

CAT

The Newsletter of the Cumbria Amenity Trust
Mining History Society



Langdale Axe factory. Photo by Mark Hatton.

No. 139

May 2020

Cover picture – Langdale Stone Axe Factory

For many many years the Lake District Fells have been highly valued for their stone, metal and mineral resources. The first people to exploit that resource lived here during the stone-age, some five thousand years ago. For nearly a thousand years people climbed up on to the fells to find greenstone, which was used to manufacture some of the finest and most precious axe heads of that time. The greenstone band that was worked runs from the Langdale Pikes through to Scafell Pike and Glaramara. It is thought that the value of the axe heads was enhanced by the quality of the stone, the skills of the people who worked it, and their high mountain origin. Perhaps the mountains were the home of the Gods or the Ancestors, and the axes from here carried special power or status as a result.

The work of quarrying the greenstone high up in the fells must have been very hard indeed. The people who worked here knew only too well how quickly the weather could change. What might have started as a good day for working could quickly turn nasty when the wind increased and rain swept in. In warmer months, they may have decided to sleep up in the fells to save the long and tiring walk up and back down each day. The solution was to create a small bothy in a sheltered cliff face. As the bad weather approached people could leave their work place and retreat to the shelter to rest until the bad weather passed over. And here they could leave a change of clothing and some food where it would keep dry even in heavy rain. And at night three or four people could sleep in on dry turfs and bracken for bedding. Originally the people here had been working a narrow vein of greenstone in the cliff face and realised how sheltered this spot was and how convenient for the pathway that sweeps around the cliff face to the multiple work sites on the crags above. Realising the potential of this site for a shelter, the people extended the narrow working to create this square shaped bothy out of the solid rock face.

People toiled on these hills each day to painstakingly work the vein of greenstone that courses through these crags some one thousand eight hundred feet above the valley floor. The stone was quarried from the cliff faces, then carefully and skilfully knapped to see if it would form the shapes they wanted. If it did the rocks were carried down to the valley for further processing. If it didn't, they were rejected and tossed aside. We know very little about these people, their beliefs, their lifestyles or the system of exchange they used but we can appreciate their work and imagine their relationship with these magical places. Some four or five thousand years might have passed since they last worked up here but so much still remains to show what they did and where they sheltered.

Mark Hatton.

Cumbria Amenity Trust Mining History Society

Newsletter No 139, May 2020.

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New Members

Jane Toothill, from New Hutton, Kendal. Jane has degrees in geology, and volcanology and is an International Mountain Leader.

Tanya Savage, from Kendal

David Turver, from Louth, in Lincolnshire. David is a retired mechanical engineering technician.

Neil Pacey, from Kendal

David Gough, from Loughborough

Richard Bungay, from Troutbeck, Penrith.

Ian Francis, from Maryport, Cumbria.

Martin Long, from Heanor, in Derbyshire. Martin is also a member of PDMHS.

Charlotte Taylor, from Lancaster. Charlotte is a member of the Yorkshire Subterranean Society

David Brown, from Burscough, in Lancashire. David is a student paramedic so is interested in cave and mine rescue. He has trained to be a rock climbing instructor and is qualified in operation and inspection maintenance with technical outdoor solutions and is competent in SRT

Editorial

The quarterly newsletter is a record of CATMHS activities and interests and has articles related to mining history. It was invaluable in compiling the CATMHS 40th Anniversary publication. Every issue is available on the CATMHS website, which is searchable. Copies are sent to NAMHO and to the Cumbria libraries at Ulverston, Kendal, Carlisle, Whitehaven and Barrow and there is a full set in the Armit Library & Museum in Ambleside.

Since the advent of Social Media I have become concerned that fewer people are contributing to the newsletter and that it might cease to be a complete record of our activities and interests. Facebook has become the main vehicle for promoting and organising meets and subsequently for posting photographs and comments. Sometimes there are informative pieces on mining related topics. Please consider giving these posts some context and perhaps a bit of structure and submitting it to me for the Newsletter.

Apart from official meets, most CAT activities have been carried out by small groups with an interest in a particular site or activity, whether it be exploration, conservation, documentation, or surveying. The Furness Adventurers, Newland Furnace Trust, CATMHS Digging Team, Welsh Exploration Group, even COMRU, all came about as a result of small groups of CAT members pursuing a common interest.

Projects such as the exploration of Coniston copper mines in the 1980's, the subsequent underground survey of the Coniston mines, the survey of Nenthead shafts, and the pumping

out of Logan Beck copper mine at Ulpha, didn't start as CAT projects, but they were inspired by the Society and were carried out by CAT members and reported in the CAT newsletters and Journals. My point is that in the past all these groups reported their activities and findings in the newsletter as a matter of course, and that happens less than it used to.

So this is an appeal for more contributors. Don't be put off by thinking that what you have been doing isn't of interest or that 'everyone knows that'. Even well informed people can have gaps in their knowledge and it can be useful when generally well known material is brought together from a variety of sources.

Since I wrote this I have been pleased to received some excellent meet reports and several articles. However, nearly all activities have now stopped because of the need to contain the Covid 19 virus. There will be no meets for the foreseeable future, hence no meet reports for the Newsletter. Isolation could be an opportunity to write up some activities, do some internet research, or complete that article that you have had in mind.

Donation for CATMHS from sales of the 2020 Adit Now calendar.

CATMHS was one of the groups the Adit Now site members nominated this year, and the total raised where CATMHS was the nominated beneficiary was £384.17. Sums raised through calendar sales are always relatively modest, but it is hoped it will be useful for the club's ongoing preservation and conservation activities.

The rescue organisation this year is the COMRU. This is because the calendar features Kate Tyler on the cover (with the permission of her family) and it seems appropriate for the CRO to be on Kate's patch.

It is gratifying to be recognised in this way, and we should find an appropriate use for it. Suggestions so far are ...

First Aid training and equipment.

Conservation at Low Water power house.

We could use some to buy some stainless steel bolts to replace some rather rusty spits across MAGS catwalk.

We could use some to pay for the replacement oil drum lids at Goldscope, Dalehead, Wythburn, Eagle Crag etc.

Project work at Honister, 2020.

This is a brief note on planned project-work in the Honister area during the first half of the year. Much of the work will involve generating drone image of key sites that are not easy to access or study by any other means. Below is a summary:

Bull Gill

This gully runs up the face of the Crag and has featured on several occasions in the history of slate working at Honister. It also became the 'resting place' in former times of old plant and equipment that was no longer required. We hope to fly a drone, with the camera on the video setting, from the top of the scree below the foot of the buttresses, up the gully to the rim of the Crag. The only problem is that Via Ferrata cables run across the gully at one point, so we need to take care there.

The purpose of this is to obtain clear images of some of the old mining remains that were created during the 18th and early 19th centuries and also the relics of pieces of equipment that were disposed of down the gully. It will also be interesting to locate, if we can, the boulders that came down the gully during the thaw about three years ago and lodged just above the old tramroad bridge that crosses the gully. When I inspected them at the time the newly-exposed rock was of a pale blue colour! Last year I took Lorraine and Kevin Crisp up to this point so that Lorraine (a geologist) could inspect the boulders, but we found they had vanished! Gnash Baxter tells me that more boulders are to be found in a narrow gully further up Bull Gill although Lorraine feels that these may not be the result of glacial depositing.

Quay Foot Slate Band

This is the lowest of the three slate bands laid down in the area by volcanic activity, approximately four hundred and fifty million years ago! It was worked extensively in the 19thC at Quay Foot, near to the Bowder Stone, but not to any extent on Honister Crag. However it clearly outcrops on the steep face of the Crag and these outcrops may have been worked on a small scale during the late 17th and mid18th centuries. By filming from a drone, along the line of the outcrops we should get a much better idea of any trial workings established there. Evidence may include the remains of revetment walls and even the entrances to levels into the slate band. It will also be a much quicker and safer method to study them than by abseiling down from above. These investigations will have to be carried out on clear, bright days with little wind.

Blockley's Level, Yew Crag

On the last trip up into Blockleys Gulley I noticed that Blockley's Level may have been driven, by mistake, on the barren side of the slate band. The slate band appears to lie above the sill that forms the sloping roof of the level, and looks to contain olive-green slate similar to the Kimberley Band on Honister Crag.

Alastair Cameron.

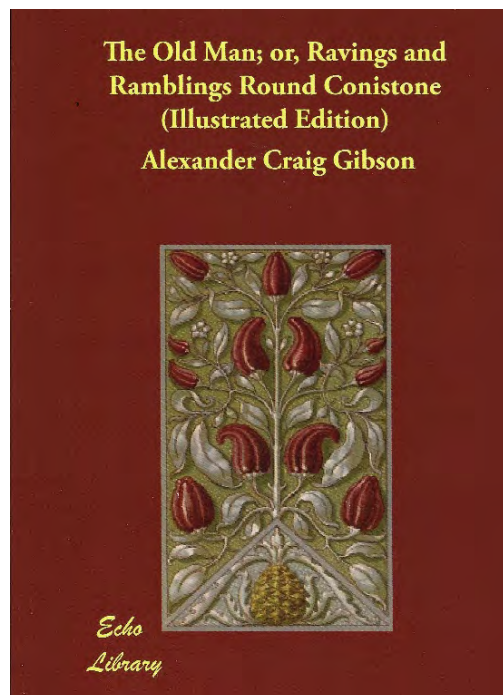
Book re-print - The Old Man; or, Ravings and Ramblings Round Conistone.

Written by Alexander Craig Gibson, who was for a time the surgeon to the Coniston copper mines

First published in 1849 this book was re-published by the Echo Library in 2018. It is available from the Book Repository via Amazon. My copy cost £6.99 including postage.

West Allendale Mines Plan.

Leif Andrews has used numerous abandonment plans to produce a comprehensive and very well drafted plan encompassing the whole of West Allendale. It includes Barneycraig, Guddamgill, Swinhope, Wellhope and Scraithole mines. He is happy to share it. It is a PDF of 1.4MB. If anyone would like a copy then email a request to membership@catmhs.org.uk



Coniston Sawmill waterwheel



On 24th March Philip Johnston posted a short video on Facebook of his waterwheel turning under water power for the first time, albeit from a hosepipe. It looks majestic in motion. The opening event planned for 5th May has to be postponed.

