

# ***A BRIEF HISTORY OF THE STONE QUARRIES AT COMBE DOWN***

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The builders of the Roman villa at Combe Down would, it may be assumed, have used a local source of stone. Perhaps also, stone was supplied from there for the new baths at the hot springs in the valley below. This however is supposition. Similarly, there is no actual knowledge of any quarrying at Combe Down in the Middle Ages.

The 16th Century antiquarian and traveller John Leland wrote that he approached Bath from Midford 'by mountain and quarre'. This seems to be a reference to quarrying in Horsecombe Vale, between Midford and Combe Down. Stone was supplied to Longleat House from 'Horsecomb Hed' in 1568. John Wood stated that in his day the 'quarre' Leland referred to bore the name Horse Combe Quarry. He described it as 'the most westward and oldest of all the penetrations ...into the bowels of the hill in search of Free Stone'. There is documentary evidence of mining of stone at Bath by 1663. A Danish visitor in that year, Oluf Baruch, wrote of 'a cave ... on a nearby hill hollowed out by those who live there for stone for buildings'. This could have been at Combe Down. But pre-1700, the picture is hazy.

By the 1720s, quarrying was established in the area of the present Combe Down village. Seven people are known to have had quarries there in 1727, some of them masons or builders. One was the prominent local architect-builder Thomas Greenway.

Ralph Allen had arrived in Bath in 1710. He began buying land on Combe Down in 1726 and by 1731 owned almost all of it. In 1729 he acquired quarrying rights for 100 years. His estate at Combe Down extended from Prior Park westwards as far as Bloomfield Road, and took in the whole of the north side of Horsecombe Vale.

The main features of Allen's quarrying operation were its sheer scale, development of extensive underground workings and use of innovative methods for lifting and transporting the stone. There were horse-operated cranes at the mine heads to lift the stone on to wagons which were hauled on rails down the hill to a stone yard and wharf at Dolemead (Widcombe). There, another crane was used to load the stone on to barges. The cranes and the railway were designed by John Padmore.

I have not come across any figures for the quantities of stone extracted at Combe Down in those days. According to Ralph Allen's clerk of works Richard Jones, the annual amount of stone 'sent away' (by barge) from the Dolemead wharf was 1,800 tons. But when exactly? Was this a typical figure? In any case, the amount sent to the building sites across the river in Bath itself must have been much greater, but can only be guessed at. Then there were the

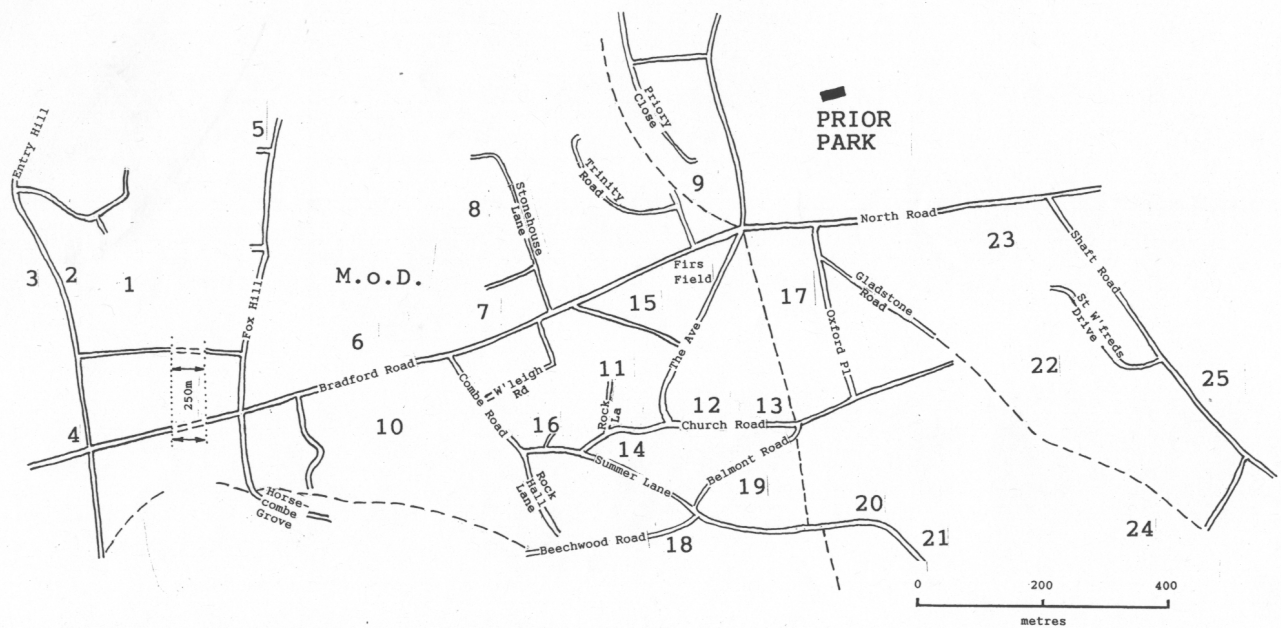
large quantities used on the Down, including the stone for Allen's showpiece home Prior Park.

