif and drain the waters that run vertically down to the subsoil. Caves can also be found in the upper sections of the calcareous massif, as well as in the phreatic zone, where the underground water accumulates and tends to drain horizontally through the inside of the karst system, until it finally surfaces in the form of springs and upwellings.

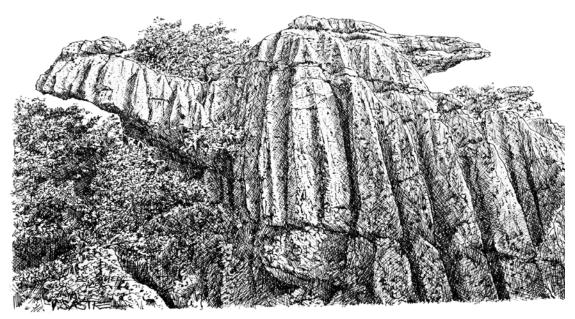
4. Who sculpted Es Camell?

On the right-hand side of the path just before you come to a charcoal production floor, you will see a small sign indicating a detour to "Es Camell", a singular rock formation that you will discover just two minutes from this point in the trail.

As it happens, this camel-, dromedary-camel- or tortoise-shaped stone-depending on your imagination – was not shaped by a sculptor. Rather, it is the product of water erosion. This process can be explained as follows: the carbon dioxide in the atmosphere combines with rainwater, forming carbonic acid. The then slightly acidic rainwater falls on carbonate rocks, transforming carbonates into bicarbonates, which are more soluble and therefore transportable. Hence, each time it rains, the water dissolves a part of the mountain range, in a slow yet steady process.

The rocky formations that shape the landscape of this area were initially moulded by the rainwater, whilst the karst massif was covered by soil. Erosion processes then led to the loss of soil, leaving the stone exposed to the elements, which gradually reshaped them through the different climate changes that Mallorca has undergone in its recent geological past. The results were striations, grooves, hollows and other shapes.

A few metres from Es Camell, you will see a viewpoint overlooking the mountains of Lluc and the Valley of Josafat, from Son Amer to Ca s'Amitger. This is definitely worth a stop.



Es Camell (Drawing: Vicenç Sastre)

5. From Es Camell to the Cometa des Morts cave

From Es Camell, head back to the main trail, where you will immediately come to a round flat area formerly used as a charcoal production floor. This floor bears witness to the traditional use of the forest. For many years, the *sitges* or charcoal kilns, were used to make charcoal from the wood of holm oaks and other trees.



Escanyacabres or spurge olive (Photo: Sebastià Torrens)



Symptoms of "Witch's Broom" (Photo: Gràcia Salas)

Five minutes past the charcoal production floor, you will come to a fork in the trail. Whilst the path to the left leads to Es Pixarells, you will take the path to the right, which will bring you to the Cometa des Morts cave. You will soon pass beneath a pine tree (*Pinus halepensis*) with an odd deformed shape of unknown origin popularly known as "Witch's Broom". Here, the leaves are closely clustered together, forming a spherical shape that sometimes serves as a nest for bird species such as the long-eared owl (*Asio otus*) and the European scops owl (*Otus scops*).

The trail heads slightly downhill and flattens out into a small valley known as the Cometa des Morts. Geologically, this place is a doline. Dolines are relatively shallow oval or circular funnel-shaped depressions typical of karstic landscapes and produced by either the dissolving of the calcareous massifs near the surface or by the collapse of the roof of a cave.

Hidden in this valley are countless natural prehistoric caves. In fact, this site takes its name, "des Morts" (meaning "of the dead") from the Talayotic burial remains that were discovered inside one of the caves in the deepest section of the valley.

Years ago, this doline was used for olive orchard cultivation. Today, however, the abandonment of the olive orchard has led to the occupation of the pine grove (*Pinus halepensis*). More open and sunnier than the holm oak grove, the pine forest accommodates plant species such as the spurge olive or escanyacabres (*Cneorum tricoccon*), the heather (*Erica multiflora*), the mastic (*Pistacia lentiscus*) and the omnipresent rockrose (*Cistus monspeliensis*) amid vast communities of Mauritanian grass (*Ampelodesmos mauritanica*). These plants provide birds with an abundant supply of fruit, seeds and insects.



Heather (Photo: Sebastià Torrens)

6. The Cometa des Morts cave

To find the Cometa des Morts cave, you will have to follow the signposts, which at one point will lead to the left, bringing you along a narrow path that in turn will take you into the holm oak forest and up to the entrance of the cave. Geologically, this cave is the sinkhole of this doline, where the rainwater seeps through.

Discovered in the 18th century, this cave was excavated in 1945 and 1948 by Father Cristòfol Veny. Two burial phases were found inside the cave. The first dated from the Bronze Age and was located in the end chamber. The second,

Entrance to the Cometa des Morts cave (Photo: Gràcia Salas)

which consisted of lime-covered human remains, was found in the middle of the cave and dated back to the Iron Age. These vestiges are currently on display in the Lluc Sanctuary Museum and the Museum of Mallorca.

To continue the itinerary, you will need to return to the path that you have momentarily left. The trail will curve several times until you come to the highway. Go on to the right and approximately fifty metres down the road you will see a wide road that runs down along the old Pollença -Lluc highway. Follow this road, which will take you back to the football field. bringing you to the end of this trail.

