

The Shell Grotto Large text information

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Why was it built? When? Who by?

We don't know.

When the Grotto was discovered in 1835 it appears to have been a surprise to the people of Margate; there is no anecdotal evidence that anyone remembered its construction, or indeed knew of its existence. It is not marked on any maps that pre-date its discovery and we have yet to find any documents at all which refer to it before 1835.

Was it a temple... a secret meeting place... a folly?

While Greece was home to the earliest grottoes, Renaissance Italy saw them surge in popularity as a device to add authenticity to neo-classical villas. This fashion spread across Europe, reaching Britain in the 1600s, and taking hold with a vengeance in the 18th century, with the wealthy returning from their Grand Tours and commissioning extraordinary shell houses and grottoes.

In a country littered with the remains of frivolous architectural statements it is easy to assume that the Grotto must be some kind of folly. The site of the Shell Grotto, though, did not fall within the grounds of a large estate and many find it hard to imagine a wealthy landowner electing to have an expensive flight of fancy constructed underneath pastureland. In secret.

Is it ancient... Medieval... Georgian?

Those who believe the Grotto is devotional argue that the shells are not arranged in mere patterns but convey complex symbolism – but the symbol you see depends on whether you favour the Romans, the Cretans, the Phoenicians or the Knights Templar as your Grotto builders. Others prefer to imagine that the Grotto was home to the immoral activities of the Hellfire Club. It's also possible that the Grotto went through several phases of development. It's been suggested that it may have started out as a dene hole (a small mine for the extraction of chalk) with the decoration added in a later century.

Was it the Romans... the Knights Templars... a persecuted religious group?

There are many more questions than answers and perhaps that is how it was always meant to be. That the Grotto's chameleon uniqueness allows it to be a place of worship, an unlikely folly, a secret meeting place, Cretan, Phoenician, a Georgian extravagance, or even 19th-century folk art, is part of its very essence. For many its mystery, magic and charm lies intrinsically in its very existence, but for those who favour one theory over another it is a conversation piece, which has sparked vigorous debate for the best part of two centuries. And may well continue to do so for two more!

How was the Grotto discovered?

There are conflicting accounts although most agree on a date of 1835.

The earliest reference to the discovery appears in an article in the Kentish Gazette of 22nd May 1838, announcing its forthcoming opening as a public attraction. The circumstances are described simply, referring to a gentleman having recently purchased Belle Vue Cottage and making alterations which involved excavating a few feet. During this operation the workmen were impeded by a large stone and, on the landowner's direction, an examination followed, resulting in the discovery.

By 1885, when the popular late 19th-century fiction writer Marie Corelli related the story as told by her Grotto guide, the account had been expanded to include a workman losing his spade down the hole (where the Dome now is) and a boy being lowered into the void to retrieve it.

At the time of the discovery, Belle Vue Cottage (now Rose Lodge on Dane Road) was operating as a private girls' school run by James and Arabella Newlove, in conjunction with Dane House Academy, a boys' school (now the Mulberry Tree pub). The Newloves' youngest son and daughter, Joshua and Fanny, aged 16 and 12 respectively in 1835, often also figure in tales of the extraordinary find.

Fanny was interviewed in the 1890s by Algernon Goddard, who went on to buy the Grotto. He recounts:

"An old lady, the daughter of the Schoolmaster, tells how her brother Joshua found out these underground interests before they were known to his elders, and how he opened a way into it by removing blocks of chalk, and then crawling along the passage. She and some of the girls also used to creep in, with candles on their necks, but it was without the knowledge of their father, who was a strict disciplinarian. One day her brother overheard two gentlemen talking to his father who was merely a tenant, and who proposed to take 21 years lease of the place. "Don't lease it Newlove! buy it outright!" So the lease which had been prepared was thrown aside, and the property was purchased."