Corner of Curiosities

Has anyone ever thought about why explosive devices bobbing around at sea designed to sink warships or buried in shallow ground on fields of war designed to kill or maim soldiers are called mines? The reason is that miners were once employed to dig tunnels under the walls of castles, then fill these tunnels with explosives, to allow the wall to be breached. This practice was also used in the trenches of the First World War, when miners dug under the enemy's lines and filled these tunnels with explosives with devastating results. So, explosives under the ground were simply called mines, based on where they were hidden. And when explosives were developed to hide under the surface of the sea, these were also simply called mines.

Hospital Level

Hospital Level at Coniston Coppermines is today one of the better known and more frequently visited levels in the set. However, how many people know the origin of its name? The other adits in these parts are named after people, such as Courtney's, Taylor's, Gaunt's or Fleming's, or they are named after the location they are in, such as Grey Crag, Levers Water or Kernal. But a couple are known by a name that describes their function. Deep Level, also known as Horse Level, is one example, being the lowest drainage and the main haulage level in the set. Hospital Level is another example of this. A hospital was a place of rest or recovery. And Hospital Level was where injured, poorly or elderly miners were sent to work. Hospital Level is right beside the Paddy End Mill. It doesn't require a steep climb up to the higher levels and neither does it require an arduous climb down ladders to the lower levels. So Hospital Level was likely named because, relatively speaking, it was the easiest place to work.

Thriddle Incline & Thriddle Shaft

These two extraordinary man made features of the Coniston Coppermines are also well known. But again, who knows the origin of their name? The incline and shaft are in a valley called The Red Dell. Try saying "The Red Dell" quickly, running the three words together into one, whilst adopting a broad Cumbrian accent. It comes out as "Thriddle".

Mark Hatton.

Gear Review - Fenix HM65R headtorch



Fenix have a good reputation for producing high quality, reasonably priced and robust head torches that are suitable for use underground. The latest model they have released is the HM65R. So is it any good? Well in short, yes it is, in fact it is very good indeed.

The HM65R torch has a separate spot lamp and a flood lamp which can be used separately or together. The spot pumps out up to 1,000 lumens and the flood up to 400 lumens. So have both on together on the highest setting and 1,400 lumens can very effectively light up long tunnels and large underground spaces. The power setting on each lamp can be adjusted to give the optimum light for the space you are in. The light from both lamps has the same tone (a neutral white) which is ideal for photography.

The torch runs off a single replaceable and rechargeable 18650 battery. This provides several hours of light in typical use, with many hours possible if you just use the low power settings. Carrying a spare 18650 battery and swapping them over when needed is very easy. The lamp has a built in battery level indicator which is easy to use and very effective.

The unit weighs very little so is barely noticeable on your helmet. And it is rated IP68 so it is good for a few metres of immersion in water. So whilst not suitable for cave diving, it will hold up to the type of wet conditions non divers are likely to encounter.

It costs around £90 - £95, which initially sounds a little dear, but having used one for a few months now I think this is great value for money. The unit is very well made, cleverly designed and very nice to use. This is now my go to head torch that quite literally puts all the others in my extensive collection in the shade!

Mark Hatton.

Notes on the Mines Forum meeting, 4th February.

Present: Eleanor Kingston, LDNPA, Jamie Lund, National Trust, Andrew Davidson, Natural England, Peter Bardsley, Liz Withey, Environment Agency, Katie Shorrock, Coal Board, Warren Allison, Mark Simpson, Ian Matheson, Mike Mitchell, CATMHS, Donald Angus, Alastair Cameron.

Updates

Coniston: The temporary bridge over Red Dell Beck should be replaced by a permanent one this month. Philip Johnston's Bonsor Sawmill waterwheel is nearing completion. He intends to hold an opening day in May.

United Utilities have applied for permission to re-surface part of the track, which has been damaged by water due to a faulty valve.

Scheduling at Coniston is to be reviewed in order to allow better management of sites, including the United Utilities water treatment site and Philip Johnston's waterwheel.

The Natural Trust and Natural England have been meeting to discuss potential entry to the High Level Stewardship Scheme by Coniston Commoners, and will draw attention to scheduled sites in the area, which includes Torver High Common, Coniston and Seathwaite.

Alastair Cameron hopes to instigate consolidation work in the quarries on the North East shoulder of Coniston Old Man and to erect three interpretation panels. Initial focus will be at Saddlestone quarry. He suggested that the whole area might be Scheduled.

In the working quarries, volcanic black slate has been discovered at Low Brandy Crag, which is valued for producing worktops etc.

At Deep Level, CATMHS has produced drawings for a gate similar in design to that at Kernal Level, to be installed in sound rock in-by of the portal. Once in place the entrance, which was partially blocked by a land slip, will be cleared out. This will reduce the water level inside.

Concern has been expressed that Courtney's Cross Cut, which is open, may be a danger to the public. Andrew Davidson pointed out that liability exists even though injury may have been caused by foolhardy or thoughtless action of the victim. A notice and a barrier may become necessary.

The Fix the Fells team intend to gather stone from Blue Quarry and lift it by helicopter to use for footpath repairs.

Force Crag: Northern Archaeological Associates are continuing with a conservation plan for the whole of the Coledale valley. Publication is imminent and comments will be sought. The National Trust intend to review their visitor provision at Force Crag mill.

Work at Level 3, which was to be carried out by the CATMHS digging team, has been delayed because of concerns regarding future liability for unforeseen consequences. The NT are considering applying for a grant from the AIA to pay for the work. It is possible that the Coal Board may assist with funding.

Newcastle University are coming to the end of their involvement at Force Crag. They are currently trying to determine the limits of water flow through the settling pond. There is a need to divert rainwater from the settling ponds. They are also investigating the generation of hydrogen sulphide, but this gas is not thought to be a big issue in the open environment.

There are concerns regarding erosion of part of the embankment of Coledale Beck. The Coal Board are monitoring the situation and considering a survey to determine erosion and pollution. Jamie Lund asked if the tailings at the two mill sites could be included in the survey. Photographs are sought of the wider area in order to establish base data.

Greenside: The Environment Agency would like to stabilise water flow rates in the river in order to prevent damaging flash flood issues. This would also be of benefit to the archaeology.

Restoration of Lucy Tongue portal has been in abeyance during the Coniston Copper Project. Eleanor Kingston hopes to initiate a wider project involving a number of sites, including Greenside mine and its impact on the village. This would contribute to the World Heritage Inscription.

Greenburn: Cumbrian Rivers Trust are to provide support to investigate metal pollution issues. The National Trust has monitored the condition of the conserved buildings and are developing a program of remediation. They do not intend to rebuild the collapsed wall of the mill, but will clear fallen masonry from the wheelpit below it.

Tilberthwaite: Warren Allison raised an idea to pump out Hawkrigg mine, an Elizabethan open working, in order to investigate the working limits and record what is there. There was generally support, providing the pumped water could be properly disposed.

Threlkeld: Work is in progress to divert water around the collapsed culvert by cutting a new channel in undisturbed ground.

Honister: The working quarry hopes to start producing olive green slate from a new site on No. 4 level by the end of this year.

An investigation is envisaged of the archaeology on the Key Foot slate band on the face of Honister Crag using a drone camera.

Scheduling Industrial Sites:

Potential sites for scheduling are Penny Rigg mill, Tilberthwaite, Silver Gill and Roughton Gill at Caldbeck, and the Yew Crag slate quarries at Honister. A criteria for scheduling is that some risk to the site should be identified. Alastair Cameron suggested that the slate workings on the North East shoulder of Coniston Old Man might be included and Jamie Lund suggested the Stoneycroft smelter site.

Other business: It was suggested that there is a need for a survey to be carried out of Yewthwaite and Goldscope mines.

The lid of the recently refurbished entrance to Goldscope Coffin Leve has been damaged. Conservation work at Duddon Furnace has been completed.

The meeting concluded with a presentation by Alastair Cameron on potential examination and conservation of the slate quarries on Coniston Old Man and at Honister.

Forthcoming Meets

These meets had been scheduled before Covid 19 became a problem. A restriction of movement in the countryside was brought into effect by Foot and Mouth disease in 2001. Hopefully it will be possible to re-schedule when Social Mixing becomes possible once again.

SRT Practice Session.

An opportunity to practice and perfect SRT work with experienced CATMHS club members in the first class SRT facility at the Yorkshire Subterranean Society near Settle. A practical session was planned for the following day at Lost Johns Cave, Leck Fell, near Ingleton.

Jet mines at Guisborough.

Chris Twigg offered to run a meet around the Jet Mines he has been exploring and surveying.

Dorothea and Pen-yr-Orsedd.

Wales Weekend. A very special guided tour of these simple fascinating slate Quarries in the Nantlle Valley. Dorothea was worked from 1820 -1970, opening huge pits that are over a hundred meters deep. The last ever Cornish Beam Engine to be built was installed here in 1904. Pen-yr-Orsedd operated at a similar time but closed in the 90's. Again another simple stunning quarry with the Blondin aerial ropeways still in situ. The last mine manager that ran Pen-yr-Orsedd has kindly offered to guide us around these magnificent Quarries.

Sunday will be spent either exploring more of these Quarries or checking out the Copper workings a little further up the valley.

Coniston Coppermines

A surface walk around Coniston Coppermines with a few optional short underground sections. We will explore the history and engineering marvels of this wonderful Coppermine, nestled in some of the finest Lakeland scenery. Suitable for all.

Whitehaven Mines, surface walk.

The meet is a surface walk to view the remains of William Pit, Wellington Pit, King Pit (at one time the deepest mine in the world and the first to pass 1000 feet), Haigh Pit with its pit head winder still complete, Saltom Pit, a scheduled monument, which was one of the first coal mines in the world to work under the sea, and the fan house at Duke Pit, another scheduled monument, as well as other coal mining remains. Warren Allison has also got access from West Cumbria Mining to open the buildings at Haig Pit for a look around the boiler house and winding gear.

Dinorwic and private tour of a large Festiniog Slate Mine.

Dinorwic quarry was the second largest slate quarry in the world, covering more than seven hundred acres. Impressive internal quarry tramways and inclines were used to move the slate around the quarry. A spectacular place for a visit. Jon Knowles has kindly offered to lead a meet around this beautiful quarry. This will be a weekend meet, and the other day will consist of a guided tour by Jon into "a very special" Festiniog slate quarry. that has numerous artefacts and spectacular chambers to see. No photos will be allowed on social media as a condition of this trip.

Kirby Steven Lead and Copper Mines

A surface walk exploring the seldom visited Lead and Copper mines of the area.