The mines extended under virtually the whole of the central part of Combe Down, from Combe Road in the west to Oxford Place in the east, and from Bradford Road in the north to Church Road in the south. Around the edges of this area, especially to the west and south, surface workings provided faces into which tunnels could be driven to access the mined area.

Ralph Allen died in 1764 leaving large debts. Very soon, much of his equipment including the cranes was sold, and the railway to Widcombe was lifted. In 1765 the diggings were leased to various tenants. In 1788, Allen's estate including the quarries passed to Earl De Montalt, widower of Allen's niece and last surviving legatee, Mary Allen. The estate rental book for the years 1795-99 names 15 quarry tenants, between them working 14 quarries (unnamed except by tenant). There is known to have been active surface quarrying at this time but specific locations remain unknown. Underground working may have been sharply reduced.

When Earl De Montalt (by now Viscount Hawarden) died in 1803 his estate was divided up and sold. The sale included the underlying beds of stone and split up the ownership of the main underground workings. The quarrying rights transferred with the sales still had 26 years to run. When they finally expired in 1829, several new owners appeared on the scene. But before long, a gradual decline set in. There were a number of reasons for this, among them urban encroachment, limited reserves after 120 years of intensive working and competition from the huge workings opened up in the Corsham area after the opening of the Great Western Railway in 1841. Underground working at the mines opened by Ralph Allen had practically ceased by about 1860. In 1887 a new company was set up to rationalise production and marketing of Bath Stone. Seven established local firms were acquired, several of them owning Combe Down properties. Some other operators continued independently. But by 1900 sales of Bath Stone were falling away, and by the beginning of the first World War most of the quarries at Combe Down had closed down for good. There is today just one remaining stone working on the Down.

In the following brief descriptions of the principal quarries and quarried areas of Combe Down, I have taken Entry Hill-Southstoke Road as the boundary with Odd Down to the west, and Ralph Allen Drive-North Road-Shaft Road as that with Claverton Down to the east. I have divided the Combe Down workings into the following sectors: Entry Hill, Fox Hill-Ralph Allen Drive, Combe Down Village



LOCATION OF THE QUARRIES AND QUARRIED AREAS DESCRIBED

(including Summer Lane), and Shaft Road. Numbers refer to the map. For the larger operations and generalised areas of quarrying, as described, the numbers are sited more or less in the centre of each one. The names I use are from the cited articles by Addison and Wooster. Each of these articles also gives grid references for the quarries, and more detailed information in some cases.

### Entry Hill

A good place to start is the quarry with the best accessible exposures of the Combe Down Oolite. This is known as *Springfield*, and is now a landscaped area enclosed on three sides by the quarry walls (1). Access is from Entry Hill Park, off Entry Hill. This was the largest open quarry in Bath. Over its lifetime it yielded c.2.5 million cubic feet (160,000 tons) of stone. Most of the activity was c.1750-c.1900. It is a RIGS and provides exposures all around its 8-10m high walls. Wear a hat! There is a blocked-up mine entrance on the eastern side, apparently heading in a direction just south of an adjacent quarry. This latter, quite deep, was open to Entry Hill itself. It is now occupied by a house and garden. Part of the quarry face still exists and is visible from the road (2).

