

# KENTS CAVERN

---

P R E H I S T O R I C C A V E S

---

U N E S C O G L O B A L G E O P A R K

Welcome to Kents Cavern,

We operate with a guided tour system for people who wish to see the caves. The tours run regularly throughout the day and start from inside the waiting room marked 'Cave Entrance' (Situating opposite the ticket desk). Your guide will meet you in the waiting room and throughout the tour they will showcase the various parts of the cavern. We have attached a summary of the tour to this document briefly explaining what happens in each part of the cave.

Your tour will last just under one hour.

We have various free activities which are available for both adults and children, including a children's activity area, an exhibit on influential excavators and their findings over the last 200 years of Kents Cavern's history (Both situated at the far end of the main building). We have a woodland trail which can be located just off the public footpath at the far end of the complex, don't forget to pick up an activity sheet from the ticket desk before you head down!

Toilets can be located at both ends of the building; Accessible toilets and baby changing facilities can be found through the doors at the far end of the restaurant.

Thank you for your visit, we hope you enjoy yourself!

### **Guided tour of Kents Cavern**

Kents Cavern is an important Stone Age site which is rich in geology and archaeology which makes it an important Palaeolithic site in Britain. Within the waiting room please note the various displays showcasing original Kents Cavern finds and highlighting the historical significance of Kents Cavern. Please pay particular attention to the Ancestral Cave Bear skull.

When the tour begins please stay on the path and keep up with your tour, if you need to leave the cave for any reason please let the tour guide know.

### **Sound and Light Show**

The caves are around two and a half million years old, created by continual movements of water through cracks in the limestone rock. The rocks themselves were once at the bottom of a tropical sea pushed here through movements in the earth's tectonic plates. Our Devonian limestone is 385 million years old. Through millions of years of erosion, the passages and chambers of Kents Cavern were created. Occupation through the Stone Age, Bronze Age and the Iron Age is what makes Kents Cavern a site of special historical importance. Within this tour you will see around 0.5 kilometres of the caves 1 kilometre system. The cave has no light, seasons or time and is always 14 degrees.

### **Bottom of the slope**

The first modern visitors came to Kents Cavern over 200 years ago during the Nineteenth century. The first of these Victorian excavators was a Roman Catholic priest, Fr. John MacEnery. MacEnery started exploring these caves in 1825, documenting his findings so that he could hand them over to the next excavators. During 1865-1880 a young man called William Pengelly launched a great excavation of Kents Cavern. He and his team removed thousands of objects of both historical and archaeological magnitude, suggesting both human and animal occupation of these caves. They found buried in the many layers of rock, flint hand axes, extinct animal's bones and teeth and instruments such as pottery and jewellery used by prehistoric man. Unlike today's modern archaeologists Pengelly was using crude and basic means to excavate, such as; shovels and pickaxes and lighting their way by candle light. Pengelly also used a small number of explosives to break his way through the stalagmite floor, to reveal the mud and silt or breccia that lay beneath. Remnants of the stalagmite floor are still visible today as a band of white lines running through the cave, this is also known as the calcite crust.

## **The Long Arcade**

You are now looking upon the Long Arcade; this was the site of an underground river carving its way through the rock. This underground passageway is also known as a phreatic canyon. This underground river filled the long arcade with mud, rock and silt, known as breccia. This in turn was then excavated by Pengelly's men.

## **The Face**

When Pengelly's team came across the face they came through the original entrance to the cave behind you, after breaking through the stalagmite floor. They found evidence of Roman occupation and Roman coinage found at the bottom of the face. Imagine seeing the face by fire light over 2000 years ago in times which were surrounded by superstitious mystery. It is possible that these Roman visitors viewed the face as a God named Mithras; part of Mithraism a religion already associated with the Roman Empire. Leaving this superstition behind we can see that the face is an entirely natural formation created by water depositing a mineral calcite across it. Through this the formation flowstone is then created.

Through the use of explosives and various visitors throughout the years, obvious damage has affected the various formations. However, the next section of the cave was left untouched until the 1870s and therefore remains intact.

## **The Rockies Chamber**

The Rockies chamber is one of the deepest parts of the cave, as you can see it stages many beautiful formations; specifically, stalagmites and stalactites. Stalagmites and stalactites are created through rain water mixing with carbon dioxide in turn forming a weak carbonic acid. This seeps through the limestone rock. Once the carbonic acid dissolves it leaves behind a calcium bicarbonate solution. A calcium carbonate deposit is left behind. The small straw shaped formations are the very beginning of this journey, and as the calcite deposit builds the straw changes form a stalactite. It is mostly the same principle for stalagmites. Stalagmites and stalactites occasionally joined together to form a column or a pillar. The special formations in this chamber can be seen as something quite different, for instance the wedding cake and its surrounding feast, the dragon and the wishing stone.

## **Cave of Inscriptions (Bone Box)**

The specimens contained in this box are all replicas as the real objects are far too valuable. The first relic the guide will show is the skull of Homo heidelbergensis. Homo heidelbergensis is believed to be the earliest occupier of Europe. Homo erectus first originated from Africa around one million years and arrived in Europe around 700,000 years ago. The average size of Homo heidelbergensis was about the size of a twelve-year-old today. The next skull is the skull of Neanderthal first found in Germany in 1856. Neanderthal were shorter yet more thickset than modern humans, they had bigger heads and limbs and had to adapt to survive the harsher conditions during the Ice Age. The third human to have occupied Kents Cavern were Homo sapiens, in the cave a human jawbone was found; the oldest evidence of Homo sapiens found in Northern Europe, it has been dated to around 40,000 years old. Other examples of prehistoric animals include the teeth of various animals included a sabre tooth cat, baby woolly mammoth and a cave bear. The skull of the ancestral cave bear was also found in close proximity to this chamber in 1948.

## **The Bears Den**

### **Warning – Cave lighting will be put out briefly in this chamber**

The skull of an ancestral cave bear found in Kents Cavern has been dated to 420,000 years old. It is possible that caves bears both modern (*Ursus spelaeus*) and ancestral (*Ursus deningeri*) cave bears hibernated in this chamber and both old and young died here.

Your guide will demonstrate how prehistoric people used fire in the cave, particularly with shell lamps; scallop shells packed with animal fat and moss. This is what we believe they used as torches, however it is most likely that man and women did not come this far into the cave. Once the lights go out however the darkness enfolds you. This is referred to as total darkness.

### **Water gallery/Exhibition area**

Kents Cavern is a gateway site to the English Riviera Geopark; a UNESCO endorsed area. Since Kents Cavern opened to the public in 1880 it has received in abundance of 6 million visitors. Up the slope above you, there is an exhibition area, please take your time to look around. The exit is to the right at the top of the slope, please mind your head on exiting the cave.

Thank you for visiting.