

## The hole story

Discover a subterranean world  
under the streets of Nottingham

**Time:** 45- 60 mins

**Distance:** 1 ½ miles

**Landscape:** urban

Nottingham is world-famous as the home of folk hero Robin Hood. There is another side to the city though - beneath our feet.

Nottingham has more caves than anywhere else in Britain with a recent count reaching over 540. The caves vary in size and use but they all have one thing in common. None of them are natural. Each was carved out by human hands.

This trail explores a city shaped by the spaces below its streets. Find out how Britain's 'place of caves' developed and why Nottingham's people took to life underground.

**Location:**

Nottingham, Nottinghamshire

**Start:**

Castle Rock, Castle, Boulevard, NG1 6EL

**Finish:**

Broadmarsh Centre, Low Pavement

**Grid reference:**

SK 56995 39391

**Keep an eye out for:**

A few hills and take care for trams - but also look out for caves!

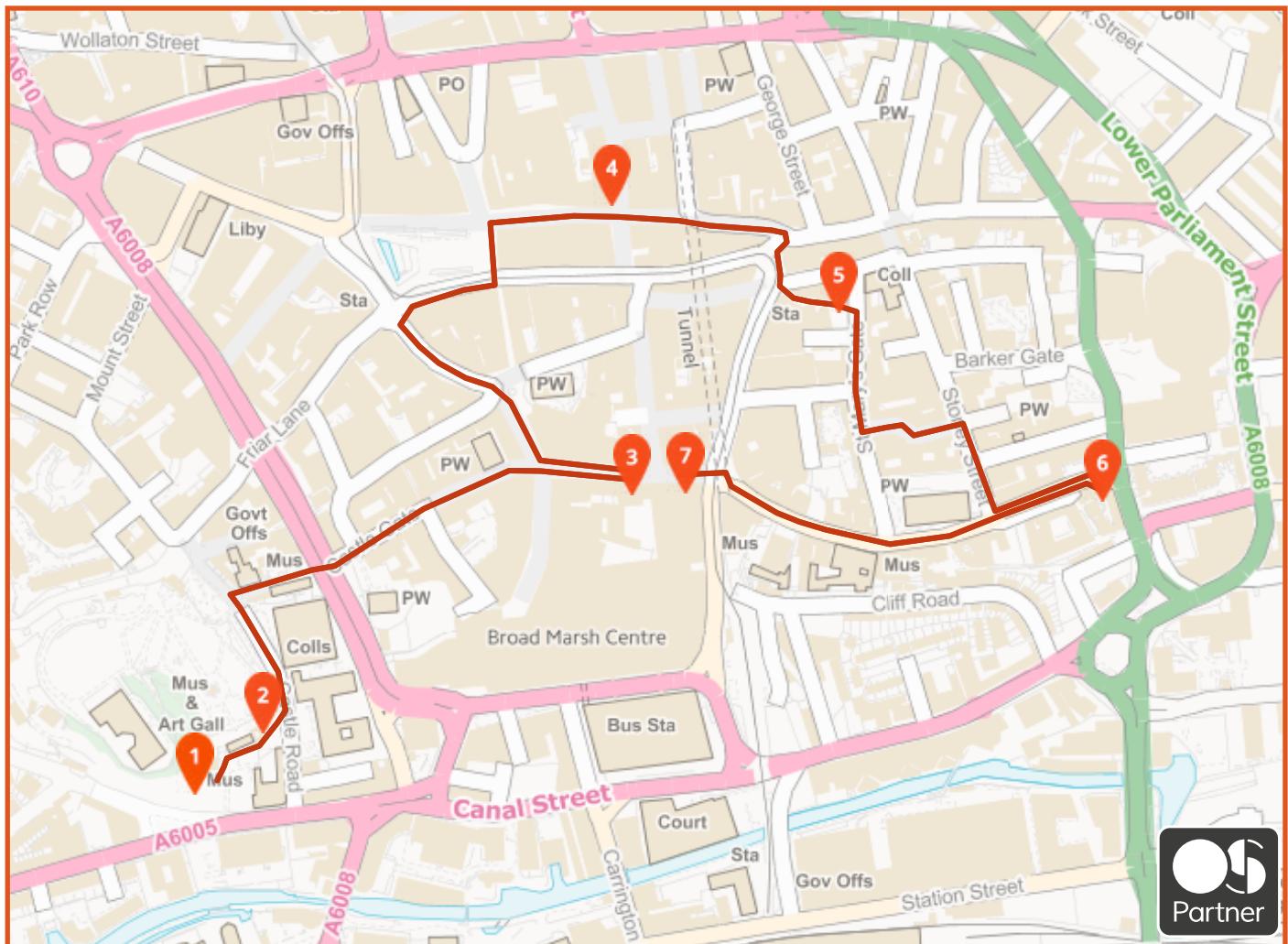
**Directions**



Begin at the entrance to the Museum of Nottingham Life, located on Castle Boulevard. Go into the museum grounds and follow the path up to a round stone (a mill stone) at the bottom of Castle Rock. There should be two metal gates in the rock face ahead. (If the museum gates are closed you can still see the Castle Rock from the road).



## Route and stopping points



- 01 Castle Rock, Castle Boulevard
- 02 Ye Olde Trip to Jerusalem, Castle Hill
- 03 Willoughby House, Low Pavement
- 04 Junction of Long Row / Clumber Street
- 05 Lace Market Square
- 06 Chardlace Walk, Hollowstone
- 07 Broadmarsh Shopping Centre, Low Pavement

## 01 Castle Rock, Castle Boulevard

We begin delving into Nottingham's caves at Castle Rock. This 400,000-year-old landmark is in many ways Nottingham's foundation stone. The city grew from two settlements, at opposite ends of a sandstone ridge – a Norman Castle based here and a Saxon town.

The sandstone ridge was an ideal defensive location because of its height. The two settlements expanded along it until they merged. Castle Rock is one of the largest exposed sections of sandstone. This type of rock is called Sherwood Sandstone. Take time to look at its dimpled surface and bands of colour. Can you also spot holes and doorways at various heights? These are caves and tunnel entrances.

Formed from grains of sand that have been compressed together, Sandstone is fairly soft and easy to cut with basic hand tools. So Nottingham's earliest residents dug out places to live in the rock. In 868 a visiting Welsh monk named Asser described the town as 'Tiggua cobauc' - the 'place of caves'. There are still caves at the top of Castle Rock where the city's poorest people literally made their homes.

