

YEOVIL IN STONE

An urban geology walking tour around the centre of Yeovil - it's not all Ham Hill Stone!



This trail has been produced as part of an initiative by Somerset Geology Group to encourage more interest in the story of the rich and varied geology that underlies Somerset.

For further information and trails see <https://somersetgeology.org.uk>





Yeovil Town Council

Thanks to Yeovil Town Council and their “Small Grant Assistance to Local Organisations” that has generously funded the printing of “Yeovil in Stone”.

INTRODUCTION

Yeovil in Stone - an Urban Geology Walking Tour

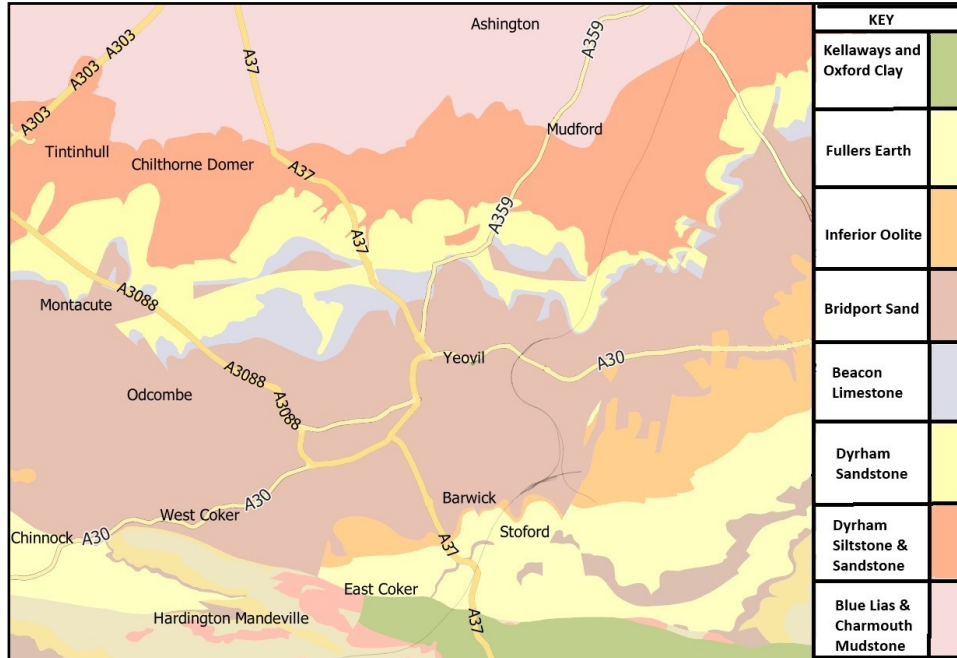
This is a self-guided walking tour that will take you about 90 minutes, around Yeovil Town Centre. You need no knowledge of geology and do not need to be an Olympic athlete to get around! It is also suitable for all ages—fossil spotting is included. We hope you achieve at least one of the following on the walk:

- You have fun seeing 14 different building stones (the cover photo is of Yeovil Stone at St. John's Church) and 8 different fossils, at 10 different stops. There are tick boxes to check to see how good your observation skills are.
- You understand that there are many building stones in Yeovil, not just Ham Hill Limestone (aka Hamstone and Ham Hill Stone), and why historically and economically there are different stones (architectural and geological words in [blue-type](#) are explained on page 19).
- You will look at Yeovil with a more appreciative eye!

Yeovil is a great town—you will only be seconds away from a coffee shop, restaurant, pub or toilet throughout the walk. After the walk, there is a little quiz that you can take to help reinforce what you have seen. There is even a list of facts to impress your friends with! Thanks for taking the walking tour and have fun!

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GEOLOGY AROUND YEOVIL



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Today, we will have a look at the stones in the man-made part of Yeovil—the buildings. However, what are the rocks that occur naturally in the country around and under Yeovil and in the wider Somerset?

On your way into Yeovil today, you may have seen the **Bridport Sand Formation** (there is a picture on the back page). You can see these softer, sandy stones in the Holloways (sunken lanes) like the one leading down from the Ham Hill ridge to Montacute; or on the Dorchester Road on the way into Yeovil. There are harder concretions (lumps with some calcium carbonate cementing the sandstone) that hold the sandstone together to form the vertical hollows but the sandstone itself erodes away very easily.

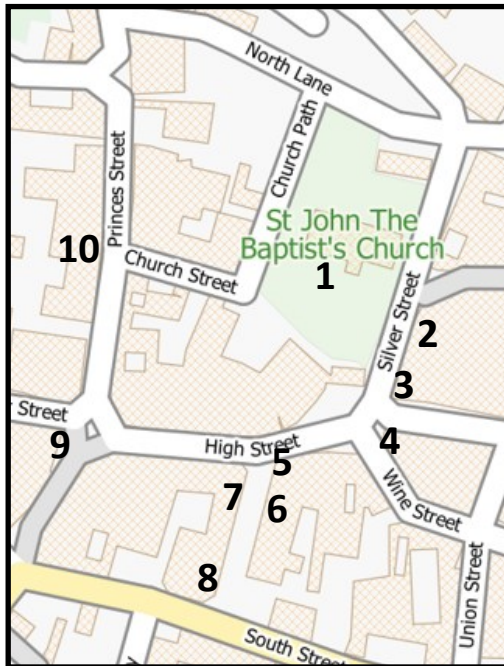
This is the same rock that you can see in the East Cliff at West Bay, Bridport and there are often landslides there. The reason you do not see the Bridport Sand rock in Yeovil buildings is because it is not suitable as a building stone.

The other main rock formation under Yeovil is the Yeovil Stone (also known as Beacon Limestone) that you will see in the church walls and tower today.

