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The Newsletter of the Cumbria Amenity Trust
Mining History Society



Hospital Level, Coniston copper mines. Photo Julian Cruickshank

No. 151

May 2023

Cumbria Amenity Trust Mining History Society

Newsletter No 151, May 2023

Membership

| | |
|--------------------------|--------|
| New members | Page 1 |
| Forthcoming CATMHS meets | Page 1 |

News

| | |
|---------------------------------------|--------|
| NAMHO 2023 | Page 1 |
| Greenside mine restoration project | Page 2 |
| Florence mine plans | Page 4 |
| Mines Forum, 7 th February | Page 7 |
| Exploration of Kernal Stope, Part 2 | Page 9 |

Meets

| | |
|---|---------|
| Coniston Through Trip, 6th February | Page 21 |
| Mineral meet, 5 th Feb | Page 22 |
| Hodbarrow, 12 th March | Page 26 |
| Newlands Valley mines 2 nd April | Page 28 |

Articles

| | |
|--|---------|
| Beam Engines – Mines and Groses | Page 32 |
| Information from unusual sources | Page 34 |
| Connections, Cumbria, Lancashire & Yorkshire mines | Page 36 |
| William Wordsworth and mines in Patterdale | Page 39 |

Society Officers and Committee Members

Back cover

New Members

Neil Casson, from Ulverston.

Sally Schofield, from Dalton in Furness

Sally is a graduate of Camborne School of Mines and has worked all around the world in the mining industry. She is looking forward to getting her head round the history of her home turf.

Cathy Hooper, from Appleby.

Andrew Fyfe, from Steyning, West Sussex.

MY GREAT GRANDFATHER WILLIAM BOULTON was the owner of Yarlside Mine and a lifelong farmer as a tenant of the Duke of Devonshire in the last half of the 19th C. He died in 1902. My grandfather grew up in and around Barrow, Ulverston and Hawkshead.

Forthcoming Meets

Coniston Slate Quarries, 7th May

Geology Walk, Gatescarth, Buttermere. 14th May

Borrowdale Wad mine, 21st May

Coniston Coppermines, horizontal levels. 21st May

Outdoor First Aid basics, 11th June

Coniston Coppermines surface walk, 17th June

Tilberthwaite and Hodge Close slate walk, 18th June

NAMHO Conference 2023 - Final pre-conference update

The website went live on 1st Feb, to be met with a deluge of pent up demand for all of the SRT trips which quickly filled up. The more gentle trips are also getting booked up nicely.

The organisers originally asked CATMHS members to refrain from booking onto trips as soon as the website went live to allow our visitors from outside the region to have a chance. Enough time has passed since then, so if there are trips you have been holding back from booking, you are most welcome to book.

The lecture programme remains as it was on 1st February. There is plenty of space at present, so CATMHS members are also welcome to book on to that.

Through the work of the Meets Secretary (Julian Cruikshank) and meet leaders, a number of the planned NAMHO Conference meets have been tested and honed to perfection on CATMHS members via the Society's normal meets list. Please keep an eye on the meets list and come along to the practice meets.

The organisers are still working on the camp site. It will be either a field in Grasmere Village, or at White Moss. Details will be forthcoming as soon as it has been confirmed.

Considerable effort has gone into raising the profile of the event. Publicity has gone out to local U3A groups, members of the Cumbria Local History Federation, Cumbria Industrial History Society, the Cumberland and Westmorland Antiquarian and Archaeological Society and Grasmere Village Hall. Warren has contacted Cumbria Life magazine who have offered to run a couple of articles on the conference, and we also hope to have some local TV

coverage. We are also holding discussions with The Wordsworth Trust to see if we can offer a bespoke trip or two.

Meet Leaders and helpers do need to register for the conference. There is a special delegate rate of £0 which should be selected. Merchandise and meals will be at the normal rate.

Mark Hatton has kindly organised a First Aid refresher course for 11th June at The Ambleside Parish Centre. It will focus on the type of scenarios that might be encountered when taking groups on surface or underground trips during the NAMHO Conference. It is hoped that all NAMHO volunteer guides and leaders will be able to attend this course unless they already have First Aid qualifications.

The Friday and Saturday night events promise to be great social occasions, with plenty of opportunity to trade trips with folk from other regions. Do sign up.

We will have Moore Books and Starless River at the conference, giving great opportunity to stock up on books and gear. Displays are also planned from CATMHS of course, as well as Descent Magazine and the forthcoming HLF bid from the North Pennines AONB Partnership.

As we draw closer to the event, it is clear that more volunteers are needed to ensure the smooth running of the event. For example, we will need to supervise the car-park, move furniture around in the Village Hall, ensure that delegates at the lecture programme are suitably refreshed, etc. etc. If you can spare some time over the event, please let the organisers know, they would be very pleased to hear from you. If you have any questions, or would like to point out any omissions, the organisers (Chris Cowdery, John Aird) can be contacted at namho@catmhs.org.uk

The conference website can be found here: <http://www.namho.org/conference>
See you all there!

Update on maintenance of the Greenside Emergency escape route

The work to reinstate the emergency escape route at Greenside has continued since the update in the last newsletter. This has involved breaking up and removing the new scab of rock that had appeared alongside the original boulder on P7 and tackling the car crash of balanced rails hanging ladders (Figure 1) and the unstable scab of rock on the crows nest on P8 (Figure 2).

With some very long days we have made good progress. The crows nest is now stable for at least the short term but will require regular maintenance checks and work to remove any further scabs that drop. In an ideal world we would replace all the wood and pack it tightly to the roof, but this is likely to be prohibitively expensive and the difficulty of bringing the wood in and carrying out the installation in an area of unstable rock not justifiable. There are still some areas of unstable detached scabs that need to be dealt with on P8 before the debris that has landed on the Lucy Tongue level can safely be accessed for removal, and the final ropes can be installed.

We plan to have a final tidy up and check through everything after that, but fully anticipate the route to be secure for NAHMO.

Rob McClymont, Tracey Binks, Carl Barrow, Chris Little.

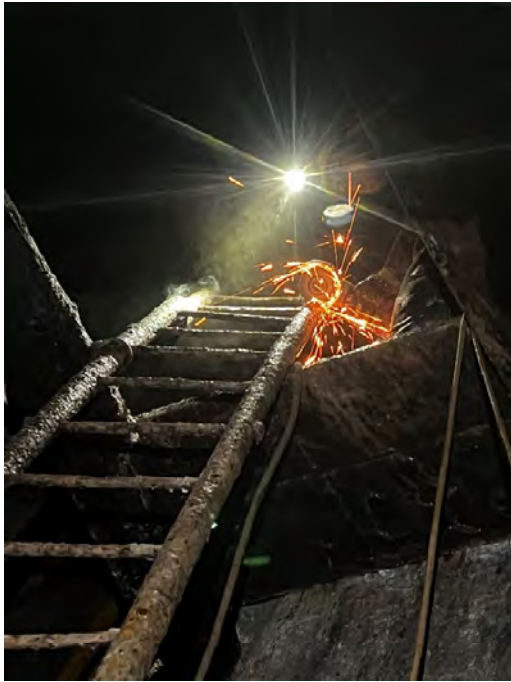


Figure 1: Removal of part of the buckled and distorted ladder close to the base of P8 (left) and lowering of damaged ladder from the boulder (right)



Figure 2: Crows nest 04/02/23 (left) and 18/02/23 – images from the same angle are not available, but the instability on 18/02/23 is apparent.

West Cumberland Iron Mines Maps

While at the Florence Arts centre, which is located in the shower and admin block of the former Florence iron ore mine, it became apparent to Bob Mayow that Gilbert Finlinson, the mine manager and owner, had a considerable number of perhaps irreplaceable maps, plans and documents relating to mining in West Cumbria. These were dirty and gathering dust, and were not being stored in suitable conditions. Many of the earlier plans, drawn on linen, were now torn and in poor condition. At about the same time Chris Cowdery had found mine plans relating to West Cumbria in his local record office. Bob, Chris and Ian Matheson met with Gilbert and established that his plans were indeed local plans with many centred on Haile Moor.

Raymond Clements, one of the last mine surveyors at Beckermest mine, had a collection of iron ore mine plans from when the mines were closed in the early 1980s. Raymond sadly died in April 2022 and his mining notes and maps were passed to Colin Woollard. Raymond's large maps were scanned by the British Geological Society (BGS) and his smaller maps, plans and articles were scanned by Colin. The original articles have now been deposited at the Whitehaven Record Office and all the smaller images have been uploaded to the CATMHS website. The larger plans will be uploaded later in the year when time permits as they are large images – bigger than our standard upload limit on the website.

At Bob's instigation, he, Colin Woollard and Ian Matheson met with Gilbert Finlinson in the autumn of 2022 and agreed to catalogue the more important mine maps and plans at his office at Florence Mine. This cataloguing exercise took a number of visits and around three hundred plans were identified as relevant to the Florence, Ullcoats and Beckermest mines, but also mining sites further afield in both iron, coal and metal mines in West Cumbria. With this listing available some two hundred plans were selected as being of prime interest to the historical mining heritage of West Cumbria.

Gilbert was somewhat reluctant to allow original documents to leave the site, so work continued at the Florence location to repair his very large linen map of the Florence area, since it had become ripped and would not unroll without further damage. A number of other maps were also very fragile and were repaired on site. Gilbert showed us his ledger detailing the operations of the Florence and Ullcoats Mine from 1962 to 1968 under the Millom Hematite Ore and Iron Company up to the time when they went into voluntary liquidation. He also had a book detailing all the boreholes which had become quite damaged. Gilbert kindly allowed us to make copies of these documents. The three of us managed to photograph the ledger and Ian scanned the borehole book. Pdf copies of these two documents are now available and a bound copy of each has been deposited in the Armitage Museum as part of the CATMHS archives.

The process of making copies of the two hundred prime plans began with scanning the A3 documents on site. With some negotiation and assurances Gilbert allowed us to take thirty five of the most significant A0 sized plans offsite to Firpress in Workington, a local printers, to be scanned as Pdf images. We then experimented with photographing the remaining plans, some of which were very large stiff and curly. With a couple of LED worklights we were able to get good illumination in the Florence Art Centre's "white display room" and so could hang maps on the wall and take photographs that were good enough to record most of the information on the maps and plans. Some needed to be stitched together to form a composite document.