We have the unsigned lease from February 1835, which may lend this story some credence. Fanny subsequently named the gentlemen, two near neighbours, as Captain Jeremiah Easter of The Wilderness and Chateau Belle Vue and Maurice D'Acosta, Gentleman, of Lausanne House. Perhaps their advice indicates some prior knowledge of the Grotto? She also says that the Grotto was "in an unfinished state" when it was discovered and that her father employed a man called Stephen Wales, a bricklayer, to finish it. We think Wales enlarged the North Passage and added the shellwork niches for lamps. Maybe that was the extent of his input...with no detailed description of the

Grotto at the time of its discovery, the amount of work undertaken remains open to speculation.

Where were the shells collected?

There are approximately 4.6 million shells in the Shell Grotto. With only two exceptions, they are native British shells, something that marks the Grotto out as unusual.

Other shell structures in the UK are worked with exotic shells, used not only for their flamboyant decorative value but also to demonstrate that the owner was wealthy, educated and well travelled.

The most frequently used shells throughout the mosaic – mussels, cockles, whelks, limpets, scallops and oysters – are largely local.

They could have been found in sufficient numbers from four possible bays: Walpole Bay in Cliftonville; Pegwell Bay especially at Shellness Point, Cliffsend, near Richborough; Sandwich Bay, Sandwich; and, a little farther away, Shellness on the Isle of Sheppey. As most of these shells are also harvested for food, and Thanet has always had a vigorous fishing industry, by-products of the trade may have been also used to supplement the local collection. Family tradition suggests that Shellness Point at Pegwell was probably the location where most of the shells originated.

The majority of the mosaic is formed from the flat winkle, which is used to create the background infill between the designs. However, this shell is found only rarely locally, so would have been collected from shores west of Southampton, where it is present in great abundance. It is not eaten, or used in any manufacturing process (the cockle, for example, is ground up and used in the making of plaster). So these shells, found in vibrant yellows and oranges, were brought to Margate for their looks alone.

The two foreign species in the Grotto are both to be found in the Altar Room. Up in the corners are two queen conches, from the Caribbean, while giant clams from the Indo-Pacific sit atop the altar and the entrance arch.

A different type of shelled creature altogether was allegedly recorded in the Grotto. The story goes that the World War II bomb that hit the East Wall revealed turtle bones secreted behind the wall. It seems this led HG Wells (1866-1946) to speculate that the Grotto was close to 3,000 years old. Of course, we have no written record of the find, and the bones are nowhere to be found...

Why are the shells discoloured?

The Grotto was lit with gas lamps for nearly 100 years.

Indeed, when the Grotto was auctioned in 1932, the catalogue referred to "wonderful catacombs illuminated with incandescent gas". However the new owner soon set about converting to electricity, proudly proclaiming "A World Wonder – Lighted by Electricity" in a poster believed to date to the end of that decade. The gas lighting was probably wonderfully atmospheric, as one early 1850s' flyer suggests: "If there is one time better than another for Viewing the Grotto, it is from 7 to 10 o'clock in the Evening, as the Gas is more splendid and the effect truly astonishing". Unfortunately this same effect has left the shells covered in carbon deposits.

While the shells could be cleaned this would introduce a great deal of moisture, which is the last thing the Grotto needs. Also, beneath their layer of soot, most of the shells appear to be white – shells lose their colour in damp conditions. So cleaning would merely result in us swapping one unnatural finish for another, whilst running the risk of damaging the mosaic.

What sticks the shells to the chalk?

During our 2009 condition survey, five mortar samples were sent off for analysis – each one was found to be different, which could be explained by successive repairs. Some samples were identified as lime mortar, some described as 'Roman cement type'.

You'll notice bare patches, often circular, around the Grotto. These are small slates that may have been mosaiced at ground level — where, presumably, the working conditions would have been much more pleasant — and then attached to the chalk. Where the mortar is visible on these roundels, it is Plaster of Paris, which has proved less effective, hence the bare patches. We're currently re-making these missing roundels; there's more information on our Roundel Project board to your left.

Are there any more passages?

We think not.

