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The Newsletter of the Cumbria Amenity Trust
Mining History Society



No. 152

August 2023

Cumbria Amenity Trust Mining History Society

Newsletter No 152, August 2023

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Society Officers and Committee Members

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New members

Simon Athersmith, from Ulverston.

Nick Roden, from Cockermouth. Nick is a professional photographer & videographer.

Amy McGowan, from Shap in Cumbria.

Forthcoming meets.

2nd – 3rd September. Nenthead weekend.

Details to be confirmed.

22nd – 24th September. Corris Slate District Weekend This weekend is intended to provide an introduction to the Corris Slate District for those who are not familiar with it and preference will be given to people who don't know the area.

Friday 22nd September

Depending upon interest we might arrange a trip to a local mine.

Saturday 23rd September

Either Braich Goch Slate Mine Easy Trip Grade E (ML Mark Waite)

Mark will lead people on an easy trip through the extensive Braich Goch Mine. This will be a full day underground but will not include any SRT. There will be some occasions where it is necessary to clip onto traverse lines, due to the route being close to an edge, and for these a belay type belt and cows tails, rather than a sit harness is recommended, Mark can provide belts if needed. Meet in the Corris Craft Centre car park at 10.00 a.m.

Or Aberllefenni Slate Mine Underground Grade D (SRT) (ML Jon Knowles)

Jon will lead a trip into Aberllefenni to see the last floor to be worked underground in a Welsh Slate Mine. The descent involves a loose slate waste slope and a near vertical ladder (2 sections which total 40m) which will be rigged with a rope for safety – harness and SRT kit required. Other than this the trip consists of walking along slate mine levels. Meet at a parking area on the edge of forestry at SH 774 108 at 10.00 a.m.

Saturday Night

It is hoped to arrange a meal at a local hostelry in Dinas Mawddwy. Further details will be provided in due course.

Sunday 24th September

Either Braich Goch Slate Mine SRT Trip Graded D (SRT) (ML Mark Waite)

Mark will lead people on an SRT trip into some of the more remote parts of the mine. Trip may include fixed ladders, SRT, and exposed traverses. Meet in the Corris Craft Centre car park at 10.00 a.m.

Or Aberllefenni Slate Mine Walk & Easy Underground Grade E (ML Jon Knowles)

Jon will lead what will primarily be a surface walk though Aberllefenni Village and then on to see some of the surface features of the mine before entering one of the mine levels where the enormity of the workings can be seen. Helmet and lamp needed. There is also a short section where if you cannot run quickly it may come over your boots. Meet in the NRW riverside parking area at Foel Friog NGR 769 093 at 10.00 am.

For people going to Braich Goch it will be necessary to sign a disclaimer which will be provided in due course.

Places on all the underground trips are limited. To book please contact Jon Knowles at jonknowles1@btinternet.com or 07920 231627.

1st October. Minerals Display at Ambleside Parish Centre.

Apology, Beam Engines – Mines and Grose

In the last newsletter the name of Brian Cubbon, the author of the article Beam Engines – Mines and Grose, was accidentally omitted. For those of you who don't know him Brian is a passionate Barrowvian living in Norfolk. He is a supporter of Newland Furnace Trust and the instigator and principal author of the recent CATMHS publication Red Earth Revisited.

Plans at Brandlehow mine refused

The application to demolish the Mine Manager's house at Brandlehow has been refused.

There were three reasons for refusal, summarised as:

1. The current building has evidential, historical significance, aesthetic and communal significance, including its connection with the former mine workings which would result in a heritage asset causing substantial harm to the World Heritage Site.
2. Visual effect of the development would be adverse
3. Insufficient information is available to conclude that the development would not have an adverse impact on the integrity of the adjacent Special Area of Conservation, part of which is Derwentwater. This is to do with contaminated ground.

National Park Historic Environment Officers annual meeting

Each National Park hosts an annual meeting of their archaeologists and those with an interest in the historic environment, which looks at various aspects in the area hosting the meeting. This year it was the turn of the Lake District and Eleanor Kingston asked if on behalf of the CATMHS I could take them into the Horse Crag level at Tilberthwaite mine, just for an hour. Meeting at the car park on an early evening in May, we split into two groups of around ten with the plan that Eleanor would show her group around the mill and describe the work that was undertaken with the Coniston Copper Project, and I would take the second group into the closehead on the Horse Crag level.

Arriving in the closehead, using photographs I described how the CATMHS re-opened the level, which they amazed at the work that had been done and they commented that they had not seen anything like this in their areas. We only had an hour on site as their evening meal was beckoning,

Watershed project

This was a strange request to meet two artists, which came from the Environment Agency through Peter Bardsley, who is one of their representatives on the Mines Forum. Harriet and Rob are environmental arts researchers and have been working together as "somewhere nowhere" for the past twelve years and have also worked with the Environment Agency for several years on various projects. Their work predominantly focuses on the nature and culture

of place, specifically in rural spaces. Harriet is currently doing a practise led PhD centred in the Ullswater catchment area and has secured funding to do a short-term project called Watershed. The project brings five artists and members of the Ullswater Valley community together to share perspectives - what makes the valley special, what is loved, and to enquire into landscape change. The process involves a series of conversations, opportunities to join artist-led events, and the production of a range of art works to be shared at a final event reflecting on different perspectives in the valley. It focusses on memories, experiences and aspirations for the landscape and ecosystems in the Ullswater Valley and how art can capture and inform the way the place is valued and what it is valued for.

Meeting Harriet and Rob at the Glenridding Tourist Information Centre we met Pete Barron and Issac Johnston from the John Muir Trust, who manage most of Glenridding Common in their office. I took the opportunity to show them a presentation of the mine so Harriet and Rob had an understanding before we went up.

We walked through the lower part of the mine onto the top of No.1 tip which gives a fantastic view of the Glenridding Valley, where the site was described. It soon became apparent that they had not realised what an impressive and historical place it is. The most nerve-racking part was the interview which they both said gave them a totally different perspective of the mine, it's impact on the community, the landscape and how the Parish has still not recovered from its closure in 1962, shown by the housing occupancy being at 40% and only around twenty eight children at Patterdale School when it was a hundred or more even into the 1950's.

There were photographs to take, which was very interesting and different as Rob used a camera which required him putting a hood over it and his head.



I must admit that I am not one for art, but this project showed just how important it is to engage with people who don't have an interest in our industrial past and its impact on the landscape and communities, perhaps summed up by the following two emails after the visit to Greenside.

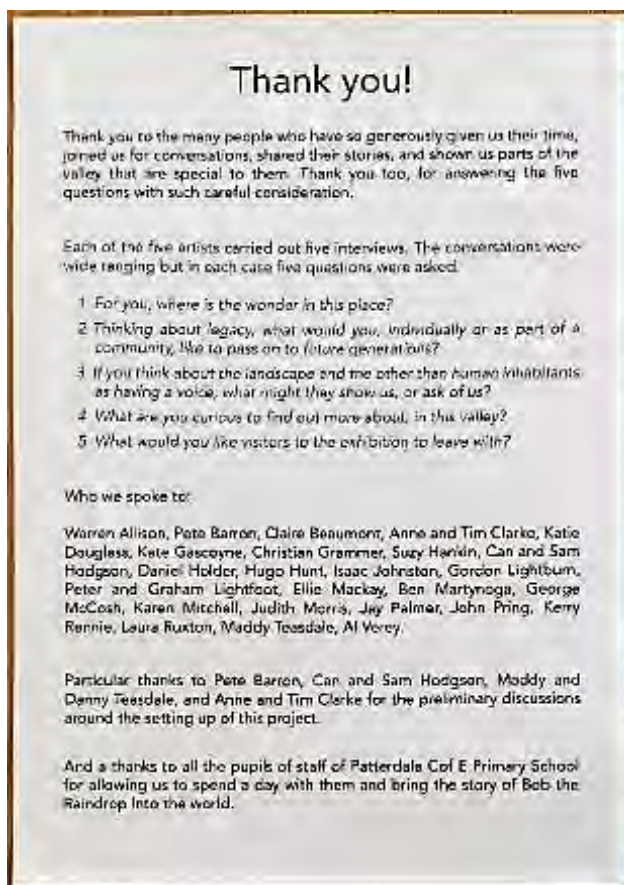
Harriet - Thank you so much for making time to meet Rob and me last week, and for sharing so much about the history of the mines. We were so inspired by our time with you and went on to talk to others about it - and I can tell you, everyone wants to know more!

Rob - Both of us loved our time with you and have now become advocates of the cultural value of the mines.

There was an official opening night which was well attended by those who had contributed to the project from many different parts of the community and the project was on show to the public from the 19th to 21st July in Glenridding Village Hall.

The thank you to all the contributors has below it a photograph of Greenside, which I think reinforces why we should become involved in projects such as this even if it is outside our comfort zone.

Warren Allison.



NAMHO 2023 Conference

The annual conference titled “5000 years of Mining and Quarrying in the Lake District” was held from Friday 7th to Tuesday 11th July at Grasmere Village Hall. We had hoped to have the camping and car parking in the field opposite the village hall, and although the National Trust as landowner had waived the part of the tenancy agreement with the farmer which did not allow camping, they had consulted with the Grasmere Village Society who objected, and so camping was moved to White Moss at a significant cost to CATMHS.

The hall was set up during Friday ready for the registration of delegates and the evening meal. Each delegate had a pack containing all the information they would require for the weekend even down to a brief history of the sites they would visit and recommended directions how to get there. It was a hive of activity with the tables and chairs for over eighty people to set up, trade stands, sound equipment, an art display provided by Celia Dring which certainly brightened up the hall, and, most importantly, the bar. Alternative visits had been suggested for people coming to the conference who had little interest in mining, and the Wordsworth Trust in Grasmere were very generous to offer a reduced rate on visits to Dove Cottage for conference delegates.

The hall filled up and was alive with chatter as people met up, many for the first time since the last conference. As this was a social event and people did not want to hear long speeches, very short introductions were made by Warren Allison and Chris Cowdery, and the bar was open with a guarantee that it would not run dry. Following a lovely meal served by the caterers with military precision the hall was buzzing with conversation. Around 10.30pm the Mountain Goat minibus arrived to start transporting people back to White Moss camp site, with Michael Oddie in charge of herding people on to it.



Saturday arrived with people either going on the trips or starting to arrive for the conference lectures, with over forty in total. The lectures were very well received as was the cake during the breaks, and it was clear that having Les Williams from Hidden Earth bringing his sound equipment made a huge difference. COMRU brought one of their vehicles and what a fine sight it was outside the hall.

People from the trips started to arrive back ready for the evening meal and once again the hall was alive with the sound of chatter. The three-course meal was once again served superbly, and the conversation carried on right to the end of the evening, when the minibus arrived again. Michael Oddie was again in charge but rushed into the hall saying he was having such a chat with the driver he had left his pint on the bus!

Sunday came and the hall started to fill with delegates coming for the lectures, with others having already departed for the various trips. The lectures finished at 5pm and the hall was immediately being cleaned up with many people helping.

