

The Story of the Caves

**Large text exhibition
labels and panels**

Kindly read and return

An island is born

The Isle of Thanet

Around 7,000 years ago, sea levels rose across Europe forming what we now know as the English Channel.

As water levels continued to rise along the Kent coastline, a small island of chalk became detached from the mainland and the Isle of Thanet was born.

The island spanned 10 miles at its widest point and was separated from the mainland by a single stretch of water that became known as the Wantsum Channel.

The Channel was two miles wide and proved an important shipping route for the Roman Empire. It remained in use until about 500 years ago, when a combination of shingle and silt caused the Isle of Thanet to become reconnected to the mainland. Now called the River Wantsum, people still cross it when they enter Thanet from the west.

Marked on map

Margate

Wantsum Channel

A chalky landscape

Clues in the cliffs

Thanet's geology holds much information about the island's past and provides detailed clues into when the land was formed and how it was used.

The Isle of Thanet is made up of two distinct sections. The bottom layer is a dry, hard rock chalk that can be seen above sea level in the famous white cliffs around the Kent coastline.

The top layer, formed between 72 and 86 million years ago, is made up of 'Margate chalk', a sedimentary bedrock. This layer was formed during the Cretaceous Period, when dinosaurs roamed the earth.

Image caption

A view of the chalk cliffs at Kingsgate Bay.

Image courtesy of BBA Photography/shutterstock.com

Simplified geological map of Kent

Dark pink - Chalk

Small pink dots on white - Thanet Beds

Vertical pink stripes - London Clay

Light pink - Weald Clay

White dots on pink - Gault/Upper Greensand

Diagonal white stripes - Lower Greensand

Large pink dots on white - Hastings Beds

Marked on map

Margate

Canterbury

Dover

English Channel

3D image caption

Chalk - a rock which once lived

Millions of years ago sub-microscopic plankton fell to the sea floor where it was compacted into chalk rock. The scientific term for this versatile compound is calcium carbonate.

Fertile ground

Since the Neolithic Period, right up to the present day, farming has played a huge part in this area's economic success. The combination of chalky soil and coastal location both defines Thanet's landscape and provides incredibly fertile ground, making it very easy to grow good-quality crops here. Such fertile soil would have attracted the first settlers to the area, helping them to thrive.

Thanet's first sign of life

Around 65 million years ago the sea off Margate was filled with small squid-like animals living in spiral shells. Today, the fossils of these ammonites can still be discovered around this coast.

3D Fossil Image caption

Model of *Acanthoceras rhotomagense* var *sussexiense*, Cretaceous Period, found in chalk.

BGS copyright UKRI. Original Source: 3d-fossils.ac.uk

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First footsteps

The Iron Age Man

A rare discovery was made on this site in 2018. The Iron Age skeleton of a young man was found curled up in the bottom of a chalk pit. His bones tell a story about the community who lived here long before the Romans arrived.

He was 5ft 6" (1.67m) tall and around 34 years old.

The cause of death remains a mystery but experts found that he had previously suffered fractured ribs and toes.

This is not unusual, as Iron Age men trained as warriors to defend their tribe. His broken bones would have been left to heal without treatment or pain relief.

Image caption

The excavation of the crouch burial.

Image courtesy of Daniel Worsley/SWAT.

During the two-week excavation more than 50 volunteers helped uncover everything from Victorian coloured glass to our crouch burial, which was found on the very last weekend of the excavation.

An Iron Age community

2,000 years ago, a flourishing Iron Age community lived on this site. Evidence of pits, gullies and building structures has been discovered beneath the ground you are standing on.

Our Iron Age ancestors lived in large communities, based in walled hill forts to protect themselves against violent attack from rival tribes. Because they lived so close to the sea there was the additional threat from foreign invaders, who travelled here by boat.

Life was difficult. Successful crops and healthy animals were vital for food and materials. Tools and weapons from this time, made from iron and steel, have been discovered in the surrounding area.

Ceramic pot caption

Pieces of the past

This unassuming pot is over 2,000 years old and dates from between 400 and 500BC. Layers of paint and iron oxide, which were found inside the pot when our archaeologists discovered it in 2018, would suggest that it may have been used by an Iron Age potter to decorate their wares. What designs do you think they came up with?

Beneath the surface

Building a modern town

The first house on this site was one of many built in Margate at the end of the 1700s.

Locally-sourced chalk was used to make bricks and cement. This is how the Caves were first created more than 200 years ago.

The mine was dug by hand using a small, short-headed, iron pick. The tool marks can still be seen on the cave walls. Once excavated, the chalk would be hauled up to ground level in large tubs and prepared for its next destination.

