

The Penmorfa Chronicles

October 17th 2003

**Skylight revisited, a new circuit and lost
bags!**

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Our adventures continue

My story begins deep in the heart of the Great Orme after negotiating one hundred and thirty metres of pipe-work, wading along more than six hundred metres of tramming adit and clambering up through a stunning labyrinth of tunnels and chambers. Truly a copper mine with attitude but once you get to know her, a friend with secrets to share.

Return to the top...

January 26th 2003. At long last I am back at the 'Skylight' with some time to spare. Although we had discovered it almost two years ago (Journal No 1 2001) this is my first opportunity to scrutinize it fully. Leaving Paul behind in the safety of the Third Attic I scramble up the spoil tip and bridge carefully up the shaft until I'm under the impending roof of consolidated debris. A scaffolding pole provides a secure foothold from which to assess the situation. I am at the highest point of the Penmorfa system, at the limit, the nose cone of a Saturn Five. The roof above, part clay part rock, has definitely been dumped from workings above. Is a connection close? I'm ever the optimist. Whilst I work out what to do, let me take you over some of the events that preceded our arrival here.

A New Year, new energy...

Since our breakthrough into the 'Carpenter Series', and its exploration during the spring of 2002 (Journal No 2 2002) this complex and intriguing mine had remained largely undisturbed.

Perhaps to help combat the worst excesses of the festive season or maybe triggered by the arrival of a New Year, we resolved to pay another visit. The proposed destination was an area known as Devil's Head Chamber (named after a clay sculpture) and a tunnel which linked to the so-called 'Rock Eyes' (two drill holes). Close to these an obscure connection which I had only visited once was thought to have the potential to lead into new territory.

Being unable to go myself I awaited news of that Sunday's trip with great interest. The stories which emerged were of a second set of 'rock eyes', big drops, a maze of tunnels and a final wall of deads, which would require bolting. A magnificent calcited passage added to the excitement and set the scene for our trip the following week.

The map man...

It was thought that the discoveries had led into an entirely new section of mine. I decided to make a rough map to check. The graph paper looked professional. I started my drawing at the base of the First Stemple Shaft, pacing the metres, or adding two for each flat body length. Quick compass bearings were taken at each turn. I was rushing things, attempting to keep up with the main team. I wasn't too aware of the surroundings, kept busy recording the data. Along the way, well past the second 'rock eyes', it dawned on me that the top of the page was now south. When did the error start? Perhaps I was 180 degrees out on one of the bearings, which one? The increasingly difficult computations needed and the continual readjustments to the map were putting my head into a spin. Eventually my best guess revision seemed to indicate we were indeed into a new area of the mine.

The calcited passageway...

The team regrouped at an open area surrounded by numerous tunnels. Leaving our bags I was introduced to a hidden jewel. A small damp secluded passage leading gradually upwards, its dripping walls and roof covered in calcite, the wet floor a thick carpet of

whiteness. Numerous decorated grottos set back in the walls and enchanting pools of water added to the magnificence of the place. Mineralization in excess, unrivaled, a splendid find.

The frontier...

We reclaimed our bags and travelled an intricate warren of tunnels. Still working on my map I was convinced we were in entirely new territory. Eventually I reached Brian and Pete, sheltering from the debris descending from Gaz and Dave Flowers who were in a very precarious position at the top of a crumbling spoil-heap in the narrow rift above us. A drill was already in action. After a while I was encouraged forwards into a higher niche. Here I could better study the neatly stacked wall of deads, which rose tantalizingly some thirty feet to an unknown area above. Alongside on a solid wall Gaz and Dave were finding it hard going, drilling a line of bolts. The spoil was continuing to erode and cascaded past me towards the team below. The wall of rocks would be undermined at this rate, with dire consequences for all.

Drill man...

Enthusiasm was ebbing, with only one bolt left and plenty of height still to gain, when I was given the opportunity to have a go. Getting to the deads proved arduous enough, everything was falling down. Two bolts provided security as we swapped positions and I tied into the rope. Clipping the drill bag onto my harness and accumulating numerous tapes and karabiners, I suddenly felt heavily laden. The hammer and spanner were added as I swung out to the foot of the deads and a vertical line of four bolts. Time for action.

