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**The Newsletter of the Cumbria Amenity Trust
Mining History Society**



Stylish attendees at the CATMHS Annual Dinner at Rydal Hall

No. 110

February 2013

Cumbria Amenity Trust Mining History Society

Newsletter No 110, February 2013.

Contents:

News

Editorial	Page 2
Membership	Page 2
AGM & Dinner	Page 3
Chairman's report	Page 3
Secretary's report	Page 5
Treasurer's report	Page 6
Membership secretary's report	Page 7
Newsletter Editor's report	Page 7
Archivist's report	Page 7
2012 NAMHO Conference	Page 8
Nenthead Mines Conservation Society	Page 8
Possible new mining developments at Nenthead	Page 9
NAMHO Research Framework	Page 10

Meets and Activities

Tilberthwaite dig	Page 11
Boxing Day Meet	Page 12

Articles

JK Quarry photo	Page 20
Chinese Whispers	Page 21
Coniston Sale, 1875	Page 24
The Cowdery Gloworm head torch	Page 27

Society Officers and Committee Members

Back cover

Editorial Newsletter

Last year I offered to supply the newsletter as a pdf by email to those who requested it. So far ten members have done so and this has resulted in a ten percent saving in money to the society and in time and effort to the Newsletter Editor. It would be helpful if more members would sign up to this method. There are advantages to the recipient. Pictures and plans are brighter and clearer on screen and you can zoom in on details. The pdf's are searchable and it is easy to print off all or part of an article if required. There is no problem of storage (or disposal), and you can quickly find an issue instead of having to rummage in the back of your cupboard or whatever. Back issues are available to members from the Treasurer at £1 each. If you would like to take advantage of this system, send an email to the Newsletter Editor.

Promulgation of CATMHS minutes

Many years ago Ronnie Calvin proposed to an Annual General Meeting that CATMHS minutes should be made available to members. At that time the internet didn't exist and printing and posting was the only way. Since then minutes for the CATMHS AGM and Committee Meetings have been published in or with the Newsletter and distributed to all members by post. This involves printing, collating, stapling and posting some 3,000 pages each year, a considerable investment in both time and money. Things have changed and we can make considerable savings by using the internet.

In future draft AGM and Committee minutes will be sent by email to members who have attended the relevant meeting, or posted to those who don't use email. Approved AGM and Committee minutes will be published on the member's page of the CATMHS website. Paper copies of approved AGM and Committee minutes will be available to any member on request. Officer's reports to the AGM will be published in the February Newsletter.

In order to view the minutes on the member's page of the CATMHS website you will need the user name and password. User name = members; password = hudgill. If you have a problem contact the webmaster, webmaster@catmhs.org.uk If you want to continue receiving paper copies of the minutes then contact the Newsletter Editor.

Membership

We welcome Gordon Hudson, from Burnley in Lancashire. Gordon is a retired coal miner, and writes: 'Even though I am retired I am still active and an ex coal miner and am experienced in several forms of mining including roof supports, both timber and steel arches. I also have my shotfirers papers, so if you are ever stuck for help with any of your many projects you do in these old mines I am offering my help, providing I am available. I have seen some of your work and it is perfect, even better in some case than the actual miners would have done. I did work at Carrock for a short time and fired a couple of headings. All this when I lived at Keswick and knew all the miners from Keswick who were younger than me; most of them have passed away.'

Also Harvey Sunderland, from Werrington, Peterborough. Harvey is interested in general industrial archaeology and has experience of steel fabrication work. He hopes to go on the Greenside meet next May.

Spare Newsletters

Chris Cowdery is organising his collection of CATMHS newsletters. He has the following going spare:

9,33,46,47,49-51,54,55,60-64,69-76,79,80

And he has the following gaps, and will offer a good home to any spare copies of these:

1,2,4,10,17,19-23,38-40.

Chris can be contacted at chris@cowdery.org.uk

AGM and Dinner

The AGM and Dinner were held at Rydal Hall on 8th December. 18 people attended the AGM and the reports of the Officers are reproduced below. Members of the Committee were all re-elected. Jon Knowles stood down as Meets Secretary after a long stint, and John Brown was elected to take his place. Normally the meets program is discussed by the committee and then passed on to the Meets Secretary for action. Suggestions for meets are always welcome.

32 people attended the dinner, which was followed by a pictorial presentation by Jon Knowles covering recent activities in Welsh slate quarries, Tilberthwaite Horse Crag Level and the Time Team event at Coniston. Mark Simpson showed slides of the extensive and ancient quarry workings on Lingmoor, which, it is hoped, will be a subject of the Windermere Reflections program later this year.

Finally Warren Allison showed some historic pictures of Greenside mine from his extensive collection.

Most people stayed overnight and enjoyed breakfast in the fine surroundings of Rydal Hall. As always the event was most enjoyable, the food was first class, and the staff at the Hall were friendly and obliging. It is also very good value. Make a note in your diary for the 2013 event, which will be held on 2nd weekend in December.

Chairman's Report to AGM 2012

CATMHS owes a great debt to Peter Fleming, who sadly passed away last year, for his contribution to the society over many years. I cannot add any more than Mike Mitchell and Ian Matheson wrote in the newsletter other than to say I have never seen as many people at a funeral as Peter's, which is a recognition of how much people thought of him.

Could I once again sincerely thank the committee and members of the Society for their support during the year? Various committee members will be making their reports, but I would like to briefly cover some of the areas that the Society has been involved in the last year. The Society should also thank John Knowles for his contribution over a number of years as the meets secretary who has decided to stand down.

Perhaps the highlight of the year was the Society's involvement with the Time Team Project at Coniston Copper Mines where digs were carried out at Cobblers level and the Back Strings and was partially instigated by Peter Fleming in conjunction with the LDNPA. The results of the work will be published in a few months with the programme being screened next summer. A huge thank you should go to all the members who helped in organising the project, assisting Time Team when on site and for the dig on Sebastian Mine which unfortunately was unsuccessful.

The clearing of the second fall at Tilberthwaite Mine is progressing well; Pete Blezard's converted tub is running superbly on the original rail. Approximately ten to fourteen tons a week is being removed and stacked close to where the crosscut turns on to the vein with the pack wall looking very impressive and we are not up to the main collapse yet.

The LDNPA has recently secured funding of some £19,000 to obtain accurate costings for conservation work to be carried out at Coniston and Tilberthwaite Mines with a view to obtaining tenders for the work which would not have happened without our Society's involvement.

Work will also start shortly at Greenside Mine to dig through the fall from the Lucy Level to the Lucy Engine Shaft to prevent it from blocking the main exit for the water onto the Lucy Level.

In the summer Richard Leafe, Chief Executive of the LDNPA and two of the top people at the Environment Agency in the North West were taken into Greenside Mine along the Lucy Level. All of them could not believe the work that CATMHS has done in clearing the roof falls and maintaining the level over the last 20 years. The Environment Agency stated that they only look at the outside of mines and do not consider the implications of what the underground workings can have on the environment, which they need to look at and commented that CATMHS has a vital role in educating the various agencies.

Work continues at Force Crag Mine and Gategill Mine by the various agencies to understand the impact that the mines are having on Bassenthwaite Lake and the local rivers as far as Workington with pollution by heavy metals especially Zinc and what mitigation measures can be put in place. Gategill Mine is considered to be the most polluting mine in England. CATMHS has been asked to become involved in advising the agencies on the mine workings and this has provided the society with another two projects.

- Open up and reinstate No3 level with the Environment Agency covering the cost of the material
- Secure the top of the rubble slope from No 3 level to No 2 level

At a seminar hosted by the Environment Agency on the 6th December 2012 at Penrith on these two mines, all the agencies commented on how valuable the societies input is.

Work is starting on getting the permissions in place for future projects including finding the elusive fourth level at Silver Gill Mine and one of the Flemings Levels near the top of the Thriddle Incline at Coniston.

As part of the project to open the main entrance to Carrock Mine, Natural England has provided limited funds to have a geological survey done of the underground workings. The LDNPA, Natural England and the British Geological Survey were shown underground and the area round Smiths Vein was chosen for the survey which will compliment the one carried out on the rest of the mine when it was working. CATMHS has been asked to be involved in the survey work with the BGS; the BGS surveyor is a member of PDHMS who recently attended the joint meet.

Also as part of the Carrock Mine project the LDNPA is currently tendering to carry out conservation work at the 1st World War Mill with funding coming from the High Level Stewardship Scheme which the Caldbeck Commoners have gone into. This may also release funds for future conservation work on the Caldbeck Fells. A survey of the area was carried out

which CATMHS had an input into and contributed to the securing of funding. Approximately 20 people from English Heritage were shown around the site as part of a training programme above and below ground and English Heritage may use the project as a way to demonstrate how it can work with local groups. Thanks should go to Colin and Sharon Woollard and John Brown for providing the refreshments which included a variety of scones and homemade jam.

The Copper Bottomed: Art, Exploration and Conservation in the Coniston Copper Mines Exhibition at The Ruskin Museum was a huge success. Mike Mitchell and Ian Matheson with Peter Fleming put in a huge amount of effort and they should be thanked by the Society. Vicky Slowe from the Ruskin Museum wrote a letter to the Society to thank it for its major contribution to the success of their summer exhibition. A total of 6275 visitors visited the exhibition, a great credit to the society.

The Welsh branch continues with exploration at various sites and the 10 year exploration of Tyn-y-Bert Mine in Upper Corris was completed and written up in the Newsletter.

