

DSWA Dorset News

May 2020

I hope you enjoy this issue of the Newsletter in which I am sharing the results of my exploration into the history of the Isle of Purbeck, its quarries, mines and mellow stone, and characteristic walls. I've been helped in this project by Sally Fielding, Dave Rawson, Jon Leyland, the National Trust walling ranger on South Purbeck; Keith Coombs who took some of the photographs; and Trev Haysom, a tenth-generation stone mason with unrivalled knowledge of Purbeck quarrying and its history. Haysom Purbeck Stone has been working in Purbeck since the late 17th century.

Purbeck stone and marble

Purbeck stone is confined largely to an area of 10 square km to the south and west of Swanage. Twenty operational quarries produce up to 25,000 tonnes annually, just half of that shipped out of Swanage in the boom years of the 18th century and leading up to the Industrial Revolution when there was high demand for building stone in burgeoning towns and cities.



The hardest and polishable limestone, known as Purbeck marble, consists of the fossilised shells of freshwater snails (*Viviparus*) and was first quarried from open pits by Iron Age and Roman artisans. Blue and purple Purbeck marble, quarried along a seam from Peveril Point to Worbarrow Bay, were used in tiles and mosaics at Fishbourne Palace (c.75 CE), near Chichester.

Apart from its use in utility objects such as grindstones, and the decorative arts, stone was rare as a building material until the Norman invasion when there was high demand for

building castles and churches. Corfe Castle (pictured) was built from 1090 using burr stone, the limestone beneath the Purbeck marble seam, and its masons constructed a settlement, now Corfe Castle village, outside its walls (photo CR).

Wilkswood, near Langton Matravers: Green Man sculpture of indeterminate age carved from Purbeck marble next to a wall made with Purbeck marble rubble, considered by Trev Haysom to be medieval quarry waste. The priory at Wilkswood (Willie's Wood) is mentioned in Domesday Book (1086), and there was also an open cast marble quarry active during the Middle Ages. Walls in Wilkswood and Langton West Wood often contain remnants of Purbeck marble although they may not be medieval in origin (photo CR).



Salisbury Cathedral (1220-1258), the first important building to be designed in the early English style, remains an outstanding example of the lavish use of Purbeck marble, its interior containing 12,000 tons of the polished stone.



Purbeck marble pillars in the Nave, Salisbury Cathedral (photo left, Malcolm Wright; photo right, Steven Zucker).

Throughout the Middle Ages, the Isle of Purbeck was the King's hunting warren and the quarries were crown property. They and the stone workshops were a good source of royal income. However, when the Purbeck marble industry declined in the 14th century, the desire for Purbeck building stone soon replaced it.

Building towns and cities

Britain's growing prosperity from the 15th century, resulting largely from the wool trade, gave rise to the use of stone as a common building material for significant dwellings and prestigious buildings. Following London's Great Fire (1666), and consequent changes in building construction and early regulations, this demand increased steadily, extending to the towns and cities across Britain. As well as open cast quarries, stone was also mined underground and through galleries driven into the cliffs.



Most of this stone was transported either along the Priest's Way, the track that runs from Worth Matravers to Swanage (photo CR), or via the turnpike (Langton High Street). The route depended on the location of the quarry.

Purbeck paving continued to be in use until the early 20th century.

Purbeck's diagonal walls

Some of the most attractive walls in Purbeck have been built with stones sloping diagonally. This is a very old wall next to Tom's field, Langton Matravers, which was the site of a stone quarry (photo CR). A number of theories concerning the origins of this type of build have been put forward including the legend that they were built in the 'French style' by Napoleonic prisoners of war. There is little historical evidence for this.



French prisoners of the Napoleonic wars *were* held captive in Britain between 1803 and 1814 – 102,000 of them – but apparently not in Dorset. The nearest 'French' prisons were Portchester, near Portsmouth, and Forton, near Gosport. Others were in Bristol, Plymouth, and Dartmoor. 'Hulks' (decommissioned naval vessels) in Portsmouth, Plymouth and Chatham, also acted as prisons. However, the defeat of Napoleon brought about a recession in the Purbeck quarries because there was no longer a need for coastal defence works.



Old diagonally-built wall between Blackers Hole and Durlston (Purbeck & South Dorset OS Explorer map grid ref SZ 01192 77095, photo Sally Fielding).

Trev Haysom makes the point that many of these old walls contain quarry bi-product in the form of paving stones broken in manufacture, hence their characteristic appearance. This suggests that they were built when the paving quarries were active, that is, as early as the mid-16th century and up to the early 20th century. Trev adds: ‘They are not a feature where Purbeck-Portland beds occur near the surface, simply because that sort of rock doesn’t produce the nice, flat slabs the sloping style requires.’