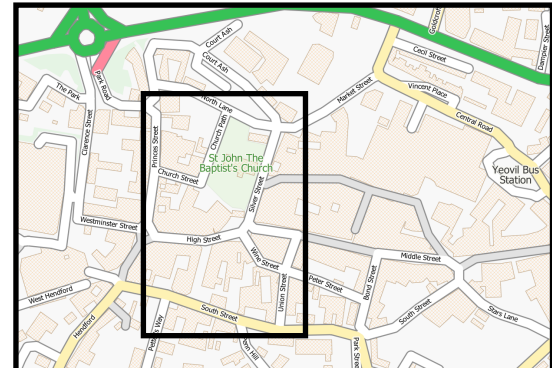
THE WALKING TOUR MAP

Yeovil in Stone - an Urban Geology Walking Tour

There are 10 stops on the tour — from number 1 on the map follow the numbers and you will end up back at the church. (There are many car parks to choose from in Yeovil if you are coming by car. Toilets are available to the public upstairs in M&S)



The 10 stops on the tour:	
1	St John's Church
2	Marks and Spencer
3	HSBC Bank
4	Burger King
5	Barolo Lounge
6	Barclays Bank
7	Halifax—Plaque
8	Library
9	NatWest Bank
10	The Winking Frog Cafe



Area of the walking tour

STOP 1 — ST JOHN'S CHURCH (BUILDING STONES)

Start the urban geology walking tour at St John's Church right in the centre of town (see the walking tour map on page 5)

There are three different building stones to see at this first stop (tick the blue boxes when you have seen them)

2. Stone name: **Ham Hill Limestone** (aka Hamstone or Ham Hill Stone), from Ham Hill a couple of miles away.

Stone type: **Limestone** Age: **Lower Jurassic**

Where: This can be seen around the front door arch, the windows (known as the **tracery**) and as horizontal features (known as **string courses**).

3. Stone name: **Yeovil Stone** (aka Beacon Limestone)

Stone type: **Limestone** Age: **Lower Jurassic**

Where: This has been used to build the walls, tower and **buttresses** of the church. At the front of the church the stone is rough, but if you look at the eastern wall (the bit closest to M&S) it has been cut smoothly. This is known as **ashlar**, and is the oldest part of the church. The stone may have been originally earmarked for another building.

The stone came from a quarry just behind the church in 1380 (between what is now North Lane and Court Ash).

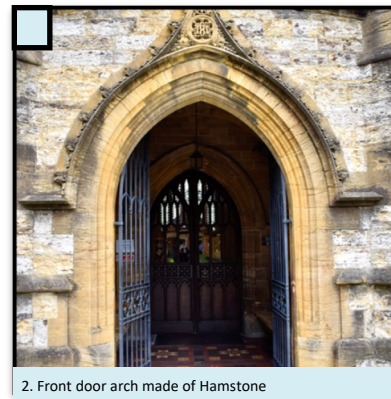
4. Stone name: **Blue Lias**

Stone type: **Limestone** Age: **Lower Jurassic**

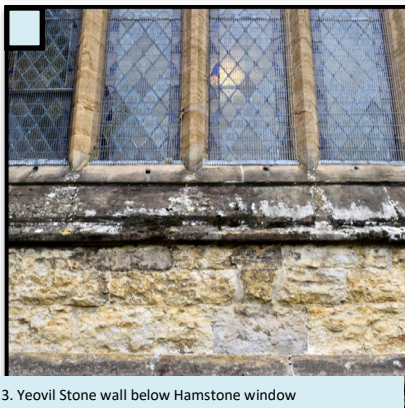
Where: This is the "front door step" in the porch.. This stone would have come from a quarry in Somerset.



1. St John's church



2. Front door arch made of Hamstone



3. Yeovil Stone wall below Hamstone window



4. Blue Lias floor tile at front door

STOP 1—ST JOHN'S CHURCH (BUILDING STONES)

Stay at St John's Church

5. The photos on this page have been taken with a loupe (x 30 magnification) and a mobile phone and are an excellent way to get a closer look at the stones.

6. Ham Hill Limestone

What: This photo shows the broken shells that make up this stone (see the story on page 10 on how Ham Hill Stone was formed). The golden colour is due to a mineral called goethite (iron hydroxide). It is termed a **freestone** i.e. a rock which can be cut in any direction for building use.

Where: This can be seen as the arch in the entrance porch and in the window tracery.

7. Yeovil Stone

What: A very different limestone compared to Hamstone. It is less uniform than Hamstone and looks "lumpy". It is sometimes **oolitic**, **nodular** and **conglomeratic**. Colour-wise, it is grey, pink, reddish-brown and brown in colour.

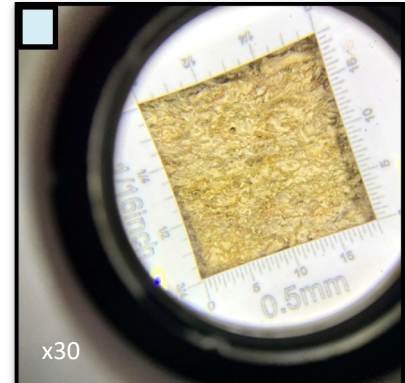
Where: Walls and tower of the church.

8. Blue Lias

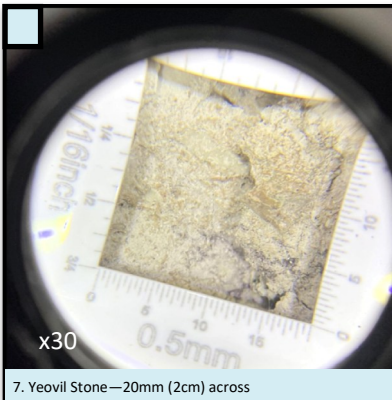
What: This very fine grained, muddy, iron rich limestone is coloured blue if hard and is **impervious**. Fossils are of small oysters and **burrows** (darker sections) made by crustacea or worms moving through the soft sediment.



