

# Exploring Mines in the Derwent South (Matlock) Catchment Area

Bonsall Leys Level – Slaley Sough – Dunsley Spring Level

John Preston and I spent a day, deep in Masson territory, investigating some of the mine workings on the north side of the Via Gellia road (A5012). The road runs along the bottom of a deep, steep-sided valley, with a fastflowing stream alongside, and near-vertical jungle on both slopes. Although there are several lay-bys in the upper section of the valley, once we had passed 'Marl Cottage' on the left (a very unusual and picturesque building constructed from tufa blocks), parking was a real problem. We eventually pulled off, under trees on the right, a short distance beyond the large, obvious entrance to a mine level, just above road level on the left. This was Bonsall Leys Level.

# Bonsall Leys Level [Entrance: SK 27205700]

This working is a horizontal adit, with an entrance about two metres wide and two and a half metres high. Inside, the passage roof lowers to two metres, and clear water, about 30 cm deep, covers the passage floor from wall to wall, flows out of the entrance and dribbles across the road below. The passage (two metres square) continues almost straight for about 70 metres, to a blank end-wall, with standing water throughout its length. The floor is level, and the roof and walls are sound, with shot-holes present throughout. A short distance in from the entrance, an inlet pours water down the left wall from a tiny bedding plane which the passage intersects at roof level. The bedding plane slopes gently downwards, and remains as a significant feature of the left wall throughout the remaining length of the passage, with inlets at several points. At the end of the passage the bedding has dipped to just below floor level, resulting in an upwelling of water at the base of the forefield. There are clean deposits of white flowstone on the wall below each inlet point. There are a few rubbish items near the entrance (car tyres), and some graffiti at the far end - the oldest is 'well cut' and has names with the year '1915'.

### Slaley Sough [Entrance: SK 27195711]

'Caves of the Peak District' states that Slaley Sough is 'near the top of the north side of the Via Gellia, about 200' above the A 5012 road about 50 yards east of ..... Bonsall Leys Level'. – sounds easy. We struggled up the steep, slippery slope, following the course of a small stream as it gave us a route through the wet undergrowth. Lurching from tree to tree we gradually gained altitude and eventually found that the slope was limestone scree from a waste heap above, with the remains of a small, rectangular miners' coe. The passage entrance, where the spoil heap merged into the slope, was stooping height into a cavity, under tree roots, which was filled with thousands of resting mosquitoes. They all woke up when they realised that 'lunch' had arrived !!

Its difficult to understand why this passage is called a 'sough' (drainage level), as it is a long way above the valley floor, and consequently would fail to maximise its potential to drain workings above river level.

Once inside the 1 metre-square entrance, the passage becomes a comfortable, horizontal level, about 2 metres high and 1 metre wide, running north-west. After a few metres there is an alcove on the left where a small inlet has caused a minor collapse from the roof. Most of this water must drain away, however the next section of passage has about 10 cm of standing water, before the passage rises sufficiently to become dry. After 50 metres the passage has narrowed to 0.75 metres wide, and the roof gradually drops, until, after about 100 metres, the passage takes on a square cross-section, about 1metre wide and high. This lower passage leads to a 'T'-junction, about 140 metres from the entrance, where the miners intersected the Great Rake vein.

Right, at the junction, an easy, walking size passage follows the line of Great Rake north-east for 14 metres, to a 16 metre deep shaft, sunk in the vein. It is easy to traverse past the shaft, on the right wall, into a final short stretch of level to a forefield. The vein material is visible in the passage roof, and in the wall of the shaft, as a 1cm. scrin of Barites with tiny flecks of Galena (Lead), and a clay fill. Shafts downwards (Winzes), such as this, and shafts upwards (Raises) were often driven, on the line of the vein, to search for more productive ground above or below the level being worked or driven through. Minor mineral veins, intersected during working, would be followed in the hope of reaching profitable ore bodies. Later such exploratory workings could be utilised as routes for men or materials, for ventilation purposes, or they could be back-filled with waste material, to save the effort of taking it out for dumping on the surface.

Left at the junction is the Main Level, with the First Raise in the passage roof almost immediately, following Great Rake to the south-west along a passage 2 metres high by 1.5 metres wide. There are the remains of timber sleepers in places along this passage, but no rails are still in place. After 100 metres the base of the Second Raise is reached, and the Main Level changes direction (right), to run in a more north-westerly direction, along the line of Red Rake. Continuing forward, along the line of Great Rake, a low, narrow passage drops at about 30 degrees, until, after about 40 metres, it intersects a Calcite and Clay scrin which marks Flixen Rake. The passage turns south-east (left) along Flixen Rake, and enlarges, before closing down at a forefield after a short distance.