We found local plans from Lamplugh, Cleator Moor, Egremont, Beckermest and other ‘surprises’ from further afield. Goldscope, Broughton Moor, Caldbeck, Boltongate, and some abandonment plans, mainly copies, relating to coal mining.



FM 124 - One of the detailed plans for Egremont Main Street.

All the scanned plans are now uploaded on the CATMHS website and are available to view. To find these plans searching “Index” will locate several of our mine plan indexes from which specific references can be found. Generally Florence plans can be found under “Florence Mine Plan” and Raymond Clements documents can be found under “Clements”.

This work was completed in March 2023 at a time when Sue Mackay had just joined the adjacent Arts Centre. Sue is now the director at the Florence Arts Centre and she has a background working in Museums and is keen that the plans are made available/accessible to both visitors to Florence and to the local community. It has been suggested selected plans might be exhibited at Florence in the autumn. It is clear that there may well be further mine plans within the site but it is difficult to see what is present. We hope we have managed to

salvage some overview and details of the mining heritage of the area as without a longer term rational management plan prime plans may be suddenly lost forever.

Colin Woollard, Ian Matheson and Bob Mayow.



FM 154 - One of the larger plans after limited repairs (floor to ceiling sized plan)

Mines Forum meeting, 7th February 2023
Held at the LDNPA office, Murley Moss, Kendal and on Teams

Present: Eleanor Kingston (LDNPA), Jamie Lund, Duncan Wishart, Roy Henderson (National Trust), Peter Bardsley (Environment Agency), Alistair Cameron (Coniston History Group), Chris Newton (Coal Authority), Andrew Davison (Historic England), Peter Claughton (NAMHO), Mike Mitchell, Mark Simpson, , Warren Allison (CATMHS), Donald Angus.

Updates

Coniston copper mines

Alistair Cameron commented that he had met the new director of the Ruskin Museum who wanted to put on an exhibition on the mines.

Mike Mitchell commented that he had spoken to Mo Holland to see if she had the original proofs to Eric Holland's field guide with a view to reprinting it.

Greenburn Mine

Jamie Lund reported that the consolidation of the structures at the mine was complete. The Trust had been working with the South Lakes Rivers Trust on water borne metal pollution and a project was ready to go subject to funding which would capture water currently going through the site much earlier and divert it into the river

Tilberthwaite Mine

Alistair Cameron reported that the owner of High Fell Quarry had retired but everything was left intact for a prospective buyer, and someone had come along. The lease was still active for a few more months and would need to be reapplied for. Mark Simpson commented that he had recorded the outside structures but would like to do the inside.

Greenside Mine

Eleanor Kingston reported that the Smelt Mill was subject to enforcement action. Scheduled monument consent had been granted to replace the footbridge across Glenridding Beck but the original one would stay in place. Internal meetings had been held to take forward the actions from the management plans including a survey of the stables and gunpowder store, costs for interpretation and looking for funding. A condition survey of the gunpowder store had been carried out in the past.

Eagle Crag Mine

Eleanor Kingston reported that pre-covid Mark Hatton (CATMHS) had taken her to the mine and that it was a hidden gem. The Archaeological volunteers and CATMHS have put a proposal together to survey the mine but it was not easy due to the terrain and it would need a fly over with a drone and a documentary investigation. This would be at least a two-year project and should be done in chunks.

Force Crag Mine

Duncan Wishart had been worked with Neil Winder, Jamie Lund and Roy Henderson to review the management plan. There had been discussions with Newcastle University and the BGS about monitoring groundwater and how to keep this going. Progress was being made on the lease for the lagoons with the Coal Authority. The next step would be to get new members of staff to a meeting with other organisations to learn more about the site and potentially gaining access to No 3 level.

Yewthwaite Mine

Jamie Lund reported that fixed point monitoring had been completed using photographs from thirty years ago. This would allow checks of ground movement to be made after a heavy rainfall. The Environment Agency is looking at sampling points and the local farmer had complained about a cow dying and sediment going onto the land.

Honister Quarry

Alistair Cameron reported Jan and Joe Wear had retired and one of her sons was operating the mine, currently No5 Kimberley Level, and were considering working the Honister part. There have been major changes in the management structure and there might be a shortage of people to run the mine.

Coniston Old Man

Alistair Cameron reported he was continuing to interpret the workings and the Ruskin Museum is looking at putting a display on about the quarries. Oral recordings had been done over the years of a dozen men who worked there. They should perhaps be lodged with Ambleside Oral Society. There are proposals for Fix the Fells to repair the road between Saddlestone and Smithy Bank quarries

NAMHO

Warren Allison gave a resume of the arrangements for the conference being held at Grasmere Village Hall from the 7th to 9th July including all the lectures and trips.

Any other business

Peter Bardsley gave the following resume on the Environment Act 2023

- Long term target to halve the length polluted by harmful metals from abandoned mines by 31st December 2038, against a baseline of around 930 miles (or 1,500km).
- Interim target to construct eight mine water treatment schemes and twenty diffuse interventions to control inputs of target substances to rivers by 31st January 2028
- Deliver a ten-fold increase in the Water and Abandoned Metal Mines programme, upscaling the existing three treatment plants with forty more by 2038, to tackle harmful pollutants from abandoned metal mines.

Jamie Lund (NT) commented on the request to expand Guards Quarry at Coniston, which would receive his support in the planning application. The LDNPA was looking at whether the existing permission would cover the proposal.

Warren Allison commented that CATMHS Journal 7 had been published. CATMHS had been able to catalogue Gilbert Finlinson's maps of which there were hundreds, mainly of West Cumbria iron mines. The more interesting ones, some of which relate to Lake District mines, are being scanned. Had provided information to the LDNPA archaeologists for their surveys at Carrock End Mine near Caldbeck and Haweswater Mine.

The next meeting will be held on Tuesday 11th July 2023 at the LDNPA office at Murley Moss, Kendal.

Exploration of the Kernal stopes at Coniston copper mine by Carl Barrow, part 2.

As reported in the February newsletter, on 14th January Carl had poured a litre of red dye water down by the climbing chain that heads down through a collapse in Kernal Crag stope, to see if it's the same one in Hospital Level where there is a climbing chain coming through a collapse high up in the big stope.



Looking down to the chain in Kernal stope.



Looking up to the chain in Hospital stope.

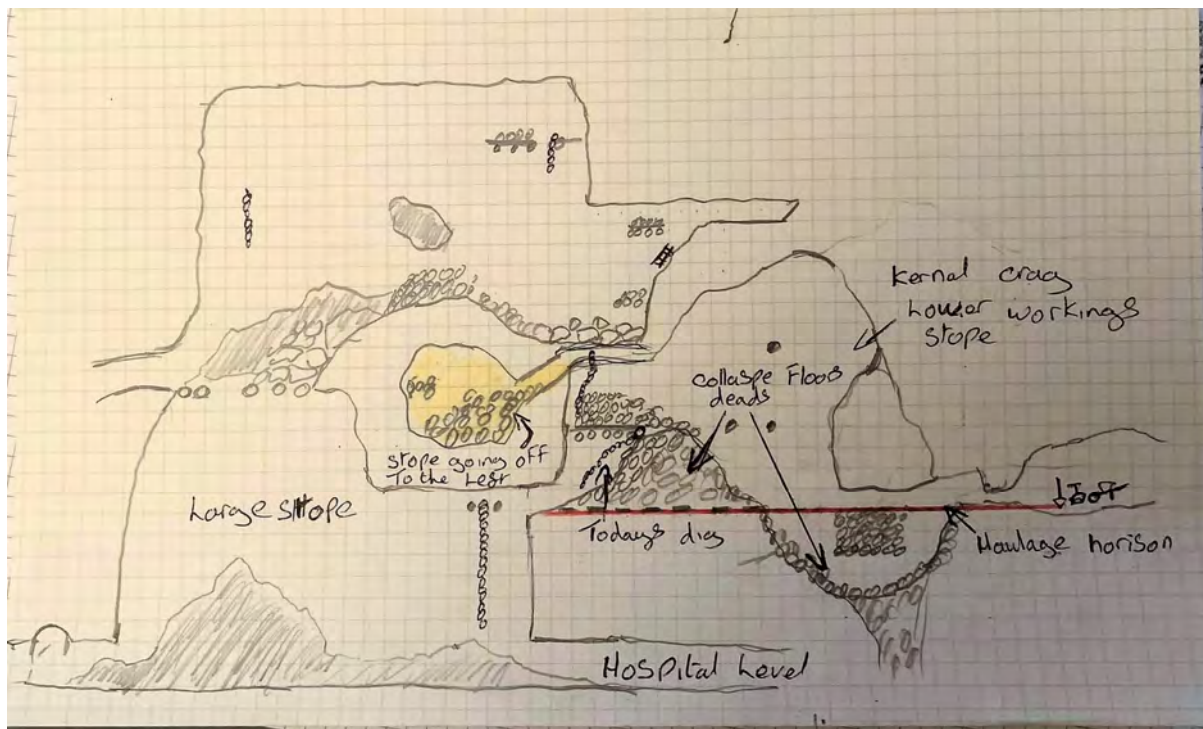
16th Jan. This is looking up to what I think is the same chain, see how the chain is tight up against the left hand wall, but if you was looking down would be the right hand side. Also look at both sides of the stope, the rock and the rocks and timbers look the same colour.

The miners used the chains to climb up and down as they didn't have the ropes and harnesses we have today; the longest one in situ in this mine at the moment is in Hospital Level in the large stope. It's about 15m long.

21st Jan. Playing high up in the Hospital stope, re-rigging and adding a new rope, trying to piece together the crazy puzzle of this mine. Assessing and planning a way to tackle this collapse. Good productive trip, also enjoyable. Looking forward to hopefully making a connection into the higher workings from here. Going to be an ongoing project that will take a couple of trips.