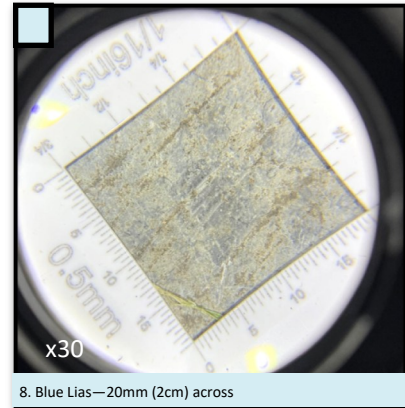
5. Loupe (there are many on the market for less than £20)



6. Ham Hill Limestone—20mm (2cm) across



7. Yeovil Stone—20mm (2cm) across



8. Blue Lias—20mm (2cm) across

STOP 1 — ST JOHN'S CHURCH (FOSSILS)

Have a wander around the outside of the church and see if you can spot the fossils below or ones that are similar.

Ham Hill Limestone: As you will learn from the "Ham Hill Stone" story on page 10, this stone is made up of broken shell fossils and you will only occasionally see [ammonites](#) or [belemnites](#). There are no such fossils in this church.

Yeovil Stone: This is one of the most fossiliferous stones in the UK. Look at the East end of the church (M&S end).

9. Belemnite: A mollusc similar to a squid / cuttlefish. These fossils are commonly found on the Jurassic coast at Charmouth.

10. Ammonite: There are a few ammonites in the walls of the church. Look closely at the wall below the window to the right of the porch (white line highlights the ammonite).

11. Crinoid: Sometimes referred to as sea lilies due to their resemblance to a plant or flower (white line highlights the crinoid).

12. Algal Mat: These laminar, brownish-purple mats are similar to stromatolites found today in Australia. These are the oldest living lifeforms on Earth (white line highlights the algal mat).

Yeovil Ammonite: There is even an ammonite named after Yeovil — **Oxycerites yeovilensis**. You will not see it on the walk today, although it spreads as far as Spain and Sicily. Fossils are used by geologists to age rocks. This Yeovil ammonite is a useful fossil for aging rocks known as the zigzag zone.



9. Yeovil Stone —belemnite (partially broken)



10. Yeovil Stone —ammonite chambers with calcite



11. Yeovil Stone - part of a crinoid stem



12. Yeovil Stone—Algal mat

STOP 2 — MARKS AND SPENCER

From the front of St John's Church, turn right and exit the church green down some short steps, cross to Silver Street and stop at photo No.13

Stone name: Guiting Stone (Middle Jurassic)

Looking back across the road to the church you can see that the M&S limestone is very different from the Ham Hill limestone and the Yeovil Stone at the church. It is known colloquially as **Guiting** (pronounced Gitting) stone (a limestone) and comes from the Cotswolds.

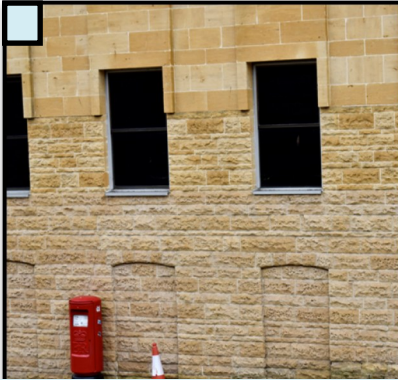
Generally, buildings made from non-local stones were built after railways were built. Before railways / canals, it would have been difficult to transport stone over great distances. M&S is a "modern" building.

13. Distant view of the side of the M&S building. This shows the rough stone at the bottom of the building and **ashlar** (smooth) stone at the top. Although they look different, they are both Guiting stone.

14. Cross-bedding: This feature is highlighted in the **ashlar** stone. This shows that layering of the beds is tilted to the horizontal when the limestone was being deposited in the sea, probably due to flowing water.

15. The Ham Hill and Yeovil Stone at the church were made of broken shells and many fossils. This Guiting limestone was formed very differently and is made of **ooliths**. These are small (<2mm) spherical grains composed of concentric layers of calcium carbonate that were deposited in a supersaturated, shallow sea.

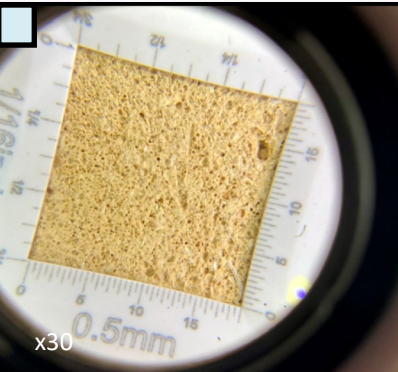
16. Holes (<0.5mm) where ooliths have been eroded away



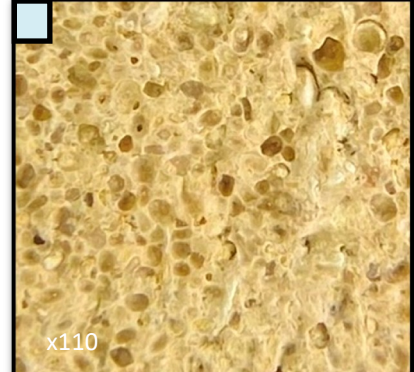
13. Guiting Stone—rough and ashlar



14. Guiting Stone — cross-bedding (white lines)



15. Guiting Stone - ooliths and a few broken shells



16. Guiting Stone— Zoomed in on the ooliths

HAM HILL STONE: THE UNIQUE STORY

Only quarried in one place, but seen far and wide

Imagine 200 million years ago when Yeovil and the whole area was under water in warm, shallow seas at 30 degrees North. We had the same climate and conditions as in present-day Algeria. Nice.

Massive rivers were running down from hills and mountains carrying weathered rocks towards the sea depositing them on their route. The seabed was sandy (quartz sand is the most resistant to erosion so is deposited furthest away at the end of river systems). Then around 180 to 170 million years ago, the Jurassic seas were regressing i.e. the sea shoreline moved south away from the present day Cotswolds to South Somerset and then to Bridport.