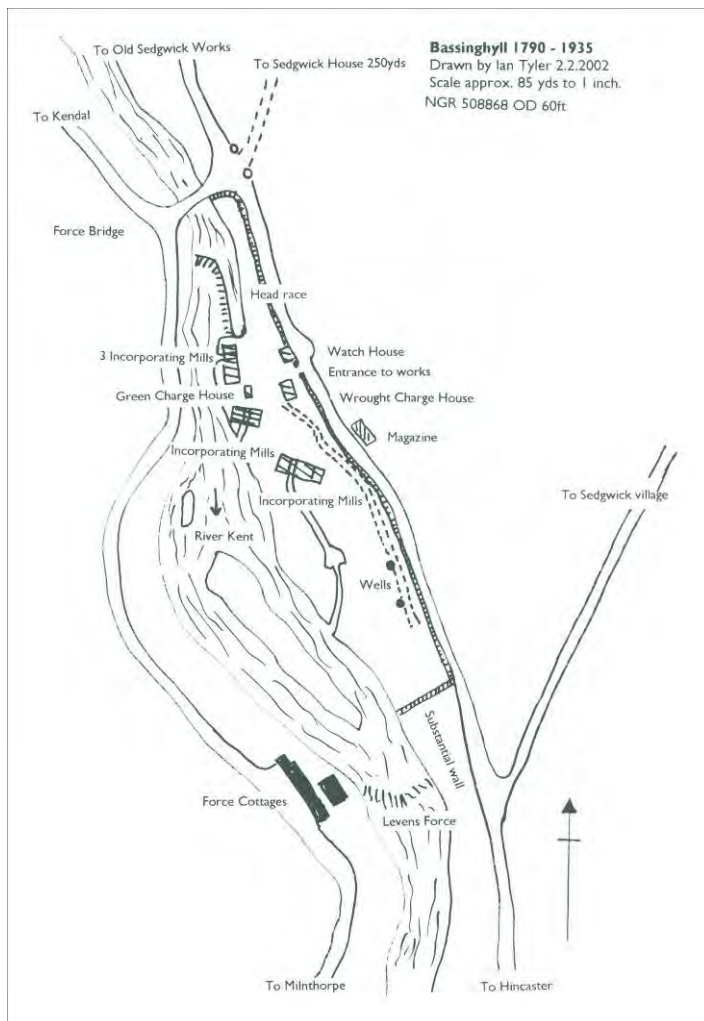
Sedgewick Gunpowder Mill Meet.

Meet leader- Michael Bill Oddie. Steven Dalglish, Liz Withey, Dave Donkin, Michael Pringle, Derek Mitchell, Belles Knott, Peter Sandbach, Dave Lund, Kevin Crisp, Mark Hatton, Warren Allison.

Meeting on the 19th January, on a lovely frosty day at Force Bridge just below the caravan park, which is the site of the New Sedgewick Gunpowder Mill now owned by the National Trust and leased to the Caravan Club, Michael explained what we were going to do and that we would visit the remains of three mills.

We started by walking away from the cars along the side of the river to look at the remains of the Bassinghyll mill which operated from 1790 to 1935 and was the longest running mill in Cumbria, now owned by the Environment Agency. Even though we had to look at it from the opposite side of the river, it is quite an amazing site especially as to how cramped the area is, so close to the river and worked for a hundred and forty five years.

Part of the area was owned by the Wakefield family, who ran the Old Sedgewick, Low Gatebeck, High Gatebeck and Bassinghyll mills, while the New Sedgewick Mill was owned by the Strickland family of Sizergh Castle.



Source- *The Gunpowder Mills of Cumbria* by Ian Tyler

Then we retraced our steps past the cars and up to the site of the Sedgewick Gunpowder Mill which is spread out over a considerable area, and what a place for a caravan park in a fantastic industrial setting. Just before the site entrance is a rather ornate footbridge which takes you over the River Kent to Sedgewick village. Then passing the Search house and Gate house before the Sawmill, Cooperage and Turbine house come into view. The cameras came out at the turbine house with a superb wide leat coming to it before it dropped into the ground. It is rumoured that the turbine is still in situ.



Footbridge looking from the east side of the river



The turbine house

Walking on Michael took us down to the river to look at the exit of the main head race, which unfortunately is gated. However, it is a magnificent piece of engineering and showed how much water must have been required to operate the site.

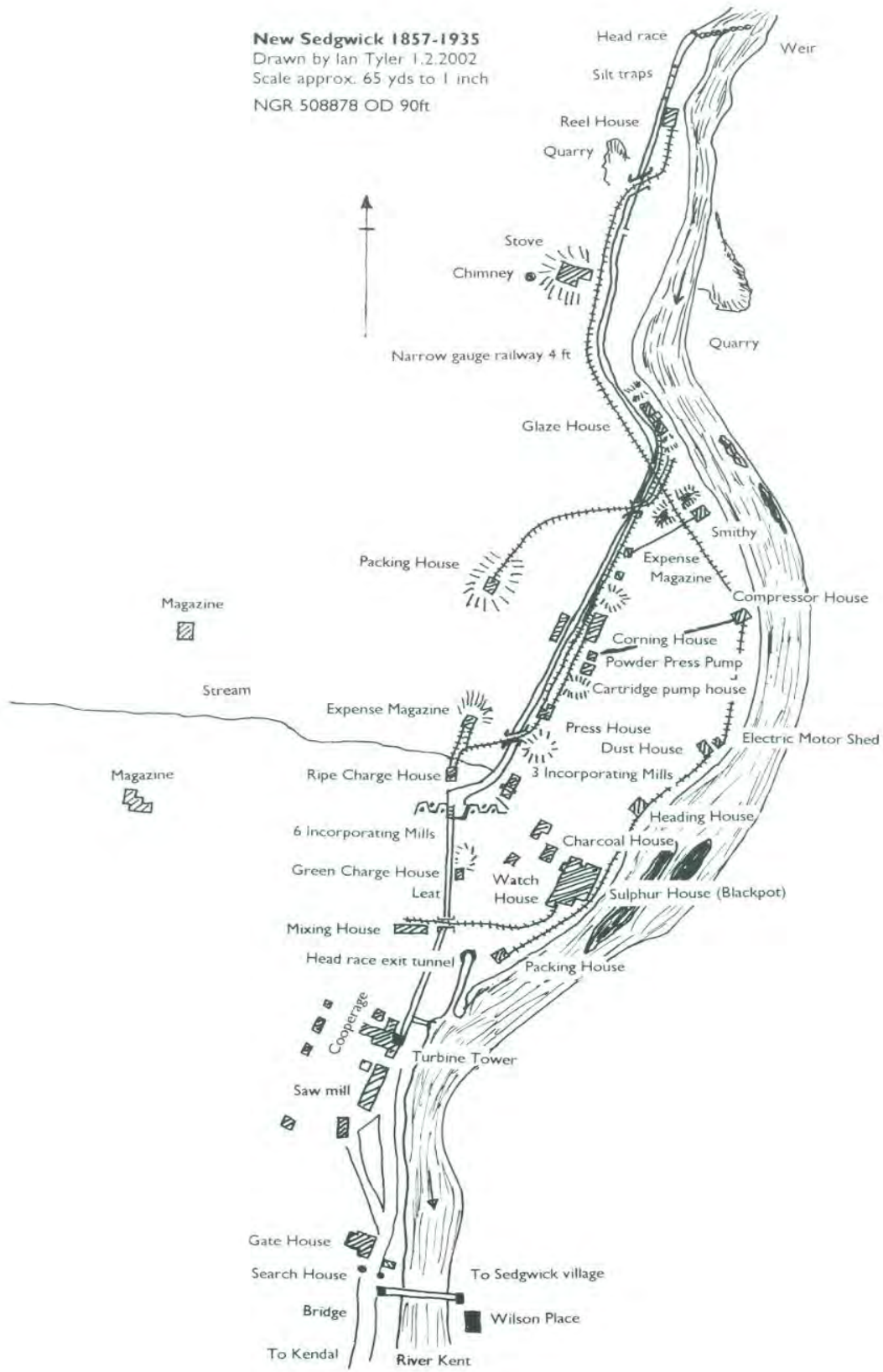


The head of the turbine



The exit of the main tail race

New Sedgwick 1857-1935
 Drawn by Ian Tyler 1.2.2002
 Scale approx. 65 yds to 1 inch
 NGR 508878 OD 90ft



Source- *The Gunpowder Mills of Cumbria* by Ian Tyler

Returning back to the road, we slowly made our way along what was originally a tramway, passing the Packing house, Sulphur house, Charcoal house and Heading house, before stopping at the Dust house, a very strange building indeed. Then on past the Electric Motor house, Compressor house and Smithy before crossing the magnificent race and stopping at the Glaze house with its huge thick walls.

It soon became apparent that this was a very complicated site where material was moved from one place to another to reduce the risk of an explosion. Slowly walking alongside the leat with the tramway on the other side we ended up at the head of the race where it meets the river. Here a weir had originally been built to divert probably much of the river to feed the various parts of the mill. Retracing our steps, we made our way back along the opposite side of the leat, which was made even more interesting by the way the sunlight shone through the trees, stopping off to look at the Stove house, which apparently was used to dry the “gunpowder”.



The main water race



The turbine plant

After a short distance we arrived at the Corning house and Powder Press house with the site of the Turbine house in between. There was much discussion as to how the turbines operated, which must have been high volume low head type. Carrying on past the Cartridge house and Press house we arrived at the site of the three incorporating mills, quite magnificent and driven by a very large waterwheel. Michael then took us on to just round the corner to where the six incorporating mills were located, an even more magnificent site. We spent quite a bit of time here before starting to make our way back to the entrance to the site, passing the Green Charge house and Mixing house.



The site of the three incorporating mills



Waterwheel pit



End wall of the incorporating mill



Waterwheel pit

It was around this time that Peter Sandbach said his little dog had gone off, so we split up, scouring the site, hollering until someone found it on the other side of a fence.

Returning back to the entrance we made our way across the superb footbridge, probably one of the best in the county to walk through the remains of the Old Sedgewick mill, of which very little remains. Arriving back at the cars, Michael then proceeded to set up a refreshment and cake stall from the back of his vehicle, which was most unexpected and certainly raised the bar as to how to end future meets.



However, after the refreshments, those who opted to extend the meet, walked back down towards the A590, passing the Bassinghyll mill to where the main road crosses the river. Here Michael took us down the river's edge to see where the "harbour" was, and it was here that the boats that brought the raw materials to the mills would dock and then return with the barrels of gunpowder.



The harbour for the boats

While we were walking around the area, pieces of building were spotted in the ground with areas of slag type material, and the consensus was that there must have been a mill of some type here which appears not to have been recorded.