Trips had also been arranged for Monday to working sites and on Tuesday to mines further afield.

The conference has been a great success judging by the comments many people have made which is due to the input of so many people and organisations behind the scenes, who were listed in the “Thank you” banner at the entrance to the hall and all are to receive a thank you letter from the Society. A special thank you needs to go to Chris Cowdery who initiated the idea of hosting the conference and John Aird, being the main organisers, without whom the conference would not have been the success it was.



The CATMHS committee had decided that we should put on the best possible conference, and it fitted in with our charitable aims for the public good. It has reinforced some of the partnerships the Society has with the National Trust, Lake District National Park Authority, British Geological Survey, Newlands Trust, and some landowners, but has also forged new links with local farmers, the Wordsworth Trust, local quarries and mines and acquired new members. Our profile has been raised locally and nationally.

The legacy of the conference is that the considerable effort by many members that has gone into providing the conference has made the Society stronger, more active and more widely

known. Engagement with Grasmere primary school in geology as part of the school curriculum is currently being planned to start in September, when members of the Society will visit the school.

Warren Allison.

Reflections on NAMHO 2023 by Chris Cowdery.

I attended my first NAMHO Conference in 1999 (Forest of Dean), and have been to all of them since. They have run every year with the exception of 2001 (Foot & Mouth) and 2020 (Covid). They are held in a different location every year, examples being Cornwall, Tamar (Devon), Edinburgh, Llangollen, Aberystwyth, Alderley Edge, Peak District, Nenthead, Cleveland, and no doubt some more that slip my mind. It's always a highlight of my year, because not only do I get to go on lots of trips that would usually be difficult to arrange, but I also get the chance to catch up with old friends that I only see once a year.

CATMHS last hosted the conference in 2004, and I felt that we should host it again. John Aird agreed, so we put it to the CATMHS Trustees. After some animated discussion and a proposal containing details of how the conference would run, agreement was reached and detailed planning could start. This was eighteen months before the conference ran.

An enormous amount of work went into setting up the programme of lectures, field trips (surface and underground), catering, bar, venue, camping, website, 'customer service', publicity, information, rehearsing, merchandise, banner stands, trade stands and so on.

Booking opened on 1st Feb 2023, and as expected, the 'hardcore' trips were soon booked up (although last minute changes meant that in practice not many were at 100% capacity on the day).

As the conference drew closer, planning became more detailed, which usually means that the list of tasks seems to get ever longer rather than shorter! But come the date, everything was in place.

The conference kicked off on Friday 7th July, and in a blizzard of activity, was soon over! From my perspective, it ran well. The planning (and the contingency planning) worked, so problems arising could be resolved without perceived disruption to the programme. Trips ran, delegates had the information they needed (assuming they actually read it!), food arrived and was eaten, large quantities of beer were consumed and last minute changes could be accommodated.

The question I ask myself is, if we did it again should it be run differently?

The biggest cause of stress was the camping. It is essential for a NAMHO conference to offer camping. I would be displeased to hear that somebody could not afford to come to a conference that we hosted. I originally thought that with the large number of green fields in Grasmere, finding a friendly farmer that we could negotiate with would be straightforward. Unfortunately, although Grasmere is an ideal location from a travel perspective, and has an ideal venue in the

village hall, village politics preclude camping anywhere near the village. There appears to be a complete local stitch-up!

We obtained permission from a local farmer (who as it happens had known many early CATMHS members and members of the New Coledale Mining Company) to use his field, which was opposite the Village Hall. His landlord (the National Trust) agreed. However, the Grasmere Village Society were able to put a stop to our plans. We then investigated using part of the Grasmere Sports Field, but they were particularly unhelpful, bordering on obstructive, leaving us with the White Moss field as our last option. This necessitated providing a minibuss transfer service to the Village Hall, and required us to provide a campsite attendant during the day when delegates were all out on trips. It also meant that we had to block-book the public car-park next to the Village Hall to ensure our delegates had convenient parking, which required car-park attendants to keep members of the public out. All in all, workable but not ideal, and incurring extra expense!

What about a different venue? Rydal Hall had planned to do substantial building work on their 'Bulley Barn'; whether they actually did or not I don't know, but that could have worked better. We could have booked the entire Grasmere Sports Field, which would have given ample camping space, but their buildings are completely unsuitable. Would the lectures and evening events have worked in a marquee if the weather was wet and windy? Not terribly well I suspect, and it wouldn't have been much of a refuge for campers. Ambleside Parish Rooms are great, but there's nowhere near enough parking. Conistone is too far from trips in the Northern Lakes. Threlkeld is too far from trips in the Southern Lakes.

Before the conference (and during) there were remarks about whether the dates chosen were optimum to achieve a hot dry weekend. I felt that trying to set up an event on the basis of likely weather was highly optimistic in this country and we should just hope for the best and plan for the worst!

The sheer quantity of beer drunk at a NAMHO conference often catches out the organisers. I was keen to ensure we had an adequate supply, which we did! About four hundred pints were drunk over two nights, which seemed an admirable effort.

We realised that all of the proposed NAMHO trips would make for a great CATMHS Meets List. Meets Secretary Julian Cruickshank did a sterling effort in setting them up, which gave the meet leaders a chance to practice on a tame group. I attended as many as I could, Cumbria being a fair drive from Peterborough just for a day out, but I very much enjoyed them all.

The website booking system worked well, trips were very well run by a large number of very competent helpers. I was particularly gratified to hear of trip locations being completely re-rigged to bring them up to a high standard. The food and drink went down well, and the lecture programme went off very smoothly. Teas, coffees and cakes were served during the breaks in the lecture programme, the trade stands added depth, and Celia's artwork made the venue look special.

Overall, if we did it again, I would ensure that the venue, parking and camping were all clearly resolved before committing. Everything else worked well and apart from a lot of effort, was pretty straightforward to do.

Some statistics from the conference:

Total delegates: 181	Helpers (total): 51
Speakers: 14	Trip leaders / helpers: 32
Total surface trips: 15	Total underground trips: 22
Campers: 66, of which 50 were tent occupants.	Friday evening food: 72
Saturday evening meal: 90	Beer consumption: Approx 400 pints
Polo shirts sold: 18	Hoodies sold: 14
Number of e-mails received: 2647.	

The Program:

Surface trips

Geological walk at Buttermere
Coniston Coppermines walk
Force Crag Mill
Langdale Axe Factory Walk
Newlands Valley Walk
Derwentwater Mines Walk
Hodge Close Slate Quarries Walk
Newlands Furnace
SRT Practice

Underground Trips

Borrowdale Wad Mine
Carrock Tungsten Mine
Caudale Moor Slate Quarry
Coniston Horizontal Levels
Coniston Slate Quarries
Coniston Through Trip
Goldscope
Wythburn
Greenside – Lucy Tongue
Tilberthwaite Mines
Thrang Crag
Hudgillburn
Nenthead
Wanlockhead

Visits:

Dove Cottage Visit
Burlington Stone Quarry
Shap Blue Granite
Kirkby Thore Gypsum mine

Leaders

Julian Cruikshank & Lorraine Crisp
Chris Bunker & Duncan Scott
Ormonde Joel & Trevor Cooper (NT Volunteers)
James Archer & Tom Rumsey (NT)
John Picken & John Ashby
Lorraine Crisp & Kevin Crisp
Michael Pringle & Carl Barrow
Dave Robson
Dave Hollingham

Leaders

Iwan Fletcher & Tracey Binks
John Brown & Sarah Westmacott
Jon Knowles & Mark Waite
Mark Hatton & Richard Neilson
Robert Gurr, Pete Archer & Angus Gurr
Michael Oddie & Rob McClymont
Nick Green, Allan Richardson & Lloyd Briggs
David Lund & Dave Hollingham
Warren Allison & Liz Withey
John Brown & Sarah Westmacott
John Aird & John Ashby
John Brown & Sarah Westmacott
Leif Andrews & Dave Gledhill
John Aird & Chris Cowdery

The Wordsworth Trust

Ian Kelly

James Johnson

Brian Litser, British Gypsum.

Lectures:**Presenter**

Ian Matheson

Richard Smih

Stephe Cove

Dave Robson

Jamie Lund (NT)

Richard Smith

Graham Brooks

Warren Allison

Eleanor Kingston (LDNPA)

Ormonde Joel

Eimear Deady

Roy Starkey

Sally Taylor

John Picken

Rebecca Cadbury-Simmons

Eleanor Kingston (LDNPA)

Lecture Title

Fifty years of exploration and conservation – CATMHS contribution to Lakelands Mining Heritage.

Mining and Smelting in the Caldbeck Fells.

Hodbarrow Iron 1840-2023.

The Story of Newland Furnace.

The archaeology of the Lake District extractive industries – its legacy, significance and future.

Medieval lead smelting.

Coal mining on the Caldbeck Fells.

The history of Greenside Mine when working through original photographs.

The history and conservation of mining sites in the Lake District.

Lake District National Park Archaeology Volunteer Mine Survey Results.

The geology and mineralisation of the Lake District. Revisiting historic mining areas from a critical minerals perspective.

Nature's Treasures – the legacy of 300 years of mining.

Tracing the stone artefacts of Cumbria's first farmers, from upland quarries to lowland settlements and far beyond.

Stone hammers, mortar stones and early mining in Cumbria.

Land of Lead & Silver.

Coniston Copper.



Family connections at Yarlside mine

In the last newsletter I recorded new member, Andrew Fyfe, from Steyning, West Sussex, who wrote '*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.*' This resulted in some interesting correspondence:

Peter Sandbach asked me to forward some information on William Boulton and Thomas Storey from some 19thC press cuttings

Alan Fyfe responded: What a treasure trove you have sent me! I have been researching my grandfather Edward Boulton's family origins and that of his parents Mary Ann Storey and William Boulton. I had always heard WB was referred to as the Ironmaster of Roose but had only in the last twenty years found some limited history of his mining activities. My grandfather was born in 1875 and did not leave home until around thirty and did not marry until he was forty after meeting my grandmother who was an officer in the British hospital in Alexandria in WW1 as a nurse. My grandfather was a Captain in the 19th Battalion of the Rifle Brigade, also in Alexandria.

Thank you so much for sending the information. It really brings so much colour to our family history showing how Wm Boulton went from retail to farming and mining the land he was a tenant farmer of (Duke of Devonshire). I know the law about mineral rights has changed in UK but I often wondered how the Duke of Devonshire reacted to his farmland becoming in part a mine. 50% royalty answers that question!

I had little information from my grandfather about his brothers who all seemed to have died or emigrated long before I was born. Now thanks to you I have news of two of his brothers in S Africa. I had found through DNA descendants of his younger brother George who emigrated to Canada as a surveyor. Two electrical engineers in S Africa is new information.

I am so appreciative of your gift to me of all this information.