Clearly the miners thought that Red Rake had greater potential than Great Rake, however, after following the calcite scrin which marked the line of the vein for about 20 metres, they abandoned that line and turned the Main Level more westerly (left). After another 20 metres the miners struck southwesterly (left again) to intersect Flixen Rake 25 metres further on. At this point the passage has been enlarged, on the left side, to form a large recess, but Flixen Rake vein must have been another disappointment, as it is barely discernable in the walls and roof. The Main Level changes direction again, turning west (slightly right) and continues as an easy, walking size passage for about 10 metres to a junction.

The Main Level, straight ahead, is partially blocked by a mound of decomposed Toadstone, which has come down the Third Raise through the passage roof. To the right, a short passage follows another minor scrin (which may be part of Flixen Rake), directly to the top of a deep shaft, which 'Caves of the Peak District' states is 46 metres deep, and 'blind'. Using a narrow ledge on the right of the shaft-top it is possible to see a considerable distance down, the shaft being clear and dry all the way, and at least 1.5 metres in diameter. It may be that fallen rubble at the base of the shaft conceals the way on into other passages below.

The Toadstone blockage in the Main Level has been dug through by previous explorers, and as we crawled through it was possible to see up into the base of the Third Raise where fallen rubble has been partially calcited together by dripping water. Once clear of the blockage, the Main Level continues about 2 metres high and 1.5 metres wide, for about 136 metres, with slight changes of direction to right and left, until it picks up the line of Parson's Rake. The vein hades (leans) about 25 degrees to the right (northeast), and the miners have used the right cheek of the vein as the right passage wall, giving it a lop-sided cross-section. After another 46 metres the miners have driven the Fourth Raise, as an oval shaft in the roof, with one flat side where it follows the hading wall up the line of the vein. We could see up for at least 15 metres, and a tape sling hanging at the side, about 5 metres up, indicated that someone has climbed it. The air had remained fresh throughout, and at this point there was a major air current entering the Main Level from the raise above, which indicates openings to the surface some 80 metres above.

Another 150 metres of 2 metre high and 1.5 metre wide passage followed, still hading at about 25 degrees, and still keeping to the line of Parson's Rake, until it ended at the Western Forefield. Small patches of exposed vein minerals were visible along the roof-vein boundary in this section of passage, including some tiny patches of Galena in a Calcite matrix.

There is no evidence, in the passages currently accessible, for the past removal of commercially viable quantities of ore, as there are no obvious stopes or flat-workings. The spoil heap outside the adit entrance does not seem to be sufficient to account for the material removed in driving the levels explored, and yet there are practically no stacked 'deads' (waste rocks) anywhere, and the whole mine is remarkably sound. Apart from the immediate entrance passage, and some muddy areas below the Second Raise, the mine is dust-dry throughout, so the name 'Sough' seems to be inappropriate. Back in the daylight, we decided that having climbed nearly all the way up the valley side to Slaley Sough, we might as well climb the last twenty metres to the top, and try to find Dunsley Spring Level which is about 500 metres to the south-west, and at about the same altitude as Slaley Sough.

Once into the first field, we turned left (south-west) and passed the spring which produced the small stream flowing down the hillside close to Slaley Sough entrance. Just beyond, we picked up the line of the footpath coming from Slaley village, and we followed it to Dunsley Springs where water bubbles to the surface in a number of places. Another footpath crosses the Slaley path at this point, and begins to angle away down the slope. We followed the descending path for a short distance, to an even more impressive spring, which is being used as a water source and has pipes tapped into it. Leaving the path we struggled on across the slope, through tangled undergrowth, to an obvious hollow with a couple of fallen trees partly hiding the low, arched entrance of Dunsley Spring Level.

### Dunsley Spring Level [Entrance: SK 26845678]

The adit opening, partly obscured by an overgrown rubble pile, is rectangular, and is about 2 metres high and 1.5 metres wide. From the threshold, a heap of domestic rubbish slopes down at about 30 degrees, filling the passage from wall to wall, and extending for about 6 or 7 metres into the level. We were absolutely horrified.