Today's trip - A bit of rope maintenance, plus weighing up on the connection where we found a climbing chain heading into a collapse that I thought was the same chain coming out of a collapse that I knew about from below.

Where we were in Kernal the climbing chain goes into the collapse. Here in the Hospital stope I thought that *this* chain was same chain going into the collapse, but on a closer look where I'm at now, this chain is actually tied round a stemple so it isn't actually coming through the collapse. It's not the same chain what we're looking at in Kernal. The hole in the other end of the false floor above goes up through a couple of metres of stacked deads, whereas in Kernal,



Trying to draw a two dimensional picture of a mine when you've got parallel veins and stopes and tunnels going off at different angles isn't an easy task for me who isn't that good a drawing, but I try. Here's my sketch, what I only think, and is my gut feeling until I can prove otherwise, of where and how Paddy End mine joins to Kernal Crag mine. And where we got to in the lower stope working of Kernal Crag and where I think it joins Hospital Level.

The stone colour on the stope walls and deads look similar looking from top and bottom of the collapse in question; the width of the stopes is similar in the collapse in question; the length of the false floor you look up to from underneath the collapse is similar to where you stand on the top side of the collapse; the bottom area of the collapse enters an end of a stope, and the top of the collapse is at the end of a stope; there is a climbing chain at the top and another one at the bottom that leads to the main climbing chain in Hospital Level, as if it's the man way in and out of that part of the mine.

My theory might all be wrong and I'll hold my hands up if I'm wrong and someone can prove I'm wrong; I've still got some more digging to do to prove I'm right hopefully.

29th Jan. Still continuing trying to figure out if this is a connection to Kernal. At the top of the climbing chain in Hospital Level, top of that large stope, I've been digging on one of the sides of the collapse today, the underside of it, by using a grapple hook. Throwing the grapple hook up into the collapse heap of stones and then pulling, trying to get the right stone to pull so the whole lot will fall down to the bottom of the stope out the way. A bit like a game of Jenga but with more excitement. I've managed to cause a bit of an avalanche 'cos all this area was full of rocks. I managed to pull the right one and the whole lot went down underneath me feet. Luckily I can just get out the way by bridging the stope as the rocks go by underneath me. The grapple hook rope isn't long enough to get to them remaining. I'm just going to have to return with a longer rope for me grapple hook and ty and pull them. It all got a bit exciting when the

whole lot went in one go, but it all went beneath me and felt safe enough. I would of filmed it on my camera but it all happens a bit quick with a little bit of panic going on. It's the last thing I'm thinking about is grappling my phone to film it.



The rocks still remaining on the underside of the blockage.

My next dig will be in the part of Kernal that I think is on the other side to this area. Hopefully then I can prove my theory of how this mine connects here and why.

4th Feb. So I went back to the bottom of Kernal Crag mine to have a bit of a dig in all the deads that have collapsed down from the false floor where the climbing chain is, hoping to make a connection to lower workings in the stope, or to where I think it connects to the climbing chain in Hospital Level. I started digging at the top sending the rocks down to the bottom of the

funnel. There is many tons of deads that have collapsed in this part of the stope and it is looking like there is too much to move to continue on in this part of the mine to be honest. After digging for a while and started to feel shattered and knowing it's a long slog to pull myself back out to daylight I decided to call it a day here. I think I've exhausted the exploring here now; what I need to do next is return and survey and take measurements of all the new ground we've got in and draw up the plan of this area. I will return and have one more trip digging here to just to make sure there's no way on, then I'll de-rig all my ropes on the way out.



Arrow pointing at a stemple part covered in deads. The climbing chain is just behind me.



Arrow pointing at the same stemple as last photo after I had finished digging.

I need to have another dig at the top of the climbing chain in Hospital Level where I was last week to finish that off to see if that's going to lead me to something interesting, then I need to have another dig right at the very bottom of the mine from Deep Level, where it would lead into the very bottom of Kernal Crag mine, hoping to make a way through there. I had a bit of a dig there the other month; I believe a couple explorers in the early days managed to make the way up from the bottom there before the floor collapsed in the lower part of the stopes. My chances of digging up and getting into Kernal from there are slim but it's worth a try.

I was feeling done in before I went into the mine. After making my way to the bottom of the Kernal stopes and doing some digging, then pulling myself up all the ropes to get back out, I'm now double done in, feel wrecked. I'm exhausted and now think I've exhausted this part of the mine for exploring. Far too much rock to move to get where I want to be, but at least I've tried and I feel better for trying. I will have to have a dig from the underside again and another dig from the very bottom of the mine heading up before I completely give up and say the mine has won on this one by collapsing in on itself over time.



You can see the chain is still going down through the collapse.

4th Feb. OK, I've decided - I'm going back at some point to carry on digging to find the bottom of this climbing chain and see what's going on there. As you can see it's the end of the stope here but, and there's a big but, it might lead on somewhere at the end of the chain, and now

I've got this in my head I'm going to have to go back for another dig there to see. I don't give up that easy and when I study my photos after each trip I put ideas in my head, and once that idea is in my head I have to go along with it because that's the way I roll while exploring this mine. I shall return, the show must go on. I'm not giving up yet!

9th Feb. I'm going to have another dig from this (Hospital) side before I go back to Kernal, at the top of the climbing chain in Hospital Level in the large stope to see what's going on there, then I'll go back into Kernal Crag and dig some more there, hopefully to connect or get into more new ground. Still none the wiser whose ropes we found, or their definite route, but I'm thinking they came up from the bottom of the scree in Kernal Crag where I'm digging, but it's blocked up since they were there. Their rope was tangled up going through the scree of rocks at the bottom of the funnel there. Hopefully I will get some more answers soon.

12th Feb. Today's trip, back at top of the climbing chain in Hospital Level. After last time, I was digging here using my grapple hook and got down as much rock as I could using the hook. There was still more rocks higher up what I couldn't reach, so today I returned with some draining rods with a hook of the end of them to reach the rocks higher up.

Did the trick. After a little poke about it didn't take much when a few stones started moving and coming down, which soon became a few more, then a lot more, all helped by gravity. A lot of rocks went past me and down to Hospital Level, then a big one got wedged in the funnel below where I was hanging safe out the way. A lot of rocks came down through the hole from above the false floor. At one point a didn't think it was going to stop but then a big one came down and blocked the hole, but I still could hear a lot of rocks moving above the false floor above me, it got a little exciting for a moment or two.



So after it had settled and I changed my under pants, it was time to make the area safe again by dressing in all the rocks that had got jammed in the funnel heading down to Hospital Level. I got that done without any issues or exciting times.

The underside of the blockage after the avalanche.

So I didn't dig a way through that I was wanting, but I now know there is many tons of deads above this area, and in the area I'm thinking is above here, in Kernal, is also a lot of deads that have collapsed from above, so when I go back in Kernal I'm hoping see a small funnel formed

there where it's all fallen down here. Hopefully so I can tell I'm in the same area. Good trip all in all.

13th Feb. Trying to explain some of my madness why I think I'm digging in the same area when digging at the bottom of the funnel at the top of the climbing chain in Hospital Level and in the place I'm digging in Kernal Crag. Anybody who spends a bit of time in Coniston mine will notice the rock changes colour through the mine. Where I'm digging at moment in the funnel at the top of the climbing chain, the rock has a silver look with the odd bits having a brown tinge to them with broken bits of stemple mixed in, and if you look at the rocks in Kernal Crag area where I'm digging, it looks the same. So, after today's dig, when I go back in Kernal I'm hoping to see a change in the rock fall from how I last left it, either looking at the top of a funnel or an indentation in the rock fall, some sort of sign that I was digging below.

18th Feb. I returned to the bottom of the new ground we've got into in Kernal Crag to see if the dig and avalanche I had in Hospital Level at the top of the climbing chain has had any effect in the collapsed heap of deads here in Kernal Crag, and also to survey and measure up the new ground we got into so I can draw up a more accurate mine plan.

Well, I was hoping to see a funnel forming after digging what I think is underneath here in Hospital, but I was to find no change. Either it doesn't connect where I think it does or the heap of deads here is that deep it's made no effect from when I was digging underneath last week. I do still stand by what I say, that it did connect here back in the day, but I can't prove it. There's been a few similarities from the dig in Hospital Level and here in Kernal Crag. One more I noticed today is the size of the deads here and in Hospital Level. In Hospital Level there has been a few really large deads and one blocking the funnel there; in Kernal where I've been digging today there also been large deads. Large meaning they could be a two man lift, something you don't see anywhere else in the mine, when they are normally the size of a rugby ball.



The climbing chain in Kernal after today's dig. That is still not the end of the chain – it goes on down through the stope



This is looking up from underneath in Hospital level, above of the big climbing chain.

In Hospital Level looking up where I've been digging there's a section of false floor at the end of the stope and in that far corner, by the red arrow, there is a hole purposely built through about two meters of deads, with a car crash of deads on top. I was hoping to get to the bottom of the chain in Kernal and that it would be somewhere near. I honestly think it's somewhere down at that horizon, but there is no way I can move all this, so – give it up. I don't think I'm far wrong in what I'm saying. I think it's down there. So, I tried. Can't prove it, hey ho, I've tried.

I'm going to have one more dig underneath in Hospital Level at some point to cause another avalanche to see if that does any good to connect or lead to somewhere else.



After today's trip, taking measurements and surveying the new ground we've got into, I've tried drawing up this plan trying to get it as near as I can to what it's like showing the full mine.

Noticing the caption 'funnel down to Deep Level', Carl was asked 'What makes you think that, and where in Deep Level might it connect? South Vein?'

Yes, I'm thinking this will be South Vein, when you go along Deep Level and you come to the large collapse that clearly is leading up into a stope and the collapse there is all the deads from the collapsed floors from within the stope.

Where my caption says 'Funnel Down to Deep Level' I'm saying that it's heading down that way, but here it will be about seventy metres above Deep Level, so there should more false floors and other haulage level horizons before Deep Level. In theory there should be more new ground to get to but it's out of reach now as the funnel is blocked now of all these deads.