When the building work was complete, the mine was redundant, so the shaft was sealed and covered. The Caves were now carved out but would lie undisturbed until their rediscovery in the early 1800s.

Miners hauled more than 2,000 tonnes of chalk from the mine to the surface. That weighs the same as 5.5 million jars of marmalade. Or 370 elephants! How many of you would that be?

Working underground

Mining was a dangerous and tiring occupation and it would have been very dark and dusty in the Caves. Miners would work in teams of two: one would carve chalk out of the wall; the other would load it into wheelbarrows, which they would steer back and forth from the shaft.

The chalk mined here could have been used to build more than 300 houses.

Candle caption

Light at the end of the tunnel

Deep below the surface, working in the pitch black, miners relied on the vulnerable flicker of a candle. Imagine how many candles it would take to light this room... Now, when you are in the Caves, imagine how many it would take to light an entire mine.

Pick caption

A versatile tool

The miner's pick was so well designed that it is still used today by 100s of 1,000s of miners around the globe. With a sharp spike on one end and a flat edge on the other, it was the perfect tool for miners to break up chalk and carve out the tunnels.

Into the unknown

A pioneering teacher

Margaret Bryan moved into the Georgian house on this site, 1 Northdown Road, in 1791. An eminent natural philosopher, she ran a boarding school here for educating young women in subjects such as physics, mechanics, chemistry, astronomy and mathematics. This would have been considered very unusual and progressive for the time.

Bryan gained recognition from prominent scientists as a leading educator in her field. Encouraged by this, she decided to publish her lectures in book form. Her first book, *A Compendious System of Astronomy*, was written and exquisitely illustrated by her own hand while she was in Margate. It proved very popular and attracted a large subscriber list, which included some of the most distinguished mathematicians and scientists of the age.

Although largely forgotten, Bryan went on to have a pivotal role in the progression of female science writers in Britain.

Yet she never knew about the Caves below her feet.

Image caption

Mrs Bryan and her daughters, 1797, Samuel Shelley.
Image courtesy of Bath Preservation Trust - Herschel
Museum of Astronomy.

Board game image caption

'Science in Sport or the Pleasures of Astronomy; A New
& Instructive Pastime. Revised & Approved by Mrs. Bryan;
Blackheath', an astronomical board game, first published
1804, this version c.1815. Image courtesy of V&A.

The highest point of the Caves is just a single metre below
ground level. Incredibly, they remained hidden for more than
100 years.

Look through the telescope!

Glimpse into the past and see the starry skies above
Margate as they appeared to Margaret Bryan in the 1700s.

Unearthing a surprise

At the beginning of the 19th Century, Francis Forster, heir to a substantial estate in Northumberland, purchased Bryan House as his new family home. He set about making alterations almost immediately, changing the name to Northumberland House.

Exactly how the Caves were discovered is open to conjecture. Forster's great granddaughter, speaking a century later, suggests that the gardener "whilst digging, [came] upon a hole which, on investigation, proved to lead down into the Caves...".

However they came to light - gardeners or rabbits - Forster took the opportunity to adapt them to suit his aspirational lifestyle. With the addition of a new stairway, the Caves served as an ice well and wine cellar and could be used to Forster's advantage to impress friends and influential local residents.

Image caption

View at Margate, Edward Francis Burney.

Bryan/Northumberland House appears top middle.

Image courtesy of Yale Center for British Art.

Carved graffiti caption

The first graffiti?

As you explore the Caves keep an eye out for the letters C.F.F. engraved into the walls. But what do they stand for? Candles Flicker Faintly? Chalk Flows Freely? Could Find Fossils? Or perhaps they are the initials of 13-year-old Charles Francis Forster, Francis' son, etched into the walls for eternity?

Turning handle caption

The wheel to wonderland

Turn the handle to help the rabbits dive into the Caves.

Down the rabbit hole

Francis Forster kept a number of pet rabbits... rabbits that kept vanishing. Keen to solve the mystery, he discovered a small rabbit-sized hole at the foot of a pear tree. When he investigated further the hole revealed a large cave. The story was reported in newspapers around the UK in 1863, the same year a certain Lewis Carroll was writing about another rabbit in Alice's Adventures in Wonderland. Curiouser and curiouser!

Those bunnies keep on vanishing. Can you find where they're hiding?

An underground spectacle

The Vortigern Caves

After Forster's death in 1835, the Caves were sealed and neglected until John Norwood, a resourceful shopkeeper, noted the growing tourist trade in Margate. He decided to clean up the Caves and employed his best marketing style to give them the fanciful name of The Vortigern Caves.

Norwood charged the princely sum of threepence (3d) for entrance to his curious underground spectacle, claiming the Caves were once used by Ancient Britons as a shelter from violent attack and dated to 450AD.