The rubbish is a mixture of plastic, glass and metal containers, with associated wrappers and rusty metal. The plastic content, and the familiar brand names (e.g. 'Ski' yoghurt) make it clear that this is not old rubbish, but it is not very recent either (hardly any smell, as all food waste and degradable material has already disappeared). The real mystery is how the rubbish got to the site in the first place.

There is a cottage, Marl Cottage, by the Via Gellia road far below, but it is inconceivable that anyone would climb the footpath up the very steep slope (height difference at least 60 metres, and distance at least 250 metres), then struggle across the rough hillside to the adit, carrying domestic refuse to the adit – many, many times !! There must have been easier ways to get rid of it. [P.D.M.H.S. Members visited this site before 1971 (see list of References at the end), and the refuse was present at that time.]

Once clear of the rubbish, the entrance passage was about 3 metres high and 1.5 metres wide, with a flat floor, and running approximately northwest. Within a few metres the roof dropped to about 2 metres high, and the floor was covered with a beautiful, white crystalline layer. At some time there must have been a thin layer of water trickling across the passage floor, and the deposition had occurred at that time. Closer examination showed a network of micro-gours (deposited calcite in the form of curved dams, often holding back a pool of water) spreading out from points where water had once dribbled down the passage wall. There were also many kinds of 'spatter' formations, and cave 'pearls' (free moving, and fixed, pearl-like shapes of deposited calcite). The wall itself was coated with gleaming, white flowstone which contained thousands of tiny, hanging gours. A little further along the passage, the gours covering the floor were still active, with water spilling from one into the next, as the deposited surface sloped down, away from the water trickling down the wall. There were lines of 'sharks-teeth' drip formations at roof level, and a patch of amazing helectites (stalactites growing at unusual angles).

This is a really beautiful stretch of passage, and consequently we were extremely careful to avoid touching the pristine surfaces. Moving along the passage involved using isolated rocks, which protruded from the sparkling layer, as stepping stones.

The formations ended after about 60 metres, and the passage continued as easy walking to a 'horse' (a pillar of rock from roof to floor, which divides a passage into two for a short distance) where the miners abandoned the previous heading and turned slightly more northerly (right). There are fine examples of sweeping pick-marks in the forefield here, and an area of crisscrossed pick-marks at the start of the new passage. 25 metres further on, the passage again steps to the right, still at about 2 metres high and 1.5 metres wide. Each change of direction seems to have been in response to the location of a different mineral 'stringer' or scrin, which they then followed in the hope of striking an area of productive vein. The next 100 metres of passage continues north-west, as easy walking, but then enters a zone of more shattered rock, with evidence that the miners were unsure about the security of the roof. 'Egg and Eye' (hand-picked sockets) appear at regular intervals, and in some places decayed timber stemples are still in place, although, even when new, some seem unlikely to have been substantial enough to actually support the roof-blocks they are set against !

About 200 metres from daylight, a junction is reached, where the miners drove a cross-cut passage to the right, at right-angles to the Main Level. This side passage is only about 7 metres long, following a 2 cm wide scrin containing Lead, Barytes and Calcite, and ends at a forefield.

Beyond the junction there is a section of the Main Level where the miners found the roof was so unstable that they had to insert a series of stone stemples, with their lower ends supported on a pack of rubble running along the left wall. Some of these stemples have collapsed, and it is necessary to squirm carefully through the resulting jumble of blocks which almost block the passage. At one point two stemple-blocks have been set against each other, one from each wall, to make a shallow arch across the passage, and at another place a complete stemple has dropped horizontally and has jammed across the passage at half height.

The continuing level has large quantities of waste rock still awaiting removal, and consequently the passage is little more than a metre high over this abandoned spoil. About 55 metres beyond the junction a shaft in the floor is reached (a 'winze'), which occupied the whole width of the passage floor. It looked to be about 10 metres deep, but was easily passed into the final 8 metres of the level, ending at a forefield in decomposed Toadstone.

On the way out we took the time to photograph many of the features, and at one point we noticed the numerals '220', and a marked point, deeply inscribed in the wall at about 1.5 metres above the floor. Pacing carefully, we found that every 20 yards the distance was marked ! (We couldn't find '80', and gave up looking after that.) I have never seen this done in other levels, and wondered if it was connected with payment made for the distance driven. One other feature of note, was a series of highly polished rub-marks along a section of one wall of the level, at about 0.5 metres height. Due to their regularity it seems likely that they were made by a truck running on rails (scuffing the wall as it passed), although no other evidence of tracks was seen.

