

## Vela Spila Audio Tour Text

Welcome to Vela Spila !

This outstanding limestone cave, formed through the action of water millions of years ago, has a unique story to tell.

### #1

However, before we enter the cave, let us turn for a moment and look at the view. If you stand at the edge of the hillside you will see the harbour, Vela Luka below you. It is fringed with houses which begin to climb towards the hillside olive terraces. Across the harbour you see Vranac hill ahead, and, to the left, the tallest, Hum hill. Beyond it, at the mouth of the harbour, the island of Ošjak and the Adriatic Sea. This is what we see today, but had you gazed out of the cave 20,000 years ago, where our story begins, your view would have been quite different.



*View from Vela Spila*



*Europe during the Last Glacial Maximum*

Instead of the sea you would have seen a green valley with the hills and the Adriatic plain beyond. A refuge from the ice age frequented by animals and humans alike. Perhaps, way away, you may have been able to glimpse the sea as a glimmer on the horizon, some 20 kilometres away. As a hunter, the herds of red deer, passing through the valley towards the plain, would have been your quarry. You would have brought the choice parts of the carcass back to the hearths in the cave for cooking while the harsh almost Arctic weather raged outside.



*20,000 years ago, the sea would have been over 20km away.*

If you turn and look at the entrance to the cave, I'll point out another difference. 20,000 years ago, the arch of the cave mouth would have been far above you. We are actually standing on about 10 meters of sediment, accumulated over the years.

So, as we step inside the cave we are standing on soil from the current era, but as we walk down the slope, we will be walking back in time.

Before we do so, however, please walk to the right, so that you can look down of the excavations below.



*Entrance to Vela Spila*

## #2



*Archaeologists at work*

It happened that a new road was being built around the bay and fill was needed in a marshy area at the northern end of the harbour. There was a great deal of soil in the cave, so someone had the idea of removing it with a digger and transporting it where it was needed.

If you look to the right, you will see some red painted lines.

*Can you see them ?*

These show where the soil level had been before the digger got to work. If you look at the back wall of the cave, you can see an area of darker rock and an area of lighter coloured rock. The point at which they meet marks the level of the soil. Thus, in just a few months of mechanical excavation, 4 to 5 thousand years of evidence of Vela Spila's unique story, was removed from almost three quarters of the cave. Of course today this would not have happened as people are more aware about the loss of information; but it did allow archaeologists to dig down from the Neolithic more quickly.



*Level of sediment in 1970s*

Let us walk down the slope remembering that with each step we take we are going back through time, though the Iron and Bronze Ages, to the Neolithic: the New Stone Age. We won't pause here yet, but continue down towards the current excavations, through the Mesolithic or Middle Stone Age to the Palaeolithic or Old Stone Age as far as current excavations have reached.

## #3

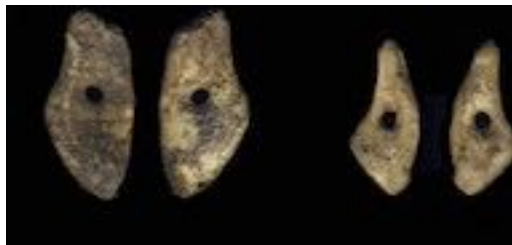
In these days most of Europe was covered by ice. From pollen found, we know the landscape around Vela Spila was forested steppe. People intercepted the herds they hunted, taking shelter, from time to time, in caves such as Vela Spila for periods of indeterminate length.







From the bones found we know they hunted red deer, wild cattle, ass and boar. They made and used flint tools. Over a 1000 worked tools have been found in the lowest layers; and because such flints were not available locally, we know they either travelled or exchanged these rocks over quite long distances. *Can you imagine what it would be like to select a rock and chip away at it with another rock until you have made a sharp tool - and what it would feel like to use it ?*



*Pierced red deer teeth*

As well as for hunting and butchering, the tools were also used to pierce fine holes in red deer teeth. Quite a large number have been found, and, from examination of the use wear around the holes, we can see which were strung and which stitched onto clothing. We do not yet know who wore them, if they were used by both men and by women, or if they signified prestige or status, or if they were just simple decorations.

*What do you think?*

We also know they worked soft clays into figurines. They made animals and people and decorated them with impressions. We do not know if they were made as toys for children, or as teaching aids for young hunters or for shamanic or spiritual reasons. It would appear that a clay figurine, probably drying by the fire, one day, fell in.



*Fired clay figurine*



*Figurine of an animal*

When clay is heated to over 325 degrees centigrade, it undergoes a chemical change, it hardens and will never return to a soft state when mixed with water. Clearly once the embers had died down, and the figurine retrieved, someone realised what could be achieved. To date, archaeologists have found dozens of pieces of fired clay figurines in sediment layers dated to around 17 thousand years ago. Fired

clay figurines were continued to be made in the cave for over 2000 years.

No bowls or cups were ever made; only figurines.

One of the factors that makes Vela Spila so unique is that it is one of only 5 sites in ice-age Europe where fired clay figurines have been found.