In the area of Ham Hill, a sandbank formed that affected the ocean currents, eddies and waves. The environment under water in the shallow sea became much rougher so the sea creatures floating or swimming around the Ham Hill sandbank were **crushed**. Over time the soft sands became saturated with the calcium carbonate (lime) from the shells to form a limestone known as Ham Hill Stone or locally as Hamstone. Not surprisingly, it is therefore rare to find a whole fossil. It was a fluke of nature that the environment formed by the sandbank led to crashing seas, crushing shells and producing calcium carbonate to cement the sandstone to form the harder Ham Hill Stone. The golden colouration is due to iron particles that also washed down the rivers.

Ham Hill Stone is unique. It is mainly found on Ham Hill with smaller outcrops on the hills near Chiselborough and in North Perrott. All the Hamstone that you see today has come from a very small area. It is as unique to this area as anything could be. It is our jewel.

Historically, there is evidence of quarrying on Ham Hill from Roman times. In the 19th Century there were 24 working quarries. There are now just two quarries in operation. The mounds on Ham Hill are formed from quarry waste (spoil heaps). Ham Hill Stone was, and is an expensive commodity. Many Norman Churches in Somerset, Dorset and East Devon are built of Hamstone. It was and still is prestigious to have Hamstone ornamentation in important buildings such as Montacute House and Sherborne Abbey. Hamstone can be carved to produce strong, intricate decorations and tracery around windows, pillars and for gargoyles and statues.

Thanks to Sheila Alderman, Somerset Geology Group

STOP 3 — HSBC BANK

From M&S move up the hill to the building next door on the right —the HSBC Bank

Stone name: **Douling Stone (Middle Jurassic)**

Douling Stone is the commonly used name for this stone. This is another Somerset stone that we can be proud of—from Douling, east of Shepton Mallet.

17. You will see many buildings in Somerset made of Douling stone—Wells cathedral is an outstanding example. Cemented with **calcite**, it has a crystalline and coarsely granular appearance. In sunshine it sparkles!

18. This is a view of the orange-buff and grey cross-bedded (see also at Stop 2) Douling limestone made up of calcite crystals with **crinoid** debris.

19. A loupe view of Douling stone. In older buildings (such as Wells cathedral) the stone would have been more oolitic than you see here. Why? Because rocks are not man-made and therefore vary depending how they were laid down in the sea / what the weather was like / storms etc over millions of years.

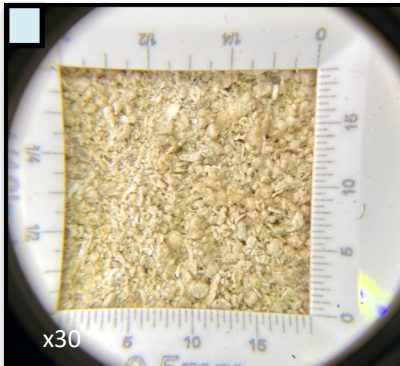
20. If you look up at the top of the HSBC building, you will see that although the bottom part of the building is made of one type of stone (Douling Stone), the top of the building is made of Hamstone like you saw in the tracery at St John's church. Why this was planned is unknown, but from a geological perspective it is pleasing to get two stones in one building.



17. Douling Stone



18. Douling Stone— can you spot the cross-bedding?



19. Douling Stone — not many ooliths, lots of calcite crystals.



20. Hamstone— Not all buildings are made of one stone.

STOP 4 — BURGER KING

Cross from the HSBC Bank to Burger King (watch out for traffic) and walk around to the back of the restaurant (on the right)

Stone name: Hornton Stone (Lower Jurassic)

Hornton is the commonly used name for this stone. This is a Cotswolds stone from near Banbury. It was famously used by the sculptor Henry Moore who described it as “warm and friendly”.

This stone is known as a **marlstone**, not a limestone like all the stones we have seen so far (Hamstone, Yeovil Stone, Blue Lias, Guiting and Douling). A marlstone is an earthy material rich in carbonate minerals, clay and silt. It is also rich in fossils in places and absent of fossils in other places!

21. Blocks of **ashlar** Hornton stone. It has a deep brown colour due to a mineral called **berthierine** (a dark green iron-rich layered silicate formed in low-oxygen marine conditions).

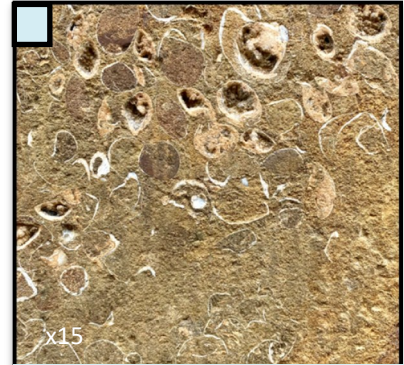
22. Fossil brachiopods. A **brachiopod** is a marine animal that is enclosed by a shell and attached to the sea-floor by a fleshy stalk.

23. A loupe view of Hornton stone. Very uniform, no fossils.

24. A close-up of a large **brachiopod** that has been infilled by something different to the Hornton stone. Groundwater containing dissolved minerals passes through the buried fossil, and when that water evaporates, minerals grow in the available space. The mineral in this case is probably **calcite**.



21. Hornton — blocks of marlstone



22. Hornton — a cluster of brachiopod fossils



23. Hornton—Loupe showing no fossils



24. Hornton — a brachiopod infilled with calcite

STOP 5 — BAROLO LOUNGE

From Burger King, go past Superdrug to Barolo Lounge on the High Street.

Stone name: Man-made stone

21. The stone used in the Barolo Lounge building is not a natural stone, but is man-made i.e. similar to concrete. The chips in the stone are **Blue Lias** (as seen in the church porch floor).....so you could argue it is a locally man-made stone!