Five strenuous minutes of methodically clipping, stepping and straining got me to the top bolt. Increasingly flustered by the effort required and the weight of my paraphernalia, I was thankful to finally span the rift in a bridging position, right foot in a tape, left foot pushing against the far wall. Able to regain composure I reviewed the problem. The remaining wall covered in grit and basically disintegrating would provide no useful hold. The last bolt needed to be placed as high as possible to have a chance of reaching the top. It was arduous putting pressure on the drill when it was at arm length, as was tightening up the nut. It refused to tighten and seemed likely to fall out if I continued trying, so I made do with it loose. A monumental effort allowed me to stand in the final sling almost within striking distance of the top and its edge of loose rocks. Time to retire and come back with more bolts, or make some bold moves, bridging ever higher in the hope things worked out. The latter course led with bated breath to a hidden hold and broad smile, with a final heave over the top to the euphoric shout "We're there".

Beyond the pail...

Discarding kit, I made a quick exploration along the new level. One passage led upwards into blind workings, the main tunnel ran down a little before reaching a battered, but modern looking metal bucket, inside was a flashcube! The passage went further but I returned with my news for the team to ponder. Dave Flowers was to come up next. Unable to find a suitable anchor, I positioned the kit bag to protect the rope over the edge and sat down behind a large rock, well back, clipping the rope to my harness. Dave duly arrived. My description had sounded familiar. We hurried back to the bucket and continued only a short distance before dropping down into an extremely familiar passageway. The foot of the main stemple shaft, a route we had past two hours earlier, and from where I had started my cartography! The inaccuracies of my map were now all too obvious.

Gaz and the rest of the team were already retracing their steps. I left some kit at the entrance of our tunnel to ensure they knew exactly where we were. In the meantime we

returned to our climb. Dave abseiled off me to collect the kit and strip the bolts of their hangers, they wouldn't be needed again.

Gravity intervenes...

We were disappointed not to have discovered a new area but at least we had the satisfaction of finding a circuit and we didn't have to come back with extra bolts on another day just to find that out.

Fate took a hand in the exploration of Penmorfa at this juncture. On the return journey back to our rendezvous at the stemple shaft, Gaz somehow managed to drop two tackle bags! The first, his own, vanished down the deep inhospitable chasm found between the Devil's Head Chamber and the new 'rock eyes'. The second, Brian's bag, went down a lesser drop below the rope at the Bypass. It was getting late, we were tired, and it was time to go. We would have to make a return trip soon to search for the lost kit.

The search begins...

Two weeks later the team returned. I enticed Paul Brice a newcomer to the Penmorfa to climb down directly to the original Rock Eyes from just after the Bypass, to dispel the myth created by my awful mapping that there were two sets. I then introduced him to the Rocking Stone and indicated the direction we had taken to find the Calcited Passage and the bolt climb. In the meantime Gaz had been attempting to get to grips with the loose rocks at the top of the void where his bag had disappeared. It was proving very hazardous clearly nothing was going to be achieved quickly. As the drilling began and the discussions continued, I offered to continue Paul's education with a circuit of the nearby attics. And that's where we are now having just clambered up the Second Stemple Shaft. Needless to say, passing below the Skylight was too tempting I just had to climb up to have another look at the possibilities in the top of the shaft.

It was always in my mind to get back to this unique spot, forbidding yet so inspiring. The true nature of our discovery intrigued me, the unknown beyond perhaps so close.

Back at the top...

Bringing you up to date has given me time to consider the situation and allowed my senses to develop a feel for the place. But can I trust my intuition as I focus on all the possibilities and the implications?

The dubious looking roof hasn't fallen down yet, perhaps it will survive some careful probing. This large tent peg, I have brought with me is the perfect instrument with which to remove loose material with precision. The pieces fall to the spoil tip below and rattle beyond towards Paul. Look at this, the wall closest to me is definitely made of solid rock plastered with a layer of gritty clay. By gradually dislodging this layer together with the numerous stones it contains I'm revealing yet more of the solid wall. Working upward from the level of my hip has also enabled me to engineer a platform. I can now step off the scaffold pole and sit under this slight overhang, which now gives me a sense of protection from the ominously hanging mass above. I have already decided that if there is any movement from that direction my best plan will be to sit tight. I can see a small hole in the rock near my head, which could be threaded with a rope. Perhaps tying on will be a good idea in the future?

Progress with the peg is steady and gradually the ledge is extending leftwards to reveal yet more of the solid wall which seemed to be running straight, perhaps the start of a passageway. All too aware of the dangers involved in disturbing the roof as it is undermined

I am attempting to create a nice curvature, hopefully it will prove stronger. At the end of my ledge I am starting to encounter larger rocks that appear to have been stacked. A good sign. I'll throw them down the shaft as well, after shouting a warning of course.