This had been an absolutely superb meet to a fantastic site which is certainly one of Cumbria's hidden gems and in great company once again. This is a place we should visit again, once the caravans have gone.

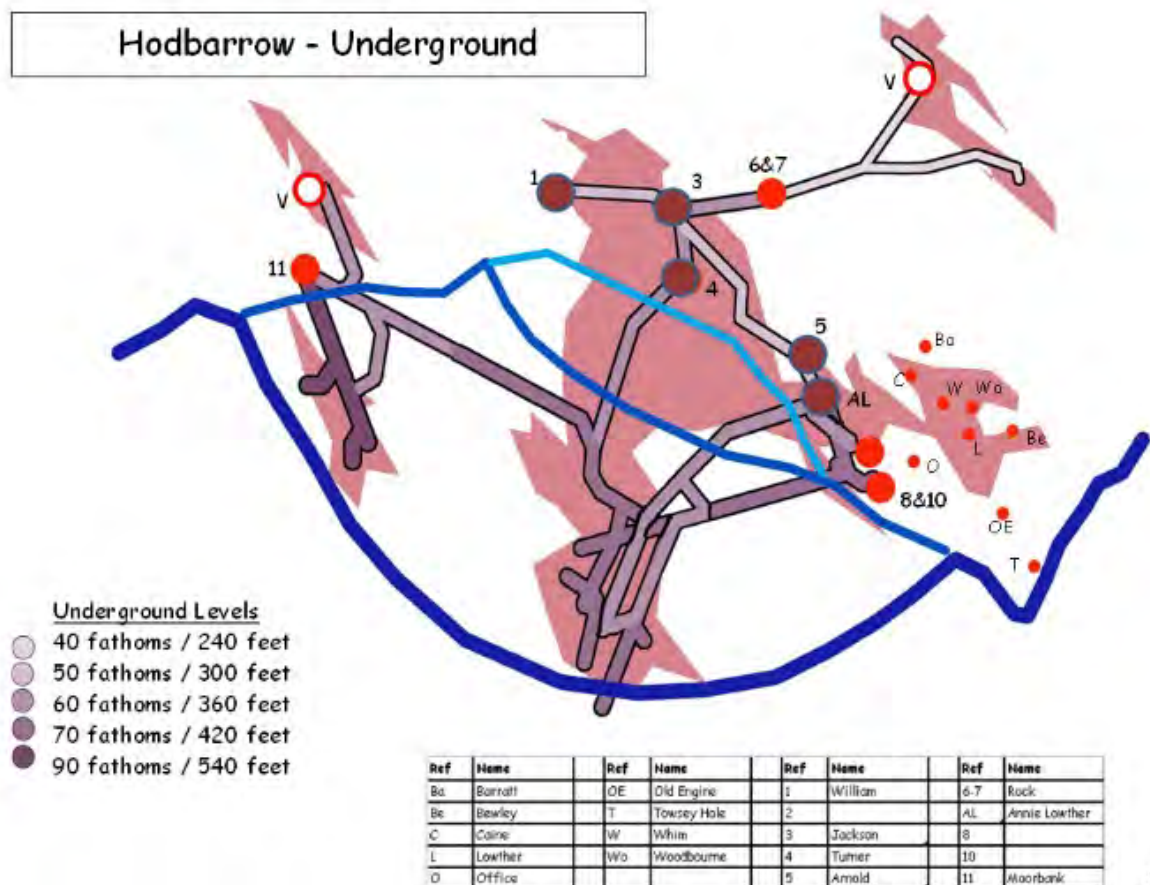
Warren Allison.

A Palindrome Day Visit to Hodbarrow, 2nd February, with Stephe Cove

Fourteen members and two guests turned out for a presentation of maps, old photographs and ore specimens before taking a leisurely walk around the site and finishing with tea and cake at what used to be the Hodbarrow Offices.

Warren Alison, Peter Sandbach, Bob Mayow, Derek Mitchell, Michael Pringle, Dave Hughes, Mark Willey, Clare Harvey, Steve Sim, Liz Withey, Jane Toothill, Mark Hatton, Jason Attwood and Paige Craik. Guests - Duane Farren and Jon Powell.

Hodbarrow was a fantastically rich mine that raised twenty eight million tons of ore over the hundred years to its closure in 1967. At times it was bringing up more than all the Furness mines together and nearly half of the West Cumberland output. It didn't start that way and the early years were very tight - £3,000 (≡ £325,000 today) was spent before raising the first ore and £57,000 (≡ £7 million) was spent over 10 years before the first profits made dividends for the shareholders.



SC
2011

John Barratt came with the money and experience he had gathered at Grassington lead mines and Coniston copper mines and was partnered by Nathaniel Caine, a Liverpool iron agent who had the business acumen and contacts to get the best out of the mine. After the logistics problems at his earlier mines, Barret knew that a successful mine with a pier for direct shipping into and out of the mines would cut down costs and raise profits.

The old mine was a collection of shallow shafts using ladders for access and horse gins for raising ore. They were dug into the ore body which was worked away from the shaft bottom

leaving pillars to support the limestone roof. These were robbed back to the shaft leaving the ground to collapse. A bore hole drilled for a water supply for some cottages revealed a larger body of ore. Where mining at Coniston had followed vertical seams of ore, at Hodbarrow the haematite lay in flats up to one hundred feet thick, dipping towards the sea. New, deeper shafts were sunk with great difficulty because of aquifers running through the limestone and the boulder clay, but production and profits soared. Miners came to Millom from all over Britain and the town expanded with numerous pubs, churches and chapels for the new residents.



A “safety barrier” was needed between the workings and the sea and this began to hamper operations. First a timber revetment was built as a temporary solution and then plans were made for a more permanent barrier two thirds of a mile long and fifty feet high. This was built as a solid concrete structure with a clay bank behind and was finished in 1890. It cost £106,000 plus

£4,000 legal expenses (≡ £14 million) but was paid for out of profits in less than two years. However, underground workings soon began to encroach on the stability of the wall. Behind the wall the surface was slumping into the cavities below and the area, known as the Broken Ground, was eventually anywhere up to sixty feet below the original surface level.



One early morning in 1898, a hole about 60 feet in diameter was discovered on the foreshore, and it was found that a connection had been made between the tide outside and the sand seam which existed in the mine about 120 feet below. The result was that a considerable quantity of water got into the mine, and there was great danger of the mine being flooded. No shift was working underground and all available manpower was called in to fill the hole before the noon tide came in. Horses and carts were brought to ferry stone, clay, soil and anything that might fill the hole including gorse and hawthorn. By the noon high tide, the flow was much diminished.

A more flexible solution was needed to enclose even more of the foreshore to follow the ore. The Outer Barrier, one and a third miles long, was one of the world’s biggest civil engineering projects of its day. The contractors who came to Millom had just completed the Aswan Dam on the Nile. The centre of the new dam was sheet piling with puddled clay contained in a huge bank. Limestone boulders were tipped on the seaward side and the barrier was further protected by several thousand twenty five ton concrete blocks. Each block was numbered and dated so each block’s curing in the blockyard could be monitored before being

taken out and placed. Three massive Goliath cranes, similar to the units used in modern container ports, moved the blocks out of the yard to either end of the barrier where they were lifted and lowered into place. Work was started in 1900 and took five years. It cost £588,430 (£≡ 72 million) and gave the mine a new lease of life. Deeper shafts were dug and output soared with over a thousand men and boys employed. Over half a million tons of ore were raised in some years, so the cost of building the sea wall was paid for out of profits in a single year.

At first cargoes were taken to and from the ships by wheelbarrow along planks. A pier and a lighthouse were soon built and increased the efficiency of the operation. In the summer months, over a hundred ships could be waiting in the estuary – some for the mines and some for the adjacent ironworks. Ore was taken up the coast to Workington and down to Ellesmere Port and South Wales where it was stored on wharves and transported locally by rail and canal as demand required. Rail traffic was used more in the winter months but it was generally more profitable to transport by sea without any harbour dues to be paid when using the company's own pier. Returning vessels brought timber from Ireland and other supplies for the mine.



Rock House, Lighthouse and much earlier lime kilns – Stephe Cove collection

A number of paddle tugs were used in docking operations and, at one time, there was an associated shipping company with a number of schooners. One of these, the “Hodbarrow Miner” sank off the Cornish coast near Newquay with only one survivor.

While iron and steel making depended on high grade or haematite was at the top of the market. As processing became ever more sophisticated, low quality ores imported from Spain and then from even further away from the UK changed the market. There was a burst of demand through WW1 and then the years of slump saw stockpiles of ore growing and miners laid off. From a peak of 545,376 tons raised in 1907 only 14,682 tons were produced in 1922.

The company moved to electricity to reduce cost and increase efficiency. With a power plant on site, workshops and processes were altered. An electric locomotive worked underground

and the rope haulage and pumps were electrified. At times water was entering the workings at 1500 gallons per minute and although the electric pumps could cope with “cleanish” water, Number 10 shaft with the large beam engine continued to pump, because it alone could cope with the sand and gravel.

The search for new ore was not abandoned and in 1925 a borehole found workable ore near the Haverigg end of the Outer Barrier. A final shaft, number 11, was sunk at Moorbank in 1928 and was the only working pit up until closure. Later boreholes explored up to a depth of 2,500 feet in sand dunes at Haverigg but no further discoveries were made. World War II saw a temporary increase in demand but afterwards Hodbarrow could not compete with quantities of cheap ore coming into Britain from remote parts of the world and so the mine was closed in 1967.

Left behind was a huge area containing the aftermath of a hundred years of mining. Around the edge of the broken ground were remains of engine houses and workshops, chimneys and railway lines. If Hodbarrow had kept going another ten years or been forty miles nearer the A6 (no M6 beyond Carnforth until 1970’s), there might have been the potential for an amazing industrial heritage site. But it was not to be. Machinery was broken up for scrap. Eric Holland, a founder member of CATMHS broke up the beam engines and pumps. Some years later, I once asked him how he felt about that. He was resigned to the fact that there was no chance of saving the site, it was going to be done by somebody so why not him. The buildings were demolished and the site was cleared and levelled.



Hodbarrow in the 1960's. Photo by Gilbert Scurrah.

When the pumping stopped, the hollow began to fill up and the rest of the area has gradually gone to scrub and brambles creating a wonderful wildlife haven. The land was sold to a Norfolk caravan park company who had great ideas for the site. Their map key used pine trees to indicate the slag banks giving the impression of gloriously green wooded areas rather than glaring white slag. There was a plan to breach the Outer Barrier with a sea lock to make a marina but none of this happened. Eventually the site was sold to a local developer who sold on part to the RSPB. They were interested in the site for the Little Terns who showed their appreciation by moving en-masse to Foulney Island and didn't return for years.