I know most people will think my theory of it connecting to Hospital Level can't be, but I would like them people to explain to me how Kernal Crag vein was mined, because it all didn't come out at the top where we go in now, as the spoil heap there is only big enough to be just the spoil from the drive of the level to get to the vein, and I'm not convinced Gaunts connects to this vein, as the spoil heap outside Gaunts is also only big enough to be from the drive of the level. Also I haven't come across any sign of a connection in the vein. but that might be lost under a collapsed floor in there, so that only leaves the only way it was mined all the way up from Deep Level, which is a bloody long way for the miners to get into Deep Level then work

their way all the way up through Kernal Crag stope to start work and haul the deads and ore out. So, with a few other reasons, that's why my theory is that it connects to Hospital Level where I think it does, where the long climbing chain is. I might not quite be in the right place in Kernal but maybe the next floor down. If it was possible to dig through all the deads that's collapsed there, somehow it would be connected. I might not be exactly in the right place but I don't think I'm far wrong.

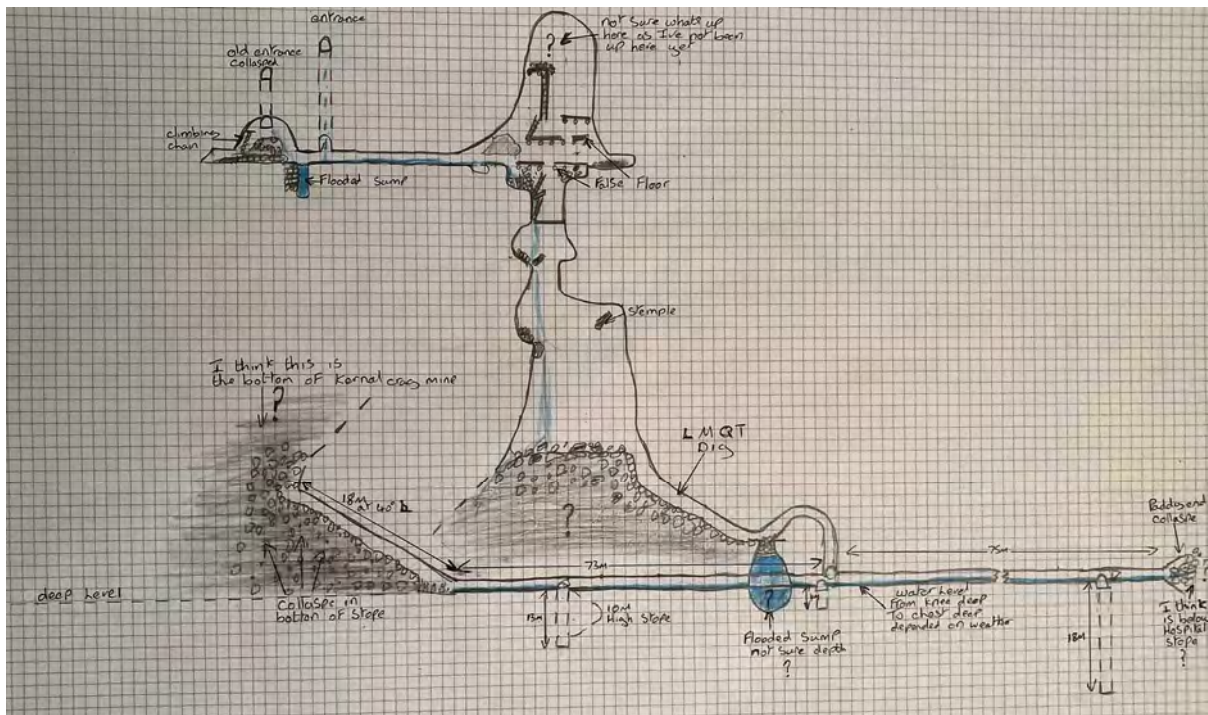
I sometimes prefer to be in the dark alone in the dark place. I enjoy playing as it can be safer alone. Less to go wrong and less to worry about things going wrong.

25th Feb

Went to do some more digging in the bottom of the mine to dig upwards through a collapse heading into the stope where I think connects to Kernal, but we couldn't dig anymore from what I dug last as it's collapsed again from my last dig and now I've seen sense and took it on the chin that it's too dangerous to continue digging at this dig as there could be tons of deads that could or will collapse onto us when digging there, with no room to get out the way. Not a happy mine explorer but that's mine exploring, move onto the next project in this mine.

4th March

So here we are in Deep Level – there's the draft door in Deep Level. Its quite dry at the moment. Just a bit of water coming from Paddy End. This is a section of Deep Level in solid rock between the stopes but it's collapsed at both ends. This is the Red Dell side. There's a rock roof but at the end its absolutely choked with deads. I'm thinking it's at the bottom of Kernal where I'm digging at, roughly. About twenty meters between the top of this rubble to my dig in Kernal. When I surveyed the new ground I've bin in in Kernal and measured all the pitches, added it all up. I'm miles past Hospital horizon, about twenty meters below Hospital horizon, and Deep Level to Hospital horizon I've worked out to be about sixty, seventy metres



ish.

South shaft, the LMQT dig and Deep Level.

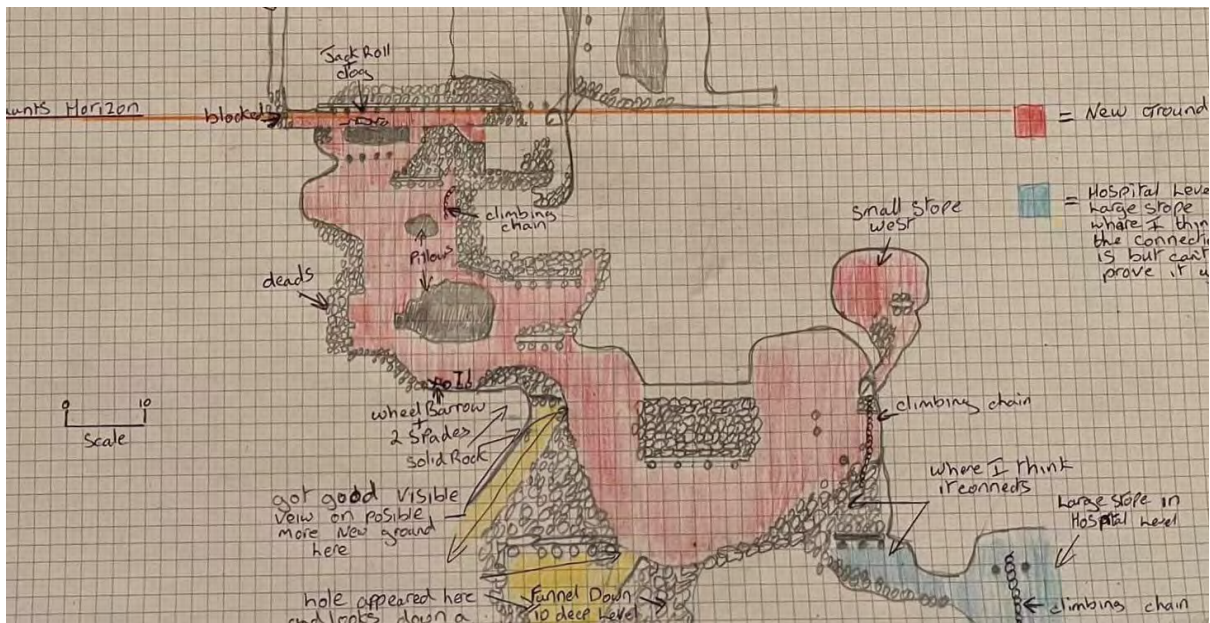
The scree here must be rising up about twenty odd meters. I'm going up to have a bit of a dig. This is the top of the scree, and it goes on straight up

I do like seeing the false floors and the different timbers they are made from in the different parts of the mine. Some are cut planks like these and some are just cut branches of the trees and some are in better condition than others in the different parts of the mine, not always because of the age. It can be how wet or dry they are and the atmosphere. Sometimes the wet ones last longer than the dry ones for some reason.

11th March,

Well, I'm nearly at the bottom of Kernal. Today I'm going to bolt up and get into a lisle bit just to say I've done it. I know it's only about ten metres long, not very much in there but I just want to tick it off, as I do. I can see some planks for a wheelbarrow run as they laid them out on top of the rock and there's a metal pipe of some sort. So that's today's little play time and you never know I might find an ore tub, a wheel barrow or a miner's pipe, You never know.

But, but, a little bit of excitement here for me - on this side of the stack of deads there is a nice little black hole. When I shine my torch in that black hole the end of the stope is about three foot away, but it continues down as far as I can see. So when I have totally exhausted this side and can't do any more I'm going to let those deads go, it won't take much, and that might lead into somewhere different again. Exciting times. This place never stops giving.



My mine plan drawing, blue shading was wrong there where I thought it was going to connect, after surveying the new ground the other week I didn't realise how deep in the mine I was and this area in the bottom of Kernal is about twenty metres below Hospital horizon, so I was a mile out there but on today's trips I can add some more detail on this map. Yellow area is new ground I sin today.

Carl Barrow.

Coniston Through Trip, 26 February

The Coniston Through Trip is a thing of myth and legend and for a group of Improver Mine Explorers this was an opportunity not to be missed. Our leader Michael (Bill) Oddie and co-leader Carl Barrow have spent many days underground here but were still happy to show off the mine workings to others and were reassuringly patient in making sure that everyone stayed safe and got the most out of the experience. On the way up to the top we had a quick look in the Kernal Level to see the opening to the scary depths that our intrepid leaders have recently been exploring and then had an interesting tour of the colourful world of Lever Waters mine before starting the descent into the underworld of Simon's Nick and the Back Strings.

A walk down an open canyon morphed into a scramble through old workings to the first big challenge of the trip, a ninety foot abseil from an arrête of rock above a stope on the Paddy End vein down to Top Level.



Everyone passed the test without trauma so the stakes were raised by a traverse of MAG's catwalk. Many photos have been shared of this iconic feature and no-one passed up the opportunity of a crossing despite the fact it wasn't a necessary part of our route. Back on course we reached the next big abseil of seventy feet down to Middle Level, passing the Blue Pool that also appears in many photos, before lunch in a chamber containing a striking blue stained rock.