I was sent to work in Peru in 1961 and married a year later. One of my sons Charles Fyfe is the financial business partner of a Canadian mining engineer of scottish descent and together they own a zinc mine and a gold mine in Peru. And there was no prior knowledge of his great great grandfather's mining activities in Lancashire/Cumberland/Cumbria.

And further (to Peter)

Over the last twenty plus years, thanks to the internet, I have been steadily researching but you have shed a whole new light on William Boulton's actual life. Ironmonger, tenant farmer and mine owner with his brother-in-law Sir Thomas Storey.

I recall my grandfather talking about living at various homes as a child - Springfield first and after which every home he lived in that I recall was named Springfield which I now find still exists half a mile south of Ulverston Station as Springfield Mansions, divided into many flats; Park House in the outskirts of Barrow in Furness, and finally Croft House in Roose. He thought Park House had burned down but I have located a photo of it still standing.

One of my great aunts recalled that the Boultons used to field a cricket team from the area to play against the Duke of Devonshire's team at Chatsworth. That would account for some pictures I saw as a child of very well dressed people in front of a large mansion unidentified and one of the earliest cars. I do not know what happened to that album but we no longer have it.

I had picked up some bits and pieces about the Yarlside Mine, the tramway, and the mine accident you found. I followed the development of Barrow until it subsumed Roose and Stank. Stank is believed to be home of the Boultons of the area for centuries according to a privately published book of the Bolton family written by American Bolton's and published in 1898. I have a copy and in a Chapter on the Bolton's of Furness it includes an interview at Park House with my great grandmother Mary Ann (Storey) Boulton and description of the interior wainscoting and oak beams etc.

My grandfather Edward Boulton and two brothers were educated at Hawkshead Grammar school and I took a photo of the register entry in around 1885 when he was ten showing their address changed from Springfield to Park House.

I was unaware of the death of one of his brother's in S Africa and that another had also gone to work there. Grandpa crossed them off saying they emigrated and died/lost touch so I had no information until you provided the news item.

My sister was a magistrate like our great grandfather but in Eastbourne. She was happy to learn of this connection.

We lived with our grandparents so absorbed a lot of information from grandpa over the years and gradually the picture has become so much clearer.

I hope to make it to the area soon. I am 83 but still very active so it is possible.

Peter replied:

The newspaper files were put together for the Red Earth Revisited which I helped to edit. Springfield was previously the home of Robert Hannay, Schneider's partner and Aldingham Hall was an even larger mansion built by an elderly clergyman. There has been a great deal of development this century at Parkhouse farm and if anything remains of the original it is hidden in new buildings.

It is my impression that Thomas Storey had little to do with Yarlside other than putting his name to it and, presumably some capital. Certainly Thomas Storey felt on his own when the ore was running out.

From Lindsay Harrison:

I read in the recent newsletter we have a new member named Andrew Fyfe from West Sussex who mentions that his Great Grandfather was mine owner of Yarlside Mine at Newton in Furness where I live. In our village at Newton in Furness adjacent to Stank and Yarlside mines we have a row of cottages called 'Boulton Row' dating from 1860. I have asked around the village but could not find any direct evidence linking them to Andrews's Great Great Grandfather. However only very recently I have been shown some deeds selling the land, signed by William Boulton of Parkhouse, so I will get in touch with him.

Coniston Old Man slate-working sites - Proposed future interpretation plans.

The remains of slate working operation on Coniston Old Man must be one of the most remarkable industrial relics in our region. Over past centuries various methods have been used on the mountain to obtain the quality slate-rock from its source, both from shallow deposits and also from a number of extremely deep locations within the mountain. Today underground parts of the mountain structure consist more of huge open voids than of solid rock. Over the period of operation the community of Coniston has provided an extremely skilled work-force required to mine, quarry and process the material on the mountain. A rail transport facility was also developed to carry the manufactured slate products away from Coniston to customers throughout Britain.



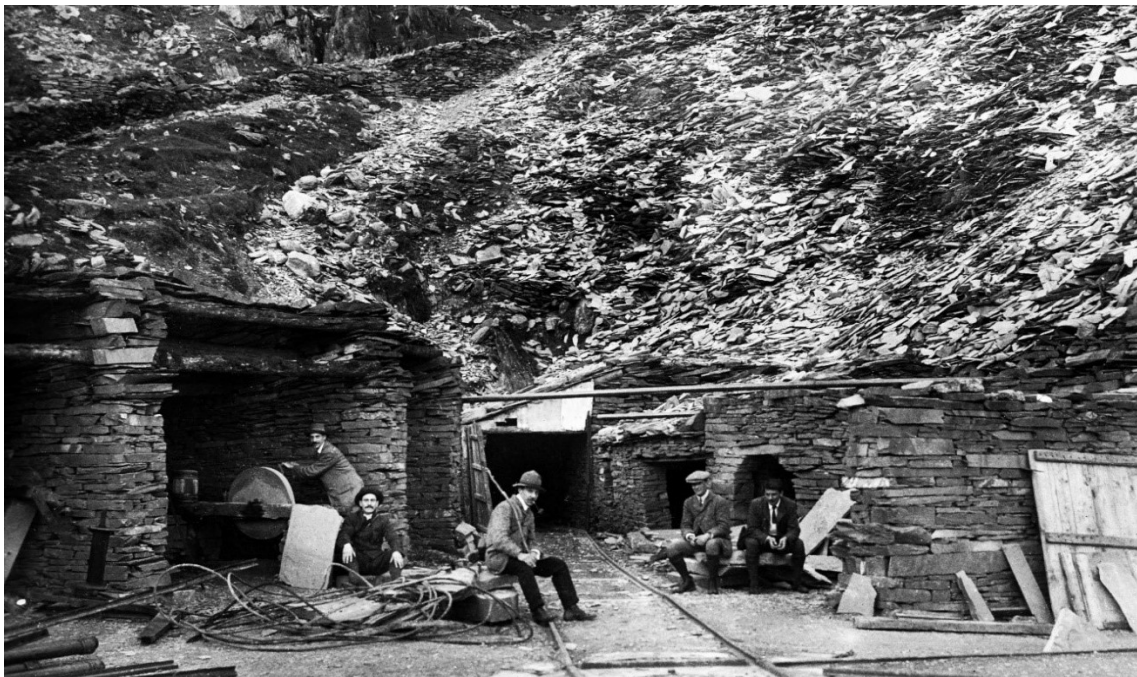
From left to right: George Brownlee, Tommy Birkett, Charlie Major, Pete Richards, Mickey Jones, Alf Coward, Ernie Major.

A significant number of the workings have closed down now but three operating sites remain and there is, hopefully, the potential for some of the smaller workings to be re-established which will provide essential revenue for local people other than from just catering for tourists.

We are very lucky to have the knowledge and expertise from several local former slate-quarrymen who worked on the mountain. One in particular, Donald Kelly, has a remarkable memory for events and incidents that happened within the slate workings. He remembers clearly the event that occurred in 1956, three years after the Coniston Old Man Quarries had closed down. An order was received for a large quantity of roofing slate of a particular grade to repair damaged roofs of the Houses of Parliament in London. The original slate had come from Coniston Old Man. To meet the order Donald, who at that time was working at the Brossen Stone site on the Old Man was asked to try to re-establish production at the former site on the Old Man. He collected together a small team of experienced slate-quarrymen, including his father Charlie Kelly and two former colleagues and re-establish services at the site. He then set off a single blast in the Middle Moss Head chamber which proved to be a huge success. Slate block was transported from Middle Moss Head and taken down the mountain, using the original aerial flight system. Slates were made to order and shipped from Coniston to schedule.

During the 1980's work started to interpret the past history of slate working on the mountain. This was overseen by the local Coniston Heritage Lottery Team. Work progressed for nearly twenty years after which a smaller group with specialist knowledge of the working of slate in Cumbria oversaw further development. It is quite clear to most people that slate working as an industry must be protected and encouraged to develop. Today Robert Gurr and Alastair Cameron are reviewing certain sites on the mountain mainly to ensure that we have full data on each one and to prevent further deterioration taking place. We plan to set out a programme for any stabilisation work that may be required, in conjunction with Carter Jonas Ltd, the land agents for Richard le Fleming who owns the mountain.

We are also concerned about the damage through vandalism that occasionally occurs. Fortunately, last year we were able to get action taken by the local police when the entrance to the Saddlestone Mine on the Old Man was illegally and dangerously re-opened by a group of visitors to the area. We understand that some action was taken by the police and we want to make sure that these types of foolish acts do not occur again.



'Gentlemen' on the Saddlestone Bank on a Sunday morning, up to no good

Work on the site at the moment is concentrating on the Scald Cop workings, the highest workings on the north-east shoulder of the mountain. Again, with the help of Donald Kelly who has provided information on his father, Charlie who worked at Scald Cop, we have been able to build up a picture of operations at this site and how it linked in with operations at the adjacent sites of Low Water and also Cove Quarries. The large open shallow pit at Scald Cop is an extremely interesting feature that will require future study.

Robert is also carrying out work to identify previous rail links that existed in the Low Bank, Brandy Crag and Scald Cop areas of the mountain. We believe that a 'primitive' transport system, known locally as a 'hurrie', pre-dated the more recent aerial flights and counterbalanced incline railways, and allowed quarrymen to transport slate rock, and made-slates, down a prepared route on the mountain-side by sliding the rock down on a wooden base. This investigation will give us a clearer idea of the early history of transport on the mountain.

Alastair Cameron.

Movement in the Borrowdale Wad mine.

Abandoned Mines are rarely static environments that remain the same over the long term. All sorts of factors cause changes to occur which may often mean the ability to navigate through the mine alters over time. One of the most common causes of change are collapses, where rock moves around inside the mine. For example rocks may fall when roof supports fail, or rocks may fall from the fractured and weakened hanging wall of old stopes, or wooden stemples supporting deads (waste rock left inside the mine by miners to create platforms or walls and which save the rock being carried out and tipped on the surface) may weaken and fail, allowing those deads to fall and be redistributed around the mine. So when exploring old mines, even on very familiar routes, it is not uncommon to find significant changes that have created new obstacles and possibly new openings. One recent example of this has occurred in The Wad Mine.

The Wad Mine was worked by Miners over some three hundred years, and they created a labyrinth of tunnels and shafts which in that particular mine are called Stages and Pipes. For many years the mine attracted robbers who tried to gain access to the workings without permission, intent on carrying off some of the highly valuable graphite. One way to prevent this was to block up all of the entrances other than the lowest working level called Gilberts. A secure building was constructed over the entrance to Gilberts so all movements in and out of the mine could be controlled by guards, who were posted there at all times. As a result of this arrangement all spoil (waste rock), produced by the mining operation in the search for the elusive Wad had to be moved down to Gilberts Stage, from where it was trammed out along the level and through the guard building to be tipped outside. Getting the waste rock down to Gilberts was a laborious exercise as it could mean carrying the rock long distances through the mine, along various stages and dropping it down various pipes until it finally reached Gilberts Stage, from which there was a long way to haul it out to day. But during the years when the mine was very productive and highly profitable, such time consuming work could easily be affordable.