We set off to walk around the site after lunch, starting from the Mine Offices. Our first stop was the end of the Inner Barrier and the foundation stone, which I had cleared of brambles in preparation for the visit. The area is now a caravan park and we paused at the point where the Moorbank Shaft had gone down to 90 fathoms. No-one seems to know how well it was filled in. Jason, whose family own part of the site, took us across to the ventilation shaft. He'd lowered a lead weight on 350 feet of fishing line without reaching the bottom but must have been very close to the 60 fathom level.

Then we went on round the sea wall to the lighthouse. The outer half of the site is now an RSBP bird reserve. At the end of the wall we climbed to the galvanized drain cover that marks the site of the Old Engine Shaft and then down to the shore. It was here, at Towsey Hole, that the first workings had taken place before Barrett's involvement. The red ooze was used locally as smit – to mark and identify sheep. It goes in only a short way to a blockage. As recently as sixty years ago, it was possible to go in and climb the timbers of the shaft to the surface above the cliff.

Back at the track, we passed the flooded quarry where the limestone had been taken for the outer wall and walked round to the old lighthouse and the lime kilns that are shown on the oldest maps of the area, long before mining was started. At the point where the two red brick engine houses for number 8 and 10 stood there is nothing to show but a handful of bricks in the ground. Nearby there is a hollow for the Arnold Pit, which contains a part of a pump rod and little else.

We continued to the site of number 6, where there is a concrete cap to the shaft. Some years ago, the side of the capping crumbled and it was possible to crawl in to the top of the shaft itself. (Millom News 11.5.79) The water level was some twenty feet below the top and the timbers were so rotten that you could scrape off the wood with your fingers. The hole was closed with an old bedstead and slag. Some time later it opened again but was well concreted this time.

From here we followed the old railway line up to our starting point. The offices are now Herdwicks café and B&B so we finished the day with coffee and cake. This circuit is a great walk for anyone, anytime and the Discovery Centre at Millom Station has lots of information about the mine, including the last cage from the mine, with a reconstruction of the shaft bottom at Moorbank.

The near complete absence of the Furness and West Cumberland mines is a great shame. It might not be on the scale of Salisbury Plain without Stonehenge or Ghiza without the pyramids, but a whole way of life is gone without a trace. In his poem Hodbarrow Flooded, Norman Nicholson described the reflections in the hollow - "Old winding towers up-ended float on glass" - and the flooded underground workings - "The lungs of a drowned man".

A google search for Hodbarrow brings a number of articles and many images past and present.

A search on the CWAAS site brings up several articles

<http://www.dmm.org.uk/colliery/h903.htm> list accidents at the site

<http://www.pastpresented.ukart.com/photog/millom2/index.htm> photos taken at closure

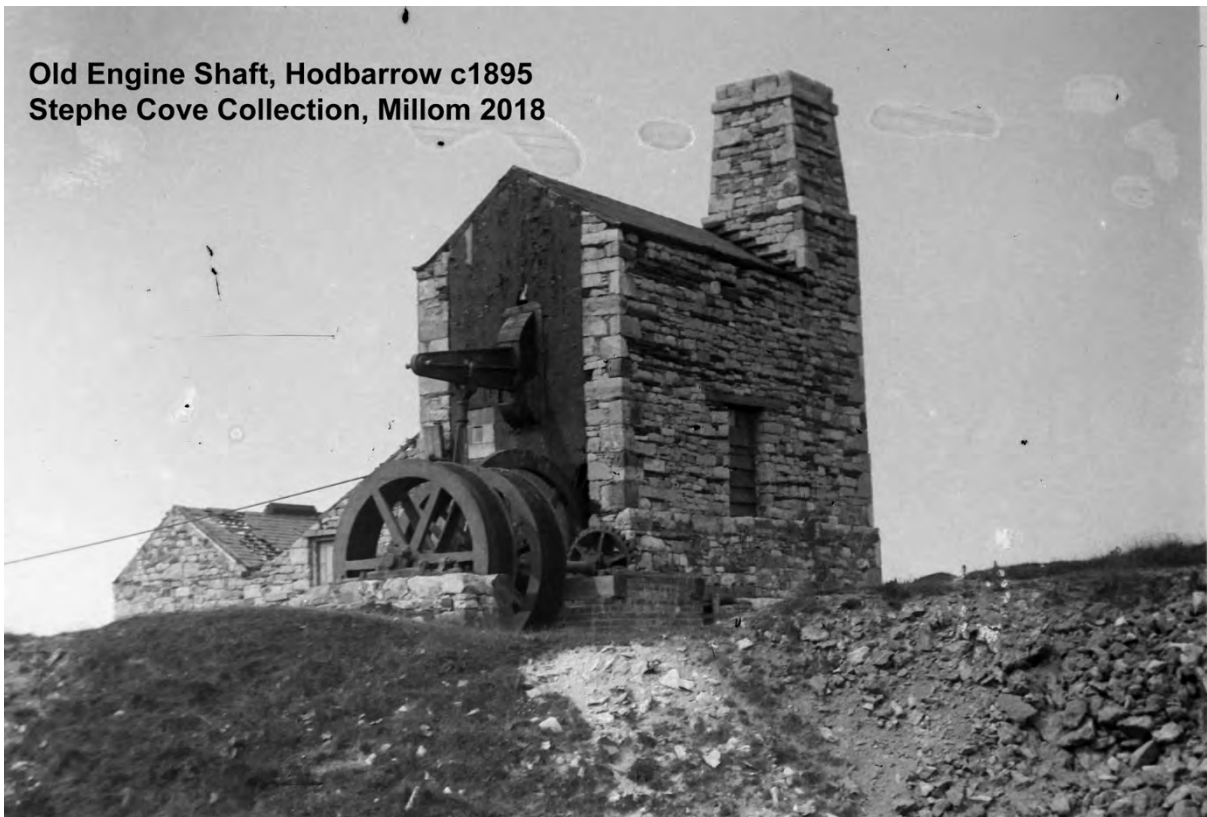
Cumberland Iron, A Harris; Monographs On Metalliferous Mining History Vol 2, 1970

Collected Poems, Norman Nicholson; Faber and Faber, 1994.

All images from Stephe Cove collection unless otherwise stated



Remains of No 8 (Right) and No 10 (left) after closure – by Gilbert Scurrah



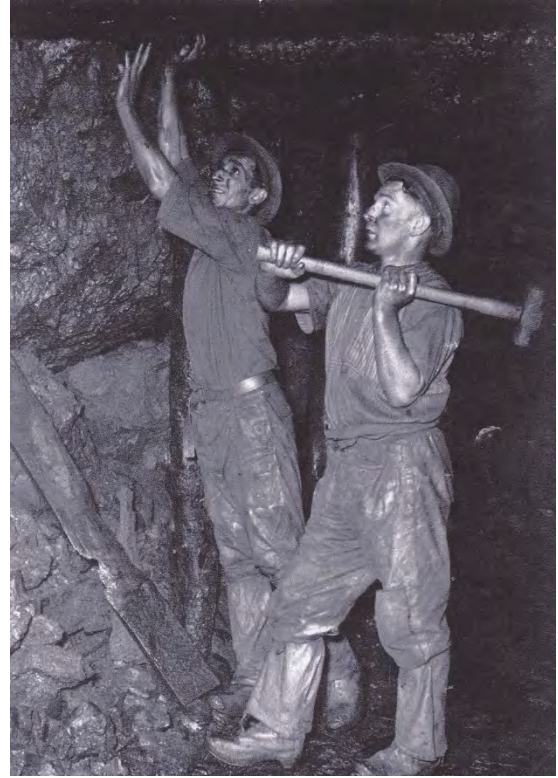
Old Engine House – First shaft at Hodbarrow



Steam Shovel working on Inner Barrier – SC



Underground at Moor Bank 1960 – Newspaper 1960s. The guy at the pump valve is sand filling a void



Underground at Moor Bank 1960 – Newspaper 1960s



Hodbarrow Sea Walls from the air, 1990s – photo by Lawrence Hill

Middlecleugh (taking in Camel or is it Dromedary Sump), Nenthead, 16th February.

In Attendance: Chris Little, Michael Bill Oddie, Rob Cruickshank, Julian Cruickshank, Derek Mitchel, Michael Pringle, Carl Barlow, Steven DalGLISH, Magnus Mcintosh, Steve Sim, Iwan Fletcher.

Following storm Denis there was some concern we might not make it to Nenthead on Sunday the 16th of February. Weather reports promised a minor Armageddon of snow, showers and high winds; however the morning was clear and comparatively calm. Travelling from the west I and others crossed the river Eden at Langwathby, a grey brown torrent expanded well beyond its banks, having flooded the approaching A689 the night before and washing away a wall and a fence in the process. On arrival at Smelt Mill car park we were regaled by the tale of recent flooding in one of the Conservation Society's buildings and the frustrating and lengthy process of drying and making good the damage done. Despite all of this, the mood of the group was one of optimism and promise for a good day underground.

We walked through the cold, bright morning in procession up from Smelt Mill to Middlecleugh, lifting the iron bars and rolling out the grand old rusty tub that guards the entrance. Then we made our way into the level through water over welly height, ignoring any passages off to the right which would be explored on our way back. There were strict instructions from Nick not to fall through the degraded iron pipe running beneath our feet, on risk of foot amputation. We were not warned about the well disguised but significant hole in the floor not far from the approach to Camel Sump, so although a ripple of 'watch the hole' slowly made its way down the line, more than one person had the experience of stopping abruptly and shouting 's**t a huge hole'. Despite the peril we made it safely and swiftly to Camel Sump and were gifted an audience with a six inch tall one humped beast being ridden



by one behatted person and led by another, with the date 1794 chiselled by its side. Other carvings, dates and signatures adorned the walls atop this deep sump, with just enough room for the team of thirteen to gather round.



We proceeded beyond Camel Sump, keeping right this time to an area big enough for us to sit and have some lunch. It was at this point that Carl, itching to explore all the nooks and crannies



of Middlecleugh left to take some epic photos of undisturbed water filled levels translucent under perfectly formed limestone archways.