Refreshed we continued down the rubble-strewn slope of the enormous Belman Hole Vein stope, taking care not to dislodge rocks onto people down the line whilst taking in the scale of the cathedral like environment.



The final abseil pitch heading seventy feet down to Grey Crag and Hospital levels was the most awkward to get onto but careful supervision made it a smooth operation, and the final stage of the day was the relatively straightforward walk out of Hospital Level via the vast chamber of the Great Open.

This excellent day was thoroughly enjoyed by Duncan Scott, Rob Cruickshank, Richard Neilson, Jonathan Lynch and myself, with great thanks going to our leaders and to the generation of CATMHS members who explored and opened up this fantastic world. It is not a trip suitable for beginners and all the members of this meet were able to enjoy the experience due to the investment in SRT training made in recent years by Graham Derbyshire, Mark Hatton, Michael Oddie and David Lund, which has been much appreciated.

Julian Cruickshank

Mineral meet

Kevin Crisp, Lorraine Crisp, James Archer, Robert Gurr, Liz Withey, Mark Hatton, Lindsay Harrison Julian Cruickshank, Rosemary Vidler, Anne Danson, Michael Pringle, Warren Allison, Ian Matheson, Andy Hopkins and six other non-members.

Given the interest in underground photography, geology and minerals amongst some of the members, Liz suggested that CATMHS holds a mineral day to allow people to bring some of their own collections to put on show.

The Parish Rooms in Ambleside were suggested as it was a central location with parking close by, and to hold it in February when the weather could be inclement. Ian Matheson suggested booking the Wesley Room which had large windows with a lovely view towards the fells.

I have my own collection of specimens purchased from Bill Creighton, Lindsay Greenbank and Pete Blezard over many years, but wrapped up and not on display. Last year I did a Zoom talk on Greenside Mine for the Russell Society which is the foremost mineral society in the country and included photographs taken by Liz of some specimens that I had from the mine, mostly collected by my uncles when working there. During the talk I asked if there was anyone who could give her advice as this was something totally new and Roy Starkey who is one of the finest mineral photographers in the country arranged for us to have a tutorial by Zoom. This meet spurred me start to sort out my own collection properly (very embarrassed how I had stored the specimens) and catalogue it.



So, the room was booked, put on the Facebook page and soon Lorraine and Kevin Crisp were in touch offering help with Lindsay Harrison asking if he could bring his some of his own collection. Liz offered to photograph peoples specimens and it was decided to offer tea, coffee and cakes as this would be something of a social event. Rosemary Vidler then asked if she could bring her specimens and cake, followed by Mark Hatton and Julian Cruickshank (but no offer of cake from either of them).

On a lovely day, probably one of the best in some time we started to set up. James Archer brought along some rough-out axe heads discovered from the band of rock which the celebrated Axe Factory worked, including maps which showed some five hundred sites, and Anne Danson brought some of her specimens. There was no idea as to how many people would turn up, but most stopped for the afternoon.



Photo- Julian Cruickshank



Lindsay Harrison - Photo- Julian Cruickshank

Lindsay had brought specimens he had acquired over the years, but he has never labelled them (this happens so often) and wanted to know if people could identify the mineral and the mine it came from. Lorraine soon had her book on minerals out and there was a great deal of discussion, but we seemed to be able to work out what most of the specimens were and where they came from.

Lindsay also had probably the best example of a copper pricker I had ever seen and inscribed with W Casson. The pricker used to hang above the fireplace in the General Burgoyne in Urswick until Lindsay bought it some 25 years ago. The landlord's father had purchased it at auction in Broughton in Furness in the 1940's where it was sold as a meat skewer.



Photo Warren Allison

Lindsay thought it was W Casson who worked the Common Wood Quarry at Ulpha in the late 1800's but there was another W Casson who was from the early 1800's. The Metalliferous Mines Act of 1872 banned the use of iron prickers due to the risk of an explosion if it struck the rock creating a spark and they had to be made of copper, so we agreed it was W Casson from the late 1800's.

The room was full of chatter and Liz had started to photograph various specimens including Mark's rocks (axe head and roughouts) which seemed to take a long time and I didn't realise he had that much patience.



Photo- Julian Cruickshank



Photo- Warren Allison

Time flew and at 5pm we started to pack up after a thoroughly interesting afternoon and we all agreed to do another meet in the winter but open it to the local community and the schools who are still doing A Level geology. This was a great social event and one for a poor weather day.

Warren Allison.

Hodbarrow Walk, 12th March



The Outer Barrier, the Broken Ground and the collapsed Inner Barrier.

Ten members, including one on his first CATMHS meet, managed to find the Guide Hall in Millom secretly hidden behind the old library building. Greeted with coffee and biscuits, they sat and watched a scrolling presentation of photographs of the early pre-1900 days. I've only recently discovered these pictures and have no memory of where they came from!

Remember that this was a practice for the forthcoming NAMHO weekend, so the stakes were high. When all were duly assembled, I gave a presentation on the history of the mine from the early days when, in 1854, John Barratt saw the potential of a mine sited close to transport links so different from Grassington and Coniston. With a selection of maps and photos I charted the rise and fall of the mine and the town of Millom.



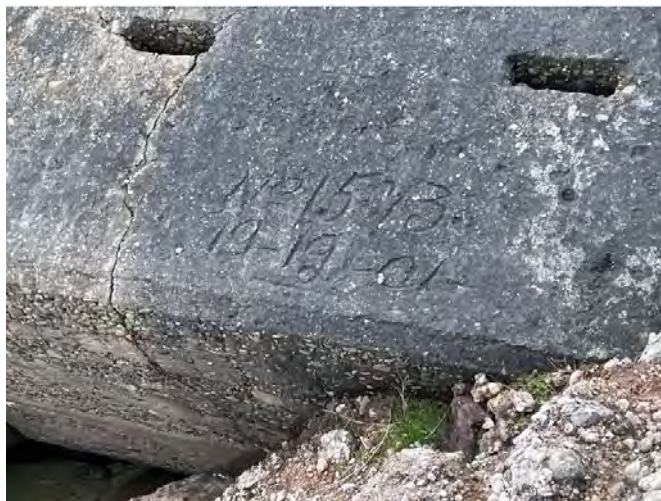
Cornish Beam Engine, Number 8 and 10 pit heads after closure (Raymond Clements)

After our indoor picnic, we drove up to the site. There is a view from the old Mine Office building that shows the Outer and Inner Barriers and gives a good picture of the layout and scale of the mine. The Hollow where the surface has collapsed into the underground workings was known as the Broken Ground and was once dry land but is now filled with deep water.

The first part of the walk is through a caravan site visiting the Foundation Stone of the first wall opened in 1890. The wall was built to access more of the ore body which was going out into the estuary. Close by, a caravan marked where the last headgear and shaft were before the closure in 1967. In the nearby field a metal plate covers the top of the ventilation shaft, now a two foot metal tube with sixty fathoms of water inside.

The collapse of the first wall led to a major project to build a more “flexible” structure to access an even greater body of ore which lay between forty and ninety fathoms deep in massive blocks over fifty feet thick in places. This was a world class project and the engineers came to Millom after finishing the first Aswan dam in Egypt. It took five years, cost £588,430 (£72 million today) and was paid for out of profits in one year. Output in 1907 was over half a million tons of ore.

The Outer Barrier starts with heaped limestone rocks before the 25 ton concrete blocks begin to face the seaward side. At first these are tumbled but gradually they become more uniformly stacked up. The lighthouse marks where sluice gates were installed in 1905 to drain water pumped from the mine. At the far end of the wall, the windmill marks the site of the earliest workings. Going down to the beach takes you to Towsey Hole where a short adit clearly shows the seam of ore that was one of the earliest points where haematite was extracted.



Each block numbered and dated (Richard Nielson)

Nothing remains of the main workings at Number 8 and 10 pits apart from a handful of bricks and a depression where the shaft has some dodgy timbers and slabs covering the infill. No.6 pit has a nicely raised slab over it. In the past it was possible to get under the capping to view the timbers of the shaft. A final walk up the old railway line completed the circle back to the cars.

Norman Nicholson, Millom’s poet, wrote in “Hodbarrow Flooded”

*... beneath the greening spoil of a town’s life-time,
The sixty, seventy, ninety fathom levels
Are long pipe and throttles of unflowing water,
Stifled cavities,
Lungs of a drowned man.*

Stephe Cove

PS – if you’ve never walked around the Sea Wall, you are missing a treat!

Newlands Valley walk

Meet leaders: Bob Mayow and John Pickin. Michael Pringle, Martin Lawton, Duncan Scott, Roger Ramsden, Richard Neilson, Bob Entwistle, Phil Newton, Julian Cruickshank, Liz Withey, Warren Allison, Mark Hatton and Abigail Mann.

This was another meet planned for the NAMHO conference and was to help iron out any potential problems. It was a pleasant spring like day when we met relatively early at the car park below Newlands Church, which was rapidly filling up.

Bob signed everyone in and gave a pep talk as to what we would be covering on the walk as well as helping to finalise the route. Slowly we walked up towards Little Town and cut off to the road which takes you up the east side of the valley. We were lucky to have Mark Hatton with us as Goldscope is probably one of his favourite mines and he picked the place where the whole site can be described, including how the German miners brought water from Little Dale on the west side of Scope End into the mine to drive an underground waterwheel before exiting on the east side to drive the processing plant. Mark was in his element here and the question arose as to how we captured this information for the conference meet.



Walking on we passed Littletown mine worked by the Germans and Barnes Gill mine, virtually opposite Goldscope and worked circa 1870, before reaching the Carlisle climbing hut below Near Broad Gill which was worked in ancient times before a two hundred yard long level was driven. It is thought that the climbing hut relates to the mine. John pointed out the huge walled enclosure and where a building had been on the opposite bank of the beck with the area being known as “New Land”, is this where the valley got its name from?