However, in the later years of the mines operation there was a great deal of waste rock being produced but very little graphite was being found. So losses were being made and costs had to be cut. One easy money saving device was simply to tip the waste rock down the nearest pipe but not clear that rock out by moving it all the way down to Gilberts and tramping it along Gilberts to the surface. That waste rock is still blocking up many of the pipes within the mine. The Grand Pipe is the largest shaft in the mine, the top of the Grand Pipe being at Farey's Stage and the bottom some ninety metres lower at Gilberts Stage. The bottom forty five metres of The Grand Pipe are today completely choked up with spoil. Much of the Grand Pipe has a diameter of over twenty metres, so there are over 14,000 cu metres of spoil now deposited in that pipe. Other pipes elsewhere in the mine are also choked with spoil.

One day I was taking a group of novice mine explorers through the Wad Mine and we had had a good day descending from Gill's Stage down to Farey's Stage. Some of the group were tired after their first experience of using SRT and exploring all of the many nooks and crannies of the ground between these two stages. Having arrived at Farey's I told the group that we would very soon be at the top of The Grand Pipe, which we would easily cross using the traverse I had installed on our way up the hill that morning, and then we would be back in the daylight for the final walk down to the cars. But as we walked along Farey's we came across a huge hole in the floor that was about twenty feet across and thirty feet deep and the full width of the level. There was no safe way to navigate across this hole. We had no choice but to reverse our route, climbing back up to Gill's Stage, from where we wearily emerged a

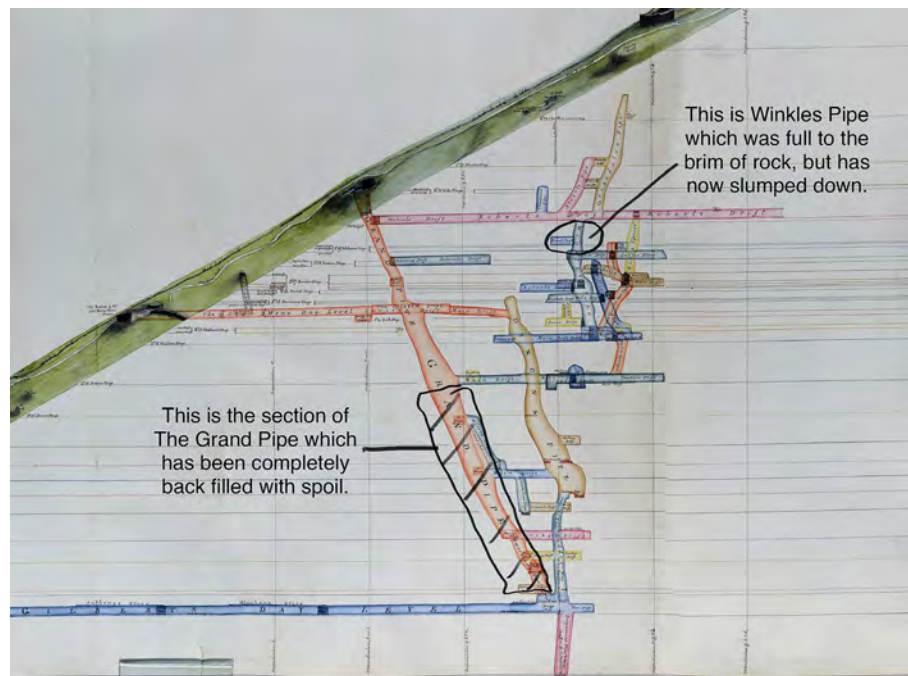


couple of hours later. Thankfully we had not done the trip as a pull-through so the ropes were still in place to allow us to ascend.

Later that day I tried to work out what this new hole was and how it had suddenly appeared in a section of Farey's Level that we had walked through dozens of times in the past without any sign that the ground here was anything other than stable.

Consulting the old mine plans soon revealed the cause. There was a large Pipe called Winkles Pipe that ran through Farey's Level down towards Gilberts. But this pipe had been completely back filled in the later years of operation of the mine by the process described above. After a prolonged wet spell, water had loosened the spoil in Winkles Pipe which had finally slumped down on its old route towards Gilbert's, creating this large hole in the floor.

On subsequent visits to the Wad Mine we installed a rope traverse around Winkles Pipe at Farey's Stage, allowing safe crossings of the pipe. We also explored lower levels of the mine to see where the spoil had travelled to, finding it almost totally blocking the traditional descent route from The Old Man's Stage to Dixons. We installed an alternative route down another clear pipe to allow us to by-pass the traditional route.



So the lessons learnt was to expect the unexpected, never rely on mines being stable and if possible avoid pull-throughs, as depriving yourself of the ability to reverse your route could have serious consequences.

Mark Hatton.

Exploration of Kernal Stope by Carl Barrow, Part 3.

In 2007 the CATMHS digging team succeeded in clearing a way through the entrance to Kernal Level at Coniston. This led into a considerable area of new ground but their interest was mainly in creating access and it was not thoroughly explored. In 2022 Carl Barrow began a determined and systematic investigation as described in Newsletters 150 and 151. Carl was hoping to find a connection with Hospital Stope, but so far this has proved elusive.

South Shaft, accessed from Courtney's Cross Cut, is filled with large quantities of mine debris. In the 1980's LMQT began a dig at the bottom of the shaft by clearing a way through the rubble beneath a sloping rock roof and eventually succeeded in getting down to Deep Level. In 1989 Ian Matheson, Mark Scott and Mark Simpson spent an evening examining their work. Deep Level there is a tunnel cut in solid rock with a draft door part way along. One end terminates in a collapse beneath Hospital stopes and at the other end a steep scree slope led up to a small hole in solid rock. This led into a stope which they believed to connect with the Kernal stopes. Looking up, several false floors could be seen, all piled with stacked deads. Even a small run of scree would block the exit, so they left without disturbing anything. Since then the hole has become blocked by collapses from above, but Carl has been there in his quest to find a connection between Kernal mine and Hospital/Deep Level.



Mark Scott squeezing through the small hole. November 1989

11th March. Right, so here I am now in Kernal at the bottom of this scree and that's that chain I've been digging at. I thought it connected with Hospital Level where that climbing chain is, but when I surveyed the mine the other week I didn't realise how deep I was, I'm actually about 20m below Hospital horizon. But it gets even more exciting. As you might know I've been digging in Deep Level in a collapsed stope there. It got a bit exciting last week when I nearly got buried by doing a controlled-out of control-ish avalanche. A lot of rocks come down where I was at and I was hoping it would connect up to this bit here, and lo and behold look what's appeared here – a great big hole and I can see it continues on down in the stope. So, where I was digging the other day and all them rocks come down is down there. Happy days. That hole wasn't there last time I was here.



Things are getting good. That does connect to Deep Level because it's all loose caused by that avalanche last week. So I'm nearly there. I'm getting a little bit excited.

The arrow points at the hole that has appeared. Now you can see the stemples of the false floor. When looking down the hole it looks like it goes down about seven or eight metres where you can see more false floors and stacked deads and the top of a funnel, which will be above where I was digging in Deep Level.

7th April: So, I've returned back here. This is the one where I nearly got buried. I was tied off where the yellow rope ends and all this was clear when I was digging and then I moved the wrong one and basically the whole lot come down and flowed like a river of rock for what seemed like a few minutes, which was probably seconds, know what I mean. I managed to jump out quick and get out of the way. It just flowed past me and eventually choked itself up. I'll see if I can get it to flow again and make a connection



Got a lot more rocks moving, come to a bit of a stand still at the moment here now as it's too dodgy to carry on from below. I need to come into this stope from above to see if I can dig from above. Be interesting to see the difference from above in how much rock has come down.



After another avalanche, it now has become a bit dodgy to be digging here as you can't really control the avalanche, it just gets a bit excited and doesn't want to stop, with a lot of rocks trying to get very friendly with you when you don't want to makes friends with them. Had a bit of a poke to clear the rocks by using my draining rods with the hook on the end and trying to keep as far away as I can but the trouble with that is the further you are away down the scree when they do fall they gather more speed up by the time they get to you so can't win there really.

So having to retreat from this dig now. Hopefully some rocks will fall down themselves and set off its own avalanche at some point. It was interesting just sitting there and just listening to the mine with all the rocks high up in the stope still slowing moving minutes after the main avalanche. Next job is to come in at the top of the stope and see how much rock has moved up there and see if it has made a clear connection yet where I can dig from above to clear this space. Good trip though, enjoyed myself.

12th April: So I don't have as much deads to move as I was first thinking. I was digging there again on Friday from Deep Level and caused another bit of an avalanche, but it got a bit dodgy to carry on digging from there for now, so I've to go back in Kernal to the bottom again to see how much the funnel has gone down from there and see if I can do some digging from there too. Hopefully I'll get through after a couple more digging trips and that will make a great through trip into Kernal to the bottom into Deep Level up South Shaft into Courtney's Crosscut and out to daylight.

15th April, in a different part of the mine

I get a buzz out of getting into little places like this. I just love the atmosphere of these working areas, where you know this was where the miners were last at, working. There's a climbing chain up to here; there is one of the biggest tallow candles I've seen in this mine, a lump of clay what they stick to the wall to stick candles to and a hessian sack with a lot of clay round it, so obviously that was the sack what they brought the clay in. Bits of wood would have been a box of some sort, a galvanised bucket, some timbers. There's a candle sticking to the wall, some stemming sticks what they used to stem up the firing holes what they drilled by hand and a little working platform what they stood on to drill holes above. Nice little area.





The hole from outside

22nd April. So, I'm back down here at the bottom of Kernal Crag. Where I've been digging in Deep Level where the big funnel is where I nearly broke me foot, it still keeps coming down this big funnel of rock. This is the top of the funnel and my digging in Deep Level caused an avalanche that has



and from inside

dropped it here. The hole is a lot bigger. When I first dug in Deep Level the other week and caused an avalanche and then come back here to check, there was only a little hole and now it's quite a good easy crawling hole so I'm able to get down under the next false floor and down a scree. I still can't get the connection or see how this tunnel of deads is but it seems deep. I've come down this scree beneath the stemple. Still no sign of me recognising anything that I can see. It's not very nice underneath this floor so I'm going to come out of here now. You can see water dripping here but where I am in Deep Level the rock se quite dry. so that could be a pyramid down in Deep Level and this water coming down the other side

What I don't know is how far it is from here to where I'm digging in Deep Level. In Deep Level it rises up about twenty metres at a forty degree angle up a scree into a stope area, so I've raised a fair way up from Deep Level. I just don't know how much there is from there to the hole in Kernal stope. I'm trying to look through the little cracks and crevices and it still looks quite deep. The scree goes down about five metres, something like that. So there is a lot of deads here, and when I'm digging down in Deep Level it's got very dodgy – it's nearly got me twice so I don't know what to do from now on.

When we first got here there were some old ropes in place, and through talking to some people we found out they come through Deep Level down there. It was a dodgy trip what they did, it was a dodgy scree but they come up here seen all these false floors, had a quick look about and got out quick because it didn't look very good. And since they've been it has all collapsed.