If you look around, you will see that the 42 pieces have been collected in only about 10 sq.meters of excavations... imagine what might be found when the rest of the cave is excavated !



### #3b

The making of fired clay figurines abruptly stopped, the reason for which might be an event which so terrified those using the cave that they fled and no human returned for a very long time.

Around 15,000 years ago an enormous volcanic event happened in the bay of Naples. It is called the



*Thick layer of ash*

Neapolitan Yellow Tuff event. Archaeologists have found a layer of ash from the ash cloud in the sediment. It is thick enough for them to know that a lot of ash fell and covered the area.

*Can you imagine what the people saw or how they felt ?*

It is doubtful they would have known about the volcano, but one day they would have seen dark clouds and very red sunsets - then they would not have seen the sun at all ... they would have been shrouded in a thick toxic mist. It is possible that the animals fled and being much more in tune with nature, the people possibly fled too. If they did not, they would have seen the ash starting to fall softly, like snow, and it would have covered everything, suddenly cutting life short, the landscape devastated.

Was this what caused the cave to remain unoccupied for several 1000 years?

If we move to our right we will see a deep profile of many strata or layers of sediment.

### #4

Each strata represents a different time period. Dating these strata and carefully recording all the finds within them helps us to reconstruct the cave's story. Another reason why Vela Spila is so unique is that it has a very long chronology of human occupation or use. Finds of stone tools, animal and fish bones are evidence of humans using or living in the cave almost throughout its history, throughout its strata.

Archaeologists are able to date the strata and the finds within them through scientific methods such as Radiocarbon Dating, using bone or charcoal, Dendrochronology using tree remains and

Thermoluminescence gauging light. Knowing the dates of the strata helps us know approximately when events occur, such as the volcanic event.



*Vela Spila roof*

For example, if you look at the roof, you will see two large holes... when did they occur ?

The large rock in front of you is deeply buried. By dating the strata above and the layer of sediment below it, on which it fell, we can say it fell sometime between

14,000 and 9,000 years ago, around the end

of the last ice-age when the climate was warming and the sea level rising.

There is some evidence to suggest a sizeable earthquake, or series of earthquakes were the cause of the roof fall. Perhaps it was this that which caused the cave to remain unoccupied for several 1000 years?

If the roof fall did not occur until that time, then the people who had used the cave for shelter in the Palaeolithic, before that time, would not have had such a well lit cave as we experience today.



*Rock fallen from the roof*

Sea level reaches Ošjak 11,000 years ago



The rising sea levels would have been apparent to those hunters following the herds because access to the Adriatic plain would have gradually become more and more restricted. Indeed, around 11,000 years ago Korčula became an island.

You might imagine the stories handed down from one generation to another - they would describe a different world...

#### #4b

Those who used Vela Spila at this time, in the Mesolithic or Middle Stone Age, thrived on fish and shellfish.



*Quantities of mackerel bones have been found.*

From the huge quantity of bones found, archaeologists can tell that mackerel fishing was a major occupation. Such large numbers of mackerel vertebrae have been collected that it seems the cave may have been used for fish processing, perhaps smoking for storage, on an almost industrial scale. Ethnographic evidence from the 1970s shows the shoaling behaviour of mackerel makes them relatively easy to catch in certain seasons, in carefully positioned nets along a shore. The presence of some tuna and swordfish bones tells us that people also fished in the open sea, presumably with boats.

The few red deer in the area were soon consumed. The lack of large animals meant that smaller animals such as roe deer, fox and rabbit were now hunted. Indeed foxes were hunted so much that over the years the species became smaller and less robust. How do we know? We can tell this from the bones which are found.

Also, from the tools found, we can see that instead of travelling or trading further afield for quality flints, those living and working in the area, were satisfied with tools from the local rock of inferior quality. Many more tools have been found made from bones. These are mostly slender points, like needles, and would have been used for stitching clothing, and also probably for making nets.

Interestingly, although they had easy access to an abundance of sea shells for making decorative beads, the people at this time only chose one type of shell, the *Colombella rustica*, to pierce for threading. They may have been used as beads on clothes; as decorative head-dresses; worn as jewellery; or tied into the hair. Also of interest is that these shells are found throughout the central Balkan and Adriatic sites, and mostly exclusively. This indicates a shared tradition amongst widely spread groups of people. *Do you have any ideas as to why?*



*Bone point*



*Pierced shells*



Let us walk to the wall of the cave beside the excavations.

#### #5

It is in this area that some burials have been found. They all date to around 9000 years ago in the Mesolithic, or Middle Stone Age. The partial skeleton of a 40 year old man was found buried at the cave edge beside the current excavation. Many pierced sea shells were found with his bones, indicating he was buried in beaded garments. He may have worn a beaded head-dress or the shells may have been braided into his hair.