22. Close up of the stone showing the Blue Lias chips.

As part of the “Yeovil Refresh” project the new Pennant Sandstone **pavement** and **kerbs** were laid down and completed in 2024.

Stone name: Pennant Sandstone (Carboniferous)

Where: From Forest of Dean (also from the Somerset Coalfield and Bristol). Another fairly local stone.

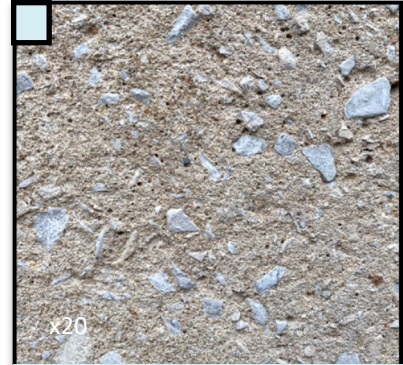
23. A view of the sawn **sandstone** paving. It is non-slip and hardwearing. Variations in colour (green-grey and blue-grey) adds contrast and interest. Unlike, all the stones you have seen so far this sandstone was not formed in a shallow sea, but formed in channels and floodplains of a river. A **sandstone** is made up of broken pieces of older weathered and eroded rock, in this case in a river.

Stone name: Granite (age unknown; from China)

24. The dark grey kerb stones are made of granite. This is not part of the sedimentary family of rocks. It is part of the **igneous** family. It is formed through the cooling and solidification of magma underground.



21. Barolo Lounge—man-made stone.



22. Man- Made Stone—concrete with blue lias chips.



23. Pavement— Pennant Sandstone.



24. Kerb Stone— pale coloured granite.

STOP 6 — BARCLAYS BANK

From Barolo Lounge, turn the corner into King George Street, on your left is Barclays Bank.

Stone name: Bath Stone (Middle Jurassic)

Where: Bath, Somerset!

25. **Bath Stone**, as it is commonly known, is another **oolitic** limestone (like M&S) with a few shell fragments.

Barclays Bank was originally the Post Office building and was built later than the Halifax Building (Stop 7). It is pleasing to see that although the Halifax and Barclays Bank buildings were built 4 years apart that they both have used the same stone.

26. A photo of Bath Stone from its “home” city.

27. Loupe photo showing the predominantly cream coloured oolitic holes, a few **clasts** (sedimentary grains) and a couple of bits of broken shells.

28. Zooming in on the loupe photograph, it is now easy to see how homogenous this rock is i.e. it does not vary much compared to the Yeovil Stone and Hornton Marlstone that we saw earlier that varies a lot from block to block.

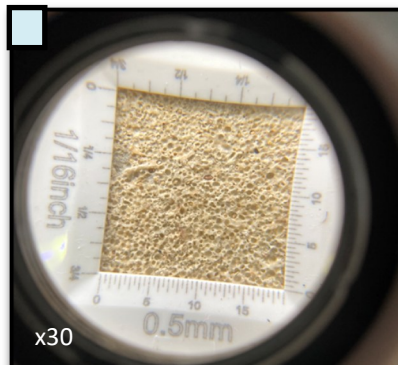
This is an important feature of Bath Stone and it is classified consequently as a ‘freestone’, so-called because it can be sawn or ‘squared up’ in any direction, unlike other rocks such as slate, which form distinct layers.



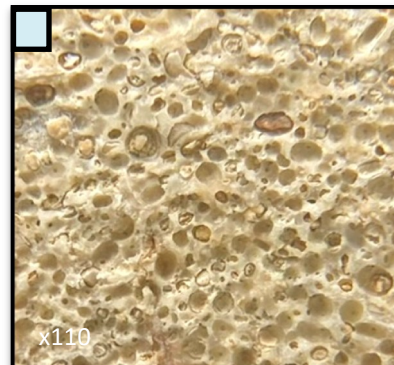
25. Barclays Bank — Bath Stone



26. The Royal Crescent in Bath showing off Bath Stone.



27. Bath Stone—Loupe showing ooliths and a few shells.



28. Bath Stone— Oolith holes and some clasts.

STOP 7— HALIFAX

From Barclays Bank, the Halifax is opposite.

Stone name: Portland Stone (Upper Jurassic)

Where: Portland, Dorset.

The plaque on the side of the Halifax building is made of Portland Stone which is famous worldwide. Many of London's iconic buildings are made of Portland Stone such as St Paul's Cathedral, Tower of London, Somerset House and Buckingham Palace. Further abroad, it is used at the United Nations headquarters in New York.

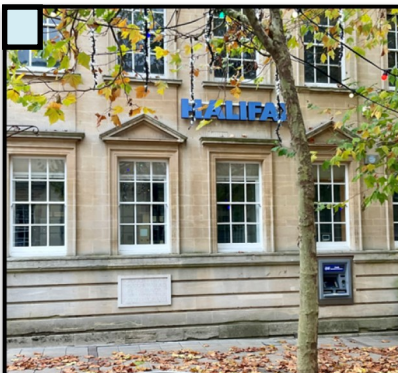
The plaque was laid in 1926 and the Municipal Offices opened in 1928. It is now the Halifax.

29. The Halifax building itself is made of **Bath Stone**, the same as the Barclays Bank building opposite.

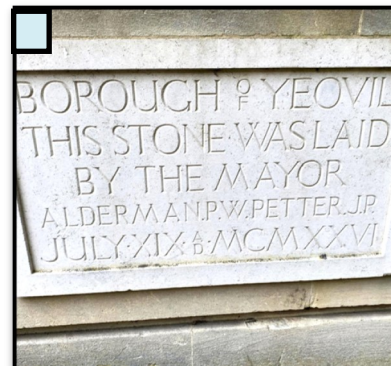
30. The plaque on the side of the Halifax building is made from a different stone—**Portland Stone**. There are many different types of Portland Stone. In this example, the limestone is very **oolitic**.