His imaginative enterprise initially proved to be a great success but by 1867 its popularity had dwindled and the Caves were closed once more.

Map image caption

A plan of the Vortigern Caves, c.1875.

Image courtesy of The Kent Archives.

Who was Vortigern?

All hail Vortigern, Supreme Lord and Great Chief of the Britons. Many believe it was this crafty 5th-century ruler who invited the Saxons to England to help push back the Scottish invasion. So pleased was he that it's rumoured Vortigern then gifted Thanet to his Saxon son-in-law, Hengist.

Restored by the Reverend

The Immense Smugglers' Caves

It appears the Caves enjoyed a brief resurgence towards the end of the 19th Century. After the publication of Robert Lewis Stevenson's hugely popular *Treasure Island* in 1883, links to Ancient Britons were dropped and instead the Caves were marketed as the "Immense Smugglers' Caves".

This wasn't just a time of change for the Caves though. In 1828 Holy Trinity Church was built, and in 1893 the decision was made to convert part of Northumberland House into the vicarage.

When the Reverend Pryor was appointed to the church in 1902, the enterprising vicar saw the potential of the Caves. He worked to revive them, building a new entrance through the vicarage cellar. The restored Caves were re-opened to

the public in about 1908 and, once again, quickly became a popular Margate attraction.

What's in here?

Reach into the darkness and see if you can guess the mystery object.

Did you guess right?

These floor tiles could tell a tale or two. They formed the entrance of 1 Northdown Road, until it was bombed. Our archaeological dig uncovered them, and you'll find more by our main entrance and in the gardens.

Saving the Caves

A new era

Though an unthreatening seaside town, Margate held a key position on the route back to mainland Europe from London so did not escape the shadow of war. With the new menace from the air in World War I, the Caves were utilised as an air raid shelter.

The town was again subjected to heavy bombing in World War II. On 21 September 1941, Northumberland House,

including the vicarage, was irreparably damaged during an air raid. As a result of the damage, the house was later demolished, and the Caves sealed.

In 1943 a similarly tragic fate befell Holy Trinity Church when it was severely damaged during a raid and was never rebuilt.

Image caption

A service takes place in the ruins of Holy Trinity Church.

Image courtesy of margatelocalhistory.co.uk

Changing hands

In 1958, James Geary Gardner, owner of Chislehurst Caves, took over and enlisted the help of Margate School of Art students to clear debris and add to our collection of paintings. Over the next half a century the Caves were compulsorily purchased by Margate Council, and leased on shorter lets, before closing again in 2004.

Thus began the latest chapter of our story; in 2008 The Friends of Margate Caves started working towards restoration and re-opening. In 2013 a new charity, The Margate Caves Community Education Trust, was created. They took a long lease on the site from Thanet District Council and set about further fundraising.

Successful bids to the National Lottery Heritage Fund and the National Lottery Community Fund allowed the charity to build a community hub on the site which opened in 2019. It includes a café, visitor centre and access to the restored Caves. The work doesn't end there: by visiting today, you are helping secure the future of the Caves. Every entrance ticket, gift shop purchase and cup of tea ensures we can continue to conserve the Caves and serve the local community for generations to come.

Image caption

Building the new visitor centre in 2019.

Image courtesy of Frank Leppard.

A new 100mm borehole was discovered during the 2019 conservation of the Caves. It is at least 5m (16ft) deep and contains a threaded bar. Initial inspection suggests there could be another tunnel below the Caves floor running from the Well towards Northdown Road. Could this be part of a fabled tunnel that connects the Caves to the Lido? How deep do the Caves actually go? And what other secrets lie waiting to be discovered?

Tall tales from the depths

The mysteries of the Caves have captured the imagination for nearly 300 years. Local tales, historical theories and popular rumours have given rise to a number of stories about the Caves. Could there be any truth to them?

A secret stash?

100s of years, where better for smugglers to stash their contraband goods? And with smugglers' caves dotted around the Thanet coast it's easy to understand why this rumour has endured for so many years. But with no obvious access to the sea and a tricky shaft to navigate, is this really a great spot for bootleggers and their bounty? The Reverend Pryor capitalised on the smuggling myth to attract visitors, claiming that the colourful Margate character, Richard 'Lucky Dick' Ovenden, was the last smuggler to use the Caves for his nefarious purposes. He even had Ovenden's image hanging at the entrance.

Image caption

Richard 'Lucky Dick' Ovenden.

Image courtesy of margatelocalhistory.co.uk

A perfect prison?

Peering down into the darkness, it is no surprise that the pre-war caretaker at Holy Trinity Church thought the two circular wells were once a terrifying dungeon filled with spikes and knives. Was he right to pity “the poor wretches who were consigned to them” or is there a more reasonable explanation?