The LDNPA entered CATMHS into the group section of the UK National Parks Award judged by TV presenter Helen Skelton. This covered all of the National Parks and CATMHS were short listed amongst five from the 18 groups who entered. Helen Skelton quoted 'I would also commend members of the CAMTMHS for their specialist knowledge and educational engagement'.

The Society may also become involved in the Windermere Reflections Project being run by the LDNPA and National Trust, which in its second year is looking at surveying mine or quarry sites in the Windermere Catchment Area.

At the LDNPA Archaeologist Conference in October attended by 200 people CATMHS was again mentioned in the opening statement by a member of the Authority, which should be seen as recognition of the standing of the Society.

The Mines Forum meetings continue to be a mechanism for developing good relations with various organisations such as English Heritage, The National Trust, LDNPA and the Environment Agency.

There continues to be a varied list of meets and members should be appreciative of those people who organise and lead them. Could I ask if people could provide suggestions to the Meets Secretary (John Brown) as to what they would like to see included in future meets?

The Society should once again thank John Hodgson and Eleanor Kingston from the LDNPA for all the help and support they have given over many years. As with all societies, it is becoming harder to attract younger people and we need to consider how CATMHS can overcome this to ensure that the society continues for many years to come.

Warren Allison, Chairman.

Secretary's Report to AGM 2012

Following changes to our constitution at the last AGM we have held four committee meetings this year. All have been well attended and an additional planning meeting, which included John

Hodgson from the LDNPA, was convened to support the run up to the Time Team event in July 2012. Sheila Barker continues to cover the NAMHO interface with CATMHS.

This year we have provided considerable interaction with the LDNPA and associated agencies. We received a letter of thanks from Richard Leafe, the chief executive of the LDNPA, following our successful collaboration with English Heritage, The Environment Agency, Dalemain and the LDNPA which resulted in the 3 year management agreement for Carrock Mine. This close collaboration continued with on-going support and a guided visit for Richard and his property team together with senior members of the Environment Agency to Lucy Level at Greenside.

In May we supported an English Heritage 3 day Cumbria Field Trip with two short underground visits to Carrock Mine and an overview of the works at the site. In July the Time Team visited Coniston to make Series 20 Programme 9. Our collaboration with this large enterprise resulted in a letter of thanks and a donation of £400 to the society.

The secretary has received a number of requests for information and assistance over the year from the BBC2 Coast programme makers to individuals and companies with interest in the mining history and archaeological remains within Cumbria.

In August a review was carried out into the Roanhead Store. It was agreed that the store would continue to be rented by CATMHS for a further five years and that a simple work meet would be held in the Spring to carry out any maintenance works required.

Treasurer's Report to AGM 2012

To start I would like to thank Mr Douglas Harrison for auditing the accounts; our Auditor is both competent and thorough, we are fortunate to retain his services.

Reviewing the year's activities: -

Income

You will see that little has changed until we reach publications; the decline in the sale of which reflects our aging catalogue of literature. The change in the income for the dinner is not due to a large change in attendance but is a quirk of the Society's financial year ending on the 31st October.

The rise in the value of rail sold reflects the increased price of steel. I am very grateful to Peter Blezard who not merely stores our stock of rail but also handles the sales most efficiently.

The income from English Heritage represents the final payment for work carried out at Carrock.

Expenditure

The decline in Members Travelling Expenses reflects the reduction in the number of Committee meetings held, while the negative value for Library expenditure reflects the purchase of the Furness mine plans we bought last year by the County Record Office.

Projects

Expenditure at Greenside is in preparation for the next campaign details of which Warren, Colin or John Brown will be delighted supply.

I am very pleased to say that as a result of Colin's efforts we have now been reimbursed £400 by Time Team, which sum will appear in the next year's accounts

In summary a good year financially with Society going forward in a sound position. Finally I must thank the webmaster Chris Cowdery for his excellent service to the Society.

Membership Secretary's Report

There has been a slight reduction in membership this year. The previous year we had 90 paying members compared to only 84 this year, of whom 9 had joint membership, plus 9 Honorary members. Usually about 10% don't renew, replaced by a similar number of new members; this year there were only 3 new members, although we have had three more since then. I expected that the Ruskin Museum display and the promotion at the Archaeology Conference might gather new members, but they did not.

Newsletter Editor's Report

The Newsletter is well regarded both within and without the Society and continues to be well supported by contributors, for which I am grateful. Complimentary copies are sent to NAMHO, the Lake District National Park Archaeologists and to journalist Bill Myers, who writes for the Barrow newspaper. It is also available in the Cumbria Libraries.

I continue to actively monitor costs and review production methods. Laser printing was found not to be a cost effective option. Programmed periodic use of genuine Epson ink, in an inkjet printer has however effectively extended printer life and reduced the frequency of misprints without greatly adding to the overall costs. Postage is still the highest single cost.

Archivists Report to AGM 2012

Information requests.

Last year I noted that it had been 'a much busier year than normal and the requests generally have taken more time to answer', similarly this year. Some answers come from society records, some from members, sometimes from providing contact details of others that could help, always after gaining their consent to be contacted. The web site certainly makes the society more 'visible'.

NAMHO Framework

The most time consuming request came from NAMHO, initially as a broad request about a range of minor minerals worked in the Lake District. The response to my answers was at best discouraging, but some aspects were picked up by one of the editors and real progress made. The iron framework should benefit from the additional contributions of Richard Hewer and Brian Cubbon provided freely when their help was requested. The salt framework should similarly benefit from a correction to my understanding about the Walney salt works from Brian, further from earlier research by Peter Holmes, found in the archive. An information search for a documentary reference of diatomite, found an important locally written account of extractive industries in Kentmere, a copy of which is now in the library.

Archive

The Strontian and J.R. Foster-Smith material mentioned last year is 'resting'. Copies of all but one of the audio tapes have been shared with the Dock Museum, completion of this task when time permits. Access to the JRM is adequate again; current jobs are best handled by only two people.

Mine Plans and Maps

This task seemed to go on for ever, but in the early, wintry months of the year, much progress was made in sorting through the many photographs taken by a group of members in several sessions. The images are now listed in a spreadsheet along with relevant data (date, size, scale, location, media etc). Progress halted with the coming of spring and the 'physical' problem of rearranging images into meaningful and contiguous groups in a single 'flat' Windows file. Possibly a relatively painless answer to this problem is emerging.

As in past years my thanks to Sheila Barker for her help with many aspects of looking after our collection.

The number of items catalogued, excluding mine plans and map has increased from 730 to 950, the number of map and mine plan images (.jpg) exceeds 650.

The 2012 NAMHO Conference

The 2012 NAMHO Conference was held at the end of June at Quarry Bank Mill, near Alderley Edge, in Cheshire, hosted by the Derbyshire Caving Club. Several CAT members attended, including Mark Waite, Chris Cowdery, Sheila Barker & Don Borthwick.

Lectures, surface walks and underground visits were enjoyed in good weather.

Next years conference will be held June 28th/1st July in Aberystwyth.

See www.namhoconference.org.uk for details.

Details of the minutes of the NAMHO 2012 AGM and council meetings are available from: sheila.barker@cybermoor.org.uk

For more information regarding NAMHO activities see the latest newsletter at www.namho.org

Nenthead Mines Conservation Society - December 2012

A Higher Level Stewardship plan for the Nenthead site is to be submitted to Natural England next week. The plan is for a ten year programme and envisages an annual maintenance budget of about £5k.

The plan also includes proposals for projects, which would be separately funded. EH and Natural England have agreed that the Smelt Mill spine wall and the River Nent walls, are the priority projects. The river walls also include Rampgill Burn, which is being considered as a project by the Environment Agency. The theme seems to be repairing and improving the river walls to prevent dump migration.

The plan will also include:

Care of the moorland, grassland and woods.

Education access visits by children, and a three year Archaeology management plan.

NMCS are expecting to have a role to play in managing these plans, but are waiting for CCC's decision.

Sheila Barker

Extract from ITV program Lookaround, 4th Dec 2012:

Mining jobs hope for Cumbria

Ambitious mining plans revealed

Five hundred jobs could be created if plans go ahead to bring lead and zinc mining back to a village in the Pennines. Commercial mining started in Nenthead near Alston more than 300 years ago; it reached a peak in the middle of the 19th century, before declining. An Irish mining company, Minco PLC, thinks there might be previously undiscovered resources still there, as John Bevir reports. In the report John speaks to Dick Phillips from Alston Moor Parish Council and local resident Alex Martin.

Nenthead used to have a mine, but it was closed and turned into a museum. The new plans have attracted some criticism because of the impact on the local environment, but the company behind the plans has been quick to point out that current mines are significantly cleaner than mines used to be. They have also warned that the vast majority of exploration works do not lead on to mines being opened, but have said they won't know for certain until more boreholes are drilled.

\$1million is being spent on drilling exploratory boreholes, which could lead to the creation of a new lead and zinc mine in the North Pennines, just a few miles from the border between Cumbria, County Durham and Northumbria. One 350 metre borehole has already been drilled by the mineral exploration company Minco Plc. Two further boreholes are planned, which could rise to eight, depending on what the initial ones reveal.

Representatives from Minco plc have already met with residents of the nearby village of Nenthead. The initial exploration is looking for mineral deposits to justify a commercial mining operation on the land. If this were to happen the company estimate up to 400 to 500 jobs would be made for 30 to 40 years. The company has confirmed their plans on their website saying:

'Minco has commenced a new exploration initiative in the North Pennine Orefield located in the northern English counties of Cumbria, Northumberland and Durham. Minco plans an initial US\$1 million exploration programme, including 4,000 metres of diamond drilling. Exploration is focused on the search for stratiform, replacement-style zinc and lead deposits in the unexplored, more massive limestone formations of the basal Carboniferous stratigraphy. There is significant untested potential for such mineralisation approximately 300-400m below previous, adit-accessed workings, and such deposits could be significantly larger than any previously discovered.