8th May. (*A different approach.*)

Where I'm at now is in Kernal Crag, this is Middle Stope. The entrance you come in is East Stope then you go up and down and this is Middle Stope. There is a climbing chain that leads into a hole which leads to West Stope. The early CAT guys got into West Stope using a ladder, bolting up but they de-rigged all their ropes and cut off the connection. So last year after seeing the drawings in one of the early CAT journals I bolted across and made a connection and left a temporary rope, an old climbing rope, which I am replacing with an 11 mill rope.

I'm in the bottom of West Stope. My plan is to return at some point and drill and bolt my way up there where there is a man hole and get to the top and see what is gannin on like. Nobody else has been up there. I've got it all rigged now so I can return and bolt up there. Rock looks good.

13th May.

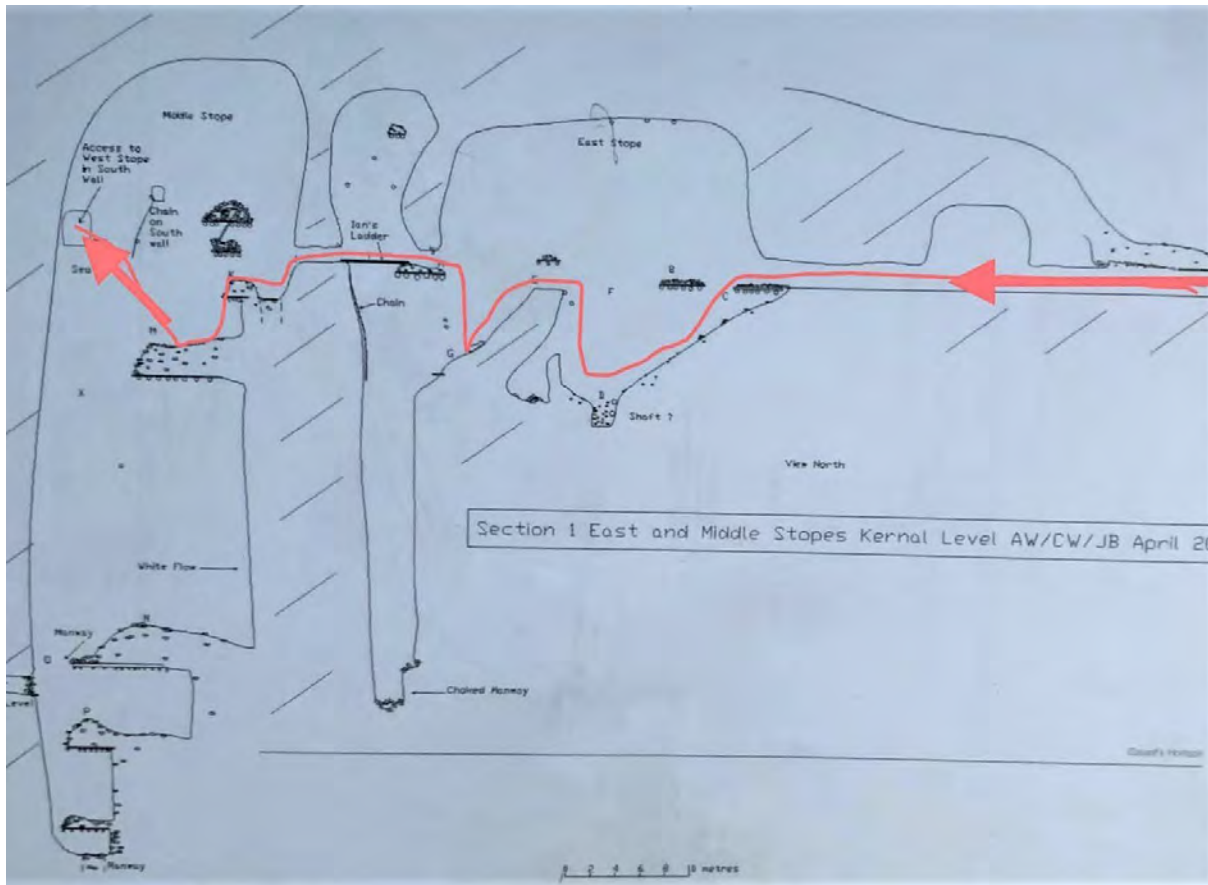


Great day making a good start on bolting up in from the bottom of West Stope in Kernal Crag. So when you are in the bottom of West Stope and you look up to the false floor, you can see a man way hole in the end and looking past the false floor it looks like it might lead into more workings or another stope. Anyways it looks interesting in what's going on up there and the only way to find out is bolt up.

Today's trip was about just getting my bolting up ropes and kit to this area and just making a start to bolt up. I wasn't intending to bolt all the way up on today's trip as I knew carrying my ropes and bolting kit, drill and a load of quick draws and carabiners to this area was a task on its own, so made a good start on bolting up and got to a few metres from where I wanted to be.

I just was running out of quick draws and steam to continue on, and where I was bolting up water pours in on you so I got soaked right through. So had enough for today as it's a good trip

getting out the mine from here. Happy in what I got done though and looking forward in getting back there to finish off and find out what's through the man-hole.



The West Stope bolting project.

20th May

I got through the manhole. That there breaks into the same stope and looking up there's a false floor but it does continue round that corner and going up I'm sure it links to the same stope. Not sure how far we'll push this, its just going to be the same stope all the way up. It's a bit dodgy doing this on my own because if all this collapses down there its just going to block me in. For now I'm not going to push it anymore on my own. Got to be sensible sometimes! Great day good trip. Glad it's done now so I can move on to my next project in the mine.

27th June

Well as you all may know I have spent a bit of time in Coniston exploring yon mine over the last few years. While exploring I'm trying to work out what's been going on and why and how, something you can work out but most of the time you are just assuming some things. I do believe we will never know exactly, as not everything was recorded, and also with the mine collapsing over time or flooded you just will never know what went on at the time the mine was working, so we all have our own ideas what went on in there.

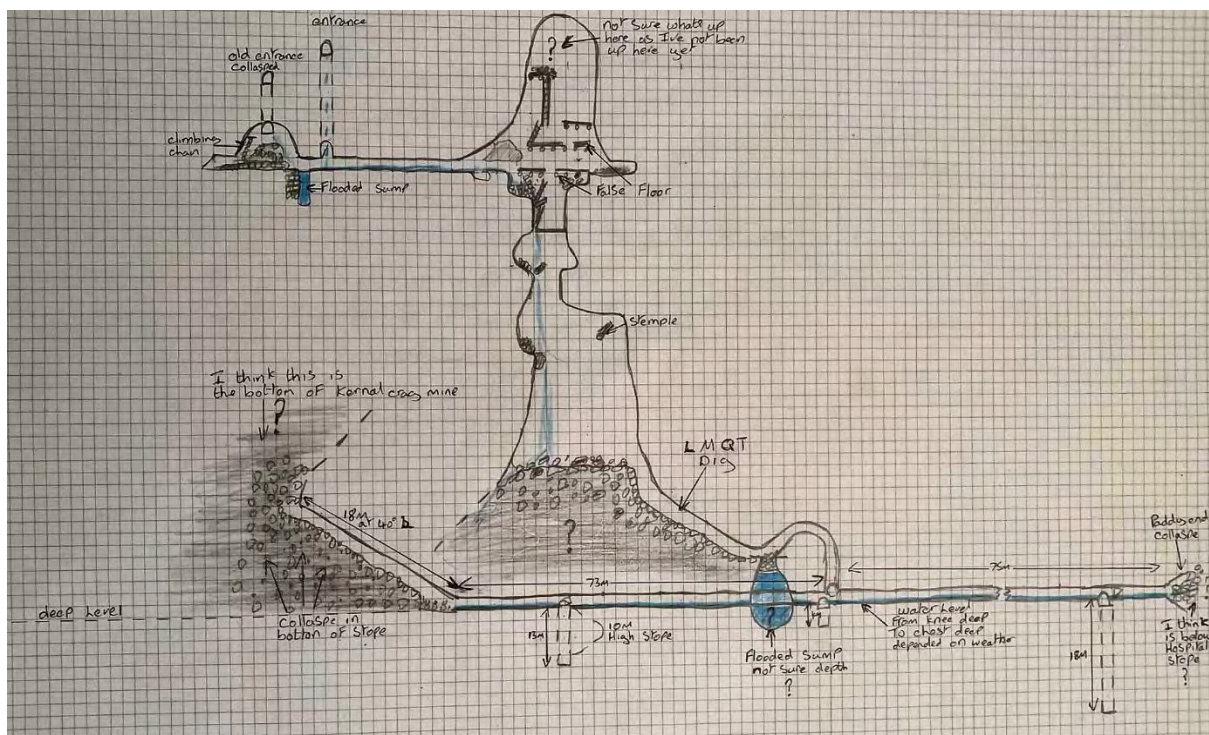
So while I've been exploring in there I've have a few different projects on-going, different areas I'm working on. I'll admit I'm a bit scatty. One minute I'm exploring one part then the following weekend I'll be at a totally different area then another area then go back to do some

more at the first area and so on. A lot of it is depending how I'm feeling and what I feel I'm up to doing at that time. Also that mine messes with my head and my to do list keeps getting longer so I do trips to tick some off.

8th July

Finally got back to the bottom of yon part of the mine where I've got a dig going on. (*Deep Level from South Shaft. Ed.*) I've had a bit of a break on this project as it's not the easiest trip to keep doing to get right down here into the bottom of this part of the mine. I've got a bit of a digging project going on here now where I'm digging from above and below in the collapse, where it seemed to be like an hourglass situation of rocks but I just don't know how deep it is.

I've had a couple of digs from below where things got a bit exciting and there was a bit of an avalanche and I nearly got buried, and the second time I went back another avalanche set off and a rock hit my foot, badly bruising it, so today I've come to the top of the funnel to dig some weight off the top and hopefully take some volume of rocks off the top so when I do go back to the bottom to dig there's less rock to fall down through the funnel.



South Shaft, the LMQT dig and Deep Level

Also went to check out another area to explore. If this dig doesn't go to plan and there's too much rock in the stope to move, there is another part to dig into that looks like it might connect to Deep Level going the opposite direction I can get to now. This dig will mean causing another avalanche high up in the stope where all the rock will land at the top of the funnel where I'm digging today, so I've got to be sure that the funnel dig is definitely not do-able before I do the second dig.

Had a good day digging down there, got a bit moved. Looking forward to digging below again to try and make the connection.

Meets

As CATMHS preparations for the NAMHO conference in July got in to full swing, we had a busy programme of meets “Trying Out” events being offered to conference participants.