Nottingham's caves have affected people from all walks of life, however, even royalty. In 1330, 18-year old Edward III gained the throne by sneaking through a cave at night. His father (Edward II) had been overthrown in a coup by nobleman Roger de Mortimer, who set up home in Nottingham Castle. Under cover of darkness, Edward III led his troops through a cave in Castle Rock, snuck into the castle and seized Mortimer. At the base of Castle Rock, look for an arched doorway lined with brick. This is said to be the cave Edward used; it has become known as Mortimer's Hole.

As we will discover, Castle Rock is just one place where people have made the most of this city's unusual geology.

### Directions

With the Castle Rock behind you turn left, then follow the path to the Museum of Nottingham Life buildings (a group of redbrick cottages with benches outside). Go through the metal gate and stop at the pub on the left, Ye Olde Trip to Jerusalem.

(If the gates to the museum were shut you can reach the pub by following Castle Boulevard. Simply take the first left and the pub will be a short distance uphill on the left.)

## 02 Ye Olde Trip to Jerusalem pub, Castle Hill

How old is your local? Look on the walls of Ye Olde Trip to Jerusalem to find the date 1189. This marks the time of the Crusades, when King Richard I and his men fought in the Holy Lands. Several of Richard's knights stayed at Nottingham Castle and the story goes that they stopped here for 'one for the road'.

'The Trip' declares itself "the oldest inn in England". So do two more Nottingham inns - Ye Olde Salutation Inn and The Bell Inn - and there are several more very old pubs in the city. But why?

The reason is Sherwood Sandstone. All towns rely upon a constant supply of water. Two rivers pass through Nottingham, the Trent and the Leen, but river water could become polluted, spreading diseases like typhoid and cholera.

Sherwood Sandstone meanwhile is a good 'aquifer'. Aquifers are underground rocks that can hold water. So some of Nottingham's caves were dug to create water wells; 'The Trip' has a hatch in the ceiling, said to be a well that supplied the castle.

But wells were not the only answer when water became polluted. People also turned to beer. Brewing removed impurities, which made beer safer to drink than water. And Sherwood Sandstone was perfect for making and storing beer. The caves provide low light and a constant cool temperature (14 degrees Celcius).

So pubs flourished in Nottingham from the city's earliest years. Almost each pub has caves underneath, some even have cave bars. At 'the Trip' the upstairs rooms are hewn from Castle Rock. These are well worth a visit as some of the best examples of caves in everyday use.