Specific exploration targets have already been identified by Minco and initial exploration drilling will be focused at three principal sites. Minco will complete approximately 4,000 metres of core drilling. The average depth of each hole will be approximately 500m.'

'Underground above Horwich' (45 mins from junction 36 on the M6)

This book explores the extraction of coal and clay back to Victorian origins with two historical routes to follow. Only 100 copies were published, most were sold pre-publication but I do have a few remaining. They sold at £6.95 but as there are so few remaining I will reduce this to £5 inc p&p. There are over 80 pages, 17 colour, 18 black and white photographs, route maps, archive material etc. All profit goes to the BHF.

Members can contact me directly via e-mail: dac60@tiscali.co.uk

Danny Calderbank

Mining and quarrying archaeology in the Lake District - contributions to the Framework for the Archaeology of the Extractive Industries in England.

The Research Framework for the Archaeology of the Extractive Industries in England (being carried out by NAMHO with funding from English Heritage) is now entering the final stage of the first two phases - the Resource Assessment, looking at what we know about the archaeological investigation of mining and quarrying, and the Research Agenda, what we would like to see done in the way of archaeological investigation in the future.

Resource Assessments for the Prehistoric to Roman Period and thereafter by mineral category are, or shortly will be, accessible on the research pages at the NAMHO website - www.namho.org - and comment is encouraged. Although every effort has been made to include all aspects of the mining and quarrying industries in the Lake District there are areas where there is certainly room for a greater input based on local expertise. The copper assessment is particularly sparse for the district and surely does not reflect a lack of archaeological activity? Minor minerals / metals are another area where there is room for a great contribution from the Lake District. That assessment is still under consideration and has not yet appeared on the website, but in the case of cobalt and tungsten / wolfram mining the district has sites worthy of specific reference for their history and archaeology. For example, the wolfram workings at Carrock are unique outside the south-west, recent work on the site has been documented in the CATMHS newsletter but we are not yet aware of any archaeological assessment - perhaps carried out but not published? One of the few cobalt mines in England, on Sail, did not justify regional or national categorisation in the Monument Protection Programme carried out by English Heritage and we are not aware of any archaeological work on the site. Postlethwaite (1889, 109) does, however, refer to a smelt-mill used in connection with the working of the mine by the Keswick Mining Co. in the 1840s - more information on that smelt-mill would be appreciated.

The Research Agenda - a 'wish list' for future archaeological investigations. We are not yet considering the priorities, just what needs to be done for the future. There are going to be many aspects of both mining and quarrying where investigation in the Lake District could make significant contributions to our understanding of the industries - what are they?

Publication of the Assessment and Agenda phases is due in the Spring with a conference at Caphouse Colliery, the National Coal Mining Museum for England, planned for 18 May 2013. Before that happens we need to ensure that all the data has been assessed correctly and there is a full list of objectives for the future. Your contributions are essential.

Dr Peter Cloughton
Conservation Officer for NAMHO and Project Manager
P.F.Claughton@exeter.ac.uk

Tilberthwaite Horse Level Dig, 2012

Work started again on 12th February 2012, with the tub being moved from number one collapse (removed and supported) to the location of the tail of number two collapse. This was not an easy task and because the tub wheels were too wide to get through the steel supports, disassembly of the tub had to be undertaken, carried through to the other side of the supports, reassembled and moved the 400 metres to its new location. This was a full day's work.

Seven more visits were made until the progress was disrupted by the long summer break and this included the preparations and involvement with the 'Time Team' visit at Coniston.

The 14th October saw a return and to the slog of removing approximately twelve to fourteen tonnes of collapse material each Sunday. Six further excursions have been made to the mine since then and the packwall, which is made up mainly of big bags, towers four to five metres high in places and is about thirty six metres in length. The distance the tub now has to travel from the dig area to the tipping area is some 100 metres



Warren Allison beside the pack wall. Photo Mark Simpson and encounters quite a few tight bends in the level. At the current position (December 2012), the face of the dig is approximately two and a half metres by two and a half metres and is estimated to be twenty five metres from the actual collapse.

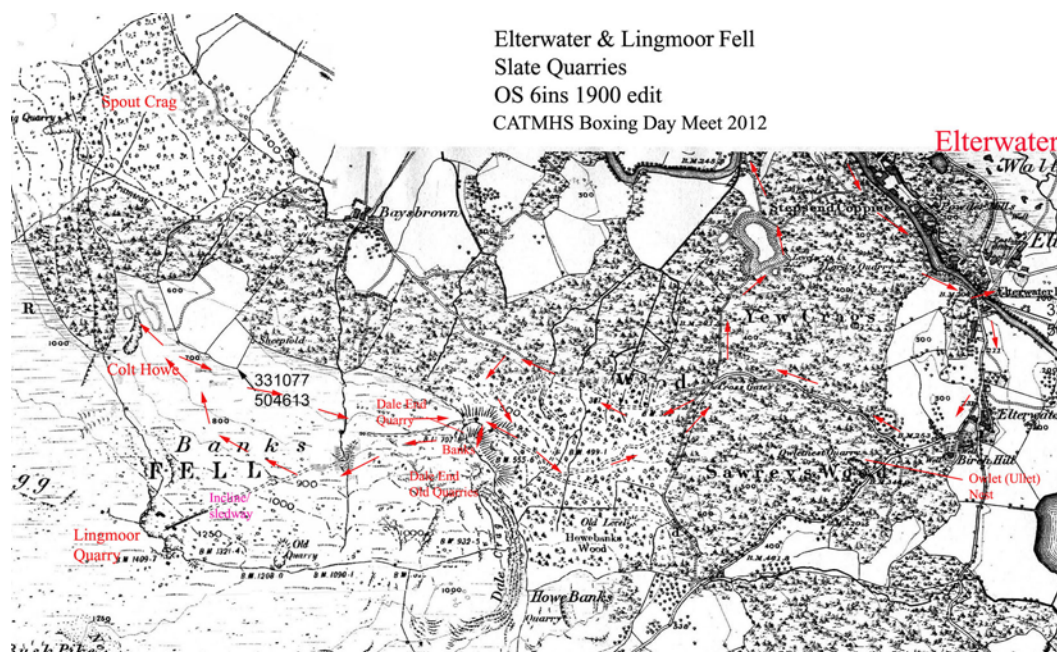
The team is seeking a cheap source of second hand 1 tonne bags for building the pack wall. Work is still in progress.

John Brown.

Boxingday Meet 2012. Sawrey's Wood and Lingmoor Fell Slate Quarries.

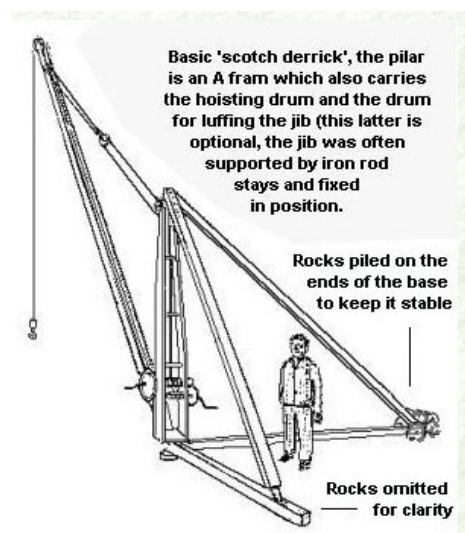
This was originally a Mark Scott meet, but it seems that he was involved with other things on Boxing Day, so he asked me to step in. Mark Simpson.

Well, it does not seem like a year since the last meet here and the world has certainly changed since then. It was a select little group that assembled at the Elterwater Car Park; Sheila Barker, Don Borthwick, Maureen Fleming, Allan Richardson, and Helena Simpson. The weather was mild for the time of year, it was cloudy but not raining. Five past ten came and went, so we set off. The route taken can be seen on the 6ins OS map below.