On the west side of Entry Hill, just above the entrance to the golf course, was another large quarry (3), virtually abandoned by 1839. There was a brief resumption of working on a small scale in the 1940s. The site is now a council storage depot. A small remnant of the quarry wall can still be seen from the roadside.

On either side of Entry Hill where it meets Bradford Road were quarries known as *Crossways* (4). These were working in 1839. They were closed in 1904 and completely backfilled. The western one is said to have been used to dump rubble from the 1942 air raids. There is a playing field there now. On the eastern one stands the Catholic Church of St Peter & St Paul.

### Fox Hill to Ralph Allen Drive

There was a small quarry west of Fox Hill where it starts its descent to Perrymead (5). This had closed by 1900. At the Bradford Road end of the MoD compound there was a small vertical shaft underground quarry 1909-1924 (6). There were surface quarries to the east, as far as Stonehouse Close, between the mid-19th Century and c.1914 (7). To the north, between the Combe Down RFC field and Stonehouse Lane, was a long linear quarry which was worked until the 1930s (8).

The area between Trinity Road and Ralph Allen Drive, encompassing Pope's Walk and Priory Close, was extensively quarried between 1800 and 1914 (9). The very last working was c.1925. At one time there were underground workings to the south linking up with Firs mine. There is now no trace of any of the quarries between Fox Hill and Ralph Allen Drive, except perhaps some of the minor surface undulations one sees in the area. Everything has been filled and built over. More detail on individual workings in all this area between Fox Hill and Ralph Allen Drive can be found in Peter Allison's very informative book *Around Combe Down*.

### Combe Down village

This was the main area of quarrying in the 18th Century. Starting from the west, there were several surface workings in the area between Horsecombe Grove and Combe Road. The largest quarry here was *Coxe's* (aka Cox's or Collibee's) (10). Part of it can be very clearly seen in the form of a large irregular depression occupied by some house, gardens and a factory, behind the buildings on the west side of Combe Road. There was tunnel access to underground workings east of Combe Road and Rock Hall Lane, which later acquired the name Byfield mine (see below). At least one entrance is still visible.

To the east of Combe Road, first the surface workings. In the centre there is *Davidge's Bottom* at the head of Rock Lane (not to be confused with Rock Hall Lane). This is occupied by housing but is very obviously an old quarry, partly backfilled (11). The quarry wall on the north and east sides can still be seen. There was an entrance to Firs Mine here. The very last working in this area was in the 1930s. There were two other small quarries nearby, now built over.

North of Church Road, opposite the parish church and extending some way to the east, were the *De Montalt* and *Hopecote* quarries (12 and 13), probably not worked since around 1830. There were more entrances to Firs Mine from here. The north wall of the De Montalt Quarry is still exposed behind De Montalt Place and can be seen at the far end of the lane beside Claremont House.

Between Church Road and Summer Lane, west of the church, was *Church Quarry* (14), open to Summer Lane. A quarry face still exists behind Quarry Vale Cottages. Between here and Church Road was a stone yard and the end of one branch of Ralph Allen's railway (another branch went to *Davidge's Bottom*). There was yet another entrance to Firs Mine here. The site on which the church was built in 1834 was covered in quarry waste.

The main working in Combe Down village was Ralph Allen's *Firs Mine* (15), so called because of the many fir trees Allen had planted in this area. (As noted by Mike Chapman, these were for landscaping but were also a means of making money: the new houses being built with his stone also required deal boards for their construction). Firs Mine underlies Firs Field and areas to the west (to Westerleigh Road), south (to Church Road) and east (to Gladstone Road). There were entrances from near the Hadley Arms at the top of The Avenue in the north and, as already noted, from quarries to the south. The mine extended across an area of at least 25 acres (10 hectares). There is a honeycomb of tunnels with headroom of from less than one to about three metres, and some caverns up to about eight metres in height.