### Directions

From the pub turn left and go uphill to a statue of Robin Hood, along the way take time to look at the castle walls. At the statue, turn right and cross the road to enter a narrow cobbled street (Castle Gate). Follow it across a busy dual carriageway to a pedestrianised crossroads with shops. Go straight ahead onto Low Pavement, which rises uphill. Stop on the right hand side just before a pair of red telephone boxes. You should be outside a grand building set back from the road.

## 03 Willoughby House, Low Pavement

As you would expect, most of Nottingham's caves are out of sight. At times we will have to use our imagination as we go around the city but there are some amazing things to discover about the world beneath our feet.

A good example is what lies below this building. Willoughby House was built in the 1730s for Rothwell Willoughby, one of the wealthiest men in Nottinghamshire. Today this is the flagship menswear shop of Nottingham-born designer Paul Smith. The building's opulence though goes right back to the original owner - and extends below ground.

Underneath are networks of underground spaces, including a pair of 'gentleman's caves'. Willoughby's were cylinder-shaped rooms that he used to store his extensive wine collection. Caves like this were status symbols designed to impress. Many became unique and lavish entertainment venues, with the added appeal of privacy. This led to tales of wild underground parties filled with drinking and gambling.

But these were not the only stories being whispered about Nottingham's caves. Rumours spread of buried treasure, underground forests and druid sacrifices. There were even suggestions that all the caves linked up like a maze. Though these tales are untrue one thing is certain - not everyone lived such a high life below ground.

### Directions

Retrace your steps back to the crossroads and turn right. Pass a large church on your right and bear left onto Wheeler Gate. Continue to a large city square with a huge domed-roof building on the right: the Council House. Make your way across towards it (watch out for trams). Keep the Council House on your right and continue into the pedestrianised street alongside it. Stop on the corner with the first street on the left, opposite an orange building with a clock tower.

## 04 Junction of Long Row / Clumber Street

We have just crossed the Old Market Square, where the Norman and Saxon settlements first merged and passed the grand 1920s Council House. But why have we stopped on this shop corner?

If we were here just over 60 years ago there's a good chance we would be underground, huddled in the cellar of a wine merchant's shop while planes rained down bombs overhead. At the outbreak of the Second World War many of Nottingham's caves were adapted into air-raid shelters. By 1941 some 86 had been converted, including one under this very spot.

While many shelters were adapted from existing caves others were specially built, including ones at the Player's Cigarettes factory for their 8,000 workers. Sherwood Sandstone provided ideal protection. It could be dug out quickly and used to fill sandbags. The stone also absorbed bomb shockwaves, so few of the shelters collapsed.

Some shelters still survive, including underneath nearby Pelham Street. A recent expedition found original signs on the walls and even the toilet still intact! We will go up Pelham Street shortly. As we do, try to imagine the scene underground and what it must have been like staying in there during terrifying bombing raids.

Have you noticed that the buildings here are a mix of old and new? This is because of bomb damage and redevelopment after the war. As we will find out, these changes had a great effect on many of the city's historic caves.

### Directions

With the orange building on your right, continue ahead onto Pelham Street. At the top turn right and cross the first road ahead of you (Victoria Street). Continue a short way with the tram lines on your right. Cross over the end of Warser Gate then follow a pedestrianised path on the left through a precinct of modern shops. You will emerge into a city square with tree-shaped sculptures. Stop at one of these and face Nottingham New College across the road.

## 05 Lace Market Square

Though this is a modern square we are actually in the oldest part of Nottingham. This area originated from the Saxon town but is most famous for a very Victorian industry. By the late 19th century Nottingham was the world's centre of lace making – very fitting for a city underlain with intricate holes!

Lace was a hand-made luxury until the Industrial Revolution. After the North West had developed a monopoly on cotton making, Nottinghamshire engineers pioneered lace-making machines to keep their businesses competitive. Lace was made, stored and sold in elaborate warehouses - creating an area still known as the Lace Market. Look across the road at Nottingham New College. This building, and several others we will see on the next part of the trail, is a former lace warehouse.

As lace making grew from the 1800s, so did Nottingham's population. People arrived from surrounding areas for work. Many were poorly paid. Low wages combined with high demand for living space, meant unscrupulous landlords took advantage. Nottingham's caves became homes again, with whole families crowded into cold damp dark squalor.

These slums and industrial growth changed people's attitudes to the caves. Many Victorians found the caves deplorable. Caves were filled in or destroyed to make way for new development.