Langdale Axe Factories. 16th April. James Archer

This meet started at the Stickle Barn and climbed up towards Pike O’Stickle. James Archer, the meet leader has been studying the Axe Factories for decades and has a wealth of knowledge about this exceedingly interesting and important part of the ancient history of the area. It is now thought that axe production here started thousands of years earlier and extended thousands of years longer than had been originally estimated. The Greenstone band was worked extensively in numerous places over a length of several miles. Low cloud and damp conditions prevented full access to the workings on the steepest flanks of Pike O Stickle but the group still learned a great deal about how the stone was worked here.

Buttermere Geology Walk, 14th May. Julian Cruickshank

This meet started at Gatesgarth, ascended to Warnscale bothy, crossed Haystacks and descended via the Low Wax Knott Coppermine worked by the Elizabethan miners. Julian Cruickshank and Lorraine Crisp shared their extensive knowledge of the geology of the area with participants, explaining the complex formation of the rock structures and mineral deposits.

Wad Mine 21st May. Iwan Fletcher and Tracey Binks

This meet explored the depths of the fascinating Wad Mine above Seathwaite. The route options were discussed and the rigging checked (resulting in a fairly extensive “to do” list). The descent of Dixon’s Pipe to Gilbert’s was successfully navigated, although in wet weather this would be a very “refreshing” option.

Coniston Horizontal Levels, 4th June. Mark Hatton

This meet visited the various open adits around the Coppermines, including East Bonser, Levers Water, Hospital Level and Deep Level. These levels give us a deep insight on how the mine was worked, mainly during the 19th century.

Coniston Slate Quarries 10th June. Robert Gurr and Pete Archer.

This meet took the route up by Low Brandy Crag to Saddlestone, examining the available evidence for an incline to have been constructed here. The consensus was that indeed an incline appears to have been constructed but perhaps the project was never completed or if it did it only operated for a very short period, possibly just long enough to facilitate the erection of the Ariel Flights higher on the mountain. We explored the Power House then the Moss Head complex, finishing off in Spion Kop. The very hot dry weather made this a very enjoyable but very exhausting meet in which we all learned a great deal about the development and ingenuity of these extensive slate mines.

Outdoor First Aid 11th June. Simon Clooney

A one day “First Aid at Work” course was attended by fourteen CATMHS members, honing their skills in advance of the NAMHO conference. The venue was Ambleside Parish Centre on one of the hottest days of the year. The emphasis of the course was how to best respond to the type of incident we may encounter during the NAMHO conference mine meets. The key message was that prevention is far better than cure.

Langdale Axe factories visit, 16th April. (Trial run for the NAMHO Conference).

Meet Leader; James Archer. Attended by: Pete Archer, Martin Lawson, Richard Nielsen, Bob Entwistle, Michael Pringle, John Pickin, Chris Cowdery, Stephe Cove, David Lund, Helen James, Lindsay Harrison, Iwan Fletcher, Tom Rumsey. Mark Hatton

After a week of glorious weather, we arrived at Stickle car park with grey clouds looming and no sign of a view of the Langdale Pikes. The only positive was that it was not raining yet.

Interestingly, the original date that had been swapped with Stephe's trip to give more daylight. The irony that day had proved to be gloriously sunny was not lost on me.

After assembling in the car park it seemed appropriate to do a bit of a show and tell with a selection of rough outs and a hammer stone, so that we could get our eye in for what we would be trying to spot on the hill. (And I was NOT going to carry all that weight uphill!)



Avengers Assemble! Photo, Pete Archer.

Also, huge thanks to Mark Hatton for turning up with some additional chunks of red granite from Eskdale and an amazing finished and polished axe that he had borrowed from a farmer in Dumfries & Galloway. It was lovely to see this item return home to Langdale for the day.



Mark's lovely finished Group VI axe found near Newtown Stewart. Photos, J. Archer.

Once we had prevaricated long enough, there was no excuse not to begin the slog up the fell. We ascended by the old peat sled route above Dungeon Ghyll to Pike Howe. Fortunately, there was original pitching and ruined peat huts to give me an excuse to stop and get my breath back. After the final steep pull up the back of Pike Howe, past an obvious minor iron ore outcrop, we arrived on the grassy flanks below Harrison Stickle. Here it is still possible to see slight evidence of previous peat digging and the remains of an undated remnant wall that cuts across the fell between Dungeon Ghyll and Mill Ghyll. I had heard these being referred to as cow walls, but I learnt a new name as someone referred to it as an udder scraper. I quickly saved this to my mental hard drive and will use it again!

All this way and still no sign of prehistoric axe production? This was about to change. Where the footpath heads up towards the cleft of Dungeon Ghyll, the historic erosion of this path really started to impact on important archaeological stone working sites that seemed to appear anywhere the turf was eroded. The original footpath repair work was then done to try and bury the worksites and protect them from further erosion. This has been incredibly successful, so finding sites takes a little more patience these days. But listening out for the sound of “broken glass” beneath our feet and inspecting small areas of sheep scrapes soon yielded worked material, or “lithic scatter” as it is more formally known.

With the cloud showing no signs of lifting, I decided to revise my original plan and instead we stayed below the cloud and during a leisurely lunch stop we split into two groups to visit the worked rock face on Harrison Stickle. Here it was possible for people to appreciate the scale and enterprise of our forbears as well as understanding what makes a good stone axe. The fact that large quantities of material was quarried by using nothing more complicated than fire setting and antler picks is incredible. They definitely had a very clear understanding of exactly what they were after material wise and sought out “good metal” in some incredibly awkward places. Interestingly, some archaeologists consider this a deliberate act that imbued the finished product with more kudos, and some quarry and production sites have been found in incredibly precarious locations when equally good material is far more accessible. This is the classic problem that we will never know or fully understand the significance and motivation our ancestors had.



Inspecting the workface of a Neolithic quarry site near Harrison Stickle. Photo Pete Archer.

After re-grouping, we headed across to ford the middle reaches of Dungeon Ghyll and across more peat cuttings to gather below Loft Crag by the ruined peat hut. Here I was able to show a working site that is on the Eastern side of the path which has yielded some lovely delicate chisel type rough outs. (one of which I had with me in my pack after stumbling across it on the path twenty years ago). This helps to illustrate the variety and different sizes of tools created from this material. This site had also been excavated in 1991 and had revealed a probable date of 4000BC with pollen evidence already suggesting woodland clearance.



Inspecting lithic scatter by the path up Thorn Crag. Photo by Pete Archer.

Unfortunately the weather was showing no signs of improvement and after a quick vote we decided to descend back via the Mark Gate path rather than continue up into the gloom.

An excellent debriefing and further opportunity to inspect rough outs was then available outside the New Dungeon Ghyll Hotel with the added bonus of beer and crisps.

There had been an anomaly from an emergency excavation at the side of the path by Pike O Stickle a few years ago that yielded a radiocarbon date of 5968 BC, potentially pushing use of the site back another 2000yrs. This was quite divergent from anything else sampled locally, so it was always viewed with a degree of scepticism. However, results from a dig in Maryport have also thrown a spanner in the works! The team retrieved worked rhyolite and tuff from a pit, which conveniently had charred hazelnuts. These have now been radiocarbon 14 dated to 8200BC. The stone tools have not been petrographically analysed yet to my knowledge, but they do appear to be material sourced from the central Lake District, potentially showing that this source of useful stone had been known about for thousands of years before it was exploited in a huge way in the Neolithic period. This is a level of continuity that is hard to comprehend, especially when we realise that we are as close in time to when this site was exploited in the Neolithic as the people possibly exploiting it in the Mesolithic. For more information about the finds at Maryport, please follow the link. <https://intarch.ac.uk/journal/issue59/4/>

Post Script. As Warren has pointed out, we might have to change the name of the conference from 5000 years of mining & quarrying in the Lake District to 10,000 years!

A note on petrology:

Usefully, petrology gives each rock source a unique chemical signature. Petrologically, most axes in the central Lake District are made from what is known as Group VI (6) hornstone. This constitutes approximately 27% of all Neolithic axes found in the UK. However a much smaller number of darker tools were made from an Andesite found nearby. This has been classed as group XI (11). Both are exploiting incredibly fine-grained heavily metamorphosed tuffs.

James Archer.

Coniston Coppermines surface meet, Saturday 17 June 2023

Chris Bunker (leader), Chris Cowdery, Dave Lund, Robert Gurr, Bob Entwistle, Julian Cruickshank and Mark Hatton

This meet was one of a series of meets in recent months trying out various routes to be used during the NAMHO conference in July. Chris Bunker led us up the track from The Blue Quarries to The East Bonser Wheel Pit. This gently rising route commands excellent views over the Coppermines Valley, which facilitates many debates about how the mines were developed and operated over the centuries. One debate was around the operation of the leat that runs around the hillside between the top of the Paddy End Mill and the wooden footbridge over Red Dell above the cascades. Visually this leat appears to run from Paddy End towards Red Dell. But is this an optical illusion as conventional wisdom is that the leat was built to return water to Paddy End from Red Dell. One theory we discussed during the meet was whether the leat could have been engineered to allow water to be flowed either way, or whether the direction of the leat could have been changed at some stage in its life, or whether it flows water from both ends towards the middle. The debate was inconclusive.



Another debate focused on which wheelpit was the scene of the Thomas Millican tragedy in 1850. Thomas was sixty years old and had worked at the mines for thirteen years, operating one of the large waterwheels in Red Dell. He met his death by falling in to the wheel, possibly during the task of applying grease to the axle at the start of his daily shift. But was he killed in the New Engine, the West Bonser Engine, the Old Engine or possibly the East Bonser engine.

The answer to this question “turns” on which wheels would have been operating that day on Wednesday 21st August 1850. Conventional wisdom is that the East Bonser wheel would have been decommissioned by 1850, its work now being done by the Old Engine. But in 1850 the Old Engine was being upgraded to a larger more powerful wheel, so was it in operation that day? Further west up along Red Dell is where we now find the largest wheelpit of the lot which is the New Engine. This wheel operated the pump rods and winching equipment along the West end of the deep Bonser Mine and Thriddle. We know it replaced a smaller wheel originally here called the West Bonser Wheel and this changeover probably took place in the late 1840’s. So in August 1850 Thomas Millican was most likely working the New Engine.

The group then walked along the Leat between Red Dell and Paddy End to see if we could establish beyond all reasonable doubt which way it flowed. We couldn’t, but I remain stubbornly confident that it does run from Red Dell towards Paddy End. The Group then visited Gaunt’s Level portal and examined the remains of Paddy End Mill before returning to the cars at Bonser Mill. A thoroughly enjoyable and thought provoking meet around this fine mining site. The NAMHO conference members who will attend this meet in July are in for a treat.

Mark Hatton.

Geology Walk, Haystacks and Warnscale Bottom, 14 May 2023

The participants were Julian Cruickshank, Lorraine Crisp, Chris Cowdery and Duncan Scott.

A very enjoyable walk was had, looking in at an Elizabethan copper coffin level and various slate workings whilst thinking about the relationship with the geology.