Back at the entrance, the rubbish pile had to be crossed again, however, protruding from the mess at one side, I spotted a tall, glass measuring cylinder with engraved units, such as might be used in a laboratory. John decided it would make a good addition to his collection, and thus it became the first item removed.

Perhaps this site could be added to the long list of locations needing to be cleaned up. It has historical and mining interest, superb formations, and probably acts as a bat roost in winter. There is about a skip-full of refuse to be cleared, and the worst part would be actually carrying it down the hill to the roadside, in plastic sacks – has anyone got a helicopter ?

Steve Knox 29 <sup>th</sup> May 2005.	Trip date:	25 <sup>th</sup> May 2005.
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References:

Slaley Sough – Flindall, R.B. & Hayes, A.J., 1971, Bulletin P.D.M.H.S. Vol. 4, No. 6, pp 431 - 437, Survey.

# Email from Jen explaining her late return from S Wales.

Hi Ralph,

Just arrived back home. Spent an extra night at my folks as I was knackered. There was a big rescue at OFD on Saturday to Sunday, which we were roped into. Woman doing Cwm Dwr to OFD top entrance fell and suffered a suspected fractured pelvis part way down Cwm Dwr. Decision was taken to evacuate her via Top Entrance as this was easier than trying to thread a stretcher out of Cwm Dwr. Accident happened on Saturday at around 1pm. She emerged 26 hours later. I'd just done a trip into OFD 3 that lasted about six hours, so went back to our cottage for food and a couple of hours sleep before returning to help. All the healthy Croydon CC members voluntered to help and I was one of a big party that went in at 1am We were supposed to be hauling her up a 90' pitch out of the streamway just below Maypole inlet, but comms were terrible and we found she was still in the streamway a long way below the Great Oxbow. We went down to relieve the stretcher party in the streamway as they were cold and exhausted. It took our party a long time to get her to the base of the pitch and we were not out of the cave till 11am. While we were exiting we met many of the "morning shift" coming down, some of which were from as far away as Mendip. The casualty was in remarkably good spirits through most of the rescue, probably helped by the morphine(!), but was apparently starting to suffer sense of humour failure during the last part of the carry to the exit. Understandable really. She probably has the record for the slowest OFD through trip! I don't have an update yet on her condition after she was put in the helicopter.

That night was supposed to be a party as it was the twentieth anniversary for our club cottage. Needless to say the beer and the lamb spit roast were consumed the following night, but most people had a very early night. South Wales Caving Club were also supposed to be having a party that night, but all their food was eaten by rescuers, including a very nice chilli!

## Jen

# This follows Jen's recent epic in Provi-Dow, is there a message from someone on high??

# Where now? What does the future hold?

Well if I knew the answer to that I wouldn't be grovelling about in small holes in the Peak District and trudging the peaks of Lakeland and N Wales. I would probably have won the lottery (several times) and now be languishing in my twilight years on my private yacht moored off my private beach on my private island somewhere off... but dream on, for the time being I'm stuck with you lot or perhaps I should say you're stuck with me!!

Caving has never been a popular sport and it does suffer somewhat from an image problem. This was brought home to me as I drove home from a particularly squalid digging session in Eyam where the participants looked like actors from a scene depicting life in the trenches in WW1. I past numerous cyclists (both on road and off road types) all dressed in revealing skin-tight lycra in every imaginable colour. A similar story (in terms of dress) as I passed The Roaches although the numbers were less than they were a decade ago. Apparently the majority of climbers now "do it" indoors- or on boulders- not like the "real thing" I hear some of you old timers commenting!

A few of us were in Kingsdale a couple of weeks ago and at 1030 am we were the **only** vehicle parked outside Valley Entrance. However as we exited it was heartening to see couple of minibuses parked up, at least we weren't the only cavers in The Dales.

Well what can be done? It's no use moaning- we can't turn the clock back- youngsters have more leisure time, and a lot more money to spend than I ever did and there are certainly more activities to keep them busy both indoors and out. There is no getting round it, the caving population has shrunk and it is unquestionably getting older! On our dig yesterday the **youngest** person was approaching fifty and a few months ago three of us were chatting at the bottom of Oxlow -our combined ages came to just over 200!!