The first site visited was Owlet Nest Quarry, one of three quarry groups in Sawreys Wood, and the easiest to get to. There is a short track from the road up to a large level area overlooking the quarry hole. This seems to have been worked in two phases, the last being a pit at the west end, taken, one assumes, down to adit level. The most

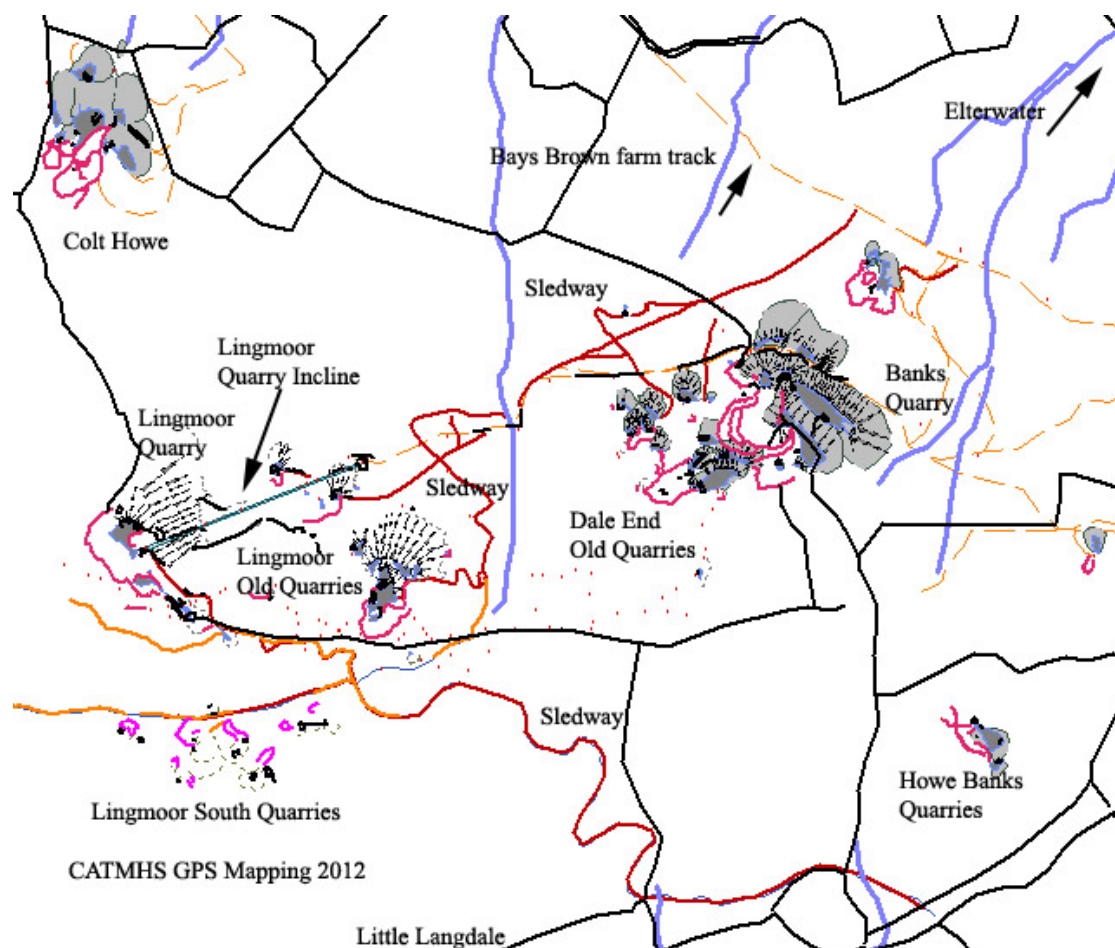
significant feature on this platform is a steel anchor. Quite what it was for was speculated on, and the most likely use was for holding down one of the braces for a Scotch derrick. However if that was the case, one would expect another anchor nearby. The idea being that clog was raised out of the pit onto the platform and transferred to carts.



Back down the quarry track and along to Four Lane Ends, where the Lingmoor Quarry track comes in from the South. (More about this track later) Keeping to the Bays Brown Road we passed the old Banks Quarry track and proceeded a bit further on to where the sled roads come down from Lingmoor Fell. To the uninitiated they look like overgrown watercourses. But sleds once provided the sole

means of moving the slate from the high quarries down to the valley bottom. (The other way, before using carts, was on men's backs or by panniers on ponies.) In one of these sled runs, the one to Spout Crag Quarry, there is a rock in the bed of it with two rusty grooves caused by runners.

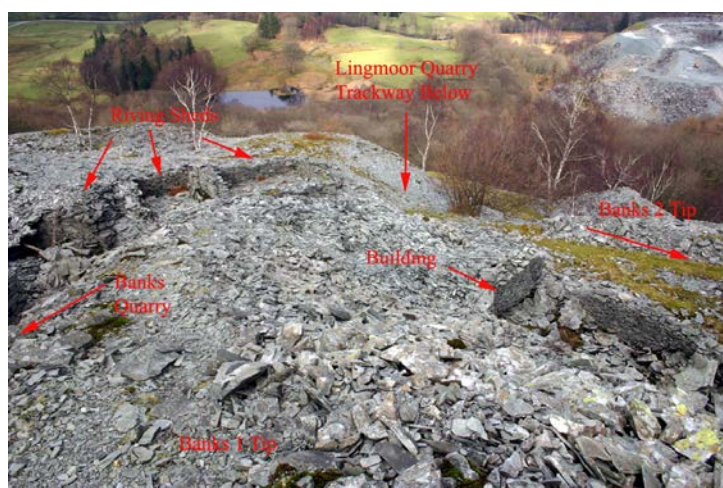
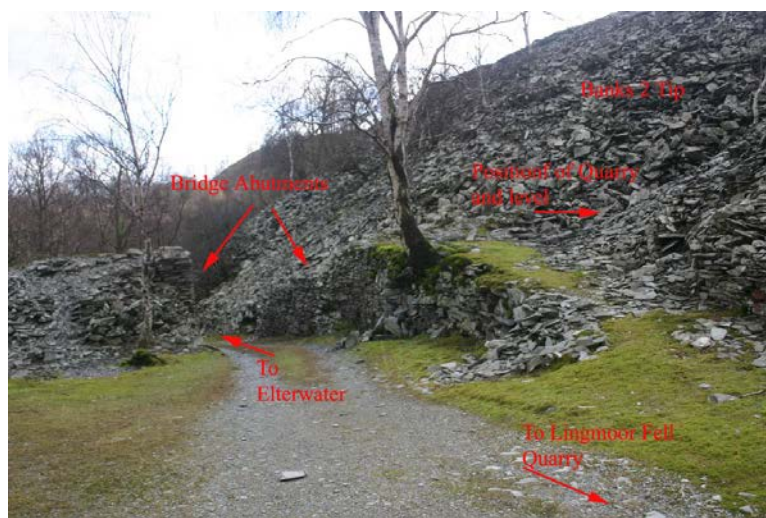
These sled ways can be found all over this part of Cumbria where slate and peat have needed to be moved. One has to say that the sled men are the unsung hero's of the slate industry when you think of the loads moved, the distance and slope of the routes. Whether or not the sled shown is typical is not known, but remember that the sled had to be strong enough to take 2 or 3 cwt of slate, may be, and small enough to be carried back to the quarry for another load. How many runs a day? Perhaps 6 or more. Makes you think!



Sledway Map.

The party made its way up these runs through Bays Brown Woods until we reached the Banks Quarry tips, and then round their east side to the Lingmoor Quarry track. This cart track only appears in its entire length in the Second edition OS map and appears to have been constructed to serve the Lingmoor Quarry. It took in part of the old Banks Quarry track. Looking at it from a distance it is an even gradient up to the Lingmoor Quarry loading platform.

Once on the track we made our way up to just before the Fell Gate. Here we contemplated the bridge abutments and the Banks Quarry tips. The chronology is not easy to work out and will be discussed at the end of this article. But what we were standing on came from the old Dale End Quarry, the one just by the gate with the level at the back of it. Note: My naming of the quarries, eg Banks 1, Banks 2 and Dale End Old Quarries is my own, to aid navigation around the area.



The tips in front of us, to the South are in 3 distinct sections. The Banks 2 Quarry tips to the east, a riving tip from Banks 2 in the middle, and Banks 1 Quarry tip at the west end, part in filling Dale End Quarry. There is no obvious route up to Banks 2 working floor apart from a modern scramble up the riving tip.

We all ascended to the tips and had a look at the riving sheds, 3 of them at the entrance to the Banks 2 quarry, the lodging(?) hut nearby, and what looks to be a compressor house at the far end of Banks 2 tip. Alongside this tip to the south is Banks 1 tip with a field wall built on it.

A word about field walls. The woods below and the fells above have decayed field walls in them that indicate a different enclosure pattern. Probably sometime about late 18th early 19th century (and you would need to research to find out when) the land boundaries were reorganised with the walls you see today. These new walls go across

tips and sled roads. That the sledways were in operation when these new walls were built can be seen by a blocked gateway in the wall below the present fell gate.

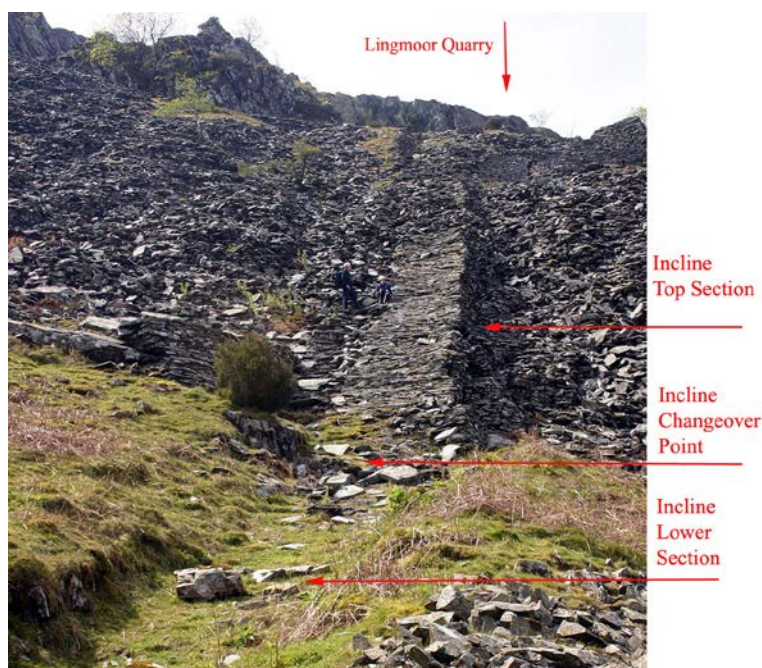
We looked in Banks Quarry and noted the collapsed west side of it, then made our way back down to the fell gate. From here it was up to the small workings on the hillside overlooking Banks and lunch outside one of the huts situated there. The quarries here are on a very small scale, and are similar to the workings below



Lingmoor Quarry and the Lingmoor Fell South Quarries. Typically a small quarry, a riving hut and a tip, with a sled way leading off by the tip. My best estimate that most are late 18th cent, though one near the lunch site looks as if it was worked later.