Having gone as far as we could we turned back with a plan to explore the side passages we'd ignored to get directly to Camel Sump. A back filled or collapsed passage had a small window on the right wall which looked like a larger passage had been made smaller but left open, perhaps for ventilation. Crawling into this head first, chest to the earth, gave a glimpse of a terrifyingly decomposed wooden ladder descending down a long shaft. At the point of a junction with a number of other passages and not far away from a beautiful calcite formation some three hundred meters into Middlecleugh, you can experience what seems to be a trick of the mind and bend down a little and look back toward the entrance and see just a small circle of light, literally the light at the end of a very, very straight tunnel.

Further passages led to some great mini adventures with crawling almost up to caving standard and the beautiful water filled archways Carl had already visited. Deep enough to get your pants wet, and it's not been a great underground trip unless you've got your pants wet.



We exited to a colder but still clear day and made it swiftly down to the Smelt Mill car park to get changed and warm. A great trip, and many thanks to our two meet leaders Nick and Leif and of course to Michael Bill Oddie for organising the trip.

Thanks to Iwan Fletcher for the report. Photos, taken from Facebook, are by Carl Barrow and Michael Oddie.

23rd February. Greenside mine, Lucy Tongue level.

This meet had been scheduled to follow the AGM on 15th December but was postponed because snow closed Kirkstone Pass. Unfortunately it had to be postponed again. Following the heavy rain and local flooding caused by storms Ciara and David the preceding week the meet leader Warren Allison checked the level of water in the Lucy Level and found it to be virtually up to the roof.

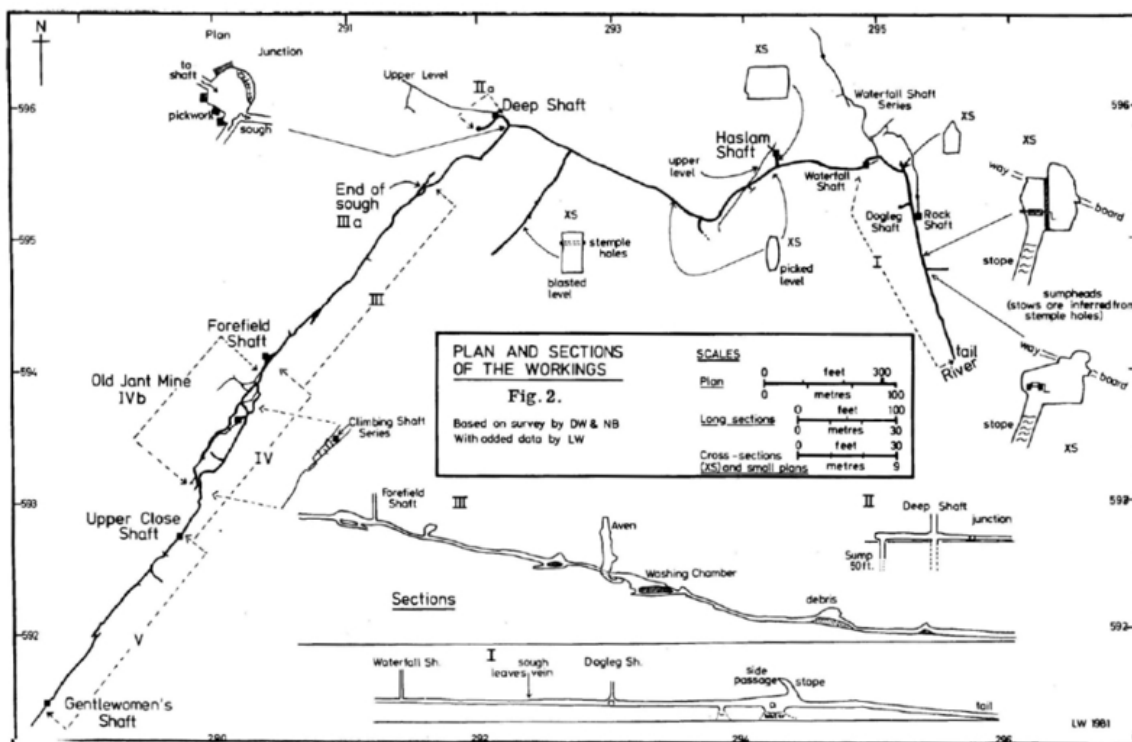
SRT Practice Session. Due to interest being shown in developing SRT skills by a number of members and prospective members, a further opportunity had been arranged to practice and perfect SRT work with experienced CATMHS club members in the first class SRT facility at the Yorkshire Subterranean Society near Settle. This was to have been followed An underground practice session to consolidate the skills and techniques acquired the previous day at **Lost Johns Cave**, Leck Fell, near Ingleton.

Both events had to be cancelled at short notice due to Covid 19 movement restrictions.

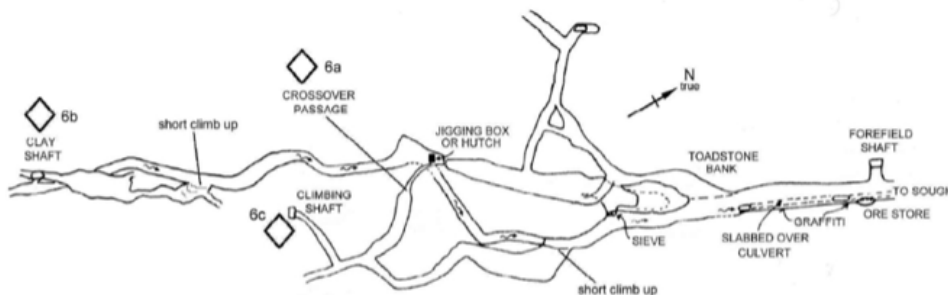
CATMHS Peak District Meet, Saturday 29th February

Attendees: Garry Parsons, Michael Bill Oddie (Meet Organiser), Michael Potts, Rosie Lord, Mark Hatton, Robert Stevenson (Meet Leader), Pete Johnson, Sally Allsop, Michael Pringle, Chris Bunker.

This meet was part of a two-day CATMHS excursion into the Peak District organised by Michael Oddie in conjunction with the Derbyshire Caving Club. The Saturday is covered by this write-up and the second day covered the Good Luck Mine which is also well worth a visit. The area surrounding Matlock Bath has a rich mining history but is now surrounded and built upon by the aforementioned town. They have rightfully chosen to showcase their industrial heritage through both a local Mining Museum and several show mines contained within the hillside(s) around the town.



Old Jant Mine



The mine we were visiting on the Saturday via a through trip was formerly two mines called 'Youds level' and 'Old Jant-Mine', to which Youds level provides both access and a drainage adit or 'Sough' as they are called in the Peak District. A map of both mines is shown above with 'Deep Shaft' shown at the top to the left of centre, where the trip began.

Before detailing the meet it's worth reading the following extracted from 'Adit Now' which explains more about the history of the soughs and the people who drove these levels.

'The soughers worked in tight, claustrophobic, wet, often bad air conditions for the minimum amount of money, which was not paid weekly but on the reckoning system (the same as the lead miners) whereby they costed their price for the work in advance; this would be for a set period of anything from six to twelve weeks. They must have been a tough bunch of miners who in turn turned into soughers and adventurers, but the adventurers were mainly the larger lead mine owners and smelters who invested their money in driving the soughs to reach the remaining lead deposits left beneath the water table when workable deposits started to run out in the 17th & 18th centuries. A lot of money could be made or lost through this kind of enterprise, which accounts for a common expression in Derbyshire when I was young about people who wasted their money, which was to say that "they'd thrown their money down a sough!". In the early narrow soughs the mining method was mostly hand drilling (from memory gunpowder for blasting was introduced into Ecton around 1670 wasn't it?) often through hard barren rock such as the "toadstone" beds (volcanic rocks such as basalt, dolerite) also shales (Hillcarr sough is a very good example of this with additional costing for gritstone lining the walls and roof of the sough when driven through the shales, which also produced gas, and on one occasion caused an explosion and deaths). The "toadstones" separate the Matlock limestones, this is why the sough passages are "coffin" shaped, they took out the bare minimum of rock to save on their costings for the work. Another thing we forget is that people in years gone by were of smaller stature and would have fitted into these narrow passages better than present day mine explorers. Nellie Kirkham always told me that Derbyshire lead miners who moved abroad to work were renowned for their drainage expertise in the use of tunnels, whereas Cornish miners were renowned for their engines.'

A very good example of their work in Youds Sough is shown on the next page, which is looking out towards the river whilst also clearly displaying the curved strikes of the pick from the other direction (Many thanks to Warren Allison for commenting on this on Facebook). What should also be noted is that unlike at Nenthead, where the levels are driven in a straight line, here they bend and twist, which questions how they accurately drove the sough in the direction of the shaft which they were to drain. Another interesting point to note is that you can clearly see where they decided the roof was too high and deliberately lowered it. This repeats every five to ten metres throughout and has been driven in this way to reduce the amount of rock to remove and associated spoil to extract.



The trip itself....

Our through trip started at the top of the Hill on the Western side of Matlock where DCC very kindly put in an abseil rope to cover the eighty metre drop into 'Deep Shaft' The first picture on the next page shows a participant on top of the shaft about to descend whilst the rest of us waited in the sunshine/ hail/snow/rain for our turn to descend.



On reaching the horizon of Youds the explorer was still suspended above many metres of flooded shaft reaching down to other areas of the mine. There is a positive water pressure here and water is rising from the lower levels which flows out through the Sough we were about to follow.



This is the view down the shaft with the bottom of it lit by CATMHS/DCC head torches





As can be seen space was at a premium at the bottom of the shaft...



Once all had descended, the group headed towards 'Old Jant Mine' following the very low and narrow coffin levels which had water to a depth of about 6 inches to a foot throughout making the going challenging as shown here.



At this point three of us, including myself, chose to make a bid for freedom and retrace our steps to the bottom of the shaft, collect our kit and head east to the mouth of the 'sough' which drained into the River Derwent, and more importantly, where we would be able to reach the light of day. Here I also realised the error in my ways; as this was my first trip of the year, I'd chosen to use standard above ground kit to keep warm (many layers of fleeces) and in turn had lost all flexibility whilst physically struggling to fit in the coffin levels. I truly was a square peg in a not quite square shaped hole and this was one of the easier bits.

After several bends and twists through about half a mile of crawling (including a curtain waterfall to pass through) we eventually made it to the bottom of a ladder. On ascending this short ladder we came out via a trap-door in to the middle of a Children's Playground just next to the Public Toilets... What a trip!



There are other significant mining areas to explore within the Peak District including Lathkilldale with its lead mines, the Bakewell Chert Mines, which provided the raw material to grind clay in the Denby Potteries, and the Magpie Lead Mine above Bakewell.

All of the above have information on Google should the reader wish to investigate further.