Further to the west was another area of underground workings, already referred to, assimilated by Ralph Allen and extended under his ownership. This is now called the *Byfield Mine* (16). It extends east of Combe Road between Bradford Road and Summer Lane, part of the way along Westerleigh Road in the north and as far as Rock Lane in the south. It has underground links with Firs Mine and with Coxe's Quarry (mine entrances from the west of Rock Hall Lane and from the lane itself). Neither Firs nor Byfield was systematically worked after Allen's death but there was re-working of parts of the mines until about 1860, when they were essentially exhausted. A small part of Byfield Mine was re-opened by means of a vertical shaft in 1905, for about five years.

As noted, the Firs mine workings in the period to 1764 extended to Gladstone Road, but the picture east of The

Avenue is made complicated by later working and re-working. The area around Oxford Place (17) was quarried underground pre-1809 with an entrance from near Church Road to the south. This operation may have ended in 1838. A secondary phase of quarrying in the area, casual and intermittent, ceased in the 1890s.

In the area south of Summer Lane there were two quarries at the eastern end of Beechwood Road (18). These were known as *Beechwood* and *Vinegar Down*. There is no trace of these now. The former may have been working in the period 1850-1880. The latter was certainly worked in the mid-19th Century and closed in 1913.

Further east, between Summer Lane and Belmont Road, at the site of the Roman villa, there was a quarry known as *Cruikshank's* (19) operating in the 1850s (the villa was discovered in 1860). Just beyond Kingham Farm (now Kingham Cottage) on the north side of Summer Lane, was the short-lived quarry opened by William Smith in about 1810 (20). This or a successor to it can still be seen in the wood by the road. There was also a mine known as *Jackdaw* (Jackday) (21) whose entrance was 200m east of Kingham Farm. The portal (blocked up) is still there, close to the road just beyond and opposite Lake Cottage. It is surprisingly large, the width being c.3m and exposed height c.1.5m. It has a well-preserved stone arch. It is reported that stone from Jackdaw and Vinegar Down (18) was used to line some of the Combe Down railway tunnel, opened in 1874.

### Shaft Road

*Upper Lawn Quarry* (22) is the one remaining working quarry on Combe Down. I understand it has reserves for a good many more years (some decades) of production. It is located west of Shaft Road, off St Winifred's Drive, and can be seen from the playing field between the latter and the eastern end of Church Road. It is the latest site of an operation that began at North Road (where the Rockery Tea Garden now is) in about 1850 and has progressively moved southward. The original quarry, partly backfilled, is still to be seen as a large depression (23) occupied by gardens. Later workings were entirely filled and built over (end of St Winifred's Drive) or levelled for playing fields.

Upper Lawn Quarry has for a long time now been the sole primary source of Combe Down Oolite, one of the most durable of the Bath freestones. In recent times it has supplied stone for restoration work at Buckingham Palace, Windsor Castle and Brighton Pavilion.

A short distance southeast of Upper Lawn was the large *Mount Pleasant Quarry* (24). The eastern part (east of the footpath shown on the map) probably closed pre-1914. It was completely backfilled in the 1980s to form playing fields. There was some underground working here, and there is now a bat habitat. The western part of the quarry still exists, disused and closed off pending a decision on what to do with the site. This latter part was briefly worked between the wars and again in the 1980s.

To the east of Shaft Road just beyond St Winifred's Drive were the entrances to two underground workings close together (25). *Shaft* Mine was working in the 1850s and finally closed in the mid-1930s. There were horse-drawn tramways to the different faces. *Grey Gables* (aka St Winifred's) Mine nearby closed in 1938.

### The Future

It seems unlikely that any more quarries will be opened or re-opened in the area. Thus Upper Lawn will probably remain the only producer of freestone at Combe Down.