The view across to Elterwater is spectacular, but after half an hour, by common consent it was time to move on. So it was back down to the Fell Gate on the Lingmoor Quarry track, and up to the Lingmoor Quarry transhipment dock. Below the track can be seen the grooves of the sled runs, with the occasional one heading up the hillside to the quarries above.

At the loading dock, Don and Sheila decided to go back. It had been my intention to ascend the Incline to look at what I think is a unique feature of this structure, but time was pressing and I wished to look in at Colt Howe. The Lingmoor Quarry incline does not conform to incline types found elsewhere. It is in two sections, and although they



are in line they change angle approximately two thirds the way up, and although there is a drum house on the edge of the quarry floor it is quite small and narrow, not like your normal counter balance drum house at all. There is also no evidence of rails or sleepers. My thought on its operation is that loads were moved on sleds from top to bottom. On the first part, the steepest, the sled was lowered by cable to the slope angle

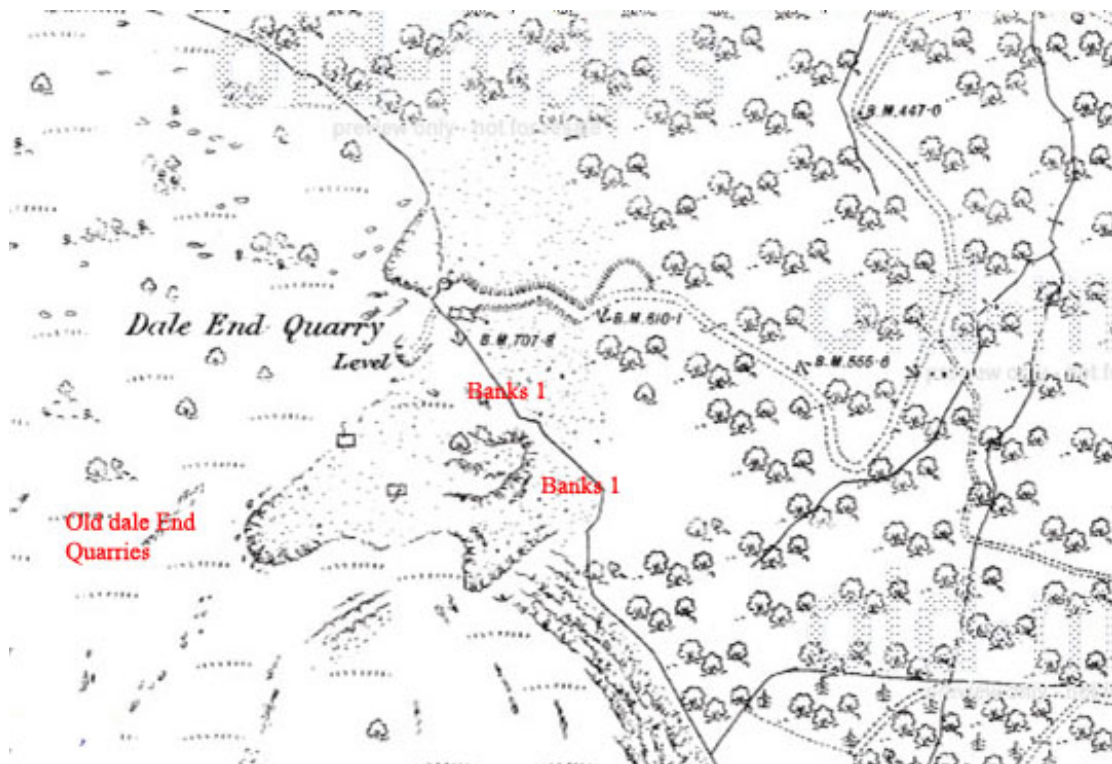
change point. It was then uncoupled and run by gravity the rest of the way to the trans-shipment point. However if someone can come up with a different method of working, please write in.

We made our way down to Colt Howe, and had a quick look round. A complicated site, with the last working floor above the level of the old quarry entrance. Further investigation is needed but it seems that the last phase of extraction was from a closehead accessed by a level in the west side of the open workings. There are several interesting features here; one is the powder store, still roofed, the other is the slates in the riving shed on an abandoned floor to the north. This is as far as I had intended to go and it was time to work our way back. Apart from anything else it looked like rain. We cut across on the old quarry trod to the Lingmoor Quarry track and back down to Four Lane Ends. From here it was through the modern Elterwater quarry works, and down by the river to the car park.

The Wainwright provided welcome refreshment.

Banks Quarry Chronology.

We are fortunate to have good 25in maps of this area, and what they show is interesting. Now, with some caveats about what the 1861 edition may show, what does it tell us?



1861 25" OS map

No track to Lingmoor Fell quarry, only one coming to Dale End Quarry. The Old Dale End quarries are shown as well as what I call Banks 1.

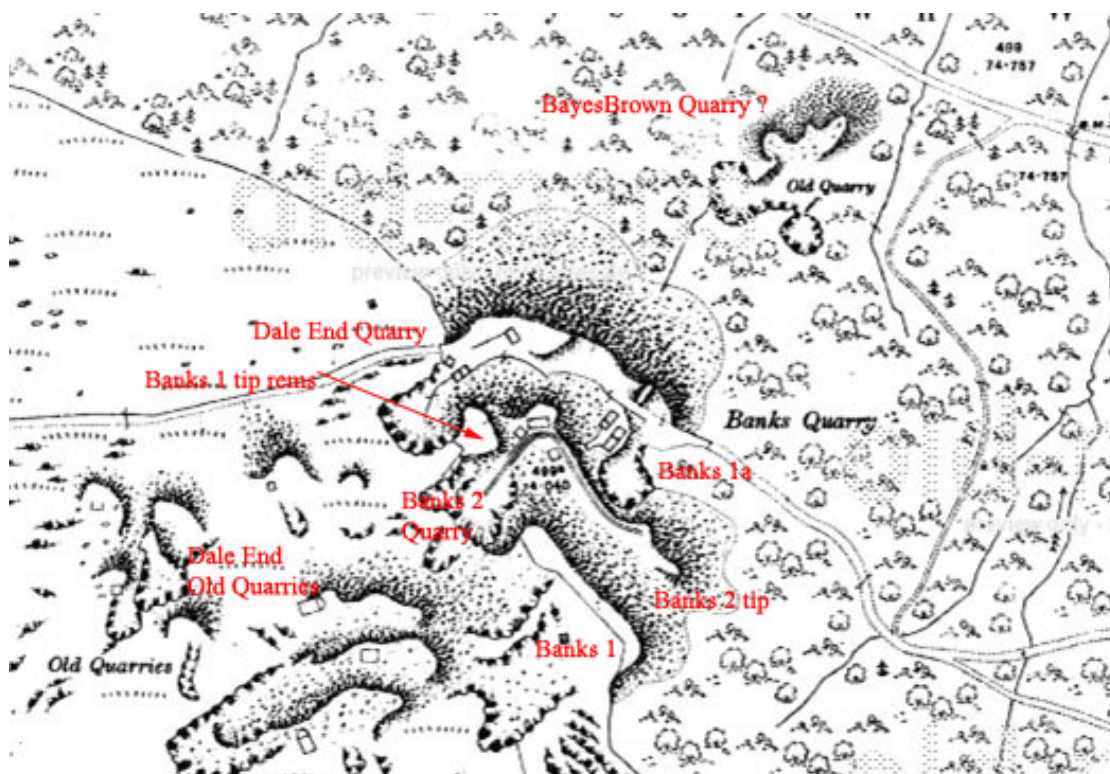
Going to the 1898 map, the Lingmoor Fell track is now in and the Dale End Quarry tip is as it is today, indicating the presence of a closehead. And a quarry to the south