Wall 12

This map shows the location of twelve diagonally-built walls across Purbeck (red dots joined up with red line), which border quarries producing paving stones. Stones for paving were generally of no fixed size, but random, the natural raw piece dictating the size. Some early references to this random stone called it ‘promiscuous’.

Original Purbeck paving stones in Hare Court, Inner Temple, London (photo Peter Barr). Most of the buildings now date from the 18th to 20th centuries. Hare Court’s most notorious legal tenant was George Jeffreys (1645-1689), the so-called ‘Hanging Judge’ of the Bloody Assizes, the West Country trials which ended the Monmouth Rebellion.





As well as paving stones, Purbeck stone roof tiles were also produced, but it was not possible to cleave the stone as thinly as slate and this created a weight problem. A Purbeck stone roof weighs about 1.25 tons per 100 square feet. Although many houses and cottages in the area have been re-roofed, this cottage in Acton demonstrates typical weight sagging. Wastage from tile production undoubtedly added to the slender stone available for diagonally-built walls (photo CR).

Wall outside the Ship Inn, Langton Matravers. This wall, although using a diagonal style, is clearly built on horizontal foundations (photo Keith Coombs). Keith's dog, Maddie, accompanies those of us who wall for the National Trust on Tuesdays.



Maddie inspecting the foundations of this wall at Eastington, which runs south to north from the coast. In walls built on steep slopes, the stones were often embedded directly into the ground diagonally. Purbeck stone is considered to have a good grip and this technique was intended to stabilize the wall and prevent it sliding towards the coast (photo Keith Coombs). This wall is unusual for Dorset in that it incorporates long through stones every six feet which visibly protrude from the wall. In fact, it was built by a Yorkshire waller!

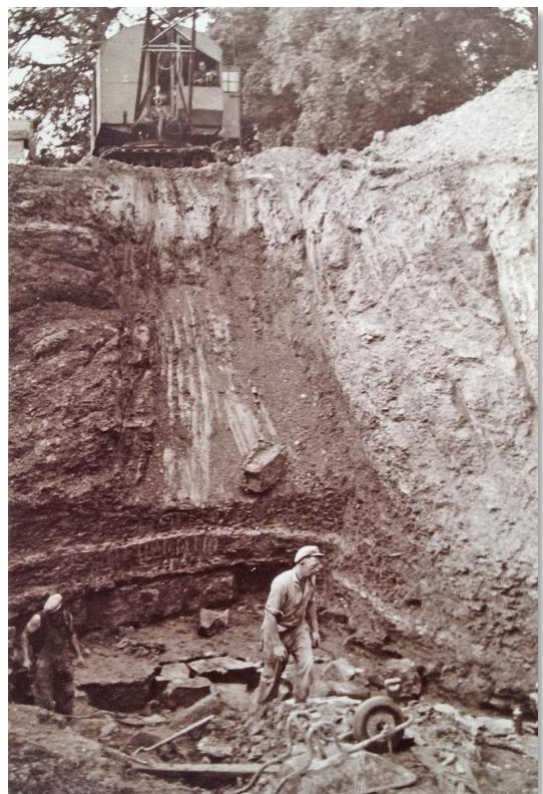
Generations of stoneworkers

A notable characteristic of the Purbeck quarrying industry and its landscape is that villages such as Langton Matravers, Acton, Worth Matravers and parts of Swanage, which originally housed quarry workers and their families, are predominantly stone built, often from stone waste. Quarrying methods remained largely unchanged until the mid-20th century with cutting usually done by hand, often using tools that had been in the family for generations. Although landowners required rent for a quarry plus a royalty on stone raised, quarrying rights remained with the quarrier and the quarry could be sold, bequeathed, or handed down through the family. By the late 19th century, the parish of Langton Matravers included about one-third of the Purbeck quarries. According to the census of 1881, the stone-working population comprised about 40 per cent of the total and 70 per cent of these had been born in Langton Matravers.

The Haysom and the Keates family stonemasons, for example, have lived and worked in Purbeck since the end of the 17th century. This post-war photograph on the right, from the Haysom archive, shows the quarrying of Purbeck marble for the restoration work of Temple Church, London, which was hit by incendiary bombs in May 1941.



Walter Haysom (Trev's father) carving a Purbeck Marble capital for the restoration.





Interior of the Chancel of Temple Church facing west toward the Round Church. The marble columns and bases of Purbeck Marble were made in the Haysom workshops. The church was rededicated in November 1958 (photo Diliff).

In 1996, Kevin Keates uncovered unusual footprints in his quarry which Trev Haysom identified as dinosaur prints (probably made by brachiosaurs) left in soft mud more than 140 million years ago when Purbeck was a sub-tropical wilderness, and these were later covered over by layers of rock. Long necked plant eating brachiosaurs could reach 50 tonnes, five times the weight of a modern elephant, and measure more than 25 metres from nose to tail (photos CR).