A ready retreat?

With violent tribes invading the island did the Caves begin as a den hole, a refuge for Ancient Britons to hide in? Or perhaps the Saxons sheltered here from ruthless Viking attacks?

A Herculean hero?

Our Thanet Giant painting is said to be based on Richard Joy, who was indeed a giant of a man. This local colossus towered more than seven feet high and could lift six times his own weight. Known as the Kentish Samson, his feats of strength were so legendary that he even entertained King William III. Richard was an intimidating enough figure on land but soon turned to a life on the ocean wave and

became a smuggler. He drowned at sea in 1742 and was brought back to be buried in Broadstairs.

Image caption

Portrait of William Joy, c.1699, engraving. Image courtesy of The Trustees of the British Museum. (We hope our Richard never caught up with the artist to have a word about getting his name wrong...)

A curious coin?

Rumours of pilgrims and religious worship soon emerged when owner, Reverend Prior, discovered a bronze coin in the Caves. British Museum experts identified it as an early 16th-century Spanish coin. Could this have been dropped by a Spanish pilgrim? Was the Reverend trying to convince others that his church had been built on sacred ground? Perhaps the coin belonged to a Spanish prisoner captured from the Armada and the Caves were used as a dungeon after all? Or maybe the coin was picked up by one of our mythical smugglers on their travels? How the coin got here remains a mystery.

Meet our cave dwellers

Lions and tigers and bears, oh my!

Curious creatures

Initial research suggests that the first paintings were probably commissioned by Francis Forster in the early 1800s to delight his visitors. This consisted of 13 to 14 scenes, including the soldiers.

Further additions, including the lion, elephant and Thanet Hunt, had appeared by the 1860s. Yet more murals came in the 1950s courtesy of Margate School of Art students, who added the fluorescent Thanet Giant and the Virgin Mary. In 1984 the paintings were restored by artist Karol Edward Osten-Sacken, who also added some scenes of his own.

The paintings bear testament to the living history of the Caves. We continue to work on the conservation of the murals, on locating lost paintings, such as our tiger, on dating those we're unsure of, such as the bear and hippo, and ultimately to restore some to their 19th-Century appearance.

Long before Thanet was an island, before even Britain was an island, elephants and hippos would roam freely across the land. There were no sandy beaches back then – just open meadows, wooded valleys and swampy lagoons.

Oh dear, our hippopotamus doesn't look very well. Why do you think she's so green? Did the artist run out of grey paint? Was the hippo feeling sick? Or perhaps she's trying to disguise herself so the lion doesn't find her!

After the Kentish King, Egbert, murdered Princess Domneva's two brothers he allowed her to build Minster Abbey on the Isle of Thanet. The story goes that she was granted as much land as her pet deer could run around in a day. The boundary remains much the same as in 670AD, and the deer is still the symbol of the village of Minster.

Before the Caves were discovered, visitors to Margate could enjoy a donkey ride along the beach. Donkeys walked the sands from 1790 until 2008, making it one of Britain's longest-running seaside traditions.

Draw us a new member of the Caves family here! But please stay inside the blue lines... and, of course, don't draw or graffiti in the Caves.

What might you discover?

The Caves are 94.2m (309ft) long. That's enough space to park 30 Minis bumper to bumper.

The highest point of the Caves is 12.2m (40ft), as tall as the Scenic Railway at Dreamland.

Brace yourself for a bit of a walk. It's a 13m (43ft) descent into the Caves along a 15m (49ft) tunnel. Watch your step and mind your head!

If you're feeling thirsty you'll have to dip your bucket 13.5m (44ft) down the freshwater well - but make sure you time it right because at high tide the water becomes brackish (salty).

While you're down in the Caves keep a look out for the ghost paintings - areas where murals have faded over time.

Map key

- A The Thanet Hunt
- B Crocodile
- C Fox
- D Vortigern, King of the Britons and ghost painting

- E Historic graffiti
- F God Bless the King
- G The Thanet Giant
- H Bear and ghost painting
- I Donkey
- J Monkeys
- K Carving, claimed to be a consecration mark
- L Virgin Mary
- M Elephant
- N Rearing Horse
- O Deer
- P Boar
- Q Hippopotamus
- R Lion
- S Site of reported ammonite fossil, now lost
- T Remains of earlier representation of the Virgin Mary
- U Evidence of another, deeper tunnel (route unknown)
- V Galloping horse
- W Original entrance, excavated c.1808
- X Partially destroyed ghost painting of Sir Toby Philpott
- Y Soldiers
- Z Ghost painting of skull

Top of map - Emergency exit

Top right of map - Well

Left of map - Ice pits

Bottom of map - Entrance