After an initial brief resume of the last five hundred million years, the path to Scarth Gap was climbed giving the opportunity to view the glaciated landscape of the oldest rocks in the Lakes, the Skiddaw Slates, to the north and then the craggy Borrowdale Volcanic Group rocks of Haystacks. The first stop was the Low Wax Copper Mine, entering the Elizabethan Coffin Level as far as a collapsed stope and viewing the later 19th Century Trial which breaks into it. The mine is in Skiddaw Slates just below the contact with the volcanic rocks and continuing higher up to the summit of Haystacks, classic examples of flow banded lavas were to be seen everywhere. We had lunch at the top,



looking out over the bleaker granite topography of neighbouring Ennerdale, which may have been the underlying heat source for the copper mineralisation and which has much later haematite iron ore mineralisation on its margins from an Irish Sea source. There were also views north across the Solway to Scotland, the site of the Intercontinental Collision 450 - 400 Million years ago which gave rise to all the geological kerfuffle.

After lunch we continued along the ridge to Dubs Quarry, passing exposures of flow brecciated lavas and volcanic ashes before reaching the Kimberly Slate Band and looking at the old workings and the restored bothy. The slates represent a period when volcanic ash was falling into still water and being deposited in fine grained bands which later when Scotland and England finally collided were subjected to great pressure, causing minerals to form aligned perpendicular to the stress creating the slaty cleavage.



Dropping down one of the old mining tracks into Warnscale Bottom we passed the less well known Green Crag slate workings and visited the better known associated restored Workman's Bothy which Social Media claims has the best view in Lakeland. Inside we noticed a map on the wall from the early 19th Century which showed an "Old Copper Mine" nearby and gave an associated reference. Later following up on these leads revealed the unsurprising information that Mark Hatton has already explored this mine in Black Beck gorge but also, more surprisingly, the amount of information on mining at the time detailed in an article in the Derwent Fells History Society Journal 51, which is freely available online. The

apparent association of copper mines in this district with Skiddaw Slates just below the contact with the volcanic rocks is possibly worthy of further thought in understanding their location.

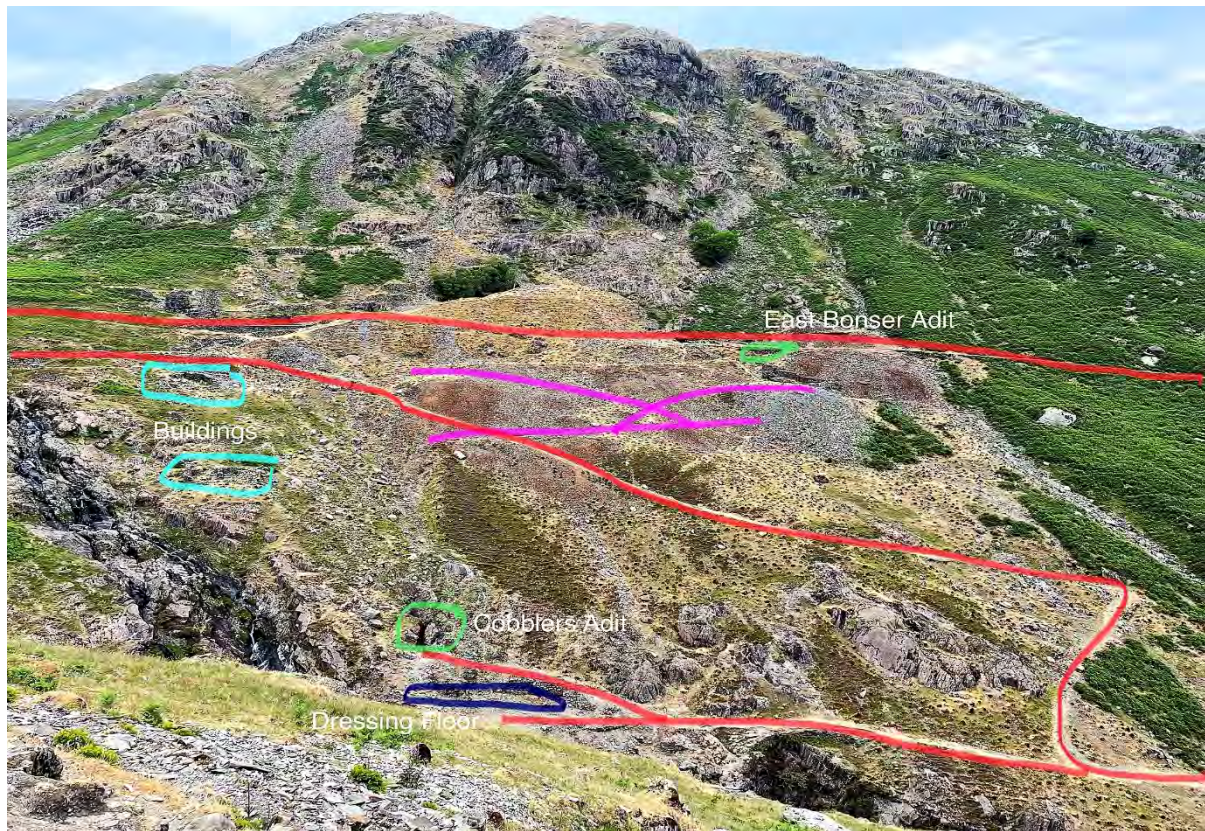


To finish the business of the day we walked down to Warnscale Beck to view the actual junction of the Skiddaw Slates and Borrowdale Volcanic Group rocks which are well exposed in the “infinity pools” which are another social media highlight of the area before concluding with an ice cream at Gatesgarth Farm.

Julian Cruikshank.



The tracks and paths of Red Dell



This view over the tracks and paths of Red Dell give us some clues about the development of the mine. This area was first mined in the late Elizabethan period (1590's) when it was called Low Work and Cobblers Hole. Initially this first generation of miners worked the vein at surface and through a very short adit as East Bonser. They would have created a steep zig zagging track up to their works to allow access from the valley floor and facilitate the removal of copper ore, probably carried down by packhorse. This ore appears to have been hand processed, as evidenced by the multiple mortar stones we can still find around these earliest spoil heaps. Later these miners dug a longer adit from the valley floor and a small mill for dressing the ore, complete with water powered stamps, was located outside the Adit. They would have extended their track up to this adit (which they named Cobblers Level) and dressing floor.

In the mid 1700's another large scale mining effort was commenced here by The Macclesfield Copper Company led by Charles Roe. They extended the depth of the earlier workings and installed a water wheel outside the East Bonser adit and enlarged the Cobblers level. They constructed a mill higher up Red Dell (off to the left of this photo). They built a new cart track to both of these places running at a more gentle gradient by starting further down the valley.

This track required quite a bit of engineering to build and today it is still in good condition and would allow a horse and cart to access these upper areas of Red Dell. On the steep slopes are the remains of two sturdy buildings marked on the photo. Who built these buildings, when and what they were used for is not clear. They are not on the route of the main tracks so how they were accessed is not clear. Much could be learnt about the early development of the Coniston Coppermines by further study of the tracks and structures on this area of Red Dell.

Mark Hatton

An interesting gravestone at Bowness on Windermere

St Martin's Church in the centre of Bowness dates back to the 13th Century. But what caught my eye during a recent visit was a gravestone dating to the 18th Century. This stone stands beside the south wall of the Church itself. It is made of fine slate but has clearly suffered some serious damage in the past having been snapped in half and a section of the top edge is missing. Parts of the face is worn in a way that suggests the stone may have served as a paving slab at some time, possibly within the Church itself.



The gravestone is arranged with two separate inscription panels. On the left the inscription refers to John, son of Robert Kendall of Bells Field, who died in 1736 aged 20 years old. On the right the inscription refers to Mary Ellaray of Boonas who died in 1737 aged 31 years old. John Kendall's inscription goes on to say

“Under Great Stones My Bruised Limbs Did Lie
Whilst That My Flame Did Flie
From The Deep One Life Did Save
In Time Hard Rock My Life Did Crave.”

Some of the lettering is indistinct or missing and the spelling is erratic, so this may not be quite right. But nevertheless it is clear is that John died by being crushed by great stones. This made me wonder if John may have died in an accident in a slate quarry. But I wasn't able to find anything else online about John. Perhaps Mary Ellaray may offer us a clue here. Doing some Googling on Mary turned up the information that her sister (Elizabeth) was the wife of Robert Kendall. So John was Mary's nephew. Mary was not married and she died a spinster without any children. A summary of Mary's will is recorded in a book called “The Disappearing Yeoman: Windermere 1640-1841”, which records that Mary was the owner of Hodge Parrock and Cleator Parrock and left these to her Mother and Sisters. Parrock is an old Cumbrian term for a close or a parcel of land. So was Hodge Parrock the name of that large slate working in Tilberthwaite that we now know as Hodge Close? Perhaps Cleator Parrock may have been what we now know simply as Parrock, the large slate working adjacent to Hodge Close. In the 18th century Parrock and Hodge Close would have been a series of closeheads that were only joined up and open topped much later, in the 19th Century.

So taking all of this information together we seem to have a picture that suggests John Kendall was a quarryman who was killed by a rock fall whilst working underground in Hodge Close almost three hundred years ago. The inscription says “my flame did fly” which may be referring to John's spirit ascending to heaven after death. And just possibly, where the inscription says “From The Deep One Life Did Save” could mean that in the accident a life was saved. So perhaps John lost his life whilst another quarryman survived the accident?

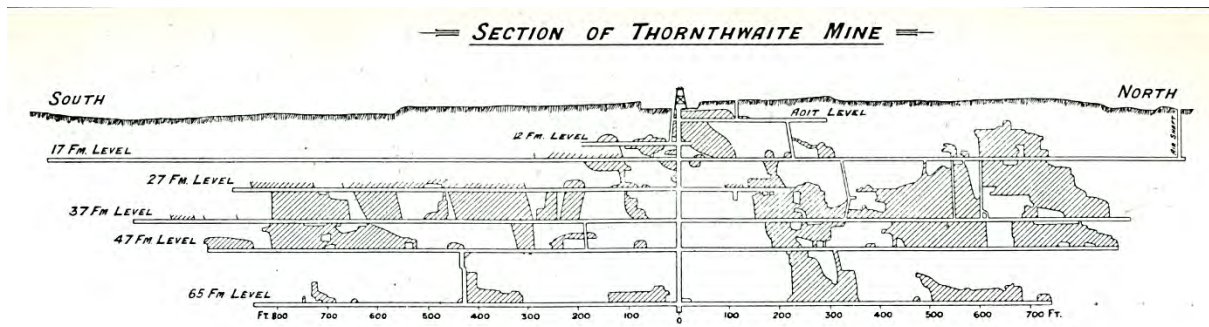
Mark Hatton.

Thornthwaite Mine

This was a large lead and zinc mine in the village of Thornthwaite near Keswick which was a shaft operation on either side of what was the old A66 eventually worked to a depth of 85 fathoms before closure in 1921. According to John Postlethwaite in his book “Mines and Mining in the English Lake District” the mine was re-opened by the Keswick Mining Company in 1848 who erected a 40-foot water wheel to pump the water from the mine. By 1873 the mine was taken up by Mr. W Francis and a portable 30-horse power steam engine was procured.