Many thanks to Michael Oddie and Mark Hatton for the pictures used in this meet write-up.

Chris Bunker



Picture of the full group that attended the Saturday Trip!

Good Luck Mine, Derbyshire, Sunday 1 March 2020.

Present: Michael Oddie (CATMHS Meet Leader), Mark Hatton, Garry Parsons (CATMHS), Robert Stevenson, Sally Allsop, Pete Johnson (Derbyshire Caving Club)



Today we were hosted by the members of the Good Luck Mine Preservation Club who generously showed us around their lead mine, which is located near Matlock Bath on the south side of the wooded valley of Middleton Dale, in an area of many small lead mining operations that span the 17th to 20th centuries.

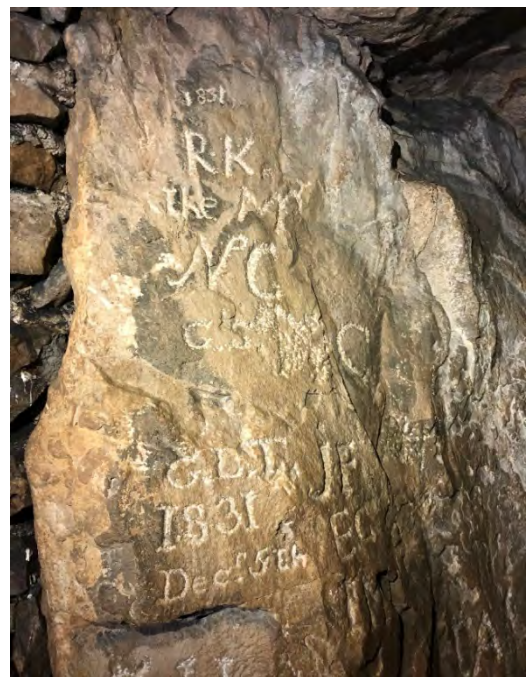
The adit here was started in 1830 and the original eleven inch gauge tramway, made of hand-rolled wrought-iron, is still in place throughout much of the mine. The adit was driven for some ninety yards through barren limestone before the Silver Eye vein was intercepted. This vein was stoped out to surface and today serves as a laddered escape route. Our first adventure on entering the mine was to climb the ladders to explore this stope.

Once our group had returned to the main adit we headed in-by to an unusual inclined section. This ends where the Good Luck vein was struck. The Good Luck vein never exceeded fifty centimetres in width and usually averaged about twenty five. So, whilst no one ever made a fortune in here, for the next ten years the Good Luck vein and several offshoots were worked quite vigorously. For the next one hundred years or so various adventurers raised a little more galena but by 1952 the adit had become derelict and the entrance was blown in. It was not until 1972 that it was opened again by mine explorers.

Today the mine is under the care of the Goodluck Mine Preservation Club who are committed to its maintenance and further exploration. The twenty or so members of the club clearly love this place and commit substantial amounts of time, effort and money on its upkeep. The mine is opened to pre booked visitors on the first Sunday of each month.

Our tour guides happily showed us some of the far corners and upper reaches of the mine, well off their usual visitor routes. The most notable feature of the mine was how a roof has been created above the haulage level along the Good Luck vein out of blocks of limestone, wedged rather precariously just above head height. Apparently it took a bit of time to convince the Mine Inspector that this roof was really quite stable, despite looking like it could come in at any time. In addition, there were multiple artefacts, tubs and chain ladders in places around the mine and some rather splendid miners' graffiti. We also visited several active dig sites within the mine where club members are pursuing various projects. This all added interest to what was universally acknowledged as a rather beautiful, interesting and quite quirky mine. Well worth visiting if you are in the area on open days.

Mark Hatton



Report on Progress of work at Old Man Quarries, Coniston.

The most recent historical work that has taken place at the Old Man Quarries site started last June when it was realised that the ten year review of the previous Heritage Lottery Scheme on the mountain was rather overdue and should be started as quickly as possible.

The original Scheme was extremely successful. It brought together a very enthusiastic team which included Ken Robinson, English Heritage, John Hodgson, National Park Authority, several members of CATMHS and a number of local people who had either themselves worked at Old Man Quarries or had fathers or grandfathers who had done so. Maureen Fleming and I oversaw the work and the results included an extensive report on the site, oral history recordings of those who had worked there and also the development of the Coniston Old Man web-site. At the time it had been decided that developing facilities to promote the site to visitors should be left for the time being.

During autumn 2019 thoughts turned to a greater promotion of the site. A small team had already set itself up to work on carrying out some stabilisation of the Old Man Smithy, on the Low Bank horizon, and the same group planned a visit to the Saddlestone workings above to see how feasible it would be to use this site as a 'test' area for, what became known as a Stabilisation and Interpretation (S & I) project. This proposal took a huge leap forward at the Mine Forum Meeting on 4th February 2020.



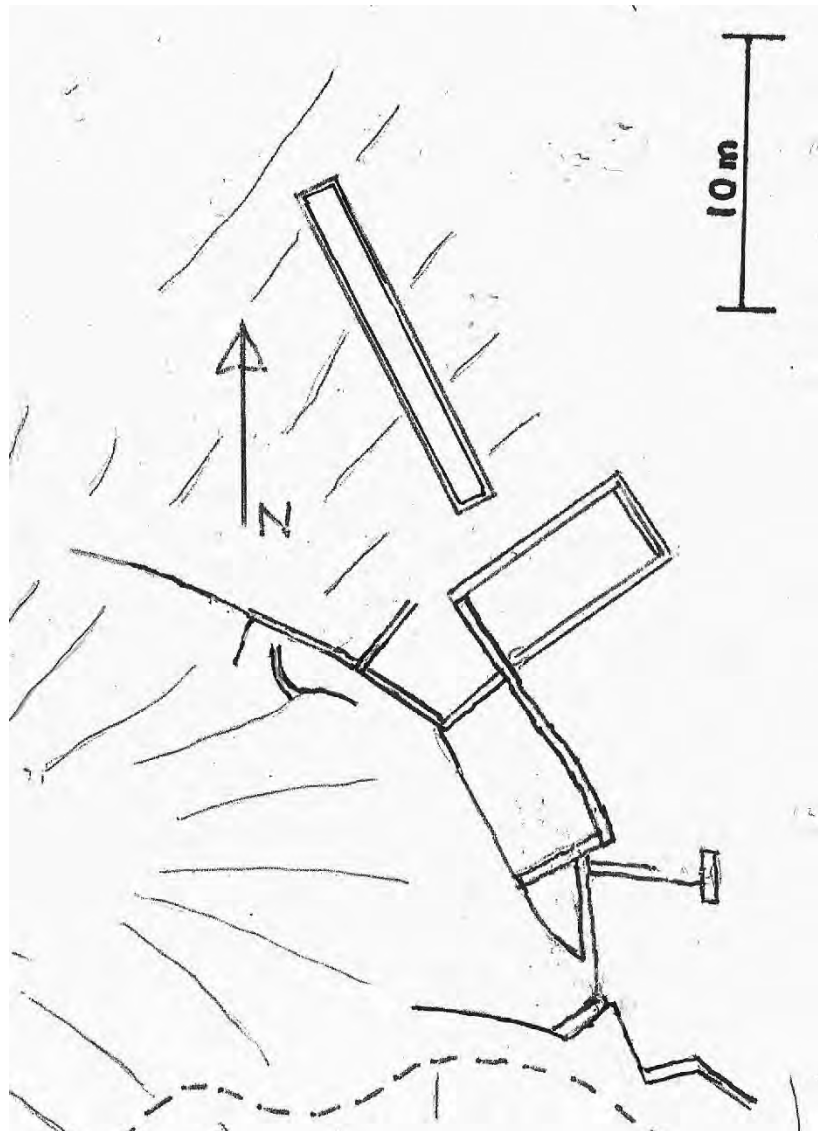
Smithy Bank taken by Peter Archer

At the meeting Eleanor Kingston (Lead Strategy Adviser: Historic Environment, Lake District National Park Authority), reviewed a proposed forthcoming Stewardship Scheme for the Duddon, Seathwaite, Torver and Coniston Commons, and made the point that, if such a

scheme takes place funding would be available for historical projects in the area, but this would be subject to the Commoners agreement. A proposal was put forward at the meeting that an S & I project at the Coniston Old Man Quarries site would be a suitable contender. Since then the work has been progressed by the small team, enlarged to include Eleanor, with proper time-scales introduced for the completion of the various stages of the project. A number of members of the local community have also shown interest and encouragement.

At the present time the various slate working banks that comprise The Old Man Quarries have been investigated, ground surveys drawn up and a whole series of images produced of the site by conventional and drone photography.

This part of the project was completed by the end of February, which was fortunate as the concerns about the COVID-19 virus then put the mountain out of bounds. At the present time the data is being assessed and a ranking system for sites included. The work required to stabilise damaged structures at each site is being listed. This will allow contractors, who would be keen to undertake the work once access to the site can be re-gained, to develop project proposals and an overall cost for doing so.



Ground survey of Smithy Bank

Hopefully access restriction will be lifted towards the end of the year so a time scale for the various final implementation stages can be established.

Alastair Cameron.

Dark Grey Volcanic Slate from Coniston.

Gold Scope quarry, on the slopes of Brown Pike above Torver, is one of the earliest in the district and operations there possibly started in the mid 1600's.

Most quarries working during this period were situated on the le Fleming lands. However Gold Scope wasn't and was therefore free from the levy payment demanded by the landowner at that time. But Gold Scope was a long way from anywhere and initially slate from the quarry had to be transported by horse and cart over the fells to the port of Greenodd for shipment away. Despite this Gold Scope became quite an extensive working extracting the unusual dark-grey slate by the 'cave-working' technique.

The last proprietors at Gold Scope were the father and son team of Tom and Gordon Kendal. After Tom died Gordon continued on until the 1950's, when he became too old to tackle the long daily trek up to the site and he closed it down. Gordon used to recount to me the difficulty that he and his father had in riving the dark grey slate. There was definitely a technique required! Their cave-working is still there and, with care, can be explored.

Dark grey slate was also located and worked on Coniston Old Man, high above Low Water Tarn. Two levels were driven into the mountain, just below the summit, to work the deposit, and slate rock was extracted for several decades.



The slate quarries on Coniston Old Man above and below Low Water

As well as these two old level workings there are also the remains of an early surface working in a steep gulley slightly to the north. This was discovered by myself during a university mountaineering club weekend trip in the 1970's. Despite being on near-vertical ground one could clearly see where extraction and riving of slate had taken place. I have to admit that I have never been back there, although when one of the slate mine levels was re-

opened by an enthusiastic digger (Martin) working alone a few years later, his excited phone call to me the same evening resulted in my skiving off work the following day and going up to the site for a look.