Arriving at Castlenook Mine, some had gone straight up to look at the waterwheel pit which was directly above the shaft with access by a short level just by the road. John and others walked down to the dressing floor where a leat came into to drive a waterwheel. Here John



pointed out that the spoil heap had been extended onto the leat indicating two phases of working. Walking onto the dressing floor there were the remains of a large ore bin and concrete flooring as well as a pair of settling ponds from the earlier period.

The ore bin with waterwheel pit to the top right

This was one of the reasons why the walks before the conference were so important as with Castlenook Mine the walk should come down to the dressing floors first then up to the mine entrance and then follow the leat up the valley, otherwise they would be missed.

We carried on up the valley to arrive at the large sheepfold which may have origins with mining and crossed over the beck to arrive at the eastern end of the German workings known as Long Work, one of the first they worked in the area. Martin had shot off to examine the crosscut driven circa 1920 to drain one of the German open workings. It was now time for lunch.

This open working is quite spectacular and there is much to see. John was in his element as this is a rich area for bucking stones. Until recently it was thought there were only a couple - how wrong we were. There are two known large ones just above the beck, but more are dotted around the site. People started to wander to look at the workings, the drained one having a lovely hand cut gutter to take the water away.



16th Century building

Warren and Liz were above the open-cuts, and Liz spotted what could have been a drain running the full length to carry away water, so John was called back for his advice. While waiting Warren spotted an area of spoil further up the fell for which no reason could be seen why this should be there. John arrived and while walking round pointed out another bucking stone inside a building with three feet thick walls, which he suggested could be 16th Century.

Walking along the line of workings John pointed out yet another bucking stone but the indentations were not deep.



John's bucking stone



Warren's bucking stone

They caught the others up at the pile of what has been described as smelted ore from hundreds of years ago. Here Mark was describing his theory and there was a large amount of discussion going on.



The pile of decomposed ore

At this time Warren showed John another bucking stone which he hadn't seen before, and this shows you can come back to a site time and time again and see things you had missed on previous trips.

We re-crossed the beck back to the open workings and walked back down the valley before crossing the main beck by a bridge before arriving at the Goldscope mine dressing floors.

Most people had already got up to the Grand Level and went to visit the underground waterwheel pit. The rest had a look at the dressing floors and decided to rest up before the others came back down the fell to meet up at Low Snab Farm. Mark, Duncan and Roger decided to walk round to look at the workings on the west side while the rest of us slowly walked back to the cars. Bob, Liz and Warren caught up with the farmer to ask about parking on his farm for the conference walks and had a long chat with him.



Looking east back to the open workings.

The farmer's (John Edmondson) grandfather had worked the farm in the 1920's and could remember the mine working and the miners, one being a Barnes from Braithwaite. (Neil Barnes worked for New Coledale Mining Company in the late 1980's and was from the same family) He also remembered seeing the old waterwheel from the 1800's lying on the ground rotting away. When he was a child at school (about 10 years old) he collected pieces of metal such as wheels, etc and took them to school, but unfortunately his father sold them for scrap. John has a huge interest in the mine and once lambing is over with, we are going back to see him and walk the dressing floors with him.

It was nearly five o'clock before we left the car park after a very interesting day in this superb valley with so much still to discover.

Bob Mayow and Warren Allison.

Beam Engines, Mines and Groses

The short article in Newsletter 150 by Warren Allison was interesting, and has prompted me to write this. I am surprised at the lack of Cornish Engines in the Lake District, but I assume that the article related just to the National Park. Be that as it may, anyone beginning an interest in the subject should be aware that a number of Cornish Engines were to be found in what I would call the wider Lake District – extending south to the edge of Barrow and also including the Millom area. A number of these are mentioned in “The Red Earth Revisited”. For instance one of the finest and most powerful engines ever built in Cornwall, the Borlase engine, finished up on No 8 shaft of Whicham Mine and the best remaining local engine house is found on No.2 shaft at Stank mine at Barrow. Being the only one in Cumbria still partly intact and recognisable it is well worth seeing.

It is worth mentioning that the Newcomen engines were not strictly Cornish Engines. Beam engines, yes, but they worked on a slightly different principle where it was atmospheric pressure that did the work, resulting from the creation of a vacuum in the cylinder when the steam was condensed by a cold water jet. They were not as powerful as the later Cornish engines.

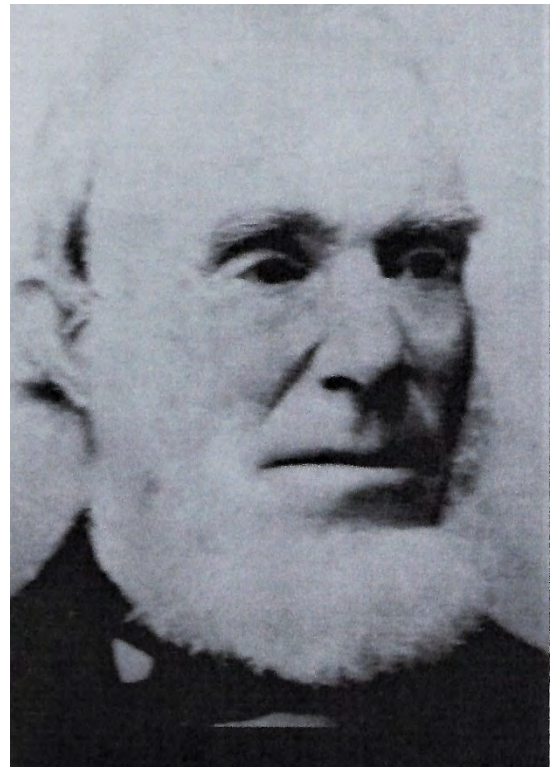
Now, there is one important name missing from the list of engineers who improved the efficiency of early Cornish engines, namely Samuel Grose. He was often described as the most scientific engineer in Cornish mines, and carried out improvements by changing the steam pressure and arrangement of the pipework, but his main accomplishment was to increase the Duty* from about 30 million to over 80 by what now seems to us to be an obvious method. All parts which had any contact with steam were clothed (we would now say lagged) with a relatively non heat conducting material such as sawdust. This included the main cylinder, which he made double walled with the packing in between. He built and installed a number of engines and his improvements were the principal reason why the Cornish engine became as popular and widespread as it did.

This Samuel Grose (1791 – 1866) was – like his father Samuel Grose (1764 – 1825) - involved with the Alfred Consols, a complex of mining activity in the Gwinear area near Hayle, Cornwall, and he was a first cousin of my Great Great Grandfather Matthew Grose (1788 – 1849). This Matthew appears also to have worked two setts nearby at Treglistian, Gwinear, leased to him for 21 years by the Marquis of Buckingham in 1806, and at the end of this term he moved with his whole family to the Isle of Man, becoming a Captain at Foxdale Mine. This was in 1828 and one of his eleven children was my Great Grandfather Matthew Grose (1819 – 1887); the father of Matthew Grose (1788 – 1849) was Matthew Grose (1761 – 1824) of Redruth, son of Matthew Grose (1732 - 1795) who came from the parish of St. Enoder, a mainly agricultural parish, but one where small scale mining was going on, and he moved to the major mining area of Redruth sometime before 1754 to improve his prospects. The father of Matthew Grose (1732 – 1795) was Anthony Grose of St Enoder who lived and died in the village, and in turn his father was Samuel Grose (1660 – 1727) also of St Enoder. All were mining men in their time. Now, Matthew Grose (1761 – 1824) was brother to Samuel Grose (1764 – 1825) who in turn was father to Samuel Grose (1791 – 1866), who is the important one. Believe it or not this Samuel had a mining engineer brother named Matthew Grose (1795 – 1853), about whom I know little except he was unmarried and a Copper Mine Agent.

However, it is worth noting that Matthew Grose (1761 – 1824) worked Somerset mines as did his brother, but that Matthew was an awkward character that people found difficult to get on with. He was certainly disliked by William Jenkin, the Marquis's Mineral Agent, who had a

low opinion of his abilities and always preferred to give jobs to Samuel. His mining did not go well, either in Somerset or later in Cornwall (Herland Mine), and to cut a long story short he died, having tried mining in Somerset again, with few friends and in abject poverty. This Matthew of course was my Great Great Great Grandfather!

It was not long before Matthew (1819 – 1887) followed his father into Foxdale Mine, working alongside him as an ordinary miner and learning the trade, but he was eventually appointed as Captain at Ballacorkish mine not far away when it reopened in 1860 having been shut down since 1811 and here he made a good reputation for himself and became well known and highly regarded and respected all over the Island. His endeavours and the development of Ballacorkish Mine under his leadership appear to have been mostly reported in the Manx newspapers, particularly The Isle of Man Times, Mona's Herald and the Manx Sun (along with his major domestic events). Occasionally he wrote something technical to do with the mine for the Mining Journal. He had a hand also in a number of other Manx mines, principally the important and spectacular mine at Bradda Head, Port Erin. His opinion was often sought as to the prospects and development of new mining sites. This Matthew married twice, having eleven children with his first wife who died in 1868, and five with his second. This is where I come in, as the third of these five was Laura Margaret Grose (1875 - 1941), who became my father's mother after her marriage to William Henry Cubbon. I have one very dim memory of her, as I was only three when she died.



Great Grandfather Matthew. Photographer unknown – about 1880.

A whole book could be written about my Grose relatives, as they crop up everywhere in mining in Cornwall, the Isle of Man, Shropshire, Flintshire, the USA and Canada. More of them are even called Matthew, but there is an Edwin William Wearn Grose, a son of Matthew Grose (1788 – 1849), who reckoned he'd found gold on the Isle of Man, and a Herbert Qualtrough Grose in Vancouver, Canada, and son of Matthew Grose (1819 – 1887) from his second marriage and brother to my father's mother. This one I have a clear memory of, as he came over to see his relations in 1947, and I remember a long afternoon over tea when he spoke enthusiastically to my father about his mining activities. I was still too young to fully take it in though! He died in 1956, and I have an album of photographs showing some of his mining work in Canada. We think his visit was, at least partly, a recruitment drive, and he specifically wanted my cousin Dennis Skillicorn to go out and work for him but neither he or any of the other relatives were tempted, so he left empty-handed ...

I hope other CATMHS members will have a go at tracing their own ancestry, you never know what you'll find, and looking at beam engine sites.