31. The loupe photograph shows the fine, homogenous nature of the stone that makes it ideal for a plaque.

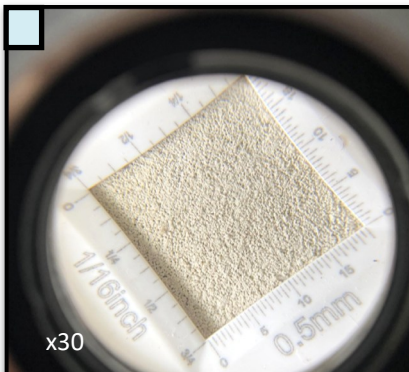
32. Zooming in on the loupe photograph, you can see the ooliths clearly.



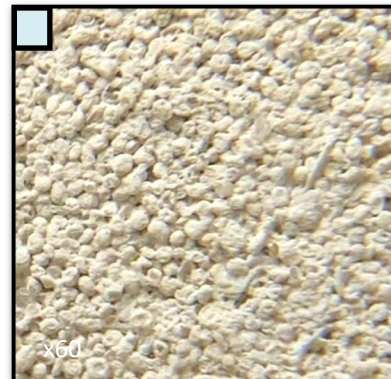
29. Halifax — Bath Stone (same as Barclays Bank)



30. Portland Stone— Plaque from 1926



31. Portland Stone —Ooliths preserved in the plaque



32. Portland Stone— Close up showing the round ooliths

STOP 8 — LIBRARY

From Halifax, walk further up King George Street—the library is on the corner.

Stone name: Westwood Ground Limestone
(Middle Jurassic)

Where: Westwood, Bradford on Avon, Wiltshire.

The library is the newest building in the street (1988). This is the only building on the walk that has definitely had the stone extracted from a mine as opposed to an open quarry. During the second world war a large part of the mine was used to build Royal Enfield gun and bomb sights safely underground and also to store valuables from London including the Elgin Marbles.

This stone is part of the Great Oolite Group and is similar to **Bath Stone**

33. The Westwood Ground Limestone is similar in looks to the Bath Stone used in the other buildings in this street.

34. From a distance, the stone is a grey / buff colour with the occasional broken shell.

35. The loupe photograph shows the **oolites** in a buff - coloured **matrix**.

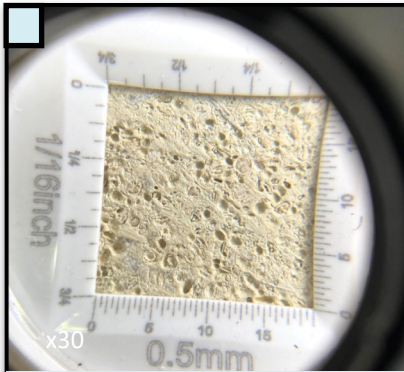
36. Zooming in on the loupe photograph, you can see the oolite holes with a very fine matrix and a few small, broken shells.



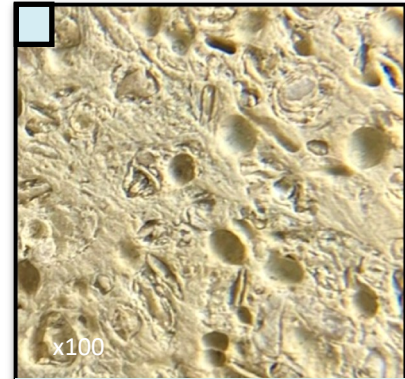
33. Library — Westwood Ground Stone



34. Westwood Ground Limestone — occasional shell.



35. Westwood Ground Limestone—Loupe photograph.



36. Westwood Ground Limestone— Loupe close up

STOP 9 — NATWEST BANK

It is a 2 minute walk to this stop from the library. Follow the library around the corner, walk down South Street and take the first right into Hendford.

Stone name: Portland Whitbed (Upper Jurassic)

Where: Portland, Dorset.

The NatWest building continues the theme of banks having **ashlar** (smooth), white stone. In this case this is another stone from Portland called the **Portland Whitbed**. It is creamy/white, although the large concentrations of grey shells can darken the overall colour.

It is different to the Portland Stone you saw at Stop 7 used for the plaque on the Halifax building. The stone at the NatWest is less **oolitic** and has more shells than the Halifax plaque.

37. The Portland Whitbed stone looks like the Bath Stone at the Barclays Bank and Halifax buildings from a distance.

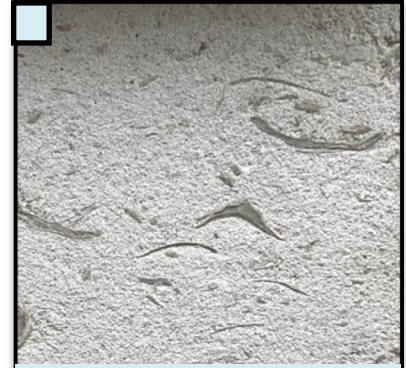
38. Getting closer to the stone, you can see it is not as uniform as Bath Stone—there are more fossils.

39. The loupe photograph shows that there is mostly oolites (circles) but also some shell material (curved lines)

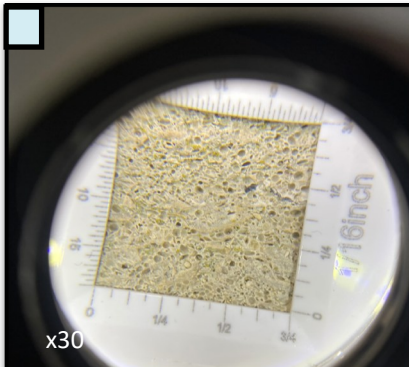
40. Zooming in on the loupe photograph, you can see the curves of the fossil shells. These are probably thin clam shells.