The company Ground-Scan Ltd carried out two ground probing radar surveys in 1988 to determine the existence and extent of any cavities behind the Grotto walls. They did not find any voids large enough to indicate further excavations, and indeed the layout of the Grotto indicates a self-contained structure. They did, however, find intriguing anomalies: "...there is a cavity, probably containing objects in the left hand half, behind Altar panel 98. Several other panels on this wall show anomalies on the radar recordings which could be caused by objects and/or small cavities."

Why is there a bare wall in the Altar Room?

The Cottage that sits directly above the Altar Room was destroyed by a bomb during World War II, taking a direct hit on 19 October 1940.

The East Wall of the Altar Room was also completely destroyed, along with a little less than two feet of the north and south walls. Some fragments of these walls survive and are displayed in the cabinet behind you. The bare panel on the north wall of the Altar Room was knocked through to create a door, giving access to the Grotto from Dane Road. We believe this entrance operated from about 1843 to 1873, when it was boarded up.

According to Grotto hearsay, the room once had a barrel-vaulted ceiling also covered with shell mosaic. This was apparently removed some time in the 1800s. The only possible evidence for this can be seen in the two corners of the room where the mosaic survives, and the square corner becomes concave – perhaps the beginning of the vault.

Was it a smugglers' cave?

There was certainly a good deal of smuggling going on in and around Margate but it's difficult to imagine the Grotto being a useful hiding place. For one thing, it's a fair distance inland from the coast with no tunnels extending to or from the cliffs, nor any providing entrance or escape routes to nearby houses. The storage space available isn't significant. And why decorate it with millions of shells?

Can the shells be carbon dated?

Despite the erroneous suggestion that the carbon deposits on the shells resulting from oil and gas lighting prevent accurate dating, they can be carbon dated and indeed they have.

In the 1960s a single sample from the mosaic of the bomb-destroyed East Wall of the Altar Room was carbon dated. However, we have been advised by experts in this field that we would need to provide a number of samples to mitigate against multiple phases of decoration or dating a Victorian – or later – repair. The cost is high. We're told that the single sample is in itself insufficient to draw any sound conclusions and so currently it is treated merely as the first and only piece of an incomplete data set. Credible results worthy of public consideration will have to wait until further samples are taken, tested and appraised. Even then there are no guarantees that the process would produce a definitive date. Right now, there are pressing conservation priorities that have to take precedence....

What conservation is needed?

The Shell Grotto lies largely under a residential garden at a depth of less than two metres. In the 1980s this garden

was concreted over, resulting in much wetter conditions in the Grotto, which was placed on the Historic England Buildings at Risk Register in 1999.

We embarked on an ambitious conservation programme in 2007 with funding from English Heritage (as it was called then), Kent County Council, Thanet District Council and the Friends of the Shell Grotto. Environmental monitoring in the Grotto showed relative humidity levels at more than 90%. That's very damp! Large areas of shells had detached from the chalk substrate; some areas had completely disintegrated and fallen away. To make matters worse, throughout the 20th century many ill-advised and frankly cack-handed repairs had been made to the mosaic.

Survey work began and it became clear that one leaking pipe was responsible for a great deal of damage in the Rotunda. This was promptly re-lined, halting decades of deterioration, and we could start reinforcing the chalk around the Grotto, a carefully considered process of drilling holes and gravity grouting from above.

English Heritage favoured a natural turf roof on the Grotto so the next job was to set about breaking up the concrete roof, all 14 tonnes of it, delicately and by hand. With the green roof in place, the internal repairs could begin; the first time, after all this work, that the results would be visible to the public.

The first task was to pin back areas of shell decoration that had become detached from the chalk. This involved drilling a hole and screwing in stainless steel reinforcing bars, which were then resined into place. This process was repeated hundreds of times, and on each occasion the repair was carefully concealed and its location recorded. Meanwhile, work was carried out on the areas that had completely lost their shell decoration, replacing previous poor repairs and re-bedding some shells in damaged areas. For this we used shells that we had collected from the Grotto floor over many years.

Our current undertaking is the Roundel Project; more details on the Roundel Board.

Who owns the Grotto?