In 1881 the property was transferred to “The Cumberland United Silver Lead Mine” with a 30-horse power steam engine for drawing, and for pumping a 36-foot waterwheel attached to a 40-horse power steam engine. The machinery was propelled by a 30-foot waterwheel assisted by a 20-horse power stationary steam engine.

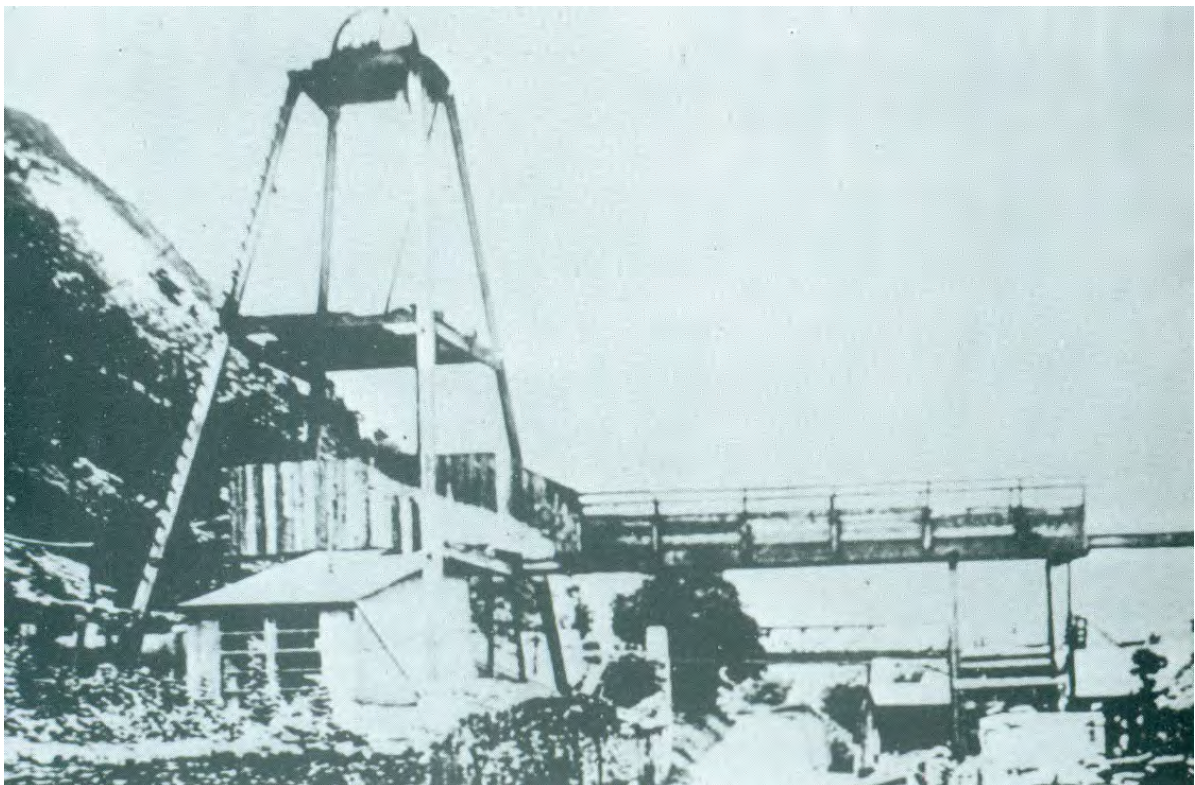
After the death of Mr Lobb the mine passed into the hands of Messrs. F. W. Crewdson and Anthony Wilson who formed the “Thornthwaite Mines Ltd” and this company installed new pumps and sunk the mine to a depth of 85 fathoms.



Ian Tyler in his book "Goldscope and the mines of the Derwent Fells" has two photographs of the mine showing in one the headframe and in the second the headframe and waterwheel, courtesy of Beamish Museum.

Many years ago I purchased a photograph (20" by 10") from Bill Creighton when he closed his business Grove House Gallery in Keswick of the headframe and waterwheel shown in Ian's book and is from the original as it shows much more detail.

Then I found a photograph from a postcard which is dated as 1912 on the Mindat.org web site. So far these are the only three photographs I have come across of the mine and I have attempted to date them.



This photograph gives the impression that the headframe was being built or re-built as it appears to be incomplete with the winding rope missing when compared to the next photograph. Could this date to the late 1800's?



This is the well known photograph which is the one I have but this version is cropped and believe could date to around 1912 when the next photograph was allegedly taken.



Thornthwaite Mine 1912- Mindat.org

This appears to show the dressing floors and shows how photographs can turn up in the most unexpected place.

Warren Allison.

Brandlehow Mine

Following the recent planning application to demolish the cottage at Brandlehow Mine on the shores of Derwentwater and replace it with another house, I was talking to National Trust archaeologist Jamie Lund about the historical aspect of the mine and the cottage. He sent me a copy of a photograph taken by Rupert Potter of the cottage and mine remains, probably taken not long after the mine closed, and it got me thinking, were there anymore? So, I did some investigation into Rupert and found he had taken more of Brandlehow Mine.

Rupert Potter (1832-1914), father of the children's writer and illustrator Beatrix Potter 1866-1943, took up photography in the 1860s when it was still a relatively new art form. An enthusiastic and skilled amateur, he was elected to the Photographic Society of London in 1869 and later contributed to photographic exhibitions. Rupert assisted the artist Sir John Everett Millais (1829-1896, a close friend, by photographing backgrounds for paintings and sitters as portraits. His favourite subject, however, was Beatrix herself, and his prolific legacy of several hundred photographs forms a broad pictorial account of her life from infancy to marriage.

Rupert was also a skilled landscape photographer. During the Potter family's extended summer holidays to Scotland and the Lake District it was Beatrix's delight to accompany her father on photographic expeditions. He photographed in particular the countryside around Eastwood in Dunkeld, Wray Castle near Ambleside and Lingholm on the edge of Derwentwater. Source V&A Museum



Area below Whitwell's Level dated 25th August 1903. Source V&A Museum



Brandlehow Mine date 1899. Source V&A Museum.



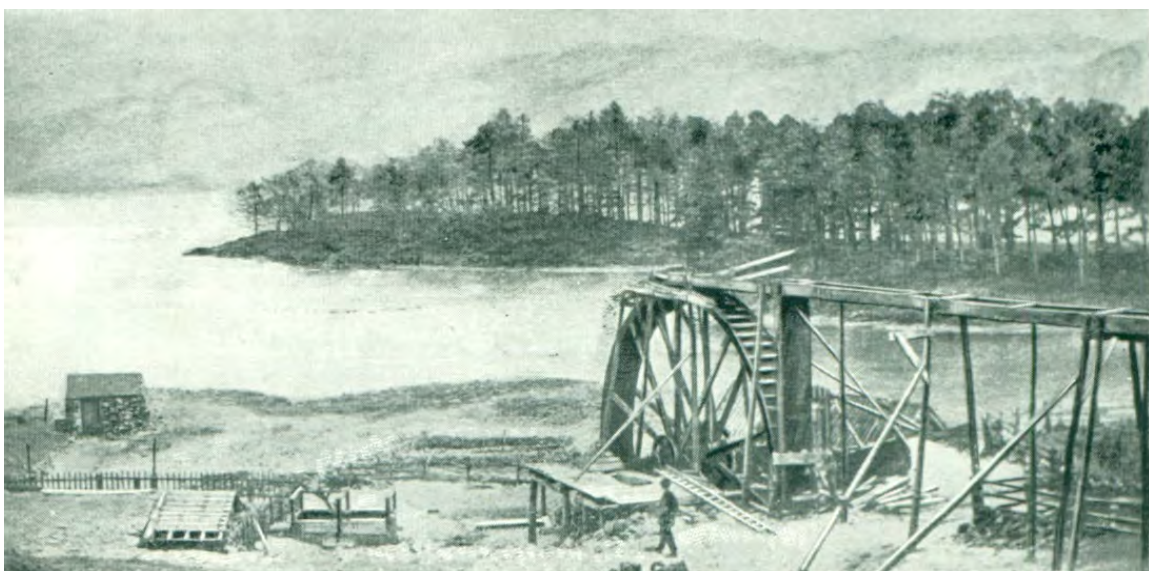
Source National Trust archive.

I have assumed that the date is 25th August 1903 as there are slight differences compared to the similar one taken in 1899. The photograph above clearly shows left to right:

- The remains of a stone-built building with one end wall still intact.
- The spoil heaps by the lake shore.
- The cutting leading to the entrance to the Salt level with the remains of a building to the right.
- The cottage.
- The spoil heaps to the right of the cottage appear to have been removed.
- The road behind the cottage leading to the reservoir and the foundations of the barracks for the miners at the bottom of the photograph.



Area immediately south of Brandlehow mine dated 25th August 1903. Source V&A Museum



The top of the Old Shaft dated 1862 (located in the front of the cottage) Source- John Postlethwaite Mines and Mining in the English Lake Counties third edition published 1913.

The above photograph, of which the photographer's name is unknown, shows the waterwheel at the top of what was then called the Old Shaft, but originally driven by John Tebay and known as Tebay's shaft. According to Tyler, in 1854 the shaft was re-opened and sunk another ten fathoms to a depth of thirty fathoms.

By the end of 1889 the engine shaft was down to the 75 fathom level, but by 1891 the mine was abandoned, and the equipment was sold in March 1892.



Seathwaite Wad and the Mines of Borrowdale Valley, published 1985. Source Ian Tyler.

The photograph shows the area around the engine shaft with the remains of a large building and chimney, which is north of the cottage. It could have been taken by Rupert Potter in 1899, as only the roof is missing.

It makes one wonder if more photographs of the mine were taken, given the appeal of the area to landscape photographers over a long time up to the present day.

Warren Allison.

CUMBRIA AMENITY TRUST MINING HISTORY SOCIETY

Registered Charity No. 1180198

Honorary President:

Lord Egremont
Petworth House, Sussex

Chairman

Warren Allison
Phone: 01228 523923
Email: chairman@catmhs.org.uk

Secretary:

Colin Woollard,
Phone 01900 823686
Email: secretary@catmhs.org.uk

Treasurer:

John Aird,
Phone: 0208 997 5985
Email: treasurer@catmhs.org.uk

**Membership Secretary
& Newsletter Editor:**

Ian Matheson
Phone: 015394 32957.
Email: membership@catmhs.org.uk

Meets Secretary:

Julian Cruikshank
Phone: 07752 879120
Email: meets@catmhs.org.uk

Webmaster:

Chris Cowdery
Email: webmaster@catmhs.org.uk

Committee members:

John Aird, Warren Allison, John Brown,
Chris Bunker, Stephe Cove, Chris Cowdery,
Julian Cruikshank, Lorraine Crisp, Graham
Derbyshire, Mark Hatton, Ian Matheson, Michael
Oddie, Michael Pringle, Colin Woollard.

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