New voices, the rest of the team have arrived. Apparently the drill bit and the bolts were different sizes, so no abseiling was possible. A bit more digging to do and a few more rocks to trundle. "What the f#!" Unfortunately one of my missiles has hit Gaz on the knee (his bad one of course). Perhaps he wasn't quite aware of how the rocks were flying or maybe I wasn't diligent enough with my warnings. Either way it really isn't his day. Sorry Gaz!

Back out bagless...

Everyone is hopeful of having more luck finding Brian's bag. They negotiate a cease-fire and scramble over the spoil below me to reach the top of the First Stemple Shaft. As they abseil down into the distance to begin their search I continue awhile with my digging, but a feeling of isolation starts to grow. This is a lonely and dangerous place to work without back up from below. Reluctantly I clamber back down; well pleased with the progress I have made. Hopefully I will be back soon.

I catch up with everyone at the foot of the stemple shaft. Brian's bag has been found, but the draining rods being used to reach it have unfortunately pushed it even further away and the bag has fallen over an edge to somewhere beyond. Yet again we realize it is time to go. Although no bags have been recovered we are still optimistic. See you all in Penmorfa next week!

New connections and old beer (How umpteen abseils re-modeled our world...)

New discoveries...

Unfortunately I was unable to make it on either of the following two weekends which witnessed some major breakthroughs. These were to transform our understanding of the system and lead us to some hidden treasures.

Both bags were retrieved. Brian's lay close to the regular route up, at the foot of the 'Third Ladder Climb' (Journal 1 2001) down which it had been prodded. Dave Flowers survived the dangerous abseil to recover Gaz's bag and find a cross cut passage linking to a much safer parallel rift below the Rocking Stone. Both rifts continued down a long way and offered new opportunities for exploration.

Whilst recovering Gaz's bag, Dave also discovered some brilliant artefacts in a long lost, isolated tunnel. An ancient ginger beer bottle and some drilling tools were taken to the Rocking Stone for display. Fuses that were too delicate to move were left in situ. There were also several lumps of clay with candle imprints. The miner involved must certainly have been planning to return.

A connection was also made from the Rocking Stone rift to the Wet Way. Although the Wet Way led up to the Third Attic it had always been regarded as a separate region with no links to our regular route at this height. Finding one greatly improved our appreciation of the mine layout.

Whilst still celebrating the previous successes, Erik checked out a few small tunnels close to the Rocking Stone. He was astonished and extremely pleased to suddenly pop out onto the regular route, well below Llyn Penmorfa Chamber. 'Erik's Back-Passage' a superb shortcut

will now save everyone forty minutes of effort, climbing up in order to drop down. Places like the Rocking Stone and the Calcited Passage are now easily attained. Wipe that grin off your face Erik and thank-you!

Big stemple, huge possibilities...

On the 9th of March I was introduced to Erik's shortcut as the team returned with the intention of abseiling down some of the recently discovered rifts.

Gaz and Erik first abseiled down a circular hole next to the calcited passage. Anticipating the outcome I popped back through the shortcut in time to spy them through the false floor of the 'Foot Traverse' making their way back up to rejoin us. A nice ab, but no new ground. Next we all dropped down the rope at the Rocking Stone. Then whilst the rest went ahead to bolt and rig the next major abseil, Gaz and I took the opportunity to visit the spot where his bag had been recovered. After crawling through the cross cut, we clip two bolts and descended our own rope to the bag's final resting-place on the spoil at the foot of the rift.

But this was not the end. A few short steps led us to an impressive opening into the top of an awesome chamber. There was water to be heard somewhere below, a rarity in Penmorfa. Maybe we were behind the Waterfall area in totally unexplored workings? In the gloom we could make out a huge stemple spanning the void. It was an atmospheric place of considerable promise. But it would have to wait.

Returning back up the rope I quickly swung into the small isolated passage from where Dave Flowers had recently collected the bottle and drilling tools. Perhaps only the second visit in over a century. I examined the fragile fuses and blobs of clay searching the area for other artefacts but without success. It is likely that the miner reached this tunnel by using stemples, which were subsequently destroyed through old age or rockfall. The rift no doubt being used to send ore down to the tramming levels below.

A helping hand...

Soon we were at the top of our rope and scuttling through the connection into the Rocking Stone rift. We quickly reached the abseil point established by the team, their flickering lights and faint voices far below. The descent was an exciting journey into the unknown. As the space widened and the blackness below showed no sign of ending, one wall suddenly disappeared to reveal a large chamber at the side. JC was waiting, a cheery stationmaster secured on the edge of the abyss to ensure my safe arrival at his sloping platform. "Easier if you stand on the stemple first, we've all done it". Detaching from the rope I scrambled up the slope to the others investigating a network of passageways. We eventually find a yellow plastic hand hanging from the roof, a navigational aid I had placed at a kink in our regular route. We were in the Pinnacle Chamber! Another connection established.

