

1 Abingdon Case Study

Projects in the Royal Wootton Bassett area and more recently in the Abingdon area involved the use of local limestone, coarse material known as Coralline rock, “ragstone” or “coral rag”. It was created when the sea covering this part of the country was rich in coral reefs. This is typically slightly younger limestone from the South Oxfordshire area over 145 million years old (Jurassic Period). It occurs in an east west band mainly south of Oxford itself, from near Wheatley and running south west towards to beyond Faringdon. Similar to so called “Wheatley Limestone” it is rubbly and so not very easy to shape and dress into building stone.

Coralline stone was also found extending east towards Abingdon then north to Cumnor and down as far as Botley. There was a well-known quarry just over two miles west of Kingston Bagpuize by the former Lamb and Flag Inn which offered hard grey “shelly limestone”. There were also quarries at Sheepstead Farm near Marcham and at Garford by the site of the old Noah’s Ark Inn. Specimen shell fossils known as ammonites were found in these quarries and further east at Dry Sandford where Coralline stone beds nearly a metre thick were found. A shallow quarry at nearby Wootton in the 1920’s showed shelly limestone over a metre thick. Further to the southeast at Sunningwell there were Coralline beds quarried on a large scale for building stone as well as lime burning, types of stone being similar to the building stone from Wheatley and “hard whitish platy limestone with corals” similar to that from Sheepstead Farm and stone from Headington often referred to as “Pendle”. Platy stone would have been ideal material for dry stone wall building in the area. Coralline stone was also quarried at Bradley farm, south east of Cumnor. Closer to Oxford there were old Coralline rock quarries at Wytham and Seacourt Hill overlooking the Botley Valley, with a large bed found by the watercourse from Boar’s Hill to South Hinksey, not far from where the old Abingdon Road turns into Bagley. Closer to Oxford was the Little London quarry near Kennington and more Coralline limestone quarries at Littlemore. Hard grey shelly limestone was also found in quarries near the old Industrial School to the east of Cowley and a further quarry on the north side of the road east of Roman Way. The Oxford University Museum of Natural History has a collection of Coralline limestone specimens which are highly fossiliferous and apparently came from Cowley, Bullington, Horsepath Road and the Headington and Shotover area.

Now difficult to find other than as reclaimed material Oxfordshire ragstone is hard but still often too irregular and difficult to bed in a dry stone wall. On the plus side it is often found with large lumps of coral formations and attractively pock marked with cavities where fossils have weathered out. The style of neat and coursed walling used with limestone in the Cotswolds is a challenge when working with ragstone, so logically other regional wall types offer a simpler way forward. Walling styles from Derbyshire and further north for example often rely less on trimming to give neat finish and regular coursing and more on random or semi-coursed styles for uneven large boulders well fitted together. Wherever possible ragstone boulders are best set running into the wall with pinning and packing very tight and using the odd rare large flat stones wherever possible as bonding for greater stability. A conscious effort is made to achieve through stones or three quarter through stones bonded above or

below as the wall goes up to achieve maximum stability. Fortunately the original height with this case study was well over a metre and with a good supply of big coping stones which land and pinch very well on the top course of face stones, ensuring the maximum weight of each coping stone is well distributed and makes for a strong wall. In the event the only movement occurred as a result of impact during later works to the site. Owing to the dry stone construction damage was localised and quickly rebuilt.

Rebuilt ragstone wall in Wootton.



Wootton is close to Dry Sandford where there is an abandoned quarry called Cothill Pit. Now a nature reserve it was originally used for sand and limestone, but where there are still traces of Coral Rag.

Rebuilt wall with large Coralline Rag insert or “jumper” of the branching type.



Coralline Rag was in spite of its variable form and rough texture nevertheless used in some of the more ancient Oxford buildings including the early, 13th century city walls and similar dated buildings across the central county belt where it occurs naturally, such as the Great Barn at Coxwell, south west of Faringdon. Local ragstone is also found in the St George's Tower in Oxford Castle, the old watch tower for the west gate to the city and the late Saxon tower at St Michael's Church in Northgate, Oxford's oldest building. Here the corner stones (quoins) and other details are in Taynton limestone from near Burford. It is thought medieval builders may have liked to use a stone with "Oxford" ragstone's lively looking texture and using it in rough lumps was a break from the tradition of working with smooth ashlar. The fossilised remains of coral in the limestone commonly resemble either a honeycomb-like structure similar to a natural sponge or a second type which has branching (fossilised stems) and holes.

The Vicarage Pitt, off Quarry Road in Headington produced "Pendle" limestone referred to above for building. The most well-known Headington quarry (named The Magdelene Pit) was near the old workhouse and produced "Headington Hard" limestone as well as Pendle. There were numerous other quarries in the area including one to the left of the road leading up to Shotover Hill producing the typical Oxfordshire hard shelly limestone. There was similar stone available at a quarry north of Headington on the road from Elsfield, about 400 metres from Stow Wood. On

the way to Woodeaton another quarry at the top of Drun's Hill produced "shelly limestone" whilst one close to Woodperry House had beds of limestone almost free of coral fossils. There were several old quarries at Stanton St John producing Coralline rock including one by the school again sometimes showing very few coral fossils. Shelly limestones also came from Shepherd's Quarry a mile south west of Stanton St John.

Coralline limestone for building came from quarries on the north west edge of Wheatley, the same bed of rock running all the way from Woodeaton. One was located near the iconic triangular "Old Lockup" in the village centre. Also nearby were limestone workings at Red Hill called the Lyehill quarries, where like Wheatley the stone ran 40 feet deep. To the north east the Coralline limestone runs out and there is evidence of trial excavations searching for stone in the area, at Worminghall. In fact a very different material Chert (a flinty type of sedimentary rock) was chiefly found this far east and traditionally used as gravel.