The level Martin re-opened ran for about thirty five yards and led into an underground chamber with a large amount of shattered rock on the floor. It looked interesting but I didn't hang around and decided to beat a rapid retreat, as the level itself was clearly not safe. Most of the roof timbers were split and it would have only taken a gentle nudge to bring the whole lot down. I got out without mishap but the following weekend Martin again contacted me to inform me that there was no point in my going up to the mine. He had been back to the site the previous day and, sadly, had found that the level had collapsed and become completely blocked again. I don't think I ever told him that I had actually been into the chamber a few days earlier.

Many years passed before any reference to dark-grey slate was made again. In 2018 work was temporarily halted at Burlington's Low Brandy Crag quarry in the Coppermines Valley. One of the problems had been the presence of what was felt to be 'flag-stone' in the deposits of volcanic slate. The same had happened a few years earlier at the Brossen Stone site, high on the front of Coniston Old Man. In 2019 I asked Ian Kelly of Burlington if he could take myself and CATMHS members Lorraine and Kevin Crisp up to Brossen Stone in the Landrover. Lorraine is a very experienced geologist, specialising in the Borrowdale Volcanics. The visit up there and discussions that took place while standing on the quarry floor in a gale-force wind and pouring rain were extremely informative and a few months later slate working re-commenced at Low Brandy Crag with the emphasis on investigating the 'flag-stone', which in fact turned out to be a deposit of dark-grey slate similar to that worked in the olden times.

The first clog of dark-grey slate from the Copper Mines was taken down to Burlington's site at Kirkby for processing last year. When processed the results were astonishing. CATMHS member Carl Barrow, who works at the Kirkby site, commented that the rock 'looks really amazing when sanded and polished'. Wholesalers of polished stone who supply to the international market clearly feel the same. They realise its potential and are promoting Brandy Crag slate actively. I'm sure Gordon Kendal will be smiling in his grave!

Alastair Cameron.



More information on the commercial interest of this slate can be obtained by putting Brandy Crag Slate into Google.

The Murder of Leonard Stoultz at Keswick in 1566

In NL133 (November 2018) I wrote a short article about the Murder of Leonard Stoultz by a mob in Keswick as recounted by his boss, Daniel Hechstetter. Whether this murder actually took place or whether Leonard was an adult or not has been doubted by some historians.

W G Collingwood extensively researched the History of the German Miners and he drew heavily on the original accounts prepared between 1564 and 1577, written by the main players in this story. Collingwood refers to Hechstetter's account of the Murder of Leonard Stoultz but describes it as "greatly exaggerated". Collingwood relies on an entry in the Crosthwaite Parish Register dated September 1566 which records the burial of Leonard Stilts [sic] as follows:

1566 Sept 10. Leonard Stilts, Duchman and infant.

Collingwood concludes from this entry that "*the murder must have been committed on a baby*". He then goes on to speculate that "*this can hardly have been anything but the accidental result of some casual rough behavior, not an organized attack on the miners*". And he takes this speculation even further, writing "*one can imagine a 'row' and a chance stone thrown without intention to kill*".

I have long doubted Collingwood's interpretation of events here. He seems to have dismissed the accuracy of Hechstetter's letter rather too quickly. Hechstetter was appealing to the Crown for greater support and security at this critical time in establishing a mining and smelting industry in Keswick. One can see why Hechstetter may have seen some merit in slightly exaggerating for effect. However he would have been taking a big risk to have knowingly grossly exaggerated a story like this and turned an accident involving a baby into the story of mob violence leading to the brutal and deliberate murder of one of his miners recently arrived from Germany. At this time the reliability of Hechstetter and his reports on the mining operations were being doubted by some of the shareholders in London. So to have told them a blatant lie on such an important subject as murder would have been reckless. Hechstetter was anything but reckless. He would have known that his report would receive a lot of attention. Indeed Elizabeth 1 herself responded to Hechstetter's report of the murder by *writing to the local noblemen instructing them to do everything they could do to ensure such violence was not repeated.*

But if Hechstetter was correct, how do we explain the description of Leonard Stilts in the Parish Register as an "Infant". Well the answer is quite simple. The definition of an Infant is 'any person who has not reached the age of majority', which at that time in England was twenty one. So the Parish Register is simply recording that Leonard was less than twenty one. He could still have been an adult miner in his late teens. He may also have been slightly more youthfully exuberant in his behavior on the streets and taverns of Keswick at the time, and as such attract the interest of local young women and the resentment and anger of the local hot headed young men.

Perhaps Collingwood simply did not want to imagine that Keswick residents were capable of such violent acts against foreigners, so grabbed hold of the infant reference to reinvent the story of Leonard's murder and somehow down play it.

Further study of the Crosthwaite Parish Register brings up some other intriguing references to Stilts. Just one week after Leonard Stilts was buried we see the following entry in the Register of Burials:

1566 Sept 17. John Stilts, Duchman and infant.

And just nineteen months later we find yet another entry in the Register of Burials:

1568 May 1. Jobbe Stilts, Duchman.

We don't see any other Duchmen, women, infants or children buried in this period (other than Benedictus Kistler on July 6, 1567).

So, is it possible that the deaths of John and Jobbe are somehow connected to the death of Leonard. It seems possible that John was Leonard's brother (and also under the age of 21) and that Jobbe was Leonard and John's Father. Could John have been badly injured in the same mob violence as Leonard, succumbing to his wounds a week later? Or perhaps John sought revenge for the murder of his brother and also came to grief as a result. And Jobbe's death. Could that have been the result of grief, more violence, or simply a very unlucky family who no doubt regretted their decision to move to Keswick from Germany?

And yet here I am guilty of the same level of speculation as Collingwood. But in many ways this is the joy of history. We are presented with just a few isolated facts and glimpses of parts of the story and we need to fill in the gaps. The study will go on.

Mark Hatton.

Registers of Crosthwaite Church - Summary of entries involving "Duchman"
DEATHS

YEAR	DATE	FIRST NAME	SECOND NAME	Rider 1	Rider 2
1566	Sept 10	Leaonard	Stilts	Duchman	& infant
1566	Sept 17	John	Stilts	Duchman	& infant
1568	May 1	Jobbe	Stilts	Duchman	
1568	June 30	John	Sever	Duchchild	
1568	Nov 10	Janet	Hupperay	Duchman	infant
1569	Feb 2	Janet	Slegell	Duchwoman	
1569	Sept 7	Doraythie	Wastyll	Duchwoman	
1569	Sept 29	Agnes	Kistler	Duchwoman	
1570	May 29	John	Uppere	Duchman	child
1570	May 29	Janet	Puphparker	Duchwoman	
1570	July 22	Bartholomew	Pelimer	Duchman	
1570	July 28	John	Carus	Duchman's	child & infant
1570	Sept 30	John	Seaffer	Duchman's	child & infant
1570	Dec 10	Margaret	Colker	Duchwoman	
1571	Mar 21	Barbary	Hound	Duchman	child & infant
1571	May 7	George	Pawley	Duchman	

Is it less dangerous underground?

I am sure that we all get asked this question many times so in these challenging times (I am writing this in the midst of the Corona crisis) here is a light hearted look at some of the issues which have affected the Welsh Team in recent years, most of which are on the surface!

Earlier this year I was just picking up my keys to leave the house to have a trip with a CAT colleague when he phoned me. As usual there were no unnecessary pleasantries, just “What are you like at fencing?” At this point visions of running around with a small sword flashed through my mind, but I uttered “What the h*\$! are you talking about?”, to which the reply was “Well my car is on its roof on the A5104 and the farmer whose fence I have taken out does not look very happy”. It transpired that Mr. Ashby had hit some ice and lost control. In subsequent discussions it came to light that he had previously written off another car on the

same road – surely a first.



Space precludes me from including details of all his car incidents over the years, but I can email a large file to those who are interested!

Ashby has trouble with ice

When undertaking some preparatory work for last year’s NAMHO conference I met another member of the Welsh team at his house and we then left together but in our own vehicles. At the end of his drive I noted that a lady and her young daughter were riding horses up the road so I did the polite thing and stopped and indicated that they should come past whilst I waited.

They waved and smiled although this quickly changed to annoyance and alarm when there was a crash and my vehicle moved forward. It appeared that Mark “I cannot” Waite had failed to see my large bright orange van and had reversed into it.



Could you spot this on your own drive?

Sticking with the NAMHO conference, newer members may need reminding of the occasion a number of years ago when our esteemed treasurer collided with another delegate and swore blind it was the other persons fault, despite he being the one joining the main road from a minor one, admittedly at a difficult junction.

In the last couple of years I have seen a novel de-rigging technique in use called “undo the bolt you’re hanging on”. This might appear foolish and the first time I saw this undertaken the next bolt was about three meters away horizontally. It was fairly entertaining, if only for the surprised look of the person doing it as he swung across into a rock face; fortunately he survived. A few weeks back however, I saw the same technique practiced with the next bolt being vertically below the first and just above a ledge; it was executed very professionally.

If you thought that staying away from mines and going on holiday was any safer, then this is clearly not the case. A group of us went to Peru last year and the plan was to meet up at Gatwick Airport. However on the way there Chris Cowdery and Joanne had to divert to Essex Police Headquarters to collect Steve Brown, who had experienced a one vehicle accident with the central reservation – need I say more!



Steve Brown causing chaos on the M11.

For those who have costs associated with the nine mile tailback on the M11, I will happily provide contact details for Steve. For more details see this link:

<https://www.essexlive.news/news/essex-news/a12-traffic-police-issue-update-3313741>

Having not put on much weight in the last thirty years I can still get into an ancient Caving Supplies wetsuit which I bought in about 1989. This is the old two piece construction of trousers and jacket with a fish tail piece which passes under your crotch and fastens at the front. What it lacks in comfort it makes up for in protection. We were exploring a little known metal mine in mid-Wales when, despite my protestations that being above us was not a good idea, Avalanche Ashby managed to dislodge a stemple which landed beside me and then bounced into my crotch knocking me over. The stemple then bounced again and landed near a colleague at the head of a pitch who tried to catch it before it descended down a very wet stope. Whilst winded by the experience the 10mm of neoprene had saved the day and I was none the worse for the experience.

Keep safe!
Doctor Descender.

CUMBRIA AMENITY TRUST MINING HISTORY SOCIETY

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