The end of the line...

But we had the rest of the chasm to explore yet. Soon we were back on the sloping platform where more bolts had been placed, taking turns to catch the rope and set off again into the darkness. It wasn't long before we were on a cone of debris at the end of the line. Our final station being a chamber we recognized. From it a cross cut connected through to the Blue Streak Chamber, just above the Ice Bridge. (There was also an obscure connection at one end to the wagon in the Second Rift). Once again, we were back in very familiar territory.

We departed for the surface discussing the developments; happy with our new circuits and still hopeful that Big Stemple might provide a breakthrough into the fresh ground we sought.

Off the rails...

I was unable to make it on the next trip two weeks later. The team eventually abseiled into Big Stemple only to discover that they had dropped into the Second Rift. There was the wagon. Another way into a part of the mine usually accessed beyond Rift One, twenty metres up the left fork of the main tramming level.

People started to recall seeing the big stemple before, and remembered gazing up into the roof at the false floor of hanging rail-track and an inaccessible passage above, the tunnel from which they had just abseiled. Even the noisy water that had created such an impression proved to be a mere trickle, adding to a sense of injustice.

Penmorfa wasn't finished just yet, having one last laugh at the team's expense. A tricky climb up out of the rift proved too awkward, and a large stemple was used to create a maypole in order to attempt an escape. Fortunately Steve Lea who had been tinkering around in the main tramming level appeared above them to help resolve the situation.

Reflections...

These explorations which took place during the first three months of 2003, resulted in some major additions to our understanding of the mine layout. One myth shattered was that that the First Rift is more inclined than the others. (After all didn't we regularly scramble up it on route to the attics?) Our abseils were like plumb bobs, proving that the workings are basically vertical.

The First and Second Rifts run into each other and lie on the same north to south line of mineralization. (The Devil's Head Chamber in the First Rift for example is some 30 metres directly above the wagon area of the Second Rift ('Big Stemple') linked almost directly via Gaz's bag drop). They should be referred to as a single rift.

Only by following the intricacies of these stories and surveying the complexities of the mine diagram will you have truly shared in our wild adventures. If you were successful, congratulations, hopefully you have also made a friend. But to those of you that got lost along the way, don't worry, it happens to the best of us, even when we think we know the place.

More recent events

Visitors...

June 8th saw the return of some half dozen members of the Crewe Caving Club. Having already been shown around Romans in March they were keen to be introduced to the delights of Penmorfa. The trip organized and led by Gaz took in the three 'attics', visiting our prized beer bottle, the calcited passage and other points of interest. It ended with a look at the further reaches of the main tramming levels. Beer after the event was of course compulsory. Whilst sitting outside the King's Head in glorious sunshine plans were hatched for future outings. (C.f. our excursion to Peak Cavern/ Speedwell in July, guided by the Crewe team).

Kayaking...

It had been in my mind for some time to take a Canadian Canoe into the Penmorfa adit. Partly to aid those less adventurous daunted by the arduous wading, but also to carry equipment. Experiments in the garden with a child's hoop suggested that the boat might be

persuaded to squeeze through the 750mm-diameter entrance pipe if the seats were removed and the weakened frame strapped tightly around a small barrel.

In the end however I opted for a smaller kayak. If it proved of use then the Canadian could follow at a later date. It was dragged in using a set of wheels on the day of the Crewe visit. I was first into the adit. It was a very odd, eerie experience, being on my own, gliding quietly over the water into the gloom. The shortened paddles I had made worked well, but hands were adequate and easier to use. (Must try tennis bats). I stayed dry and had fun. Transporting numerous gear sacks was easy. The boat is presently moored and awaiting its next client.

Lines of Communication...

Wednesday June 11th saw an experiment in the use of a set of 'mole-phones' developed by Keith Jackson of Parys Underground. Gaz and Keith took one phone into Penmorfa. The other phone was taken into the main chamber of Great Orme Mines some 140 metres, above by Nick Jowett, Erik and others.

The phones which use some sort of electronic wave to penetrate the rock, (Details for another article perhaps) rely on a 10 metre length of well-earthed wire set out to form a right angle.

At the appointed time of 7pm communication was established but only in one direction. Keith and Gaz could hear those above but up top, the phone remained silent. It is thought that the reason for this discrepancy was that the drier conditions in the upper chamber meant that the wires there were poorly earthed.

The Chronicles will continue
Dave Wrennall : October 2003