*Duty was the recognised way of expressing the efficiency of a Beam Engine in Cornwall. It

represents the number of lbs of water that could be raised through a height of one foot whilst burning one unit (a bushel) of coal. It is expressed as millions.

Most of the family research featured here was not done by me, but by Jane Skillicorn, the daughter of my cousin Dennis. She spent three weeks on the Island doing it and I am greatly indebted to her for her findings.

I need also to thank Kresen Kernow for information, and the Cornish Family History Society. Likewise, the Manx Archives and the Manx Family History Society.

The minerals mined were:

Ballacorkish: lead/silver, some zinc and a little copper.

Bradda: lead/silver, a little copper and some iron.

Foxdale: lead/silver and copper.

Further reading:

There is a superb Manx mines website which covers with a number of others, all the sites Great Grandfather Matthew Grose was involved with.

There is relevant information in HMSO 'The Metaliferous Mining Regions of SouthWest England', two Vols Pub. 1956.

Groses are mentioned where appropriate in 'The Lancashire and Westmorland Mineral Statistics with the Isle of Man' Burt et al, 1983.

There is much about the Grose brothers, Samuel and Matthew in Somerset in 'Men and Mining on the Quantocks' by Hamilton and Lawrence, Town & Country Press, 1970.

Information from unusual sources

Information on mining in Cumbria can turn up in the most unexpected place and I have recently found two pieces, one of which I had not come across before, although I have known about the Old Cumbria GAZETTER. Potential rich sources which could add to our knowledge is from railway publications and old guidebooks.

www.disused stations-org.uk- Relates to Braithwaite Railway Station near Keswick

The station was to open with the line on 2nd January 1865, Freight traffic was handled at Braithwaite in a yard behind the platform. In effect these were four short sidings, the two southerly ones forming a loop. Mineral traffic was an important element, with a small warehouse provided in 1866 to lease to the Goldscope Mining Co, followed in 1867 by a coal depot for the use of G I May of the mining company. In 1887 the extension to the warehouse to accommodate the Cumberland Lead Mining Company's product was approved. Lead and zinc was extracted by Thornthwaite Mines Ltd (later styling themselves Threlkeld Lead Mines, Thornthwaite) used the station's freight facilities; the company was active from 1873 until 1921. Timber was also loaded at Braithwaite. In later CK & P years minor extensions were made to the goods yard layout.

Old Cumbria Gazetteer.

Source: Guidebook. A survey of the Lakes of Cumberland, Westmorland and Lancashire, written and published by James Clarke, Penrith, Cumberland and in London etc. 1787; published 1787-93. Page 92.

“There are at present a few men employed in the lead mines close to the road. These mines have no particular names that I know of, but are near places called Jenkins Hill and Walker Yates: they have been only lately discovered and are not valuable.

Note- The above relates to Thornthwaite Mines near Keswick.



Wilkinson 1810 (plate 37)

Source- Print, uncoloured soft ground etching, Smelting Mill near Thorthwaite, Cumberland by Joseph Wilkinson engraved by William Frederick Wells, published by R Ackermann. Repository of Arts, 101 Strand London 1810.

Note- According to various sources the smelt mill is at Ladstock just south of Thornthwaite village and was apparently operational between 1798 and 1849.

Warren Allison.

Connection between Cumbria mines and Lancashire and Yorkshire mines

With Liz living in Carnforth, I wondered if there were any mines in the Forest of Bowland, which is but a stone's throw away. Looking at Northern Mines Research Society Publication British Mining No.33 "The Yorkshire and Lancashire Lead Mines" by M.C. Gill there are a number of mines in the Forest of Bowland and as far as Settle.

On reading the publication some familiar names associated with mining in Cumbria popped out, from the Clifford's in the 16th Century to John Taylor in the 19th century, to John Harold Clay, Ernest Gregory, McKechnie Brothers from Widnes and W T Shaw in the 20th Century. Another familiar family name, Captain John Borlase and his son William from Cornwall is also mentioned, and must be related somehow to Captain William Henry Borlase, also from Cornwall, who was the manager at Greenside Mine. (further research needed)

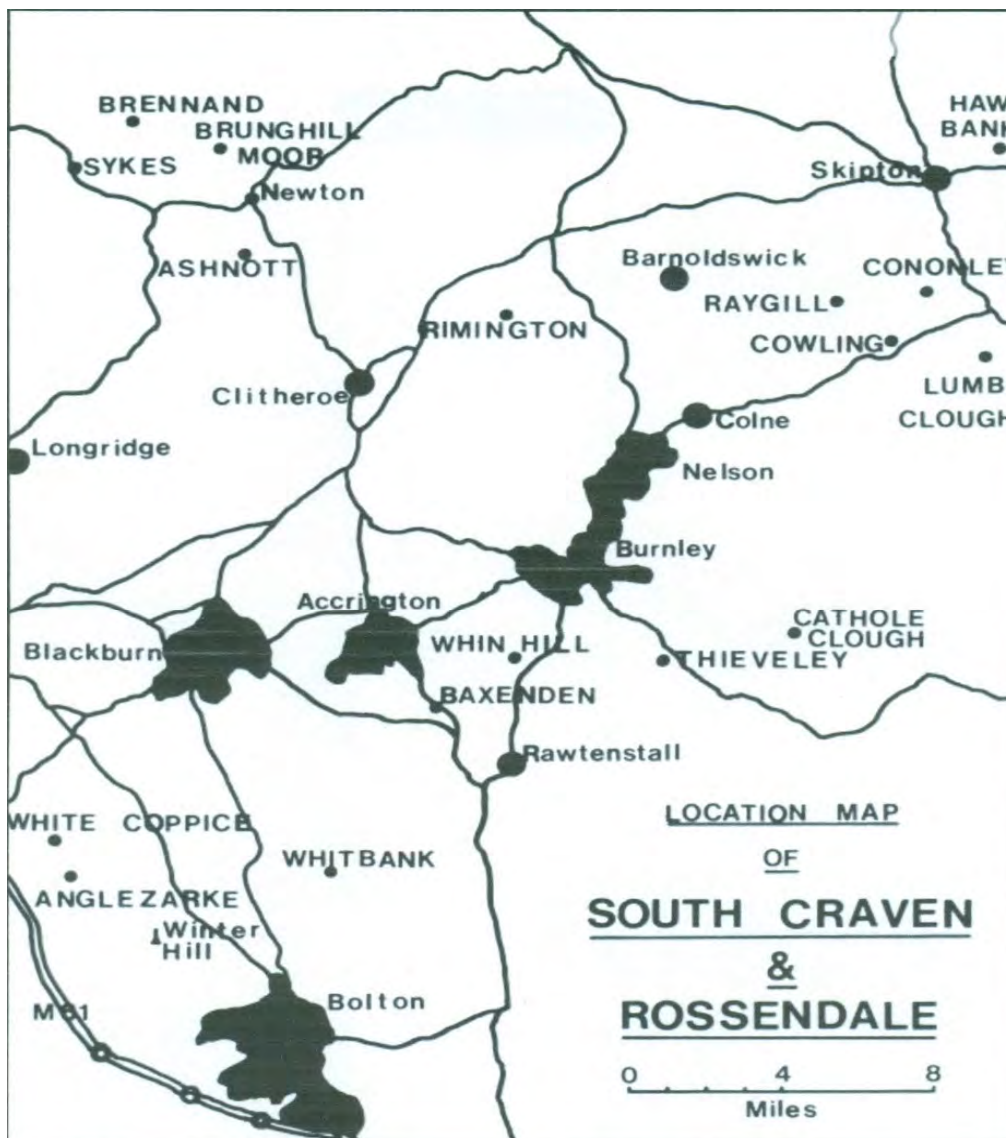


Fig.1. Location map of South Craven and Rosendale

The Cononley - Glusburn Lead Mine.

Lady Margaret Clifford. In September 1589, Lady Margaret Clifford, Countess of Cumberland had entered into a partnership with one Richard Cavendish of London, to take a

21-year lease on 100 acres on Gib Moor at Glusburn. The precise area involved is not known but, because the Cumberland's owned the adjoining liberty of Cononley, we are forced to conclude that it is on the line of the main vein between Mason's and Garforth's shafts. Nothing else is recorded of this venture, but it is unlikely that the lease was renewed, because Cavendish died in 1600 and the countess became estranged from her husband and went to live at Clerkenwell.

The Clifford's owned a huge amount of land in Cumbria and into Yorkshire and there are records of them mining and smelting around the Civil War under Lady Anne Clifford which will be the subject of a future newsletter article.

John Taylor. When John Taylor took over the management of the Duchy's mineral affairs in 1818, he instructed the then Barmaster, Joseph Mason, that he was going "to encourage adventure in all parts of the several mining fields, by liberal grants and fair duties, to be regulated by the circumstances". Whilst this was chiefly aimed at revitalising the Grassington mines, which had been increasingly moribund for a number of years, its effect was soon felt at Cononley. In 1820, James Garth and partners made an agreement with Taylor and Mason that they should take the mine and have their first twenty tons free of duty as an encouragement to their making a fair trial. There are records of only one parcel of ore being smelted and this supports the assertion that Garth "tried the vein in the 1820s, but lost his money". Certainly, there is a shaft, about 140 metres to the east of Engine Shaft, marked as Garth's Old Shaft on the working plan of the mine.

By 1825, Messrs Hall & Co. of Newcastle were working both the Glusburn and Cononley ground and raising some ore. This was a company of lead merchants with experience of mining in Arkengarthdale and the Derwent Mines, it was also working on the Bycliffe Vein at Grassington. Its interest in the Duke's mines was no doubt a product of the Taylor paradigm and his determination to attract experienced adventurers. As we know John Taylor was instrumental in developing the Coniston copper mines and his methods of mining appear to be replicated at other mines that he worked.

20th Century workings.