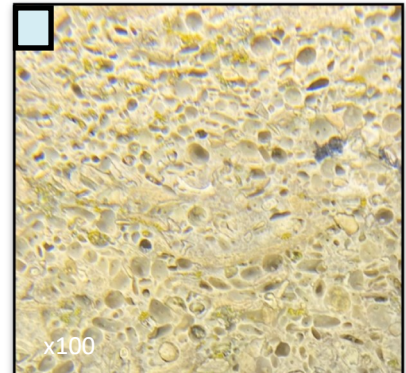
37. NatWest — Looks similar to Barclays and Halifax



38. NatWest — Outlines of fossil shells can be seen.



39. Portland Whit Bed —Loupe photograph showing oolites



40. Portland Whit Bed — Close up showing curved shells

STOP 10 — THE WINKING FROG CAFE

Walk straight across to Princes Street and keep walking 50 metres until you get to The Winking Frog Café on the left.

Stone name: **Ham Hill Limestone** (aka Hamstone or Ham Hill Stone)

Where: This can be seen in the roof tiles of The Winking Frog Café building.

Today, we have looked at building stones in the walls of buildings, a floor of a building (the [Blue Lias](#) in the church) and on the pavement and kerb stones. Now we are looking up and seeing that stone is also used for roofing. In the case of this building we are looking at Hamstone tiles.

The most common roofing material on the walk today is man-made clay tiles, some slate and the occasional Hamstone roof as can be seen here.

41. Distant view of Hamstone tiles—the same stone as we saw at the church. In this case, the tiles are not [ashlar](#) (smooth) but are a rough / more natural shape.

42. A close-up of the Hamstone tiles.

Now turn around and you will find **Church Street** behind you.

43. This building in Church Street shows the other natural stone roofing material in Yeovil—**slate**. This is a [metamorphic rock](#).

44. Back at the church, looking at the Yeovil stone walls and Hamstone tracery from our first stop earlier in the walk.

This is the last stop on the walking tour. Congratulations!



41. The Winking Frog Café roof—Hamstone roof tiles



42. The Winking Frog Café—close up of roof tiles



43. Church Street—Slate roofing



44. St John's Church—back where we started.

ARCHITECTURAL AND GEOLOGICAL WORDS

If a word has been highlighted in blue in this walking tour , you will find it below.

Architectural words used in describing building stones

Ashlar: Building stone, rectangular, finely dressed (cut or sawn) with smooth external face, straight edges and sides for close fitting.

Buttress: A structure built against or projecting from a wall which serves to support or reinforce the wall.

Dressing: Carved stone prepared for window and door mouldings and other "openings" in buildings.

Freestone: A stone that can be freely cut in any direction, usually fine-grained, uniform and soft enough to be cut easily.

Lintel: A type of beam (a horizontal structural element) that spans openings such as portals, doors, windows and fireplaces. It can be a decorative architectural element, or a combined ornamented/ structural element. Hamstone is widely used.

String Course: A layer of the same stone running horizontally in a wall. Sometimes different stones are used to give a banded, attractive appearance.

Tracery: An architectural device by which windows are divided into sections of various proportions using stone bars or ribs of moulding.

Quoins: Corner stones of buildings sometimes going all the way up to the roof-line. These are usually strong stones but also used for decorative effect.

Geological terms used in describing building stones

Algal mat: Laminated lime muds resulting from the growth of blue-green algae.

Ammonite: Extinct shelled cephalopod. All of them had a chambered shell that was used for buoyancy.

Belemnite: Extinct squid-like cephalopod that had a hard internal skeleton that is fossilised.

Berthierine: A dark green iron-rich layered silicate formed in low-oxygen marine conditions.

(Bio)Clast: Broken fossil shell debris.

Brachiopod: A marine invertebrate animal with a two-valve shell, each valve being bilaterally symmetrical.

Burrows: The remains of holes or tunnels excavated into the ground or seafloor by animals to create a space suitable for habitation, temporary refuge, or as a byproduct of locomotion preserved in the rock record.

Calcite: Calcium carbonate, the defining component of all limestone.

Conglomeratic: An adjective that describes something related to a conglomerate, a type of rock composed of visible fragments of different materials from other rocks.

Crinoid: Animal related to starfish with a cup-shaped body and arms attached to the sea floor by a stem. Also known as a "sea lily".

Cross-bedding: Sedimentary layers with ripples (like on the beach today) which were deposited inclined rather than horizontal.

Geological terms used in describing building stones (continued)

Igneous: Rocks formed by the consolidation of molten magma.

Impervious: Not allowing fluid to pass through.

Jurassic: Geological time period between the Triassic and Cretaceous periods. Stretched from 201-145 million years ago.

Limestone: Sedimentary rock mainly made of calcium carbonate from shells or oolites.

Loupe: A simple, small magnification device used to see small details more closely.

Marlstone: An earthy material rich in carbonate minerals, clay and silt. Usually fine grained.

Matrix: The fine-grained material in which larger objects are embedded.

Metamorphic: A sedimentary or igneous rock that has been altered by heating and /or pressure.

Nodular: A small rock or mineral cluster. Usually rounded.

Oolitic/Oolites: Limestones rich in spherical grains of calcium carbonate formed in warm shallow seas.

Quartz: Silica mineral common in sedimentary rocks

Sedimentary: Rocks formed by the erosion of other rocks; by accumulation of organic matter; by evaporation of seawater.

Slate: A fine-grained, foliated, homogenous rock that has been subjected to high pressure. Metamorphic.