1898 25" OS map

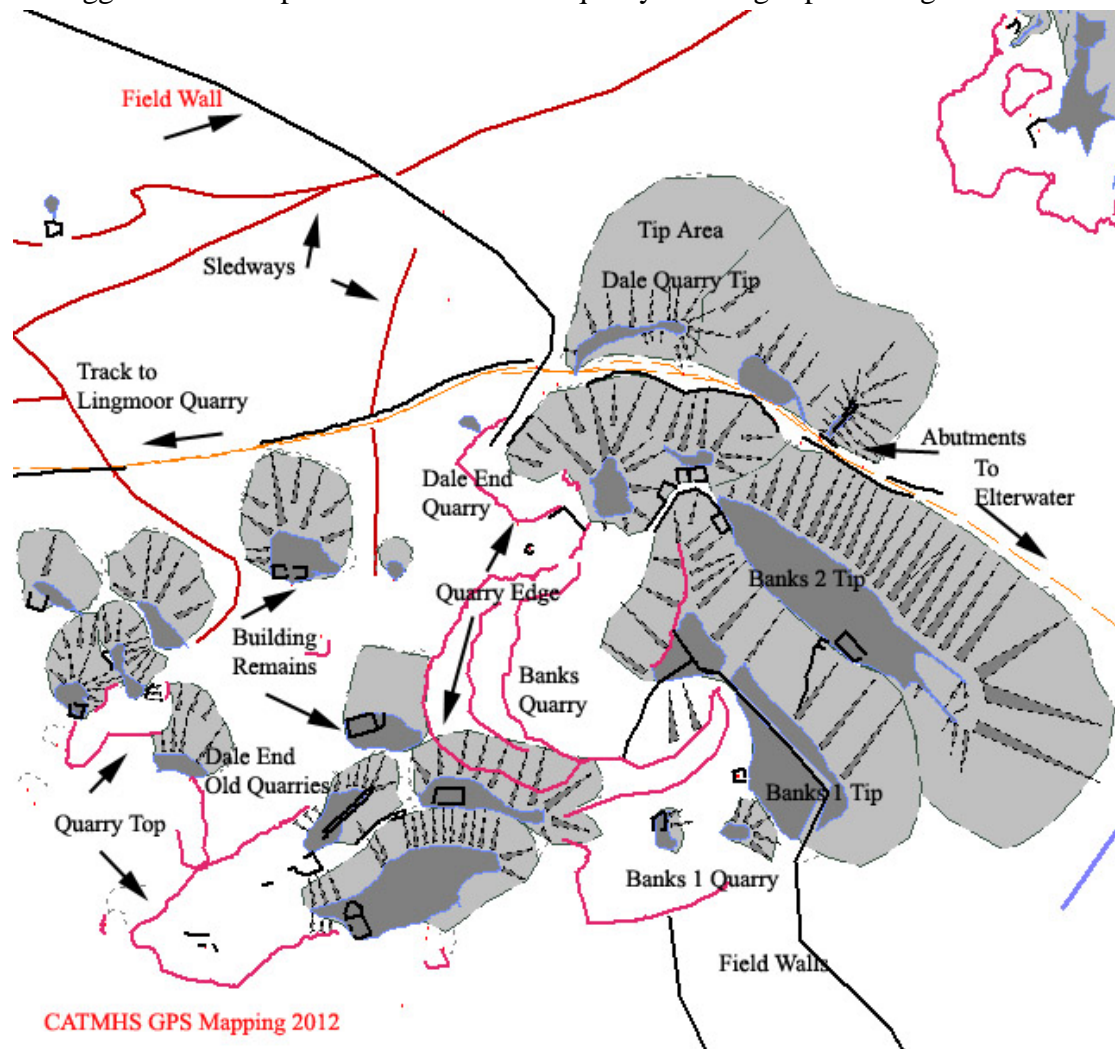
of the present bridge abutments, what I call Banks 1a. You can see a small quarry where the present Banks 2 Quarry is now.

1915, and Banks 2 Quarry is being developed on the same horizon as the present quarry and the entrance has been taken through the north end of the Banks 1 tip. The



Banks 1a quarry is larger, but to the north side is an indication of an adit opposite and on the same level as the bridge abutments. Dale End quarry tip is not much larger, so maybe all the slate was being taken out of Banks 2. The only other feature of note is that one of the Dale End Old quarries overlooking Banks 2 quarry has now doubled in size.

2012 CATMHS Mapping. (Mark Simpson) Banks 2 tip has now doubled in size, Banks 1a quarry and level has disappeared under a rivings tip and Banks 2 Quarry is a lot bigger. The collapsed west wall of the quarry is thought provoking. There is still



no obvious way the slate was transferred from the Banks 2 Floor to the track below. There is much archival work and detailed site recording required.

Useful reading :

The Slate Industry, Merfyn Williams - General introduction to slate
Slate from Coniston. Alistair Cameron. - The Coniston to Little Langdale slate area

See also entries from the Durham Mining Museum Archives below. Please note that they only cover from 1888 onwards, and do not include Lingmoor Quarry.



Boxing Day Meet: Alan Richardson, Maureen Fleming, ML Mark Simpson, Don Borthwick, Sheila Barker. Photo Helenor Simpson.

Durham Mining Museum Records

Slate mines

Banks quarry.	Owner John Bowness in 1888 1896. Operating 1882 –1922.
Bays Brown quarry	Elterwater Green Slate Co. Operating 1888 1896
Colthowe	Elterwater Green Slate Co. Operating 1888 Owned by John Robinson 1896
Cross Gates	Owner Wm Tyson. Operating in 1896.
Elterwater quarry	Elterwater Green Slate Co. Operating 1888 – 1984 to present .
Lords	Elterwater Green Slate Co, 1930s, Buttermere Green Slate Quarries Operating – 1882 – 1950 to present
Scot Coppice	Elterwater Green Slate Co. Operating 1896.
Spout Crag	Elterwater Green Slate Co. Operating 1888 – 1950's.
Thrang	Elterwater Green Slate Co. Operating 1882 – 1938.
Loughrigg Fell	Owner Thomas Newton in 1880, 1896 Operating 1884 – 1902
Original Elterwater	Manager Bennett Johns in 1890 1896. Buttermere Slate Co Ltd. Operating 1890 – 1914
Elterwater Green Slate Co Ltd was taken over in 1980's by Burlington Slate Ltd (1896 Records from PDMHS list)	

Posthlehwaite – Mines & Mining in the English Lake District

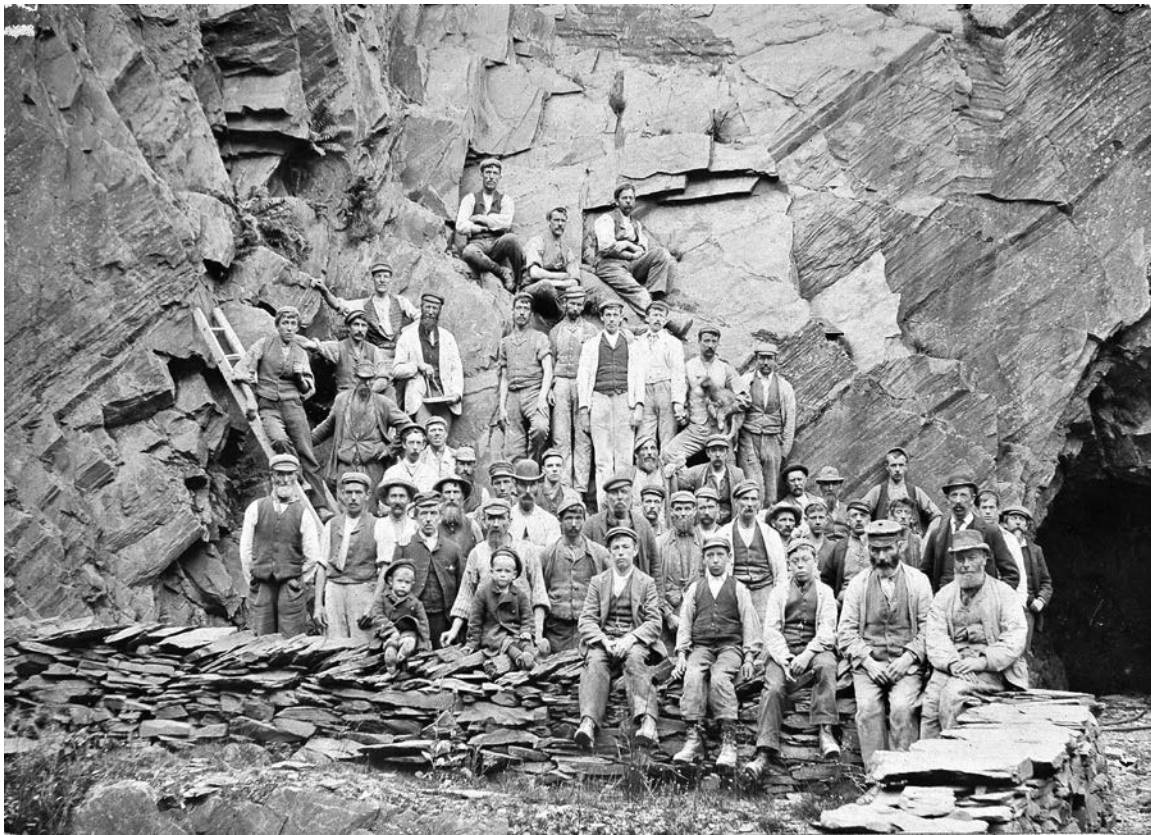
Principal slate quarries being worked in Westmorland in 1877 (1913?)

Low fell
Peppers
Lords
Spout Crag
Colt Howe
Banks
Kirkstone
Kentmere

Honister Zipwire rejected again

A meeting at the National Park Offices at Murley Moss on 9th January rejected a revised plan for a zipwire at Honister Quarry. Chris Bonnington, who was at the meeting and supported the application said that he would resign his position as Vice Chairman of the Friends of the Lake District because he did not agree with their position. Speaking of the zipwire in the past, the late Mark Wier said that it would help Honister address the ebb and flow of tourism and slate mining by retaining more staff for a longer period over the season, and provide something new and exciting for visitors to the Lakes to try. This is vitally important in such a rural corner of Cumbria like Borrowdale, where new job opportunities for people across this valley are rare' His wife, Jan Wier, said that the Quarry Company would have to either appeal the decision or close.

Can you identify the location?



I recently purchased a Quarrying photograph on ebay. The seller had no details although it was clearly an original photograph rather than a postcard. I have scanned it and it contains a lot of detail but there are no clues as to the location. I suggest that it is a slate quarrying scene, probably a tunnel giving access to a pit, rather than an adit into a mine since none of the workmen have any candles, which are normally de riguer in this type of photograph. If anybody knows the location I would be pleased to know.

