

# UXELLODUNUM

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## **The battle of Uxellodunum : New researches at Puy d'Issolud**

### **Uxellodunum**

Uxellodunum is the renowned stronghold where Gallic troops, many of whom had escaped from Julius Caesar and his legions at the siege of Alesia, fought the last battle for the independence of Gaul in 51 BC. The account of the battle was written by Aulus Hirtius to complete Caesar's *Gallic Wars* (Book VIII), but his description of the site of the battle is vague.

### **The battle**

Following the defeat at Alesia in 52 BC and the rout of the Pictons (in the Poitiers region) in the spring of 51 BC, the Senon Drappes, with 2,000 to 5,000 men, was joined by the Cadurcian Lucterios, an escapee from Alésia, with the aim of invading Provincia (the region of Narbonne). Pursued by the Roman legate Caninius they took refuge on the oppidum of Uxellodunum (in present-day Quercy).

On reaching Uxellodunum, Caninius established three camps on high ground nearby and undertook the construction of a fortification to circle the oppidum. Drappes and Lucterios established their camp ten miles from Uxellodunum. In this way they could harass the Romans and comb the region for supplies in anticipation of a siege. But, while Lucterios was leading a convoy of wheat, he was intercepted by Caninus and was forced to flee. The Romans then made a surprise attack on Drappes' camp, massacred his army and took him prisoner.

The Gauls, despite having lost their principal leaders, continued the combat. But Fabius then arrived with reinforcements of two and a half legions (15,000 soldiers) followed by Caesar with his cavalry and two other legions, in total around 26,000 men.

The Roman siege was at first ineffective, so Caesar decided to deprive the Gauls of water. Access to the water source was made impossible by the machines of war. So, downstream from there, Caesar ordered a high embankment to be built topped with a tower of ten levels, 27m high, from which archers, slingsmen and catapults fired on the Gauls.

In addition, tunnels were dug to divert the water and dry up the spring. Despite violent battles and the burning of the tower, the Roman sappers achieved their goal. The Gauls, deprived of water, believed themselves abandoned by their gods and capitulated.

Caesar was pitiless and cut off the hands of all the warriors, but spared their lives.

## The site of the battle

Hirtius was not present at the battle and never came to the site and his descriptions of the topography are vague and incomplete. This has led to the controversy as to the localisation of Uxellodunum, dating from as early as the 16th century. Many sites claim the honour of being the site of Uxellodunum. From 1993, a programme of research was put in place at Puy d'Issolud under the auspices of the Ministry of Culture, with the aim of pinpointing, once and for all, the site of the battle.

## Puy d'Issolud

Puy d'Issolud is a geological outlier, separated from the *cause* of Martel by the valley of the Tourmente and from the *cause* of Gramat by the valley of the Dordogne. The plateau has an area of approximately 80 hectares, situated mainly in the commune of Vayrac, with the western and south-western slopes situated in the commune of Saint-Denis-lès-Martel. Its highest point at 311m is in the north east. High, sheer limestone cliffs form its borders to the north-west and to the south.

There are many springs on the slopes of the site but the only one which provides abundant water on a regular basis is that known as the *Fontaine de Loulié*, on the south-west flank at an altitude of 163.5m.

## Historical data

The oldest document identifying the Puy d'Issolud as Uxellodunum is a contested deed of king Raoul who, in 935, made the donation of a high place called Uxellodunum near Vayrac to the abbey of Saint Martin in Tulle; this high place was known for having been besieged by the Romans. What is more, three deeds of property for the same abbey in 941, 944 et 945 relate to a domain called Exelduno.

## The archeological context

The plateau of Puy d'Issolud has been inhabited since the Middle Palaeolithic (Stone Age). A number of vestiges from the late Bronze Age (3,000 BC to 1,000 BC) and of the end of the early Iron Age have been discovered there. The Gallo-Romans inhabited the area in the middle of the 1st century AD and vestiges of the Merovingian period (5th to 8th century AD) have been found.

At the Loulié spring, the single aim of the early excavations was to expose the tunnels. No record of the strata was made. Only Cessac and Viré noted their observations. Many thousands of cubic metres of material were moved by hand using pick-axes and shovels, with no scientific observation taking place. However these excavations did bring to light vestiges of Bronze Age and Iron Age occupation and a remarkable number of Roman armaments.

## The state of conservation of the site

The area was profoundly altered by travertine quarrying in the middle ages, by the culture of vines in the 19th century and then by the archeological excavations of the site in the 19th and early 20th centuries.

The site was for the most part destroyed, only small untouched islands of archeological interest remained.

## The topography of the area

Since the beginning of the Holocene (around 10,000 BC) a mass of travertine (a calcareous rock with small cavities containing crystals) had formed at the foot of the cliffs, due to the presence of a spring. This mass then underwent various phases of erosion and deposition as a function of human impact. In the 1st century BC it would have been a sloping ledge with a series of natural basins and water falling over the front edge from the Vasques overflow. This overflow was considerable reduced by the quarrying and by natural erosion.

The basin at the foot of the cliffs uncovered by Cessac then Bruzy is not the spring mentioned in the *Gallic Wars* but an overflow of lower springs, dry in summer.