FACTS ABOUT THE STONES YOU HAVE SEEN

Stone Name	Best seen where?	Fossils	Characteristic
1. Ham Hill Stone	Ham Hill, Stoke Sub Hamdon, Somerset.	Rarely found as whole fossils (occasional ammonites and belemnites). Broken fossils of (oysters, brachiopods and echinoderms).	Limestone. Honey-coloured with cross-bedding and broken shells. Often seen as window tracery and door lintels. Used in the past as roofing tiles. A visit to Ham Hill (west of Yeovil) is recommended.
2. Yeovil Stone	West Bay (East Cliff), and Thorncombe Beacon, Dorset.	Belemnites; crinoids; ammonites and algal mats.	Limestone. Looks lumpy. Grey, pink, reddish-brown and brown in colour. Unsuitable for tracery work as it is not fine enough. In the past used for road repairs, lime burning and walling.
3. Blue Lias	Charmouth / Lyme Regis, Dorset.	Small oysters and burrowing trails.	Limestone. Dark grey/blue coloured limestone used for flooring in churches; walls and kerb stones. Weathers to a fawn colour—typically blue in the centre of a block and brown around the outside of the block, termed “blue-hearted”.
4. Bath Stone*	Bath, Somerset.	Oolites and a few broken shells.	Limestone. Cream/grey colour. Homogeneous stone. Widely used in non-religious buildings. If you see a building this colour and with an ashlar finish it is most likely to be this stone. Turns whiter in colour with age.
5. Hornton Stone	Hornton near Banbury, Oxfordshire.	Brachiopods very obvious.	Marlstone. Deep orange/brown colour. Sometimes this stone is uniform and has no fossils. Used for sculptures.
6. Guiting Stone	Cleeve Cloud near Cheltenham, Gloucestershire.	Oolites. Occasional broken shell or crinoid.	Limestone. Light brown/honey colour. Cross-bedded.
7. Portland Stone*	Portland, Dorset.	Oolites. Occasional broken shells.	Limestone. White/grey colour. Usually ashlar, homogeneous and “looks expensive”. (Note that the stone here is very oolitic. There are other types of
8. Portland Whit Bed Stone	Portland, Dorset.	Oolites and oysters. Occasional bivalves or ammonites.	Limestone. White/grey colour from a distance. Looks more creamy close up on fresh surfaces. The curves of the fossil shells are easily seen by the naked eye.
9. Westwood Ground Stone	Westwood, Bradford on Avon, Wiltshire.	Oolites and a few broken shells.	Limestone. Grey/buff colour from a distance, looking warmer close-up. Similar to Bath Stone but not a common stone in this area.
10. Pennant Sandstone	Somerset coalfield, Bristol and Forest of Dean.	None.	Sandstone. Green/grey and blue/grey colour gives an attractive finish. Associated with the coal seam in the Somerset coalfield.
11. Granite	Cornwall.	None.	Igneous. Here the granite is a mix of white and black but granite can also be red or green. Never just one colour. Made of large crystals some of which shine in the sun. Very hard.
12. Doulling Stone	Doulling, near Shepton Mallett.	Broken crinoids.	Limestone. Grey colour at a distant and orange/buff colour close-up. Coarse, granular appearance. Cross-bedded. Sparkles on a sunny day.

* Bath Stone and Portland Stone are the only British stones in the list of the first 55 world heritage stones according to the International Union of Geological Sciences.

STRATIGRAPHIC COLUMN

Epoch	Group	Formation	Stage	Age (millions of years ago)	Building Stone	Page
←---- oldest	Upper Jurassic	Portland Group	Tithonian - Volgian (Portlandian)	149-145	Portland Stone	15
					Portland Whit Bed Stone	17
	Middle Jurassic	Great Oolite Group	Bathonian	168-165	Bath Stone	14
			Bajocian—Callovian	170-161	Westwood Ground Stone	16
		Inferior Oolite Group	Aalenian- Bathonian	174-165	Douling Stone	11
			Birdlip Limestone Formation	174-170	Guiting Stone	9
	Lower Jurassic	Lias Group	Bridport Sand Formation	183-174 184-174	Ham Hill Stone Bridport Sands (not used)	6 & 7 back page
			Beacon Limestone Formation	Pliensbachian	Yeovil Stone	6 & 7
			Marlstone Rock Formation	—Toarcian	Hornton Stone	12
			Dyrham Formation	Pliensbachian	not used	none
			Blue Lias Formation	Rhaetian—Sinemurian	Blue Lias	6
Upper Carboniferous	Warwickshire Group	Pennant Sandstone Group	Bolsovian—Asturian	313-307	Pennant Sandstone	13
Devonian	unknown	unknown	unknown	419-358	Slate	18

Each building stone is listed under the relevant geological timescale (epoch), group, formation and stage.

Note that the Inferior Oolite Group (Douling Stone and Guiting Stone) is not inferior in quality to the Great Oolite Group (Bath Stone and Westwood Ground Stone). *“Inferior”* in this case means *“under”* the Great Oolite Group (blame geologists for the confusion).



QUIZ

A bit of fun!

All of the answers you will have come across already and are at the bottom of the page.

Q1. How many different types of building stones did you see today?

Q2. Is Hamstone a limestone or a sandstone?

Q3. What does an ashlar stone look like?

Q4. Where would you normally see Blue Lias if you are walking about Yeovil or another town?

Q5. What rocks are below the ground (the bedrock) in Yeovil?

Q6. Some of the limestones you saw today are oolitic. Which buildings had oolitic limestones?

Q7. Which type of fossil is named after Yeovil?

Q8. What type of stone is commonly used for lintels ?

Q9. Which building has a stone favoured by the sculptor Henry Moore?

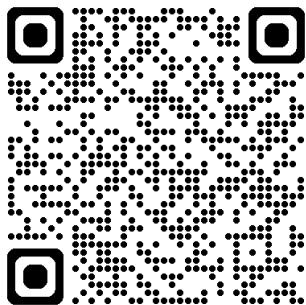
Q10. What type of stone is the new pavement in Yeovil made of?

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Yeovil Town Council

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If you want to know more about building stones, a good place to start would be by scanning the QR code above.

Photo (right): An example of a sunken lane (also known as a holloway) seen around Yeovil. This is a road or track that is significantly lower than the land on either side due to erosion of the soft Bridport Sand. It is not a suitable building stone!