In 1878, the Inspector of Mines for the West Country, Dr C le Neve Foster, commented on the irregularity of the quarrier's work. If the men could find work as stone masons they would temporarily abandon their mines but if all else failed they would fall back on farm labouring, fishing and smuggling. It was estimated that a third of the illegal tea in the country came through the Isle of Purbeck. However, no quarrier could leave his quarry or mine for more than a year and a day otherwise it would revert to the landowner.



Diagonal dry stone walls are an important historical and cultural feature of the Purbeck landscape and in addition provide an insight into the history of the quarrying industry. In some areas of Purbeck there has been a tendency to rebuild these walls with straight courses rather than retain their original slopes. This wall, repaired by Dorset DSWA at Durlston National Nature Reserve a decade ago, has been a work of conservation (Purbeck & South Dorset OS Explorer map grid ref SZ 02433 77344, photo Sally Fielding).

Trev Haysom offered his forthright opinion when asked about these particular walls: ‘... much of the rebuilding campaign has been done without enough respect for the old work. How about a bit more patching and less wholesale rebuilding?!’

The ‘Dutch’ dry stone waller’s garden landscaping project

April’s newsletter invited new wallers to share photos of walls or dry stone features they have been inspired to build. John Trenchard replied immediately: ‘I first joined the Dorset DSWA in 2017 and attended a beginner’s course, having flown over from Holland to attend. I came over again from the Netherlands for the Wallathon in 2018.



We moved back to the UK last year and I managed to get one weekend in at Dorset. So far 2020 has been restricted to my back garden in Botley, Hampshire ... fingers crossed we can start again in Dorset in the summer.’

This is the first photograph that John sent on 9 April. Clearly, a large project was underway.

By 1 May, John’s walling feature was taking shape and looking good:

‘Lovells at Langton Matravers provided six tonnes of stone which was great to work with. This provides a retaining wall for a raised patio, steps, and sloped focal point for the garden. It has been a bit of a mental health project too!

Now I have 120 square metres of patio to put in ...’





And here's John's most recent photo, complete with his first planting:

'The sun has been shining and the birds singing, it has been a great project to take my mind off the bad news in the big wide world.

My sons aged 14 and 15 assisted in cutting

and filling the garden to achieve the level terraces. We rented a mini digger for a week at the start of the school Easter holidays and this really provided a focus for the family.

We took up the turf, stored it, moved around 60 tonnes of earth and clay, levelled the new layers, built retaining walls with railway sleepers (at the edge of the garden), installed drainage, prepared sub base for patios, built the drystone walls, installed railway sleeper raised beds, and re-laid the lawn.

We now have to complete patio installation, complete the last lawn area, put up trellis and most importantly start planting – still quite some work, but a great project for the family given the situation we are all in.'

Your next project John is to go for the level one qualification – not sure when that will take place but we'll keep everyone updated.

Answers to last month's wild flower quiz

1. Greater Stitchwort
2. Speedwell
3. Red Campion
4. Marsh Marigold
5. Ladies Smock
6. Garlic Mustard - Common Name in some areas is Jacks
7. Cuckoo Pint
8. Sea Rocket
9. Skull Cap
10. Navelwort
11. Meadowsweet
12. Birds Foot Trefoil

13. Herb Robert
14. Sweet Cicely
15. Sea Holly
16. Cow Parsley
17. Hogweed
18. Bell Heather
19. Cowslip
20. Scarlet Pimpernel
21. Thrift
22. Forget-me-not
23. Bugle
24. Self Heal
25. Yellow Archangel
26. Burdock
27. Bittersweet
28. Deadly Nightshade
29. Dog Violet
30. Yellow Rattle
31. Hemlock
32. Harebell
33. Tormantil
34. Hollyhock
35. Hawkweed
36. Daisy - as in song Daisy, Daisy
37. Common Centaury
38. Creeping Jenny
39. Eyebright - Cryptic Clue. Small but "THEY'RE BIG" when arranged
40. Meadow Cranesbill
41. Primrose
42. Silverweed
43. Bindweed
44. Buttercup
45. Dogs Mercury
46. Marsh mallow
47. Water Crowfoot
48. Cornflower

This newsletter is distributed to everyone currently on our mailing list although some people on that list have not renewed their 2020 membership. We realise this is a difficult time and lack of DSWA activity may not be conducive to renewal. However, membership also covers insurance and when we do start walling again you will not be able to join us if you have let your membership lapse. Membership renewal begins in January for everyone, regardless of when you pay during the year.

Carole Reeves