## The recent research

### The archeological layers

During recent researches, the excavation of a mound of 16 m<sup>2</sup> showed a layer of destruction of burnt material. The reddened earth contained numerous objects : 961 river pebbles varying in weight from 50g to 2.5kg, 39 arrowheads, 1 catapult bolt, 4 Roman sandal nails, 14 fragments of amphora and 21 pieces of Gallic pottery. All these elements had been subjected to burning. On the surface were found burnt fragments of oak logs, and the floor was highly reddened, in places burnt.

Carbon dating of the logs and archeo-magnetic analysis of the earth were carried out.

Other researches brought to light 7 arrowheads and catapult bolts, numerous pieces of charcoal and some small pieces of Gallic pottery.

### The slopes below the cliffs and above the spring

The excavations reveal a floor and a layer of occupation, covered with a pile of fallen rocks. All of this area contained armaments of Caesar's epoch : 41 arrowheads, 9 catapult bolts, 1 stimulus (spike), 1 javelin head, 1 croc, 1 knife, fragments of amphorae, river pebbles.

Examination of this area confirmed two points:

- The site was certainly occupied in the late Iron Age, centred around the springs flowing over the travertine at the foot of the cliffs. This area is characterised by a level of occupation and a floor reddened by a fire, and it has delivered an abundance of weapons and ceramics dated to the 1st century BC. The weapons are similar to those found at Gergovie and Alésia.
- What is remarkable here is the abundance and concentration of weapons : 1263 arrowheads and a hundred or so catapult bolts in a area smaller than 4,000m<sup>2</sup>. The absence of material dating from before and after the 1st century BC leads us to conclude that this site was occupied for only a short time.

## **Electromagnetic prospection**

Prospection was carried out over a period of five years around the Loulié spring, on the slopes above and below the cliffs. This process yielded 1940 metal objects including 112 arrowheads, 6 catapult bolts, 1 javelin point, many Roman sandal nails, 3 silver Gallic coins, a Cadurc silver drachma and 2 Gallic bronze coins of Lucterios.

## **Research on the tunnels**

In the 19th century the tunnels were the focus of all the researchers' attention, and this led to the almost total destruction of the archeological levels. The recent research has therefore concentrated on determining and understanding the complete layout of the underground network.

A principal tunnel lies from west to east which appears to divide into two longitudinal branches upstream - a branch to the south, discovered by Cessac, and another to the north. Two additional lateral tunnels are tunnels dug by the Gauls to undermine the Roman tunnelling.

## **The position of the rampart and the tower**

The distance between the tower and the spring is not documented in any text. From the tower the Gauls were not in the range of Roman fire but it was however a great nuisance. The Gauls hurled burning barrels filled with soot, pitch and wooden laths at the tower to set it on fire. At the same time they attacked the Romans in force to prevent them from extinguishing the fire.

Caesar gave the order to simulate an attack. The Gaulois returned inside their fortifications and the fire was extinguished.

Because of the danger run by the Gauls' in fetching water from the spring, they constructed walls to screen off their access to the spring. The chore of drawing water from the travertine platform was thus made less risky.

The firing trials carried out in at the site in 1998 et 2005 helped to confirm that the tower was entirely in range of the enemy.

## **Where was the tower?**

In 2005, trial excavations carried out by the geologist H. Camus led him to envisage that the limestone blocks made visible by the bad weather of 2001 were the vestiges of a Roman rampart or associated military structures. In addition, the study of the orientation and inclination of arrowheads and catapult bolts in the soil allowed the origin of their firing to be identified.

The distance of the tower in relation to the Gauls' path to the water source would have been about 80m, 4m above the road and within the range, at 115m, of shots from the tower. The firing trials held in 1998 and 2006 provided valuable information on range, vulnerable areas, qualities of projectile flight and their effectiveness.

## Conclusion

The work undertaken over 12 years has permitted an updated reading of the site of Uxellodunum. The hydrogeological study of the area of the Loulié spring and surrounding springs has showed that only the former was sufficient to provide a steady supply to a population and their animals. Analysis of the water system led to two conclusions: the place identified as the source by Napoleon III is only a recent and temporary spring in periods of heavy rain; the real source is constituted by a set of underground rivulets. The water contained carbonates and over time gradually formed a mass of travertine with a cascading front. The water basin which supplied the Gauls was on this solid surface, where the highest concentration of weapons has been found. It is underneath the basin that the Roman galleries are found.

- Electromagnetic prospection delivered numerous metal objects and has identified the combat zone. The water source was indeed the epicentre of the zone.
- All the techniques used to date traffic on the ground deliver consistent results - radiocarbon analysis of wooden logs burned, as well as paleo-magnetic analyses of sediments baked by the fire or the study of objects.
- Furthermore, the study of the underground tunnels has led to the discovery of new sections. The tunnels, 1.5m high and 2m wide, extend over 60m. The techniques used to carve the tunnel vaults are consistent with those used in antiquity. Technical comments and the organisation of the network show that these galleries have had no other purpose than to capture water from the source located on the surface.
- Finally, the mapping of the Roman weaponry found suggests a localised point from which the shots came, allowing the Roman rampart (agger) to be positioned. This is confirmed by the presence of the main tunnel in the form of a trench.
- The site's archaeologist has thus confirmed the location of Uxellodunum, with an abundance of weapons, unique when compared with all other battle sites of the same period.