Ironically, when lace fell out of fashion and the industry declined, the warehouses were demolished at a similar rate to the caves. In recent years however the Lace Market's fortunes have improved. Some warehouses have been restored and found new uses, with new complementary spaces like this square. Nottingham's caves have also found new favour. But first let's go back to their very origins...

### Directions

With Nottingham New College on your left, leave the square and continue onto St Mary's Gate. Cross the road and take the next left, Broadway. Halfway along the right hand wall, look out for a small information board about the Lace Market. At the end of Broadway turn right and continue past a large church. Turn left and go along the right hand side of the road that slopes downhill. Near the end of the street go through a metal gate into Chardlace Walk.

## 06 Chardlace Walk

This area is called Hollowstone. You can probably guess why from the caves on both sides of the road. This is a good place to find out more about Sherwood Sandstone and how it formed. Sherwood Sandstone is like a canvas with Nottingham's story painted over it.

Touch the stone; it should feel slightly rough and flaky. Sandstone is made of grains and pebbles bonded by thin clay. Imagine a pebbly beach stuck together with glue. The grains are a type of quartz, a tough mineral. They are densely packed together and this structure is why the crumbly stone can support the buildings above it.

The clay in Sherwood Sandstone holds small amounts of water, which means moss and plants can grow on the surface. Also look for distinctive round holes in the stone; these are a result of water too.

When the water in the sandstone freezes into ice, it expands and eventually causes the rock to crack. Water will fill the cracks and so next time it freezes more cracking will occur. This continual process is called 'freeze thaw action'. The holes appear after water freezes in cracks around pebbles. Pressure on the rock causes it to crumble and the pebble falls out, leaving a clear round hole.

Now look for some patterns of diagonal lines. This feature is called 'cross bedding' and reveals something about how the sandstone formed. Incredibly, the stone we can see below these modern flats is the remains of a desert from around 245 million years ago.

At that time we would have been standing on a dry, sandy plain. After heavy rains, seasonal rivers ran from the top of the sandstone ridge. These rivers carried pebbles and mud from the higher ground. As the rivers dried this material built up in layers, slanting at an angle to the flat plain. Over time these layers compressed into rock - the diagonal lines are imprints of the desert's sloping surface.

## Directions

Retrace your steps and go back up Hollowstone. Keep the church on your right and continue onto the cobbled street (High Pavement). Pass the Galleries of Justice Museum and Nottingham Contemporary art gallery. Cross over at the traffic lights by the market cross and continue into the pedestrianised road ahead. Stop on the left after a short distance outside the Broadmarsh Shopping Centre.

## 07 Broadmarsh Shopping Centre, Low Pavement

From a 245-million year old desert we conclude at a 1970s shopping mall. This might seem strange but the Broadmarsh Centre is an important chapter in the story of the caves.

When it was built historic streets were controversially demolished. But construction also uncovered unique caves that shed new light on Nottingham's history.

Among them was a 13th century tannery, thought to be the only underground example in the world. Tanners made leather from animal skins. It was a horrible job where children as young as seven softened the skins in pools of urine and excrement. It's sobering to think that a place where we can enjoy some retail therapy was once the site of filthy underground toil.

Public outcry over such caves facing demolition meant the tannery and others on the site were saved. The Broadmarsh caves are now preserved in the unique 'City of Caves' visitor attraction.

The campaign reignited public interest in the caves. Some of the oldest are now protected as Scheduled Ancient Monuments and many others were rediscovered. In 2014 the University of Nottingham conducted a survey to map all the caves. They recorded a staggering 544 caves in the city – and over 100 of these were previously unknown.

Throughout this trail we have explored how Nottingham's caves have shaped the city. Thanks to the bedrock of soft Sherwood Sandstone, Nottingham grew under our feet as well as above ground. From paupers to princes, people have created and used caves as homes, places of work and play, and even shelters that saved lives.

The caves reflect how our cities develop - in physical layers from prehistoric rock to modern buildings, and in cycles of wealth and taste. Nottingham's caves also remind us what lies beneath our modern cities. Sometimes their most exciting stories are the ones hidden away under our feet.

## Directions

To return to the Castle, keep the Broadmarsh Centre on your left and continue along Low Pavement. You will pass Willoughby House again. At the junction, continue ahead onto Castle Gate and follow it to return to the Castle entrance by the Robin Hood statue.



Trail complete – we hope you have enjoyed it!