It's unlikely that caving will disappear as a "sport" but I suspect many clubs (particularly the smaller ones) may disappear or will amalgamate maybe on a regional basis. Our own club has shrunk a little, numbers at the present time seem to be fairly healthy but attendance on meets is not what it was. This may be due to the tendency to have small "lightweight" teams flitting in and out of holes with fairly minimalistic gear whereas in the "good old days" large teams were required to carry in the mountain of gear required to bottom some of our bigger systems.

There is also the tendency to nip out and do something at fairly short notice since as less cavers and less gear is required then less planning is required. Changing work patterns also mean that groups often cave mid week- or even overnight at times!

Attendance at meetings has also suffered to a point where the last few meetings have not been quorate. This is partly due to a changing pattern of membership and partly due to our constitution that states that **one third** of the membership should be present for a meeting to be quorate. For many reasons a lot of new members join as associates, partly as it's cheaper and partly because they live too far away to attend meetings (*The difference between associate and full membership is that associates cannot vote and can only use gear if caving with a FULL member*) It does seem rather unusual that we cannot have a quorate meeting because members who are not entitled to vote are not present! This is a matter that needs to be addressed at an AGM or EGM.

The second reason for attendance falling is because many feel that too much time is spent on bureaucratic issues rather than being able to turn up for a social chat with like minded people pursuing their common interest. Sadly over the last few years changes in such issues as insurance (sorry for the use of such offensive language) has involved far too much of our time but it does seem at long last that the tide is turning (even at government level and in the courts) but we're not out of the woods yet. There are still two different schemes on offer so once again a decision will have to be reached on "which one" and if we're going to remain democratic then it will have to be discussed.

Now some members are quite happy to let others decide on their behalf, which is fine as long as they don't complain after a decision has been reached! Some point out that the reason for a committee is so that some decisions can be reached without endless (some would say pointless) argument, or should that be discussion?

A solution to this would be to start the meetings on time (or even go back to the old time of 8 pm) – the meetings would be quorate if we changed the constitution to cope with this by only including **full** members in the count (and maybe reducing the 1/3 to say 25%) The "formal" meeting would be over by 8.30 leaving plenty of time for non-bureaucrats to come along and talk about important issues such as caving.

Well if you've managed to get this far at least that's a step in the right direction, why not mull it over and let's do something about it. These are only ideas- suggestions for discussion. There must be other, probably better, ideas for revitalising our enthusiasm so let's see hear your opinions either at a meeting, underground or through this publication which was originally designed for the purpose of expressing ideas as well as disseminating information.

### Ralph J.

### Neptune Mine.

Thanks to the efforts of CCPC members (mainly Darren, and Neil C., Andy T., Len, John Shenton, Steve Knox, John P., and Ralph snr- hope nobody is missed out) this mine in Cresswell Dale is now "open" again. It's an interesting place, if you've not

done it now's your chance. Further work on the engine shaft may be required. Considerable assistance was given by English Nature in transporting equipment up and down the dale.

## Hunger Hill Swallet.

Another collapsed system that the "hit squad" were called to! Digging continues but by the time you read this I will be surprised if its not open. English Nature and DCA have been involved in this, the former supplying funding and the latter (in the guise of Dave Webb doing the necessary negotiations).

### **Meets**

Sat 11 June Beginners trip in Giants- help welcome.

Sat 11 June. DCRO Street collection and Duck Race Castleton. Help required. Sat 18 June. Otter Hole. There is camping available (booked) at 517060 at Maryland nr Trellech. £4 pppn, (01600 860566) 1k from pub 10k from Otter Hole. If folks want to negotiate via Ralph while Jen is away that's fine. Sat 25 June Box Stone Mine (Somerset)\*

Sun 26 Jun Swildons Hole (Somerset)\* Weekend on Mendip?

Sun 26 June DCRO Search Exercise at Stoney Middleton. Arrive on the lay-by at 10. 2-3 July BCRC Mendip

Sun 3 July Birks Fell Cave AND Margarets birthday bash. You should have received info on this – if not contact Margaret or Ralph.

Sat 9 July DCRO Bakewell street collection

Sat 16 July Otter Hole – trip fully booked. See above for camping details. Jen.

Anyone interested in helping with the dig at Hunger Hill ring in to check dates etc. Jennies mid week trips will be postponed for a while as she is working away. She will normally be around at the weekends.