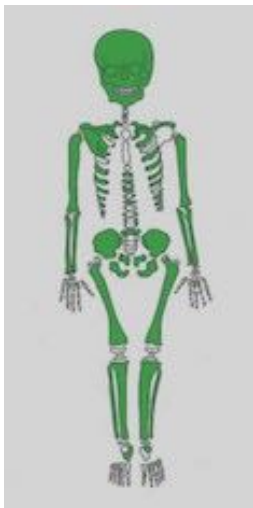


*Burial and re/burial*

Missing from his skeleton are the cranium from the skull, the pelvis, the femurs and tibia of both legs and the humerus and ulna from one arm. He had been buried, then, when the flesh had decomposed, these larger, important bones were exposed and removed. There is no evidence that animals had disturbed his grave; so we know that it was people who had taken his bones for some particular purpose. *Can you imagine what that purpose might have been ?* In the same area have been found remains of food: fish, shell-fish, sea and land snails. Perhaps some celebratory feasting took place. At 40 years of age, he would have been old for those times, perhaps he was regarded as a person of special significance. *Can you imagine why that would have been ?*

Deeper within the cave you can see another excavation. Let us move closer to it.

#### #6



It was here that were found the well preserved burials of some children. There was a foetus close to term and 3 children less than 4 years old. What is interesting is that none of the bones from the hands or feet of the children have been found, also all have 1 or more major bones missing and the foetus is only represented by its leg bones. There are no teeth or cut marks on the bones. *Why do you think these bones are missing ?*

The burials are another reason why Vela Spila's archaeology is unique. We have the only examples of children's burials in Mesolithic Croatia and also the only example, in that of the adult male, of secondary inhumation, where a grave is opened for a purpose and then the body reburied. We can only wonder why his

larger bones were deliberately removed, what happened to them and what might have been the rites which accompanied this. Hopefully more burials will be found and their excavation thoroughly recorded so that scientific research might help to answer these questions.

Turn your gaze to the mouth of the cave. Can you imagine it with all the detritus gone, almost level with where you are standing now ? Between us and the entrance the huge rocks fallen from the roof. *What might have been happening then ?*

## #6b

Life around Vela Spila did not stand still. Strangers came by boat from near and far. They brought with them new ideas, new tools, new materials, new traditions. Some will have settled, others moved on.



*Incised ware ca8000BP*

We are in the era of the Neolithic, or New Stone Age. Flints have been found in Vela Spila from the Italian peninsula; these would have been traded, or fetched, or brought. They were used for making tools, blades and arrow-heads. Pottery was introduced and its use for containers and domestic ware became widespread. Some found here show sophisticated incised decoration, others, of a buff clay, are painted with red swirls, dots and lines. The cultivation of cereals was introduced and excavated grinding stones, used to make flour, indicate food preparation was still carried out in the cave, although it is thought the people usually lived in shelters or houses outside. From the animal remains we know that the herding and consequent domestication of animals, another significant feature of the Neolithic, became established around Vela Spila.

To understand one of the clues that lets the archaeologists know this, you will need to stand close to the cave wall on the side of this trench, closest to the new excavation.

## #7



*Layers of animal dung*

If you look diagonally across, you will see an area, near the top, left bare of the protective rock wall. If you look closely, you will notice layers of dark grey and light grey strata. These, dating to around 6000 to 8000 years ago tell us another story. We call them 'layer cakes'. They are in fact layers of burned dung: animal excrement. The light grey layers represent dried dung which has been burnt; the dark grey represents the moister dung beneath, which would have been too wet to catch fire during burning.

It appears then, that the cave during much of the Neolithic was used at certain times as an animal shelter: for the penning of the communities' sheep and goats. The pastoralists would have probably driven in their flocks to be safe during the winter and themselves have shelters around the mouth of the cave. We have found pieces of their decorated domestic ware in these upper layers. With the arrival of Spring, the herds would have been driven out for pasture. The enormous amount of dung which would have accumulated during the winter would have been left and dried during the warmer months. It would seem that before returning, the pastoralists would have set fire to it to kill insects and prepare the cave as a winter shelter again.

If we start to return to the entrance, we can look at a tray of animal bones. Some of them are quite ancient, some of them are from our times. They represent a number of animals: red deer, donkey, dog, sheep and goat. *Can you work out which is which?*

## #8

We do not believe that Vela Spila was used for habitation during the Bronze and Iron Ages. The people probably moved to higher areas such as in the several nearby hill forts that have been identified. These areas afforded greater views of the channels and islands. Stone built houses have been found on Kopila hill, near Blato and there is a large and complex stone necropolis beneath it.



*Necropolis at Kopila*



*Gaius Octavius*

The people of the time, whom the Romans called the Illyrians, were renowned for their piracy - particularly of Roman ships trading in the area. Such a nuisance were they, that, Tacitus wrote, Octavius (later Caesar Augustus) when Governor, eradicated the entire population in retribution. A lesson to all their neighbours not to disrespect the Romans and their ships.

As we leave the cave we can turn again and see the vastness of the space within which so many people over so many ages lived, worked and played for at least certain periods during their lives.

Thank you for visiting Vela Spila. As you can tell, there are still many questions to answer; so much more of the cave to be excavated and its secrets revealed.





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