To eliminate the risk of subsidence in the area of old underground workings, a programme of stabilization is to be carried out. Due consideration is being given to environmental issues such as the impact on the hydrogeology of the wider area, conservation of the historical heritage and the importance of the mines as a bat habitat SSSI.

In brief, studies have established the following preferred stabilization options. Most of the mined space to be irrevocably filled, probably with foam concrete using limestone dust as a filler. In hydrogeologically sensitive areas, permeable limestone aggregate to be used instead of concrete. Some archaeologically significant spaces to be filled with (removable) washed marine sand and thereby remain accessible. These will also be lost for the present generation but could be re-opened in some future age. Before filling, detailed records and 3D digital imagery models to be made of the typical archaeology of the mines. Some small areas to be retained as bat habitats.

There is a proposal, still to be worked out and presented in detail and not part of the stabilization scheme as such, for a public presentation/interpretation facility for history and archaeology. This would probably be off Rock Hall Lane. If this can be achieved with at least some rock exposure in an underground gallery, there will be one place where the geology of the mines will still be on view in situ. Otherwise there will be no exposed rock left in the stabilized mines except for any unlined parts of the bat habitats.

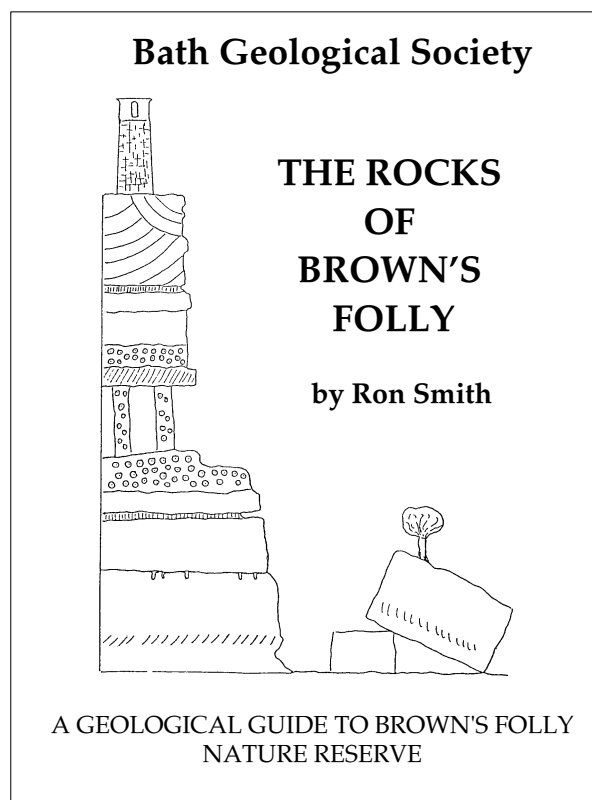
Preliminary and emergency work has been going on for some time, but final decisions on the details and funding of the main stabilization scheme are still awaited. This is the current (spring 2004) situation as I understand it. There is a Combe Down Stone Mines Information Centre in the village, which is open to the public several times a week and where more detailed and continually up-dated information can be obtained.

**FOOTNOTE** Concerning the sites numbered 20 and 21, there is evidence that William Smith worked the mine at site 21 (Jackdaw) for a time. Also his open quarry was probably on the hillside immediately above the entrance to this mine (there is still a quarry there, partly infilled), and not at site 20 nearer to Kingham Farm. (Information from Andrew Mathieson).

### REFERENCES

- P.Addison, 1998. *Around Combe Down*. Millstream Books  
M.Chapman, 1996. *A Guide to the Estates of Ralph Allen around Bath*. Bath Record Office  
D.Pollard, 1992. *Digging Bath Stone - an interim report*. Subterranea Britannica, Bulletin 28, 24-39  
P.Wooster, 1978. *The stone industry at Bath*. Journal of the British Industrial Archaeological Society 11, 5-13

Unpublished material on open file accessed at the Combe Down Stone Mines Information Centre.



The fourth edition of Ron's book has now been produced by the Avon Wildlife Trust and is on sale from Bath Geological Society at £1.00