James Harold Clay. In 1927 the lease on the Glusburn ground had passed to James Harold Clay, of the Manor House, Thornton in Craven, who also had interests on Greenhow Hill and the Caldbeck Fells. He too had a licence, from Chatsworth Estates, to work dump material at the Cononley Mine for which he was charged an annual dead rent of £50 and a royalty of 1s per ton (2240 lbs), both merging with the other. Clay worked under the title of "British Barytes Ltd", and concentrated mining operations on Mason's Shaft. The Company also had a barytes milling plant at Silkstone Common, near Barnsley, which it had operated since 1927, and which was supplied with mineral from the Caldbeck and Glusburn mines. From January to May 1930, some 93 tons of dump material had been sold to T. Horn, of Leeds, for 10s 6d F.O.R. at Cononley Station. Some of the market for barytes at this time was with the paint, rubber and asbestos industries; where it was used as a filler.

In 1930, moves were afoot to float the Industrial Minerals Corporation Ltd, of which Clay was to be a director. He was to sell to it all of the assets of British Barytes Ltd for £8,000, of which £2,500 was attributable to good will. Mr Clay was also prepared to sell his leases of barytes mines in Cumberland and Yorkshire (i.e. Caldbeck and Glusburn) to I.M.C. Ltd.

The prospectus of this new company tells us that it was also intended to work the Glusburn ground, developed by Clay, in conjunction with the Cononley Mine. Some exploration work to this end certainly took place, and the incline was examined to the foot of Garforth's Shaft. The prospectus also tells us that auditors for British Barytes Ltd reported the following results for the period from 11th May, 1927, to 31st August, 1928, and each of the two years ended 31st August 1929 and 1930. After including all expenses, including depreciation on plant and machinery and buildings, but before charging interest on bank overdraft, the results were as follows: The period from 11th May 1927 to 31st August 1928, Loss £3,855 5s 3½d. Year ended 31st August, 1929, Loss £3,876 19s 4d. Year ended 31st August, 1930, Loss £2,228 18s 6d, total £9,961 3s 1½d. In consequence, no dividends had been paid by the company during the above period.

James Clay formed a company in the 1920's called the Caldbeck Mining Company to work Potts Gill Barytes Mine near Caldbeck and built a small dressing plant below No.1 level, selling the barytes in a washed state with most of it going to Barnsley for grinding.

In 1926 James also attempted to clear both the 30 and 60 fathom levels at Driggith Mine but found most of the old timbers in the stopes had given way, letting down large falls of packed waste which were difficult and costly to clear, and eventually the venture was given up without ever getting to the central and richest workings.

(Source- W. T. Shaw Mining in the Lake Counties)

Ernest Gregory, McKechnie Brothers and W. T. Shaw. Towards the end of the Second World War, Mr Ernest Gregory took leases on the Cononley and Grassington Moor mines, again working the tips for barytes. This man, who was also involved with re-working tips at Mary Tavy and Devon Great Consols Mines, appears to have concentrated his efforts upon the tips near the Engine Shaft and is not known to have worked underground.

The final and at the time a most hopeful development was the arrival of the firm of McKechnie Brothers of Wigan, and its attempt to re-open the incline in 1957. There were plans to extend the existing plant, with its three shaking tables, by adding the following configuration, which has been taken from the specification prepared by W.T. Shaw: a jaw crusher, fed by a hand loaded conveyor belt. The crushed spar to pass into a rotary screen, + 1/2" material being sent on to a roller crusher for further reduction. All of that material passing the screen to be sent to two sets of four cell jigs. Fines were then to be returned to the original tables. In the event, however, this mill, which was to be constructed from materials scavenged from the company's Driggith Mine in Cumbria, was never built.

Driggith Mine- In 1943 Messers W. & W. T. Shaw partially explored the 12 fathom and 30 fathoms levels but transferred the lease to Mr E. Gregory who raised some barytes from the old outcrop workings. Messrs. McKechnie Brothers of Widnes the recent leaseholders, bought out Mr. Gregory in 1948 and erected a dressing plant near the mouth of the 30 fathoms level. A little clearance work was done in the level and a rise driven through to surface for ventilation, but the old stopes proved too difficult to re-work and the venture was not a success. All this plant has now been removed.

McKechnie's were also mining Barytes at Potts Gill and Sandbeds mines on the Caldbeck fells as well as Force Crag Mine. (Source- W. T. Shaw Mining in the Lake Counties)

There is more research to do on connections in Cumbria with other mining areas.

Warren Allison

William Wordsworth and mining in Patterdale

William Wordsworth is not usually connected with mining in the Lake District, but he wrote two poems about a miner who spent ten years mining at a copper (?) mine in Patterdale and Silver from Greenside Mine.

To understand Wordsworth's connection with Patterdale, we must go back to when John Marshall the famous industrialist from Leeds bought land in 1815 on the shores of Ullswater at Watermillock and built Hallstead's, now the Outward-Bound Centre. John married Jane Pollard in 1795 and they had eleven children, five boys and six girls. In 1824 he bought Patterdale Hall Estate which included Greenside Mine, shared with Greystoke Castle. The family also came to own Buttermere, Crummock Water and Loweswater Estates (1814) Castlerigg Manor and Derwent Island (1832), and Monk Coniston Estate (1836). When John died in 1845 his estate was valued at £1.5 to 2.5 million.

John's wife had originally met William Wordsworth's sister Dorothy at school in Halifax when they were both six, and became great friends for the rest of their lives. Both William and Dorothy were also friends with people like the Clarkson's at Eusmere near Pooley Bridge, who were prominent abolitionists and helped spearhead the bill to abolish the slave trade in 1807. They spent a great deal of time in the Ullswater Valley and William also purchased a small estate in Patterdale in 1802, which is now known as Wordsworth Cottage, and frequently visited William Marshall (John's son) who owned Patterdale Hall.

The miner

The Excursion was originally meant to be part of a longer poem that was going to be titled *The Recluse*, and was meant to be a reflection on Wordsworth's views of man, nature, and society. *The Excursion*, *The Recluse*, and *The Prelude* were all meant to eventually go together, but Wordsworth never wrote *The Recluse*. There is a Preface to the 1814 edition of *The Excursion* that might be helpful in providing more context for that poem from Wordsworth himself. It follows several characters who discuss man, nature, and society.

Source Kate Payne, Wordsworth Trust.

THE CHURCH-YARD AMONG THE MOUNTAINS.

Close to his destined habitation, lies
One whose Endeavours did at length achieve
A victory less worthy of regard,
Though marvellous in its kind.

A Place exists
High in these mountains, that allured a Band
Of keen Adventurers to unite their pains,
In search of treasure there by Nature formed,
And there concealed:

But they who tried were foiled,
And all desisted, all, save he alone;
Who taking counsel of his own clear thoughts,
And trusting only to his own weak hands,

Urged unremittingly the stubborn work,
Unseconded, uncountenanc'd;

Then, as time Passed on,
While still his lonely efforts found
No recompence, derided; and, at length,
By many pitied, as insane of mind;
By others dreaded as the luckless Thrall
Of subterraneous Spirits, feeding hope
By various mockery of sight and sound;
Hope, after hope, encouraged and destroyed.

But when the Lord of seasons had matured
The fruits of earth through space of twice ten years,
The mountain's entrails offered to the view
Of the Old Man, and to his trembling grasp,
His bright, his long-deferred, his dear reward.

Not with more transport did Columbus greet
A world, his rich discovery! But our Swain,
A very Hero till his point was gained,
Proved all unable to support the weight
Of prosperous fortune.

On the fields he looked
With an unsettled liberty of thought,
Of schemes and wishes; in the day-light walked
Giddy and restless; ever and anon
Quaffed in his gratitude immoderate cups;
And truly might be said to die of joy!

He vanish'd; but conspicuous to this day
The Path remains that linked his Cottage-door
To the Mine's mouth; a long, and slanting track,
Upon the rugged mountain's stony side,
Worn by his daily visits to and from
The darksome centre of a constant hope.

This Vestige, neither force of beating rain,
Nor the vicissitudes of frost and thaw
Shall cause to fade, 'till ages pass away;
And it is named, in memory of the event,
"The PATH OF PERSEVERANCE."

The poem is summed up as a miner living in Patterdale who stayed on to prospect and dig after his companions had given up hope of finding 'precious ore'- presumably copper. After ten years persistence he succeeded, but his new wealth turned his brain. 'Giddy and restless' by day, drinking, 'immoderate cups' by night, he soon died.

Source Jeff Cowton, Wordsworth Trust.

From the description, I believe the mine could be Dub How copper mine on the slopes of Place Fell as it is close to Patterdale and the long slanting track that linked his cottage to the mine's mouth upon the rugged mountain path is as a good a fit as any.

Silver from Greenside Mine

Wordsworth's poem about the silver from Greenside Mine was to Cordelia Marshall (John and Jane's sixth child) born in 1803 and living at Hallsteads. It appeared in the collection *Poems Composed or Suggested during a Tour in the Summer of 1833*.

Here is the short introduction to that collection:

"Having been prevented by the lateness of the season, in 1831, from visiting Staffa and Iona, the author made these the principal objects of a short tour in the summer of 1833, of which the following Series of Poems is a Memorial. The course pursued was down the Cumberland river Derwent, and to Whitehaven; thence (by the Isle of Man, where a few days were passed) up the Firth of Clyde to Greenock, then to Oban, Staffa, Iona; and back towards England, by Loch Awe, Inverary, Loch Goil-head, Greenock, and through parts of Renfrewshire, Ayrshire, and Dumfriesshire, to Carlisle, and thence up the river Eden, and homewards by Ullswater."

Source Kate Payne, Wordsworth Trust

To Cordelia M Hallstead, Ullswater

Not in the mines beyond the western main,
You say, Cordelia, was the metal sought,
Which a fine skill, of Indian growth, has wrought
Into this flexible yet faithful Chain;

Nor is it silver of romantic Spain
But from our loved Helvellyn's depths was brought,
Our own domestic mountain. Thing and thought
Mix strangely; trifles light, and partly vain,
Can prop, as you have learnt, our nobler being:

Yes, Lady, while about your neck is wound
(Your casual glance oft meeting) this bright cord,
What witchery, for pure gifts of inward seeing,
Lurks in it, Memory's Helper, Fancy's Lord,
For precious tremblings in your bosom found!

Warren Allison.

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