The Grotto has been in private hands since its discovery and remains so today. It was Grade 1 listed in 1973 so Historic England watches over its preservation.

The damp problem prompted Historic England to enter the Grotto onto the Buildings at Risk register in the 1990s, its condition listed as Poor and given Priority Category 'C'. This indicates "slow decay, no solution agreed". Happily, the extensive conservation works carried out in recent years resulted in the Grotto being removed from the Register in 2012.

To further safeguard the Grotto, the Friends of the Shell Grotto were formed in 2008.

The Friends' group is an independent trust committed to preserving and promoting this unique Grade I listed structure. Whilst run independently to the Grotto, they obviously work closely with the owners and play an essential role in the life and work of the Grotto. Friends have funded conservation works, sponsored mosaic roundels and assisted with the refurbishment of this room. Every Friend makes an invaluable contribution to the Grotto's future.

Becoming a Friend brings many benefits including unlimited free entry to the Grotto, invitations to Friends' events and a regular Newsletter. Ask in the shop for an application form.

Where can I discover more about the Grotto?

There is some in-depth information, plus interesting snippets and old press cuttings, in the chest of drawers. You'll find lots more information on our website - shellgrotto.co.uk - and we are collecting an extensive library and archive; if you have a specific query do ask, or email us and we can refer you to our excellent archivist. The information on this board is included in our Guide Book, which is, of course, available upstairs in the shop.

The Roundel Project

Visitors to the Grotto cannot fail to notice the bare slates scattered throughout the passages; these are areas where the mosaic was worked above ground and then the roundel placed into the Grotto's design. The mortar has lasted less effectively on these roundels and, at August 2012, there were 100 of them missing their shells.

The Shell Grotto commissioned conservator Rob Smith to recreate the missing mosaic. The works are be carried out in accordance with our Listed Building Consent, with shells carefully sourced and designs matched to early 20th-century photos of the Grotto. Washes of mineral paint are used to marry the new panels to the surrounding mosaic.

You can sponsor a roundel in your own name, as a business, as a gift for a friend or family member and you can name a roundel in memory of a loved one.

Small roundels measure an average 10cm diameter and cost £250; medium roundels measure an average of 14cm and cost £300; large roundels measure 18cm and cost £500. It's also possible to part-sponsor a roundel with a donation of £50; we will then commission a new roundel once we have enough sponsorship. Sponsorship by standing order is available.

Sponsors' generosity is acknowledged with names displayed here and on the Shell Grotto website. Sponsors also receive a verification certificate and an invitation to view their roundel once it is installed. Roundels are a permanent addition to the Grotto's fabric.

The sponsorship scheme will be administered by the Friends of the Shell Grotto. Please ask at the counter for more information and an application form.

About our conservator

Rob Smith completed the 2011 conservation works at the Grotto and was a finalist in English Heritage's 2012 Heritage Angel awards for those works. He has worked in conservation and restoration for the Royal household, the National Trust, the Churches Conservation Trust, many historic houses and private clients. Rob has also won an Oxford Preservation Trust Award. He is based in Deal.

The creation of each roundel is a carefully considered process:

- 1. Old photographs are studied to try to identify the missing roundel's design
- 2. The slate backing is sourced and cut to size
- 3. The shells are sourced and sorted
- Plaster of Paris and gold size used to make the mortar workable for longer – are mixed

- 5. The shells are mosaiced onto the slate
- 6. After drying, Keim Mineral Paint in a mix of grey, black and dark green is applied to form a base coat. This is a natural, water-borne, liquid silicate paint that gives an extremely durable and colourfast finish
- 7. The roundel is brought to the Grotto
- 8. The original bare slate backing is removed, along with any bordering shells. The shells are re-used, the slate is labelled and archived
- 9. The new slate roundel is set in place in Plaster of Paris and the bordering shells are reinstated
- 10. Mineral paints are used to tone the roundel with surrounding mosaic. The resulting restoration is seamless!

A selection of shells used frequently in roundels, including Baltic tellins and flat periwinkles, plus a sample of the Plaster of Paris and gold size mortar.