Jon Knowles

Chinese Whispers

Our knowledge of events depends on who recorded it and why. This 20th Century example shows how much accounts may vary:

The Mine Report

Written by J T Rigg for Wadham & Co who reported to the mineral owner, Myles Sandys. It seems to record the first use of compressed air rock drills at Roanhead:

April 1920, Kathleen Pit

In this pit there is at present one working which is at the bottom or 204 Yds level and is a main level they have started to drive Northwest from near the shaft in the direction of Nigel No2 pit. This drift is so far being driven by hand, and is at present in limestone and has cut into a large lough in which there was a quantity of sand and water but this has been overcome and they are now driving on again, in jointy limestone. It is their intention to drive this drift on with the rock drills. They are at work fitting up an air compressor and drills have arrived but they have the air pipes still to put in and connect up.

June 1920: This drift is still being driven by hand as they have not yet got the air pipes put in, and they are having to get a new air receiver as they had a misfortune with the old one - the end blew out while testing the same.

November 1920: The rock drills are now in use and they have driven 340Ft. It is intended to test the ground between the two pits, to test the depth of the Nigel ore and to drain the water away from same.

The Oral History Tape

George Braithwaite worked at Roanhead from 1929 until 1941. Jim Walton made the recording:

GB As I would say the chap who told the tale to me wasn't one for elaborating. We called him Jackie Barnes, he had served his time. It was a chap who was older than me, and he had served his apprenticeship at Askham ironworks. And then when they were taken over he had gone to Roanhead, and of course this Hunter chappie was probably of Askham stock.

JW Was he a young lad?

GB Well yes, he was only a young feller, apprentice in the engineering shop. Oh no, that was true enough. I never doubted it. He was sat on the safety valve of an air receiver that was – you know what I mean – the cylinder where they store the compressed air, you know, to take the impulse, the pulse out of it, because they were all, the compressors in those days were all reciprocating – they weren't reciprocating – there was horizontal and.....mainly Ingersol Rand in those days but there was Ingersol Rand and Ali McLennan and.....There was a third one that was common Doesn't matter.

JW What was the point of sitting on the pressure valve?

GB Well so they could get more pressure on, so it wouldn't blow off, to see how much pressure they could build up with the engine. You see they were all experimenting with the compressed air in those days and the compressor itself would..... It was common enough to get about 100 to 120, but I am talking about 20 years previous to that, when this happened it would be about 1910, probably before the first world war.

..... It was Hughey who gave the order, you know what I mean. He would only be a young feller in those days, and his father would still be alive, old Myles, and it was....."Go on, see how high we can get". You know what I mean. This is what happened, it was a cast iron receiver and itburst.

Mrs B: He was all right was Hughie?

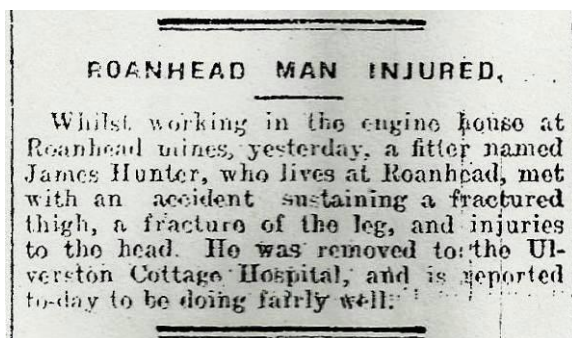
GB: Oh, Hughie was alright, yes, he was a great big tomboy, wasn't he?

Mrs B: An overgrown schoolboy.

The Newspaper

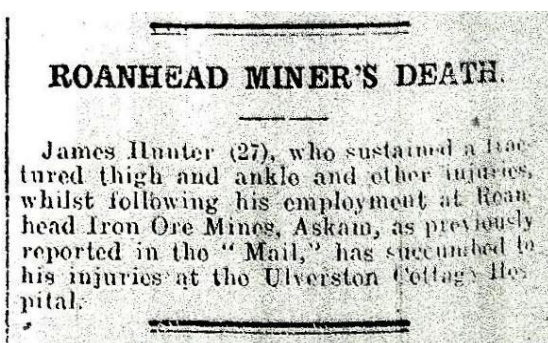
North Western Daily Mail 11 May 1920

ROANHEAD MINER'S DEATH



13 May 1920

ROANHEAD MAN INJURED



14 May 1920. Roanhead Explosion

FITTER'S FATAL INJURIES AT THE MINES. NARROW ESCAPE OF CAPT KENNEDY

Sitting without a jury, Coroner F W Poole held an enquiry at the Ulverston Police Court, yesterday afternoon concerning the death of James Hunter (24), employed as a fitter at Roanhead Iron Ore Mines, Askam, who had succumbed at the Ulverston Cottage Hospital to internal injury and a fractured thigh, sustained through the explosion of an air compressor at the mines on Monday last. Messrs Kennedy Bros were professionally represented by Mr R B Jackson and Mr W Leck, HM Inspector of Mines, was also in attendance.

Jno Jas Hunter, a cousin of the deceased, employed at the mines as a fireman, gave evidence that on Monday he was engaged in getting up steam for the air compressor, whilst the

deceased was looking after the compressed air engine. At the time of the accident witness was oiling on the top of the engine bed, when deceased told him to hold the safety valve down in order to get more air into the compressor or receiver. At that time the gauge showed a pressure of 70lb, and when it increased by the holding down of the valve to 73lb the explosion occurred, the ends of the compressor being blown out. Witness hurt his finger ends, and was thrown down by the explosion. When he got up he found the deceased lying on his back between the rails, about ten yards away. He was badly injured, but was conscious. When the witness was on the top of the engine bed Captain Hugh Kennedy came along, and was some yards away from the compressor when the explosion occurred.

Replying to Inspector Leck, Witness said he had been holding down the safety valve handle only two or three seconds before the explosion took place.

In answer to Mr Jackson, witness said when Captain Kennedy came on the scene shortly before the explosion he knelt down in front of the receiver to listen, and told deceased there was a leak there. Deceased replied that it was not there. He thought it was at the drill, which was about ten feet off. Captain Kennedy then went to the drill to try to locate the leak, when the explosion occurred.

Captain Hugh Kennedy, who is in charge of the mines, testified that he did not hear deceased tell the last witness to hold the safety valve down, nor did he see it held down.

The Coroner: It was rather an extraordinary thing for a fitter to do? - I cannot understand why he did it. Why he tried to locate the leak by increasing the pressure I cannot imagine, unless he was accustomed to higher pressures when employed at Messrs Vickers, and thought there was no risk.

At the close of his evidence Captain Kennedy, on behalf of the firm, expressed deep sympathy with the relatives of the deceased.

John Duke, who has been in the employ of Kennedy Bros as engineer for 52 years said the receiver was 12 ft long and 2ft 1in inside. The thickness of the plates was ½ in, the thickness of the end plates being 7-8ths of an inch. The end had blown out in five places.

Inspector Leck: And some must have blown near Captain Kennedy? - Yes, I don't know how he escaped.

The Coroner found that the deceased was accidentally killed by the blowing out of the end of the compressor or receiver; that he was entirely responsible for the accident, and that so far as the management was concerned no blame was to be attached.

Compiled by Peter Sandbach.

Coniston & Tilberthwaite Copper Mines Sale, inventory, 1875.

Many readers will be familiar with the flyer, reproduced below, announcing the sale of Coniston and Tilberthwaite Copper mines on 3rd August 1875 in order to wind up the accounts of the Executors of some deceased partners. The property was purchased by Thomas Wynne for £3,000.

A handwritten draft, given to me by Peter Fleming some time ago, gives more detailed information regarding the inventory at that time.

THE WELL-KNOWN
CONISTON AND TILBERTHWAITE COPPER MINES,
IN NORTH LANCASHIRE.

MESSRS. T. M. FISHER SONS & Co.
ARE INSTRUCTED TO SELL AS A GOING CONCERN,
AT THE CLARENCE HOTEL, SPRING GARDENS, MANCHESTER,
ON TUESDAY, THE 3RD OF AUGUST, 1875,
At 4 for 5 o'clock in the Afternoon, in one or more Lots as may be decided upon, subject to Conditions of Sale to be then produced.

ALL THOSE VALUABLE AND EXTENSIVE
MINING PROPERTIES,
KNOWN AS THE CONISTON AND TILBERTHWAITE COPPER MINES, WITH
41 FREEHOLD HOUSES, COPPER STATION, 13 LEASEHOLD COTTAGES,
And all the BUILDINGS, MACHINERY, & PLANT.

The CONISTON ROYALTY including the Paddy End district is about three miles square the lodes are numerous and well defined, and as the present workings have been limited to only two or three lodes, a large part of the sett is undeveloped. The Mine known as Coniston or Deep Mine is now being partially worked, a new skip road for drawing the work and also for raising and lowering the men is near completion. The returns from this portion of the Mines now average 100 tons of ore per month, and when the skip road is finished the quantity of ore raised will be considerably increased, and the cost of getting and raising will be reduced by at least one-fifth. In the Paddy End district the lodes have only been worked to a depth of ten fathoms below Coniston horse level, and an inconsiderable outlay is required to draw the water from this portion of the Mines and put it in full and profitable work.

The water power is almost unlimited, levels having been driven up into the two mountain tarns called Levers Water and Low Water, from which, in addition to the mountain streams, large supplies of water are drawn. No steam power is required, and the only coals used are at the Smiths' Shops and the Offices.

The present lease of the Coniston Sett expires in 1880, the Royalty is $\frac{1}{4}$ th, and a renewal of the Lease on the same terms can be obtained. The only surface rent payable is £9 a year for the Land the Copper Station is built upon, and the road to it.

The TILBERTHWAITE ROYALTY comprises a large area adjoining to Coniston, the deep level has been driven 1080 yards, and unwaters a large district, one lode only has been partially opened on, there are three other lodes in a short distance, and there is no doubt large returns will be made from this Mine. There is also a vein of Slate rock of good quality near the level mouth, for which offers to work have recently been made. The supply of water here is also most ample.

* These Mines are held on lease of which ten years are unexpired, at a minimum rent of £60 merging in a Royalty of $\frac{1}{4}$ th.

The Copper Station at the terminus of the Coniston Branch of the Furness Railway is within three-quarters of a mile of the principal dressing floors, rendering easy access to and from the Mines.

The whole of the Machinery and Buildings are in good order and repair.

The Mines have been worked for many years by an ordinary trading partnership, and have paid large profits. They are now offered for sale in consequence of the advanced age of some of the partners, and of the decease of others, whose representatives are not in a position to expend the necessary capital for further developing the Mines, and providing the requisite additional machinery for economically working the same. A very considerable sum has been laid out in opening the Mines, of which the Purchasers would reap the advantage.

The Rental of the House and Cottage Property is about £250 per annum.

The Mines, Property, and Plans can be inspected on application to Mr. Bennett Johns, or Capt. Bawden, at the Offices on the Mines, and any further Particulars and information can be obtained on application to the Auctioneers, 29, Blackfriars Street, Manchester; Messrs. Thos. Brealey & Son, Surveyors, Leek; or to H. Arnold, Esq., Solicitor, Kendal.

*‘Valuable Mining Property
The Well Known Coniston and Tilberthwaite Copper Mines in North Lancashire*

Messrs T M Fisher & Co are instructed to sell, as a going concern, at the Clarence Hotel, Spring Gardens, Manchester on Tuesday the 3rd August 1875 at 4 for 5 o’clock in the afternoon in one or more lots as may be decided upon, subject to conditions of sale to be then produced-

All those valuable and extensive mining properties known as the Coniston and Tilberthwaite Copper mines –

The freehold buildings at Coniston comprise 41 new houses (with outbuildings and gardens) in four blocks pleasantly situated in the village near the railway station

The Leasehold buildings which are at the mines include 13 Cottages, Complete suite of offices, Board and Managers rooms, Pay Offices, Changing Rooms, Cooking Kitchens, Powder Magazines, Storehouse for material and dressed copper, Large Smith’s Shop fitted with 7 hearths, Carpenters shop and Saw Mill, Stables, Mill Houses and large sheds for Stamps and jigger machines and several ranges of shedding for sorters and dressers –

The Copper Station is situated three quarters of a mile from the principal dressing floors & at the terminus of the Coniston branch of the Furness Railway with shoots for unloading the ore, large sampling floors, and platform over siding for loading several trucks, office, etc.

The plant includes 13 large overshot Water wheels varying from 12 to 45 feet diameter, 3 small water wheels, crushing mills, screens & elevator, jigging machines, stamping mills, tramways & hoists, iron wagons, carts etc.

The Coniston mining sett is About 3 miles square, the lodes are numerous and well defined, & as the present workings have been confined to 3 or 4 lodes a large part of the sett is undeveloped. The mines are now in partial work only, & the present returns average about 100 tons of ore per month –

The water power is almost unlimited as a level has been driven into a mountain tarn of about 45 acres area called Levers Water from which in addition to the mountain streams a large supply of water is drawn – No steam power is required and the only coals used are at the Smiths Shops

The present Lease of the Coniston sett expires in 1880 – the royalty is one eighteenth, without any surface rent, & a renewal of the Lease, on the same terms can be obtained –

Tilberthwaite Mines comprise a large area adjoining Coniston, the deep level is driven 1080 yards & un waters a large district – the lodes are only partially opened out- There is a large vein of slate rock of good quality near the level mouth for which offers of work have recently been made, and the supply of water is most ample

These mines are held on Lease of which 10 years are unexpired at a minimum rent of £60 merging in a royalty of one eighteenth –

The buildings at the Tilberthwaite mines are Mill House, Smith's shop, Copper shed and shedding for sorters etc, and the plant embraces 2 large water wheels 12 & 32 feet diameter, new crushing Mill with revolving screens and elevators, jigging machines, iron wagons etc

The mines have been worked for some years by an ordinary trading partnership & paid large profits & are being sold in order to wind up the accounts of the Executors of some deceased partners –

The rental of the house and cottage property is about £250

The mines and property can be inspected on application to Captain Bawden at the Mines. Full particulars with catalogues of machinery & plant & any further information obtained from Messrs Thos. Breal & Son Surveyors Leek, The Mining Journal, the Auctioneers 29 Blackfriars treet Manchester or from Mr H Arnold, Solicitor, Kendal.



Building remains at Tilberthwaite Mine, 2012

The Cowdery Glowworm LED head torch

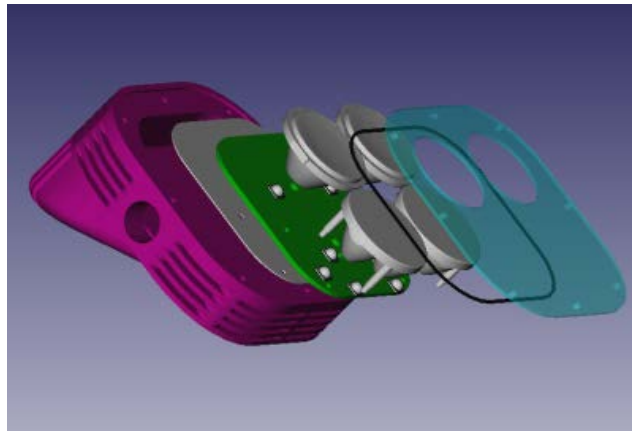
Back in the good old days, a SpeleoTechnics FX2 or an Oldham was deemed perfectly OK for mine exploration. I suppose a 'stinky' was too, back when Moses went caving. When I kitted myself out in 1996, a SpeleoTechnics FX Headlite seemed a sensible option. Not quite as bright as an Oldham, but far more convenient, and with a spare battery it would last a full day too. And no nasty wire to snag whilst crawling.

Within a few years, the white LED became a reality, initially available in what is considered a 'standard' LED form, and none too bright. However, John Ashby procured a few, one of which became the pilot light in my FX Headlite. It lasted for 9 days on a full charge.

Roll on a few years, and LED based caving lamps started to appear using a new generation of white LEDs with ever increasing brightness. Mike Hrybyk brought out his excellent Retro2 upgrade which substituted the standard Oldham lamp assembly contents with a smart new PCB with LEDs. The likes of Stens and Scurions started to appear. Roy Fellows started experimenting with modifying Oldhams and selling them, achieving a good level of success.

It became apparent that with the advent of these super bright head torches, my night vision wasn't reaching its full potential. As soon as I found myself alone with the dim glow from my FX Headlite, I couldn't see where I was going. Therefore I decided in early 2011 that I would have to do something about it.

Most people would have forked out for one of the many LED head torches available. I decided to build my own. I decided that because it would be a significant effort, I would have to go for something substantially brighter than the brightest unit available commercially. This strategy would buy me extra time before I have to build another lamp. For a benchmark, I noted that a Stenlight was around 500 lumens, and the Scurion around 1000 lumens. (The FX Headlight is around 50 lumens) Therefore I planned my light to be the first caving light to exceed 10,000 lumens!



Without going into too much technical detail, the most suitable LEDs are manufactured by Cree. They will deliver 943 lumens when driven at 3amps. Twelve of these will deliver a shade over 11,000 lumens. For the lens, a company called Ledil make a part which groups 3 LEDs together and provides a narrow beam. The LEDs generate significant heat, so they have to be mounted on a PCB made on an aluminium substrate to conduct the heat away. There is no suitable housing for all this, so I designed my own in 3D CAD and had it machined from a billet of aluminium in Hong Kong.

Powering this is not a trivial matter. The Cree LED's require around 3.3Volts at 3A, so twelve of them require about 120Watts of power. Selecting a 20Volt 5-cell Lithium Polymer battery pack (intended for radio controlled aircraft) gave me enough power. There are no suitable power supplies that I could buy, so I designed and built my own custom PCB. The LED's are arranged in strings of 3, so the power supply has four independent channels. Each channel is controllable between 0 and 3A under the control of a 32-bit microprocessor. In fact, this head torch is probably the first 32-bit head torch, and also probably the only one with USB.



The power supply and battery are mounted on the rear of my helmet to counterbalance the not insignificant weight of the lamp assembly on the front. There is a pushbutton on the side of the lamp assembly which cycles through a number of different brightnesses (and off), including a 5 second burst of 'full power'. Full power is limited to 5 seconds because of heat buildup within the lamp assembly. The entire assembly will reach 70 degrees C in 15 minutes on 50% brightness (there is a temperature sensor in the lamp assembly to protect the unit)



All that said, how does it perform?

It has been on a few trips now, and has performed faultlessly so far. I am pleased about that because there is enough stored energy in the system to do serious damage to the circuits! Full brightness is similar to a camera flash, but much longer. It is far, far brighter than a Scurion, and will illuminate an entire slate chamber without difficulty.

It will remain a one-off because I doubt if there are any other mugs wishing to pay well in excess of four

figures for another one! More technical details including circuits can be found on my website <http://www.cowdery.org.uk/gloworm.php>

I believe the Gloworm to be as bright as one can sensibly make a head torch with today's LED technology. As time progresses, the LED's will become more efficient (i.e. more light, less heat), so in 5-10 years, torches as bright as Gloworm will start to become more common. So if you are exploring a mine and a burst of light indicates that a sudden untopping has taken place, perhaps it's just me coming towards you.

Chris Cowdery.

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